

## Motor Control Explosionproof Circuit Breakers - Disconnect Switches

8B-1

### EXPLOSIONPROOF AND DUST-IGNITIONPROOF CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G; NEMA 7 & 9



Optional XCBH 2-2 handle shown; standard handle is XBO.

**BREAKERS:** Circuit breakers are thermal magnetic type and are available in frame sizes ranging from 15 to 1200 amperes. Also available as non-automatic circuit interrupters, without automatic overload trip elements for load switching and isolation. In this application short circuit and overload protection must be provided by separate protection device. Breakers also available for magnetic trip only.

The units can be set up for GE, Cutler-Hammer (Westinghouse), Square-D and ITE (Siemens) brand circuit breakers. Consult factory for other brands. Holes for Cutler-Hammer circuit breakers are drilled directly into back wall.

**ENCLOSURES:** The housings are copper-free cast aluminum alloy. The enclosures are Adalet XCE series with precision ground cover and body joints.

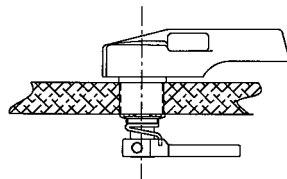
The enclosure design offers sufficient space for wire bending and ease of installation and maintenance. XCBC and larger units are furnished with hinges, and stainless steel cover bolts. The covers are removable for clear access to breakers. For XCBA and XCBB units, hinge and mounting pan are optional.

The front mounted circuit breaker handle is padlockable in either "on" or "off" position.

High interrupting capacity breakers are also available in comparable size.

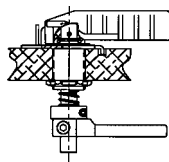
**Approvals:**  
Enclosure Certifications

**Compliances:**  
Class I, Groups B, C, D  
Class II, Groups E, F, G  
NEMA 4, 7, 9  
UL Classified Enclosure



**Optional XCBH Style**

"Classic", larger handle.  
Special 1" – 1 1/2" NPSM opening required for installation.



**Standard XBO Style**

"New", spring loaded, compact adjustable design, ease of assembly and less expensive.  
Standard 3/4 – 14 NPSM opening required for installation.

| Enclosure  | UL Classified Enclosure Rating |
|--|--------------------------------|
| XCBA, XCBB, XCBC, XCBD, XCBE, XCBF, XCBG                     | Class 1, Grps BCD              |
| XCBA N4, XCBB N4, XCBC N4, XCBD N4, XCBE N4, XCBF N4, XCBGN4 | Class 1, Grps CD               |

## Motor Control Explosionproof Circuit Breakers - Disconnect Switches

### Molded Case Circuit Breaker Enclosures (Breaker Included)

| Breaker Frame Size | Breaker Interrupting Rating                         | Volts   | Amp Rating      | Catalog No.   |                            |
|--------------------|---|---|-----------------|---|----------------------------|
|                    |   |   |                 | 2 Pole Non-Interchangeable                          | 3 Pole Non-Interchangeable |
| 100/150            | 14,000 Amperes Interrupting Capacity at 480 Volt AC | 480 Volt AC   | 15              | XCBA-N4-15E42*                                      | XCBA-N4-15E43*             |
|                    |   |   | 20              | XCBA-N4-20E42*                                      | XCBA-N4-20E43*             |
|                    |   |   | 30              | XCBA-N4-30E42*                                      | XCBA-N4-30E43*             |
|                    |   |   | 40              | XCBA-N4-40E42*                                      | XCBA-N4-40E43*             |
|                    |   |   | 50              | XCBA-N4-50E42*                                      | XCBA-N4-50E43*             |
|                    |   |   | 60              | XCBA-N4-60E42*                                      | XCBA-N4-60E43*             |
|                    |   |   | 70              | XCBA-N4-70E42*                                      | XCBA-N4-70E43*             |
|                    |   | 250 Volt DC   | 80              | XCBB-N4-80E42*                                      | XCBB-N4-80E43*             |
|                    |   |   | 90              | XCBB-N4-90E42*                                      | XCBB-N4-90E43*             |
|                    |   |   | 100             | XCBB-N4-100E42*                                     | XCBB-N4-100E43*            |
|                    |   |   | 110             | XCBB-N4-110E42*                                     | XCBB-N4-110E43*            |
|                    |   |   | 125             | XCBB-N4-125E42*                                     | XCBB-N4-125E43*            |
|                    |   |   | 150             | XCBB-N4-150E42*                                     | XCBB-N4-150E43*            |
|                    |   |   | 100/150         | 14,000 Amperes Interrupting Capacity at 600 Volt AC | 600 Volt AC                |
| 20                 | XCBA-N4-20E62*                                      | XCBA-N4-20E63*                                      |                 |   |                            |
| 30                 | XCBA-N4-30E62*                                      | XCBA-N4-30E63*                                      |                 |   |                            |
| 40                 | XCBA-N4-40E62*                                      | XCBA-N4-40E63*                                      |                 |   |                            |
| 50                 | XCBA-N4-50E62*                                      | XCBA-N4-50E63*                                      |                 |   |                            |
| 60                 | XCBA-N4-60E62*                                      | XCBA-N4-60E63*                                      |                 |   |                            |
| 70                 | XCBA-N4-70E62*                                      | XCBA-N4-70E63*                                      |                 |   |                            |
| 250 Volt DC        | 80  | XCBB-N4-80E62*                                      |                 |   | XCBB-N4-80E63*             |
|                    | 90  | XCBB-N4-90E62*                                      |                 |   | XCBB-N4-90E63*             |
|                    | 100   | XCBB-N4-100E62*                                     |                 |   | XCBB-N4-100E63*            |
|                    | 110   | XCBB-N4-110E62*                                     |                 |   | XCBB-N4-110E63*            |
|                    | 125   | XCBB-N4-125E62*                                     |                 |   | XCBB-N4-125E63*            |
|                    | 150   | XCBB-N4-150E62*                                     |                 |   | XCBB-N4-150E63*            |
|                    | 225/250   | 18,000 Amperes Interrupting Capacity at 600 Volt AC |                 |   | 600 Volt AC                |
| 90                 |   |   | XCBC-N4-90JN2*  | XCBC-N4-90JN3*                                      |                            |
| 100                |   |   | XCBC-N4-100JN2* | XCBC-N4-100JN3*                                     |                            |
| 125                |   |   | XCBC-N4-125JN2* | XCBC-N4-125JN3*                                     |                            |
| 150                |   |   | XCBC-N4-150JN2* | XCBC-N4-150JN3*                                     |                            |
| 175                |   |   | XCBC-N4-175JN2* | XCBC-N4-175JN3*                                     |                            |
| 200                |   |   | XCBC-N4-200JN2* | XCBC-N4-200JN3*                                     |                            |
| 225                |   |   | XCBC-N4-225JN2* | XCBC-N4-225JN3*                                     |                            |
| 250                |   |   | XCBC-N4-250JN2* | XCBC-N4-250JN3*                                     |                            |

\* Circuit breaker brand suffix:

**W**-Cutler-Hammer (Westinghouse)

**G**-General Electric

**S**-Square-D

**T**-I.T.E. (Siemens)

8B-2

## Motor Control Explosionproof Circuit Breakers - Disconnect Switches

### Molded Case Circuit Breaker Enclosures (Breaker Included)

8B-3

| Breaker<br>Frame<br>Size | Breaker<br>Interrupting<br>Rating                                  | Volts           | Amp<br>Rating | Catalog No.                   |                               |
|--------------------------|--|-----------------|---------------|-------------------------------|-------------------------------|
|                          |  |                 |               | 2 Pole<br>Non-Interchangeable | 3 Pole<br>Non-Interchangeable |
| 400                      | 22,000<br>Amperes<br>Interrupting<br>Capacity<br>at 600<br>Volt AC | 600<br>Volt AC  | 100           | XCBD-N4-100KN2*               | XCBD-N4-100KN3*               |
|                          |  |                 | 125           | XCBD-N4-125KN2*               | XCBD-N4-125KN3*               |
|                          |  |                 | 150           | XCBD-N4-150KN2*               | XCBD-N4-150KN3*               |
|                          |  |                 | 175           | XCBD-N4-175KN2*               | XCBD-N4-175KN3*               |
|                          |  | 250<br>Volt DC  | 200           | XCBD-N4-200KN2*               | XCBD-N4-200KN3*               |
|                          |  |                 | 225           | XCBD-N4-225KN2*               | XCBD-N4-225KN3*               |
|                          |  |                 | 250           | XCBE-N4-250KN2*               | XCBE-N4-250KN3*               |
|                          |  |                 | 300           | XCBE-N4-300KN2*               | XCBE-N4-300KN3*               |
| 600                      | 22,000<br>Amperes<br>Interrupting<br>Capacity<br>at 600<br>Volt AC | 600<br>Volt AC  | 350           | XCBE-N4-350KN2*               | XCBE-N4-350KN3*               |
|                          |  |                 | 400           | XCBE-N4-400KN2*               | XCBE-N4-400KN3*               |
|                          |  | 250<br>Volt DC  | 250           | XCBE-N4-250LI2*               | XCBE-N4-250LI3*               |
|                          |  |                 | 300           | XCBE-N4-300LI2*               | XCBE-N4-300LI3*               |
|                          |  |                 | 350           | XCBE-N4-350LI2*               | XCBE-N4-350LI3*               |
|                          |  |                 | 400           | XCBE-N4-400LI2*               | XCBE-N4-400LI3*               |
| 800                      | 22,000<br>Amperes<br>Interrupting<br>Capacity<br>at 600 Volt AC    | 600<br>Volt AC  | 500           | XCBF-N4-500LI2*               | XCBF-N4-500LI3*               |
|                          |  |                 | 600           | XCBF-N4-600LI2*               | XCBF-N4-600LI3*               |
|                          |  | 250<br>Volt AC  | 400           | XCBF-N4-400MI2*               | XCBF-N4-400MI3*               |
|                          |  |                 | 500           | XCBF-N4-500MI2*               | XCBF-N4-500MI3*               |
|                          |  |                 | 600           | XCBF-N4-600MI2*               | XCBF-N4-600MI3*               |
| 700                      | XCBF-N4-700MI2*  | XCBF-N4-700MI3* |               |                               |                               |
| 800                      | XCBF-N4-800MI2*  | XCBF-N4-800MI3* |               |                               |                               |

**Note:** For Interchangeable Trip substitute an "I" for "N" in the Catalog Number.

(Example: XCBC-N4-70JI2)

### Fusible Disconnect Switches

| Horsepower<br>Rating<br>at 480 Volts | Horsepower<br>Rating<br>at 600 Volts | Amp<br>Rating | Catalog No.<br>3 Pole |
|--------------------------------------|--------------------------------------|---------------|-----------------------|
| 20                                   | 20                                   | 30            | XCBA-N4-30DF3*        |
| 40                                   | 50                                   | 60            | XCBA-N4-60DF3*        |
| 75                                   | 75                                   | 100           | XCBB-N4-100DF3*       |
| 125                                  | 150                                  | 200           | XCBC-N4-200DF3*       |

**Note:** (3) Class "J" fuses are optional in the above catalog numbers.

\* Circuit breaker brand suffix:

**W**-Cutler-Hammer (Westinghouse)

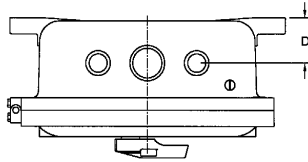
**G**-General Electric

**S**-Square-D

**T**-I.T.E. (Siemens)

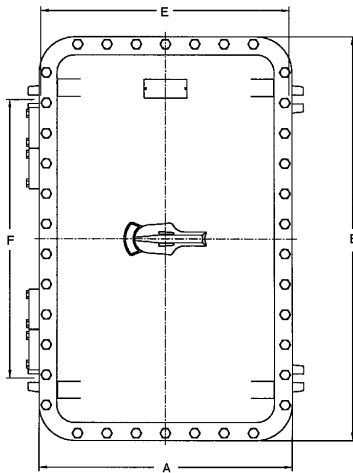
# Motor Control Explosionproof Circuit Breakers - Disconnect Switches

## Non-Fused Disconnect Switches

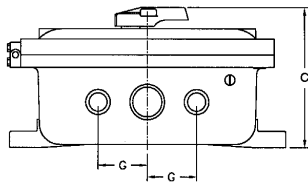


| Horsepower Rating at 480 Volts | Horsepower Rating at 600 Volts | Amp Rating | Catalog No. 3 Pole |
|--------------------------------|--------------------------------|------------|--------------------|
| 20                             | 25                             | 30         | XCBA-N4-30DN3      |
| 40                             | 60                             | 60         | XCBA-N4-60DN3      |
| 75                             | 75                             | 100        | XCBB-N4-100DN3     |
| 125                            | 150                            | 200        | XCBC-N4-200DN3     |

## Circuit Breaker Enclosure Only



| Breaker Frame Size | Trip Range | Catalog Number |
|--------------------|------------|----------------|
| 100                | 15-70      | XCBA-N4        |
| 100/150            | 80-150     | XCBB-N4        |
| 225/250            | 70-250     | XCBC-N4        |
| 400                | 100-225    | XCBD-N4        |
| 400/600            | 250-400    | XCBE-N4        |
| 600/800            | 400-800    | XCBF-N4        |
| 1200               | 800-1200   | XCBG-N4        |



## CIRCUIT BREAKERS and DISCONNECT OPTIONS

| Description  | Suffix | Available On    |                   | Universal Enclosure Only |
|--|--------|-----------------|-------------------|--------------------------|
|  |        | Circuit Breaker | Disconnect Switch |                          |
| Auxiliary Switch 1A and 1B Contacts                    | AS1    | •               | •                 |                          |
| Auxiliary Switch 2A and 2B Contacts                    | AS2    | •               | •                 |                          |
| Bell Alarm (Specify No. of Contacts)                   | BA     | •               |                   |                          |
| Breather/Drain - installed in bottom                   | E      | •               | •                 | •                        |
| Breather and Drain installed                           | EE     | •               | •                 | •                        |
| High Interrupting Capacity Breaker                     | HI     | •               |                   |                          |
| Epoxy Coating (External), (Specify Color)              | LI     | •               | •                 | •                        |
| Epoxy Coating (Internal and External), (Specify Color) | L2     | •               | •                 | •                        |
| Substitute MCP for Breaker                             | M      | •               |                   |                          |
| Phenolic Nameplate (Specify Legend)                    | NP     | •               | •                 | •                        |
| Shunt Trip (Specify Voltage Rating)                    | ST     | •               |                   |                          |
| Undervoltage Release (Specify Voltage Rating)          | UV     | •               |                   |                          |
| Other / Special  | Z      | •               | •                 |                          |

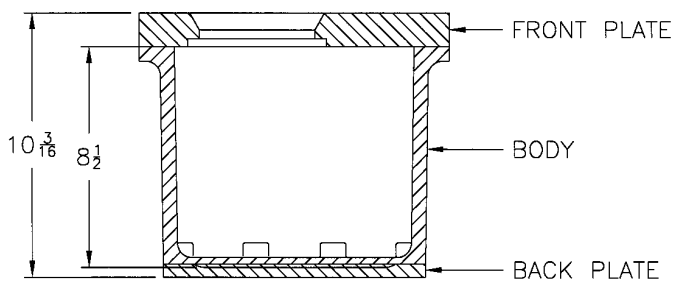
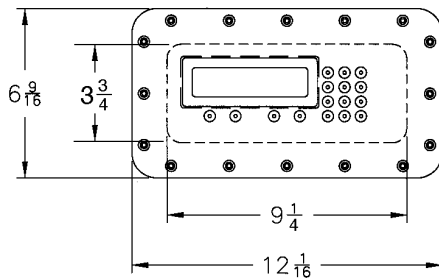
## Data Dimensions

| Enclosure | Nominal Inside Dimensions |        |       | Overall Dimensions |        |        | Mounting CL to CL |        | Mounting Bolt Size | Conduit Dimension |       | Conduit # of Holes |            | Shipping Weight |
|-----------|---------------------------|--------|-------|--------------------|--------|--------|-------------------|--------|--------------------|-------------------|-------|--------------------|------------|-----------------|
|           | Width                     | Length | Depth | A                  | B      | C      | E                 | F      |                    | D                 | G     | Size               | Top/Bottom | Pounds          |
| XCBA-N4   | 6                         | 11     | 5     | 9 1/4              | 14 1/4 | 9      | 9 1/8             | 7 1/2  | 7/16               | 2 1/2             | —     | 1 1/4              | 1          | 28              |
| XCBB-N4   | 6                         | 13     | 5     | 9 1/4              | 16 1/4 | 9      | 9 1/8             | 9 1/2  | 3/8                | 2 1/2             | —     | 2                  | 1          | 31              |
| XCBC-N4   | 7                         | 18     | 5     | 10 3/8             | 21 5/8 | 9      | 9 3/4             | 14 1/2 | 3/8                | 2 3/4             | —     | 2 1/2              | 1          | 47              |
| XCBD-N4   | 12                        | 20     | 5     | 16 1/4             | 24 1/4 | 10     | 15 3/4            | 14 3/8 | 1/2                | 3 1/4             | —     | 2 1/2              | 1          | 108             |
| XCBE-N4   | 12                        | 24     | 6     | 16 1/4             | 28 1/4 | 11     | 15 3/4            | 18 3/8 | 1/2                | 3 5/8             | 2 7/8 | 3                  | 2          | 131             |
| XCBF-N4   | 12                        | 36     | 8     | 16 1/4             | 40 1/4 | 13 1/2 | 15 3/4            | 29     | 5/8                | 4 1/2             | 3 3/8 | 4                  | 2          | 237             |
| XCBG-N4   | 12                        | 46     | 8     | 16 1/4             | 50 1/4 | 13 3/8 | 15 3/4            | 39     | 5/8                | 4 1/2             | 3 3/8 | 4                  | 2          | 286             |

All enclosures have 1/2" NPT top and bottom for breather drain.

8B-4

## XDF Custom Enclosure Systems For Digital Instrumentation



### Applications

Environments requiring explosionproof or dust-tight enclosures.

Housing for panel mounted instrumentation with or without external operator functions – can accommodate standard DIN or other size devices.

### Examples

- Flow Meters
- Level Indicators
- Motion Controllers
- Temperature Monitors
- Gas Analyzers

### Features

- Space saving rectangular design
- Enclosure dimensions customized to match the instrument
- A range of rectangular window openings
- Choice of quantity and location of miniature operators including “key pad” configuration
- Front or rear accessibility for instrument service
- Watertight NEMA 4 gasketing
- Choice of surface finishes
- Recessed Allen Head cover bolts for appearance and security
- Special nameplating and escutcheon available.

### Availability & Support

Adalet engineering will review your specific requirements.

Adalet offers design support, custom dimensional layout, product prototyping, testing and certification assistance.

Production scheduling and inventory to match defined needs.

Custom sizes available, consult factory for details.

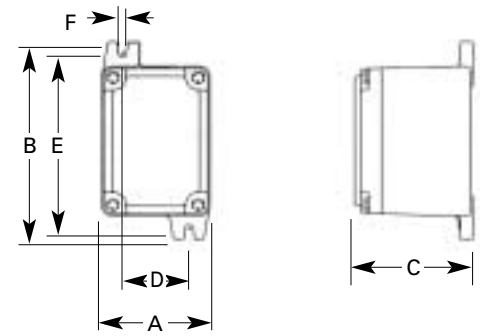
### Certifications

 FM STANDARD 3615

 CSA STANDARD C22.2 No. 30

NEMA 4, 7CD, 9E, F & G  
 NEC Class I, Division I, Groups C & D  
 Class II, Groups E, F & G  
 NEMA 4, 7CD, 9E, F, & G

# Factory-Sealed Control Stations



### Dimensions

| Dimensions in Inches |   |         |       |       |       |
|----------------------|---|---------|-------|-------|-------|
| A                    | B | C       | D     | E     | F     |
| 4 1/4                | 8 | 4 11/16 | 2 5/8 | 7 1/8 | 11/32 |

### Features and Benefits

- Factory-sealed control stations eliminate the need for poured seals
- All control stations have 3/4" feed-through conduit entries
- Factory-sealed contact block rated NEMA A600 and NEMA Q300
- All selector switches have lock-out capabilities
- Bodies and covers are cast from lightweight, corrosion-resistant, copper-free aluminum
- High-quality legend plates permit easy identification of device function
- Durable cast-on lugs cannot get lost
- Ground screw is highly visible and accessible
- Strong, durable materials for reliability and safety
- Customization of box entries available – please consult factory
- NEMA 4 option available – please consult factory

### Material/Finish

Body, Cover: Copper-Free Aluminum  
 Operator and Pilot Light Bodies: Anodized Aluminum  
 Operator Shaft: Stainless Steel  
 Levers: Aluminum

### Application

A wide variety of control stations may be assembled from Adalet bodies, devices and covers for use indoor or outdoor where Class I or Class II hazards are present, such as petroleum refineries, chemical plants and grain-processing and storage facilities. XFS Control Stations may be used in conjunction with magnetic starters or contactors for remote control of motors.

| Catalog No. | Control Station Description   |
|-------------|---|
| XFSA3101    | Black momentary pushbutton  |
| XFSA3223    | Start-stop momentary pushbuttons  |
| XFSA3911    | Maintained emergency stop with mushroom head                                    |
| XFSA3173    | 2-position, 2-circuit selector switch with 1NO/1NC contact                      |
| XFSA3185    | 2-position, 4-circuit selector switch with 2NO/2NC contacts                     |
| XFSA3178    | 3-position, 2-circuit selector switch with 1NO/1NC contact marked HAND-OFF-AUTO |
| XFSA31208   | Green pilot light   |
| XFSA31209   | Red pilot light   |
| XFSA32089   | One green and one red pilot light   |
| XFSA30925   | Red pilot light with start-stop momentary dual pushbutton                       |

### Certifications/Compliances

**Cover Assembly**  
**Body Assembly**  
**Complete Enclosure Assembly**



Class I, Division 1, Groups B\* CD  
 Class I, Division 2, Groups BCD†  
 Class I, Zone 1, Group IIB  
 Class I, Zone 2, Group IIB

NEMA 4 Option:  
 Class I, Division 1, Groups C & D  
 Class I, Division 2, Groups BCD†  
 Class I, Zone 1, Group IIB  
 Class I, Zone 2, Group IIB

Class II, Division 1, Groups E, F & G  
 Class II, Division 2, Groups E, F & G†

NEMA 3, 3R, 4, 7CD, 9EFG, 12

### Contact Block Only

Class I, Division 1, Groups BCD (recognized)  
 Class I, Division 2, Groups BCD (listed)  
 Class I, Zone 1, Group IIB+H2  
 Class I, Zone 2, Group IIB+H2



### Applicable Standard

Underwriters Laboratories:  
 UL 698, UL 1203



\*Group B pending  
 †Division 2 Compliance

## OmniStar Specifications



### Features and Benefits

- Factory sealed control station **eliminates the need for poured seals**
- Factory sealed contact block rated NEMA A600 and NEMA Q300
- Single-station through four-gang vertical or horizontal configurations are available to accommodate a wide variety of system needs
- Conduit entries available in 1/2", 3/4" and 1" sizes either dead-end or feed through
- Customization possible by using any of a wide variety of devices: pilot lights, miniature operators, momentary contact pushbuttons, selector switches, key operator selector switches or rocker arm
- One- through four-hole covers allow up to four NO/NC contact blocks per station
- Bodies and covers are cast from lightweight, corrosion-resistant, copper-free aluminum
- High-quality legend plates permit easy identification of device function
- Durable cast-on lugs cannot get lost
- Ground screw is highly visible and accessible
- Strong, durable materials for reliability and safety
- Customization of box entries available – please consult factory
- NEMA 4 option available – please consult factory

### Material/Finish

Body, Cover: Copper-Free Aluminum

Operator and Pilot Light Bodies: Anodized Aluminum

Operator Shaft: Stainless Steel

Knobs: Nylon

### Application

A wide variety of control stations may be assembled from Adalet bodies, devices and covers for use indoor or outdoor where Class I or Class II hazards are present, such as petroleum refineries, chemical plants and grain processing and storage facilities. XFS Control Stations may be used in conjunction with magnetic starters or contactors for remote control of motors.

### Certifications/Compliances

**XFSC Cover Assembly**

**XFSB Body Assembly**

**XFSA Complete Enclosure Assembly**



**Contact Block Only**



Class I, Division 1, Groups CD  
Class I, Division 2, Groups B\*CD†  
Class I, Zone 1, Group IIB  
Class I, Zone 2, Group IIB  
NEMA 4 Option:

Class I, Division 1, Groups C & D  
Class I, Division 2, Groups C & Dt  
Class I, Zone 1, Group IIB  
Class I, Zone 2, Group IIB  
Class II, Division 1, Groups E, F & G  
Class II, Division 2, Groups E, F & G†  
NEMA 3, 3R, 4, 7CD, 9EFG, 12

\*Group B Compliance

†Division 2 Compliance

Class I, Division 1, Groups BCD (recognized)  
Class I, Division 2, Groups BCD (listed)  
Class I, Zone 1, Group IIB+H2  
Class I, Zone 2, Group IIB+H2

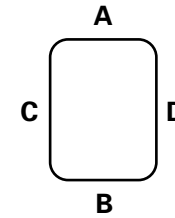
### Applicable Standard

Underwriters Laboratories: UL 698, UL 1203

# OmniStar Bodies & Covers

**Table A1** Conduit Entry

| Conduit Entry | Catalog Suffix No. | Hole Location Suffix Numbers |        |                |                | Replacement Body Catalog No. |
|---------------|--------------------|------------------------------|--------|----------------|----------------|------------------------------|
|               |                    | Top                          | Bottom | Left           | Right          |                              |
| 1/2"          | 2                  | A                            | B      | C <sup>1</sup> | D <sup>1</sup> | XFSB2                        |
| 3/4"          | 3                  | A                            | B      | C <sup>1</sup> | D <sup>1</sup> | XFSB3                        |
| 1"            | 4                  | A                            | B      | C              | D              | XFSB4                        |



<sup>1</sup> Catalog suffix number followed by hole location suffix (C&D holes always 1" NPT)

Example – 3ACD would be a body with a 3/4" hole in the top position and two 1" holes on the sides.

**Note:** When ordering assembled control station, catalog number should begin with XFSA to indicate body and cover. Refer to page 7D-6 for catalog logic/example.

**Table B1** Covers

| Style  | Catalog Suffix No. | NEMA Type 4 Catalog Suffix No. | Replacement Cover Catalog No. <sup>2</sup> | NEMA Type 4 Replacement Cover Catalog No. <sup>2</sup> |
|--|--------------------|--------------------------------|--|--|
| Blank  | –                  | -N4                            | XFSC                                       | XFSC-N4  |
| One 3/4" NPSM Hole                           | 1                  | 1-N4                           | XFSC-1                                     | XFSC-1-N4  |
| Two 3/4" NPSM Holes                          | 2                  | 2-N4                           | XFSC-2                                     | XFSC-2-N4  |
| One 3/4" NPSM Hole and Two 3/8-16" UNC Holes | 3                  | 3-N4                           | XFSC-3                                     | XFSC-3-N4  |
| Four 3/8-16" UNC Holes                       | 4                  | 4-N4                           | XFSC-4                                     | XFSC-4-N4  |
| Two 3/8-16" UNC Holes                        | 5                  | 5-N4                           | XFSC-5                                     | XFSC-5-N4  |
| Rocker Arm — See next page                   | RA                 | RA-N4                          |  |  |

<sup>2</sup> Replacement cover catalog numbers should be followed by suffix numbers for Adalet operators.

Example – XFSC-4-N4 would be a NEMA Type 4 cover with four holes.



XFSC-1



XFSC-2



XFSC-3



XFSC-4



XFSC-5



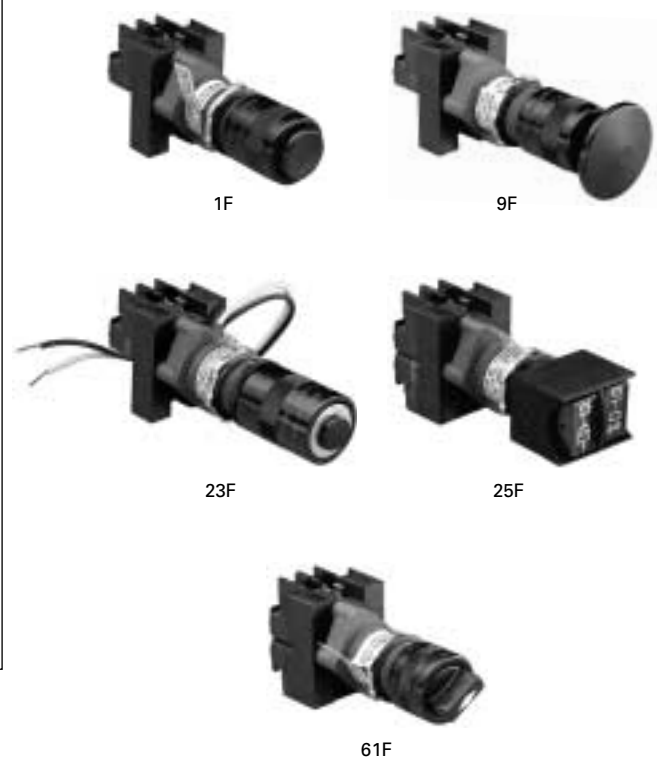
7C-4

## OmniStar Device Kits – Pushbuttons & Pilot Lights

**Table C1** Pushbuttons

| Kit                                     | Catalog<br>Suffix Nos.<br>for 1 NO/1 NC | Catalog<br>Suffix Nos.<br>for 2 NO/2 NC |
|---|---|---|
| Momentary Pushbutton – Black            | 1F                                      | 10F                                     |
| Momentary Pushbutton – Green            | 2F                                      | 11F                                     |
| Momentary Pushbutton – Red              | 3F                                      | 12F                                     |
| Momentary PB w/ Padlock – Black         | 4F                                      | 13F                                     |
| Momentary PB w/ Padlock – Green         | 5F                                      | 14F                                     |
| Momentary PB w/ Padlock – Red           | 6F                                      | 15F                                     |
| Mushrm Hd Momentary PB – Black          | 7F                                      | 16F                                     |
| Mushrm Hd Momentary PB – Green          | 8F                                      | 17F                                     |
| Mushrm Hd Momentary PB – Red            | 9F                                      | 18F                                     |
| Mushrm Hd Maintained                    | 911F                                    |   |
| Mushrm Hd Maintained                    |   | 912F                                    |
| Lighted Pushbutton – Amber <sup>2</sup> | 20F                                     |   |
| Lighted Pushbutton – Blue <sup>2</sup>  | 21F                                     |   |
| Lighted Pushbutton – Clear <sup>2</sup> | 22F                                     |   |
| Lighted Pushbutton – Red <sup>2</sup>   | 23F                                     |   |
| Lighted Pushbutton – White <sup>2</sup> | 24F                                     |   |
| Dual PB Momentary – “Start/Stop”        |   | 25F                                     |
| Dual PB Momentary – Green/Red           |   | 26F                                     |
| Dual PB Momentary – Black/Black         |   | 27F                                     |
| Dual PB w/ Lockout – “Start/Stop”       |   | 28F                                     |
| Dual PB w/ Lockout – Green/Red          |   | 29F                                     |
| Dual PB w/ Lockout – Black/Black        |   | 30F                                     |
| Dual PB Maint – “Start/Stop”            |   | 31F                                     |
| Dual PB Maint – Green/Red               |   | 32F                                     |
| Dual PB Maint – Black/Black             |   | 34F                                     |
| Dual PB Maint w/ Lockout – “Start/Stop” |   | 35F                                     |
| Dual PB Maint w/ Lockout – Green/Red    |   | 36F                                     |
| Dual PB Maint w/ Lockout – Black/Black  |   | 37F                                     |
| Rocker Arm 2 NO/2 NC <sup>1</sup>       |   | RA1                                     |

Use Suffix “0” for 3/4" NPSM plug and Suffix “00” for 3/8" UNC plug to fill unused spaces. For collars different in color than pushbutton ordered, consult factory.



1 For Rocker Arm 3 NO/3 NC, use suffix RA2 andfor Rocker Arm 4 NO/4 NC, use suffix RA3.  
2 Not for use in NEMA 4 applications

### Contact Ratings OmniStar

|                              | AC   |     |     |     | DC   |      |
|------------------------------|--|-----|-----|-----|------|------|
|                              | 110  | 220 | 440 | 550 | 120  | 440  |
| Volts                        |  |     |     |     |      |      |
| Make & Interrupting Capacity | A 60                                       | 30  | 15  | 12  | .55  | .27  |
| Normal Load Break            | A 6  | 3   | 1.5 | 1.2 | .55  | .27  |
| Continuous Current           | A 10                                       | 10  | 10  | 10  | 2.50 | 2.50 |
| Catalog No.                  | FSBT                                       |     |     |     |      |      |
|                              | One Normally Open and One Normally Closed. |     |     |     |      |      |

**Table D1** Pilot Lights

| Lens Color | Suffix Nos. for<br>Guarded Pilot Lt.<br>Candelabra Base | Suffix Nos. for<br>Guarded Pilot Lt.<br>Slide Base | Suffix Nos. for<br>Miniature Pilot<br>Lights |
|------------|---|--|--|
| Amber      | 205F  | 215F   | 201F   |
| Blue       | 206F  | 216F   |  |
| Clear      | 207F  | 217F   |  |
| Green      | 208F  | 218F   | 202F   |
| Red        | 209F  | 219F   | 203F   |
| White      | 210F  | 220F   |  |

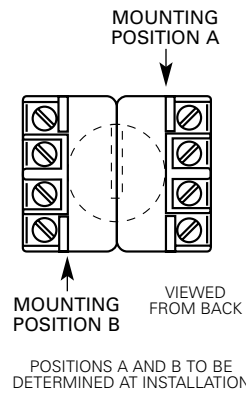
# OmniStar Device Kits – Selector Switches

**Table E1** Selector Switches

| Selector Switch   | Cam | Suffix Nos. for Mounting Position A<br>1 NO/1 NC | Suffix Nos. for Mounting Position B<br>1 NO/1 NC | Suffix Nos. for Mounting Position AB<br>2 NO/2 NC |
|---|-----|--|--|---|
| Selector Switch   | 1   | 51F  | 61F  | 67F   |
| Selector Switch   | 2   | 52F  | 62F  | 68F   |
| Selector Switch   | 3   | 53F  | 63F  | 69F   |
| Selector Switch   | 4   | 54F  | 64F  | 70F   |
| Selector Switch   | 5   | 55F  | 65F  | 71F   |
| Selector Switch   | 6   | 56F  | 66F  | 72F   |
| Selector Switch with Padlock                                | 1   | 73F  | 79F  | 85F   |
| Selector Switch with Padlock                                | 2   | 74F  | 80F  | 86F   |
| Selector Switch with Padlock                                | 3   | 75F  | 81F  | 87F   |
| Selector Switch with Padlock                                | 4   | 76F  | 82F  | 88F   |
| Selector Switch with Padlock                                | 5   | 77F  | 83F  | 89F   |
| Selector Switch with Padlock                                | 6   | 78F  | 84F  | 90F   |
| Selector Switch with Spring Return Center Right to Left     | 2   | 91F  | 96F  | 101F  |
| Selector Switch with Spring Return Center Right to Left     | 3   | 92F  | 97F  | 102F  |
| Selector Switch with Spring Return Center Right to Left     | 4   | 93F  | 98F  | 103F  |
| Selector Switch with Spring Return Center Right to Left     | 5   | 94F  | 99F  | 104F  |
| Selector Switch with Spring Return Center Right to Left     | 6   | 95F  | 100F   | 105F  |
| Selector Switch with Spring Return Center from Right        | 2   | 106F   | 111F   | 116F  |
| Selector Switch with Spring Return Center from Right        | 3   | 107F   | 112F   | 117F  |
| Selector Switch with Spring Return Center from Right        | 4   | 108F   | 113F   | 118F  |
| Selector Switch with Spring Return Center from Right        | 5   | 109F   | 114F   | 119F  |
| Selector Switch with Spring Return Center from Right        | 6   | 110F   | 115F   | 120F  |
| Selector Switch with Spring Return Center from Left         | 2   | 122F   | 127F   | 132F  |
| Selector Switch with Spring Return Center from Left         | 3   | 123F   | 128F   | 133F  |
| Selector Switch with Spring Return Center from Left         | 4   | 124F   | 129F   | 134F  |
| Selector Switch with Spring Return Center from Left         | 5   | 125F   | 130F   | 135F  |
| Selector Switch with Spring Return Center from Left         | 6   | 126F   | 131F   | 136F  |
| Key Selector Switch with Spring Return Center Right to Left | 2   | 138F   | 143F   | 148F  |
| Key Selector Switch with Spring Return Center Right to Left | 3   | 139F   | 144F   | 149F  |
| Key Selector Switch with Spring Return Center Right to Left | 4   | 140F   | 145F   | 150F  |
| Key Selector Switch with Spring Return Center Right to Left | 5   | 141F   | 146F   | 151F  |
| Key Selector Switch with Spring Return Center Right to Left | 6   | 142F   | 147F   | 152F  |
| Key Selector Switch with Spring Return Center from Right    | 2   | 153F   | 158F   | 163F  |
| Key Selector Switch with Spring Return Center from Right    | 3   | 154F   | 159F   | 164F  |
| Key Selector Switch with Spring Return Center from Right    | 4   | 155F   | 160F   | 165F  |
| Key Selector Switch with Spring Return Center from Right    | 5   | 156F   | 161F   | 166F  |
| Key Selector Switch with Spring Return Center from Right    | 6   | 157F   | 162F   | 167F  |
| Key Selector Switch with Spring Return Center from Left     | 2   | 168F   | 173F   | 178F  |
| Key Selector Switch with Spring Return Center from Left     | 3   | 169F   | 174F   | 179F  |
| Key Selector Switch with Spring Return Center from Left     | 4   | 170F   | 175F   | 180F  |
| Key Selector Switch with Spring Return Center from Left     | 5   | 171F   | 176F   | 181F  |
| Key Selector Switch with Spring Return Center from Left     | 6   | 172F   | 177F   | 182F  |
| Key Selector Switch   | 1   | 183F   | 189F   | 195F  |
| Key Selector Switch   | 2   | 184F   | 190F   | 196F  |
| Key Selector Switch   | 3   | 185F   | 191F   | 197F  |
| Key Selector Switch   | 4   | 186F   | 192F   | 198F  |
| Key Selector Switch   | 5   | 187F   | 193F   | 199F  |
| Key Selector Switch   | 6   | 188F   | 194F   | 200F  |

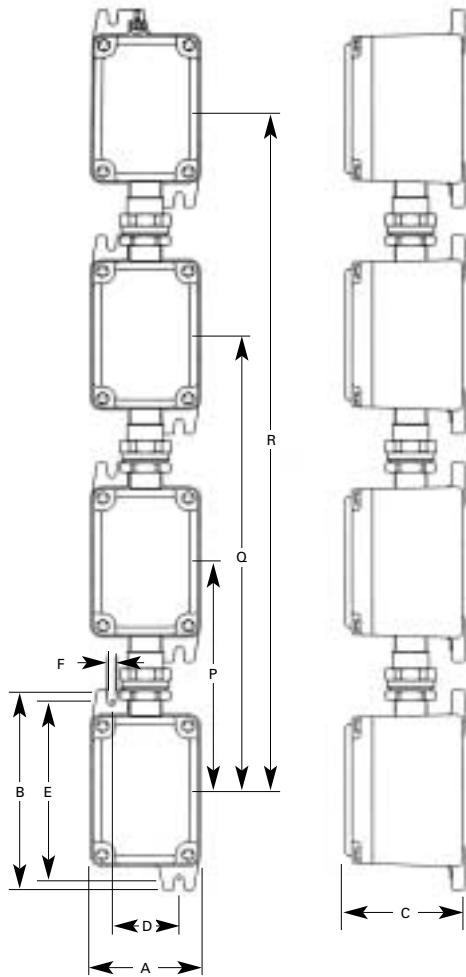
## Contact Sequence Chart

| Circuit of Contact Block | Mounting Position | 2-Position Selector Switches |                        |                        |                        |                        |                        | 3-Position Selector Switches |                        |                        |                        |                        |                        |
|--------------------------|-------------------|------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|------------------------------|------------------------|------------------------|------------------------|------------------------|------------------------|
|                          |                   | Cam 1 Contact Sequence       | Cam 2 Contact Sequence | Cam 3 Contact Sequence | Cam 4 Contact Sequence | Cam 5 Contact Sequence | Cam 6 Contact Sequence | Cam 1 Contact Sequence       | Cam 2 Contact Sequence | Cam 3 Contact Sequence | Cam 4 Contact Sequence | Cam 5 Contact Sequence | Cam 6 Contact Sequence |
| Normally Closed (NC)     | A                 | Circuit A                    | X O                    | X X O                  | X X O                  | X O X                  | O O X                  | O O X                        | O O X                  | O O X                  | O O X                  | O O X                  | O O X                  |
| Normally Open (NO)       |                   | Circuit B                    | O X                    | O O X                  | O O X                  | O X O                  | X X O                  | O X O                        | O X O                  | O X O                  | X X O                  | O X O                  | O X O                  |
| Normally Closed (NC)     | B                 | Circuit A                    | X O                    | O X O                  | O X X                  | X O O                  | O X X                  | X O O                        | O X X                  | X O O                  | O X X                  | X O O                  | X O O                  |
| Normally Open (NO)       |                   | Circuit B                    | O X                    | X O X                  | X O O                  | O X X                  | X O O                  | O X X                        | X O O                  | X O O                  | X O O                  | X O O                  | O X X                  |

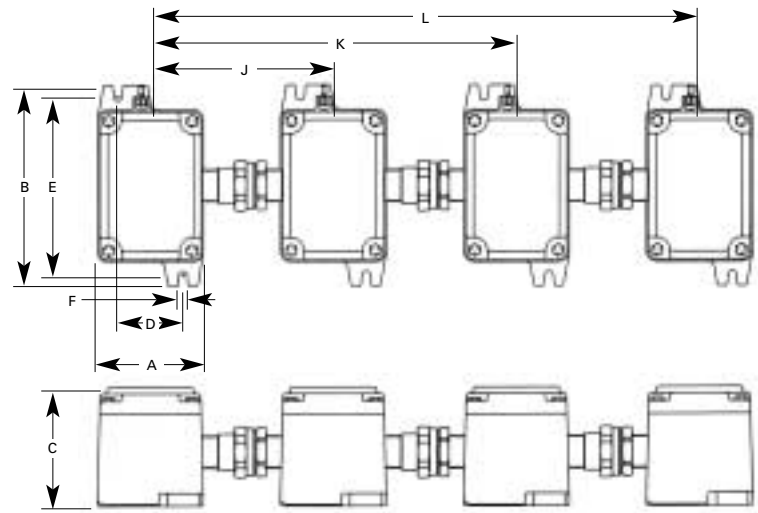


7C-6

# OmniStar Dimensions – Vertical & Horizontal 4-Gang Assembly



**VERTICAL 4-GANG ASSEMBLY**



**HORIZONTAL 4-GANG ASSEMBLY**

## Dimensions

| Dimensions in Inches |   |         |       |       |       |        |        |          |       |        |        |
|----------------------|---|---------|-------|-------|-------|--------|--------|----------|-------|--------|--------|
| A                    | B | C       | D     | E     | F     | J      | K      | L        | P     | Q      | R      |
| 4 1/4                | 8 | 4 11/16 | 2 5/8 | 7 1/8 | 11/32 | 7 5/16 | 14 5/8 | 21 15/16 | 9 1/8 | 18 1/4 | 27 3/8 |

# OmniStar Ordering Information

## To Order

To order control stations, determine the number of operators required. Select the control station body and cover by operator quantity and mounting type from Tables A1 and B1. Order operators by suffix numbers from Tables C1, D1 and E1. Add suffix numbers to box/cover assembly number (replacing the "B" in the box catalog number with an "A" for "Assembly" followed by a

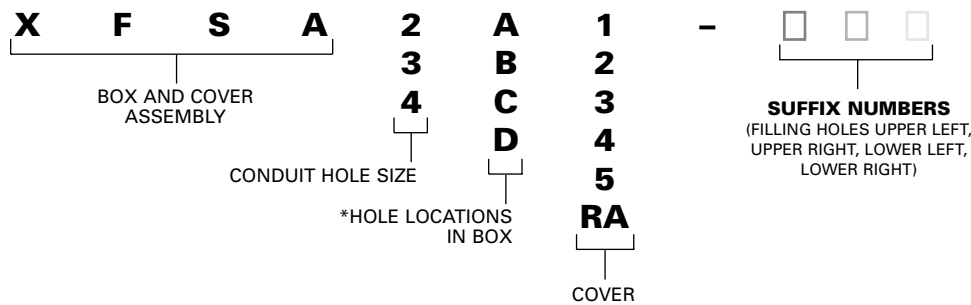
number to indicate the number of holes in the cover), separating the assembly number from the suffix number(s) by dashes. All operator holes must be filled by an operator or plug. Installation of operators will be made in the following order: upper left, upper right, lower left, lower right. See Assembly Catalog Numbers Logic/Example below. Select legend plates from Table F1 below.

**Table F1** Legend Plate Standard Markings

| Pushbuttons/Pilot Lights |       |        | Selector Switches |                     |
|--------------------------|-------|--------|-------------------|---------------------|
| Blank                    | Slow  | Reset  | Run-Jog           | Open-Off-Close      |
| Start                    | Open  | In     | Hand-Auto         | Fast-Off-Slow       |
| Inch                     | Close | Out    | Forward-Reverse   | Run-Auto-Jog        |
| Stop                     | Up    | Left   | Fast-Slow         | Hand-Off-Auto       |
| Run                      | Jog   | Right  | Open-Close        | Forward-Off-Reverse |
| Forward                  | On    | Low    | Up-Down           | 1-Off-2             |
| Reverse                  | Off   | High   | Off-On            | Up-Off-Down         |
| Fast                     | Back  | Down   |                   |                     |
|                          |       | E-Stop |                   |                     |

Legend Plates are anodized aluminum with engraved letters on black background. Stop has red and start has green background. Special engraved legend plates can be supplied.

## Assembly Catalog Numbers Logic/Example



XFSA2A1-1F is an assembled control station with one 1/2" hub, and one operator hole with one momentary pushbutton black.

\*C & D holes are always supplied as 1" NPT

## Explosionproof and Dust-tight Fittings and Accessories

### EXPLOSIONPROOF AND DUST-TIGHT JUNCTION BOXES CLASS I, GROUPS C & D; CLASS II, GROUPS E, F & G; NEMA 7 & NEMA 9 MULTI-HUB BOXES



XJAB

Designed for general wiring in hazardous locations. For pulling and splicing conductors. Serves as mounting outlets with use of appropriate fixture covers.

Available with dome cover for additional splicing room and mounting of various devices.

**Bodies XJAB, XJAD and XJAX 26 thru 46 have two interior mounting bosses, which can be blind tapped.**

**Bodies XJAC, XJAL and XJAT 26 thru 46 have four interior mounting bosses, which can be blind tapped.**

**All bodies 570 thru 890 have solid back, can be tapped blind.**

XJAC  
(No bottom hub)

XJAD

| Catalog Number | Conduit Size (In.) | Standard Pkg. Quantity | Standard Pkg. Weight Lbs. |
|----------------|--------------------|------------------------|---------------------------|
| XJAB-26        | 1/2                | 10                     | 9                         |
| XJAB-36        | 3/4                | 10                     | 10                        |
| XJAB-46        | 1                  | 10                     | 12                        |
| XJAB-570       | 1 1/4              | 5                      | 25                        |
| XJAB-690       | 1 1/2              | 4                      | 22                        |
| XJAB-890       | 2                  | 4                      | 23                        |
| XJAC-26        | 1/2                | 10                     | 9                         |
| XJAC-36        | 3/4                | 10                     | 10                        |
| XJAC-46        | 1                  | 10                     | 12                        |
| XJAC-570       | 1 1/4              | 5                      | 26                        |
| XJAC-690       | 1 1/2              | 4                      | 21                        |
| XJAC-890       | 2                  | 4                      | 23                        |
| XJAD-36        | 3/4                | 10                     | 9                         |
| XJAD-46        | 1                  | 10                     | 15                        |
| XJAL-26        | 1/2                | 10                     | 9                         |
| XJAL-36        | 3/4                | 10                     | 10                        |
| XJAL-46        | 1                  | 10                     | 12                        |
| XJAL-570       | 1 1/4              | 5                      | 26                        |
| XJAL-690       | 1 1/2              | 4                      | 21                        |
| XJAL-890       | 2                  | 4                      | 23                        |

**NEMA 4 WATERTIGHT OPTIONAL:**  
Consult factory for availability and/or certifications.



#### Compliances

- NEC Class I, Groups C, D  
Class II, Groups E, F, G

- UL Standard 886 - CSA Standard C22.2 No. 30

10A-1

## Explosionproof and Dust-tight Fittings and Accessories

### EXPLOSIONPROOF AND DUST-TIGHT JUNCTION BOXES CLASS I, GROUPS C & D; CLASS II, GROUPS E, F & G; NEMA 7 & NEMA 9 MULTI-HUB BOXES



**XJAL**  
(No bottom hub)

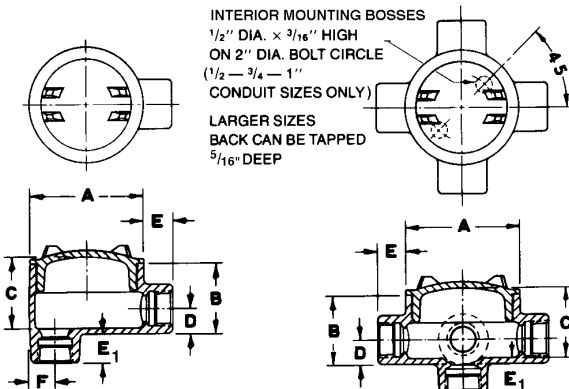


**XJAT**  
(No bottom hub)



**XJAX**  
(No bottom hub)

| Catalog Number | Conduit Size (In.) | Standard Pkg. Quantity | Standard Pkg. Weight Lbs. |
|----------------|--------------------|------------------------|---------------------------|
| XJAT-26        | 1/2                | 10                     | 10                        |
| XJAT-36        | 3/4                | 10                     | 10                        |
| XJAT-46        | 1                  | 10                     | 13                        |
| XJAT-570       | 1 1/4              | 5                      | 27                        |
| XJAT-690       | 1 1/2              | 4                      | 21                        |
| XJAT-890       | 2                  | 4                      | 23                        |
| XJAX-26        | 1/2                | 10                     | 12                        |
| XJAX-36        | 3/4                | 10                     | 14                        |
| XJAX-46        | 1                  | 10                     | 15                        |
| XJAX-570       | 1 1/4              | 5                      | 27                        |
| XJAX-690       | 1 1/2              | 4                      | 21                        |
| XJAX890        | 2                  | 4                      | 23                        |



| DIMENSIONS (inches) |       |         |        |        |        |         |                |
|---------------------|-------|---------|--------|--------|--------|---------|----------------|
| Conduit Size        | A     | B       | C      | D      | E      | F       | E <sub>1</sub> |
| 1/2                 | 3 1/2 | 2       | 2      | 5/8    | 7/8    | 1 1/16  | 7/8            |
| 3/4                 | 3 1/2 | 2       | 2      | 3/4    | 7/8    | 1 3/16  | 7/8            |
| 1                   | 3 1/2 | 2 3/16  | 2 3/16 | 7/8    | 1      | 1 5/16  | 1              |
| 1 1/4               | 6 3/8 | 3 3/16  | 3 3/4  | 1 3/32 | 1 1/16 | 1 13/32 | 1              |
| 1 1/2               | 6 3/8 | 3 9/16  | 3 3/4  | 1 9/32 | 3/4    | 1 19/32 | 1              |
| 2                   | 6 3/8 | 3 13/16 | 4      | 1 1/16 | 3/4    | 1 7/8   | 1              |

**Compliances**

- NEC Class I, Groups C, D  
Class II, Groups E, F, G
- UL Standard 886 - CSA Standard C22.2 No. 30

**NEMA 4 WATERTIGHT OPTIONAL:**  
Consult factory for availability and/or certifications.



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## Explosionproof and Dust-tight Fittings and Accessories

### EXPLOSIONPROOF AND DUST-TIGHT JUNCTION BOXES CLASS I, GROUPS C & D; CLASS II, GROUPS E, F & G; NEMA 7 & NEMA 9 MULTI-HUB BOXES



XJA6



XJA6S



XJADC

#### BLANK COVERS

| Catalog Number | Description                     | St. Pkg. | Std. Pkg. Weight Lbs. |
|----------------|---------------------------------|----------|-----------------------|
| XJA6           | For 1/2" - 3/4" - 1" Bodies     | 10       | 5                     |
| XJA8           | For 1 1/4" - 1 1/2" - 2" Bodies | 5        | 11                    |

#### SEALING COVERS

| Catalog Number | Description                 | St. Pkg. | Std. Pkg. Weight Lbs. |
|----------------|-----------------------------|----------|-----------------------|
| XJA6S          | For 1/2" - 3/4" - 1" Bodies | 10       | 7                     |

Entire body must be filled with sealing compound. NEC prohibits splices and taps in sealing fittings.

#### DOME COVERS

| Catalog Number | Description   | St. Pkg. | Std. Pkg. Weight Lbs. |
|----------------|---|----------|-----------------------|
| XJADC          | For 1/2" - 3/4" - 1" Bodies<br>Inside Depth 2 3/8"              | 10       | 9                     |
| XJAD4          | For 1 1/4" - 1 1/2" - 2" Bodies<br>Inside Depth 4 1/8"          | 1        | 5                     |
| XJAD6          | For 1 1/4" - 1 1/2" - 2" Bodies<br>Inside Depth 6"              | 1        | 6                     |
| XJAD10         | For 1 1/4" - 1 1/2" - 2" Bodies<br>Inside Depth 10"             | 1        | 8 1/2                 |
| XJAD13         | For 1 1/4" - 1 1/2" - 2" Bodies<br>Inside Depth 13"             | 1        | 9 1/2                 |
| XJAO           | O-Ring For NEMA 4 watertight<br>For 1/2" - 3/8" - 1" Bodies     | 1        | —                     |
| XJTO           | O-Ring for NEMA 4 watertight<br>For 1 1/4" - 1 1/2" - 2" Bodies | 1        | —                     |

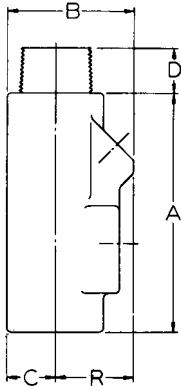
10A-3

## Explosionproof and Dust-tight Fittings and Accessories

### EXPLOSIONPROOF AND DUST-TIGHT SEALING FITTINGS CLASS I, GROUPS B\*, C & D; CLASS II, GROUPS E, F & G; NEMA 7 & NEMA 9



XYB-XYBM



Sealing Fittings are required in Hazardous Locations and are used to isolate arc-producing devices in conduit and wiring systems, and to prevent the passage of explosive pressures from one area to another.

FOR HORIZONTAL AND VERTICAL MOUNTING - Type XYB and XYBM are suitable for either horizontal or vertical mounting and are provided with threaded plugged openings into which fiber and cement can be placed to form effective seal. XYB has female ends for conduit entrance. The XYBM has female ends with a removable threaded nipple.

\*1/2", 3/4", 1" sizes Class I, Group B, C, D, Class II, E, F, G.

1 1/4", 1 1/2", 2", 2 1/2", 3", 3 1/2", 4" sizes Class I, Group C, D Class II, E, F, G

CSA Certified LR27991

UL Listed E10493

10A-4

| Catalog No. Description | Conduit Size (In.) | Ounces Req. For Each Sealing Fitting |       | Standard Package |               |
|-------------------------|--------------------|--------------------------------------|-------|------------------|---------------|
|                         |                    | Cement                               | Fiber | Qty.             | Tot. Wt. Lbs. |
| Female-Female           |                    |                                      |       |                  |               |
| XYB-2                   | 1/2                | 1                                    | 1/8   | 5                | 2.1           |
| XYB-3                   | 3/4                | 2                                    | 1/4   | 5                | 2.6           |
| XYB-4                   | 1                  | 3                                    | 1/4   | 5                | 3.7           |
| XYB-5                   | 1-1/4              | 6                                    | 3/8   | 2                | 2.5           |
| XYB-6                   | 1-1/2              | 9                                    | 1/2   | 2                | 3.2           |
| XYB-8                   | 2                  | 18                                   | 3/4   | 2                | 5.6           |
| XYB-10                  | 2-1/2              | 23                                   | 1-1/2 | 2                | 6.2           |
| XYB-12                  | 3                  | 48                                   | 3-1/8 | 1                | 6.0           |
| XYB-14                  | 3-1/2              | 70                                   | 4-1/2 | 1                | 6.8           |
| XYB-16                  | 4                  | 90                                   | 6     | 1                | 8.3           |

| Catalog No. Description | Conduit Size (In.) | Ounces Req. For Each Sealing Fitting |       | Standard Package |               |
|-------------------------|--------------------|--------------------------------------|-------|------------------|---------------|
|                         |                    | Cement                               | Fiber | Qty.             | Tot. Wt. Lbs. |
| Male-Female             |                    |                                      |       |                  |               |
| XYBM-2                  | 1/2                | 1                                    | 1/8   | 5                | 2.2           |
| XYBM-3                  | 3/4                | 2                                    | 1/4   | 5                | 2.7           |
| XYBM-4                  | 1                  | 3                                    | 1/4   | 5                | 3.8           |
| XYBM-5                  | 1-1/4              | 6                                    | 3/8   | 2                | 2.6           |
| XYBM-6                  | 1-1/2              | 9                                    | 1/2   | 2                | 3.4           |
| XYBM-8                  | 2                  | 18                                   | 3/4   | 2                | 5.9           |
| XYBM-10                 | 2-1/2              | 23                                   | 1-1/2 | 2                | 6.8           |
| XYBM-12                 | 3                  | 48                                   | 3-1/8 | 1                | 6.3           |
| XYBM-14                 | 3-1/2              | 70                                   | 4-1/2 | 1                | 7.3           |
| XYBM-16                 | 4                  | 90                                   | 6     | 1                | 8.8           |

| Nominal Dimensions (Inches) |                    |         |        |        |               |
|-----------------------------|--------------------|---------|--------|--------|---------------|
| Conduit Size                | (XYBM Series Only) |         |        |        | Turn Radius R |
|                             | A                  | B       | C      | D      |               |
| 1/2                         | 3-19/32            | 1-13/16 | 5/8    | 11/16  | 1-3/16        |
| 3/4                         | 3-25/32            | 2-1/16  | 3/4    | 15/16  | 1-5/16        |
| 1                           | 4-3/8              | 2-5/16  | 7/8    | 15/16  | 1-7/16        |
| 1-1/4                       | 5-5/32             | 2-13/16 | 1-1/16 | 1-1/16 | 1-3/4         |
| 1-1/2                       | 5-11/16            | 3-3/16  | 1-3/16 | 1-3/16 | 2             |
| 2                           | 6-13/16            | 3-7/8   | 1-1/2  | 1-7/16 | 2-3/8         |
| 2-1/2                       | 7-1/2              | 4-1/2   | 1-7/8  | 1-5/8  | 2-11/16       |
| 3                           | 9-9/16             | 5-1/2   | 2-3/16 | 1-7/8  | 3-5/16        |
| 3-1/2                       | 9-1/2              | 6-1/6   | 2-3/8  | 2      | 3-11/16       |
| 4                           | 9-9/16             | 6-1/2   | 2-5/8  | 2-1/8  | 3-7/8         |

**Compliances**

- NEC Class I, Groups B, C, D  
Class II, Groups E, F, G
- UL Standard 886 - CSA Standard C22.2 No. 30

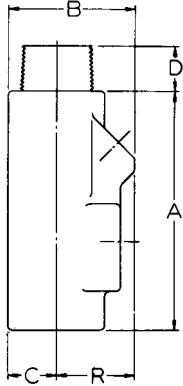


## Explosionproof and Dust-tight Fittings and Accessories

### EXPLOSIONPROOF AND DUST-TIGHT 40% FILL SEALING FITTINGS CLASS I, GROUPS B\*, C & D; CLASS II, GROUPS E, F & G; NEMA 7 & NEMA 9



XYB-XYBM



Sealing Fittings are used for the same application as the standard Adalet sealing fitting but allow up to 40% wire fill in the fitting.

\*1/2", 3/4" sizes Class I, Group B, C, D, Class II, E, F, G.  
1", 1-1/4", 1-1/2", 2", 2-1/2", 3" sizes Class I, Group C, D,  
Class II, E, F, G.

CSA Certified LR27991

UL Listed E10493

| Catalog No.<br>Description | Conduit<br>Size (In.) | Ounces Req. For<br>Each Sealing Fitting |       | Standard<br>Package |               |
|----------------------------|-----------------------|---|-------|---------------------|---------------|
|                            |                       | Cement                                  | Fiber | Qty.                | Tot. Wt. Lbs. |
| Female-Female              |                       |   |       |                     |               |
| XYB-34                     | 1/2                   | 2                                       | 1/4   | 5                   | 2.6           |
| XYB-44                     | 3/4                   | 3                                       | 1/4   | 5                   | 3.7           |
| XYB-54                     | 1                     | 6                                       | 3/8   | 2                   | 2.5           |
| XYB-84                     | 1-1/4                 | 18                                      | 3/4   | 2                   | 5.6           |
| XYB-104                    | 1-1/2                 | 23                                      | 1-1/2 | 2                   | 6.2           |
| XYB-124                    | 2                     | 48                                      | 3-1/8 | 1                   | 6.0           |
| XYB-144                    | 2-1/2                 | 70                                      | 4-1/2 | 1                   | 6.8           |
| XYB-164                    | 3                     | 90                                      | 6     | 1                   | 8.3           |

| Catalog No.<br>Description | Conduit<br>Size (In.) | Ounces Req. For<br>Each Sealing Fitting |       | Standard<br>Package |               |
|----------------------------|-----------------------|---|-------|---------------------|---------------|
|                            |                       | Cement                                  | Fiber | Qty.                | Tot. Wt. Lbs. |
| Male-Female                |                       |   |       |                     |               |
| XYBM-34                    | 1/2                   | 2                                       | 1/4   | 5                   | 2.7           |
| XYBM-44                    | 3/4                   | 3                                       | 1/4   | 5                   | 3.8           |
| XYBM-54                    | 1                     | 6                                       | 3/8   | 2                   | 2.6           |
| XYBM-84                    | 1-1/4                 | 18                                      | 3/4   | 2                   | 5.9           |
| XYBM-104                   | 1-1/2                 | 23                                      | 1-1/2 | 2                   | 6.8           |
| XYBM-124                   | 2                     | 48                                      | 3-1/8 | 1                   | 6.3           |
| XYBM-144                   | 2-1/2                 | 70                                      | 4-1/2 | 1                   | 7.3           |
| XYBM-164                   | 3                     | 90                                      | 6     | 1                   | 8.8           |

| Nominal Dimensions (Inches) |         |         |        |                    |                  |
|-----------------------------|---------|---------|--------|--------------------|------------------|
| Conduit<br>Size             | A       | B       | C      | (XYBM Series Only) | Turn<br>Radius R |
|                             |         |         |        | D                  |                  |
| 1/2                         | 3-25/32 | 2-1/16  | 3/4    | 15/16              | 1-5/16           |
| 3/4                         | 4-3/8   | 2-5/16  | 7/8    | 15/16              | 1-7/16           |
| 1                           | 5-5/32  | 2-13/16 | 1-1/16 | 1-1/16             | 1-3/4            |
| 1-1/4                       | 6-13/16 | 3-7/8   | 1-1/2  | 1-7/16             | 2-3/8            |
| 1-1/2                       | 7-1/2   | 4-1/2   | 1-7/8  | 1-5/8              | 2-11/16          |
| 2                           | 9-9/16  | 5-1/2   | 2-3/16 | 1-7/8              | 3-5/16           |
| 2-1/2                       | 9-1/2   | 6-1/16  | 2-3/8  | 2                  | 3-11/16          |
| 3                           | 9-9/16  | 6-1/2   | 2-5/8  | 2-1/8              | 3-7/8            |

#### Compliances

- NEC Class I, Groups B, C, D  
Class II, Groups E, F, G
- UL Standard 886 - CSA Standard C22.2 No. 30

10A-5

## Explosionproof and Dust-tight Fittings and Accessories

### EXPLOSIONPROOF AND DUST-TIGHT SEALING FITTINGS CLASS I, GROUP D; CLASS II, GROUPS E, F & G; NEMA 7 & NEMA 9

Adalet Sealing Fittings are used to isolate arc-producing devices from wiring systems and to prevent the spread of explosive gases.

#### FOR VERTICAL MOUNTING

Types XY and XYM Fittings are for vertical mounting, and are provided with threaded plugged openings into which the sealing cement is poured. Sizes 1-1/4" x 1-1/2" have large plugged openings in the lower hub to facilitate packing fiber around the wires to form a dam. Type XYM's have removable threaded nipples. The two hubs are tapped simultaneously to assure alignment of the conduits, especially important to equipment manufacturers using short runs of conduit.

#### FOR HORIZONTAL & VERTICAL MOUNTING

Type XYC Fittings are for horizontal mounting only, with the cover opening in an upright position. XYCS fittings are for vertical or horizontal mounting, with removable threaded covers which can be turned to the desired position for pouring in the sealing cement. The covers are interchangeable. The male-to-female types have removable threaded nipple.



XY 2-3-4

XYM 2-3-4



XY 5-6

XYM 5-6



XYC

XYCM



XYCS

XYCSM

CSA Certified LR27991

UL Listed E10493

#### Compliances

- NEC Class I, Group D Class II, Groups E, F, G
- UL Standard 886 - CSA Standard C22.2 No. 30

| Catalog Number |             | Conduit Size (In.) | Ounces Required per Fitting |               | Standard Package |             |
|----------------|-------------|--------------------|-----------------------------|---------------|------------------|-------------|
| Female/Female  | Male/Female |                    | Sealing Cement              | Packing Fiber | Qty              | Weight Lbs. |
| XY2            | XYM2        | 1/2                | 1                           | 1/8           | 25               | 10          |
| XY3            | XYM3        | 3/4                | 1                           | 1/4           | 25               | 10          |
| XY4            | XYM4        | 1                  | 2                           | 1/4           | 25               | 12-1/2      |
| XY5            | XYM5        | 1-1/4              | 4                           | 3/8           | 10               | 7-1/2       |
| XY6            | XYM6        | 1-1/2              | 5                           | 1/2           | 10               | 10          |
| XYC2           | XYC2M       | 1/2                | 2                           | 1/8           | 25               | 13          |
| XYC3           | XYC3M       | 3/4                | 2                           | 1/4           | 25               | 13          |
| XYC4           | XYC4M       | 1                  | 4-1/2                       | 1/4           | 25               | 15          |
| XYC5           | XYC5M       | 1-1/4              | 8-1/2                       | 3/8           | 10               | 10          |
| XYC6           | XYC6M       | 1-1/2              | 11-1/2                      | 1/2           | 10               | 11          |
| XYC8           | XYC8M       | 2                  | 13-1/2                      | 3/4           | 10               | 12          |
| XYC10          | XYC10M      | 2-1/2              | 15                          | 1-1/2         | 1                | 2           |
| XYC12          | XYC12M      | 3                  | 31-1/2                      | 3-1/8         | 1                | 3           |
| XYC14          | XYC14M      | 3-1/2              | 42-1/2                      | 4-1/2         | 1                | 4           |
| XYC16          | XYC16M      | 4                  | 51                          | 6             | 1                | 5           |
| XYC2S          | XYC2SM      | 1/2                | 2                           | 1/8           | 25               | 13          |
| XYC3S          | XYC3SM      | 3/4                | 2                           | 1/4           | 25               | 13          |
| XYC4S          | XYC4SM      | 1                  | 3                           | 1/4           | 25               | 15          |
| XYC5S          | XYC5SM      | 1-1/4              | 6-1/2                       | 3/8           | 10               | 10          |
| XYC6S          | XYC6SM      | 1-1/2              | 10                          | 1/2           | 10               | 11          |
| XYC8S          | XYC8SM      | 2                  | 12-1/2                      | 3/4           | 10               | 12          |
| XYC10S         | XYC10SM     | 2-1/2              | 13-1/2                      | 1-1/2         | 1                | 2           |
| XYC12S         | XYC12SM     | 3                  | 29-1/2                      | 3-1/8         | 1                | 3           |
| XYC14S         | XYC14SM     | 3-1/2              | 40                          | 4-1/2         | 1                | 4           |
| XYC16S         | XYC16SM     | 4                  | 48-1/2                      | 6             | 1                | 5           |

## Explosionproof and Dust-tight Fittings and Accessories

### EXPLOSIONPROOF AND DUST-TIGHT 40% FILL SEALING FITTINGS CLASS I, GROUP D; CLASS II, GROUPS E, F & G; NEMA 7 & NEMA 9



XY 34, 44



XYM 34, 44



XY 54



XYM 54



XYC 34-XYC 164



XYC 34M-XYC 164M



XYC 34S-XYC 164S



XYC 34SM-XYC 164SM

Adalet 40% Fill Sealing Fittings are used for the same applications as the standard Adalet Sealing Fittings, but allow up to 40% wire fill in the fitting.

| Catalog Number |             | Conduit Size (In.) | Ounces Required per Fitting |               | Standard Package |             |
|----------------|-------------|--------------------|-----------------------------|---------------|------------------|-------------|
| Female/Female  | Male/Female |                    | Sealing Cement              | Packing Fiber | Qty              | Weight Lbs. |
| XY34           | XYM34       | 1/2                | 1                           | 1/4           | 25               | 10          |
| XY44           | XYM44       | 3/4                | 2                           | 1/4           | 25               | 12-1/2      |
| XY54           | XYM54       | 1                  | 4                           | 3/8           | 10               | 7-1/2       |
| XYC34          | XYC34M      | 1/2                | 2                           | 1/4           | 25               | 13          |
| XYC44          | XYC44M      | 3/4                | 4-1/2                       | 1/4           | 25               | 15          |
| XYC54          | XYC54M      | 1                  | 8-1/2                       | 3/8           | 10               | 10          |
| XYC84          | XYC84M      | 1-1/4              | 13-1/2                      | 3/4           | 10               | 12          |
| XYC104         | XYC104M     | 1-1/2              | 15                          | 1-1/2         | 1                | 2           |
| XYC124         | XYC124M     | 2                  | 31-1/2                      | 3-1/8         | 1                | 3           |
| XYC144         | XYC144M     | 2-1/2              | 42-1/2                      | 4-1/2         | 1                | 4           |
| XYC164         | XYC164M     | 3                  | 51                          | 6             | 1                | 5           |
| XYC34S         | XYC34SM     | 1/2                | 2                           | 1/4           | 25               | 13          |
| XYC44S         | XYC44SM     | 3/4                | 3                           | 1/4           | 25               | 15          |
| XYC54S         | XYC54SM     | 1                  | 6-1/2                       | 3/8           | 10               | 10          |
| XYC84S         | XYC84SM     | 1-1/4              | 12-1/2                      | 3/4           | 10               | 12          |
| XYC104S        | XYC104SM    | 1-1/2              | 13-1/2                      | 1-1/2         | 1                | 2           |
| XYC124S        | XYC124SM    | 2                  | 29-1/2                      | 3-1/8         | 1                | 3           |
| XYC144S        | XYC144SM    | 2-1/2              | 40                          | 4-1/2         | 1                | 4           |
| XYC164S        | XYC164SM    | 3                  | 48-1/2                      | 6             | 1                | 5           |

10A-7

#### Compliances

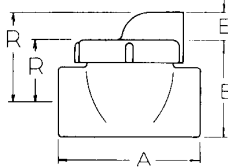
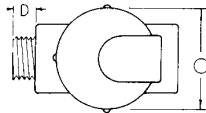
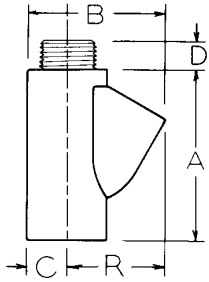
- NEC Class I, Group D  
Class II, Groups E, F, G
- UL Standard 886 - CSA Standard C22.2 No. 30

CSA Certified LR27991

UL Listed E10493

## Explosionproof and Dust-tight Fittings and Accessories

### EXPLOSIONPROOF AND DUST-TIGHT SEALING FITTINGS CLASS I, GROUP D; CLASS II, GROUPS E, F & G; NEMA 7 & NEMA 9



10A-8

| Catalog Number |             | Conduit Size | Dimensions (In.)          |         |         |        |        | R = Turning Radius (Inches) |               |          |
|----------------|-------------|--------------|---------------------------|---------|---------|--------|--------|-----------------------------|---------------|----------|
| Female/Female  | Male/Female |              | Nominal Dimensions, (In.) |         |         |        |        | Plain Cover                 | Sealing Cover | No Cover |
|                |             |              | A                         | B       | C       | D      | E      |                             |               |          |
| XY2            | XYM2        | 1/2          | 3-1/16                    | 2-7/16  | 3/4     | 11/16  |        |                             |               | 1-13/16  |
| XY3            | XYM3        | 3/4          | 3-1/16                    | 2-7/16  | 3/4     | 1      |        |                             |               | 1-13/16  |
| XY4            | XYM4        | 1            | 3-3/4                     | 2-15/16 | 15/16   | 15/16  |        |                             |               | 2-1/8    |
| XY5            | XYM5        | 1-1/4        | 4-15/16                   | 3-3/16  | 1-3/16  | 1-1/8  |        |                             |               | 2-1/8    |
| XY6            | XYM6        | 1-1/2        | 4-7/8                     | 3-7/16  | 1-5/16  | 1-5/16 |        |                             |               | 2-1/4    |
| XYC2           | XYC2M       | 1/2          | 3-1/16                    | 2-9/16  | 2-1/6   | 5/8    | 13/16  | 1-7/8                       | 2-11/16       |          |
| XYC2S          | XYC2SM      |              |                           |         |         |        |        |                             |               |          |
| XYC3           | XYC3M       | 3/4          | 3-1/6                     | 2-9/16  | 2-1/16  | 15/16  | 13/16  | 1-7/8                       | 2-11/16       |          |
| XYC3S          | XYC3SM      |              |                           |         |         |        |        |                             |               |          |
| XYC4           | XYC4M       | 1            | 3-11/16                   | 2-11/16 | 2-3/8   | 15/16  | 1      | 2-1/8                       | 3-1/16        |          |
| XYC4           | XYC4SM      |              |                           |         |         |        |        |                             |               |          |
| XYC5           | XYC5M       | 1-1/4        | 4-1/2                     | 3-3/16  | 3-3/8   | 1-1/16 | 7/8    | 2-11/16                     | 3-1/16        |          |
| XYC5S          | XYC5SM      |              |                           |         |         |        |        |                             |               |          |
| XYC6           | XYC6M       | 1-1/2        | 4-1/2                     | 3-7/16  | 3-3/8   | 1-1/8  | 7/8    | 2-11/16                     | 3-1/16        |          |
| XYC6S          | XYC6SM      |              |                           |         |         |        |        |                             |               |          |
| XYC8           | XYC8M       | 2            | 4-11/16                   | 4       | 3-3/8   | 1-3/8  | 7/8    | 3                           | 3-5/16        |          |
| XYC8S          | XYC8SM      |              |                           |         |         |        |        |                             |               |          |
| XYC10          | XYC10M      | 2-1/2        | 5-5/16                    | 4-5/8   | 3-3/8   | 1-5/8  | 7/8    | 3-1/4                       | 3-3/4         |          |
| XYC10S         | XYC10SM     |              |                           |         |         |        |        |                             |               |          |
| XYC12          | XYC12M      | 3            | 6-7/16                    | 5-7/16  | 3-15/16 | 1-3/4  | 1-3/8  | 4                           | 4-5/8         |          |
| XYC12S         | XYC12SM     |              |                           |         |         |        |        |                             |               |          |
| XYC14          | XYC14M      | 3-1/2        | 6-9/16                    | 6-3/8   | 4-3/4   | 1-5/8  | 1-5/16 | 4-5/8                       | 5             |          |
| XYC14S         | XYC14SM     |              |                           |         |         |        |        |                             |               |          |
| XYC16          | XYC16M      | 4            | 6-15/16                   | 6-13/16 | 4-3/4   | 2      | 1-5/16 | 4-3/4                       | 5-3/8         |          |

CSA Certified LR27991  
UL Listed E10493

### ADACO SEALING CEMENT AND ADACO PACKING FIBER CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G; NEMA 7 & NEMA 9



XSC

XAF

| Catalog No. | Description | Net Weight |
|-------------|-------------|------------|
| XSC-8       | ADACO No. 1 | 8 oz.      |
| XSC-16      | Sealing     | 16 oz.     |
| XSC-160     | Cement      | 10 lbs.    |
| XAF-6       | ADACO       | 1-1/2 oz.  |
| XAF-24      | Packing     | 6 oz.      |
| XAF-64      | Fiber       | 1 lb.      |

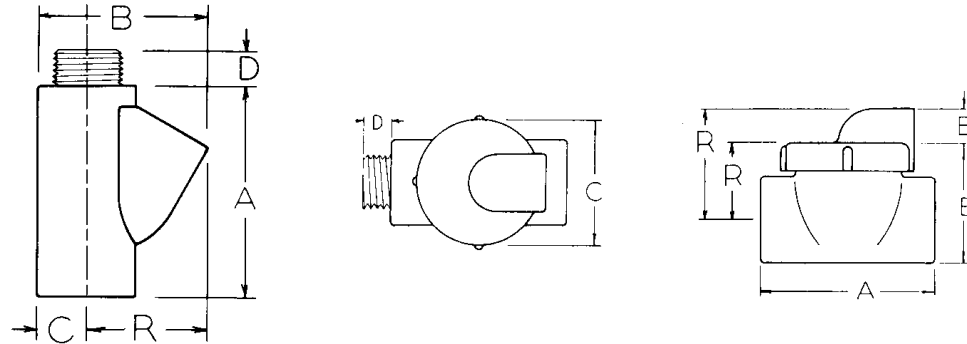
**ADACO SEALING CEMENT** is the easiest-to-use sealing cement on the market. The powder is contained in a polyethylene bag within an outer container. To mix, remove the bag of powder, fill the outside container with water up to the marked "water line" and pour in the powder. Simple...no guesswork about how much water to use. The mixing container is right there...and clean. The largest unit package offered contains one pound of powder. The XSC-160 (10-pound quantity) consists of 10, one-pound packages (at the ten-pound price) so that every mix is correct. This cement has been especially prepared for use in Adalet Sealing Fittings. It is not an insulating compound, and is not affected by gasoline, alcohol, benzol, oils, acetone or lacquer solvents.

**ADACO PACKING FIBER** is used with Adaco Sealing Cement for plugging conduit openings in fittings. Alumina Silica based long fiber non-asbestos for use as a packing at the hubs of sealing units to prevent the Sealing Cement in the liquid state from entering the conduit lines. The Fiber is tamped between the wires and the hub before the Sealing Cement is poured into the fitting.

300

## Explosionproof and Dust-tight Fittings and Accessories

### EXPLOSIONPROOF AND DUST-TIGHT 40% FILL SEALING FITTINGS CLASS I, GROUP D; CLASS II, GROUPS E, F & G; NEMA 7 & NEMA 9



| Catalog Number |             | Conduit Size | Dimensions (In.)          |         |         |        |        | R = Turning Radius (Inches) |               |          |
|----------------|-------------|--------------|---------------------------|---------|---------|--------|--------|-----------------------------|---------------|----------|
|                |             |              | Nominal Dimensions, (In.) |         |         |        |        | Plain Cover                 | Sealing Cover | No Cover |
| Female/Female  | Male/Female | A            | B                         | C       | D       | E      |        |                             |               |          |
| XY34           | XYM34       | 1/2          | 3-1/6                     | 2-7/16  | 3/4     | 1      |        |                             | 1-13/16       |          |
| XY44           | XYM44       | 3/4          | 3-3/4                     | 2-15/16 | 15/16   | 15/16  |        |                             | 3-1/8         |          |
| XY54           | XYM54       | 1            | 4-15/16                   | 3-3/16  | 1-3/16  | 1-1/8  |        |                             | 2-1/8         |          |
| XYC34          | XYC34M      | 1/2          | 3-1/6                     | 2-9/16  | 2-1/16  | 15/16  | 13/16  | 1-7/8                       | 2-11/16       |          |
| XYC34S         | XYC34SM     |              |                           |         |         |        |        |                             |               |          |
| XYC44          | XYC44M      | 3/4          | 3-11/16                   | 2-11/16 | 2-3/8   | 15/16  | 1      | 2-1/8                       | 3-1/16        |          |
| XYC4S          | XYC44SM     |              |                           |         |         |        |        |                             |               |          |
| XYC54          | XYC54M      | 1            | 4-1/2                     | 3-3/16  | 3-3/8   | 1-1/16 | 7/8    | 2-11/16                     | 3-1/16        |          |
| XYC54S         | XYC54SM     |              |                           |         |         |        |        |                             |               |          |
| XYC84          | XYC84M      | 1-1/4        | 4-11/16                   | 4       | 3-3/8   | 1-3/8  | 7/8    | 3                           | 3-5/16        |          |
| XYC84S         | XYC84SM     |              |                           |         |         |        |        |                             |               |          |
| XYC104         | XYC104M     | 1-1/2        | 5-5/16                    | 4-5/8   | 3-3/8   | 1-5/8  | 7/8    | 3-1/4                       | 3-3/4         |          |
| XYC104S        | XYC104SM    |              |                           |         |         |        |        |                             |               |          |
| XYC124         | XYC124M     | 2            | 6-7/16                    | 5-7/16  | 3-15/16 | 1-3/4  | 1-3/8  | 4                           | 4-5/8         |          |
| XYC124S        | XYC124SM    |              |                           |         |         |        |        |                             |               |          |
| XYC144         | XYC144M     | 2-1/2        | 6-9/16                    | 6-3/8   | 4-3/4   | 1-5/8  | 1-5/16 | 4-5/8                       | 5             |          |
| XYC144S        | XYC144SM    |              |                           |         |         |        |        |                             |               |          |
| XYC164         | XYC164M     | 3            | 6-15/16                   | 6-13/16 | 4-3/4   | 2      | 1-5/16 | 4-3/4                       | 5-3/8         |          |
| XYC164S        | XYC164SM    |              |                           |         |         |        |        |                             |               |          |

10A-9

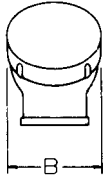
## Explosionproof and Dust-tight Fittings and Accessories

### EXPLOSIONPROOF AND DUST-TIGHT SHORT RADIUS PULL ELBOWS

#### CLASS I, GROUP D; CLASS II, GROUPS E, F & G; NEMA 7 & 9



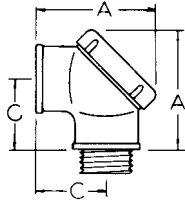
FL



This versatile and inexpensive explosion-proof fitting with a threaded cover will easily and compactly handle 90° conduit runs. FL series have two female entrances. MFL series has one female entrance and one removable threaded nipple.



MFL



| Catalog Number | Conduit Size (In.) | Nominal Dimensions Inches |        |       | Standard Package |               |
|----------------|--------------------|---------------------------|--------|-------|------------------|---------------|
|                |                    | A                         | B      | C     | Quantity         | Weight Pounds |
| FL92           | 1/2                | 2-5/8                     | 2-1/8  | 1-3/8 | 25               | 8             |
| FL93           | 3/4                | 2-13/16                   | 2-1/8  | 1-1/2 | 25               | 10-1/2        |
| FL94           | 1                  | 3-1/4                     | 2-7/16 | 1-7/8 | 25               | 11            |
| FL95           | 1-1/4              | 3-3/4                     | 3-1/2  | 2-1/4 | 25               | 24            |
| *FL96          | 1-1/2              | 4-5/8                     | 4-3/16 | 2-5/8 | 25               | 30            |
| MFL92          | 1/2                | 2-5/8                     | 2-1/8  | 1-3/8 | 25               | 9             |
| MFL93          | 3/4                | 2-13/16                   | 2-1/8  | 1-1/2 | 25               | 12            |
| MFL94          | 1                  | 3-1/4                     | 2-7/16 | 1-7/8 | 25               | 13            |
| MFL95          | 1-1/4              | 3-3/4                     | 3-1/2  | 2-1/4 | 25               | 26            |
| *MFL96         | 1-1/2              | 4-5/8                     | 4-3/16 | 2-5/8 | 25               | 34            |

#### Compliances

- NEC Class I, Group D  
Class II, Groups E, F, G
- UL Standard 886 - CSA Standard C22.2 No. 30

\* Fitting not UL Listed or CSA Certified

CSA Certified LR27991

UL Listed E10493

10A-10

### EXPLOSIONPROOF AND DUST-TIGHT REMOVABLE PLUGS

#### CLASS I, GROUPS A, B, C & D; CLASS II, GROUPS E, F & G; NEMA 7 & NEMA 9

Tapered thread close-up plugs for explosionproof conduit entrances. Provides 5 full threads of engagement. Made of aluminum alloy, these plugs have screw-driver slots and fit practically flush when installed.



OX

| Catalog Number | Conduit Size (In.) | Standard Package |               | Catalog Number | Conduit Size (In.) | Standard Package |               |
|----------------|--------------------|------------------|---------------|----------------|--------------------|------------------|---------------|
|                |                    | Qty              | Weight Pounds |                |                    | Qty              | Weight Pounds |
| OX2            | 1/2                | 250              | 6-3/4         | OX8            | 2                  | 50               | 12            |
| OX3            | 3/4                | 250              | 10-1/4        | OX10           | 2-1/2              | 50               | 20-1/2        |
| OX4            | 1                  | 150              | 9             | OX12           | 3                  | 50               | 30            |
| OX5            | 1-1/4              | 100              | 12            | OX14           | 3-1/2              | 50               | 40            |
| OX6            | 1-1/2              | 100              | 14-1/2        | OX16           | 4                  | 50               | 52            |

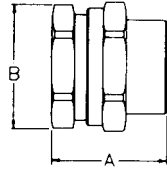
## Explosionproof and Dust-tight Fittings and Accessories

### EXPLOSIONPROOF AND DUST-TIGHT CONDUIT UNIONS CLASS I, GROUPS A, B, C & D; CLASS II, GROUPS E, F & G; NEMA 7 & NEMA 9

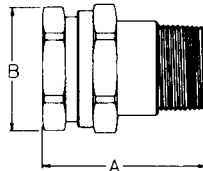
Explosionproof unions for use in conduit piping systems for ease of installation and removal of fittings, boxes and equipment enclosures in hazardous atmosphere areas. Parts are steel, cadmium plated for corrosion protection. Style XU has two female NPT threads. Style XUM has two female NPT threads and one plated threaded nipple.



XU



XUM



| Catalog Number | Conduit Size |               | Standard Package |               |
|----------------|--------------|---------------|------------------|---------------|
|                |              |               | Qty              | Weight Pounds |
| XU2            | 1/2"         | Female-Female | 50               | 19            |
| XU3            | 3/4"         | Female-Female | 50               | 21            |
| XU4            | 1"           | Female-Female | 25               | 13-1/2        |
| XUM2           | 1/2"         | Female-Male   | 50               | 22            |
| XUM3           | 3/4"         | Female-Male   | 50               | 26            |
| XUM4           | 1"           | Female-Male   | 25               | 16-1/2        |

#### DIMENSIONS

|        | Conduit Size | A        | B      |
|--------|--------------|----------|--------|
| Series | 1/2"         | 1-3/4"   | 1-1/2" |
| XU     | 3/4"         | 1-3/4"   | 1-3/4" |
|        | 1"           | 1-15/16" | 2"     |
|        |              |          |        |
| Series | 1/2"         | 2-9/16"  | 1-1/2" |
| XUM    | 3/4"         | 2-3/4"   | 1-3/4" |
|        | 1"           | 3"       | 2"     |
|        |              |          |        |

CSA Certified LR27991  
UL Listed E10493

**Compliance**  
• NEC Class I, Groups A, B, C, D  
Class II, Groups E, F, G  
• UL Standard 886 - CSA Standard C22.2 No.30

10A-11

## Explosionproof and Dust-tight Fittings and Accessories

### EXPLOSIONPROOF AND DUST-TIGHT FLEXIBLE COUPLINGS

#### \*CLASS I, GROUPS A, B, C & D; CLASS II, GROUPS E, F & G; NEMA 7 & NEMA 9

**Application:** XFC couplings are for use in Hazardous Atmospheres where a flexible connection is required for motor and equipment installation where movement and vibration are present. Also for difficult bends and connections.

**Material:** Brass and bronze end fittings. Bronze wire flexible braid covering over flexible bronze core with insulating liner. INCLUDES TWO REMOVABLE ZINC CLEAR COATED NIPPLES.


NOTE: For stainless steel in 1/2" and 3/4" sizes add SS suffix (XFCSS-) nipples not included.



| Nominal Dimensions (inches) |              |             |               |                |              |             |               |
|-----------------------------|--------------|-------------|---------------|----------------|--------------|-------------|---------------|
| Catalog Number              | Conduit Size | Flex Length | Weight Pounds | Catalog Number | Conduit Size | Flex Length | Weight Pounds |
| XFC-24                      | 1/2          | 4           | 1-3/4         | XFC-410        | 1            | 10          | 2-5/8         |
| XFC-26                      | 1/2          | 6           | 2             | XFC-412        | 1            | 12          | 2-3/4         |
| XFC-28                      | 1/2          | 8           | 2-1/2         | XFC-415        | 1            | 15          | 3             |
| XFC-210                     | 1/2          | 10          | 2-3/8         | XFC-418        | 1            | 18          | 3-1/4         |
| XFC-212                     | 1/2          | 12          | 2-1/2         | XFC-421        | 1            | 21          | 3-1/2         |
| XFC-215                     | 1/2          | 15          | 2-5/8         | XFC-424        | 1            | 24          | 3-3/4         |
| XFC-218                     | 1/2          | 18          | 3             | XFC-427        | 1            | 27          | 4-1/8         |
| XFC-221                     | 1/2          | 21          | 3-1/8         | XFC-430        | 1            | 30          | 4-1/2         |
| XFC-224                     | 1/2          | 24          | 3-1/4         | XFC-433        | 1            | 33          | 4-7/8         |
| XFC-227                     | 1/2          | 27          | 3-3/8         | XFC-436        | 1            | 36          | 5-1/4         |
| XFC-230                     | 1/2          | 30          | 3-1/2         | XFC-512        | 1-1/4        | 12          | 6-1/2         |
| XFC-233                     | 1/2          | 33          | 3-3/4         | XFC-515        | 1/4          | 15          | 7             |
| XFC-236                     | 1/2          | 36          | 4             | XFC-518        | 1-1/4        | 18          | 7-1/2         |
| XFC-34                      | 3/4          | 4           | 2             | XFC-521        | 1-1/4        | 21          | 8-1/4         |
| XFC-36                      | 3/4          | 6           | 2-1/4         | XFC-524        | 1-1/4        | 24          | 8-3/4         |
| XFC-38                      | 3/4          | 8           | 2-3/8         | XFC-527        | 1-1/4        | 27          | 9-1/2         |
| XFC-310                     | 3/4          | 10          | 2-1/2         | XFC-530        | 1-1/4        | 30          | 10-1/4        |
| XFC-312                     | 3/4          | 12          | 2-5/8         | XFC-533        | 1-1/4        | 33          | 10-3/4        |
| XFC-315                     | 3/4          | 15          | 3             | XFC-536        | 1-1/4        | 36          | 11-1/4        |
| XFC-318                     | 3/4          | 18          | 3-1/8         | XFC-612        | 1-1/2        | 12          | 8-1/4         |
| XFC-321                     | 3/4          | 21          | 3-1/4         | XFC-615        | 1-1/2        | 15          | 9             |
| XFC-324                     | 3/4          | 24          | 3-3/8         | XFC-618        | 1-1/2        | 18          | 10            |
| XFC-327                     | 3/4          | 27          | 3-1/2         | XFC-621        | 1-1/2        | 21          | 11            |
| XFC-330                     | 3/4          | 30          | 3-3/4         | XFC-624        | 1-1/2        | 24          | 12            |
| XFC-333                     | 3/4          | 33          | 4             | XFC-627        | 1-1/2        | 27          | 13            |
| XFC-336                     | 3/4          | 36          | 4-1/2         | XFC-630        | 1-1/2        | 30          | 14            |
| XFC-46                      | 1            | 6           | 2-1/4         | XFC-633        | 1-1/2        | 33          | 15            |
| XFC-48                      | 1            | 8           | 2-1/2         | XFC-636        | 1-1/2        | 36          | 16            |

| Nominal Dimensions (inches) |                   |                            |         |        |        |                  |
|-----------------------------|-------------------|----------------------------|---------|--------|--------|------------------|
| Catalog Number              | Conduit Size      | Classification*            | A       | B      | C      | Min. Radius Bend |
| Series<br>XFC               | 1/2               | Class I & II               | 1-11/16 | 2-5/16 | 1-7/16 | 12               |
|                             | 3/4               | Group A, B, C, D, E, F & G | 1-3/4   | 2-5/8  | 1-7/8  | 14               |
|                             | 1                 | Class I & II               | 2       | 3      | 2-5/16 | 14               |
|                             |                   | Group C, D, E, F & G       |         |        |        |                  |
|                             | 1-1/4             | Class I & II               | 2-1/8   | 3-3/8  | 2-3/4  | 16               |
| 1-1/2                       | Group D, E, F & G | 2-1/2                      | 3-7/8   | 3-5/16 | 16     |                  |

 CSA Certified LR27991

 UL Listed E10493

**Compliances**

- NEC Class I, Groups A, B, C, D  
Class II, Groups E, F, G
- UL Standard 886 - CSA Standard C22.2 No. 30



## Explosionproof and Dust-tight Fittings and Accessories

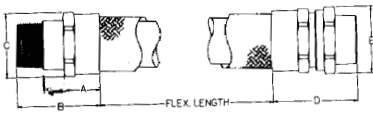
### EXPLOSIONPROOF AND DUST-TIGHT FLEXIBLE COUPLINGS

**\*CLASS I, GROUPS A, B, C & D;**

**CLASS II, GROUPS E, F & G; NEMA 7 & NEMA 9**

**Application:** XFCU couplings are for use in Hazardous Atmospheres where a flexible connection is required for motor and equipment installation where movement and vibration are present. Also for difficult bends and connections.

**Material:** Brass and bronze end fittings. Bronze wire flexible braid covering over flexible bronze core with insulating liner. INCLUDES ONE REMOVABLE ZINC CLEAR COATED NIPPLE ON ONE SIDE AND ONE UNION FITTING ON THE OTHER SIDE.



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UL Listed E10493

| Nominal Dimensions (inches) |              |             |               |                |              |             |               |
|-----------------------------|--------------|-------------|---------------|----------------|--------------|-------------|---------------|
| Catalog Number              | Conduit Size | Flex Length | Weight Pounds | Catalog Number | Conduit Size | Flex Length | Weight Pounds |
| XFCU-24                     | 1/2          | 4           | 2             | XFCU-410       | 1            | 10          | 3             |
| XFCU-26                     | 1/2          | 6           | 2-1/4         | XFCU-412       | 1            | 12          | 3-1/8         |
| XFCU-28                     | 1/2          | 8           | 2-1/2         | XFCU-415       | 1            | 15          | 3-3/8         |
| XFCU-210                    | 1/2          | 10          | 2-5/8         | XFCU-418       | 1            | 18          | 3-5/8         |
| XFCU-212                    | 1/2          | 12          | 2-3/4         | XFCU-421       | 1            | 21          | 3-7/8         |
| XFCU-215                    | 1/2          | 15          | 3-1/8         | XFCU-424       | 1            | 24          | 4-1/8         |
| XFCU-218                    | 1/2          | 18          | 3-1/4         | XFCU-427       | 1            | 27          | 4-1/2         |
| XFCU-221                    | 1/2          | 21          | 3-3/8         | XFCU-430       | 1            | 30          | 4-5/8         |
| XFCU-224                    | 1/2          | 24          | 3-1/2         | XFCU-433       | 1            | 33          | 5-1/8         |
| XFCU-227                    | 1/2          | 27          | 3-5/8         | XFCU-436       | 1            | 36          | 5-1/2         |
| XFCU-230                    | 1/2          | 30          | 3-3/4         |                |              |             |               |
| XFCU-233                    | 1/2          | 33          | 4             |                |              |             |               |
| XFCU-236                    | 1/2          | 36          | 4-1/4         |                |              |             |               |
| XFCU-34                     | 3/4          | 4           | 2-1/4         |                |              |             |               |
| XFCU-36                     | 3/4          | 6           | 2-1/2         |                |              |             |               |
| XFCU-38                     | 3/4          | 8           | 2-5/8         |                |              |             |               |
| XFCU-310                    | 3/4          | 10          | 2-3/4         |                |              |             |               |
| XFCU-312                    | 3/4          | 12          | 3-1/8         |                |              |             |               |
| XFCU-315                    | 3/4          | 15          | 3-1/4         |                |              |             |               |
| XFCU-318                    | 3/4          | 18          | 3-3/8         |                |              |             |               |
| XFCU-321                    | 3/4          | 21          | 3-1/2         |                |              |             |               |
| XFCU-324                    | 3/4          | 24          | 3-5/8         |                |              |             |               |
| XFCU-327                    | 3/4          | 27          | 3-3/4         |                |              |             |               |
| XFCU-330                    | 3/4          | 30          | 4             |                |              |             |               |
| XFCU-333                    | 3/4          | 33          | 4-1/4         |                |              |             |               |
| XFCU-336                    | 3/4          | 36          | 4-3/4         |                |              |             |               |
| XFCU-46                     | 1            | 6           | 2-5/8         |                |              |             |               |
| XFCU-48                     | 1            | 8           | 2-7/8         |                |              |             |               |

10A-13

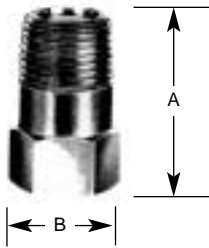
| Nominal Dimensions (inches) |              |                                   |         |        |        |         |       |                  |
|-----------------------------|--------------|-----------------------------------|---------|--------|--------|---------|-------|------------------|
| Catalog Number              | Conduit Size | Classification*                   | A       | B      | C      | D       | E     | Min. Radius Bend |
| Series XFCU                 | 1/2          | Class I & II                      | 1-11/16 | 2-5/16 | 1-7/16 | 2-7/16  | 1-1/2 | 12               |
|                             | 3/4          | Group A,B,C,D,E,F & G             | 1-3/4   | 2-5/8  | 1-7/8  | 2-1/2   | 1-3/4 | 14               |
|                             | 1            | Class I & II<br>Group C,D,E,F & G | 2       | 3      | 2-5/16 | 2-13/16 | 2     | 14               |

**Compliances**

- NEC Class I, Groups A, B, C, D  
Class II, Groups E, F, G
- UL Standard 886 - CSA Standard C22.2 No. 30

## Explosionproof and Dust-tight Fittings and Accessories

### EXPLOSIONPROOF AND DUST-TIGHT COMBINATION BREATHER/DRAIN CLASS I, GROUPS C & D; CLASS II, GROUPS F & G; NEMA 7 & NEMA 9



XDB2

Stainless steel combination breather drain. Install in top of enclosures as breather. Install in bottom of enclosure as drain.

| Nominal Dimensions (inches) |         |       |         |
|-----------------------------|---------|-------|---------|
| Catalog Number              | Thread  | A     | B       |
| XDB2                        | 1/2 NPT | 1-5/8 | 7/8 hex |

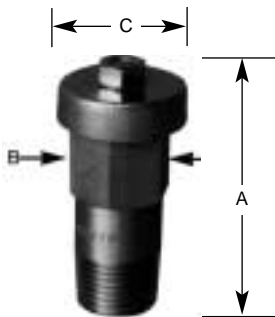
#### Compliances

- NEC Class I, Groups C, D Class II, Groups E, F, G - Class III
- UL Standard 886 - CSA Standard C22.2 No. 30

- CSA Certified LR27991
- UL Listed E10493

10A-14

### EXPLOSIONPROOF AND DUST-TIGHT COMBINATION BREATHER/DRAIN CLASS I, GROUPS A, B, C & D; CLASS II, GROUPS E, F & G; NEMA 7 & NEMA 9



XDBH2

| Nominal Dimensions (inches) |         |        |         |       |
|-----------------------------|---------|--------|---------|-------|
| Catalog Number              | Thread  | A      | B       | C     |
| XDBH2                       | 1/2 NPT | 2-7/16 | 7/8 HEX | 1-1/4 |

Flow Rate:

- .01 CFM air
- .5 cc/minute water

#### Certifications

- Class I, Groups A, B, C and D Class II, Groups E, F & G - Class III

#### UL and CSA

UL Standard 886 - CSA Standard C22.2 No. 30

- CENELEC EExd IIB DEMKO 00E.004127U

- CSA Certified LR27991
- UL Listed E10493

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## Explosionproof and Dust-tight Fittings and Accessories

### EXPLOSIONPROOF FLAME ARRESTOR FITTING CLASS I, GROUPS B\*, C & D NEMA 7



Typical XFA2



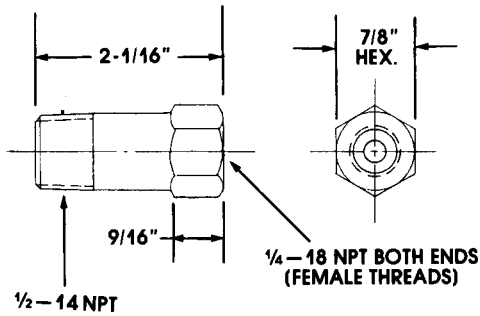
Typical XFA2X

**APPLICATION:** Provides thru-wall connections of tubing systems for electro/pneumatic and gas analysis devices installed within Adalet's explosion proof enclosures.

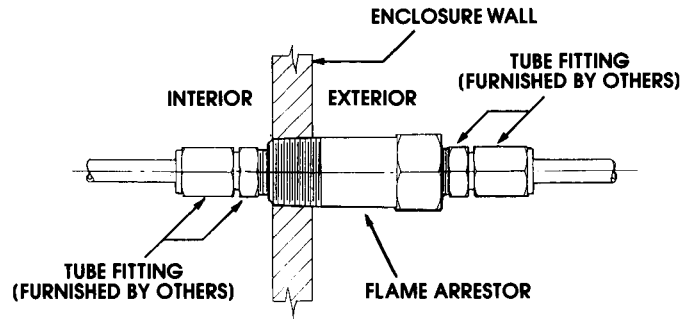
The flame arrestor fitting is designed to prevent flame propagation thru tubing systems with minimum flow restrictions of control pressures.

**MATERIAL:** Stainless steel

| Catalog Number | Description | Weight |
|----------------|-------------|--------|
| XFA2           | 1/2" NPT    | 4 oz.  |
| XFA2X          | 1/2" NPT    | 4 oz.  |



#### TYPICAL FIELD INSTALLATION



Exterior enclosure wall counter boring may be required to maintain 1/2" enclosure wall thickness for ease of field connections.

#### XFA2

##### Approximate Control Restrictions

- \* 0.5 PSI drop at 20 CFH airflow
- \* 1.3 PSI drop at 34 CFH airflow

- \* NEC Class I, Groups C & D
- \* UL Recognized Component
- \* CSA Certified Component
- \* CENELEC EExd Group IIB

#### \*XFA2X

##### Approximate Control Restrictions

- 1 PSI drop at 18 CFH airflow
- 5 PSI drop at 53 CFH airflow

- UL and CSA Class I, Groups B, C & D
- CENELEC EExd Group IIB
- DEMKO 00E.0041270



CSA Certified LR27991



UL Recognized E10493

10A-15

## Fittings and Accessories

### SALI INSULATING BUSHINGS (SUPERIOR ADALET LAMINATED INSULATION)

Sali bushings are machined from paper laminated phenolic material and comply with NEMA-X phenolic material specifications.




#### Specifications:

- 11,000 psi tensile
- 17,000 flexural
- 450v/mil dielectric
- Heat resistance - 150° C, continuous
- Moisture absorption - 1/2 of 1%
- Listed by Underwriters Laboratories for your quality assurance.
- Sali bushings have been repeatedly proved in a wide variety of applications over a 25 year period.

#### TYPE PE-FEMALE-DEEP-THREADED


| Catalog Number | Conduit Size (Inches) | Carton Qty. | Wt. Per Hundred (Lbs.) | Nominal Dimensions (Inches) |        |        |
|----------------|-----------------------|-------------|------------------------|-----------------------------|--------|--------|
|                |                       |             |                        | I.D.                        | O.D.   | Height |
| PE-2           | 1/2                   | 50          | 1-1/2                  | 5/8                         | 1-1/8  | 5/8    |
| PE-3           | 3/4                   | 50          | 2                      | 13/16                       | 1-5/16 | 5/8    |
| PE-4           | 1                     | 50          | 3-1/2                  | 1                           | 1-5/8  | 25/32  |
| PE-5           | 1-1/4                 | 25          | 4-1/2                  | 1-3/8                       | 2      | 25/32  |
| PE-6           | 1-1/2                 | 25          | 5-1/2                  | 1-5/8                       | 2-1/4  | 25/32  |
| PE-8           | 2                     | 10          | 7-1/2                  | 2                           | 2-3/4  | 25/32  |
| PE-10          | 2-1/2                 | 5           | 12                     | 2-7/16                      | 3-1/4  | 1      |
| PE-12          | 3                     | 5           | 16                     | 3                           | 3-7/8  | 1-1/16 |
| PE-14          | 3-1/2                 | 5           | 19                     | 3-1/2                       | 4-3/8  | 1-1/16 |
| PE-16          | 4                     | 2           | 24                     | 4                           | 5      | 1-1/16 |

 E10016  
LISTED

Recommended for rigid conduit or in combination with male type PEM when maximum thread engagement is required.

#### TYPE PES-FEMALE-SHALLOW-THREADED

| Catalog Number | Conduit Size (Inches) | Carton Qty. | Wt. Per Hundred (Lbs.) | Nominal Dimensions (Inches) |        |        |
|----------------|-----------------------|-------------|------------------------|-----------------------------|--------|--------|
|                |                       |             |                        | I.D.                        | O.D.   | Height |
| PES-2          | 1/2                   | 50          | 1-1/2                  | 5/8                         | 1-1/8  | 1/2    |
| PES-3          | 3/4                   | 50          | 2                      | 13/16                       | 1-5/16 | 1/2    |
| PES-4          | 1                     | 50          | 3                      | 1                           | 1-5/8  | 5/8    |
| PES-5          | 1-1/4                 | 25          | 4                      | 1-3/8                       | 2      | 5/8    |
| PES-6          | 1-1/2                 | 25          | 4-1/2                  | 1-5/8                       | 2-1/4  | 5/8    |
| PES-8          | 2                     | 10          | 7                      | 2                           | 2-3/4  | 5/8    |
| PES-10         | 2 1/2                 | 5           | 11                     | 2-7/16                      | 3-1/4  | 13/16  |
| PES-12         | 3                     | 5           | 14                     | 3                           | 3-7/8  | 7/8    |
| PES-14         | 3-1/2                 | 5           | 16-1/2                 | 3-1/2                       | 4-3/8  | 7/8    |
| PES-16         | 4                     | 2           | 25                     | 4                           | 5      | 7/8    |

 E10016  
LISTED

Designed for general use on rigid conduit, connectors, and similar installations where the additional mechanical strength of the deep type bushings is not needed.

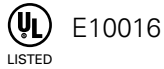
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## Fittings and Accessories

### TYPE PET-THREADLESS-FOR RIGID CONDUIT-FEMALE-SET SCREW THREADLESS

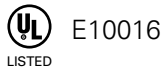


For threadless rigid conduit on all free conduit terminals such as terminating behind or within switchboards, switchgear, etc.



| Catalog Number | Conduit Size (Inches) | Carton Qty. | Wt. Per Hundred (Lbs.) | Nominal Dimensions (Inches) |        |        |         |
|----------------|-----------------------|-------------|------------------------|-----------------------------|--------|--------|---------|
|                |                       |             |                        | I.D. 1                      | O.D.   | Height | I.D. 2  |
| PET-2          | 1/2                   | 50          | 1-1/2                  | 5/8                         | 1-1/8  | 5/8    | 7/8     |
| PET-3          | 3/4                   | 50          | 2                      | 13/16                       | 1-5/16 | 5/8    | 1-1/16  |
| PET-4          | 1                     | 50          | 3-1/2                  | 1                           | 1-5/8  | 25/32  | 1-11/32 |
| PET-5          | 1-1/4                 | 25          | 4-1/2                  | 1-3/8                       | 2      | 25/32  | 1-11/16 |
| PET-6          | 1-1/2                 | 25          | 5-1/2                  | 1-5/8                       | 2-1/4  | 25/32  | 1-15/16 |
| PET-8          | 2                     | 10          | 7-1/2                  | 2                           | 2-3/4  | 25/32  | 2-13/32 |
| PET-10         | 2-1/2                 | 5           | 12                     | 2-7/16                      | 3-1/4  | 1      | 2-29/32 |
| PET-12         | 3                     | 5           | 14                     | 3                           | 3-7/8  | 1-1/16 | 3-17/32 |
| PET-14         | 3-1/2                 | 5           | 17                     | 3-1/2                       | 4-3/8  | 1-1/16 | 4-1/32  |
| PET-16         | 4                     | 2           | 25                     | 4                           | 5      | 1-1/16 | 4-17/32 |

### TYPE SPE-THREADLESS-FOR EMT-FEMALE-SET SCREW



For use directly on thin wall conduit.

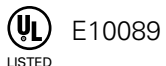
| Catalog Number | Conduit Size (Inches) | Carton Qty. | Wt. Per Hundred (Lbs.) | Nominal Dimensions (Inches) |        |        |         |
|----------------|-----------------------|-------------|------------------------|-----------------------------|--------|--------|---------|
|                |                       |             |                        | I.D. 1                      | O.D.   | Height | I.D. 2  |
| SPE-2          | 1/2                   | 50          | 1-3/4                  | 5/8                         | 1-1/8  | 5/8    | 23/32   |
| SPE-3          | 3/4                   | 50          | 2-1/4                  | 13/16                       | 1-5/16 | 5/8    | 15/16   |
| SPE-4          | 1                     | 50          | 3-3/4                  | 1                           | 1-5/8  | 25/32  | 1-3/16  |
| SPE-5          | 1-1/4                 | 25          | 5-1/4                  | 1-3/8                       | 2      | 25/32  | 1-17/32 |
| SPE-6          | 1-1/2                 | 25          | 6                      | 1-5/8                       | 2-1/4  | 25/32  | 1-25/32 |
| SPE-8          | 2                     | 10          | 8-1/4                  | 2                           | 2-3/4  | 25/32  | 2-7/32  |

For EMT sizes 2-1/2 thru 4" use type PET.

### TYPE PEM



A high strength resilient male bushing recommended to protect wires passing through steel cabinet walls, metal partitions and similar applications. For additional strength it is recommended this bushing be secured with type PE deep threaded female bushing.



| Catalog Number | Conduit Size (Inches) | Carton Qty. | Wt. Per Hundred (Lbs.) | Nominal Dimensions (Inches) |        |        |
|----------------|-----------------------|-------------|------------------------|-----------------------------|--------|--------|
|                |                       |             |                        | I.D.                        | O.D.   | Height |
| PEM-2          | 1/2                   | 50          | 1                      | 5/8                         | 1-1/8  | 5/8    |
| PEM-3          | 3/4                   | 50          | 1-1/2                  | 13/16                       | 1-5/16 | 5/8    |
| PEM-4          | 1                     | 50          | 2-1/2                  | 1                           | 1-5/8  | 25/32  |
| PEM-5          | 1-1/4                 | 25          | 3                      | 1-3/8                       | 2      | 25/32  |
| PEM-6          | 1-1/2                 | 25          | 4                      | 1-5/8                       | 2-1/4  | 25/32  |
| PEM-8          | 2                     | 10          | 6                      | 2                           | 2-3/4  | 25/32  |
| PEM-10         | 2-1/2                 | 5           | 10                     | 2-7/16                      | 3-1/4  | 1-1/16 |
| PEM-12         | 3                     | 5           | 14                     | 3                           | 3-7/8  | 1-1/16 |
| PEM-14         | 3-1/2                 | 5           | 16-1/2                 | 3-1/2                       | 4-3/8  | 1-1/16 |
| PEM-16         | 4                     | 2           | 21                     | 4                           | 5      | 1-1/16 |

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## Fittings and Accessories

### TYPE PEML WITH LOCKNUT



A high strength resilient male bushing recommended to protect wires passing through metal walls, partitions and similar applications. Furnished with metallic locknuts.

| Catalog Number | Conduit Size (Inches) | Carton Qty. | Wt. Per Hundred (Lbs.) | Nominal Dimensions (Inches) |        |        |
|----------------|-----------------------|-------------|------------------------|-----------------------------|--------|--------|
|                |                       |             |                        | I.D.                        | O.D.   | Height |
| PEML-2         | 1/2                   | 50          | 2-1/2                  | 5/8                         | 1-1/8  | 5/8    |
| PEML-3         | 3/4                   | 50          | 3-1/2                  | 13/16                       | 1-5/16 | 5/8    |
| PEML-4         | 1                     | 50          | 6                      | 1                           | 1-5/8  | 25/32  |
| PEML-5         | 1-1/4                 | 25          | 6-1/2                  | 1-3/8                       | 2      | 25/32  |
| PEML-6         | 1-1/2                 | 25          | 9                      | 1-5/8                       | 2-1/4  | 25/32  |
| PEML-8         | 2                     | 10          | 11                     | 2                           | 2-3/4  | 25/32  |
| PEML-10        | 2-1/2                 | 5           | 30                     | 2-7/16                      | 3-1/4  | 1-1/16 |
| PEML-12        | 3                     | 5           | 34                     | 3                           | 3-7/8  | 1-1/16 |
| PEML-14        | 3-1/2                 | 5           | 39                     | 3-1/2                       | 4-3/8  | 1-1/16 |
| PEML-16        | 4                     | 2           | 56                     | 4                           | 5      | 1-1/16 |

10A-18

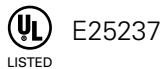
### Poly PRECISION MOLDED INSULATING BUSHINGS



A rugged, high strength molded bushing for general use on rigid conduit connectors and similar installations.

Listed by Underwriters Laboratories Inc. for 105° C (221° F). Meets all requirements of National Electrical Code for insulating bushings.

| Catalog Number | Conduit Size (Inches) | Carton Qty. | Wt. Per Hundred (Lbs.) | Nominal Dimensions (Inches) |         |        |
|----------------|-----------------------|-------------|------------------------|-----------------------------|---------|--------|
|                |                       |             |                        | I.D.                        | O.D.    | Height |
| PM-2           | 1/2                   | 100         | 1                      | 19/32                       | 1-1/16  | 13/32  |
| PM-3           | 3/4                   | 100         | 1                      | 25/32                       | 1-5/16  | 13/32  |
| PM-4           | 1                     | 50          | 2                      | 1                           | 1-5/8   | 1/2    |
| PM-5           | 1-1/4                 | 25          | 3                      | 1-5/16                      | 2       | 1/2    |
| PM-6           | 1-1/2                 | 25          | 3                      | 1-17/32                     | 2-7/32  | 9/16   |
| PM-8           | 2                     | 10          | 6                      | 1-31/32                     | 2-21/32 | 9/16   |
| PM-10          | 2-1/2                 | 5           | 11                     | 2-5/16                      | 3-5/16  | 5/8    |
| PM-12          | 3                     | 5           | 14                     | 2-7/8                       | 3-15/16 | 11/16  |
| PM-14          | 3-1/2                 | 5           | 22                     | 3-5/16                      | 4-7/16  | 11/16  |
| PM-16          | 4                     | 5           | 23                     | 3-25/32                     | 4-29/32 | 11/16  |
| PM-20          | 5                     | 2           | 40                     | 4-13/16                     | 6-3/16  | 31/32  |
| PM-24          | 6                     | 2           | 50                     | 5-3/4                       | 7-9/32  | 31/32  |



## Fittings and Accessories

### FIXTURE HANGERS SWIVEL SELF ALIGNING OUTLET BOX COVERS

#### Types SA-342 and SA-42

Adalet self-aligning covers provide flexible suspension assuring plumb alignment of the lighting fixture regardless of ceiling structure or angle. Fixtures hung from these aligner covers can be hit or bumped without damage that would be caused if rigidly mounted.

Made of stamped steel, these Aligner Covers are equipped with ball joint allowing the fixture to swing through an angle of 20° in any direction of the perpendicular. The SA-342 has two sets of supporting screw hole centers for 3-1/4" and 4" octagonal outlet boxes and covers are spotted for 2-3/4" mounting centers. Type SA-42 has two sets of supporting screw holes for 4" square outlet boxes and covers are spotted for 3-1/2" and 2-3/4" centers for 4" and 3-1/2" octagonal boxes.

| Catalog Number | Unit Carton Qty. | Standard Package | Approx Wt. Std. Pkg. |
|----------------|------------------|------------------|----------------------|
| *SA-342        | 25               | 100              | 41                   |
| SA-42          | 25               | 100              | 50                   |

Ball tapped for 1/2" stem.



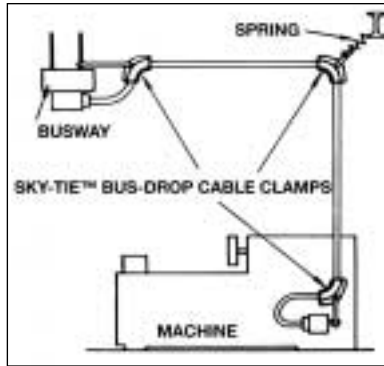
SA-342



SA-42

\*  UL Listed E88804

# Sky-Tie™ — Bus-Drop Cable Clamps



## Supports...

Cable up to 1-1/8" diameter. Uniform "lap" design of each clamp-half results in support along the entire quarter bend.

## Anchors...

Cable for 90° angle transitions using a simple, two-piece construction of interchangeable clamp-halves.

## Loops...

Excess cable for convenient handling and out-of-the-way storage, via the Sky-Tie™ SHD Duplex Converter. The SHD reduces the need to cut cable when machines are moved to new locations. The SHD converter simply fits between the two halves of the Sky-Tie™ SH cable clamps.

## Perfect For:

- Machine Tools
- Portable Tools
- Air Lines
- Other heavy-cable support applications.

## Sky-Tie™ Springs

Heavy-duty Sky-Tie™ Springs insure tautness of the cable, while absorbing vibrations and shocks. Each spring slips into the Sky-Tie™ clamp at its outside bend (or, if using the SHD Duplex, the converter's outside bend), and ties back to a structural member. Three spring models with maximum load capacities of 60, 70 and 160 pounds.

### Sky-Tie™ Springs

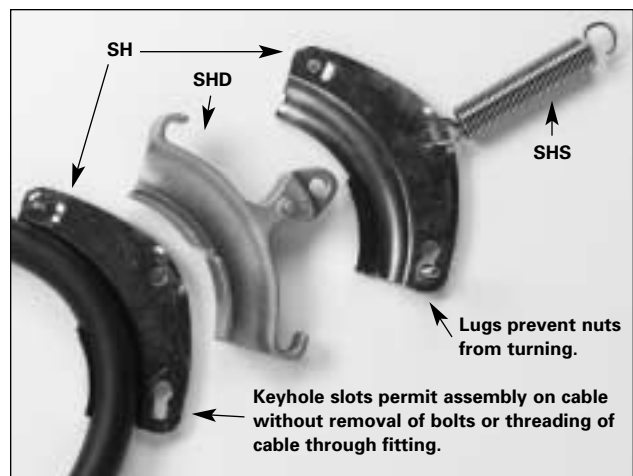
| Catalog Number | Max. Spring Load | Carton Qty. | Approx. Wt. | Std. Pkg. Qty. | Approx. Wt. |
|----------------|------------------|-------------|-------------|----------------|-------------|
| SHS-50         | 60 lbs.          | 10          | 2.2         | 50             | 11          |
| SHS-75         | 70 lbs.          | 10          | 2.7         | 50             | 14          |
| SHS-1125       | 160 lbs.         | 10          | 11          | 10             | 11          |

### Sky-Tie™ Two-In-One Cable Clamps

| Catalog Number | Cable OD (Inches) | Typical Multi-Conductor Cable Size | Carton Qty. | Approx. Wt. | Std. Pkg. Qty. | Approx. Wt. |
|----------------|-------------------|------------------------------------|-------------|-------------|----------------|-------------|
| SH-50          | 1/2 to 3/4        | 14/4 thru 8/4                      | 10          | 3.5         | 50             | 18.5        |
| SH-75          | 3/4 to 1-1/8      | 8/4 thru 3/4 or (1) 500 MCM        | 10          | 7           | 50             | 36          |
| SH-1125        | 1-1/8 to 1-11/16  | Special Applications               | 5           | 10          | 25             | 50          |

### Sky-Tie™ "Duplex" Component

| Catalog Number | Cable OD (Inches) | Typical Multi-Conductor Cable Size | Carton Qty. | Approx. Wt. | Std. Pkg. Qty. | Approx. Wt. |
|----------------|-------------------|------------------------------------|-------------|-------------|----------------|-------------|
| SHD-50         | 1/2 to 3/4        | 14/4 thru 3/4                      | 10          | 3.25        | 50             | 17.25       |
| SHD-75         | 3/4 to 1-1/2      | 8/4 thru 3/4 or (1) 500 MCM        | 10          | 7           | 50             | 36          |

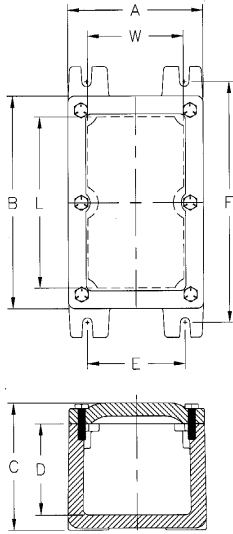


10A-20



# XIF/XIFC Explosionproof Internal Flanged Junction Boxes & Control Enclosures

## XIF: Junction Boxes XIFC: Control Enclosures



Optional NEMA 4. Add suffix "N4" to catalog number.  
Use layout sheet for drilling and tapping specifications.

**XIFC Certifications:** (N4 Optional)

- Class I, Groups C & D
- Class II, Groups E, F & G
- Class III
- UL 1203 (Classified)

**XIF Compliances:**

- NEC Class I, Group D
- Class II, Groups E, F & G
- Class III
- UL Standard 886
- CSA Standard C22.2 No. 30
- For XIF consult factory for specific certifications.

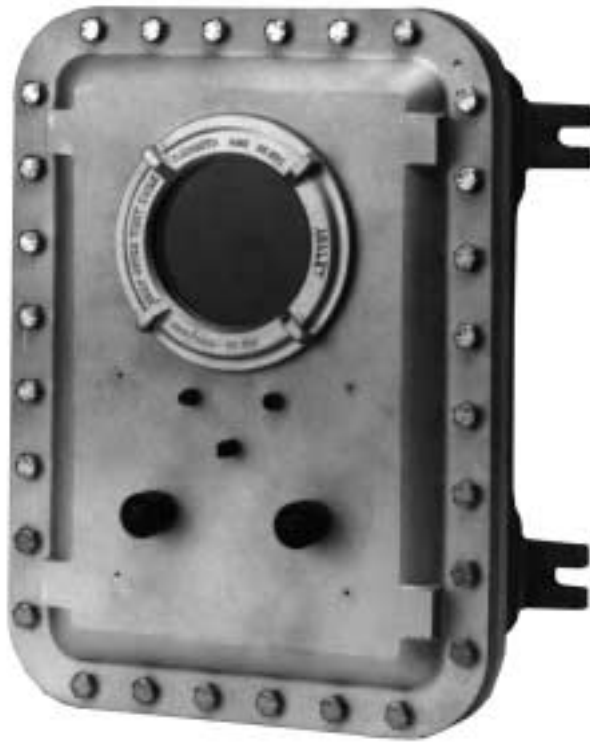
| Catalog Number |            | Inside Nominal Dimensions |          |        | Overall Dimensions |         |         | Mounting Lug CL to CL |        | Mounting Bolt Size | Shipping Weight, Pounds |
|----------------|------------|---------------------------|----------|--------|--------------------|---------|---------|-----------------------|--------|--------------------|-------------------------|
|                |            | W                         | L        | D      | A                  | B       | C       | E                     | F      |                    |                         |
| XIFC 030303    | XIF 030303 | 3 5/16                    | 3 5/16   | 3 3/16 | 4 1/2              | 4 1/2   | 4 5/16  | 3 1/4                 | 5 1/2  | 5/16               | 5                       |
| XIFC 030603    | XIF 030603 | 3 1/4                     | 5 3/4    | 3      | 4 1/2              | 7 1/16  | 4 1/4   | 3 1/4                 | 8      | 5/16               | 6 1/2                   |
| XIFC 030703    | XIF 030703 | 3 1/4                     | 6 7/8    | 3      | 4 1/2              | 8 1/8   | 4 5/16  | 3 5/16                | 9      | 5/16               | 7 1/2                   |
| XIFC 030903    | XIF 030903 | 3 11/32                   | 8 15/16  | 3      | 4 1/2              | 10 1/16 | 4 5/16  | 3 1/4                 | 11     | 5/16               | 9 1/2                   |
| XIFC 031103    | XIF 031103 | 3 1/4                     | 10 15/16 | 3      | 4 1/2              | 12      | 4 5/16  | 3 1/4                 | 13     | 5/16               | 11                      |
| XIFC 031303    | XIF 031303 | 3 1/4                     | 12 13/16 | 3      | 4 1/2              | 14 1/16 | 4 5/16  | 3 1/4                 | 15     | 5/16               | 11 1/2                  |
| XIFC 031503    | XIF 031503 | 3 1/4                     | 14 3/4   | 3 1/16 | 4 1/2              | 16      | 4 5/16  | 3 1/4                 | 17     | 5/16               | 13                      |
| XIFC 031803    | XIF 031803 | 3 1/4                     | 17 3/4   | 3      | 4 1/2              | 19      | 4 1/4   | 3 1/4                 | 20     | 5/16               | 16                      |
| XIFC 032403    | XIF 032403 | 3 1/4                     | 23 9/16  | 3      | 4 1/2              | 25 1/16 | 4 5/16  | 3 1/4                 | 26     | 5/16               | 21                      |
| XIFC 033003    | XIF 033003 | 3 1/4                     | 29 1/2   | 3      | 4 9/16             | 31 1/16 | 4 5/16  | 3 1/4                 | 32 1/8 | 5/16               | 28                      |
| XIFC 033603    | XIF 033603 | 3 1/4                     | 35 7/16  | 3      | 4 1/2              | 37      | 4 3/8   | 3 1/4                 | 38 1/8 | 5/16               | 33                      |
| XIFC 040604    | XIF 040604 | 4 1/8                     | 5 7/8    | 4      | 5 3/8              | 7       | 5 5/16  | 4 3/8                 | 8 1/4  | 5/16               | 8 1/2                   |
| XIFC 041204    | XIF 041204 | 4 1/4                     | 11 13/16 | 4      | 5 1/2              | 13 1/8  | 5 5/16  | 4 3/8                 | 14 1/4 | 5/16               | 15 1/2                  |
| XIFC 060606    | XIF 060606 | 5 1/2                     | 5 1/2    | 6      | 7                  | 7       | 7 3/8   | 5 1/2                 | 8 1/2  | 3/8                | 14                      |
| XIFC 060608    | XIF 060608 | 5 1/4                     | 5 1/2    | 8      | 7                  | 7       | 9 3/8   | 5 1/2                 | 8 1/2  | 3/8                | 17 1/2                  |
| XIFC 061206    | XIF 061206 | 5 1/4                     | 11 1/8   | 6      | 7 1/4              | 13 1/2  | 7 5/8   | 5 1/2                 | 15     | 3/8                | 28                      |
|                | XIF 061806 | 6                         | 18       | 6      | 7 1/2              | 19 1/2  | 7 13/16 | 5 1/2                 | 21 1/8 | 3/8                | 33                      |
|                | XIF 062406 | 6                         | 24       | 6      | 7 1/2              | 25 1/2  | 7 3/4   | 5 1/2                 | 27     | 3/8                | 59                      |
|                | XIF 063606 | 6                         | 36       | 6      | 7 1/2              | 37 1/2  | 7 13/16 | 5 1/2                 | 39     | 3/8                | 84                      |
| XIFC 070704    | XIF 070704 | 6 7/8                     | 6 7/8    | 4      | 7 15/16            | 7 15/16 | 5 5/16  | 6 5/8                 | 9 1/8  | 3/8                | 13                      |
|                | XIF 071603 | 7                         | 16       | 3 1/2  | 8 1/2              | 17 1/2  | 5 5/16  | 6 1/2                 | 18 7/8 | 3/8                | 36                      |
|                | XIF 083206 | 8                         | 32       | 5 7/8  | 9 1/2              | 33 1/2  | 7 7/8   | 7 1/2                 | 35     | 3/8                | 87                      |

**Note:** All dimensions are in inches and are nominal enclosure size only.

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## XCE & XJF Explosionproof Enclosures

### XCE EXPLOSIONPROOF CONTROL ENCLOSURES XJF EXPLOSIONPROOF JUNCTION BOXES FLANGED



#### Applications:

Adalet XCE series and XJF enclosures are used in the installation of electrical/electronic components for control, measurement or monitoring applications in hazardous environments. XCE control enclosures can be modified for installation of a variety of explosionproof operator devices, viewing windows and accessories permitting the development of customized enclosure systems.

#### Features


- Copper-free aluminum, lightweight and corrosion resistant.
- Integral, cast-on mounting lugs, slotted for ease of field installation.
- Uniform wall thickness for ease of installation of control devices, windows and conduit openings.
- External flange provides maximum accessibility of components mounted inside.
- Tumblast finish for quality appearance.
- Premium high strength steel cover bolts, plated and coated for maximum corrosion resistance (stainless steel optional).
- Enclosures certified drillable for conduit entrances in the factory or the field.
- Internal grounding screw standard.
- Covers exceeding approximately 75 lbs. are provided with two removable eye bolts for ease of handling.
- XCE/XCEQ/XCEX certified drillable for operators at the factory or in the field.
- IP40 standard on XCEX without gasket.

#### Design Options

- CENELEC flameproof optional – designate XCEX when ordering. Includes external earthing assembly.
- Quad-lead bolt (quick thread bolt) option - designate XCEQ when ordering. Not available with XCEX.
- NEMA 4 (WATERTIGHT)/IP66:  
Features a nitrile O-Ring retained in the cover flange in a machined groove. When ordering, add N4 to the catalog number. \*This option may affect certifications - consult factory.
- NEMA 6 (SUBMERSIBLE):  
Consult factory.
- Cast-on mounting buttons, bosses and pads:  
Per customer specifications.
- Captive cover bolts:  
Consult factory.
- Hinges:  
May be installed for removable or non-removable cover. Left side standard, other locations optional.
- Windows:  
Circular window sizes ranging from 1" to 8" diameter viewing area. Rectangular window sizes ranging from 3" x 3" to 13" x 13" viewing area.
- Stainless steel cover bolts. Consult factory for NEMA 4X rating.
- Mounting Pans:  
Available in galvanized steel, aluminum or phenolic.
- Sidewall auxiliary device installation or machining available on XCE/XCEQ/XCEX series enclosures – Consult Factory.
- Factory machined metric sidewall threads approved on XCE and XCEX series for Groups C & D only.
- The Adalet engineering department is available to assist in the selection of custom explosionproof enclosures for your products.


#### Certifications

##### XCE Series Control Enclosures

 UL STANDARD 1203  
CSA STANDARD C22.2 No. 30  
EN 50 018 (XCEX)

Class I, Groups B,C,D  
Class II, Groups E,F,G  
Class III  
CENELEC: EExd IIB, (Specify XCEX)  
ATEX Certifications available – Consult Factory.  
NEMA 4, 7B\*CD, 9EFG

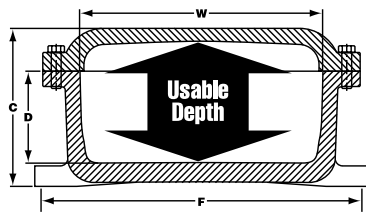
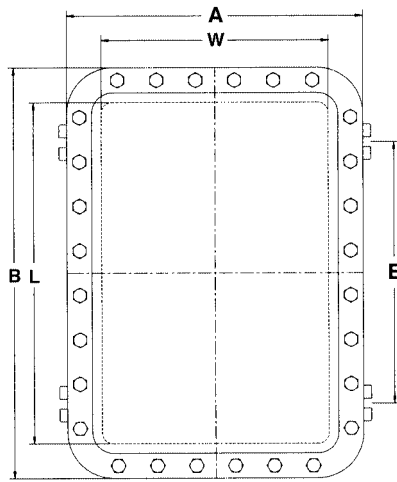
##### XJF Junction Boxes

 CSA STANDARD C22.2 No. 30  
 UL STANDARD 886

Some sizes and option combinations may not be certified.  
**Consult Factory for specific certifications and file numbers.**

5A-1

# XCE & XJF Explosionproof Enclosures



- To indicate Quad-Lead bolt option, add suffix "Q" after XCE. (Not available on XCEX models.)
- Operators, windows and hinges are ordered separately.
- To indicate EEx d approval specify XCEX.
- To indicate NEMA 4/IP66 option, add suffix "N4" after size (catalog number).

**Note:** All dimensions are in inches and are nominal enclosure size only. Inside nominal dimensions are at flange. Consult factory for exact dimensions.

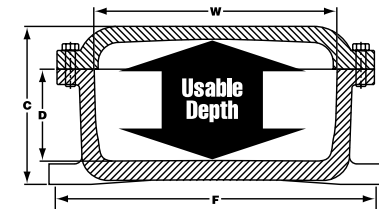
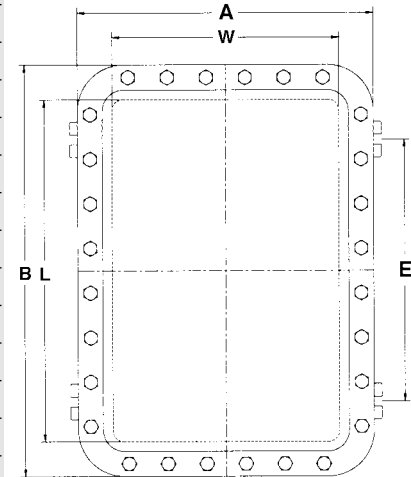
\*Approval Pending – Consult Factory.

| XCE/XJF Catalog Number | Inside Nominal Dimensions |        |       | Usable Inside Depth | Overall Dimension |        |          | Mounting Lug CL to CL |        | Mtg. Bolt Size | Apprx. Shipping Weight, lbs. |
|------------------------|---------------------------|--------|-------|---------------------|-------------------|--------|----------|-----------------------|--------|----------------|------------------------------|
|                        | W                         | L      | D     |                     | A                 | B      | C        | E                     | F      |                |                              |
| 041604                 | 4                         | 16     | 4     | 4 3/4               | 7 1/4             | 19 1/4 | 6        | 12 1/8                | 6 3/4  | 3/8            | 25                           |
| 060804                 | 6                         | 8      | 4     | 4 5/8               | 9 1/4             | 11 1/4 | 5 15/16  | 4 1/2                 | 9 1/8  | 3/8            | 21                           |
| 060805                 | 6                         | 8      | 5     | 5 5/8               | 9 1/4             | 11 1/4 | 6 15/16  | 4 1/2                 | 9 1/8  | 3/8            | 23                           |
| 060806                 | 6                         | 8      | 6     | 6 5/8               | 9 1/4             | 11 1/4 | 7 15/16  | 4 1/2                 | 9 1/8  | 3/8            | 25                           |
| 061105                 | 6                         | 11     | 5     | 5 7/8               | 9 1/4             | 14 1/4 | 7 3/16   | 7 1/2                 | 9 1/8  | 3/8            | 24                           |
| 061204                 | 6                         | 12     | 4     | 4 3/4               | 9 1/4             | 15 1/4 | 6 1/16   | 8 1/2                 | 9 1/8  | 3/8            | 24                           |
| 061206                 | 6                         | 12     | 6     | 6 3/4               | 9 1/4             | 15 1/4 | 8 1/16   | 8 1/2                 | 9 1/8  | 3/8            | 29                           |
| 061305                 | 6                         | 13     | 5     | 5 7/8               | 9 1/4             | 16 1/4 | 7 3/16   | 9 1/2                 | 9 1/8  | 3/8            | 26                           |
| 071004                 | 7                         | 10     | 4     | 4 3/4               | 10 3/8            | 13 3/8 | 6 3/16   | 6 1/2                 | 9 3/4  | 3/8            | 27                           |
| 071006                 | 7                         | 10     | 6 1/8 | 6 3/4               | 10 3/8            | 13 3/8 | 8 3/16   | 6 1/2                 | 9 3/4  | 3/8            | 31                           |
| 071805                 | 7                         | 18 1/4 | 5     | 5 3/4               | 10 3/8            | 21 5/8 | 7 3/16   | 14 1/2                | 9 3/4  | 3/8            | 55                           |
| 080804                 | 8                         | 8      | 4     | 4 13/16             | 11 3/8            | 11 3/8 | 6 3/8    | 4 1/4                 | 11     | 3/8            | 24                           |
| 080806                 | 8                         | 8      | 6     | 6 13/16             | 11 3/8            | 11 3/8 | 8 3/8    | 4 1/4                 | 11     | 3/8            | 28                           |
| 080808                 | 8                         | 8      | 8     | 8 13/16             | 11 3/8            | 11 3/8 | 10 3/8   | 4 1/4                 | 11     | 3/8            | 35                           |
| 081004                 | 8                         | 10     | 4     | 4 3/4               | 11 3/8            | 13 3/8 | 6 1/4    | 6 1/2                 | 10 3/4 | 3/8            | 30                           |
| 081006                 | 8                         | 10     | 6     | 6 3/4               | 11 3/8            | 13 3/8 | 8 1/4    | 6 1/2                 | 10 3/4 | 3/8            | 34                           |
| 081008                 | 8                         | 10     | 8     | 8 3/4               | 11 3/8            | 13 3/8 | 10 1/4   | 6 1/2                 | 10 3/4 | 3/8            | 39                           |
| 081204                 | 8                         | 12     | 4     | 4 3/4               | 11 3/8            | 15 3/8 | 6 1/4    | 8 1/2                 | 10 3/4 | 3/8            | 34                           |
| 081206                 | 8                         | 12     | 6     | 6 3/4               | 11 3/8            | 15 3/8 | 8 1/4    | 8 1/2                 | 10 3/4 | 3/8            | 42                           |
| 081208                 | 8                         | 12     | 8     | 8 3/4               | 11 3/8            | 15 3/8 | 10 1/4   | 8 1/2                 | 10 3/4 | 3/8            | 48                           |
| 091105                 | 9                         | 11     | 5     | 5 3/4               | 12 3/8            | 14 3/8 | 7 5/16   | 7 1/2                 | 12     | 3/8            | 41                           |
| 101004                 | 10                        | 10     | 4     | 4 3/4               | 13 3/8            | 13 3/8 | 6 5/16   | 6 1/2                 | 13     | 3/8            | 34                           |
| 101006                 | 10                        | 10     | 6     | 6 3/4               | 13 3/8            | 13 3/8 | 8 5/16   | 6 1/2                 | 13     | 3/8            | 44                           |
| 101008                 | 10                        | 10     | 8     | 8 3/4               | 13 3/8            | 13 3/8 | 10 5/16  | 6 1/2                 | 13     | 3/8            | 50                           |
| 101206                 | 10                        | 12     | 6 1/4 | 7 1/4               | 13 3/8            | 15 3/8 | 8 7/8    | 8 1/2                 | 13 1/4 | 3/8            | 46                           |
| 101404                 | 10                        | 14     | 4     | 4 3/4               | 13 3/8            | 17 3/8 | 6 7/16   | 10 5/8                | 13 1/4 | 3/8            | 42                           |
| 101406                 | 10                        | 14     | 6     | 6 3/4               | 13 3/8            | 17 3/8 | 8 7/16   | 10 5/8                | 13     | 3/8            | 49                           |
| 101408                 | 10                        | 14     | 8     | 8 3/4               | 13 3/8            | 17 3/8 | 10 1/2   | 10 5/8                | 13     | 3/8            | 57                           |
| 101410                 | 10                        | 14     | 8     | 10 13/16            | 13 3/8            | 17 3/8 | 12 7/16  | 10 5/8                | 13     | 3/8            | 70                           |
| 121204                 | 12                        | 12     | 4     | 5                   | 16 1/4            | 16 1/4 | 6 15/16  | 8 5/8                 | 15 3/4 | 1/2            | 60                           |
| 121206                 | 12                        | 12     | 6     | 7                   | 16 1/4            | 16 1/4 | 8 15/16  | 8 5/8                 | 15 3/4 | 1/2            | 68                           |
| 121208                 | 12                        | 12     | 8     | 9                   | 16 1/4            | 16 1/4 | 10 15/16 | 8 5/8                 | 15 3/4 | 1/2            | 80                           |
| 121804                 | 12                        | 18     | 4     | 4 3/4               | 16 1/4            | 22 1/4 | 6 3/4    | 14 1/8                | 15 3/4 | 1/2            | 85                           |
| 121806                 | 12                        | 18     | 6     | 6 3/4               | 16 1/4            | 22 1/4 | 8 3/4    | 14 1/8                | 15 3/4 | 1/2            | 93                           |
| 121808                 | 12                        | 18     | 8     | 8 3/4               | 16 1/4            | 22 1/4 | 10 3/4   | 14 1/8                | 15 3/4 | 1/2            | 101                          |
| 122005                 | 12                        | 20     | 5     | 5 3/4               | 16 1/4            | 24 1/4 | 8 1/8    | 14 3/8                | 15 3/4 | 1/2            | 104                          |
| 122404                 | 12                        | 24     | 4     | 4 15/16             | 16 1/4            | 28 1/4 | 7 1/4    | 18 3/8                | 15 3/4 | 1/2            | 116                          |
| 122406                 | 12                        | 24     | 6     | 6 15/16             | 16 1/4            | 28 1/4 | 9 1/4    | 18 3/8                | 15 3/4 | 1/2            | 127                          |

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# XCE & XJF Explosionproof Enclosures

| XCE/XJF Catalog Number | Inside Nominal Dimensions |    |    | Usable Inside Depth | Overall Dimension |          |          | Mounting Lug CL to CL |        | Mtg. Bolt Size | Apprx. Shipping Weight, lbs. |
|------------------------|---------------------------|----|----|---------------------|-------------------|----------|----------|-----------------------|--------|----------------|------------------------------|
|                        | W                         | L  | D  |                     | A                 | B        | C        | E                     | F      |                |                              |
| 122408                 | 12                        | 24 | 8  | 8 15/16             | 16 1/4            | 28 1/4   | 11 1/4   | 18 3/8                | 15 3/4 | 1/2            | 140                          |
| 122410                 | 12                        | 24 | 10 | 10 15/16            | 16 1/4            | 28 1/4   | 13 1/4   | 18 3/8                | 15 3/4 | 1/2            | 154                          |
| 123006                 | 12                        | 30 | 6  | 6 11/16             | 16 3/4            | 34 1/4   | 9 5/8    | 23                    | 15 3/4 | 1/2            | 180                          |
| 123604                 | 12                        | 36 | 4  | 4 15/16             | 16 1/4            | 40 1/4   | 7 11/16  | 29                    | 15 3/4 | 1/2            | 192                          |
| 123606                 | 12                        | 36 | 6  | 6 15/16             | 16 1/4            | 40 1/4   | 9 11/16  | 29                    | 15 3/4 | 1/2            | 212                          |
| 123608                 | 12                        | 36 | 8  | 8 15/16             | 16 1/4            | 40 1/4   | 11 11/16 | 29                    | 15 3/4 | 1/2            | 232                          |
| 124608                 | 12                        | 46 | 8  | 8 15/16             | 16 1/4            | 50 1/4   | 11 11/16 | 39                    | 15 3/4 | 5/8            | 280                          |
| 141404                 | 14                        | 14 | 4  | 5                   | 18 1/4            | 18 1/4   | 7 1/8    | 9 3/4                 | 17 3/4 | 1/2            | 91                           |
| 141406                 | 14                        | 14 | 6  | 7                   | 18 1/4            | 18 1/4   | 9 1/4    | 9 3/4                 | 17 3/4 | 1/2            | 97                           |
| 141408                 | 14                        | 14 | 8  | 9                   | 18 1/4            | 18 1/4   | 11 1/8   | 9 3/4                 | 17 3/4 | 1/2            | 103                          |
| * 142210               | 14                        | 22 | 10 | 11 1/4              | 18 1/4            | 26 1/4   | 13 5/8   | 16 1/2                | 17 3/4 | 1/2            | 181                          |
| * 142213               | 14                        | 22 | 10 | 13                  | 18 1/4            | 26 1/4   | 15 1/8   | 16 1/2                | 17 3/4 | 1/2            | 235                          |
| 142806                 | 14                        | 28 | 6  | 7 13/16             | 18 1/4            | 32 1/4   | 9 9/16   | 22 1/2                | 17 3/4 | 1/2            | 120                          |
| 161604                 | 16                        | 16 | 4  | 6 5/8               | 20 7/8            | 20 7/8   | 7 15/16  | 11                    | 19 3/4 | 5/8            | 114                          |
| 161606                 | 16                        | 16 | 6  | 7 5/8               | 20 7/8            | 20 7/8   | 9 15/16  | 11                    | 19 3/4 | 5/8            | 135                          |
| 161608                 | 16                        | 16 | 8  | 9 5/8               | 20 7/8            | 20 7/8   | 11 15/16 | 11                    | 19 3/4 | 5/8            | 156                          |
| 162406                 | 16                        | 24 | 6  | 7 13/16             | 20 7/8            | 28 7/8   | 10 3/8   | 18 3/8                | 19 3/4 | 5/8            | 190                          |
| 162408                 | 16                        | 24 | 8  | 9 13/16             | 20 7/8            | 28 7/8   | 12 3/8   | 18 5/8                | 19 3/4 | 5/8            | 209                          |
| 162410                 | 16                        | 24 | 10 | 11 13/16            | 20 7/8            | 28 7/8   | 14 3/8   | 18 3/8                | 19 3/4 | 5/8            | 225                          |
| 162806                 | 16                        | 28 | 6  | 6 13/16             | 20 1/2            | 32 11/16 | 9 1/2    | 22 1/2                | 19 3/4 | 5/8            | 200                          |
| 163406                 | 16                        | 34 | 6  | 6 15/16             | 20 1/2            | 38 1/2   | 9 1/2    | 27                    | 19 3/4 | 5/8            | 260                          |
| 163010                 | 16                        | 30 | 10 | 11 1/8              | 20 1/2            | 34 1/2   | 13 7/8   | 27                    | 19 3/4 | 5/8            | 320                          |
| 164610                 | 16                        | 46 | 10 | 11 13/16            | 20 7/8            | 50 7/8   | 14 9/16  | 39                    | 19 3/4 | 5/8            | 390                          |
| 181804                 | 18                        | 18 | 4  | 5 13/16             | 22 7/8            | 22 7/8   | 8 1/2    | 13                    | 21 3/4 | 5/8            | 154                          |
| 181806                 | 18                        | 18 | 6  | 7 13/16             | 22 7/8            | 22 7/8   | 10 1/2   | 13                    | 21 3/4 | 5/8            | 177                          |
| 181808                 | 18                        | 18 | 8  | 9 13/16             | 22 7/8            | 22 7/8   | 12 1/2   | 13                    | 21 3/4 | 5/8            | 200                          |
| 182406                 | 18                        | 24 | 6  | 7 7/16              | 22 7/8            | 28 7/8   | 10 13/16 | 18 3/8                | 21 3/4 | 5/8            | 226                          |
| 182408                 | 18                        | 24 | 8  | 9 7/16              | 22 7/8            | 28 7/8   | 12 13/16 | 18 3/8                | 21 3/4 | 5/8            | 239                          |
| 182410                 | 18                        | 24 | 10 | 11 7/16             | 22 7/8            | 28 7/8   | 14 13/16 | 18 3/8                | 21 3/4 | 5/8            | 260                          |
| 183008                 | 18                        | 30 | 8  | 9 3/8               | 22 7/8            | 34 7/8   | 12 13/16 | 23                    | 21 3/4 | 5/8            | 293                          |
| 183608                 | 18                        | 36 | 8  | 9 3/8               | 22 7/8            | 40 7/8   | 12 7/8   | 29                    | 21 3/4 | 5/8            | 318                          |
| 183610                 | 18                        | 36 | 10 | 11 3/8              | 22 7/8            | 40 7/8   | 14 7/8   | 29                    | 21 3/4 | 5/8            | 340                          |
| * 203606               | 20                        | 36 | 6  | 7 1/8               | 24 7/8            | 40 7/8   | 10 7/8   | 29                    | 24     | 5/8            | 340                          |
| * 203612               | 20                        | 36 | 6  | 12                  | 25 5/8            | 41 5/8   | 15       | 29                    | 24     | 5/8            | 415                          |
| * 204806               | 20                        | 48 | 6  | 7 1/8               | 24 7/8            | 52 7/8   | 10 7/8   | 41                    | 24     | 5/8            | 430                          |
| * 204812               | 20                        | 48 | 6  | 12                  | 25 5/8            | 53 5/8   | 15       | 41                    | 24     | 5/8            | 515                          |
| 242408                 | 24                        | 24 | 8  | 9 7/16              | 28 7/8            | 28 7/8   | 12 7/16  | 18 3/8                | 28     | 5/8            | 302                          |
| 242410                 | 24                        | 24 | 10 | 11 7/16             | 28 7/8            | 28 7/8   | 14 7/16  | 18 3/8                | 28     | 5/8            | 330                          |
| 243008                 | 24                        | 30 | 8  | 9 1/4               | 28 7/8            | 34 7/8   | 12 15/16 | 23                    | 28     | 5/8            | 356                          |
| 243608                 | 24                        | 36 | 8  | 9 1/4               | 28 7/8            | 40 7/8   | 12 7/16  | 29                    | 28     | 5/8            | 408                          |
| 243610                 | 24                        | 36 | 10 | 11 1/4              | 28 7/8            | 40 7/8   | 14 7/8   | 29                    | 28     | 5/8            | 433                          |
| * 243612               | 24                        | 36 | 10 | 12                  | 28 7/8            | 40 7/8   | 16 1/2   | 29                    | 28     | 5/8            | 545                          |
| * 323612               | 32                        | 36 | 6  | 12                  | 37 3/4            | 41 3/4   | 15 1/2   | 29                    | 36 1/8 | 5/8            | 691                          |



- To indicate Quad-Lead bolt option, add suffix "Q" after XCE. (Not available on XCEX models.)
- Operators, windows and hinges are ordered separately.
- To indicate EEx d approval specify XCEX.
- To indicate NEMA 4/IP66 option, add suffix "N4" after size (catalog number).

**Note:** All dimensions are in inches and are nominal enclosure size only. Inside nominal dimensions are at flange. Consult factory for exact dimensions.

\*Approval Pending – Consult Factory.

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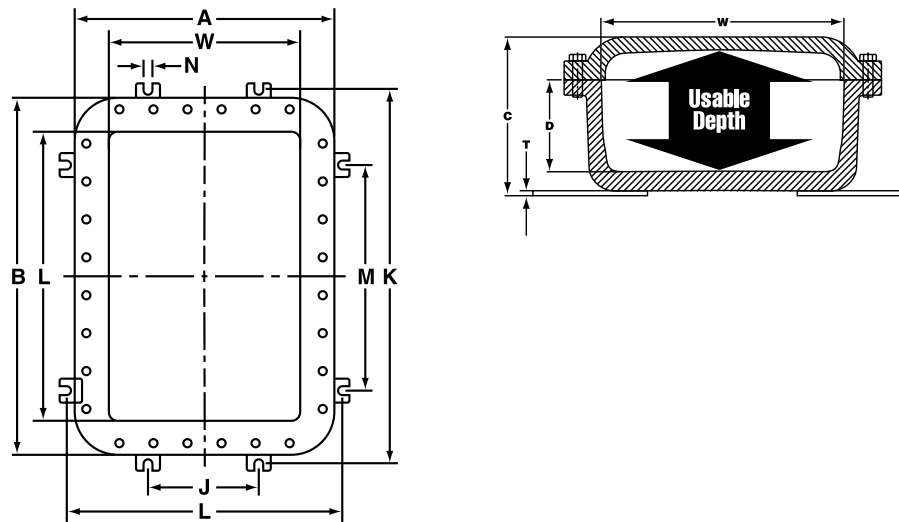
## Bolt-On Mounting Lugs for XCE & XJF Enclosures

### Adjust To Irregular Mounting Surfaces Without Damaging Enclosures



Adalet Bolt-On Mounting Lugs for XCE and XJF Enclosures are bi-directional, permitting either vertical or horizontal mounting orientation. The ductile aluminum alloy lugs adapt to irregular surfaces so lug bolts can be tightened without damaging the enclosure.

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## Bolt-On Mounting Lugs

| Catalog Number | Mounting Dimensions |        |                     |         | Mtg. Lug Size N | Mtg. Lug Thickness T |
|----------------|---------------------|--------|---------------------|---------|-----------------|----------------------|
|                | Optional Mounting J | K      | Standard Mounting L | M       |                 |                      |
| XCE060804M     | X                   | X      | 7 7/8               | 4       | 3/8             | 1/4                  |
| XCE060805M     | X                   | X      | 7 7/8               | 4       | 3/8             | 1/4                  |
| XCE060806M     | X                   | X      | 7 7/8               | 4       | 3/8             | 1/4                  |
| XCE061105M     | X                   | X      | 7 7/8               | 9       | 3/8             | 1/4                  |
| XCE061204M     | X                   | X      | 7 7/8               | 10      | 3/8             | 1/4                  |
| XCE061206M     | X                   | X      | 7 7/8               | 10      | 3/8             | 1/4                  |
| XCE061305M     | X                   | X      | 7 7/8               | 11      | 3/8             | 1/4                  |
| XCE071004M     | X                   | X      | 8 7/8               | 8       | 3/8             | 1/4                  |
| XCE071006M     | X                   | X      | 8 7/8               | 8       | 3/8             | 1/4                  |
| XCE071805M     | X                   | X      | 8 7/8               | 16      | 3/8             | 1/4                  |
| XCE080804M     | X                   | X      | 9 7/8               | 6       | 3/8             | 1/4                  |
| XCE080806M     | X                   | X      | 9 7/8               | 6       | 3/8             | 1/4                  |
| XCE080808M     | X                   | X      | 9 7/8               | 6       | 3/8             | 1/4                  |
| XCE081004M     | X                   | X      | 9 7/8               | 8       | 3/8             | 1/4                  |
| XCE081006M     | X                   | X      | 9 7/8               | 8       | 3/8             | 1/4                  |
| XCE081008M     | X                   | X      | 9 7/8               | 8       | 3/8             | 1/4                  |
| XCE081204M     | 3 13/16             | 14 3/8 | 10 3/8              | 7 13/16 | 1/2             | 3/8                  |
| XCE081206M     | 3 13/16             | 14 3/8 | 10 3/8              | 7 13/16 | 1/2             | 3/8                  |
| XCE081208M     | 3 13/16             | 14 3/8 | 10 3/8              | 7 13/16 | 1/2             | 3/8                  |
| XCE091105M     | 4 13/16             | 13 3/8 | 11 3/8              | 9       | 1/2             | 3/8                  |
| XCE101004M     | 5                   | 13     | 13                  | 5       | 1/2             | 3/8                  |
| XCE101006M     | 5                   | 13     | 13                  | 5       | 1/2             | 3/8                  |
| XCE101008M     | 5                   | 13     | 13                  | 5       | 1/2             | 3/8                  |
| XCE101206M     | 5                   | 15     | 13                  | 6       | 1/2             | 3/8                  |
| XCE101404M     | 5                   | 17     | 13                  | 9       | 1/2             | 3/8                  |
| XCE101406M     | 5                   | 17     | 13                  | 9       | 1/2             | 3/8                  |
| XCE101408M     | 5                   | 17     | 13                  | 9       | 1/2             | 3/8                  |
| XCE101410M     | 5                   | 17     | 13                  | 9       | 1/2             | 3/8                  |
| XCE121204M     | 7                   | 15     | 15                  | 7       | 1/2             | 3/8                  |
| XCE121206M     | 7                   | 15     | 15                  | 7       | 1/2             | 3/8                  |
| XCE121208M     | 7                   | 15     | 15                  | 7       | 1/2             | 3/8                  |
| XCE121804M     | 7                   | 20 7/8 | 15                  | 12 7/8  | 1/2             | 3/8                  |
| XCE121806M     | 7                   | 20 7/8 | 15                  | 12 7/8  | 1/2             | 3/8                  |
| XCE121808M     | 7                   | 20 7/8 | 15                  | 12 7/8  | 1/2             | 3/8                  |
| XCE122005M     | 7                   | 22 7/8 | 15                  | 14 7/8  | 1/2             | 3/8                  |
| XCE122404M     | 7                   | 26 7/8 | 15                  | 18 7/8  | 1/2             | 3/8                  |
| XCE122406M     | 7                   | 26 7/8 | 15                  | 18 7/8  | 1/2             | 3/8                  |
| XCE122408M     | 7                   | 26 7/8 | 15                  | 18 7/8  | 1/2             | 3/8                  |
| XCE122410M     | 7                   | 26 7/8 | 15                  | 18 7/8  | 1/2             | 3/8                  |
| XCE123006M     | 7                   | 33     | 15                  | 24 7/8  | 1/2             | 3/8                  |
| XCE123604M     | 7                   | 39     | 15                  | 31      | 1/2             | 3/8                  |
| XCE123606M     | 7                   | 39     | 15                  | 31      | 1/2             | 3/8                  |
| XCE123608M     | 7                   | 39     | 15                  | 31      | 1/2             | 3/8                  |

| Catalog Number | Mounting Dimensions |         |                     |          | Mtg. Lug Size N | Mtg. Lug Thickness T |
|----------------|---------------------|---------|---------------------|----------|-----------------|----------------------|
|                | Optional Mounting J | K       | Standard Mounting L | M        |                 |                      |
| XCE124608M     | 7                   | 49      | 15                  | 41       | 1/2             | 3/8                  |
| XCE141404M     | 9                   | 17      | 17                  | 9        | 1/2             | 3/8                  |
| XCE141406M     | 9                   | 17      | 17                  | 9        | 1/2             | 3/8                  |
| XCE141408M     | 9                   | 17      | 17                  | 9        | 1/2             | 3/8                  |
| XCE142806M     | 9                   | 31      | 17                  | 23       | 1/2             | 3/8                  |
| XCE161604M     | 11                  | 19      | 19                  | 10 15/16 | 1/2             | 3/8                  |
| XCE161606M     | 11                  | 19      | 19                  | 10 15/16 | 1/2             | 3/8                  |
| XCE161608M     | 11                  | 19      | 19                  | 10 15/16 | 1/2             | 3/8                  |
| XCE162406M     | 11 3/8              | 27 1/4  | 19 3/8              | 19 3/8   | 1/2             | 3/8                  |
| XCE162408M     | 11 3/8              | 27 1/4  | 19 3/8              | 19 3/8   | 1/2             | 3/8                  |
| XCE162410M     | 11 3/8              | 27 1/4  | 19 3/8              | 19 3/8   | 1/2             | 3/8                  |
| XCE162806M     | 11 3/8              | 31 3/8  | 19 3/8              | 23       | 1/2             | 3/8                  |
| XCE163406M     | 11 3/8              | 37 3/8  | 19 3/8              | 29 3/8   | 1/2             | 3/8                  |
| XCE164610M     | 11 3/8              | 49 3/8  | 19 3/8              | 41 3/8   | 1/2             | 3/8                  |
| XCE181804M     | 13 3/8              | 21 3/8  | 21 3/8              | 13 3/8   | 1/2             | 3/8                  |
| XCE181806M     | 13 3/8              | 21 3/8  | 21 3/8              | 13 3/8   | 1/2             | 3/8                  |
| XCE181808M     | 13 3/8              | 21 3/8  | 21 3/8              | 13 3/8   | 1/2             | 3/8                  |
| XCE182406M     | 13                  | 27      | 21                  | 19       | 1/2             | 3/8                  |
| XCE182408M     | 13                  | 27      | 21                  | 19       | 1/2             | 3/8                  |
| XCE182410M     | 13                  | 27      | 21 1/4              | 19       | 1/2             | 3/8                  |
| XCE183008M     | 13                  | 31      | 21                  | 25       | 1/2             | 3/8                  |
| XCE183608M     | 13 1/4              | 39 1/2  | 21                  | 31 1/2   | 1/2             | 3/8                  |
| XCE183610M     | 13 1/4              | 39 1/2  | 21 1/4              | 31 1/2   | 1/2             | 3/8                  |
| XCE203606M     | 15 3/4              | 39 3/4  | 23 3/4              | 31 3/4   | 1/2             | 3/8                  |
| XCE204806M     | 15 3/4              | 51 3/4  | 23 3/4              | 43 3/4   | 1/2             | 3/8                  |
| XCE242408M     | 19 1/2              | 27 1/2  | 27 1/2              | 19 1/2   | 1/2             | 3/8                  |
| XCE242410M     | 19 1/2              | 27 1/2  | 27 1/2              | 19 1/2   | 1/2             | 3/8                  |
| XCE243008M     | 19 9/16             | 33 9/16 | 27 9/16             | 25 9/16  | 1/2             | 3/8                  |
| XCE243608M     | 19 9/16             | 39 9/16 | 27 9/16             | 31 9/16  | 1/2             | 3/8                  |
| XCE243610M     | 19 9/16             | 39 9/16 | 27 9/16             | 31 9/16  | 1/2             | 3/8                  |

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## XCE Series Recommended Spacing For Operators In Covers

| Catalog Number | Standard Operators       |                              |                                  |                              | Miniature Operators      |                              |                                  |                              | Cover Wall Thickness (Inches) |
|----------------|--------------------------|------------------------------|----------------------------------|------------------------------|--------------------------|------------------------------|----------------------------------|------------------------------|-------------------------------|
|                | Maximum Number Operators | Maximum Number Operator Rows | Maximum Number Operators Per Row | Recommended Spacing CL to CL | Maximum Number Operators | Maximum Number Operator Rows | Maximum Number Operators Per Row | Recommended Spacing CL to CL |                               |
| XCE041604      | 5                        | 5                            | 1                                | 2 1/2                        | 13                       | 13                           | 1                                | 1                            | 1/2                           |
| XCE060804      | 2                        | 2                            | 1                                | 2 1/2                        | 8                        | 4                            | 2                                | 1                            | 1/2                           |
| XCE060805      | 2                        | 2                            | 1                                | 2 1/2                        | 8                        | 4                            | 2                                | 1                            | 1/2                           |
| XCE060806      | 2                        | 2                            | 1                                | 2 1/2                        | 8                        | 4                            | 2                                | 1                            | 1/2                           |
| XCE061105      | 3                        | 3                            | 1                                | 2 1/2                        | 14                       | 7                            | 2                                | 1                            | 1/2                           |
| XCE061204      | 4                        | 4                            | 1                                | 2 1/2                        | 16                       | 8                            | 2                                | 1                            | 5/8                           |
| XCE061206      | 4                        | 4                            | 1                                | 2 1/2                        | 16                       | 8                            | 2                                | 1                            | 5/8                           |
| XCE061305      | 4                        | 4                            | 1                                | 2 1-2                        | 18                       | 9                            | 2                                | 1                            | 1/2                           |
| XCE071004      | 6                        | 3                            | 2                                | 2 1/2                        | 18                       | 6                            | 3                                | 1                            | 5/8                           |
| XCE071006      | 6                        | 3                            | 2                                | 2 1/2                        | 18                       | 6                            | 3                                | 1                            | 5/8                           |
| XCE071805      | 12                       | 6                            | 2                                | 2 1/2                        | 45                       | 15                           | 3                                | 1                            | 5/8                           |
| XCE080804      | 4                        | 2                            | 2                                | 2 1/2                        | 16                       | 4                            | 4                                | 1                            | 11/16                         |
| XCE080806      | 4                        | 2                            | 2                                | 2 1/2                        | 16                       | 4                            | 4                                | 1                            | 11/16                         |
| XCE080808      | 4                        | 2                            | 2                                | 2 1/2                        | 16                       | 4                            | 4                                | 1                            | 11/16                         |
| XCE081004      | 6                        | 3                            | 2                                | 2 1/2                        | 24                       | 6                            | 4                                | 1                            | 11/16                         |
| XCE081006      | 6                        | 3                            | 2                                | 2 1/2                        | 24                       | 6                            | 4                                | 1                            | 11/16                         |
| XCE081008      | 6                        | 3                            | 2                                | 2 1/2                        | 24                       | 6                            | 4                                | 1                            | 11/16                         |
| XCE081204      | 8                        | 4                            | 2                                | 2 1/2                        | 32                       | 8                            | 4                                | 1                            | 11/16                         |
| XCE081206      | 8                        | 4                            | 2                                | 2 1/2                        | 32                       | 8                            | 4                                | 1                            | 11/16                         |
| XCE081208      | 8                        | 4                            | 2                                | 2 1/2                        | 32                       | 8                            | 4                                | 1                            | 11/16                         |
| XCE091105      | 6                        | 3                            | 2                                | 2 1/2                        | 35                       | 7                            | 5                                | 1                            | 11/16                         |
| XCE101004      | 9                        | 3                            | 3                                | 2 1/2                        | 36                       | 6                            | 6                                | 1                            | 11/16                         |
| XCE101006      | 9                        | 3                            | 3                                | 2 1/2                        | 36                       | 6                            | 6                                | 1                            | 11/16                         |
| XCE101008      | 9                        | 3                            | 3                                | 2 1/2                        | 36                       | 6                            | 6                                | 1                            | 11/16                         |
| XCE101206      | 12                       | 4                            | 3                                | 2 1/2                        | 48                       | 8                            | 6                                | 1                            | 3/4                           |
| XCE101404      | 12                       | 4                            | 3                                | 2 1/2                        | 60                       | 10                           | 6                                | 1                            | 3/4                           |
| XCE101406      | 12                       | 4                            | 3                                | 2 1/2                        | 60                       | 10                           | 6                                | 1                            | 3/4                           |
| XCE101408      | 12                       | 4                            | 3                                | 2 1/2                        | 60                       | 10                           | 6                                | 1                            | 3/4                           |
| XCE101410      | 12                       | 4                            | 3                                | 2 1/2                        | 60                       | 10                           | 6                                | 1                            | 3/4                           |
| XCE121204      | 9                        | 3                            | 3                                | 3                            | 64                       | 8                            | 8                                | 1                            | 7/8                           |
| XCE121206      | 9                        | 3                            | 3                                | 3                            | 64                       | 8                            | 8                                | 1                            | 7/8                           |
| XCE121208      | 9                        | 3                            | 3                                | 3                            | 64                       | 8                            | 8                                | 1                            | 7/8                           |
| XCE121804      | 15                       | 5                            | 3                                | 3                            | 92                       | 14                           | 8                                | 1                            | 15/16                         |
| XCE121806      | 15                       | 5                            | 3                                | 3                            | 92                       | 14                           | 8                                | 1                            | 15/16                         |
| XCE121808      | 15                       | 5                            | 3                                | 3                            | 92                       | 14                           | 8                                | 1                            | 15/16                         |
| XCE122005      | 18                       | 6                            | 3                                | 3                            | 128                      | 16                           | 8                                | 1                            | 1 1/8                         |
| XCE122404      | 21                       | 7                            | 3                                | 3                            | 150                      | 20                           | 8                                | 1                            | 1 1/8                         |
| XCE122406      | 21                       | 7                            | 3                                | 3                            | 150                      | 20                           | 8                                | 1                            | 1 1/8                         |
| XCE122408      | 21                       | 7                            | 3                                | 3                            | 150                      | 20                           | 8                                | 1                            | 1 1/8                         |

Note: Closer spacing other than 2 1/2 & 3 inches available – Consult factory for special designs.

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## XCE Series Recommended Spacing For Operators In Covers

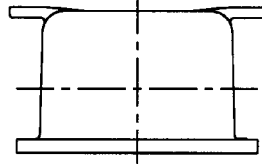
| Catalog Number | Standard Operators       |                              |                                  |                              | Miniature Operators      |                              |                                  |                              | Cover Wall Thickness (Inches) |
|----------------|--------------------------|------------------------------|----------------------------------|------------------------------|--------------------------|------------------------------|----------------------------------|------------------------------|-------------------------------|
|                | Maximum Number Operators | Maximum Number Operator Rows | Maximum Number Operators Per Row | Recommended Spacing CL to CL | Maximum Number Operators | Maximum Number Operator Rows | Maximum Number Operators Per Row | Recommended Spacing CL to CL |                               |
| XCE122410      | 21                       | 7                            | 3                                | 3                            | 150                      | 20                           | 8                                | 1                            | 1 1/8                         |
| XCE123006      | 27                       | 9                            | 3                                | 3                            | 150                      | 26                           | 8                                | 1                            | 1 3/8                         |
| XCE123604      | 33                       | 11                           | 3                                | 3                            | 150                      | 32                           | 8                                | 1                            | 1 3/16                        |
| XCE123606      | 33                       | 11                           | 3                                | 3                            | 150                      | 32                           | 8                                | 1                            | 1 3/16                        |
| XCE123608      | 33                       | 11                           | 3                                | 3                            | 150                      | 32                           | 8                                | 1                            | 1 3/16                        |
| XCE124608      | 42                       | 14                           | 3                                | 3                            | 150                      | 41                           | 8                                | 1                            | 1 1/4                         |
| XCE141404      | 16                       | 4                            | 4                                | 3                            | 100                      | 10                           | 10                               | 1                            | 7/8                           |
| XCE141406      | 16                       | 4                            | 4                                | 3                            | 100                      | 10                           | 10                               | 1                            | 7/8                           |
| XCE141408      | 16                       | 4                            | 4                                | 3                            | 100                      | 10                           | 10                               | 1                            | 7/8                           |
| XCE142210      | 24                       | 6                            | 4                                | 3                            | 100                      | 18                           | 10                               | 1                            | 1 1/8                         |
| XCE142213      | 24                       | 6                            | 4                                | 3                            | 100                      | 18                           | 10                               | 1                            | 1 1/8                         |
| XCE142806      | 32                       | 8                            | 4                                | 3                            | 150                      | 24                           | 10                               | 1                            | 1 1/8                         |
| XCE161604      | 16                       | 4                            | 4                                | 3 1/2                        | 121                      | 11                           | 11                               | 1                            | 7/8                           |
| XCE161606      | 16                       | 4                            | 4                                | 3 1/2                        | 121                      | 11                           | 11                               | 1                            | 7/8                           |
| XCE161608      | 16                       | 4                            | 4                                | 3 1/2                        | 121                      | 11                           | 11                               | 1                            | 7/8                           |
| XCE162406      | 24                       | 6                            | 4                                | 3 1/2                        | 150                      | 19                           | 11                               | 1                            | 7/8                           |
| XCE162408      | 24                       | 6                            | 4                                | 3 1/2                        | 150                      | 19                           | 11                               | 1                            | 7/8                           |
| XCE162410      | 24                       | 6                            | 4                                | 3 1/2                        | 150                      | 19                           | 11                               | 1                            | 7/8                           |
| XCE162806      | 28                       | 7                            | 4                                | 3 1/2                        | 150                      | 24                           | 11                               | 1                            | 1 1/4                         |
| XCE163010      | 32                       | 8                            | 4                                | 3 1/2                        | 150                      | 26                           | 12                               | 1                            | 1 1/4                         |
| XCE163406      | 32                       | 8                            | 4                                | 3 1/2                        | 150                      | 30                           | 11                               | 1                            | 1 1/4                         |
| XCE164610      | 48                       | 12                           | 4                                | 3 1/2                        | 150                      | 41                           | 11                               | 1                            | 1                             |
| XCE181804      | 16                       | 4                            | 4                                | 3 1/2                        | 150                      | 13                           | 13                               | 1                            | 1                             |
| XCE181806      | 16                       | 4                            | 4                                | 3 1/2                        | 150                      | 13                           | 13                               | 1                            | 1                             |
| XCE181808      | 16                       | 4                            | 4                                | 3 1/2                        | 150                      | 13                           | 13                               | 1                            | 1                             |
| XCE182406      | 24                       | 6                            | 4                                | 3 1/2                        | 150                      | 19                           | 13                               | 1                            | 1 1/2                         |
| XCE182408      | 24                       | 6                            | 4                                | 3 1/2                        | 150                      | 19                           | 13                               | 1                            | 1 1/2                         |
| XCE182410      | 24                       | 6                            | 4                                | 3 1/2                        | 150                      | 19                           | 13                               | 1                            | 1 1/2                         |
| XCE183008      | 32                       | 8                            | 4                                | 3 1/2                        | 150                      | 25                           | 13                               | 1                            | 1 1/2                         |
| XCE183608      | 36                       | 9                            | 4                                | 3 1/2                        | 150                      | 31                           | 13                               | 1                            | 1 7/8                         |
| XCE183610      | 36                       | 9                            | 4                                | 3 1/2                        | 150                      | 31                           | 13                               | 1                            | 1 7/8                         |
| XCE203606      | 45                       | 9                            | 5                                | 3 1/2                        | 150                      | 31                           | 15                               | 1                            | 1 7/8                         |
| XCE203612      | 45                       | 9                            | 5                                | 3 1/2                        | 150                      | 31                           | 15                               | 1                            | 1 3/8                         |
| XCE204806      | 65                       | 13                           | 5                                | 3 1/2                        | 150                      | 43                           | 15                               | 1                            | 1 7/8                         |
| XCE204812      | 65                       | 13                           | 5                                | 3 1/2                        | 150                      | 43                           | 15                               | 1                            | 1 3/8                         |
| XCE242408      | 36                       | 6                            | 6                                | 3 1/2                        | 150                      | 19                           | 19                               | 1                            | 1 1/2                         |
| XCE242410      | 36                       | 6                            | 6                                | 3 1/2                        | 150                      | 19                           | 19                               | 1                            | 1 1/2                         |
| XCE243008      | 42                       | 7                            | 6                                | 3 1/2                        | 150                      | 25                           | 19                               | 1                            | 1 7/8                         |
| XCE243608      | 54                       | 9                            | 6                                | 3 1/2                        | 150                      | 31                           | 19                               | 1                            | 1 7/8                         |
| XCE243610      | 54                       | 9                            | 6                                | 3 1/2                        | 150                      | 31                           | 19                               | 1                            | 1 7/8                         |
| XCE243612      | 54                       | 9                            | 6                                | 3 1/2                        | 150                      | 31                           | 19                               | 1                            | 1 3/8                         |
| XCE323612      | 72                       | 9                            | 8                                | 3 1/2                        | 150                      | 31                           | 27                               | 1                            | 1 3/8                         |

Note: Closer spacing other than 3 & 3 1/2 inches available – Consult factory for special designs.

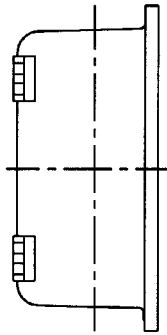


# XCE & XJF Explosionproof Enclosures

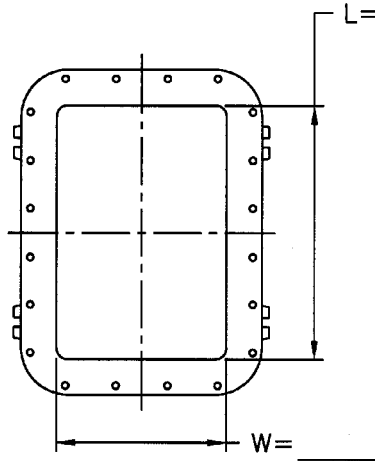
## CUSTOMER DESIGN SHEET



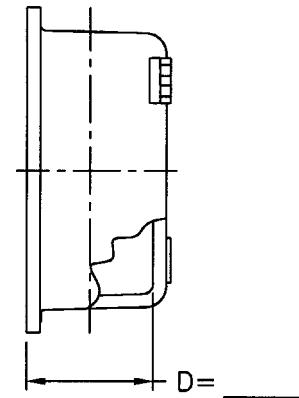
TOP VIEW



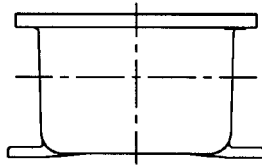
LEFT VIEW



BOTTOM VIEW



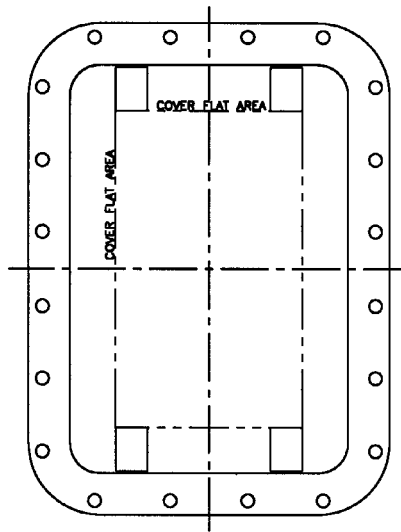
RIGHT VIEW



### BOX LAYOUT

CAT. #: X\_\_\_\_\_

- N4 O-RING
- MOUNTING PAN
- HINGES
  - LONG SIDE:
    - LEFT
    - RIGHT
  - SHORT SIDE:
    - TOP
    - BOTTOM
  - NON REMOVABLE
- NO HINGES



### COVER LAYOUT

\*CONSULT FACTORY FOR FLAT AREA DIMENSIONS

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## Conduit Drilling and Tapping Guidelines

When drilling & tapping enclosures for conduit, proper installation requires compliance with the following:

1. Must be tapped with at least 5 full NPT threads (XCEX requires six NPT threads) in enclosure back or sides only; min. 1/2" conduit size.
2. Tapping depth of NPT holes must be plus 1/2 turn min. to plus 1-1/2 turns max. past standard NPT plug gage notch.
3. Inner end of conduit openings shall be smooth and well-rounded.

**TABLE I**

| Thread Size Of<br>Conduit, Inches (NPT) | Minimum wall thickness at conduit entrance excluding XCEX |                                     |
|---|---|-------------------------------------|
|   | Explosionproof  | Dust Ignition Proof / Weather Proof |
| 1/2 - 3/4                               | 3/8 inch  | 1/4 inch                            |
| 1 - 2                                   | 7/16 inch   | 5/16 inch                           |
| 2 1/2 - 5                               | 5/8 inch  | 7/16 inch                           |

**TABLE II**

| Conduit size, inches (NPT)                                       | 1/2    | 3/4    | 1      | 1 1/4 | 1 1/2 | 2     | 2 1/2 | 3       | 3 1/2   | 4     | 5     |
|--|--------|--------|--------|-------|-------|-------|-------|---------|---------|-------|-------|
| Minimum Distance from conduit CL to inside corner or back of box | 1 5/16 | 1 7/16 | 1 9/16 | 1 3/4 | 1 7/8 | 2 1/8 | 2 3/8 | 2 11/16 | 2 15/16 | 3 1/4 | 3 7/8 |
| Approximate diameter of union                                    | 1 7/8  | 1 7/8  | 2 1/16 | 2 7/8 | 3 1/4 | 3 7/8 | 4 7/8 | 5 1/2   | 6       | 6 1/2 | 7 1/2 |

**TABLE III**

Minimum spacing between conduit centers thru sidewalls only (inches)  
(Double all distances in table for holes located in backwall)

| Size  | 5     | 4     | 3 1/2 | 3     | 2 1/2 | 2     | 1 1/2 | 1 1/4 | 1     | 3/4   | 1/2   |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| 1/2   | 4 1/2 | 3 5/8 | 3 3/8 | 3     | 2 5/8 | 2 3/8 | 2     | 1 7/8 | 1 3/4 | 1 5/8 | 1 1/2 |
| 3/4   | 4 3/4 | 3 3/4 | 3 1/2 | 3 1/8 | 2 3/4 | 2 1/2 | 2 1/8 | 2     | 1 7/8 | 1 3/4 |       |
| 1     | 4 7/8 | 4     | 3 5/8 | 3 1/4 | 3     | 2 5/8 | 2 3/8 | 2 1/4 | 2     |       |       |
| 1 1/4 | 5 1/8 | 4 1/8 | 3 7/8 | 3 1/2 | 3 1/8 | 2 7/8 | 2 1/2 | 2 3/8 |       |       |       |
| 1 1/2 | 5 1/2 | 4 1/4 | 4     | 3 5/8 | 3 1/4 | 3     | 2 5/8 |       |       |       |       |
| 2     | 5 3/4 | 4 5/8 | 4 1/4 | 3 7/8 | 3 5/8 | 3 1/4 |       |       |       |       |       |
| 2 1/2 | 6     | 4 7/8 | 4 5/8 | 4 1/4 | 3 7/8 |       |       |       |       |       |       |
| 3     | 6 1/4 | 5 3/8 | 5     | 4 5/8 |       |       |       |       |       |       |       |
| 3 1/2 | 6 1/2 | 5 5/8 | 5 1/4 |       |       |       |       |       |       |       |       |
| 4     | 6 3/4 | 5 7/8 |       |       |       |       |       |       |       |       |       |
| 5     | 7 1/4 |       |       |       |       |       |       |       |       |       |       |

This information is compiled from data which we believe is reliable and is given in good faith. Since the methods of application and conditions under which our products are used are beyond our control, we are not able to guarantee the application and/or use of same. The user assumes all risks and liability in connection with the application and use of our products.

**Note:** All dimensions are in inches.

Metric threads available from factory for Group C & D applications only – Consult Factory.

The Adalet engineering department is available to assist in designing custom explosionproof enclosures for your products.

# Conduit & Auxiliary Device Drilling and Tapping Guidelines

## SPACING FOR AUXILIARY DEVICES INSTALLED IN BOX WALLS OF CONTROL PANEL ENCLOSURES USED IN HAZARDOUS LOCATIONS.

When using an Auxiliary Device in the box wall of an enclosure used in hazardous locations, proper installation requires compliance with the following:

1. A minimum of (5) thread engagement, class 2 fit, required for group C & D applications.  
A minimum of (7) thread engagement, class 2 fit, required for group B applications.
2. Table I shows minimum box wall thickness for Auxiliary Device threads.

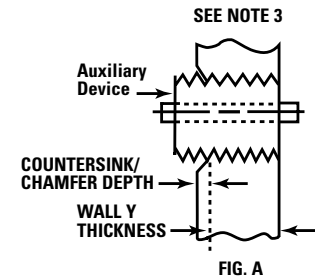
**TABLE I**

| Thread Size (In.)         | REQUIRED MINIMUM BOX WALL THICKNESS                    |  | Typical Auxiliary Devices           |
|---------------------------|--|--|-------------------------------------|
|                           | Group C & D Applications<br>min. (5) thread engagement | Group B Applications<br>min. (7) thread engagement |                                     |
| 1/2 – 3/4 NPSM (14 PITCH) | 3/8 Inch   | 1/2 Inch   | XBO, XHPB, XHSS, Standard Operators |
| 1 NPSM (11 1/2 PITCH)     | 7/16 Inch  | 5/8 Inch   | XCBH Large Handle Assembly          |
| 3/8 NPSM (18 PITCH)       | 9/32 Inch  | 13/32 Inch   | XCBH Small Handle Assembly          |
| 3/8 – 16 UNC              | 5/16 Inch  | 7/16 Inch  | XMOB, XMOSS, Mini Operators         |

3. If Auxiliary Device contains undercut in engaging threaded section, the minimum wall thickness shown in Table I must increase to maintain the minimum required thread engagement. (Fig. A)
4. Table II provides the minimum distance an Auxiliary Device center can be placed from inside corner or back of box.

**TABLE II**

| AUXILIARY DEVICE THREAD SIZE (In.)   | 3/8-16<br>UNC | 3/8<br>NPSM | 1/2<br>NPSM | 3/4<br>NPSM | 1<br>NPSM |
|--|---------------|-------------|-------------|-------------|-----------|
| Minimum distance from Auxiliary Device CL to inside corner of back of box. | 1-1/2         | 1-5/8       | 1-3/4       | 1-7/8       | 2         |



5. Table III shows minimum spacing between conduit and Auxiliary Device entrances.

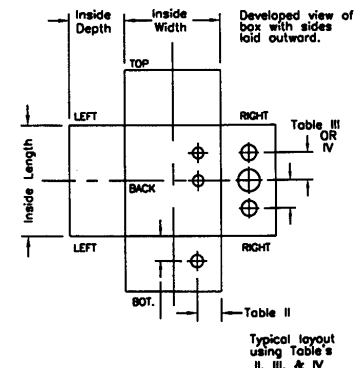
**TABLE III**

| Aux. Device Thread Size | Minimum space between centers of conduits and auxiliary devices in box wall. (Inches) |       |       |       |       |       |       |       |       |       |       |
|-------------------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
|                         | Conduit Thread Size (NPT)   |       |       |       |       |       |       |       |       |       |       |
|                         | 5   | 4     | 3-1/2 | 3     | 2-1/2 | 2     | 1-1/2 | 1-1/4 | 1     | 3/4   | 1/2   |
| 3/8                     | 4-1/2   | 3-5/8 | 3-3/8 | 3     | 2-5/8 | 2-3/8 | 2     | 1-7/8 | 1-3/4 | 1-5/8 | 1-1/2 |
| 1/2                     | 4-5/8   | 3-3/4 | 3-1/2 | 3-1/8 | 2-3/4 | 2-1/2 | 2-1/4 | 2-1/8 | 2     | 1-7/8 | 1-3/4 |
| 3/4                     | 4-3/4   | 4     | 3-5/8 | 3-1/4 | 2-7/8 | 2-5/8 | 2-3/8 | 2-1/4 | 2-1/8 | 2     | 1-7/8 |
| 1                       | 5   | 4-1/4 | 3-7/8 | 3-1/2 | 3     | 2-3/4 | 2-1/2 | 2-3/8 | 2-1/4 | 2-1/8 | 2     |

6. Table IV shows minimum spacing between auxiliary device entrances.  
NOTE: Increase distance between devices as required to maintain minimum through air spacing of contacts required by electrical codes.
7. Double all distances in Table III and IV for holes located in back wall.

**TABLE IV**

|     | Minimum spacing between Auxiliary Device of varying thread sizes (Inches) |       |       |       |
|-----|---|-------|-------|-------|
|     | 3/8   | 1/2   | 3/4   | 1     |
| 3/8 | 1-1/2   | 1-1/2 | 1-1/2 | 2-1/2 |
| 1/2 | 1-1/2   | 2     | 2     | 2-1/2 |
| 3/4 | 1-1/2   | 2     | 2     | 3     |
| 1   | 2-1/2   | 2-1/2 | 3     | 3-1/2 |



Consult factory for layout data sheets.

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## XCE and XJF Mounting Pans and Hinges

### MOUNTING PANS

| Catalog Number<br>(Steel) | Catalog Number<br>(Aluminum) | Catalog Number<br>(Phenolic) | Pan Dimensions Nominal |        | Enclosure Size Reference<br>Inside width x length | Weight Each (pounds)<br>(Steel) |
|---------------------------|------------------------------|------------------------------|------------------------|--------|---|---------------------------------|
|                           |                              |                              | Width                  | Length |   |                                 |
| XSM 0416                  | XSA 0416                     | XSB 0416                     | 3 1/4                  | 15 1/4 | 4 x 16  | 1 1/2                           |
| XSM 0608                  | XSA 0608                     | XSB 0608                     | 5 1/8                  | 7 1/8  | 6 x 8   | 1                               |
| XSM 0611                  | XSA 0611                     | XSB 0611                     | 5 1/8                  | 10 1/8 | 6 x 11  | 1 1/2                           |
| XSM 0612                  | XSA 0612                     | XSB 0612                     | 5 1/8                  | 11 1/8 | 6 x 12  | 1 3/4                           |
| XSM 0613                  | XSA 0613                     | XSB 0613                     | 5 1/8                  | 12 1/8 | 6 x 13  | 2                               |
| XSM 0710                  | XSA 0710                     | XSB 0710                     | 6 1/8                  | 9 1/8  | 7 x 10  | 1 1/4                           |
| XSM 0718                  | XSA 0718                     | XSB 0718                     | 6 1/8                  | 17 3/8 | 7 x 18  | 2 1/2                           |
| XSM 0808                  | XSA 0808                     | XSB 0808                     | 7                      | 7      | 8 x 8   | 1 1/4                           |
| XSM 0810                  | XSA 0810                     | XSB 0810                     | 7                      | 9 1/8  | 8 x 10  | 1 1/2                           |
| XSM 0812                  | XSA 0812                     | XSB 0812                     | 6 7/8                  | 10 7/8 | 8 x 12  | 2 1/4                           |
| XSM 0911                  | XSA 0911                     | XSB 0911                     | 8                      | 10     | 9 x 11  | 2 1/2                           |
| XSM 1010                  | XSA 1010                     | XSB 1010                     | 8 7/8                  | 8 7/8  | 10 x 10   | 2 1/2                           |
| XSM 1012                  | XSA 1012                     | XSB 1012                     | 10 7/8                 | 8 7/8  | 10 x 12   | 3                               |
| XSM 1014                  | XSA 1014                     | XSB 1014                     | 8 7/8                  | 12 7/8 | 10 x 14   | 3 1/2                           |
| XSM 1212                  | XSA 1212                     | XSB 1212                     | 10 7/8                 | 10 7/8 | 12 x 12   | 3 3/4                           |
| XSM 1218                  | XSA 1218                     | XSB 1218                     | 10 1/2                 | 16 1/2 | 12 x 18   | 5 1/2                           |
| XSM 1220                  | XSA 1220                     | XSB 1220                     | 11                     | 19     | 12 x 20   | 6 1/2                           |
| XSM 1224                  | XSA 1224                     | XSB 1224                     | 11                     | 23     | 12 x 24   | 8                               |
| XSM 1230                  | XSA 1230                     | XSB 1230                     | 10 3/4                 | 28 3/4 | 12 x 30   | 9 3/4                           |
| XSM 1236                  | XSA 1236                     | XSB 1236                     | 10 3/4                 | 34 3/4 | 12 x 36   | 11 3/4                          |
| XSM 1246                  | XSA 1246                     | XSB 1246                     | 10 3/4                 | 44 3/4 | 12 x 46   | 15                              |
| XSM 1414                  | XSA 1414                     | XSB 1414                     | 12 7/8                 | 12 7/8 | 14 x 14   | 5                               |
| XSM 1422                  | XSA 1422                     | XSB 1422                     | 12 7/8                 | 20 7/8 | 14 x 22   | 8                               |
| XSM 1428                  | XSA 1428                     | XSB 1428                     | 12 7/8                 | 26 7/8 | 14 x 28   | 10 3/4                          |
| XSM 1616                  | XSA 1616                     | XSB 1616                     | 14 3/4                 | 14 3/4 | 16 x 16   | 6 3/4                           |
| XSM 1624                  | XSA 1624                     | XSB 1624                     | 14 1/2                 | 22 1/2 | 16 x 24   | 10 1/4                          |
| XSM 1628                  | XSA 1628                     | XSB 1628                     | 26 1/2                 | 14 1/2 | 16 x 28   | 12                              |
| XSM 1630                  | XSA 1630                     | XSB 1630                     | 14 1/2                 | 28 1/2 | 16 x 30   | 12 1/2                          |
| XSM 1634                  | XSA 1634                     | XSB 1634                     | 32 1/2                 | 14 1/2 | 16 x 34   | 14 3/4                          |
| XSM 1646                  | XSA 1646                     | XSB 1646                     | 14 1/2                 | 44 1/2 | 16 x 46   | 20 1/4                          |
| XSM 1818                  | XSA 1818                     | XSB 1818                     | 16 3/4                 | 16 3/4 | 18 x 18   | 8 3/4                           |
| XSM 1824                  | XSA 1824                     | XSB 1824                     | 16 1/2                 | 22 1/2 | 18 x 24   | 11 1/2                          |
| XSM 1830                  | XSA 1830                     | XSB 1830                     | 16 1/2                 | 28 1/2 | 18 x 30   | 14 3/4                          |
| XSM 1836                  | XSA 1836                     | XSB 1836                     | 16 1/2                 | 34 1/2 | 18 x 36   | 18                              |
| XSM 2036                  | XSA 2036                     | XSB 2036                     | 34 1/2                 | 18 1/2 | 20 x 36   | 20                              |
| XSM 2048                  | XSA 2048                     | XSB 2048                     | 46 1/2                 | 18 1/2 | 20 x 48   | 27                              |
| XSM 2424                  | XSA 2424                     | XSB 2424                     | 22                     | 22     | 24 x 24   | 15 1/4                          |
| XSM 2430                  | XSA 2430                     | XSB 2430                     | 22                     | 28     | 24 x 30   | 19 1/4                          |
| XSM 2436                  | XSA 2436                     | XSB 2436                     | 34                     | 22     | 24 x 36   | 23 1/2                          |
| XSM 3236                  | XSA 3236                     | XSB 3236                     | 29                     | 33     | 32 x 36   | 28 3/4                          |

### Mounting Pans

#### MATERIAL — Steel: (XSM)

Galvanized 12 gauge steel plate. The catalog number includes the steel mounting pan complete with 1/4" high spacers and stainless steel mounting screws.

**MATERIAL — Aluminum: (XSA)** Consult factory for availability.

#### MATERIAL — Phenolic: (XSB)

A special phenolic laminated material that has high mechanical and dielectric strength. It is excellent for mounting and wiring control equipment. The catalog number includes the phenolic board, 3/8" thick, complete with 1/4" high spacers and stainless steel mounting screws.

**Note:** No installation charge when customer specifies factory installation of mounting pan.

### HINGES

| Hinges Catalog Number | Enclosure Size Reference<br>Inside width x length |
|-----------------------|---|
| XHB-2                 | 4 x 16  |
| XHB-2                 | 6 x 8   |
| XHB-2                 | 6 x 11  |
| XHB-2                 | 6 x 12  |
| XHB-2                 | 6 x 13  |
| XHB-2                 | 7 x 10  |
| XHB-2                 | 7 x 18  |
| XHB-2                 | 8 x 8   |
| XHB-2                 | 8 x 10  |
| XHB-2                 | 8 x 12  |
| XHB-2                 | 9 x 11  |
| XHB-2                 | 10 x 10   |
| XHB-2                 | 10 x 12   |
| XHB-2                 | 10 x 12   |
| XHB-2                 | 10 x 14   |
| XHC-2                 | 12 x 12   |
| XHC-2                 | 12 x 18   |
| XHC-2                 | 12 x 20   |
| XHC-2                 | 12 x 24   |
| XHC-2                 | 12 x 30   |
| XHD-3                 | 12 x 36   |
| XHD-4                 | 12 x 46   |
| XHC-2                 | 14 x 14   |
| XHF-2                 | 14 x 22   |
| XHF-2                 | 14 x 28   |
| XHD-2                 | 16 x 16   |
| XHF-2                 | 16 x 24   |
| XHF-2                 | 16 x 28   |
| XHF-2                 | 16 x 30   |
| XHD-3                 | 16 x 34   |
| XHF-4                 | 16 x 46   |
| XHF-2                 | 18 x 18   |
| XHF-2                 | 18 x 24   |
| XHF-2                 | 18 x 30   |
| XHF-3                 | 18 x 36   |
| XHF-3                 | 20 x 36   |
| XHF-4                 | 20 x 48   |
| XHF-2                 | 24 x 24   |
| XHF-2                 | 24 x 30   |
| XHF-3                 | 24 x 36   |
| XHF-3                 | 32 x 36   |

### Hinge Set

#### Description:

Made of extruded aluminum alloy consisting of two sections, female and male (with stainless steel pin) and four stainless steel hex head bolts. Designed to allow right or left hand removable or non-removable installation.

Unless specified, left hand removable hinge installation will be furnished by factory when hinged enclosures are ordered.

**Note:** Catalog numbers represent complete hinge sets necessary for enclosure assembly.

5A-11

**XCE** Glass Windows

**DIVISION I AND DIVISION II  
CLASS I GROUPS B, C, & D; CLASS II GROUPS E, F, & G  
NEMA 7, 9, NEMA 4/IP66 (OPTIONAL)**



| Circular Window | Window Viewing Area Diameter | Overall Window Cover Diameter | Minimum Enclosure Inside Width / Length |
|-----------------|------------------------------|-------------------------------|---|
| XGC 10          | 1 1/8                        | 3                             | 8                                       |
| XGC 20          | 1 15/16                      | 4 1/8                         | 9                                       |
| XGC 30          | 3                            | 5 3/16                        | 9                                       |
| XGC 40          | 4                            | 6 3/8                         | 9                                       |
| XGC 52          | 5 1/4                        | 7 7/8                         | 12                                      |
| XGC 66          | 6 11/16                      | 10 3/8                        | 16                                      |
| XGC 80          | 8                            | 12 1/8                        | 18                                      |

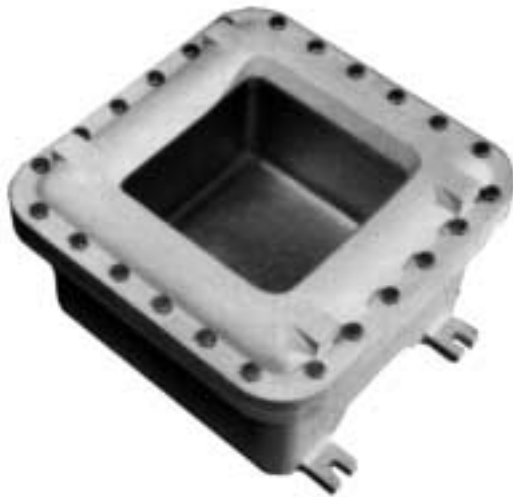
All dimensions are in inches.

Glass window catalog number includes XCE cover machining and installation.

For raintight, watertight NEMA 4/IP66 option add suffix "N4".

To order glass windows for field installations, add suffix SLF to XGC catalog no.

Consult factory for closer spacing requirements, multiple windows or combinations of operators and windows.



| Rectangular Window | Window Viewing Area Size | Minimum Enclosure Inside Width | Minimum Enclosure Inside Length |
|--------------------|--------------------------|--------------------------------|---------------------------------|
| XGW 0303           | 3 X 3                    | 8                              | 8                               |
| XGW 0305           | 3 X 5                    | 8                              | 10                              |
| XGW 0307           | 3 X 7                    | 8                              | 12                              |
| XGW 0505           | 5 X 5                    | 10                             | 10                              |
| XGW 0509           | 5 X 9                    | 10                             | 14                              |
| XGW 0707           | 7 X 7                    | 12                             | 12                              |
| XGW 0713           | 7 X 13                   | 12                             | 18                              |
| XGW 0909           | 9 X 9                    | 14                             | 14                              |
| XGW 1111           | 11 X 11                  | 16                             | 16                              |
| XGW 1313           | 13 X 13                  | 18                             | 18                              |

All dimensions are in inches.

Glass window catalog number includes installation.

For raintight, watertight NEMA 4 option add suffix "N4".

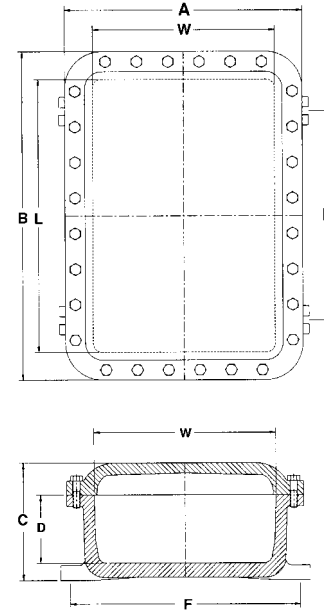
Consult factory for special viewing area requirement, closer spacing and to combine windows with other window sizes or operators.

5A-12

## DJF and WJF External Flanged Junction Boxes

### DJF DUST-TIGHT EXTERNAL FLANGED JUNCTION BOXES CLASS II GROUPS E, F, & G; NEMA 9

### WJF WATERTIGHT EXTERNAL FLANGED JUNCTION BOXES NEMA 4

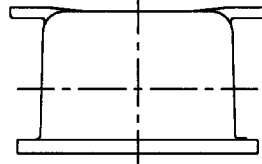


| DJF/WJF<br>Catalog<br>Number | Inside Nominal<br>Dimensions |    |   | Overall Dimensions |        |         | Mounting Lug<br>CL to CL |        | Mounting<br>Bolt<br>Size | Side<br>Wall<br>Thickness | Shipping<br>Weight,<br>Pounds |
|------------------------------|------------------------------|----|---|--------------------|--------|---------|--------------------------|--------|--------------------------|---------------------------|-------------------------------|
|                              | W                            | L  | D | A                  | B      | C       | E                        | F      |                          |                           |                               |
| 061105                       | 6                            | 11 | 5 | 8 3/8              | 13 1/8 | 6 13/16 | 7 1/2                    | 8 5/8  | 3/8                      | 3/8                       | 16                            |
| 061305                       | 6                            | 13 | 5 | 8 1/8              | 15 1/8 | 6 13/16 | 9 1/2                    | 8 5/8  | 3/8                      | 3/8                       | 18                            |
| 071805                       | 7                            | 18 | 5 | 9 1/8              | 20 1/8 | 6 13/16 | 14 1/2                   | 9 1/8  | 3/8                      | 3/8                       | 30                            |
| 121806                       | 12                           | 18 | 6 | 14 1/2             | 20 1/2 | 7 15/16 | 14 3/8                   | 14 3/4 | 1/2                      | 7/16                      | 42                            |
| 122005                       | 12                           | 20 | 5 | 14 1/4             | 22 1/4 | 6 15/16 | 14 3/8                   | 14 3/4 | 1/2                      | 7/16                      | 47                            |
| 122406                       | 12                           | 24 | 6 | 14 1/4             | 26 1/4 | 7 15/16 | 18 3/4                   | 14 3/4 | 1/2                      | 7/16                      | 52                            |
| 122408                       | 12                           | 24 | 8 | 14 1/4             | 26 1/4 | 9 15/16 | 18 3/4                   | 14 3/4 | 1/2                      | 7/16                      | 62                            |
| 123006                       | 12                           | 30 | 6 | 14 3/8             | 32 3/8 | 8 1/16  | 22 3/4                   | 15     | 5/8                      | 1/2                       | 67                            |
| 123208                       | 12                           | 32 | 8 | 15                 | 35     | 10 3/16 | 27 1/2                   | 14 1/8 | 1/2                      | 5/8                       | 80                            |
| 123608                       | 12                           | 36 | 8 | 14 3/8             | 38 3/8 | 10 3/16 | 29                       | 14 3/4 | 1/2                      | 5/8                       | 110                           |

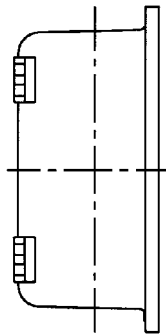
5A-13

# DJF and WJF External Flanged Junction Boxes

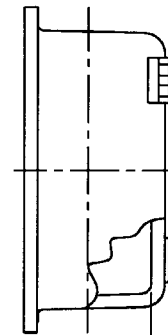
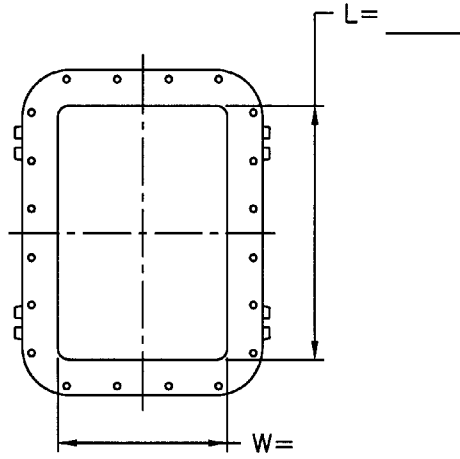
## CUSTOMER DESIGN SHEET



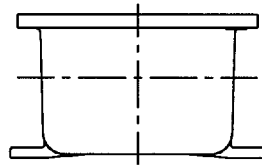
TOP VIEW



LEFT VIEW



RIGHT VIEW

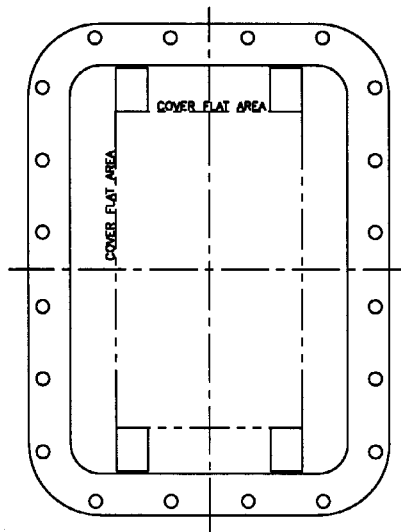


BOTTOM VIEW

### BOX LAYOUT

CAT. # DJF \_\_\_\_\_  
 # WJF \_\_\_\_\_

- N4 O-RING
- MOUNTING PAN
- HINGES
  - LONG SIDE:
    - LEFT
    - RIGHT
  - SHORT SIDE:
    - TOP
    - BOTTOM
  - NON REMOVABLE
- NO HINGES



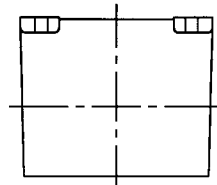
### COVER LAYOUT

\*CONSULT FACTORY FOR FLAT AREA DIMENSIONS

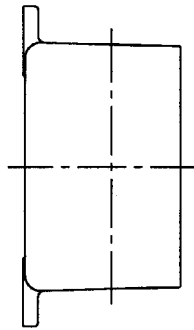
5A-14

# XIF/XIFC Explosionproof Internal Flanged Junction Boxes & Control Enclosures

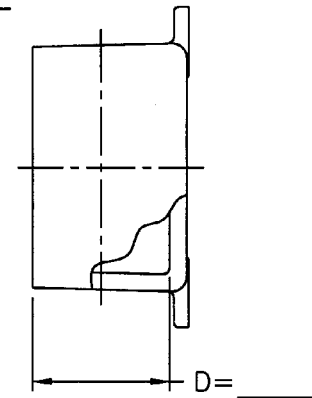
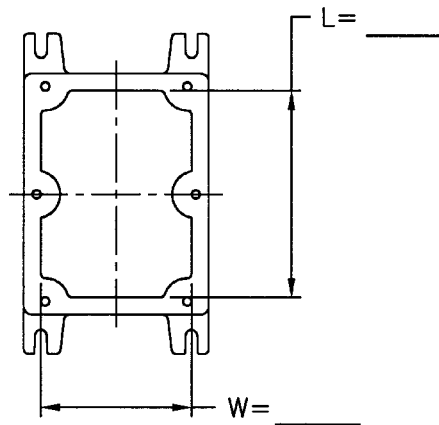
## CUSTOMER DESIGN SHEET



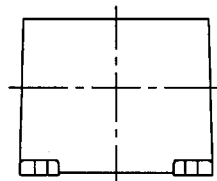
TOP VIEW



LEFT VIEW



RIGHT VIEW

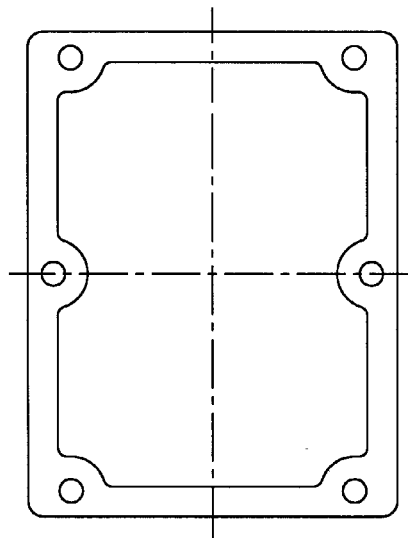


BOTTOM VIEW

### BOX LAYOUT

CAT. # XIF(C) \_\_\_\_\_

- N4 O-RING
- MOUNTING PAN



### COVER LAYOUT

5B-2



## XIF/XIFC Mounting Pans

### MATERIAL — Steel: (XSM)

Galvanized 12 gauge steel plate. The catalog number includes the steel mounting pan complete with 1/4" high spacers and stainless steel mounting screws.

### MATERIAL — Aluminum: (XSA)

Consult factory for availability.

### MATERIAL — Phenolic: (XSB)

A special phenolic laminated material that has high mechanical and dielectric strength. It is excellent for mounting and wiring control equipment. The catalog number includes the phenolic board, 3/8" thick, complete with 1/4" high spacers and stainless steel mounting screws.

**Note:** No installation charge when customer specifies factory installation of mounting pan.

| Catalog Number<br>(Steel) | Catalog Number<br>(Aluminum) | Catalog Number<br>(Phenolic) | Pan Dimensions |        | Enclosure Size Reference<br>Inside Width x Length | Weight Each (pounds)<br>(Steel) |
|---------------------------|------------------------------|------------------------------|----------------|--------|---|---------------------------------|
|                           |                              |                              | Width          | Length |   |                                 |
| XSM 0303                  | XSA 0303                     | XSB 0303                     | 3              | 3      | 3 x 3   | 1/4                             |
| XSM 0306                  | XSA 0306                     | XSB 0306                     | 3              | 5 1/2  | 3 x 6   | 1/2                             |
| XSM 0307                  | XSA 0307                     | XSB 0307                     | 3              | 6 1/2  | 3 x 7   | 1/2                             |
| XSM 0309                  | XSA 0309                     | XSB 0309                     | 3              | 8 1/2  | 3 x 9   | 3/4                             |
| XSM 0311                  | XSA 0311                     | XSB 0311                     | 3              | 10 1/2 | 3 x 11  | 1                               |
| XSM 0313                  | XSA 0313                     | XSB 0313                     | 3              | 12 1/2 | 3 x 13  | 1 1/4                           |
| XSM 0315                  | XSA 0315                     | XSB 0315                     | 3              | 14 1/2 | 3 x 15  | 1 1/2                           |
| XSM 0318                  | XSA 0318                     | XSB 0318                     | 3              | 17 1/2 | 3 x 18  | 1 3/4                           |
| XSM 0324                  | XSA 0324                     | XSB 0324                     | 3              | 23 1/2 | 3 x 24  | 2 1/4                           |
| XSM 0330                  | XSA 0330                     | XSB 0330                     | 3              | 29     | 3 x 30  | 2 3/4                           |
| XSM 0336                  | XSA 0336                     | XSB 0336                     | 3              | 35     | 3 x 36  | 3 1/4                           |
| XSM 0406                  | XSA 0406                     | XSB 0406                     | 3 7/8          | 5 1/2  | 4 x 6   | 3/4                             |
| XSM 0412                  | XSA 0412                     | XSB 0412                     | 3 7/8          | 11 1/2 | 4 x 12  | 1 1/2                           |
| XSM 0606                  | XSA 0606                     | XSB 0606                     | 5 1/2          | 5 1/2  | 6 x 6   | 1                               |
| XSM 0612                  | XSA 0612                     | XSB 0612                     | 5 1/2          | 11 1/2 | 6 x 12  | 2                               |
| XSM 0618                  | XSA 0618                     | XSB 0618                     | 5 5/8          | 16 7/8 | 6 x 18  | 3                               |
| XSM 0624                  | XSA 0624                     | XSB 0624                     | 5 5/8          | 22 7/8 | 6 x 24  | 4                               |
| XSM 0636                  | XSA 0636                     | XSB 0636                     | 5 5/8          | 34 7/8 | 6 x 36  | 6                               |
| XSM 0707                  | XSA 0707                     | XSB 0707                     | 6 1/2          | 6 1/2  | 7 x 7   | 1 1/2                           |
| XSM 0716                  | XSA 0716                     | XSB 0716                     | 6 1/2          | 15 1/2 | 7 x 16  | 3                               |
| XSM 0832                  | XSA 0832                     | XSB 0832                     | 7 1/2          | 31 1/2 | 8 x 32  | 7 1/2                           |

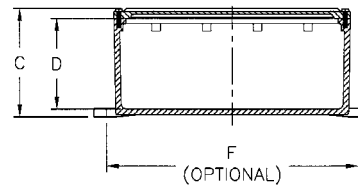
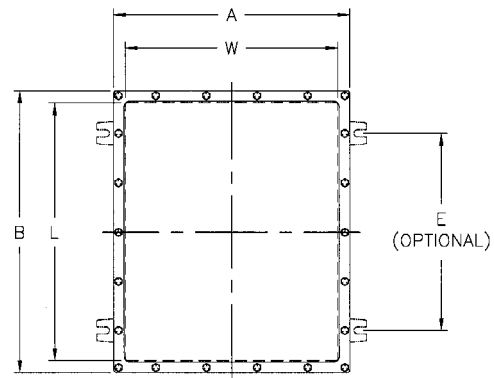
**When ordering separately, be sure to designate that mounting pan is for XIF series enclosure and specify size of box.**

5B-3

## DIF and WIF Junction Boxes

### DIF DUST-TIGHT INTERNAL FLANGED JUNCTION BOXES CLASS II GROUPS E, F, & G; NEMA 9

### WIF WATERTIGHT INTERNAL FLANGED JUNCTION BOXES NEMA 3, 4



| DIF/WIF<br>Catalog<br>Number | Inside Nominal<br>Dimensions |    |    | Overall Dimensions |        |         | Mounting Lug<br>CL to CL |         | Mounting<br>Bolt<br>Size | Side<br>Wall<br>Thickness | Shipping<br>Weight,<br>Pounds |
|------------------------------|------------------------------|----|----|--------------------|--------|---------|--------------------------|---------|--------------------------|---------------------------|-------------------------------|
|                              | W                            | L  | D  | A                  | B      | C       | E                        | F       |                          |                           |                               |
| 101406                       | 10                           | 14 | 6  | 10 3/4             | 14 3/4 | 7 5/16  | 12 3/8                   | 10 3/4  | 3/8                      | 3/8                       | 28                            |
| 164810                       | 16                           | 48 | 10 | 17                 | 49     | 11 5/8  | 19                       | 41 1/16 | 5/8                      | 1/2                       | 150                           |
| 202408                       | 20                           | 24 | 8  | 21                 | 25     | 9 9/16  | 22 3/8                   | 17 1/2  | 1/2                      | 1/2                       | 90                            |
| 202412                       | 20                           | 24 | 12 | 21                 | 25     | 13 9/16 | 22 1/2                   | 17 1/2  | 1/2                      | 1/2                       | 106                           |
| 243608                       | 24                           | 36 | 8  | 25                 | 37     | 9 5/8   | 27 1/4                   | 28      | 5/8                      | 1/2                       | 146                           |
| 364808                       | 36                           | 48 | 8  | 37                 | 49     | 9 3/8   | 39 1/4                   | 41      | 5/8                      | 1/2                       | 242                           |
| 242414                       | 24                           | 24 | 14 | 25                 | 25     | 15 9/16 | 26 1/2                   | 17 1/2  | 1/2                      | 1/2                       | 120                           |

**Note:** WIF Series includes a one piece neoprene gasket. Mounting lugs optional.

DIF Series does not include mounting lugs or gasket.

5B-4

## Explosionproof Enclosures & Components - IEC Motor Control

8D-1



Explosionproof enclosures suitable for housing IEC (International Electrotechnical Commission) style motor starters and combination starters. Sizes from 8" x 8" x 4" up to 12" x 18" x 6". Design options include: pushbutton and switch operators, pilot lights, push-to-test lights, breather/drains, auxiliary contacts, Lamacold™ nameplates, and control transformers with fuse blocks.

Enclosures are classified by UL/cUL as to explosion and fire hazards.

### Compliances:

Class I, Groups C, D  
Class II, Groups E, F, G  
Type 4



### IEC Motor Starters - Starters Included

#### For ABB Components

| Catalog Number | Enclosure Size | Amp Rating | HP at 480 Volts |
|----------------|----------------|------------|-----------------|
| XSIAA9         | XCE 080804     | 9          | 5               |
| XSIAA11        | XCE 080804     | 11         | 7.5             |
| XDIAA17        | XCE 080804     | 17         | 10              |
| XSIAA25        | XCE 080806     | 25         | 15              |
| XSICA28        | XCE 101006     | 28         | 20              |
| XSICA32        | XCE 101006     | 32         | 25              |
| XSICA41        | XCE 101006     | 41         | 30              |
| XSICA54        | XCE 101006     | 54         | 40              |
| XSIDA65        | XCE 101206     | 65         | 50              |
| XSIDA80        | XCE 101206     | 80         | 60              |
| XSIEA110       | XCE 1014D6     | 110        | 75              |

#### For Cutler-Hammer Components

|         |            |    |     |
|---------|------------|----|-----|
| XSIAH10 | XCE 080804 | 9  | 5   |
| XSIAH12 | XCE 080804 | 12 | 7.5 |
| XSIAH18 | XCE 080804 | 18 | 10  |
| XSIAH25 | XCE 080804 | 25 | 15  |
| XSICH32 | XCE 101006 | 32 | 20  |
| XSICH37 | XCE 101006 | 37 | 25  |
| XSICH44 | XCE 101006 | 44 | 30  |
| XSICH60 | XCE 101006 | 60 | 40  |
| XSIDH73 | XCE 101206 | 73 | 50  |

#### For Siemens Components

|         |            |    |     |
|---------|------------|----|-----|
| XSIAS9  | XCE 080804 | 9  | 5   |
| XSIAS12 | XCE 080804 | 12 | 7.5 |
| XSIAS17 | XCE 080804 | 17 | 10  |
| XSIAS25 | XCE 080804 | 25 | 15  |
| XSICS28 | XCE 101006 | 28 | 20  |
| XSICS32 | XCE 101006 | 32 | 25  |
| XSICS40 | XCE 101006 | 40 | 30  |
| XSICS50 | XCE 101006 | 50 | 40  |
| XSIDS65 | XCE 101206 | 65 | 50  |
| XSIDS80 | XCE 101206 | 80 | 60  |
| XSIDS95 | XCE 101206 | 95 | 75  |

#### For Square D Components

|         |            |    |     |
|---------|------------|----|-----|
| XSIAD9  | XCE 080804 | 9  | 5   |
| XSIAD12 | XCE 080804 | 12 | 7.5 |
| XSIAD18 | XCE 080804 | 18 | 10  |
| XSIBD25 | XCE 080806 | 25 | 15  |
| XSIBD32 | XCE 080806 | 32 | 20  |
| XSICD37 | XCE 101006 | 37 | 25  |
| XSICD40 | XCE 101006 | 40 | 30  |
| XSICD50 | XCE 101006 | 50 | 40  |
| XSIDD65 | XCE 101206 | 65 | 50  |
| XSIDD80 | XCE 101206 | 80 | 60  |

### IEC Combination Motor Starters - Components Included

#### For ABB Components

| Catalog Number | Enclosure Size | Amp Rating | HP at 480 Volts |
|----------------|----------------|------------|-----------------|
| XCIAA9         | XCE 1014D6     | 9          | 5               |
| XCIAA11        | XCE 1014D6     | 11         | 7.5             |
| XCIAA17        | XCE 1014D6     | 17         | 10              |
| XCIAA25        | XCE 1014D6     | 25         | 15              |
| XCIAA28        | XCE 1014D6     | 28         | 20              |
| XCIAA32        | XCE 1014D6     | 32         | 25              |
| XCIAA41        | XCE 1014D6     | 41         | 30              |
| XCIAA54        | XCE 1014D6     | 54         | 40              |
| XCIAA65        | XCE 1014D6     | 65         | 50              |
| XCIBB80        | XCE 121806     | 80         | 60              |
| XCIBB110       | XCE 121806     | 110        | 75              |

#### For Cutler-Hammer Components

|         |            |    |     |
|---------|------------|----|-----|
| XCIAH10 | XCE 1014D6 | 10 | 5   |
| XCIAH12 | XCE 1014D6 | 12 | 7.5 |
| XCIAH18 | XCE 1014D6 | 18 | 10  |
| XCIAH25 | XCE 1014D6 | 25 | 15  |
| XCIAH32 | XCE 1014D6 | 32 | 20  |
| XCIAH37 | XCE 1014D6 | 37 | 25  |
| XCIAH44 | XCE 1014D6 | 44 | 30  |
| XCIAH60 | XCE 1014D6 | 50 | 40  |
| XCIAH73 | XCE 1014D6 | 73 | 50  |

#### For Siemens Components

|         |            |    |     |
|---------|------------|----|-----|
| XCIAS9  | XCE 1014D6 | 9  | 5   |
| XCIAS12 | XCE 1014D6 | 12 | 7.5 |
| XCIAS17 | XCE 1014D6 | 17 | 10  |
| XCIAS25 | XCE 1014D6 | 25 | 15  |
| XCIAS28 | XCE 1014D6 | 28 | 20  |
| XCIAS32 | XCE 1014D6 | 32 | 25  |
| XCIAS40 | XCE 1014D6 | 40 | 30  |
| XCIAS50 | XCE 1014D6 | 50 | 40  |
| XCIBS65 | XCE 121806 | 65 | 50  |
| XCIBS80 | XCE 121806 | 80 | 60  |
| XCIBS95 | XCE 121806 | 95 | 75  |

#### For Square D Components

|         |            |    |     |
|---------|------------|----|-----|
| XCIAD9  | XCE 1014D6 | 9  | 5   |
| XCIAD12 | XCE 1014D6 | 12 | 7.5 |
| XCIAD18 | XCE 1014D6 | 18 | 10  |
| XCIAD25 | XCE 1014D6 | 25 | 15  |
| XCIAD32 | XCE 1014D6 | 32 | 20  |
| XCIAD37 | XCE 1014D6 | 37 | 25  |
| XCIAD40 | XCE 1014D6 | 40 | 30  |
| XCIAD50 | XCE 1014D6 | 50 | 40  |
| XCIAD65 | XCE 1014D6 | 65 | 50  |
| XCIBD80 | XCE 121806 | 80 | 60  |

## Explosionproof Enclosures & Components - IEC Motor Control

### IEC Motor Starters *Enclosures only*

#### For ABB Components

| Catalog Number | Enclosure Size | Amp Rating | HP at 480 Volts |
|----------------|----------------|------------|-----------------|
| XSIAA          | XCE 080804     | 9          | 5               |
| XSIAA          | XCE 080804     | 11         | 7.5             |
| XSIAA          | XCE 080804     | 17         | 10              |
| XSIAA          | XCE 080804     | 25         | 15              |
| XSICA          | XCE 101006     | 28         | 20              |
| XSICA          | XCE 101006     | 32         | 25              |
| XSICA          | XCE 101006     | 41         | 30              |
| XSICA          | XCE 101006     | 54         | 40              |
| XSIDA          | XCE 101206     | 65         | 50              |
| XSIDA          | XCE 101206     | 80         | 60              |
| XSIEA          | XCE 1014D6     | 110        | 75              |

#### For Cutler-Hammer Components

|       |            |    |     |
|-------|------------|----|-----|
| XSIAH | XCE 080804 | 10 | 5   |
| XSIAH | XCE 080804 | 12 | 7.5 |
| XSIAH | XCE 080804 | 18 | 10  |
| XSIAH | XCE 080804 | 25 | 15  |
| XSICH | XCE 101006 | 32 | 20  |
| XSICH | XCE 101006 | 37 | 25  |
| XSICH | XCE 101006 | 44 | 30  |
| XSICH | XCE 101006 | 60 | 40  |
| XSIDH | XCE 101206 | 73 | 50  |

#### For Siemens Components

|       |            |    |     |
|-------|------------|----|-----|
| XSIAS | XCE 080804 | 9  | 5   |
| XSIAS | XCE 080804 | 12 | 7.5 |
| XSIAS | XCE 080804 | 17 | 10  |
| XSIAS | XCE 080804 | 25 | 15  |
| XSICS | XCE 101006 | 28 | 20  |
| XSICS | XCE 101006 | 32 | 25  |
| XSICS | XCE 101006 | 40 | 30  |
| XSICS | XCE 101006 | 50 | 40  |
| XSIDS | XCE 101206 | 65 | 50  |
| XSIDS | XCE 101206 | 80 | 60  |
| XSIDS | XCE 101206 | 95 | 75  |

#### For Square D Components

|       |            |    |     |
|-------|------------|----|-----|
| XSIAD | XCE 080804 | 9  | 5   |
| XSIAD | XCE 080804 | 12 | 7.5 |
| XSIAD | XCE 080804 | 18 | 10  |
| XSIBD | XCE 080806 | 25 | 15  |
| XSIBD | XCE 080806 | 32 | 20  |
| XSICD | XCE 101006 | 37 | 25  |
| XSICD | XCE 101006 | 40 | 30  |
| XSICD | XCE 101006 | 50 | 40  |
| XSIDD | XCE 101206 | 65 | 50  |
| XSIDD | XCE 101206 | 80 | 60  |

### IEC Combination Motor Starters *Enclosures only*

#### For ABB Components

| Catalog Number | Enclosure Size | Amp Rating | HP at 480 Volts |
|----------------|----------------|------------|-----------------|
| XCIAA          | XCE 1014D6     | 9          | 5               |
| XCIAA          | XCE 1014D6     | 11         | 7.5             |
| XCIAA          | XCE 1014D6     | 17         | 10              |
| XCIAA          | XCE 1014D6     | 25         | 15              |
| XCIAA          | XCE 1014D6     | 28         | 20              |
| XCIAA          | XCE 1014D6     | 32         | 25              |
| XCIAA          | XCE 1014D6     | 41         | 30              |
| XCIAA          | XCE 1014D6     | 54         | 40              |
| XCIAA          | XCE 1014D6     | 65         | 50              |
| XCIBB          | XCE 121806     | 80         | 60              |
| XCIBB          | XCE 121806     | 110        | 75              |

#### For Cutler-Hammer Components

|       |            |    |     |
|-------|------------|----|-----|
| XCIAH | XCE 1014D6 | 10 | 5   |
| XCIAH | XCE 1014D6 | 12 | 7.5 |
| XCIAH | XCE 1014D6 | 18 | 10  |
| XCIAH | XCE 1014D6 | 25 | 15  |
| XCIAH | XCE 1014D6 | 32 | 20  |
| XCIAH | XCE 1014D6 | 37 | 25  |
| XCIAH | XCE 1014D6 | 44 | 30  |
| XCIAH | XCE 1014D6 | 60 | 40  |
| XCIAH | XCE 1014D6 | 73 | 50  |

#### For Siemens Components

|       |            |    |     |
|-------|------------|----|-----|
| XCIAS | XCE 1014D6 | 9  | 5   |
| XCIAS | XCE 1014D6 | 12 | 7.5 |
| XCIAS | XCE 1014D6 | 17 | 10  |
| XCIAS | XCE 1014D6 | 25 | 15  |
| XCIAS | XCE 1014D6 | 28 | 20  |
| XCIAS | XCE 1014D6 | 32 | 25  |
| XCIAS | XCE 1014D6 | 40 | 30  |
| XCIAS | XCE 1014D6 | 50 | 40  |
| XCIBS | XCE 121806 | 65 | 50  |
| XCIBS | XCE 121806 | 80 | 60  |
| XCIBS | XCE 121806 | 95 | 75  |

#### For Square D Components

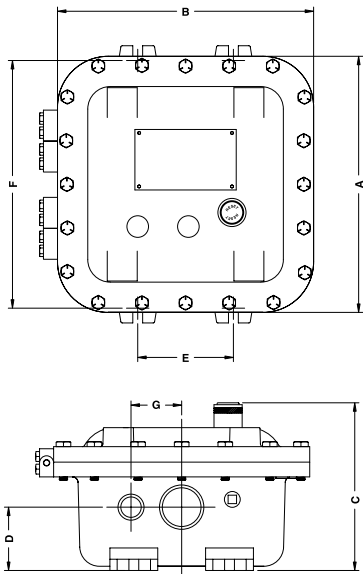
|       |            |    |     |
|-------|------------|----|-----|
| XCIAD | XCE 1014D6 | 9  | 5   |
| XCIAD | XCE 1014D6 | 12 | 7.5 |
| XCIAD | XCE 1014D6 | 18 | 10  |
| XCIAD | XCE 1014D6 | 25 | 15  |
| XCIAD | XCE 1014D6 | 32 | 20  |
| XCIAD | XCE 1014D6 | 37 | 25  |
| XCIAD | XCE 1014D6 | 40 | 30  |
| XCIAD | XCE 1014D6 | 50 | 40  |
| XCIAD | XCE 1014D6 | 65 | 50  |
| XCIBD | XCE 121806 | 80 | 60  |

8D-2

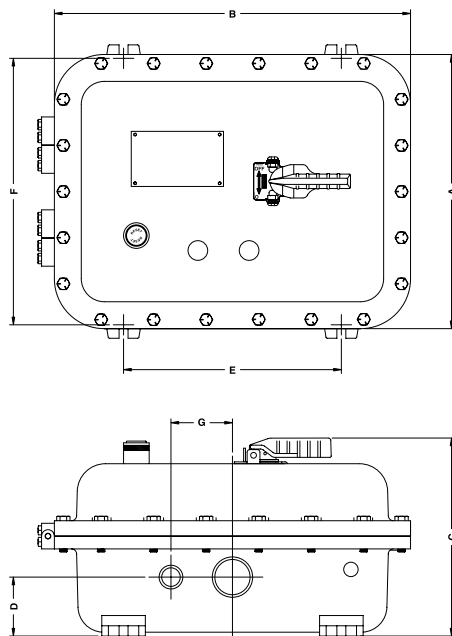
# Explosionproof Enclosures & Components - IEC Motor Control

8D-3

**Starters Diagram**



**Combination Diagram**



**Diagram Specifications**

| Catalog No.         | Base Enclosure XCE | Overall A | Overall B | Overall C | MTG E | MTG F | MTG BOLT | Conduit D | Location G | Conduit Size | Weight |
|---------------------|--------------------|-----------|-----------|-----------|-------|-------|----------|-----------|------------|--------------|--------|
| <b>Starters</b>     |                    |           |           |           |       |       |          |           |            |              |        |
| XSIA                | 080804             | 11.38     | 11.38     | 7.75      | 4.25  | 11    | 3/8      | 2.81      | 2.25       | 1-1/2        | 26     |
| XSIB                | 080806             | 11.38     | 11.38     | 9.75      | 4.25  | 11    | 3/8      | 3.81      | 2.25       | 1-1/2        | 30     |
| XSIC                | 101006             | 13.38     | 13.38     | 9.62      | 6.5   | 13    | 3/8      | 3.88      | 2.50       | 2            | 46     |
| XSID                | 101206             | 13.38     | 15.38     | 10.25     | 8.5   | 13.25 | 3/8      | 4.13      | 2.5        | 2            | 48     |
| XSIE                | 1014D6             | 13.38     | 17.38     | 9.75      | 10.62 | 13.25 | 3/8      | 2.88      | 2.5        | 2            | 51     |
| <b>Combinations</b> |                    |           |           |           |       |       |          |           |            |              |        |
| XCIA                | 1014D6             | 13.38     | 17.38     | 9.75      | 10.62 | 13.25 | 3/8      | 2.88      | 3.0        | 1-1/2        | 51     |
| XCIB                | 121806             | 16.25     | 22.25     | 10.12     | 14.12 | 15.75 | 1/2      | 4.00      | 3.0        | 2            | 95     |

**Options**

| Description   | Suffix | Combination Starter | Available On Non-Combination Starter | Universal Enclosure Only |
|---|--------|---------------------|--------------------------------------|--------------------------|
| Start/Stop Dual Pushbutton (1NO Start, 1NC Stop)                  | A      | •                   | •                                    | •                        |
| Green Start Pushbutton (1NO)                                      | A1     | •                   | •                                    | •                        |
| Red Stop Pushbutton (1NC)   | A2     | •                   | •                                    | •                        |
| Red Stop Pushbutton, Mushroom Head (1NC)                          | A3     | •                   | •                                    | •                        |
| Black Pushbutton (1NO, 1NC)                                       | A4     | •                   | •                                    | •                        |
| Hand-Off-Auto Selector Switch                                     | B      | •                   | •                                    | •                        |
| Selector Switch (2-Position) (1NO, 1NC)                           | B1     | •                   | •                                    | •                        |
| Pilot Light 120 Volt AC (*See Color Table)                        | C1*    | •                   | •                                    | •                        |
| Pilot Light with Guard 120 Volt AC (*See Color Table)             | CG1*   | •                   | •                                    | •                        |
| Push-to-Test Light 120 Volt AC (1NO, 1NC) (*See Color Table)      | CP1*†  | •                   | •                                    | •                        |
| Breather/Drain Installed in Bottom                                | E      | •                   | •                                    | •                        |
| Breather and Drain Installed                                      | EE     | •                   | •                                    | •                        |
| Auxiliary Contacts on Starter (+NO,-NC) (Specify No. of Contacts) | G(+ -) | •                   | •                                    | •                        |
| Lamacold Nameplate (Specify Legend)                               | NP     | •                   | •                                    | •                        |
| 50 VA Control Transformer 480V Pri, 120V Sec. W/Fuse Block        | T1F    | •                   | •                                    | •                        |
| 100 VA Control Transformer 480V Pri, 120V Sec. W/Fuse Block       | T2F    | •                   | •                                    | •                        |
| 150 VA Control Transformer 480V Pri, 120 V Sec. W/Fuse Block      | T3F    | •                   | •                                    | •                        |
| 200 VA Control Transformer 480V Pri, 120V Sec. W/Fuse Block       | T4F    | •                   | •                                    | •                        |

\*Color Table R-Red G-Green A-Amber B-Blue C-Clear W-White  
 †Not available in Group B applications

## **XIH** Explosionproof Instrument Housing



**NEW!**

**XIHMK** 316SS & Aluminum 3<sup>9</sup>/<sub>16</sub>" ID

**XIHL & XDHL** 4" ID Aluminum

**XIHM** 3<sup>9</sup>/<sub>16</sub>" & 3<sup>5</sup>/<sub>8</sub>" ID Aluminum

**XDHM** 3<sup>5</sup>/<sub>8</sub>" ID Aluminum

**XIH & XDH** 3<sup>3</sup>/<sub>16</sub>" ID Aluminum

**XIHS** 2<sup>5</sup>/<sub>8</sub>" ID Aluminum

**XDF** Custom Digital Enclosure

(ATEX available on some models)

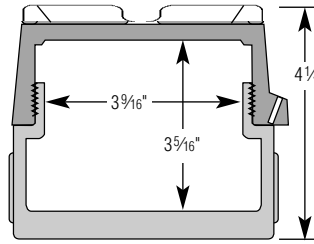
4A-1

# XIHMK Explosionproof Instrument Housing (316 Stainless or Aluminum)



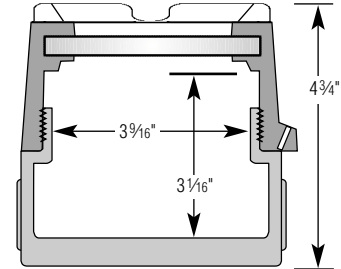
## 3 9/16" ID Enclosure

### Solid Cover Arrangements



| Catalog Number | Description              |
|----------------|--------------------------|
| XIHMKFCX       | Flat Cover 3/4" NPT Hubs |

### Glass Cover Arrangements



| Catalog Number | Description                    |
|----------------|--------------------------------|
| XIHMKFGCX      | Flat Glass Cover 3/4" NPT Hubs |

### Standard Features

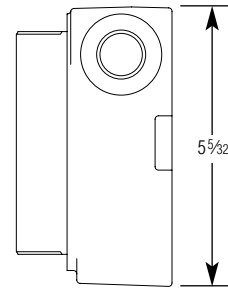
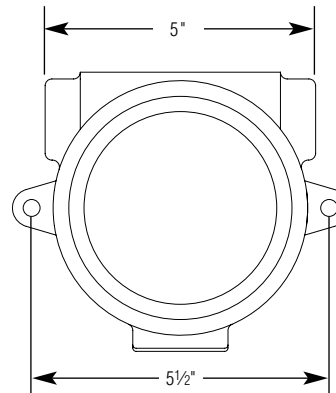
XIHMK housings accommodate large diameter assemblies, multi-level circuit boards or wide angle readouts and displays. The 3-9/16" ID provides maximum clearance to facilitate instrument mounting, calibration or service. Precision machined from sand-cast, copper-free aluminum.

XIHMK housings feature:

- 3/4" NPT conduit feed-through hubs offset for maximum clearance and capacity
- 7/16" thick base for blind tapped instrument mounting holes in any location
- Glass cover models have a large 2-1/2" diameter, tempered glass window for local read out
- 45° chamfer on window opening provides enhanced viewing angle
- Buna-N rubber gasket for NEMA 4X watertight applications
- Front boss for use as additional conduit or sensor entry
- Corrosion resistant, "safety blue" polyester powder coating (other colors available)
- Internal and external ground screws and tamper resistant cover set screw for extra safety
- Stainless steel hardware

### Design Options

- Mounting lugs with 5/16" holes
- Additional small hole drilling and tapping in the backwall for mounting of instrumentation
- 1/2" NPT or 3/4" NPT opening into back wall for conduit, sensor or probe
- Front Boss Modifications: 1/2", 3/4" or 1" NPT; 1/2", 3/4" or 1" NPSM; or 20mm or 25mm for sensor, probe or conduit entry
- 1/2" NPT reducers are available – add suffix "2" to catalog number



### Certifications



FM STANDARD 3615



CSA STANDARD C22.2 No. 30



UL STANDARD 1203

DEMKO CENELEC STANDARD EN 50014, 50018

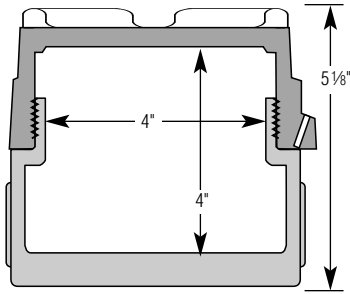
Class I, Groups B,C,D  
 Class II, Groups E,F,G  
 Class III  
 CENELEC: EExd IIC, IP66  
 NEMA 4X, 7BCD, 9EFG

4A-2

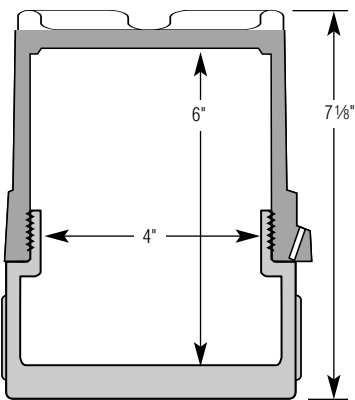
# XIHL (Explosionproof Instrument Housing – Large)

## 4" ID Enclosure

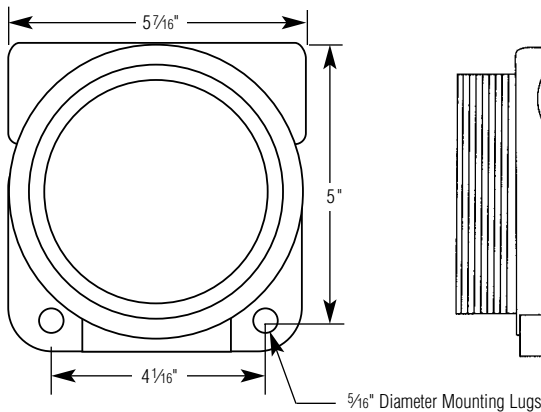
### Solid Cover Arrangements



| Catalog Number | Description              |
|----------------|--------------------------|
| XIHLFCX        | Flat Cover 3/4" NPT Hubs |

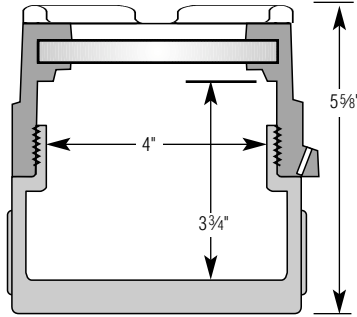


| Catalog Number | Description              |
|----------------|--------------------------|
| XIHLDCX        | Dome Cover 3/4" NPT Hubs |

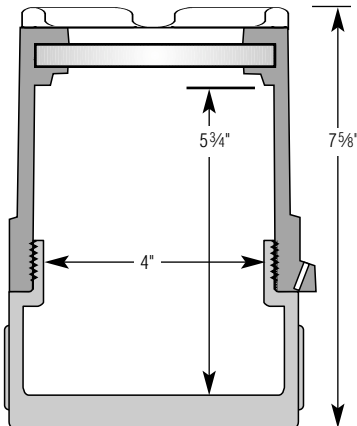


Class I, Groups B,C,D  
 Class II, Groups E,F,G  
 Class III  
 CENELEC: EExd IIC, IP66  
 NEMA 4X, 7BCD, 9EFG

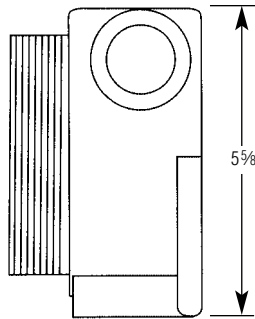
### Glass Cover Arrangements



| Catalog Number | Description                    |
|----------------|--------------------------------|
| XIHLFGCX       | Flat Glass Cover 3/4" NPT Hubs |



| Catalog Number | Description                    |
|----------------|--------------------------------|
| XIHLGDCX       | Dome Glass Cover 3/4" NPT Hubs |



### Standard Features

XIHL housings accommodate large diameter assemblies, multi-level circuit boards or wide angle readouts and displays. The 4" ID provides maximum clearance to facilitate instrument mounting, calibration or service. Precision machined from sand-cast copper-free aluminum. XIHL housings feature:

- 3/4" NPT conduit feed-through hubs offset for maximum clearance and capacity
- 1/2" thick base for blind tapped instrument mounting holes in any location
- Glass cover models have a large 3 5/16" diameter, tempered glass window for local read out
- Buna-N rubber gasket for NEMA 4X watertight applications
- Corrosion resistant, "safety blue" polyester powder coating (other colors available)
- Internal and external ground screws and tamper resistant cover set screw for extra safety
- Stainless steel hardware

### Design Options

- Four 1/4-20 UNC holes in front boss for bracket mounting
- Front Boss Modifications: 1/2" to 1" NPT, 1/2" to 3/4" NPSM or 20 mm for sensor, probe or conduit entry. Consult factory for other sizes.
- 1/2" NPT reducers are available – add suffix "2" to catalog number

### Certifications

- FM STANDARD 3615
- CSA STANDARD C22.2 No. 30
- UL STANDARD 1203
- KEMA CENELEC STANDARD EN 50014, 50018

4A-3



# XDHL (Explosionproof Double-Ended Housing – Large)



## 4" ID Enclosure

### Standard Features

XDHL housings are designed to isolate incoming power connections from instrumentation. The 4" ID provides maximum clearance to facilitate instrument mounting, calibration or service, with back-to-back chambers separated by a solid, 1/2" thick wall. Precision machined from sand-cast, copper-free aluminum.

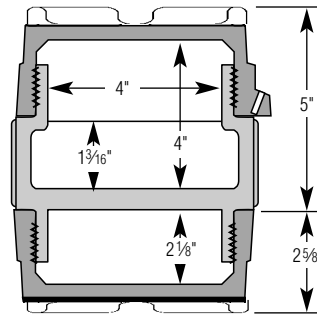
XDHL housings feature:

- 3/4" NPT conduit feed-through hubs, offset into power side for maximum clearance and capacity
- Front boss with 3/4" NPT opening into instrument side for conduit, sensor or probe (see design options for other sizes)
- Internal and external ground screws and tamper resistant cover set screws for extra safety
- A choice of solid covers or 3 5/16" diameter tempered glass window for local read out and display
- Buna-N rubber gasket for NEMA 4X watertight applications
- Corrosion resistant, "safety blue" polyester powder coating (other colors available)
- Stainless steel hardware

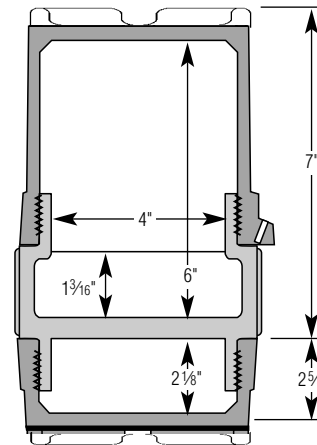
### Design Options

- 2- to 12-point, power side terminal strip with sealed pass-through to instrument (add suffix "2T", "4T", "6T", "8T", "10T" or "12T" to catalog number)
- Internal wall can be modified (Drilled & Tapped) to suit design needs – please consult factory
- Power side cover options:
  - Flat Solid — Standard
  - Dome Glass — Add Suffix "A"
  - Flat Glass — Add Suffix "B"
  - Dome Solid — Add Suffix "C"
- Front Boss Modifications: 1/2", 3/4" or 1" NPT; 1/2", 3/4" or 1" NPSM; or 20mm, 25mm or 30mm for sensor, probe or conduit entry
- 1/2" NPT reducers are available – add suffix "2" to catalog number
- Four 1/4–20 UNC holes in front boss for bracket mounting. (Consult factory for other sizes)

### Solid Cover Arrangements

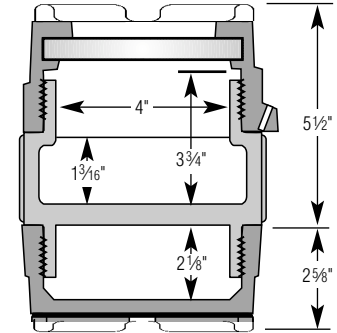


| Catalog Number | Description              |
|----------------|--------------------------|
| XDHLFCX        | Flat Cover 3/4" NPT Hubs |

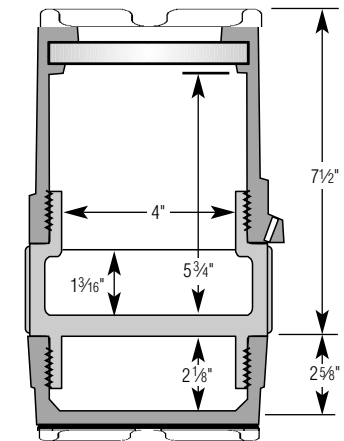


| Catalog Number | Description              |
|----------------|--------------------------|
| XDHLDCX        | Dome Cover 3/4" NPT Hubs |

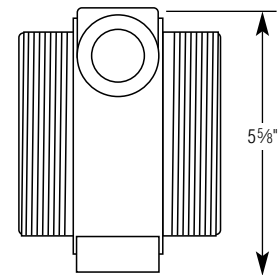
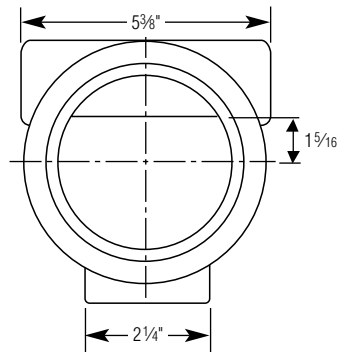
### Glass Cover Arrangements



| Catalog Number | Description                    |
|----------------|--------------------------------|
| XDHLFGCX       | Flat Glass Cover 3/4" NPT Hubs |



| Catalog Number | Description                    |
|----------------|--------------------------------|
| XDHLGDCX       | Dome Glass Cover 3/4" NPT Hubs |



### Certifications

- FM STANDARD 3615
- CSA STANDARD C22.2 No. 30
- UL STANDARD 1203
- KEMA CENELEC STANDARD EN 50014,50018

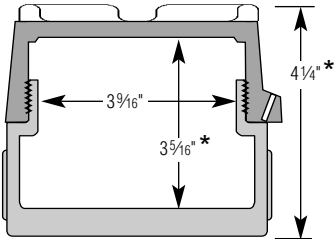
Class I, Groups B,C,D  
Class II, Groups E,F,G  
Class III  
CENELEC: EExd IIB+H2, IP66  
NEMA 4X, 7BCD, 9EFG

# XIHM (Explosionproof Instrument Housing – Medium)

**3<sup>9</sup>/<sub>16</sub>" ID Enclosure (Standard)**  
**3<sup>5</sup>/<sub>8</sub>" ID Enclosure (Available - see note)**

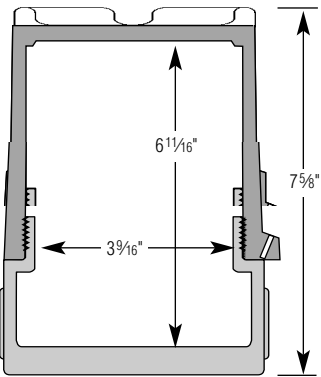


### Solid Cover Arrangements

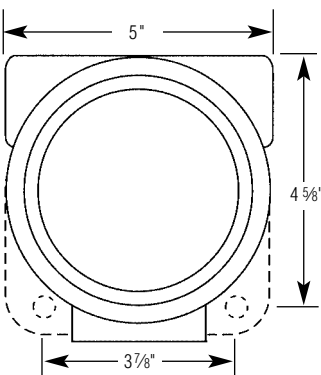


\* Midsize solid cover available – add 11/16" to above dimensions.

| Catalog Number | Description                  |
|----------------|------------------------------|
| XIHMFCX        | Flat Cover 3/4" NPT Hubs     |
| * XIHMMCX      | Mid Size Cover 3/4" NPT Hubs |

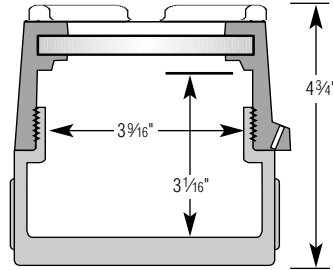


| Catalog Number | Description              |
|----------------|--------------------------|
| XIHMDCX        | Dome Cover 3/4" NPT Hubs |

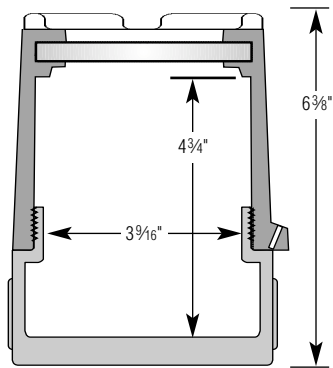


Class I, Groups B,C,D  
 Class II, Groups E,F,G  
 Class III  
 CENELEC: EExd IIC, IP66  
 NEMA 4X, 7BCD, 9EFG

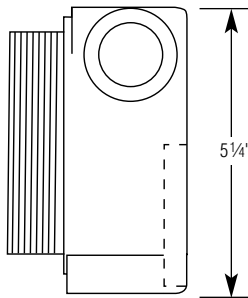
### Glass Cover Arrangements



| Catalog Number | Description                    |
|----------------|--------------------------------|
| XIHMFGCX       | Flat Glass Cover 3/4" NPT Hubs |



| Catalog Number | Description                    |
|----------------|--------------------------------|
| XIHMDGCX       | Dome Glass Cover 3/4" NPT Hubs |



### Certifications

- FM STANDARD 3615
- CSA STANDARD C22.2 No. 30
- UL STANDARD 1203
- DEMKO CENELEC STANDARD EN 50014, 50018

### Standard Features

XIHM housings accommodate large diameter assemblies, multi-level circuit boards or wide angle readouts and displays. The 3<sup>9</sup>/<sub>16</sub>" ID provides maximum clearance to facilitate instrument mounting, calibration or service. Precision machined from sand-cast, copper-free aluminum.

XIHM housings feature:

- 3/4" NPT conduit feed-through hubs offset for maximum clearance and capacity
- 7/16" thick base for blind tapped instrument mounting holes in any location
- Glass cover models have a large 2<sup>5</sup>/<sub>8</sub>" diameter, tempered glass window for local read out
- 60° chamfer on window opening provides enhanced viewing angle
- Buna-N rubber gasket for NEMA 4X watertight applications
- Front boss for bracket mounting or for use as additional conduit or sensor entry
- Corrosion resistant, "safety blue" polyester powder coating (other colors available)
- Internal and external ground screws and tamper resistant cover set screw for extra safety
- Stainless steel hardware

### Design Options

- Mounting lugs with 5/16" holes (add suffix "L" to catalog number)
- Additional small hole drilling and tapping in the backwall for mounting of instrumentation
- 1/2" NPT or 3/4" NPT opening into back wall for conduit, sensor or probe
- Front Boss Modifications: 1/2", 3/4" or 1" NPT; 1/2", 3/4" or 1" NPSM; or 20mm or 25mm for sensor, probe or conduit entry
- **Throat diameter can be increased to 3 5/8" – please consult factory**
- Glass window covers designed for Groups C and D only (CENELEC: EExd IIB) are also available – please consult factory for pricing
- 1/2" NPT reducers are available – add suffix "2" to catalog number
- Four 1/4"-20 UNC holes in front boss for bracket mounting. (Consult factory for other sizes.)

4A-5

# XDHM (Explosionproof Double-Ended Housing — Medium)



## Standard Features

XDHM housings are designed to isolate incoming power connections from instrumentation. The 3 5/8" ID provides maximum clearance to facilitate instrument mounting, calibration or service, with back-to-back chambers separated by a solid, 1/2" thick wall. Precision machined from sand-cast, copper-free aluminum.

XDHM housings feature:

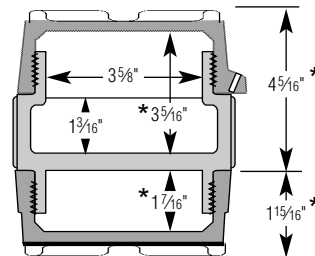
- 3/4" NPT conduit feed-through hubs, offset into power side for maximum clearance and capacity
- Front boss with 3/4" NPT opening into instrument side for conduit, sensor or probe (see design options for other sizes)
- Internal and external ground screws and tamper resistant cover set screws for extra safety
- A choice of solid covers or 2 5/8" diameter tempered glass window for local read out and display
- 60° chamfer on window opening provides enhanced viewing angle
- Buna-N rubber gasket for NEMA 4X watertight applications
- Corrosion resistant, "safety blue" polyester powder coating (other colors available)
- Stainless steel hardware

## Design Options

- 2- to 8-point, power side terminal strip with sealed pass-through to instrument (add suffix "2T", "4T", "6T" or "8T" to catalog number)
- Internal wall can be modified (drilled & tapped) to suit design needs - please consult factory
- Power side cover options:
  - Flat Solid — Standard
  - Dome Glass — Add Suffix "A"
  - Flat Glass — Add Suffix "B"
  - Dome Solid — Add Suffix "C"
  - Midsized Solid — Add Suffix "D"
- Front Boss Modifications: 1/2", 3/4" or 1" NPT; 1/2", 3/4" or 1" NPSM; or 20mm or 25mm opening modify for sensor, probe or conduit entry
- Glass window covers designed for Groups C and D only (CENELEC: EExd IIB) are also available – please consult factory for pricing
- 1/2" NPT reducers are available – add suffix "2" to catalog number
- Four 1/4–20 UNC holes in front boss for bracket mounting. (Consult factory for other sizes.)

## 3 5/8" ID Enclosure

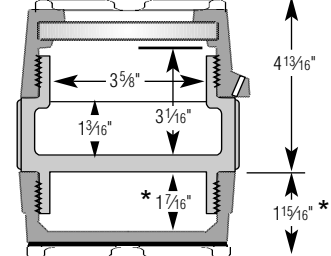
### Solid Cover Arrangements



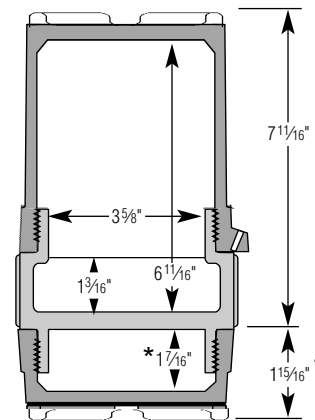
\* Midsized solid cover available – add 11/16" to above dimensions.

| Catalog Number | Description                  |
|----------------|------------------------------|
| XDHMFCX        | Flat Cover 3/4" NPT Hubs     |
| * XDHMMCX      | Mid Size Cover 3/4" NPT Hubs |

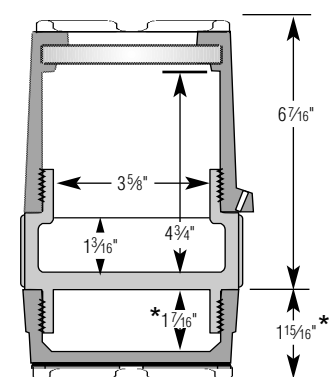
### Glass Cover Arrangements



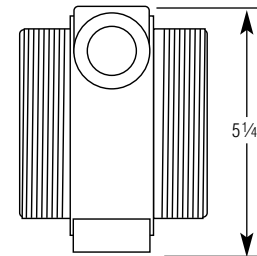
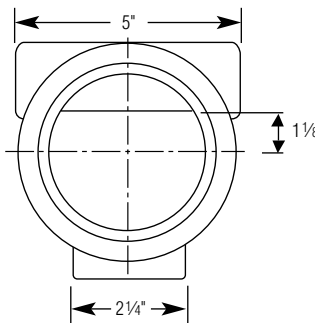
| Catalog Number | Description                    |
|----------------|--------------------------------|
| XDHMFGCX       | Flat Glass Cover 3/4" NPT Hubs |



| Catalog Number | Description              |
|----------------|--------------------------|
| XDHMDXCX       | Dome Cover 3/4" NPT Hubs |



| Catalog Number | Description                    |
|----------------|--------------------------------|
| XDHMDGCX       | Dome Glass Cover 3/4" NPT Hubs |



## Certifications



FM STANDARD 3615



CSA STANDARD C22.2 No. 30



UL STANDARD 1203

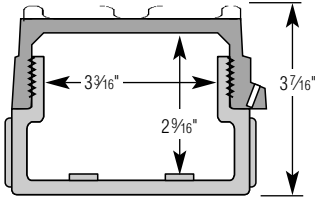
DEMKO CENELEC STANDARD EN 50014, 50018

Class I, Groups B,C,D  
Class II, Groups E,F,G  
Class III  
CENELEC: EExd IIC, IP66  
NEMA 4X, 7BCD, 9EFG

# XIH (Explosionproof Instrument Housing)

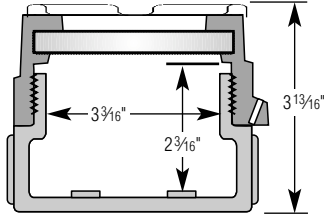
## 3 3/16" ID Enclosure

### Solid Cover Arrangements

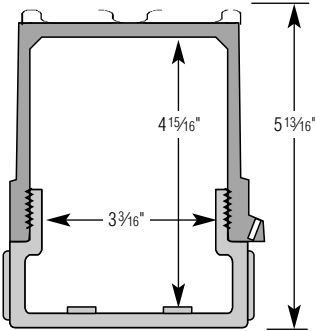


| Catalog Number | Description              |
|----------------|--------------------------|
| XIHFCX2        | Flat Cover 1/2" NPT Hubs |
| XIHFCX3        | Flat Cover 3/4" NPT Hubs |

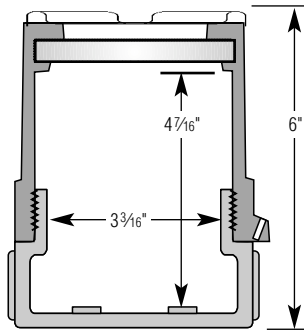
### Glass Cover Arrangements



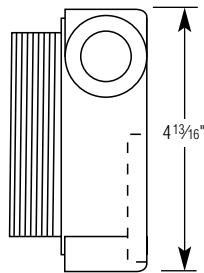
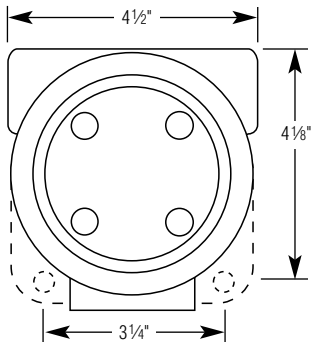
| Catalog Number | Description                    |
|----------------|--------------------------------|
| XIHFGCX2       | Flat Glass Cover 1/2" NPT Hubs |
| XIHFGCX3       | Flat Glass Cover 3/4" NPT Hubs |



| Catalog Number | Description              |
|----------------|--------------------------|
| XIHDCX2        | Dome Cover 1/2" NPT Hubs |
| XIHDCX3        | Dome Cover 3/4" NPT Hubs |



| Catalog Number | Description                    |
|----------------|--------------------------------|
| XIHDCGX2       | Dome Glass Cover 1/2" NPT Hubs |
| XIHDCGX3       | Dome Glass Cover 3/4" NPT Hubs |



Class I, Groups B,C,D  
 Class II, Groups E,F,G  
 Class III  
 CENELEC: EExd IIC, IP66  
 NEMA 4X, 7BCD, 9EFG



### Standard Features

XIH housings are designed for small to medium size electronic assemblies. The 3 3/16" ID provides ample clearance to accommodate a wide variety of measurement and control devices. Precision machined from sand-cast copper-free aluminum.

XIH housings feature:

- Four interior mounting bosses at 45° orientation accommodate blind tapped holes on a 2 1/2" bolt circle
- 1/2" or 3/4" NPT conduit feed-through hubs, offset for maximum clearance and capacity
- Internal and external ground screws and tamper resistant cover set screw for extra safety
- Glass cover models have a 2 5/8" diameter, tempered glass window for local read out
- Buna-N rubber gasket for NEMA 4X watertight applications
- Corrosion resistant, "safety blue" polyester powder coating (other colors available)
- Stainless steel hardware

### Design Options

- Four 1/4-20 UNC holes in front boss for bracket mounting. Consult factory for other sizes.
- Front Boss Modifications: 1/2" or 3/4" NPT for sensor, probe or conduit entry
- Mounting lugs with 5/16" holes (add suffix "L" to catalog number)
- Other interior mounting bosses available – please consult factory

### Certifications

- FM STANDARD 3615
- CSA STANDARD C22.2 No. 30
- UL STANDARD 1203 (Consult factory for availability)
- ISSEP CENELEC STANDARD EN 50014, 50018

4A-7

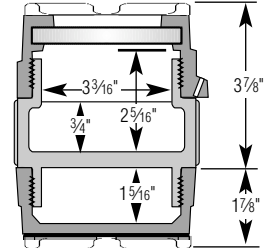
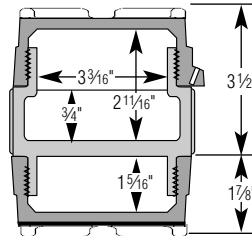
# XDH (Explosionproof Double-Ended Housing)



## 3 3/16" ID Enclosure

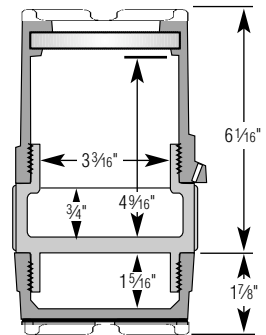
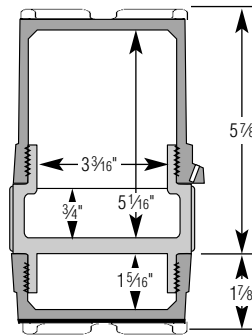
### Solid Cover Arrangements

### Glass Cover Arrangements



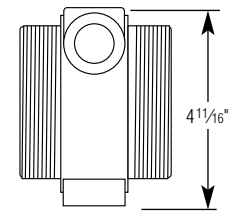
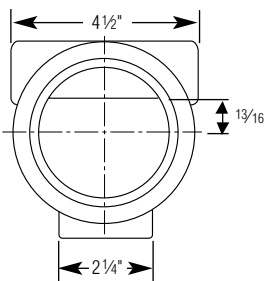
| Catalog Number | Description              |
|----------------|--------------------------|
| XDHFCX         | Flat Cover 3/4" NPT Hubs |

| Catalog Number | Description                    |
|----------------|--------------------------------|
| XDHFGCX        | Flat Glass Cover 3/4" NPT Hubs |



| Catalog Number | Description              |
|----------------|--------------------------|
| XDHDCX         | Dome Cover 3/4" NPT Hubs |

| Catalog Number | Description                    |
|----------------|--------------------------------|
| XDHGDCX        | Dome Glass Cover 3/4" NPT Hubs |



### Standard Features

XDH housings are designed to isolate incoming power connections from instrumentation. The 3 3/16" ID provides ample clearance to accommodate a wide variety of measurement and control devices, with back-to-back chambers separated by a solid, 3/8" thick wall. Precision machined from sand-cast copper-free aluminum.

XDH housings feature:

- 3/4" NPT conduit feed-through hubs, offset into power side for maximum clearance and capacity
- Front boss with 3/4" NPT opening into instrument side for conduit, sensor or probe (see design options for other sizes)
- Internal and external ground screws and tamper resistant cover set screws for extra safety
- A choice of solid covers or 2 5/8" diameter tempered glass window for local read out and display
- Buna-N rubber gasket for NEMA 4X watertight applications
- Corrosion resistant, "safety blue" polyester powder coating (other colors available)
- Stainless steel hardware

### Design Options

- 2- or 4-point, power side terminal strip with sealed pass-through to instrument (add suffix "2T" or "4T" to catalog number)
- Power side cover options:
  - Flat Solid — Standard
  - Dome Glass — Add Suffix "A"
  - Flat Glass — Add Suffix "B"
  - Dome Solid — Add Suffix "C"
- Four 1/4-20 UNC holes in front boss for bracket mounting. (Consult factory for other sizes.)
- Front Boss Modifications: 1/2" or 3/4" for sensor, probe or conduit entry
- 1/2" NPT conduit entries are available – add suffix "2" to catalog number.

Class I, Groups B,C,D  
 Class II, Groups E,F,G  
 Class III  
 CENELEC: EExd IIC, IP66  
 NEMA 4X, 7BCD, 9EFG

### Certifications

**FM** APPROVED FM STANDARD 3615  
**CSA** APPROVED CSA STANDARD C22.2 No. 30  
 ISSEP CENELEC STANDARD EN 50014, 50018

4A-8

# XIHS (Explosionproof Instrument Housing — Small)

## 2 5/8" ID Enclosure

| Cover Arrangements | Flat Cover                             |                                | Dome Cover                             |                                | Dome Glass Cover                        |                                |
|--------------------|--|--------------------------------|--|--------------------------------|---|--------------------------------|
|                    | Catalog Number                         | Conduit Size                   | Catalog Number                         | Conduit Size                   | Catalog Number                          | Conduit Size                   |
| <b>"B"</b>         | XIHSBFC2<br>XIHSBFC3<br>XIHSBFC4       | 1/2" NPT<br>3/4" NPT<br>1" NPT | XIHSBDC2<br>XIHSBDC3<br>XIHSBDC4       | 1/2" NPT<br>3/4" NPT<br>1" NPT | XIHSBDGC2<br>XIHSBDGC3<br>XIHSBDGC4     | 1/2" NPT<br>3/4" NPT<br>1" NPT |
| <b>"C"</b>         | XIHSCFC2<br>XIHSCFC3<br>XIHSCFC4       | 1/2" NPT<br>3/4" NPT<br>1" NPT | XIHSCDC2<br>XIHSCDC3<br>XIHSCDC4       | 1/2" NPT<br>3/4" NPT<br>1" NPT | XIHSCDGC2<br>XIHSCDGC3<br>XIHSCDGC4     | 1/2" NPT<br>3/4" NPT<br>1" NPT |
| <b>"D"</b>         | XIHSDFC3<br>XIHSDFC4                   | 3/4" NPT<br>1" NPT             | XIHSDDC3<br>XIHSDDC4                   | 3/4" NPT<br>1" NPT             | XIHSDDGC3<br>XIHSDDGC4                  | 3/4" NPT<br>1" NPT             |
| <b>"L"</b>         | XIHSLFC2<br>XIHSLFC3<br>XIHSLFC4       | 1/2" NPT<br>3/4" NPT<br>1" NPT | XIHSLDC2<br>XIHSLDC3<br>XIHSLDC4       | 1/2" NPT<br>3/4" NPT<br>1" NPT | XIHSLDGC2<br>XIHSLDGC3<br>XIHSLDGC4     | 1/2" NPT<br>3/4" NPT<br>1" NPT |
| <b>"T"</b>         | XIHSTFC2<br>XIHSTFC3<br>XIHSTFC4       | 1/2" NPT<br>3/4" NPT<br>1" NPT | XIHSTDC2<br>XIHSTDC3<br>XIHSTDC4       | 1/2" NPT<br>3/4" NPT<br>1" NPT | XIHSTDGC2<br>XIHSTDGC3<br>XIHSTDGC4     | 1/2" NPT<br>3/4" NPT<br>1" NPT |
| <b>"X"</b>         | XIHSXFC2<br>XIHSXFC3<br>XIHSXFC4       | 1/2" NPT<br>3/4" NPT<br>1" NPT | XIHSXDC2<br>XIHSXDC3<br>XIHSXDC4       | 1/2" NPT<br>3/4" NPT<br>1" NPT | XIHSXDGC2<br>XIHSXDGC3<br>XIHSXDGC4     | 1/2" NPT<br>3/4" NPT<br>1" NPT |
| <b>"Y"</b>         | XIHSYFC23 ONE 1/2" NPT<br>ONE 3/4" NPT |                                | XIHSYDC23 ONE 1/2" NPT<br>ONE 3/4" NPT |                                | XIHSYDGC23 ONE 1/2" NPT<br>ONE 3/4" NPT |                                |



### Standard Features

XIHS housings are designed to accommodate small instruments or devices. The 2 5/8" ID enclosure is offered in six different conduit configurations and a choice of cover arrangements. Precision machined from sand-cast, copper-free aluminum.

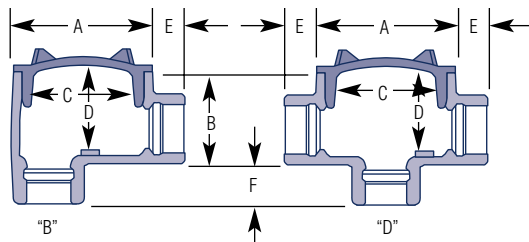
XIHS housings feature:

- 1/2", 3/4" or 1" NPT conduit feed-through hubs for power
- Internal ground screw
- Interior instrument mounting bosses that accommodate blind tapped holes on a 2" bolt circle
- Glass cover arrangements with a 1 1/8" diameter tempered glass window for local read out
- Buna-N rubber gasket for NEMA 4X watertight applications
- Tumblast, natural aluminum finish

### Design Options

- Corrosion resistant, "safety blue" polyester powder coating (other colors available)

Note: Above dimensions are for 1/2" and 3/4" NPT. For 1" NPT housings, add 5/16" to height dimensions.



| CONDUIT SIZE | A     | B      | C     | D       | E   | F   |
|--------------|-------|--------|-------|---------|-----|-----|
| 1/2          | 3 1/2 | 2 1/16 | 2 5/8 | 1 11/16 | 7/8 | 7/8 |
| 3/4          | 3 1/2 | 2 1/16 | 2 5/8 | 1 11/16 | 7/8 | 7/8 |
| 1            | 3 1/2 | 2 3/8  | 2 5/8 | 2       | 1   | 1   |

### Certifications



FM STANDARD 3615



CSA STANDARD C22.2 No. 30



UL STANDARD 1203

Class I, Groups B, C and D  
Class II, Groups E,F,G  
Class III  
NEMA 4X, 7BCD, 9EFG

4A-9



# Motor Control Explosionproof Motor Starters

## MANUAL MOTOR STARTERS

Type XLS Manual Motor Starting Switches are furnished complete with switch and interchangeable heaters. The XLS housings are cast aluminum alloy and have a trouble free operating lever threaded through the cover.

| Catalog Number | Number of Hubs | Conduit Size | Poles | Mfg. Bolt Size | Weight (lbs.) |
|----------------|----------------|--------------|-------|----------------|---------------|
| XLSC21 †*      | 2              | 1/2          | 1     | 1/4"           | 2 3/4         |
| XLSC22 †*      | 2              | 1/2          | 2     | 1/4"           | 2 3/4         |
| XLSC31 †*      | 2              | 3/4          | 1     | 1/4"           | 2 3/4         |
| XLSC32 †*      | 2              | 3/4          | 2     | 1/4"           | 2 3/4         |
| XLSC2 **       | 2              | 1/2          | -     | 1/4"           | 2 3/4         |
| XLSC3 **       | 2              | 3/4          | -     | 1/4"           | 2 3/4         |

† = HP Rating  
\* = Heater Table

## MAXIMUM HORSEPOWER RATINGS

| †Adalet Symbol | Make & Catalog No. | Poles | 115-230 Volts AC | 32 Volts DC | 115 Volts DC | 230 Volts DC |
|----------------|--------------------|-------|------------------|-------------|--------------|--------------|
| 1B             | Westinghouse MST01 | 1     | 1 H.P.           | 1/4 H.P.    | 1/4 H.P.     | 1/4 H.P.     |
| 2B             | Westinghouse MST02 | 2     | 1 H.P.           | 1/4 H.P.    | 1 H.P.       | 1 H.P.       |
| 1C             | GE CR101Y          | 1     | 1 H.P.           | -           | 1 H.P.       | 1/4 H.P.     |
| 2C             | GE CR101H          | 2     | 1 H.P.           | -           | 1 H.P.       | 1 H.P.       |

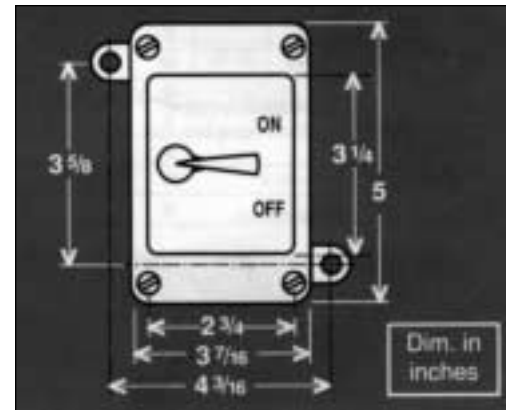
The following tables list interchangeable Heater elements for each manufacturer. The elements are not interchangeable between manufacturers. The heater elements listed are for motors rated 40°C continuous. For motors rated 50°C or 55°C, multiply by 0.9 and use this value to select heaters.

### WESTINGHOUSE

| *Adalet Symbol | Motor Full Load Current | *Adalet Symbol | Motor Full Load Current | *Adalet Symbol | Motor Full Load Current |
|----------------|-------------------------|----------------|-------------------------|----------------|-------------------------|
| 1              | .40 - .43               | 14             | 1.36 - 1.51             | 27             | 4.80 - 5.26             |
| 2              | .44 - .48               | 15             | 1.52 - 1.67             | 28             | 5.27 - 5.83             |
| 3              | .49 - .53               | 16             | 1.68 - 1.83             | 29             | 5.84 - 6.39             |
| 4              | .54 - .58               | 17             | 1.84 - 1.99             | 30             | 6.40 - 7.03             |
| 5              | .59 - .64               | 18             | 2.00 - 2.23             | 31             | 7.04 - 7.74             |
| 6              | .65 - .71               | 19             | 2.24 - 2.47             | 32             | 7.75 - 8.46             |
| 7              | .72 - .78               | 20             | 2.48 - 2.71             | 33             | 8.47 - 9.35             |
| 8              | .79 - .87               | 21             | 2.72 - 2.95             | 34             | 9.36 - 10.30            |
| 9              | .88 - .95               | 22             | 2.96 - 3.27             | 35             | 10.31 - 11.35           |
| 10             | .96 - 1.03              | 23             | 3.28 - 3.59             | 36             | 11.36 - 12.47           |
| 11             | 1.04 - 1.15             | 24             | 3.60 - 3.99             | 37             | 12.48 - 13.67           |
| 12             | 1.16 - 1.27             | 25             | 4.00 - 4.39             | 38             | 13.68 - 15.12           |
| 13             | 1.28 - 1.35             | 26             | 4.40 - 4.79             | 39             | 15.13 - 16.00           |

### GE

|    |      |    |      |    |       |
|----|------|----|------|----|-------|
| 1  | .48  | 15 | 1.78 | 29 | 5.90  |
| 2  | .53  | 16 | 1.95 | 30 | 6.41  |
| 3  | .58  | 17 | 2.13 | 31 | 6.98  |
| 4  | .65  | 18 | 2.32 | 32 | 7.60  |
| 5  | .71  | 19 | 2.53 | 33 | 8.25  |
| 6  | .78  | 20 | 2.76 | 34 | 8.95  |
| 7  | .86  | 21 | 3.01 | 35 | 9.75  |
| 8  | .95  | 22 | 3.27 | 36 | 10.60 |
| 9  | 1.04 | 23 | 3.56 | 37 | 11.40 |
| 10 | 1.14 | 24 | 3.88 | 38 | 12.50 |
| 11 | 1.25 | 25 | 4.22 | 39 | 13.60 |
| 12 | 1.37 | 26 | 4.60 | 40 | 14.80 |
| 13 | 1.49 | 27 | 5.00 | 41 | 16.00 |
| 14 | 1.63 | 28 | 5.43 |    |       |



**How To Order:** To determine the complete catalog number, select the unit wanted and add the Adalet symbol numbers for the make of starter wanted and the heaters required. Select heaters from charts.

\*\* Enclosure less switch - for CSA certified switches rated 600V max, 30 amp max, 15HP max.

### Certifications

Class I, Groups C & D  
Class II, Groups E, F & G



8E-1

# Motor Control Explosionproof Motor Starter/Protector

8E-2

## Universal Enclosure Only

To order universal motor starter/protector enclosure, specify enclosure for desired brand of switch and add options from table below.

### Enclosure Catalog Numbers

| Catalog Number | Number of Hubs | Conduit Size | Suitable Switch Brands                             |
|----------------|----------------|--------------|--|
| XMMSA1         | 2              | 3/4"         | Klockner Moeller, Allen Bradley, GE, AEG, Square D |
| XMMSA2         | 2              | 3/4"         | Sprecher & Schuh                                   |

Enclosures have 1/2" NPT-plugged tops and bottoms to accommodate breather drains.

*Example: XMMSA2-EE*

describes an enclosure only for a Sprecher & Schuh motor starter with a breather and a drain installed.

## Complete Starter Assembly

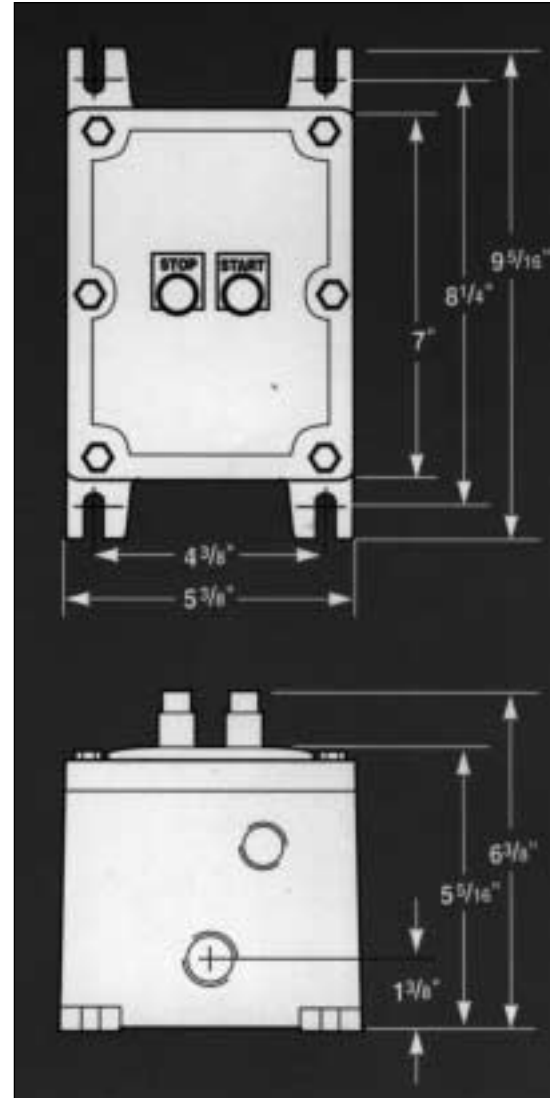
To order a complete starter assembly, specify enclosure number from the table above omitting the last number: insert suffix for switch trip range and options from tables below.

### Trip Rating Suffix Table

| Suffix | Trip Range (Amps) | Suffix                                 | Trip Range (Amps) | Suffix | Trip Range (Amps) |
|--------|-------------------|--|-------------------|--------|-------------------|
| AT01   | .10-.16           | AT06                                   | 1.0-1.6           | AT10   | 6.0*-10.0         |
| AT02   | .16-.25*          | AT07                                   | 1.6-2.5*          | AT11   | 10.0-16.0*        |
| AT03   | .25*-.40          | AT08                                   | 2.5*-4.0          | AT12   | 16.0*-20.0*       |
| AT04   | .40-.60*          | AT09                                   | 4.0-6.0*          | AT13   | 20.0*-25.0        |
| AT05   | .60*-1.0          | *May vary slightly depending on brand. |                   |        |                   |

*Example: XMMSA-AT06-AC-C1MG*

describes a complete switch assembly with a trip range of 1.0-1.6 amps with 1NO and 1NC auxiliary contacts and a green miniature pilot light installed.



| Description                        | Suffix | Complete Unit | Universal Enclosure Only |
|------------------------------------|--------|---------------|--------------------------|
| Auxiliary Contact (1NO, 1NC)       | AC     | ●             |                          |
| Amber Miniature Pilot Light        | C1MA   | ●             | ●                        |
| Green Miniature Pilot Light        | C1MG   | ●             | ●                        |
| Red Miniature Pilot Light          | C1MR   | ●             | ●                        |
| Breather/Drain Installed in Bottom | E      | ●             | ●                        |
| Breather and Drain Installed       | EE     | ●             | ●                        |
| Epoxy Coating External Only        | L1     | ●             | ●                        |
| Epoxy Coating Internal & External  | L2     | ●             | ●                        |
| Lockout Device on Stop P.B.        | LD     | ●             | ●                        |
| Shunt Trip                         | ST1    | ●             |                          |
| Undervoltage Release               | UV1    | ●             |                          |

### Compliances:

- NEC: Class I, Groups C, D  
Class II, Groups E, F, G
- UL Standard 1203  
Hazardous (Classified) Locations
- CSA Standard 22.2
- NEMA: 7CD, 9EFG

### Approvals:

- UL Classified  
 Class I, Groups C, D  
Class II, Groups E, F, G
- CSA Certified  
 Class I, Groups C, D  
Class II, Groups E, F, G



## Motor Control Explosionproof Motor Starters

8C-1



XCBSLQN4

### Features:

- Lightweight, corrosion resistant, copper-free aluminum alloy (0.3% max. copper content).
- Uniform wall thickness (not ribbed) for versatility of conduit openings assuring 5 full thread engagement and maximum available area for conduit drilling and tapping.
- Captive stainless steel cover bolts resist corrosion and cannot get lost.
- Ground lug is highly visible and accessible.
- Bolted flange design provides clear access to internal components.
- Rugged cast aluminum handle allows locking in "on" or "off" position with as many as three padlocks.
- Clevis assembly allows closing of door with breaker handle assembly in any position without damage to breaker and without internal mounting hardware.
- All operating shafts are stainless steel for corrosion resistance.
- Durable cast-on lugs cannot get lost.
- Backpan accommodates most popular brands of circuit breaker and motor circuit protectors and motor starters.
- Two predrilled and tapped operator holes furnished with explosionproof plugs for field installation of pilot devices.
- Two additional optional holes available.
- Aluminum hinges with stainless steel hinge pins are "lift-off" so the cover can be easily removed.
- Easily adjustable reset button allows for starter changes in the field.
- N4 gasket furnished as standard on combination starters.
- Narrow design on combination starter through size 2 allows closer spacing on switchracks while providing ample room to mount control transformer on the backpan.
- XCBSAQ and XCBSBQ provided with XBO breaker handle as standard.

### Compliances:

- NEC: Class I, Groups B, C, D  
Class II, Groups E, F, G  
Class III
- UL Standard 1203  
Hazardous (Classified) Locations
- CSA Standard C22.2 No. 30
- NEMA: 3, 3R, 4, 7BCD, 9EFG, 12

### Certifications



**Note:** Consult Factory for approvals and certifications on specific enclosures.

## Motor Control Explosionproof Motor Starters

### Universal Enclosures Only (does not include breaker or starter) Class I, Groups C and D; Class II, Groups E, F & G; Class III, Type 3, 3R, 4,7CD, 9EFG, 12

8C-2

#### Combination full voltage non-reversing starters

| <u>Max Starter<br/>Nema Size</u> | <u>Standard<br/>Breaker Frame Size</u> | <u>Enclosure</u> |
|----------------------------------|--|------------------|
| 1                                | 100                                    | XCBSAQ-N4        |
| 2                                | 100                                    | XCBSBQ-N4        |
| 3                                | 100                                    | XCBSLQ-N4        |
| 4                                | 225/250                                | XCBSMQ-N4        |
| 5                                | 400                                    | XCBSN -N4        |

#### Combination full voltage reversing starters

| <u>Max Starter<br/>Nema Size</u> | <u>Standard<br/>Breaker Frame</u> | <u>Enclosure</u> |
|----------------------------------|-----------------------------------|------------------|
| 1                                | 100                               | XCMRSG-N4        |
| 2                                | 100                               | XCMRSK-N4        |
| 3                                | 100                               | XCMRSP-N4        |

For Group B applications delete suffix "N4"

### Class I, Groups C and D; Class II, Groups E, F & G; Class III, Type 7CD, 9EFG Type 4

#### Across the line full voltage non-reversing starters

| <u>Starter<br/>Nema Size</u> | <u>Enclosure</u> |
|------------------------------|------------------|
| 1                            | XMSB-N4          |
| 2                            | XMSD-N4          |
| 3 & 4                        | XMSH-N4          |
| 5                            | XMSQ-N4          |

#### Across the line full voltage reversing starters

| <u>Starter<br/>Nema Size</u> | <u>Enclosure</u> |
|------------------------------|------------------|
| 1                            | XMRSC-N4         |
| 2                            | XMRSF-N4         |
| 3 & 4                        | XMRSO-N4         |

For Group B applications delete suffix "N4"

For two-speed, Y-Delta, reduced voltage, or multiple starter packages consult factory for availability.

## Motor Control Explosionproof Motor Starters

### Combination Starter Enclosures (includes breaker and starter) Full voltage non-reversing

8C-3

#### 240 Volt AC Motor Thermal Magnetic Breaker † / 120 Volt AC Coil

| Maximum HP | Nema Size | Catalog Number  |
|------------|-----------|-----------------|
| 2          | 0         | XCBSAQ-N4-2015  |
| 3          | 0         | XCBSAQ-N4-2020  |
| 5          | 1         | XCBSAQ-N4-2130  |
| 7 1/2      | 1         | XCBSAQ-N4-2150  |
| 10         | 2         | XCBSBQ-N4-2270  |
| 15         | 2         | XCBSBQ-N4-22100 |
| 20         | 3         | XCBSLQ-N4-23100 |
| 30         | 3         | XCBSLQ-N4-23125 |
| 40         | 4         | XCBSMQ-N4-24175 |
| 50         | 4         | XCBSMQ-N4-24200 |
| 60         | 5         | XCBSN-N4-25225  |
| 75         | 5         | XCBSN-N4-25300  |
| 100        | 5         | XCBSN-N4-25400  |

#### 480 Volt AC Motor Thermal Magnetic Breaker † / 120 Volt AC Coil

| Maximum HP | Nema Size | Catalog Number  |
|------------|-----------|-----------------|
| 2          | 0         | XCBSAQ-N4-4015  |
| 5          | 0         | XCBSAQ-N4-4020  |
| 10         | 1         | XCBSAQ-N4-4130  |
| 25         | 2         | XCBSBQ-N4-4270  |
| 30         | 3         | XCBSLQ-N4-4370  |
| 50         | 3         | XCBSLQ-N4-43100 |
| 75         | 4         | XCBSMQ-N4-44175 |
| 100        | 4         | XCBSMQ-N4-44200 |
| 125        | 5         | XCBSN-N4-45225  |
| 150        | 5         | XCBSN-N4-45300  |
| 200        | 5         | XCBSN-N4-45400  |

#### 600 Volt AC Motor Thermal Magnetic Breaker † / 120 Volt AC Coil

| Maximum HP | Nema Size | Catalog Number  |
|------------|-----------|-----------------|
| 2          | 0         | XCBSAQ-N4-6015  |
| 5          | 0         | XCBSAQ-N4-6020  |
| 10         | 1         | XCBSAQ-N4-6130  |
| 25         | 2         | XCBSBQ-N4-6250  |
| 30         | 3         | XCBSLQ-N4-6370  |
| 50         | 3         | XCBSLQ-N4-63100 |
| 75         | 4         | XCBSMQ-N4-64125 |
| 100        | 4         | XCBSMQ-N4-64175 |
| 125        | 5         | XCBSN-N4-65200  |
| 150        | 5         | XCBSN-N4-65225  |
| 200        | 5         | XCBSN-N4-65400  |

#### 480/600 Volt AC Motor Motor Circuit Protector † / 120 Volt AC Coil

| Maximum HP | Nema Size | Catalog Number   |
|------------|-----------|------------------|
| 1          | 0         | XCBSAQ-N4-M6003  |
| 2          | 0         | XCBSAQ-N4-M6007  |
| 5          | 0         | XCBSAQ-N4-M6015  |
| 10         | 1         | XCBSAQ-N4-M6130  |
| 25         | 2         | XCBSBQ-N4-M6250  |
| 50         | 3         | XCBSLQ-N4-M63100 |
| 100        | 4         | XCBSMQ-N4-M64150 |
| 200        | 5         | XCBSN-N4-M65400  |

† Trip rating is last 2-3 digits of catalog number

For Group B applications delete "N4" from catalog number and insert "H"

Note: Overload Heaters Not Included, See Options

## Motor Control Explosionproof Motor Starters

### Combination Starter Enclosures (includes breaker and starter) Full voltage reversing

**240 Volt AC Motor**  
Thermal Magnetic Breaker † / 120 Volt AC Coil

| Maximum HP | Nema Size | Catalog Number  |
|------------|-----------|-----------------|
| 2          | 0         | XCMRSG-N4-2015  |
| 3          | 0         | XCMRSG-N4-2020  |
| 5          | 1         | XCMRSG-N4-2130  |
| 7 1/2      | 1         | XCMRSG-N4-2150  |
| 10         | 2         | XCMRSK-N4-2270  |
| 15         | 2         | XCMRSK-N4-22100 |
| 20         | 3         | XCMRSP-N4-23100 |
| 30         | 3         | XCMRSP-N4-23125 |

**480 Volt AC Motor**  
Thermal Magnetic Breaker † / 120 Volt AC Coil

| Maximum HP | Nema Size | Catalog Number  |
|------------|-----------|-----------------|
| 2          | 0         | XCMRSG-N4-4015  |
| 5          | 0         | XCMRSG-N4-4020  |
| 10         | 1         | XCMRSG-N4-4130  |
| 25         | 2         | XCMRSK-N4-4270  |
| 40         | 3         | XCMRSP-N4-43100 |
| 50         | 3         | XCMRSP-N4-43125 |

**600 Volt AC Motor**  
Thermal Magnetic Breaker † / 120 Volt AC Coil

| Maximum HP | Nema Size | Catalog Number  |
|------------|-----------|-----------------|
| 2          | 0         | XCMRSG-N4-6015  |
| 5          | 0         | XCMRSG-N4-6020  |
| 10         | 1         | XCMRSG-N4-6130  |
| 25         | 2         | XCMRSK-N4-6250  |
| 50         | 3         | XCMRSP-N4-63100 |

**480/600 Volt AC Motor**  
Motor Circuit Protector † / 120 Volt AC Coil

| Maximum HP | Nema Size | Catalog Number   |
|------------|-----------|------------------|
| 1          | 0         | XCMRSG-N4-M6003  |
| 2          | 0         | XCMRSG-N4-M6007  |
| 5          | 0         | XCMRSG-N4-M6015  |
| 10         | 1         | XCMRSG-N4-M6130  |
| 25         | 2         | XCMRSK-N4-M6250  |
| 50         | 3         | XCMRSP-N4-M63100 |
| 100        | 4         | XCMRSP-N4-M64150 |

† Trip rating is last 2-3 digits of catalog number  
For Group B applications delete "N4" from catalog number  
Note: Overload Heaters Not Included, See Options

### Magnetic Full Voltage Starter Enclosures (includes starter)

**Full voltage non-reversing starters**  
120 Volt AC Coil

| Maximum HP @ |      |      | Nema Size | Catalog Number |
|--------------|------|------|-----------|----------------|
| 240V         | 480V | 600V |           |                |
| 3            | 5    | 5    | 0         | XMSB-60        |
| 7 1/2        | 10   | 10   | 1         | XMSB-61        |
| 15           | 25   | 25   | 2         | XMSD-62        |
| 30           | 50   | 50   | 3         | XMSH-63        |
| 50           | 100  | 100  | 4         | XMSH-64        |
| 100          | 200  | 200  | 5         | XMSQ-65        |

**Full voltage reversing starters**  
120 Volt AC Coil

| Maximum HP @ |      |      | Nema Size | Catalog Number |
|--------------|------|------|-----------|----------------|
| 240V         | 480V | 600V |           |                |
| 3            | 5    | 5    | 0         | XMRSC-60       |
| 7 1/2        | 10   | 10   | 1         | XMRSC-61       |
| 15           | 25   | 25   | 2         | XMRSF-62       |
| 30           | 50   | 50   | 3         | XMRSO-63       |
| 50           | 100  | 100  | 4         | XMRSO-64       |

For Nema 4 applications insert "N4" before number 6  
Note: Overload Heaters Not Included, See Options

8C-4

## Motor Control Explosionproof Motor Starters

### Options, Dimensions and Ordering Instructions

8C-5

| Description  | Suffix  | Combination Starter | Available On Non-Combination Starter | Universal Enclosure Only |
|--|---------|---------------------|--------------------------------------|--------------------------|
| Start/Stop Dual Pushbutton (1NO Start, 1NC Stop)                   | A       | •                   | •                                    | •                        |
| Green Start Pushbutton (1NO)                                       | A1      | •                   | •                                    | •                        |
| Red Stop Pushbutton (1NC)  | A2      | •                   | •                                    | •                        |
| Red Stop Pushbutton, Mushroom Head (1NC)                           | A3      | •                   | •                                    | •                        |
| Black Pushbutton (1NO, 1NC)  | A4      | •                   | •                                    | •                        |
| Auxiliary Switch on Breaker (1A and 1B Contacts)                   | AS1     | •                   |                                      |                          |
| Auxiliary Switch on Breaker (2A and 2B Contacts)                   | AS2     | •                   |                                      |                          |
| Hand-Off-Auto Selector Switch                                      | B       | •                   | •                                    | •                        |
| Selector Switch (2-Position) (1NO, 1NC)                            | B1      | •                   | •                                    | •                        |
| Bell Alarm Switch on Breaker (Specify No. of Contacts)             | BA      | •                   |                                      |                          |
| Pilot Light 120 Volt AC (*See Color Table)                         | C1*     | •                   | •                                    | •                        |
| Pilot Light with Guard 120 Volt AC (*See Color Table)              | CG1*    | •                   | •                                    | •                        |
| Push-to-Test Light 120 Volt AC (1NO, 1NC) (*See Color Table)       | CP1*†   | •                   | •                                    | •                        |
| Breather/Drain Installed in Bottom                                 | E\$     | •                   | •                                    | •                        |
| Breather and Drain Installed                                       | EE\$    | •                   | •                                    | •                        |
| Auxiliary Contacts on Starter (+NO, -NC) (Specify No. of Contacts) | G (+ -) | •                   | •                                    |                          |
| Time Delay Relay-On Delay (Specify Range)                          | H1      | •                   | •                                    |                          |
| Time Delay Relay-Off Delay (Specify Range)                         | H2      | •                   | •                                    |                          |
| 8-Point Terminal Strip   | K       | •                   | •                                    |                          |
| Epoxy Coating External Only (Specify Color)                        | L1      | •                   | •                                    | •                        |
| Epoxy Coating External and Internal (Specify Color)                | L2      | •                   | •                                    | •                        |
| Lamacoid Nameplate (Specify Legend)                                | NP      | •                   | •                                    | •                        |
| Overload Heaters (Specify Full Load Amps)                          | OL      | •                   | •                                    |                          |
| Control Relay (Description Required)                               | R       | •                   | •                                    |                          |
| Space Heater (Specify Wattage)                                     | S       | •                   | •                                    |                          |
| Shunt Trip on Breaker (Specify Voltage)                            | ST      | •                   |                                      |                          |
| 50 VA Control Transformer 480V Pri, 120V Sec. W/Fuse Block††       | T1F     | •                   | •                                    |                          |
| 100 VA Control Transformer 480V Pri, 120V Sec. W/Fuse Block††      | T2F     | •                   | •                                    |                          |
| 150 VA Control Transformer 480V Pri, 120V Sec. W/Fuse Block††      | T3F     | •                   | •                                    |                          |
| 200 VA Control Transformer 480V Pri, 120V Sec. W/Fuse Block††      | T4F     | •                   | •                                    |                          |
| 250 VA Control Transformer 480V Pri, 120V Sec. W/Fuse Block††      | T5F     | •                   | •                                    |                          |
| 300 VA Control Transformer 480V Pri, 120V Sec. W/Fuse Block††      | T6F     | •                   | •                                    |                          |
| Other Control Transformer (Specify VA, Pri. And Sec.)              | T7      | •                   | •                                    |                          |
| Undervoltage Release on Breaker (Specify Voltage Rating)           | UV      | •                   |                                      |                          |
| Internal Control Wiring  | W       | •                   | •                                    |                          |
| Other (Specify)  | Z       | •                   | •                                    | •                        |

\*Color Table

R-Red

G-Green

A-Amber

B-Blue

C-Clear

W-White

† Not available in Group B applications

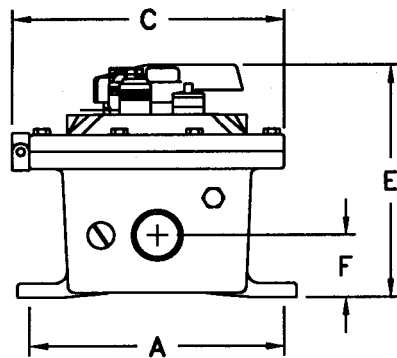
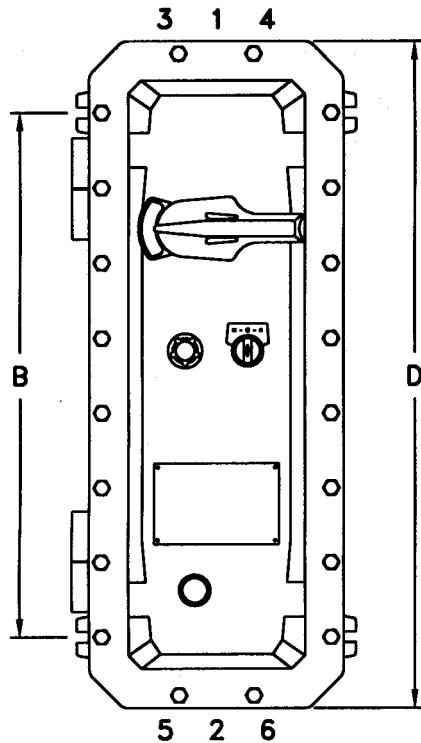
†† Fuses Included

\$ for Group B applications add H to the suffix

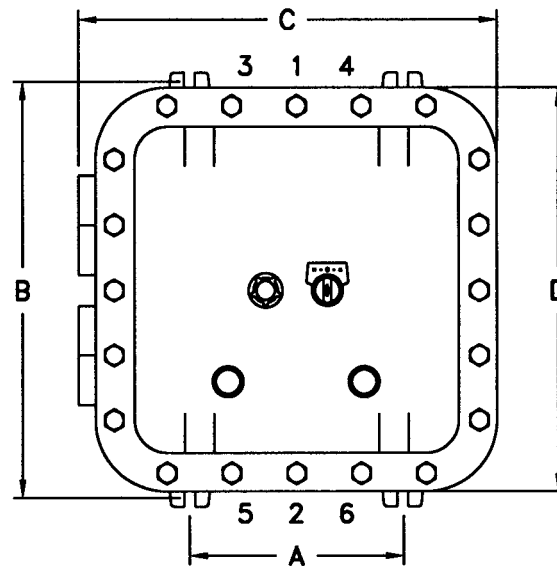
# Motor Control Explosionproof Motor Starters

## DIMENSIONS

| Enclosure     | Nom. Inside Dim. | Nominal Dimensions In Inches |        |          |          |          |         |       | Est. Ship. Wt. | Cond. Size |
|---------------|------------------|------------------------------|--------|----------|----------|----------|---------|-------|----------------|------------|
|               |                  | A                            | B      | C        | D        | E        | F       | G     |                |            |
| \$ *XCBSAQ-N4 | 062305           | 4 1/8                        | 25 1/2 | 11 1/8   | 26 15/16 | 9 11/16  | 2 1/2   | 3 & 5 | 61             | 1 1/2      |
| \$ *XCBSBQ-N4 | 072706           | 4 3/4                        | 29 7/8 | 11 13/16 | 31 1/8   | 10 1/2   | 2 13/16 | 3 & 5 | 87             | 1 1/2      |
| XCBSLQ-N4     | 122408           | 15 3/4                       | 18 3/8 | 16 15/16 | 28 1/4   | 12 15/16 | 3       | 3 & 5 | 160            | 2          |
| XCBSMQ-N4     | 123608           | 15 3/4                       | 29     | 16 15/16 | 40 1/4   | 13 3/8   | 3 5/8   | 3 & 5 | 260            | 2 1/2      |
| XCBSN-N4      | 164610           | 19 3/4                       | 39     | 21 3/4   | 50 7/8   | 16 7/16  | 4 7/8   | 3 & 5 | 420            | 4          |
| XCMRSG-N4     | 121808           | 15 3/4                       | 14 1/8 | 17       | 22 1/4   | 12 5/8   | 2 13/16 | 3 & 6 | 100            | 1 1/4      |
| XCMRSK-N4     | 122406           | 15 3/4                       | 18 3/8 | 17       | 28 1/4   | 10 15/16 | 3 5/16  | 3 & 5 | 130            | 2          |
| XCMRSP-N4     | 183608           | 21 3/4                       | 29     | 23 3/4   | 40 7/8   | 14 3/4   | 4 1/8   | 3 & 5 | 395            | 2          |
| †XMSB         | 081006           | 10 3/4                       | 6 1/2  | 12       | 13 3/8   | 8 1/4    | 2 3/8   | 3 & 6 | 36             | 1          |
| †XMSD         | 101406           | 13                           | 10 5/8 | 14       | 17 3/8   | 8 3/8    | 2 3/4   | 3 & 6 | 55             | 1 1/2      |
| †XMSH         | 121808           | 15 3/4                       | 14 1/8 | 17       | 22 1/4   | 10 3/4   | 3 1/2   | 3 & 6 | 105            | 2 1/2      |
| †XMSQ         | 183610           | 21 3/4                       | 29     | 23 3/4   | 40 7/8   | 14 7/8   | 4 5/16  | 3 & 6 | 380            | 3          |
| \$ † XMRSC    | 101406           | 10 5/8                       | 13     | 18       | 13 3/8   | 8 3/8    | 2 1/4   | 3 & 5 | 55             | 1          |
| \$ † XMRSF    | 121206           | 8 5/8                        | 15 3/4 | 17       | 16 1/4   | 8 15/16  | 3       | 3 & 6 | 85             | 1 1/2      |
| \$ † XMRSO    | 181808           | 13                           | 21 3/4 | 23 3/4   | 22 7/16  | 12 7/16  | 3 7/8   | 3 & 6 | 190            | 2 1/2      |



**VIEW A**



**VIEW B**

Standard conduit openings at locations 1 and 2, control circuit opening 3/4" NPT at locations shown in column "G". Each housing has one 1/2" NPT top & bottom for breather and drain.

- \* Mounting feet on top and bottom.
- † No breaker handle furnished.
- \$ Use view "B" for mounting dimensions.

8C-6

## FS Control<sup>3</sup> Specifications

### FS Control<sup>3</sup>

We named this line of control stations FS Control<sup>3</sup> because we offer it in three different material types – carbon steel, stainless steel and fiberglass – to meet your control station needs. Each material type has certain

properties and characteristics that make it well-suited for certain applications. If you would like assistance in determining which enclosure type best fits your application, please consult our engineering department.

### Features and Benefits

- The normally open/normally closed factory sealed contact block is rated both NEMA A600 and NEMA Q300
- Electrical ratings for pilot lights range between 6 volts and 480 volts
- Carbon steel, stainless steel and fiberglass control station enclosure types available in one- through four-hole arrangements to accommodate a wide variety of system needs. Other configurations are available - consult factory
- Conduit hub entries available in 1/2", 3/4" and 1" sizes either dead-end or feed through
- Broad new line of 30mm industrial pilot lights, pushbuttons and selector switches allows thousands of possible control station configurations
- High-quality legend plates permit easy identification of device function

### Material/Finish

- Enclosures:

**X2CS** – Made from 14 ga. cold-rolled steel with continuously welded seams ground to a smooth finish. Each X2CS enclosure comes complete with a grounding stud and wall mounting back brackets welded to the outside top and bottom. Phosphatized and finished inside and out with ANSI/ASA 61 gray polyester powder coating.

**X2SS** – Made from 14 ga. Type 304 stainless steel with continuously welded seams ground to a smooth finish. Each X2SS comes complete with a grounding stud and wall mounting brackets welded to the outside top and bottom. Finished with #4 brush.

**X2FG** – Made from compression-molded, fiberglass-reinforced polyester. Each X2FG comes complete with a grounding strap and optional mounting brackets can be provided. Molded standard machine tool gray.

- Industrial Pilot Device Bodies: PBT Polyester
- Industrial Pilot Device Caps: PBT Polyester
- Industrial Pilot Device Clamp Rings: Polyester (standard) or aluminum

### Application

- For installation in Division 2 areas of chemical and petrochemical plants, refineries and other process industries where flammable vapors, gases or combustible dust may be present due to accidental or abnormal operation
- For use with Adalet 30mm pushbuttons, selector switches and pilot lights to provide circuit/motor control and/or electrical status indication

### Compliances

#### X2CS, X2SS, and X2FG Series:

UL Standard 698, 1604 and 2279

Canadian Standards Association C22.2 No. 213-M1987

NEC Class I, Division 2, Groups ABCD; Class II, Division 2, Groups FG; Class III

NEC Class I, Zone 2, Group IIC

#### X2CS Series:

NEMA Type 3, 3R, 7ABCD (Division 2), 12 and 13, 4

#### X2FG and X2SS Series:

NEMA Type 3, 3R, 4, 4X, 7ABCD (Division 2), 12, 13

#### Factory Sealed Contact Block:

Underwriters Laboratories – UL698, UL 1203, UL1604 and UL2279

Class I, Division 1, Groups ABCD

Class I, Zone 1, Group IIC

Class I, Division 2, Groups ABCD

Class I, Zone 2, Group IIC

Canadian Standards Association C22.2 No. 213-M1987

Class I, Div. 2, Groups BCD

#### Pilot Lights:

Listed Underwriters Laboratories:

Class I, Division 2, Groups ABCD

### Certifications



#### X2CS, X2SS, and X2FG Series:

Listed Underwriters Laboratories:

Class I, Division 2, Groups BCD; Class I, Zone 2, Group IIB+H2;



Class II, Division 2, Groups FG;

#### X2CS Series:

Type 12, 4

#### X2FG and X2SS Series:

Type 3, 4X, 12 and 13

#### Factory Sealed Contact Block:

Listed Underwriters Laboratories:

Class I, Division 2, Groups BCD

Class I, Zone 2, Group IIB+H2



Certified Canadian Standards Association Class I, Div. 2, Groups BCD

#### Pilot Lights:

Listed Underwriters Laboratories:

Class I, Division 2, Groups ABCD



## Pushbutton Operators for Use with FS Control<sup>3</sup>

### Pushbutton Operators with Polyester Clamp Ring

| Cap Color | Flush Cap   | Suffix | Extended Cap | Suffix | Mushroom Cap | Suffix |
|-----------|-------------|--------|--------------|--------|--------------|--------|
| Green     | PBO-FCGN-FS | 1TS    | PBO-XCGN-FS  | 4TS    | PBO-MCGN-FS  | 7TS    |
| Black     | PBO-FCBK-FS | 2TS    | PBO-XCBK-FS  | 5TS    | PBO-MCBK-FS  | 8TS    |
| Red       | PBO-FCRD-FS | 3TS    | PBO-XCRD-FS  | 6TS    | PBO-MCRD-FS  | 9TS    |

For additional NO/NC contact block add "/FS" to end of catalog number

For aluminum clamp ring, add "A" after first dash in catalog number.

Example – PBO-AXCRD-FS is red extended cap pushbutton with aluminum clamp ring.

**Note: Caps and operating heads are available in a variety of styles and colors – please consult factory**



### Maximum Ampere Rating Control Circuit Contacts Type FSBT

| Volts                        | AC (A600) 600 VAC max                      |     |     |     | DC (Q300) |     |
|------------------------------|--|-----|-----|-----|-----------|-----|
|                              | 110  | 220 | 440 | 550 | 120       | 240 |
| Make & Interrupting Capacity | 60   | 30  | 15  | 12  | .55       | .27 |
| Normal Load Break            | 6  | 3   | 1.5 | 1.2 | .55       | .27 |
| Continuous Current           | 10   | 10  | 10  | 10  | 2.5       | 2.5 |
| Catalog No.                  | FSBT                                       |     |     |     |           |     |
|                              | One Normally Open and One Normally Closed. |     |     |     |           |     |



### Illuminated Pushbuttons Unit Complete Less Cap<sup>1</sup>

| Type                           | Volts               | Catalog Number | Suffix |
|--------------------------------|---------------------|----------------|--------|
| Transformer 50/60 Hz           | 120 AC              | TFLU120FS      | 10TS   |
|                                | 240 AC              | TFLU240FS      | 11TS   |
|                                | 480 AC              | TFLU480FS      | 12TS   |
|                                | 277 AC <sup>3</sup> | TFLU277FS      | 13TS   |
| Full Voltage Type              | 6 AC/DC             | FVLU6FS        | 14TS   |
|                                | 12 AC/DC            | FVLU12FS       | 15TS   |
|                                | 24 AC/DC            | FVLU24FS       | 16TS   |
|                                | 120 AC/DC           | FVLU120FS      | 17TS   |
| Neon Type <sup>2</sup>         | 120 AC/DC           | FVLU120NFS     | 18TS   |
|                                | 240 AC/DC           | FVLU240NFS     | 19TS   |
|                                | 480 AC/DC           | FVLU480NFS     | 20TS   |
| Incandescent                   | 120 AC/DC           | RLU120IFS      | 21TS   |
|                                | 240 AC/DC           | RLU240IFS      | 22TS   |
| LED Resistor Type <sup>4</sup> | 120 AC/DC           | RLU120LFS      | 23TS   |
|                                | 240 AC/DC           | RLU240LFS      | 24TS   |
| Dual Input Remote Test         | 6 AC/DC             | RTLU6FS        | 25TS   |
|                                | 12 AC/DC            | RTLU12FS       | 26TS   |
|                                | 24 AC/DC            | RTLU24FS       | 27TS   |
|                                | 120 AC/DC           | RTLU120FS      | 28TS   |
|                                | 240 AC/DC           | RTLU240FS      | 29TS   |



### Color Caps for Illuminated Pushbuttons<sup>5</sup>

| Color Cap with Polyester Clamp Ring |                |        |
|-------------------------------------|----------------|--------|
| Color                               | Catalog Number | Suffix |
| Amber                               | IPBCAR         | 30TS   |
| Blue                                | IPBCBE         | 31TS   |
| Clear                               | IPBCCR         | 32TS   |
| Green                               | IPBCGN         | 33TS   |
| Red                                 | IPBCRD         | 34TS   |
| White                               | IPBCWE         | 35TS   |

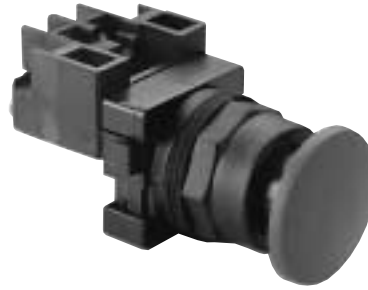
For aluminum clamp ring, add "A" prefix to color cap catalog number. Example – AIPBCBE is blue color cap for illuminated pushbutton with aluminum clamp ring.

#### Footnotes

- To order as an assembled illuminated pushbutton with color cap, add color cap catalog number to the end of illuminated pushbutton catalog number. Example – TFLU120FS-IPBCRD would be complete illuminated pushbutton with red cap.
- Neon lights are available with red or green lamps. Add suffix letter "R" or "G" respectively to designate color. Use amber, clear or red cap only for red neon lights; green or clear cap only for green neon lights.
- 120 Volt incandescent lamps are not recommended when the unit is subjected to shock and/or vibration. A transformer, resistor, neon or LED unit will provide longer lamp life.
- Specify LED lamp color. Add suffix letter "R" for red, "G" for green and "Y" for yellow (amber). Use amber, clear or red cap only for red lights; green or clear cap only for green lights; red, clear or amber for yellow lights.
- Catalog numbers are for extended color caps. For flush guarded color caps, add suffix "EECR" to the catalog number.



## Push-Twist/Push-Pull Operators for Use with FS Control<sup>3</sup>



### 2 Position Push-Twist Release Maintained Operators Non-Illuminated

| Maintained In/Maintained Out |                |        |
|------------------------------|----------------|--------|
| Color                        | Catalog Number | Suffix |
| Black                        | PTR-TMCBK-FS   | 36TS   |
| Red                          | PTR-TMCRD-FS   | 37TS   |
| Green                        | PTR-TMCGN-FS   | 38TS   |
| Yellow                       | PTR-TMCYW-FS   | 39TS   |

For aluminum clamp ring, add "A" after first dash in catalog number.  
Example – PTR-ATMCGN-FS is 2 position push-twist release operator with green cap and aluminum clamp ring.

**Note: For additional NO/NC contact block add "/FS" to end of catalog number.**

### 2 Position Push-Pull Maintained Operators Non-Illuminated

| Maintained In/Maintained Out |                |        |
|------------------------------|----------------|--------|
| Color                        | Catalog Number | Suffix |
| Black                        | PBO-PPMCBK-FS  | 40TS   |
| Red                          | PBO-PPMCRD-FS  | 41TS   |
| Green                        | PBO-PPMCGN-FS  | 42TS   |
| Yellow                       | PBO-PPMCYW-FS  | 43TS   |

For aluminum clamp ring, add "A" after first dash in catalog number.  
Example – PBO-APPMCYW-FS is 2 position push-pull operator with yellow cap and aluminum clamp ring.

**Note: For additional NO/NC contact block add "/FS" to end of catalog number.**

### 2 Position Push-Pull Release Maintained Operators Illuminated

| Maintained In/Maintained Out |                |                     |        |
|------------------------------|----------------|---------------------|--------|
| Type                         | Volts          | Catalog Number      | Suffix |
| Transformer 60/50 Hz         | 120 AC         | TFPPM120-IMCRD-FS   | 44TS   |
|                              | 240 AC         | TFPPM240-IMCRD-FS   | 45TS   |
|                              | 480 AC         | TFPPM480-IMCRD-FS   | 46TS   |
|                              | 600 AC         | TFPPM600-IMCRD-FS   | 47TS   |
| Full Voltage                 | 6 AC/DC        | FVPPM6-IMCRD-FS     | 48TS   |
|                              | 12 AC/DC       | FVPPM12-IMCRD-FS    | 49TS   |
|                              | 24 AC/DC       | FVPPM24-IMCRD-FS    | 50TS   |
|                              | 120 AC/DC      | FVPPM120-IMCRD-FS   | 51TS   |
|                              | 120 AC/DC Neon | FVPPM120NR-IMCRD-FS | 52TS   |
| Incandescent Resistor        | 120 AC/DC      | RLPPM120-IMCRD-FS   | 53TS   |
|                              | 240 AC/DC      | RLPPM240-IMCRD-FS   | 54TS   |

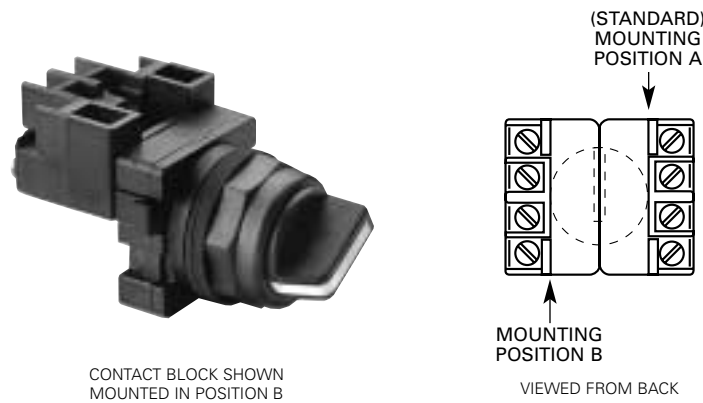
For aluminum clamp ring, add "A" after first dash in catalog number.  
Example – FVPPM6-AIMCRD-FS is full voltage 2 position push-pull release illuminated operator with aluminum clamp ring.

**Note: Standard color cap on 2 position push-pull illuminated operator is red. Additional color caps are available – please consult factory.**



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## Selector Switch Units for Use with FS Control<sup>3</sup>



### 2 Position Selector Switch Units Assembled with Polyester Clamp Ring (partial listing)<sup>1</sup>

| Mounting Position | Contact Symbol | Handle Position<br>Left / Right<br>O=Open, X=Closed | Type of Operator        | Maintained Position | Suffix | Spring Return –<br>Right to Left | Suffix | Spring Return –<br>Left to Right <sup>2</sup> | Suffix |
|-------------------|----------------|---|-------------------------|---------------------|--------|----------------------------------|--------|---|--------|
| A&B               |                | <b>O X</b><br><b>X O</b>                            | Standard                | SS02-SHWE-FS        | 55TS   | SRORL-SHWE-FS                    | 60TS   | SROLR-SHWE-FS                                 | 63TS   |
|                   |                |   | Lever                   | SS02-SLWE-FS        | 56TS   | SRORL-SLWE-FS                    | 61TS   | SROLR-SLWE-FS                                 | 64TS   |
|                   |                |   | Key Locking Pos<br>Left | K0SS2-KL-FS         | 57TS   | KOSRRL-KLFS                      | 62TS   | —   | —      |
|                   |                |   | Right                   | K0SS2-KR-FS         | 58TS   | —                                | —      | —   | —      |
|                   |                |   | Both                    | K0SS2-KLR-FS        | 59TS   | —                                | —      | —   | —      |

For aluminum clamp ring on standard or lever, add "A" after first dash in catalog number. Example – SS02-ASHWE-FS is standard 2 position selector switch unit maintained position with aluminum clamp ring. For aluminum clamp ring on key, add "A" to beginning of catalog number. Example – AKOSS2-KL-FS is 2 position key selector switch key locking left with aluminum clamp ring. Optional contact sequences available upon request. Contact block mounted standard in "A" position. To order additional contact block for "B" mounting position, add "/FS" to the end of the catalog number.

### 3 Position Selector Switch Units Assembled with Polyester Clamp Ring (partial listing)<sup>1</sup>

| Mounting Position | Contact Symbol | Handle Position<br>Left/Center/Right<br>O=Open, X=Closed | Type of Operator                | Maintained Position | Suffix | Spring Return –<br>Left to Center | Suffix | Spring Return –<br>Right to Center | Suffix | Spring Return –<br>Either to Center | Suffix |
|-------------------|----------------|--|---------------------------------|---------------------|--------|-----------------------------------|--------|------------------------------------|--------|-------------------------------------|--------|
| A                 |                | <b>X O O</b><br><b>O X O</b>                             | Standard                        | SSO3-SHWE-FS        | 65TS   | SRORLC-SHWE-FS                    | 73TS   | SRORC-SHWE-FS                      | 81TS   | SROLRC-SHWE-FS                      | 89TS   |
|                   |                |  | Lever                           | SSO3-SLWE-FS        | 66TS   | SRORLC-SLWE-FS                    | 74TS   | SRORC-SLWE-FS                      | 82TS   | SROLRC-SLWE-FS                      | 90TS   |
|                   |                |  | Key Locking Pos<br>Left         | K0SS3-KL-FS         | 67TS   | KOSRLC-KL-FS                      | 75TS   | KOSRRC-KL-FS                       | 83TS   | KOSRLRC-KL-FS                       | 91TS   |
|                   |                |  | Right                           | K0SS3-KR-FS         | 68TS   | KOSRLC-KR-FS                      | 76TS   | KOSRRC-KR-FS                       | 84TS   | KOSRLRC-KR-FS                       | 92TS   |
|                   |                |  | Both                            | K0SS3-KC-FS         | 69TS   | KOSRLC-KC-FS                      | 77TS   | KOSRRC-KC-FS                       | 85TS   | KOSRLRC-KC-FS                       | 93TS   |
| B                 |                | <b>O O X</b><br><b>O X O</b>                             | Key Locking Pos<br>Left & Right | KOSS3-KLR-FS        | 70TS   | KOSRLC-KLR-FS                     | 78TS   | KOSRRC-KLR-FS                      | 86TS   | KOSRLRC-KLR-FS                      | 94TS   |
|                   |                |  | Left & Center                   | KOSS3-KLC-FS        | 71TS   | KOSRLC-KLC-FS                     | 79TS   | KOSRRC-KLC-FS                      | 87TS   | KOSRLRC-KLC-FS                      | 95TS   |
|                   |                |  | Right & Center                  | KOSS3-KRC-FS        | 72TS   | KOSRLC-KRC-FS                     | 80TS   | KOSRRC-KRC-FS                      | 88TS   | KOSRLRC-KRC-FS                      | 96TS   |

For aluminum clamp ring on standard or lever, add "A" after first dash in catalog number. Example – SSO3-ASLWE-FS is lever 3 position selector switch unit maintained position with aluminum clamp ring. For aluminum clamp ring on key, add "A" to beginning of catalog number. Example – AKOSS3-KLR-FS is 3 position key selector switch key locking left and right with aluminum clamp ring. Optional contact sequences available upon request. Specific key removable positions are available – consult factory. Contact block mounted standard in "A" position. To order additional contact block for "B" mounting position, add "/FS" to the end of the catalog number.

#### Footnotes

- Catalog numbers for standard and lever operators identify black operators with white color insert. Consult factory for other available colors.
- Spring Return Left to Right uses a reverse cam and the contact block selection is the opposite as shown as standard.

## Pilot Lights for Use with FS Control<sup>3</sup>

### Standard Pilot Lights Unit Complete Less Cap

| Type                           | Volts                  | Catalog Number | Suffix |
|--------------------------------|------------------------|----------------|--------|
| Transformer 50/60 Hz           | 120 AC                 | TFLU120        | 97TS   |
|                                | 240 AC                 | TFLU240        | 98TS   |
|                                | 480 AC                 | TFLU480        | 99TS   |
|                                | 277 AC                 | TFLU277        | 100TS  |
| Full Voltage Type              | 6 AC/DC                | FVLU6          | 101TS  |
|                                | 12 AC/DC               | FVLU12         | 102TS  |
|                                | 24 AC/DC               | FVLU24         | 103TS  |
|                                | 120 AC/DC <sup>2</sup> | FVLU120        | 104TS  |
| Neon Type <sup>1</sup>         | 120 AC/DC              | FVLU120N       | 105TS  |
|                                | 240 AC/DC              | FVLU240N       | 106TS  |
|                                | 480 AC/DC              | FVLU480N       | 107TS  |
| Incandescent                   | 120 AC/DC              | RLU120I        | 108TS  |
|                                | 240 AC/DC              | RLU240I        | 109TS  |
| LED Resistor Type <sup>3</sup> | 120 AC/DC              | RLU120L        | 110TS  |
|                                | 240 AC/DC              | RLU240L        | 111TS  |
| Dual Input Remote Test         | 120 AC/DC              | RTL120         | 112TS  |
|                                | 240 AC/DC              | RTL240         | 113TS  |

#### Footnotes

- Neon lights are available with red or green lamps. Add suffix letter "R" or "G" respectively to designate color. Use amber, clear or red cap only for red neon lights; green or clear cap only for green neon lights.
- 120 Volt incandescent lamps are not recommended when the unit is subjected to shock and/or vibration. A transformer, resistor, neon or LED unit will provide longer lamp life.
- Specify LED lamp color. Add suffix letter "R" for red, "G" for green and "Y" for yellow (amber). Use amber, clear or red cap only for red lights; green or clear cap only for green lights; red, clear or amber for yellow lights.

### Push-to-Test Pilot Lights Unit Complete Less Cap

| Type                           | Volts                  | Catalog Number | Suffix |
|--------------------------------|------------------------|----------------|--------|
| Transformer 50/60 Hz           | 120 AC                 | TFPTT120FS     | 114TS  |
|                                | 240 AC                 | TFPTT240FS     | 115TS  |
|                                | 480 AC                 | TFPTT480FS     | 116TS  |
| Full Voltage Type              | 6 AC/DC                | FVPTT6FS       | 117TS  |
|                                | 12 AC/DC               | FVPTT12FS      | 118TS  |
|                                | 24 AC/DC               | FVPTT24FS      | 119TS  |
|                                | 120 AC/DC <sup>2</sup> | FVPTT120FS     | 120TS  |
| Neon Type <sup>1</sup>         | 120 AC/DC              | FVPTT120NFS    | 121TS  |
|                                | 240 AC/DC              | FVPTT240NFS    | 122TS  |
|                                | 480 AC/DC              | FVPTT480NFS    | 123TS  |
| Incandescent Resistor Type     | 120 AC/DC              | RLPTT120FS     | 124TS  |
| LED Resistor Type <sup>3</sup> | 120 AC/DC              | RLPTT120LFS    | 125TS  |

#### Footnotes

- Neon lights are available with red or green lamps. Add suffix letter "R" or "G" respectively to designate color. Use amber, clear or red cap only for red neon lights; green or clear cap only for green neon lights.
- 120 Volt incandescent lamps are not recommended when the unit is subjected to shock and/or vibration. A transformer, resistor, neon or LED unit will provide longer lamp life.
- Specify LED lamp color. Add suffix letter "R" for red, "G" for green and "Y" for yellow (amber). Use amber, clear or red cap only for red lights; green or clear cap only for green lights; red, clear or amber for yellow lights.
- Catalog numbers are for extended color caps. For flush guarded color caps, add suffix "EECR" to the catalog number.



### Color Caps for Standard Pilot Lights

| Color Cap with Polyester Clamp Ring |                |        |
|-------------------------------------|----------------|--------|
| Color                               | Catalog Number | Suffix |
| Amber                               | PLLAR          | 126TS  |
| Blue                                | PLLBE          | 127TS  |
| Clear                               | PLLCR          | 128TS  |
| Green                               | PLLGN          | 129TS  |
| Red                                 | PLLRD          | 130TS  |
| White                               | PLLWE          | 131TS  |

For aluminum clamp ring, add "A" prefix to color cap catalog number. Example – APLLBE is blue color cap for standard pilot light with aluminum clamp ring.

### LED Lamps

Transformer lights and full voltage 6, 12 and 24 volt lights can be provided with solid state long life LED lamps in place of the standard incandescent lamps. Adalet's LED lamps are in a miniature bayonet base for direct interchangeability and feature an ultra bright 4 LED cluster with light output comparable to a standard type 755 incandescent lamp. The 4 LEDs are built into two circuits for redundancy and include internal current limiting resistors. Lamps are available in red, green, and yellow.

### How to Order

Add the letter "L" plus the first letter of the color to the light catalog number.

**Example:** Catalog number TFLU120LR would be a transformer light with red LED lamp.

### Color Caps for Push-to-Test Pilot Lights<sup>4</sup>

| Color Cap with Polyester Clamp Ring |                |        |
|-------------------------------------|----------------|--------|
| Color                               | Catalog Number | Suffix |
| Amber                               | IPBCAR         | 30TS   |
| Blue                                | IPBCBE         | 31TS   |
| Clear                               | IPBCCR         | 32TS   |
| Green                               | IPBCGN         | 33TS   |
| Red                                 | IPBCRD         | 34TS   |
| White                               | IPBCWE         | 35TS   |

For aluminum clamp ring, add "A" prefix to color cap catalog number. Example – AIPBCBE is blue color cap for push-to-test pilot light with aluminum clamp ring.

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## Legend Plates for Use with FS Control<sup>3</sup>

### Standard Legend Plates

| Description | Catalog Number Prefix | Height (inches) | Width (inches) | Characters Per Line | Number of Lines |
|-------------|-----------------------|-----------------|----------------|---------------------|-----------------|
| Standard    | LP                    | 2               | 2              | 16                  | 2               |
| Narrow      | LPN                   | 2               | 1 3/4          | 16                  | 2               |
| Short       | LPS                   | 1 3/4           | 2              | 16                  | 2               |



Legend plates are available in the three styles listed above plus the IEC standard emergency legend plate shown to the right. Standard is black background with white letters except -05 and -28 which are red background with white letters. Other colors are available – consult factory. Plates with special legends are available – consult factory.

### Standard Legends

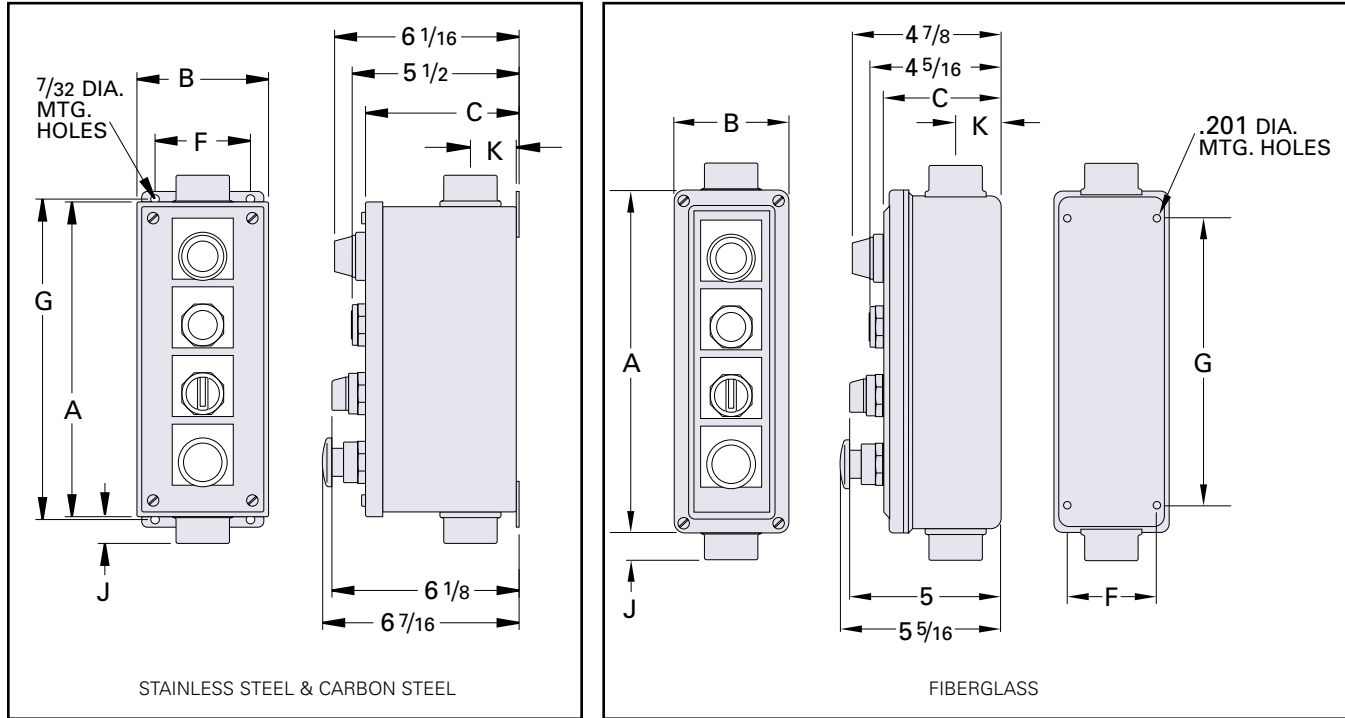
| Pushbuttons and Lights |                    | 2 Position Selector |               |                    | 3 Position Selector |               |              |                    |
|------------------------|--------------------|---------------------|---------------|--------------------|---------------------|---------------|--------------|--------------------|
| Legend                 | Catalog No. Suffix | Legend Left         | Legend Right  | Catalog No. Suffix | Legend Left         | Legend Center | Legend Right | Catalog No. Suffix |
| Auto                   | 01                 | Auto                | Hand          | 50                 | Down                | Off           | Up           | 80                 |
| Close                  | 02                 | Auto                | Manual        | 68                 | Fwd                 | Auto          | Rev          | 81                 |
| Down                   | 03                 | Down                | Up            | 51                 | Fwd                 | Off           | Rev          | 82                 |
| Emergency Stop         | 04                 | Fast                | Slow          | 63                 | Hand                | Off           | Auto         | 83                 |
| Emergency Stop (red)   | 05                 | Fwd                 | Rev           | 52                 | Manual              | Off           | Auto         | 84                 |
| Fast                   | 06                 | Hand                | Auto          | 53                 | Off                 | Run           | Start        | 89                 |
| Forward                | 07                 | Inch                | Run           | 54                 | Off                 | Start         | Run          | 85                 |
| Hand                   | 08                 | Manual              | Auto          | 55                 | Off                 | 1             | 2            | 86                 |
| Inch                   | 09                 | Off                 | On            | 56                 | 1                   | Off           | 2            | 87                 |
| Jog                    | 10                 | On                  | Off           | 57                 | 1                   | 2             | 3            | 88                 |
| Manual                 | 11                 | Open                | Close         | 58                 |                     |               |              |                    |
| Motor Run              | 26                 | Push On             | Push Off      | 64                 |                     |               |              |                    |
| Off                    | 12                 | Pull Start          | Push Stop     | 65                 |                     |               |              |                    |
| On                     | 13                 | Push Off            | Pull On       | 66                 |                     |               |              |                    |
| Overload               | 27                 | Push to Stop        | Pull to Start | 67                 |                     |               |              |                    |
| Open                   | 14                 | Rev                 | Fwd           | 59                 |                     |               |              |                    |
| Power Off              | 15                 | Run                 | Jog           | 60                 |                     |               |              |                    |
| Power On               | 16                 | Slow                | Fast          | 69                 |                     |               |              |                    |
| Push-to-Reset          | 30                 | Start               | Stop          | 61                 |                     |               |              |                    |
| Push-to-Test           | 17                 | Stop                | Start         | 62                 |                     |               |              |                    |
| Reset                  | 18                 |                     |               |                    |                     |               |              |                    |
| Reverse                | 19                 |                     |               |                    |                     |               |              |                    |
| Run                    | 20                 |                     |               |                    |                     |               |              |                    |
| Slow                   | 21                 |                     |               |                    |                     |               |              |                    |
| Start                  | 22                 |                     |               |                    |                     |               |              |                    |
| Stop                   | 23                 |                     |               |                    |                     |               |              |                    |
| Stop (red)             | 28                 |                     |               |                    |                     |               |              |                    |
| Test                   | 24                 |                     |               |                    |                     |               |              |                    |
| Trip                   | 29                 |                     |               |                    |                     |               |              |                    |
| Up                     | 25                 |                     |               |                    |                     |               |              |                    |

#### Options

- Laser engraving on legend plates
- Legend plates available in white, red and aluminum in addition to standard black
- Round, yellow legend plates.

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# FS Control<sup>3</sup> Dimensions



## Dimensions Stainless Steel (X2SS) & Carbon Steel (X2CS)

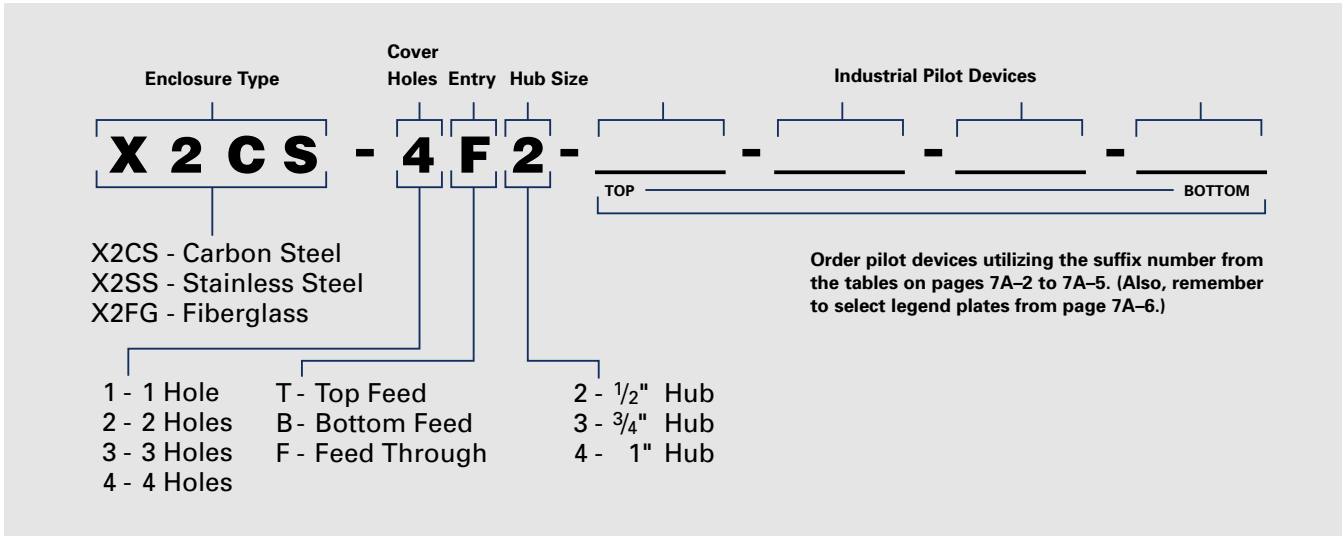
| Body Style | Outside Dimensions |        |   | Mounting Dimensions |        | 1/2" Hubs |       | 3/4" Hubs |       | 1" Hubs |       |
|------------|--------------------|--------|---|---------------------|--------|-----------|-------|-----------|-------|---------|-------|
|            | A                  | B      | C | F                   | G      | J         | K     | J         | K     | J       | K     |
| 1 Hole     | 4 5/16             | 4 5/16 | 5 | 3 1/8               | 4 1/2  | 13/16     | 1 1/2 | 7/8       | 1 1/2 | 1       | 1 1/2 |
| 2 Holes    | 6 5/16             | 4 5/16 | 5 | 3 1/8               | 6 1/2  | 13/16     | 1 1/2 | 7/8       | 1 1/2 | 1       | 1 1/2 |
| 3 Holes    | 8 5/16             | 4 5/16 | 5 | 3 1/8               | 8 1/2  | 13/16     | 1 1/2 | 7/8       | 1 1/2 | 1       | 1 1/2 |
| 4 Holes    | 10 5/16            | 4 5/16 | 5 | 3 1/8               | 10 1/2 | 13/16     | 1 1/2 | 7/8       | 1 1/2 | 1       | 1 1/2 |

## Dimensions Fiberglass (X2FG)

| Body Style | Outside Dimensions |         |       | Mounting Dimensions |       | 1/2" Hubs |       | 3/4" Hubs |       | 1" Hubs |       |
|------------|--------------------|---------|-------|---------------------|-------|-----------|-------|-----------|-------|---------|-------|
|            | A                  | B       | C     | F                   | G     | J         | K     | J         | K     | J       | K     |
| 1 Hole     | 6 5/8              | 3 13/16 | 3 7/8 | 2 15/16             | 4 7/8 | 13/16     | 1 1/2 | 7/8       | 1 1/2 | 1       | 1 1/2 |
| 2 Holes    | 6 5/8              | 3 13/16 | 3 7/8 | 2 15/16             | 4 7/8 | 13/16     | 1 1/2 | 7/8       | 1 1/2 | 1       | 1 1/2 |
| 3 Holes    | 8 7/8              | 3 13/16 | 3 7/8 | 2 15/16             | 7 1/8 | 13/16     | 1 1/2 | 7/8       | 1 1/2 | 1       | 1 1/2 |
| 4 Holes    | 11 1/8             | 3 13/16 | 3 7/8 | 2 15/16             | 9 3/8 | 13/16     | 1 1/2 | 7/8       | 1 1/2 | 1       | 1 1/2 |

# FS Control<sup>3</sup> Catalog Logic

## Catalog Logic/Example



The above example is a carbon steel control station, 4 holes, with feed through and 1/2" hub. Hubs included.

## Circuit Breaker Lighting & Power Distribution Panel Boards

### Explosionproof and Dust-Ignitionproof



**ENCLOSURES:** The housings are copper-free cast aluminum alloy. The housings are Adalet XCE series and have precision ground cover and body joints.

The design offers sufficient gutter space on sides to allow through wiring and easy lug connection. All enclosures are furnished with hinges, stainless steel cover bolts and are provided with Nema 4 gasketing. All covers are removable for clear access to breakers and gutter space. The compact design of rectangular housings permits close grouping on switch racks and other structures. No additional space is required for cover removal except from the front.

**MECHANICAL FEATURES:** The front mounted power panel and lighting panel branch breaker handles can be padlocked either in "off" or "on" position. All breaker handles are spring loaded allowing closing of the cover with breaker toggle in any position. Operating handle shafts have "V" ring gaskets for watertight application.

**ELECTRICAL FEATURES:** Breaker panel chassis, featuring bolt-on circuit breakers, are made by Cutler-Hammer. Chassis for the power distribution XPB2 series provides 480V/277 volt connections. The circuit breakers are rated for 480 volt max.

The Adalet lighting panel board XPB1 series offers 15 through 60 amps, 120, 240 volt bolt on circuit breakers with ground and insulated neutral bars as standard features. The Cutler-Hammer Industrial Ground Fault Circuit Protectors (GFCI 5mA, GFEPD 30mA) and switching neutral breakers are available as optional features.

#### Compliances:

UL, cUL Classified Enclosure  
UL Standard 1203  
CSA Standard C22.2 No. 30

Class I, Groups B, C, D  
Class II, Groups E, F, G  
Class III  
NEMA 4, 7, 9

#### Approvals:

Enclosure Certifications



E81696

8A-1

## Circuit Breaker Lighting Panel Boards

### Explosionproof and Dust-Ignitionproof

#### CLASS I, GROUP B, C, D; CLASS II, GROUPS E, F & G; CLASS III, NEMA 4, 7 & 9

Explosionproof circuit breaker lighting panelboards use cast aluminum alloy housings with hinged cover. External operating handles can be padlocked in "on" or "off" position. Incorporates Cutler-Hammer bolt-on breakers @ 240 volt max. Top feed standard.

8A-2

**BACK FED MAIN BREAKER PANELBOARDS**  
**120/240 VOLT, 1 PHASE 3 WIRE, SOLID NEUTRAL**  
**CHASSIS WITHOUT BRANCH BREAKERS OR OPERATING HANDLES**  
**10,000 AMPERE INTERRUPTING CAPACITY (SYM.)**

| Number of Avail. Breakers | MLO / BFD | Catalog Number | Main Breaker Amperes | Box Size |
|---------------------------|-----------|----------------|----------------------|----------|
| 10                        | BFD       | XPB1-121 B1    | 100                  | A        |
| 16                        | BFD       | XPB1-181 B1    | 100                  | A        |
| 22                        | BFD       | XPB1-241 B1    | 100                  | B        |

**BACK FED MAIN BREAKER PANELBOARDS**  
**120/208 VOLT, 3 PHASE 4 WIRE, SOLID NEUTRAL**  
**CHASSIS WITHOUT BRANCH BREAKERS OR OPERATING HANDLES**  
**10,000 AMPERE INTERRUPTING CAPACITY (SYM.)**

| Number of Avail. Breakers | MLO / BFD | Catalog Number | Main Breaker Amperes | Box Size |
|---------------------------|-----------|----------------|----------------------|----------|
| 9                         | BFD       | XPB1-123 B1    | 100                  | A        |
| 15                        | BFD       | XPB1-183 B1    | 100                  | A        |
| 21                        | BFD       | XPB1-243 B1    | 100                  | B        |



## Circuit Breaker Lighting Panel Boards

### Explosionproof and Dust-Ignitionproof

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**MAIN LUG ONLY PANELBOARDS**  
**1 PHASE 3 WIRE 120/240 VOLT TOP FEED MAIN LUG ONLY**  
**CHASSIS WITHOUT BRANCH BREAKERS OR OPERATING HANDLES**  
**10,000 AMPERE INTERRUPTING CAPACITY (SYM)**

| Number of Breakers | Catalog Number | Main Lug Amperes | Box Size |
|--------------------|----------------|------------------|----------|
| 12                 | XPB1-121L1     | 100              | A        |
| 18                 | XPB1-181L1     | 100              | A        |
| 24                 | XPB1-241L1     | 100              | B        |
| 24                 | XPB1-241L2     | 225              | B        |
| 30                 | XPB1-301L2     | 225              | D        |
| 36                 | XPB1-361L2     | 225              | D        |

**MAIN LUG ONLY PANELBOARDS**  
**3 PHASE 4 WIRE 120/208 VOLT TOP FEED MAIN LUG ONLY**  
**CHASSIS WITHOUT BRANCH BREAKERS OR OPERATING HANDLES**  
**10,000 AMPERE INTERRUPTING CAPACITY (SYM)**

| Number of Breakers | Catalog Number | Main Lug Amperes | Box Size |
|--------------------|----------------|------------------|----------|
| 12                 | XPB1-123L1     | 100              | A        |
| 18                 | XPB1-183L1     | 100              | A        |
| 24                 | XPB1-243L1     | 100              | B        |
| 24                 | XPB1-243L2     | 225              | B        |
| 30                 | XPB1-303L2     | 225              | D        |
| 36                 | XPB1-363L2     | 225              | D        |

**How to order:**

- A) Specify catalog number and voltage
- B) Number of operator handles, single pole, two pole and three pole as required.
- C) Circuit breakers, number of poles and ampere rating.

Unused spaces will be plugged. Top feed standard.

## Circuit Breaker Lighting Panel Boards

### Explosionproof and Dust-Ignitionproof

#### MODIFICATIONS AND OPTIONS

### Branch Breakers - Operating Handles - Components

#### CIRCUIT BREAKER OPERATOR HANDLES INSTALLED IN XPB1 PANEL BOARDS

| Catalog Number | Description                                 | Weight Each |
|----------------|---|-------------|
| XPB1-H1        | For single pole BAB breakers                | 1/4 lb.     |
| XPB1-H2        | For two pole BAB breakers                   | 1/4 lb.     |
| XPB1-H3        | For three pole BAB breakers                 | 1/4 lb.     |
| XPB1-GL        | For single pole GFI ground                  | 1/4 lb.     |
| XPB1-GR        | Fault breakers (specify left or right side) | 1/4 lb.     |

#### BRANCH CIRCUIT BREAKERS INSTALLED IN XPB1 PANEL BOARDS: BOLT-ON THERMAL MAGNETIC BREAKERS 120/240 VOLT 10,000 AMPERE I.C.

| Catalog No. | Description                              |
|-------------|--|
| XPB1-1*     | 1 pole breaker (available in 10-70 amp)  |
| XPB1-2*     | 2 pole breaker (available in 10-100 amp) |
| XPB1-3*     | 3 pole breaker (available in 10-100 amp) |

\*Add ampere rating of the branch breaker when ordering.

#### GROUND FAULT CIRCUIT PROTECTORS 120/240 VOLT 10,000 AMPERE I.C. STD. 22,000 AMPERE I.C. OPTIONAL

| Catalog No.  | Description                           |
|--------------|---------------------------------------|
| XPB1-1GFCl*  | 1 pole GFCI Breaker 5 MA Sensitivity  |
| XPB1-2GFCl*  | 2 pole GFCI Breaker 5 MA Sensitivity  |
| XPB1-1GFEPD* | 1 pole GFCI Breaker 30 MA Sensitivity |
| XPB1-2GFEPD* | 2 pole GFCI Breaker 30 MA Sensitivity |

Above Available with special application Bell Alarm or Auxiliary Switch.

\*Add ampere rating of the branch breaker when ordering

#### BOLT-ON SWITCHING NEUTRAL BREAKERS 120/240 VOLT 10,000 AMPERE I.C.

| Catalog No. | Description   |
|-------------|---|
| XPB1-N1*    | 1 pole switching to neutral<br>Requires two spaces (available in 15-30 amp)   |
| XPB1-N2*    | 2 pole switching to neutral<br>Requires three spaces (available in 15-30 amp) |

\*Add ampere rating of the branch breaker when ordering

#### OPTIONAL FEATURES MODIFICATIONS:

| Suffix Letter | Description                     |
|---------------|---------------------------------|
| E             | Breather Drain (not type 4)     |
| EE            | Breather and drain (not type 4) |
| L1            | Epoxy Coating Outside           |
| L2            | Epoxy Coating Inside/Outside    |
| NP            | Lamacoid Nameplate              |
| CU            | Copper Bus Bar                  |
| Q             | Quad-Lead Bolts                 |

## Circuit Breaker Power Distribution Panel Boards

### Explosionproof and Dust-Ignitionproof

#### CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G; CLASS II, NEMA 4, 7 & 9

Explosionproof circuit breaker power panelboards use cast aluminum alloy housings with hinged cover. External operating handles can be padlocked in "on" or "off" positions. Incorporates Cutler-Hammer bolt-on breakers @ 480 volt max. Top feed standard.

8A-5

#### BACK FED MAIN BREAKER PANELBOARDS 277/480 VOLT, 3 PHASE 4 WIRE, SOLID NEUTRAL CHASSIS WITHOUT BRANCH BREAKERS OR OPERATING HANDLES 14,000 AMPERE INTERRUPTING CAPACITY (SYM.)

| Number of Avail. Breakers | MLO / BFD | Catalog Number | Main Breaker Amperes | Box Size |
|---------------------------|-----------|----------------|----------------------|----------|
| 9                         | BFD       | XPB2-123B1     | 100                  | A        |
| 15                        | BFD       | XPB2-183B1     | 100                  | A        |
| 21                        | BFD       | XPB2-243B1     | 100                  | B        |

100 ampere main lugs conductor size #12 -1/0 CU/AL.

225 ampere main lugs conductor size #6-300 MCM CU/AL.

#### How to order:

- Specify catalog number and voltage
- Number of operator handles, single pole, two pole and three pole as required.
- Circuit breakers, number of poles and ampere rating

Unused spaces will be plugged. Top feed standard.

#### MAIN LUG ONLY PANELBOARDS 277/480 VOLT, 3 PHASE 4 WIRE CHASSIS WITHOUT BRANCH BREAKERS OR OPERATING HANDLES 14,000 AMPERES INTERRUPTING CAPACITY (SYM)

| Number of Breakers | Catalog Number | Main Lug Amperes | Box Size |
|--------------------|----------------|------------------|----------|
| 12                 | XPB2-123L1     | 100              | A        |
| 18                 | XPB2-183L1     | 100              | A        |
| 24                 | XPB2-243L1     | 100              | B        |
| 24                 | XPB2-243L2     | 225              | B        |
| 30                 | XPB2-303L2     | 225              | D        |
| 36                 | XPB2-363L2     | 225              | D        |

#### Compliances:

UL, cUL Classified Enclosure

UL Standard 1203

CSA Standard C22.2 No. 30

Class I, Groups B, C, D

Class II, Groups E, F, G

NEMA 4, 7, 9

**How to order:** Specify catalog number, operator handles and circuit breakers as separate items. Single pole breakers use 1 handle space, 1 handle. 2 pole, 2 spaces, 1 handle. 3 pole, 3 spaces, 1 handle. Unused spaces will be plugged. Top feed standard.

#### Approvals:

Enclosure Certifications



E81696



## Circuit Breaker Power Distribution Panel Boards

### Explosionproof and Dust-Ignitionproof

8A-6

## MODIFICATIONS AND OPTIONS

### Branch Breakers - Operating Handles - Components

#### BREAKER OPERATOR HANDLES INSTALLED IN XPB2 PANEL BOARDS

| Catalog Number | Description                    | Weight Each |
|----------------|--------------------------------|-------------|
| XPB2-H1        | For 1, 2 or 3-pole GHB breaker | 1/4 lb.     |

#### BRANCH CIRCUIT BREAKERS INSTALLED IN XPB2 PANEL BOARDS:

##### BOLT-ON THERMAL MAGNETIC BREAKERS

| Catalog No. | Description   |
|-------------|---|
| XPB2-1*     | 1 pole GHB breaker (available in 15-100 amp)<br>277 volt A.C. |
| XPB2-2*     | 2 pole GHB breaker (available in 15-100 amp)<br>480 volt A.C. |
| XPB2-3*     | 3 pole GHB breaker (available in 15-100 amp)<br>480 volt A.C. |

\*Add ampere rating of the branch breaker when ordering.

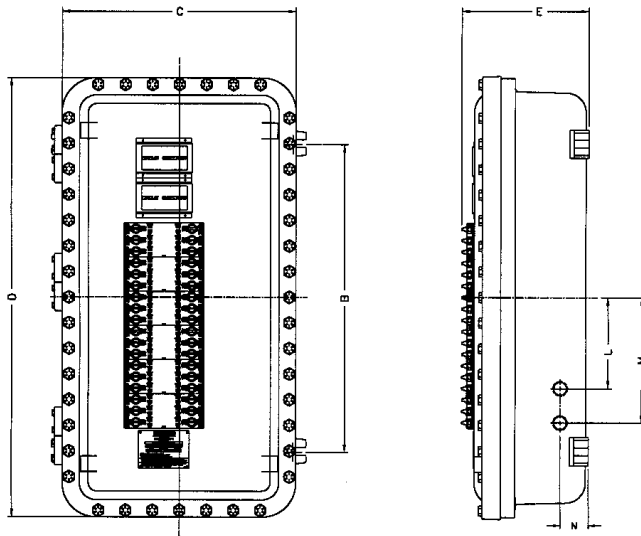
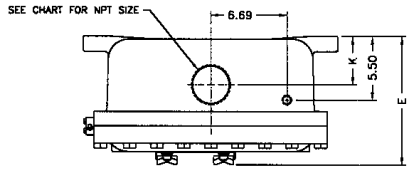
#### OPTIONAL FEATURES MODIFICATIONS:

| Suffix Letter | Description                     |
|---------------|---------------------------------|
| E             | Breather Drain (not type 4)     |
| EE            | Breather and drain (not type 4) |
| L1            | Epoxy Coating Outside           |
| L2            | Epoxy Coating Inside/Outside    |
| NP            | Lamacoid Nameplate              |
| CU            | Copper Bus Bar                  |
| Q             | Quad-Lead Bolts                 |

# Circuit Breaker Lighting and Distribution Panel Boards

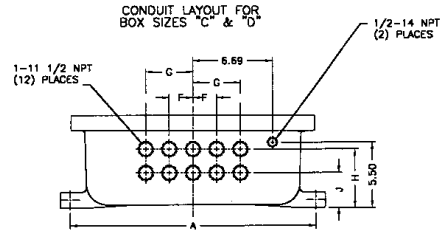
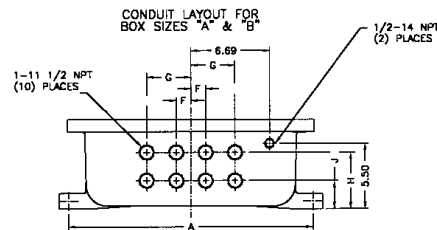
## Explosionproof and Dust-Ignitionproof

### ENCLOSURE DIMENSIONS & DATA SHEET



CONDUIT ENTRIES

| Enclosure Size | Conduit Entries |        |        |        |
|----------------|-----------------|--------|--------|--------|
|                | 1/2" NPT        | 1" NPT | 2" NPT | 3" NPT |
| A              | Top             | (1)    | —      | (1)    |
|                | Side            | —      | (2)    | —      |
|                | Bottom          | (1)    | (8)    | —      |
| B              | Top             | (1)    | —      | (1)    |
|                | Side            | —      | (2)    | —      |
|                | Bottom          | (1)    | (8)    | —      |
| C              | Top             | (1)    | —      | (1)    |
|                | Side            | —      | (2)    | —      |
|                | Bottom          | (1)    | (10)   | —      |
| D              | Top             | (1)    | —      | (1)    |
|                | Side            | —      | (2)    | —      |
|                | Bottom          | (1)    | (10)   | —      |



| Box Size | Internal Dimensions | (A) Mtg Width | (B) Mtg Height | (C) Overall Width | (D) Overall Height | (E) Overall Depth | Mtg. Bolt Size |
|----------|---------------------|---------------|----------------|-------------------|--------------------|-------------------|----------------|
| A        | 161606              | 19 3/4        | 11             | 20 7/8            | 20 7/8             | 11                | 5/8            |
| B        | 162406              | 19 3/4        | 18 3/8         | 20 7/8            | 28 7/8             | 11 1/2            | 5/8            |
| C        | 162806              | 19 3/4        | 22 1/2         | 20 1/2            | 32 1/2             | 10 3/4            | 5/8            |
| D        | 163406              | 19 3/4        | 27             | 20 1/2            | 38 1/2             | 10 3/4            | 5/8            |

| Box Size | F     | G     | H       | J       | K      | L | M     | N     | Weight lbs. |
|----------|-------|-------|---------|---------|--------|---|-------|-------|-------------|
| A        | 1 1/4 | 3 3/4 | 4 3/4   | 2 3/8   | 3 5/8  | 1 | 3 1/2 | 2 1/2 | 160         |
| B        | 1 1/4 | 3 3/4 | 4 3/4   | 2 3/8   | 3 5/8  | 3 | 5     | 2 1/2 | 220         |
| C        | 2     | 4     | 4 15/16 | 2 15/16 | 4 3/16 | 5 | 7     | 2 1/2 | 235         |
| D        | 2     | 4     | 4 15/16 | 2 15/16 | 4 3/16 | 8 | 11    | 2 1/2 | 285         |

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## Explosionproof Pilot Devices

### CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G



#### APPLICATIONS

Adalet operators are for use in control circuits functioning in environments containing hazardous gases, vapors or dusts. These heavy duty pilot lights, pushbuttons and selector switches are suitable for use in Class I, Groups B, C & D hazardous gas; Class II, Groups E, F & G dust atmospheres. Most are suitable for weather-tight (N4) applications.



#### FEATURES:

- Most operators are suitable for NEMA 3, 4, NEMA 7, 9, rain-tight, water-tight in hazardous environments.
- Two lengths available for either surface or panel mount.
- Knurled caps are standard with black anodized finish.
- Optional: specify color-coding of operator caps (no additional cost).
- Pilot light transformers available for 240 volts.
- Special length pilot light wiring leads available.
- Screw terminals available suffix T.
- Coated to minimize corrosion and provide for ease of installation.
- Operators are 3/4" NPSM standard.
- Stainless steel shafts are standard (except pilot light pushbutton operator).



#### Consult factory for UL/CSA certification availability.

**Compliances:** NEC Class I, Groups B, C & D - Class II, Groups E, F, G

UL Standard 698 - Standard C22.2 No. 30



#### Notes:

Where reference is made to Class I and Class II hazardous locations, the equipment is suitable for use in both Division 1 and Division 2 hazardous locations.

9A-1

The Adalet engineering department is available to assist in the selection of custom explosionproof housings for your products.

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## Explosionproof and Dust-tight Pilot Lights

### CLASS I, GROUPS C & D; CLASS II, GROUPS E, F & G; NEMA 3, 4, 7, 9

Explosionproof pilot lights are suitable for panel or surface mount applications. All pilot lights are of sealed construction and can be relamped from the front by removal of lens cap.

All pilot lights are made with 3/4" NPSM threads. All pilot lights have 8" flexible leads, other lengths on special order, or screw terminals.

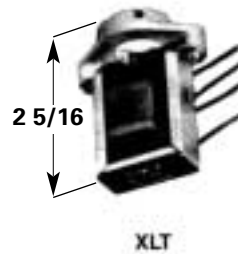
All lens caps are black anodized aluminum finish. For color coding we will furnish at no additional charge the following color combinations: lens amber-cap gold, lens blue-cap blue, lens clear-cap natural aluminum, lens green-cap green, lens red-cap red, lens white-cap natural aluminum. Specify on orders.

**Maximum installation thickness 1 15/16" on Long Series, 3/4" on Short Series.**

This standard series of pilot lights is equipped with candelabra base receptacles and 6 watt 120 volt 6S6 clear 1500 hr. avg. lamps. Also available with 6, 12, 24, 30, 50, 75 and 135 volt lamps. Specify voltage desired.



Legend Plates, see page 9A-18



| Catalog Number<br>Long Series | Catalog Number<br>Short Series | Description | Weight Each<br>Pounds |
|-------------------------------|--------------------------------|-------------|-----------------------|
| XLA                           | XLSA                           | Amber Lens  | 1/2                   |
| XLB                           | XLSB                           | Blue Lens   | 1/2                   |
| XLC                           | XLSC                           | Clear Lens  | 1/2                   |
| XLG                           | XLSG                           | Green Lens  | 1/2                   |
| XLR                           | XLSR                           | Red Lens    | 1/2                   |
| XLW                           | XLSW                           | White Lens  | 1/2                   |

\*Add suffix T to P/N for screw terminal

This special series of pilot lights is equipped with slide base receptacles and 120 volt 5000 hr. avg. lamps with slide base. Also available with 6, 12, 24, 48 and 60 volt lamps. Specify voltage desired.

| Catalog Number<br>Long Series | Catalog Number<br>Short Series | Description | Weight Each<br>Pounds |
|-------------------------------|--------------------------------|-------------|-----------------------|
| XLAS                          | XLSAS                          | Amber Lens  | 1/2                   |
| XLBS                          | XLSBS                          | Blue Lens   | 1/2                   |
| XLCS                          | XLSCS                          | Clear Lens  | 1/2                   |
| XLGS                          | XLSGS                          | Green Lens  | 1/2                   |
| XLRS                          | XLSRS                          | Red Lens    | 1/2                   |
| XLWS                          | XLSWS                          | White Lens  | 1/2                   |

\*Add suffix T to P/N for screw terminal

#### Pilot Light Transformers

| Catalog Number | Description          | Weight Each<br>Pounds |
|----------------|----------------------|-----------------------|
| XLT 240        | 240 to 120 volt, 6VA | 1                     |

One transformer required for each pilot light. Adapter furnished for mounting on threaded pilot light stem, or can be mounted to housing as space requires.

## Explosionproof and Dust-tight Pilot Lights

### CLASS I, GROUPS C & D; CLASS II, GROUPS E, F & G; NEMA 3, 4, 7, 9



XL Long Series  
(Panel Mount)



XL Short Series  
(Surface Mount)



Replacement Cap

#### Guarded Pilot Lights

Explosionproof pilot lights are suitable for panel or surface mount applications. All pilot lights are of sealed construction and can be relamped from the front by removal of lens cap.

All pilot lights are made with 3/4" NPSM threads. All pilot lights have 8" flexible leads, other lengths on special order, or screw terminals.

All lens caps are black anodized aluminum finish.

**Maximum installation thickness 1 15/16" on Long Series (Panel Mount), 3/4" on Short Series (Surface Mount).**

This standard series of pilot lights is equipped with candelabra base receptacles and 6 watt 120 volt 6S6 clear 1500 hr. avg. lamps. Also available with 6, 12, 24, 30, 50, 75 and 135 volt lamps. Specify voltage desired.

| Catalog No.<br>Panel Mount<br>(Long Series) | Catalog No.<br>Surface Mount<br>(Short Series) | Description | Weight<br>Each<br>Pounds |
|---|--|-------------|--------------------------|
| XLA-G                                       | XLSA-G   | Amber Lens  | 1/2                      |
| XLB-G                                       | XLSB-G   | Blue Lens   | 1/2                      |
| XLC-G                                       | XLSC-G   | Clear Lens  | 1/2                      |
| XLG-G                                       | XLGG-G   | Green Lens  | 1/2                      |
| XLR-G                                       | XLSR-G   | Red Lens    | 1/2                      |
| XLW-G                                       | XLSW-G   | White Lens  | 1/2                      |

\*Add suffix T to P/N for screw terminal

This special series of pilot lights is equipped with slide base receptacles and 120 volt 5000 hr. avg. lamps with slide base. Also available with 6, 12, 24, 48 and 60 volt lamps. Specify voltage desired.

| Catalog No.<br>Panel Mount<br>(Long Series) | Catalog No.<br>Surface Mount<br>(Short Series) | Description | Weight<br>Each<br>Pounds |
|---|--|-------------|--------------------------|
| XLAS-G                                      | XLSAS-G  | Amber Lens  | 1/2                      |
| XLBS-G                                      | XLSBS-G  | Blue Lens   | 1/2                      |
| XLCS-G                                      | XLSCS-G  | Clear Lens  | 1/2                      |
| XLGS-G                                      | XLGS-G   | Green Lens  | 1/2                      |
| XLRS-G                                      | XLSRS-G  | Red Lens    | 1/2                      |
| XLWS-G                                      | XLSWS-G  | White Lens  | 1/2                      |

\*Add suffix T to P/N for screw terminal

#### Replacement Guarded Lens Cap Assembly

| Catalog Number | Description | Weight Each Pounds |
|----------------|-------------|--------------------|
| XLA-GC         | Amber Lens  | 1/8                |
| XLB-GC         | Blue Lens   | 1/8                |
| XLC-GC         | Clear Lens  | 1/8                |
| XLG-GC         | Green Lens  | 1/8                |
| XLR-GC         | Red Lens    | 1/8                |
| XLW-GC         | White Lens  | 1/8                |

Legend Plates, see page 9A-19.



# Explosionproof and Dust-tight Pilot Lights

## CLASS I, GROUPS C & D; CLASS II, GROUPS E, F & G; NEMA 3, 4, 7, 9

### Guarded Pilot LED Lights

#### LED Advantages:

- 10 Year/100,000 hour service life under normal ambient conditions.
- 1x to 4x more energy efficient.
- Improved resistance to shock and vibration.
- LEDs operate significantly cooler than traditional lamps.
- Ultra bright cluster LED's

Explosionproof pilot LED lights are suitable for panel or surface mount applications. All candelabra base LED lights can be relamped from the front by removal of the lens cap.

All pilot LED lights are made with 3/4" NPSM threads. All pilot LED lights have 8" flexible leads, other lengths on special order, or screw terminal.

Screw terminal available suffix T.

All lens caps are black anodized aluminum finish with clear glass lens.

**Maximum installation thickness: 1-15/16" on Panel Mount (Long Series), 3/4" on Surface Mount (Short Series).**

Consult Adalet for the availability of other voltages.



XL Long Series  
(Panel Mount)



XL Short Series  
(Surface Mount)



Replacement Cap

| Catalog No.<br>Panel Mount<br>(Long Series) | Catalog No.<br>Surface Mount<br>(Short Series) | Description | Weight<br>Each<br>Pounds |
|---|--|-------------|--------------------------|
| XLRL-G                                      | XLSRL-G  | Red         | 1/2                      |
| XLAL-G                                      | XLSAL-G  | Amber       | 1/2                      |
| XLGL-G                                      | XLSGL-G  | Green       | 1/2                      |
| XLWL-G                                      | XLSWL-G  | White       | 1/2                      |
| XLBL-G                                      | XLSBL-G  | Blue        | 1/2                      |

\*Add suffix T to P/N for screw terminal

9A-4

# Explosionproof and Dust-tight Pilot Light Push Buttons

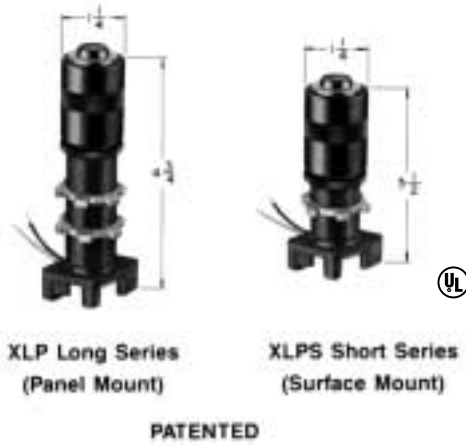
## CLASS I, GROUPS C & D; CLASS II, GROUPS E, F & G; NEMA 7, 9

### Indicator Light/Push Button Push-To-Test Operators

All operators are die cast aluminum alloy. The barrels are all 3/4" NPSM thread. Maximum installation thickness 1 15/16" panel mount, 3/4" surface mount.

Furnished standard with 120 volt slide base lamp. Also available for 6, 12, 24, 28, 48 and 60 volts. Specify when ordering.

For use with BT contact blocks. Contact blocks can be stacked for multiple circuits. Contact blocks are not included with the operators. Order from page 9A-20. For NEMA 4 application, add boot and special legend plate, see page 9A-19.



| For use with series BT contact blocks | Description of operators only | Weight Each Pounds |
|---------------------------------------|-------------------------------|--------------------|
| For Panel Mounting                    |                               |                    |
| XLPA                                  | Amber Lens                    | 3/4                |
| XLPB                                  | Blue Lens                     | 3/4                |
| XLPC                                  | Clear Lens                    | 3/4                |
| XLPG                                  | Green Lens                    | 3/4                |
| XLPR                                  | Red Lens                      | 3/4                |
| XLPW                                  | White Lens                    | 3/4                |
| For Surface Mounting                  |                               |                    |
| XPAS                                  | Amber Lens                    | 1/2                |
| XPBS                                  | Blue Lens                     | 1/2                |
| XLPCS                                 | Clear Lens                    | 1/2                |
| XLPGS                                 | Green Lens                    | 1/2                |
| XLPRS                                 | Red Lens                      | 1/2                |
| XLPSWS                                | White Lens                    | 1/2                |

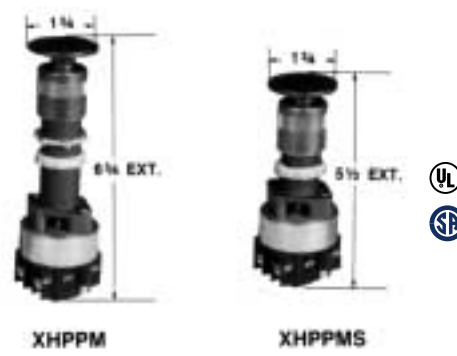
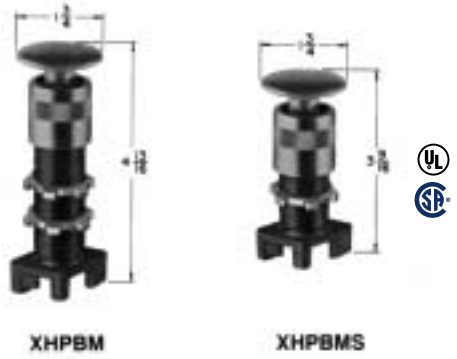
Legend Plates, see page 9A-19.

9A-5

# Explosionproof and Dust-tight Push Buttons

## CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G; NEMA 3, 4, 7, 9

9A-6



### Push Button Operators

All operators are die cast aluminum alloy. The barrels are all 3/4" NPSM thread. Maximum installation thickness 1 3/4" panel mount, 3/4" surface mount.

All operators have black molded nylon buttons. The exposed metal parts are black anodized aluminum. For color coding we will furnish at no additional cost the following color combinations: Red buttons with red metal caps and green buttons with green metal caps. Metal caps are also available in blue, gold or clear with black buttons. Specify colors required.

Red Mushroom head buttons are 1 3/4" diameter anodized aluminum. Also available in black or green.

XHPBPL has padlock attachment on top of cap allowing operator to be locked with the push button depressed.

For use with BT contact blocks. Contact blocks can be stacked for multiple circuits. Contact blocks are not included with the operators. Order from page 9A-20.

XHPPM/XHPPMS require 2" minimum spacing.

| For use with series BT contact blocks | Description of operators only     | Weight Each Pounds |
|---------------------------------------|-----------------------------------|--------------------|
| XHPB                                  | Panel Mount                       | 1/2                |
| XHPBS                                 | Surface Mount                     | 1/2                |
| XHPBM                                 | Red Mushroom Head, Panel Mount    | 1/2                |
| XHPBMS                                | Red Mushroom Head, Surface Mount  | 1/2                |
| XHPBPL                                | W/Padlock devices, Panel Mount    | 3/4                |
| XHPBSPL                               | W/Padlock devices, Surface Mount  | 3/4                |
| XHPPM*                                | Push/Pull switches, Panel Mount   | 3/4                |
| XHPPMS*                               | Push/Pull switches, Surface Mount | 3/4                |

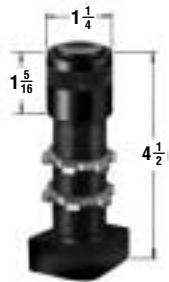
**Legend Plates, see page 9A-19.**

\*Type BT1 contact blocks are included

For extremely wet-dirty location applications, XHPB and XHPBS series are available to be used with protective boots, see page 9A-19.

## Explosionproof and Dust-tight Push Buttons

### CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G; NEMA 3, 4, 7, 9



**XVHPB**



**XVHPBS**



**XVHPBM**



**XVHPBMS**



**XVHPPM**



**XVHPPMS**



**XVHPBPL**



**XVHPBSPL**



#### Push Button Operators

Cost effective modular operator body. The barrels are all 3/4" NPSM thread aluminum. Maximum installation thickness 1 3/4" panel mount, 3/4" surface mount.

All operators have black molded nylon buttons. The exposed metal parts are black anodized aluminum. For color coding we will furnish at no additional cost the following color combinations: Red buttons with red metal caps and green buttons with green metal caps. Metal caps are also available in blue, gold or clear with black buttons. Specify colors required.

Red Mushroom head buttons are 1 3/4" diameter anodized aluminum. Also available in black or green.

XVHPBPL has padlock attachment on top of cap allowing operator to be locked with the push button depressed.

For use with BT contact blocks. Contact blocks can be stacked for multiple circuits. Contact blocks are not included with the operators. Order from page 9A-20.

XVHPPM/XVHPPMS require 2" minimum spacing.

| For use with series BT contact blocks | Description of operators only     | Weight Each Pounds |
|---------------------------------------|-----------------------------------|--------------------|
| XVHPB                                 | Panel Mount                       | 1/2                |
| XVHPBS                                | Surface Mount                     | 1/2                |
| XVHPBM                                | Red Mushroom Head, Panel Mount    | 1/2                |
| XVHPBMS                               | Red Mushroom Head, Surface Mount  | 1/2                |
| XVHPBPL                               | W/Padlock devices, Panel Mount    | 3/4                |
| XVHPBSPL                              | W/Padlock devices, Surface Mount  | 3/4                |
| XVHPPM*                               | Push/Pull switches, Panel Mount   | 3/4                |
| XVHPPMS*                              | Push/Pull switches, Surface Mount | 3/4                |

Legend Plates, see page 9A-19.

\*Type BT1 contact blocks are included

For extremely wet-dirty location applications, XVHPB and XVHPBS series are available to be used with protective boots, see page 9A-19.

9A-7

## Explosionproof and Dust-tight Push Buttons

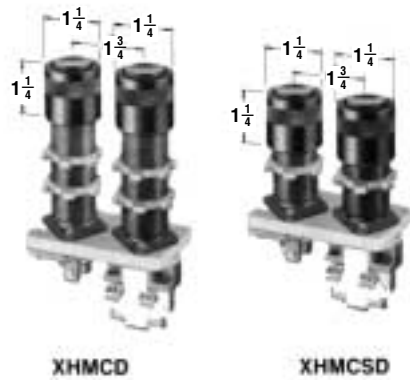
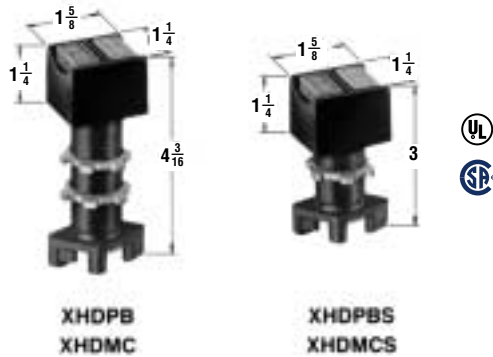
### CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G; NEMA 3, 4, 7, 9

#### Dual Push Button Operator or Maintained Contact Unit

All operators are die cast aluminum alloy. The barrels are all 3/4" NPSM thread. Maximum installation thickness 1 15/16" panel mount, 3/4" surface mount.

For use with BT contact blocks. Contact blocks can be stacked for multiple circuits. Contact blocks are not included with XHD operators. Order from page 9A-20.

9A-8



 Group CD Only

| For use with series BT contact blocks | Description of operators only     | Weight Each Pounds |
|---------------------------------------|-----------------------------------|--------------------|
| XHDPB                                 | Panel Mount - momentary*          | 1/2                |
| XHDPBS                                | Surface Mount - momentary*        | 1/2                |
| XHDMC                                 | Maintained Contact, Panel Mount   | 1/2                |
| XHDMCS                                | Maintained Contact, Surface Mount | 1/2                |

\*Two contacts in the BT contact block are actuated independently

| Furnished with one contact block | Description of operators only   | Weight Each Pounds |
|----------------------------------|---|--------------------|
| XHMCD                            | Maintained Contact Unit<br>Two Push Buttons, Panel Mount  | 1                  |
| XHMCS                            | Maintained Contact Unit<br>Two Push Buttons, Surface Mount  | 1                  |
| XHMCD                            | Maintained Contact Unit<br>Two Push Buttons, Panel Mount<br>With one mushroom and one standard button   | 1                  |
| XHMCS                            | Maintained Contact Unit<br>Two Push Buttons, Surface Mount<br>With one mushroom and one standard button | 1                  |

The XHMCD and XHMCS maintained contact units require only one contact block. These units consist of two operators and require two mounting positions.

**Legend Plates, see page 9A-19.**

# Explosionproof and Dust-tight Selector Switches

## CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G; NEMA 3, 4, 7, 9

### Selector Switch Operators

All operators are die cast aluminum alloy. The barrels are all 3/4" NPSM thread. Maximum installation thickness: 1 15/16" panel mount, 3/4" surface mount. Selector switch operators can be used as 2 position or 3 position by removal of knob and rotating knob 180°. The actuator cam which operates the plungers on the contact blocks can be readily changed for various contact sequences. FOR 3 POSITION, ORDERS MUST STATE CAM NUMBER. Contact blocks are not included with XHSS operators. Select contact block and sequence operating cam from contact block page 9A-20.

All operators have black molded nylon knobs. The exposed metal parts are black anodized aluminum. Metal caps are also available in blue, gold, clear, red or green with black knobs. Specify colors required.



Switch Included

| For use with series BT contact blocks | Description of operators only                     | Weight Each Pounds |
|---------------------------------------|---|--------------------|
| XHSS                                  | Panel Mount                                       | 1/2                |
| XHSSS                                 | Surface Mount                                     | 1/2                |
| XHSC                                  | Spring Return to Center from Right and Left       | 1/2                |
| XHSSC                                 | Panel Mount                                       |                    |
|                                       | Spring Return to Center from Right and Left       | 1/2                |
|                                       | Surface Mount                                     |                    |
| XHSR                                  | Spring Return to Center from Right, Maintain Left | 1/2                |
|                                       | Panel Mount                                       |                    |
| XHSSR                                 | Spring Return to Center from Right, Maintain Left | 1/2                |
|                                       | Surface Mount                                     |                    |
| XHSL                                  | Spring Return to Center from Left, Maintain Right | 1/2                |
|                                       | Panel Mount                                       |                    |
| XHSSL                                 | Spring Return to Center from Left, Maintain Right | 1/2                |
|                                       | Surface Mount                                     |                    |
| XHSSPL                                | W/padlock device Panel Mount                      | 3/4                |
| XHSSSPL                               | W/padlock device Surface Mount                    | 3/4                |
| XSSL-4P                               | Panel Mount, Four Position Selector Switch        | 3/4                |
| XSSL-5P                               | Panel Mount, Five Position Selector Switch        | 3/4                |
| XSSS-4P                               | Surface Mount, Four Position Selector Switch      | 3/4                |
| XSSS-5P                               | Surface Mount, Five Position Selector Switch      | 3/4                |

For extremely wet-dirty location applications, use Protective Boots Page 9A-19. EXCLUDES PADLOCK DEVICES.

Legend Plates, see page 9A-19.

9A-9

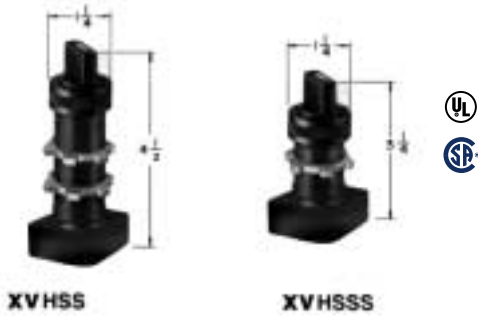
## Explosionproof and Dust-tight Selector Switches

### CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G; NEMA 3, 4, 7, 9

#### Selector Switch Operators

Cost effective modular operator body. The barrels are all 3/4" NPSM thread aluminum. Maximum installation thickness: 1 15/16" panel mount, 3/4" surface mount. Selector switch operators can be used as 2 position or 3 position by removal and rotation of the cam actuator. The cam which operates the plungers on the contact blocks can be changed for various contact sequences. FOR 3 POSITION, ORDERS MUST STATE CAM NUMBER. Contact blocks are not included with XVHSS operators. Select contact block and sequence operating cam from contact block page 9A-20.

All operators have black molded nylon knobs. The exposed metal parts are black anodized aluminum. Metal caps are also available in blue, gold, clear, red or green with black knobs. Specify colors required.



| For use with series BT contact blocks | Description of operators only  | Weight Each Pounds |
|---------------------------------------|--------------------------------|--------------------|
| XVHSS                                 | Panel Mount                    | 1/2                |
| XVHSSS                                | Surface Mount                  | 1/2                |
| XVHSSSPL                              | W/padlock device Panel Mount   | 3/4                |
| XVHSSSPL                              | W/padlock device Surface Mount | 3/4                |

Legend Plates, see page 9A-19.

For extremely wet-dirty location applications, use Protective Boots Page 9A-19. EXCLUDES PADLOCK DEVICES.

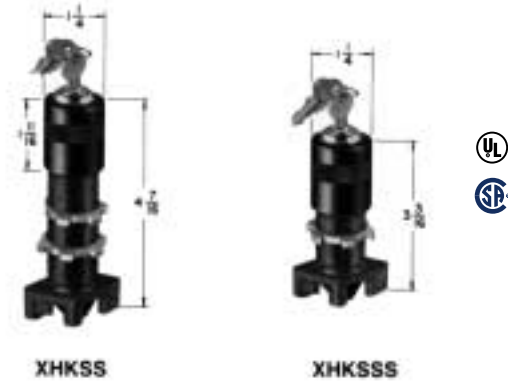
The selector switch for Series BT blocks have a sequence actuating cam as an integral part of the operator. **THE CAM NUMBER MUST BE INCLUDED IN THE OPERATOR DESCRIPTION WHEN ORDERING. THE CAM NUMBERS ARE SHOWN IN THE CIRCUIT ARRANGEMENT CHARTS, SEE PAGE 9A-20.**

9A-10



## Explosionproof and Dust-tight Selector Switches

### CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G; NEMA 3, 4, 7, 9



Key removable one position only  
specify right, center or left

#### Keylock Selector Switch Operators

All operators are die cast aluminum alloy. The barrels are all 3/4" NPSM thread. Maximum installation thickness: 1 15/16" panel mount, 3/4" surface mount. Selector switch operators can be used as 2 position or 3 position by removal of knob and rotating knob 180°. The actuator cam which operates the plungers on the contact blocks can be readily changed for various contact sequences. FOR 3 POSITION, ORDERS MUST STATE CAM NUMBER. Contact blocks are not included with operators. Select contact block and sequence operating cam from contact block page 9A-20.

The exposed metal parts are black anodized aluminum.

| For use with series BT contact blocks | Description of operators only   | Weight Each Pounds |
|---------------------------------------|---|--------------------|
| XHKSS                                 | Key Lock Operation<br>Panel Mount                                     | 1/2                |
| XHKSSS                                | Key Lock Operation<br>Surface Mount                                   | 1/2                |
| XHKSC                                 | Spring Return to Center<br>from Right and Left<br>Panel Mount         | 1/2                |
| XHKSSC                                | Spring Return to Center<br>from Right and Left<br>Surface Mount       | 1/2                |
| XHKSR                                 | Spring Return to Center<br>from Right, Maintain Left<br>Panel Mount   | 1/2                |
| XHKSSR                                | Spring Return to Center<br>from Right, Maintain Left<br>Surface Mount | 1/2                |
| XHKSL                                 | Spring Return to Center<br>from Left, Maintain Right<br>Panel Mount   | 1/2                |
| XHKSSL                                | Spring Return to Center<br>from Left, Maintain Right<br>Surface Mount | 1/2                |

Legend Plates, see page 9A-19.

The selector switch for Series BT blocks have a sequence actuating cam as an integral part of the operator. **THE CAM NUMBER MUST BE INCLUDED IN THE OPERATOR DESCRIPTION WHEN ORDERING. THE CAM NUMBERS ARE SHOWN IN THE CIRCUIT ARRANGEMENT CHARTS, SEE PAGE 9A-20.**

9A-11



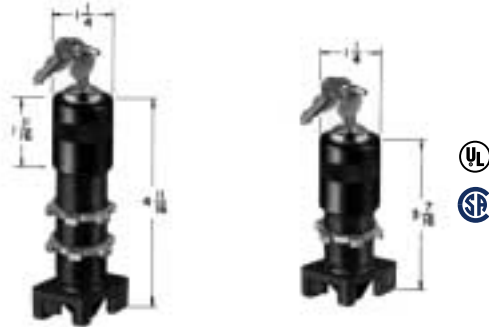
## Explosionproof and Dust-tight Selector Switches

### CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G; NEMA 3, 4, 7, 9

#### Keylock Selector Switch Operators

Cost effective modular operator body. The barrels are all 3/4" NPSM thread aluminum. Maximum installation thickness: 1 15/16" panel mount, 3/4" surface mount. Selector switch operators can be used as 2 position or 3 position by removal and rotation of the cam actuator. The cam which operates the plungers on the contact blocks can be changed for various contact sequences. FOR 3 POSITION, ORDERS MUST STATE CAM NUMBER. Contact blocks are not included with operators. Select contact block and sequence operating cam from contact block page 9A-20.

The exposed metal parts are black anodized aluminum.



XVHKSS

XVHKSSS

Key removable one position only  
specify right, center or left

| For use with series BT contact blocks | Description of operators only        | Weight Each Pounds |
|---------------------------------------|--------------------------------------|--------------------|
| XVHKSS                                | Key Lock Operation,<br>Panel Mount   | 1/2                |
| XVHKSSS                               | Key Lock Operation,<br>Surface Mount | 1/2                |

Legend Plates, see page 9A-19.

The selector switch for Series BT blocks have a sequence actuating cam as an integral part of the operator. **THE CAM NUMBER MUST BE INCLUDED IN THE OPERATOR DESCRIPTION WHEN ORDERING. THE CAM NUMBERS ARE SHOWN IN THE CIRCUIT ARRANGEMENT CHARTS, SEE PAGE 9A-20.**

9A-12

## Explosionproof Potentiometer and Switch Operators

### CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G; NEMA 3, 4, 7, 9



#### Potentiometer and Switch Operators

Operators are die cast aluminum alloy. The barrels are all 3/4" NPSM thread. 1/4" diameter shafts. Maximum installation thickness: 1 15/16" panel mount, 3/4" surface mount. XPO-XPOS have knob and dial marked 1 to 100. Two dial sizes are available. XPOC-XPOCS have 15 turn counting dial. Operators include 3 pc. coupling and device mounting bracket.

| Catalog No. | Description                           | Weight Each Pounds |
|-------------|---------------------------------------|--------------------|
| XPO         | Plain Dial, Panel Mount               | 1/2                |
| XPOS        | Plain Dial, Surface Mount             | 1/2                |
| XPOL        | Plain Dial, Large Size, Panel Mount   | 1/2                |
| XPOSL       | Plain Dial, Large Size, Surface Mount | 1/2                |
| XPOC        | Counting Dial, Panel Mount            | 3/4                |
| XPOCS       | Counting Dial, Surface Mount          | 3/4                |

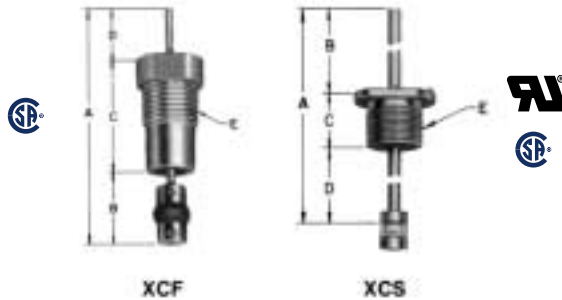
POTENTIOMETER NOT FURNISHED — Consult Factory.

### CLASS I, GROUPS C & D; CLASS II, GROUPS E, F & G; NEMA 7, 9

#### Manual and Motor Operated Rotating Shafts

XCS manual operated shafts suitable for potentiometers, rheostats and other devices requiring external adjustment. Includes 3 piece coupling to compensate for misalignment.

XCF motor operated shafts suitable for tachometers and rotating equipment with speeds to 5000 rpm. Shaft is ball bearing mounted. Includes flexible coupling to compensate for misalignment.



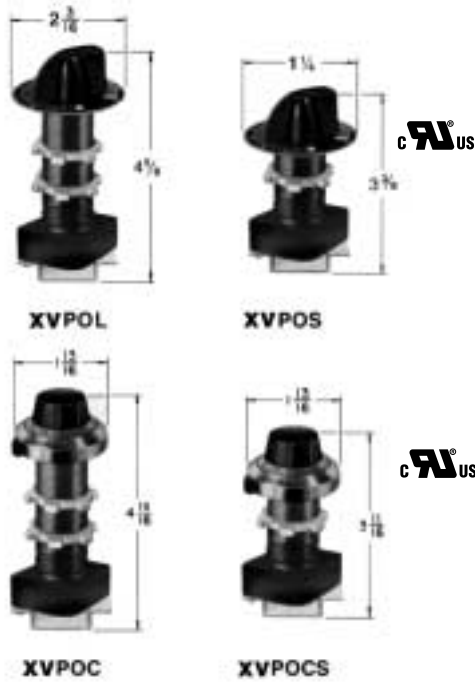
| Cat. No. | Shaft Dia. | Dimension in Inches |        |       |        |              |
|----------|------------|---------------------|--------|-------|--------|--------------|
|          |            | A                   | B      | C     | D      | E (NPSM)     |
| XCS-1    | 1/8        | 6                   | 2 1/2  | 1     | 2 1/2  | 3/4-14       |
| XCS-2    | 1/4        | 6                   | 2 1/2  | 1     | 2 1/2  | 3/4-14       |
| XCS-3    | 5/16       | 6                   | 2 1/2  | 1     | 2 1/2  | 3/4-14       |
| XCS-4    | 3/8        | 6                   | 2 1/2  | 1     | 2 1/2  | 3/4-14       |
| XCS-5    | 1/2        | 6                   | 2 1/2  | 1     | 2 1/2  | 3/4-14       |
| XCF-1    | 1/8        | 6                   | 2 3/16 | 1 5/8 | 2 3/16 | 1/2-14       |
| XCF-2    | 1/4        | 6                   | 2 1/8  | 1 3/4 | 2 1/8  | 3/4-14       |
| XCF-3    | 5/16       | 6                   | 2      | 2     | 2      | 1-11 1/2     |
| XCF-4    | 3/8        | 6                   | 2      | 2     | 2      | 1-11 1/2     |
| XCF-5    | 1/2        | 6                   | 2      | 2     | 2      | 1 1/4-11 1/2 |

NOTE: NEMA 3, 4 Features Available for XCF Only

## Explosionproof Potentiometer and Switch Operators

### CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G; NEMA 3, 4, 7, 9

9A-14



#### Potentiometer Operators

Cost effective modular operator body. The barrels are all 3/4" NPSM thread aluminum. 1/4" diameter shafts. Maximum installation thickness: 1 15/16" panel mount, 3/4" surface mount. XVPO-XVPOS have knob and dial marked 1 to 100. Two dial sizes are available. XVPOC-XVPOCS have 15 turn counting dial. Operators include 3 pc. coupling and device mounting bracket.

| Catalog No. | Description                           | Weight Each Pounds |
|-------------|---------------------------------------|--------------------|
| XVPO        | Plain Dial, Panel Mount               | 1/2                |
| XVPOS       | Plain Dial, Surface Mount             | 1/2                |
| XVPOL       | Plain Dial, Large Size, Panel Mount   | 1/2                |
| XVPOSL      | Plain Dial, Large Size, Surface Mount | 1/2                |
| XVPOC       | Counting Dial, Panel Mount            | 3/4                |
| XVPOCS      | Counting Dial, Surface Mount          | 3/4                |

POTENTIOMETER NOT FURNISHED — Consult Factory.

## Explosionproof and Dust-tight Pilot Lights

### CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G; NEMA 3, 4, 7, 9

#### Guarded Pilot Lights for Group B Application

Explosionproof pilot lights are suitable for panel or surface mount applications. All pilot lights are of sealed construction and can be relamped from the front by removal of lens cap.

All pilot lights are made with 3/4" NPSM threads. All pilot lights have 8" flexible leads, other lengths on special order, or screw terminal (suffix T).

All lens caps are black anodized aluminum finish.

**Maximum installation thickness: 1 15/16" on Long Series, 5/8" on Short Series.**

This standard series of pilot lights is equipped with candelabra base receptacles and 6 watt 120 volt 6S6 clear 1500 hr. avg. lamps. Also available with 6, 12, 24, 30, 50, 75 and 135 volt lamps. Specify voltage desired.



| Catalog No. Panel Mount | Catalog No. Surface Mount | Description | Weight Each Pounds |
|-------------------------|---------------------------|-------------|--------------------|
| XLA-GH                  | XLSA-GH                   | Amber Lens  | 1/2                |
| XLB-GH                  | XLSB-GH                   | Blue Lens   | 1/2                |
| XLC-GH                  | XLSC-GH                   | Clear Lens  | 1/2                |
| XLG-GH                  | XLSG-GH                   | Green Lens  | 1/2                |
| XLR-GH                  | XLSR-GH                   | Red Lens    | 1/2                |
| XLW-GH                  | XLSW-GH                   | White Lens  | 1/2                |

\*Add suffix T to P/N for screw terminal

This special series of pilot lights is equipped with slide base receptacles and 120 volt 5000 hr. avg. lamps with slide base. Also available with 6, 12, 24, 48 and 60 volt lamps. Specify voltage desired.

| Catalog No. Panel Mount | Catalog No. Surface Mount | Description | Weight Each Pounds |
|-------------------------|---------------------------|-------------|--------------------|
| XLAS-GH                 | XLSAS-GH                  | Amber Lens  | 1/2                |
| XLBS-GH                 | XLSBS-GH                  | Blue Lens   | 1/2                |
| XLCS-GH                 | XLSCS-GH                  | Clear Lens  | 1/2                |
| XLGS-GH                 | XLSGS-GH                  | Green Lens  | 1/2                |
| XLRS-GH                 | XLSRS-GH                  | Red Lens    | 1/2                |
| XLWS-GH                 | XLSWS-GH                  | White Lens  | 1/2                |

\*Add suffix T to P/N for screw terminal

#### Replacement Guarded Lens Cap Assembly

| Catalog No. | Description | Weight Each Pounds |
|-------------|-------------|--------------------|
| XLA-GCH     | Amber Lens  | 1/8                |
| XLB-GCH     | Blue Lens   | 1/8                |
| XLC-GCH     | Clear Lens  | 1/8                |
| XLG-GCH     | Green Lens  | 1/8                |
| XLR-GCH     | Red Lens    | 1/8                |
| XLW-GCH     | White Lens  | 1/8                |

9A-15

## Explosionproof and Dust-tight Pilot Lights

### CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G; NEMA 3, 4, 7, 9

9A-16



XL Long Series  
(Panel Mount)



XL Short Series  
(Surface Mount)



Replacement Cap

#### Guarded Pilot LED Lights for Group B Application

##### LED Advantages:

- 10 Year/100,000 hour service life under normal ambient conditions.
- 1x to 4x more energy efficient.
- Improved resistance to shock and vibration.
- LEDs operate significantly cooler than traditional lamps.
- Ultra bright cluster LED's.

Explosionproof pilot LED lights are suitable for panel or surface mount applications. All candelabra base LED lights and can be relamped from the front by removal of the lens cap.

All pilot LED lights are made with 3/4" NPSM threads. All pilot LED lights have 8" flexible leads, other lengths on special order, or screw terminal.

Add suffix T to P/N for screw terminal.

All lens caps are black anodized aluminum finish with clear glass lens.

**Maximum installation thickness: 1-15/16" on Panel Mount (Long Series), 5/8" on Surface Mount (Short Series).**

Consult Adalet for the availability of other voltages.

| Catalog No.<br>Panel Mount<br>(Long Series) | Catalog No.<br>Surface Mount<br>(Short Series) | Description | Weight<br>Each<br>Pounds |
|---|--|-------------|--------------------------|
| XLRL-GH                                     | XLSRL-GH                                       | Red         | 1/2                      |
| XLAL-GH                                     | XLSAL-GH                                       | Amber       | 1/2                      |
| XLGL-GH                                     | XLSGL-GH                                       | Green       | 1/2                      |
| XCWL-GH                                     | XLSWL-GH                                       | White       | 1/2                      |
| XLBL-GH                                     | XLSBL-GH                                       | Blue        | 1/2                      |

\*Add suffix T to P/N for screw terminal.

## Explosionproof Special Operators and Accessories

### CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G; NEMA 3, 4, 7, 9



**XRB / XRBL**

#### Reset Button Operators

| Catalog No. | Description of operations only | Weight Each Pounds |
|-------------|--------------------------------|--------------------|
| XRBL        | Reset Button - Long            | 1/2                |
| XRBL        | Reset Button - Long            | 1/2                |

Used for resetting contactors, relays, etc. in explosionproof and weather-proof enclosures. Made with 3/4" NPSM threaded stem. Standard operating shaft length 6" can be cut to length. Special lengths are also available. Use XRBL for wall thickness greater than 3/4".



**XPP  
BLACK ANODIZED**

#### Close-Up Plugs For Unused Operator Openings

| Catalog No. | Description of operations only | Net Weight |
|-------------|--------------------------------|------------|
| XPP         | 3/4" NPSM                      | 3/4 oz.    |
| XPP-N4      | 3/4" NPSM Type 4               | 3/4 oz.    |

## Explosionproof and Dust-Tight Pilot Lights

### CLASS I, GROUPS C & D

#### Non-Guarded Lens Caps

All lens caps are black anodized aluminum finish. For color coding, Adalet will furnish at no additional charge the following color combinations:

- Black Cap
- Clear Cap
- Amber Cap
- Green Cap
- Blue Cap
- Red Cap

9A-18

| Catalog No. | Description | Cap Color | Weight Each lbs. |
|-------------|-------------|-----------|------------------|
| XLA-C       | Amber Lens  | Black     | 1/2              |
| XLB-C       | Blue Lens   | Black     | 1/2              |
| XLC-C       | Clear Lens  | Black     | 1/2              |
| XLG-C       | Green Lens  | Black     | 1/2              |
| XLR-C       | Red Lens    | Black     | 1/2              |
| XLW-C       | White Lens  | Black     | 1/2              |
| XLAC-C      | Amber Lens  | Clear     | 1/2              |
| XLBC-C      | Blue Lens   | Clear     | 1/2              |
| XLCC-C      | Clear Lens  | Clear     | 1/2              |
| XLGC-C      | Green Lens  | Clear     | 1/2              |
| XLRC-C      | Red Lens    | Clear     | 1/2              |
| XLWC-C      | White Lens  | Clear     | 1/2              |
| XLAA-C      | Amber Lens  | Amber     | 1/2              |
| XLBA-C      | Blue Lens   | Amber     | 1/2              |
| XLCA-C      | Clear Lens  | Amber     | 1/2              |
| XLGA-C      | Green Lens  | Amber     | 1/2              |
| XLRA-C      | Red Lens    | Amber     | 1/2              |
| XLWA-C      | White Lens  | Amber     | 1/2              |
| XLG-C       | Amber Lens  | Green     |                  |
| XLBG-C      | Blue Lens   | Green     | 1/2              |
| XLGG-C      | Clear Lens  | Green     | 1/2              |
| XLGG-C      | Green Lens  | Green     | 1/2              |
| XLRG-C      | Red Lens    | Green     | 1/2              |
| XLWG-C      | White Lens  | Green     | 1/2              |
| XLAB-C      | Amber Lens  | Blue      | 1/2              |
| XLBB-C      | Blue Lens   | Blue      | 1/2              |
| XLBC-C      | Clear Lens  | Blue      | 1/2              |
| XLGB-C      | Green Lens  | Blue      | 1/2              |
| XLRB-C      | Red Lens    | Blue      | 1/2              |
| XLWB-C      | White Lens  | Blue      | 1/2              |
| XLAR-C      | Amber Lens  | Red       | 1/2              |
| XLBR-C      | Blue Lens   | Red       | 1/2              |
| XLCR-C      | Clear Lens  | Red       | 1/2              |
| XLGR-C      | Green Lens  | Red       | 1/2              |
| XLRR-C      | Red Lens    | Red       | 1/2              |
| XLWR-C      | White Lens  | Red       | 1/2              |

# Operator Boots and Hardware



## Legend Plates Standard Marking

| For Push Button |       |       | For Selector switches |                |
|-----------------|-------|-------|-----------------------|----------------|
| (BLANK)         | SLOW  | RESET | RUN-JOG               | OPEN-OFF-CLOSE |
| START           | OPEN  | IN    | HAND-AUTO             | FAST-OFF-SLOW  |
| INCH            | CLOSE | OUT   | FWD-REV               | RUN-AUTO-JOG   |
| STOP            | UP    | LEFT  | FAST-SLOW             | HAND-OFF-AUTO  |
| RUN             | JOG   | RIGHT | OPEN-CLOSE            | FWD-OFF-REV    |
| FORWARD         | ON    | LOW   | UP-DOWN               | 1-OFF-2        |
| REVERSE         | OFF   | HIGH  | OFF-ON                | UP-OFF-DOWN    |
| FAST            | BACK  | DOWN  |                       | EMERGENCY STOP |

| Catalog No. | Description    | Weight Each |
|-------------|----------------|-------------|
| XNP         | Specify legend | 1/16        |

Legend plates are anodized aluminum with engraved letters on black background. Stop has red and start has green background. Special engraved legend plates can be supplied.

## Operator Protective Boots

Molded silicone rubber, protective boots for use with explosion proof operators in extremely wet-dirty locations. Makes operators suitable for NEMA 3, 4, 4X, 5, 7, 9, 12, 13 application. Boot and metal collar are an integral assembly available as a factory adder or a field replacement.

Simple installation requires removal of existing cap and threading on the replacement.

| Catalog No. | Description                       | Weight Each |
|-------------|-----------------------------------|-------------|
| XBB         | Black Push Button Cap             | 1 oz.       |
| XBG         | Green Push Button Cap             | 1 oz.       |
| XBR         | Red Push Button Cap               | 1 oz.       |
| XBSB        | Black Selector Switch Cap         | 1 oz.       |
| XBSG        | Green Selector Switch Cap         | 1 oz.       |
| XBSR        | Red Selector Switch Cap           | 1 oz.       |
| XBPC        | Clear Pilot Light Push Button Cap | 1 oz.       |

To order as complete operator add part number as suffix.

| Catalog No. | Description              | Weight Each |
|-------------|--------------------------|-------------|
| XNPWB       | Black Blank Legend Plate | 1/16        |
| XNPWG       | Green Blank Legend Plate | 1/16        |
| XNPWR       | Red Blank Legend Plate   | 1/16        |

Legend plate has foam gasket backing for use with protective boots for sealing. Engraving 1 line only see Price List.

## Push Button and Selector Switch Components

Operator locking caps and actuator devices can be adapted to existing explosion proof operators. Simple installation requires removal of top cap and threading on the replacement unit.

| Catalog No. | Description                                 | Weight Each |
|-------------|---|-------------|
| XHDPL       | Padlock Device for Dual Push Button         | 1/4         |
| XHPL        | Padlock Device to activate Push Button      | 1/4         |
| XHSPL       | Padlock Device for Selector Switch          | 1/4         |
| XMB         | Red Mushroom Head 2 1/4" Button             | 1/4         |
| XMC         | Maintained Contact Lever for Push Buttons   | 1/4         |
| XMT         | Wobble Stick 2 1/2" Long for NC Push Button | 1/4         |
| XHPLG       | Padlockable Push Button Cover (Not Shown)   | 1/4         |

*Mushroom button and wobble stick recommended only for operators with normally closed contact blocks.*

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# Explosionproof Push Button and Selector Switch Components

## 600 Volts AC Maximum Contact Blocks for Push Buttons and Selector Switches

### Series BT

| Catalog | Contact Block   | Push Button                          | Selector Switch               | Weight Ea. |
|---------|---|--------------------------------------|-------------------------------|------------|
| BT1A    | One Open and One Closed   | 1 N.O.<br>1 N.C.                     |                               | 1/10       |
| BT1B    | One Closed and One Open (this is BT1A block rotated 180 degrees when assembled to operator) | 1 N.C.<br>1 N.O.                     | See Chart                     | 1/10       |
| BT2     | Two open  | 1 N.O.<br>1 N.O.                     |                               | 1/10       |
| BT3     | Two closed  | 1 N.C.<br>1 N.C.                     |                               | 1/10       |
| BT4     | One open  | 1 N.O.                               | Specify Cam and Contact Block | 1/10       |
| BT5     | One closed  | 1 N.C.                               |                               | 1/10       |
| BT44    | Two open<br><br>Two closed  | 1 N.C.<br>1 N.O.<br>1 N.O.<br>1 N.C. |                               | 1/10       |



Series BT Contact Blocks Extend 1/8" beyond operator

Contact Blocks can be stacked for multiple circuits.

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### Contact Sequence Chart

| Circuit of Contact Block                     | Contact Block Number | 2-Position Selector Switches |                        | 3-Position Selector Switches |                        |                        |                        |       |  |
|--|----------------------|------------------------------|------------------------|------------------------------|------------------------|------------------------|------------------------|-------|--|
|  |                      | Cam 1 Contact Sequence       | Cam 2 Contact Sequence | Cam 3 Contact Sequence       | Cam 4 Contact Sequence | Cam 5 Contact Sequence | Cam 6 Contact Sequence |       |  |
|  |                      |                              |                        |                              |                        |                        |                        |       |  |
| Normally Closed (NC)<br>Normally Open (NO)   | BT1A                 | Circuit A                    | X O                    | O X O                        | O X X                  | X O O                  | O X X                  | X O O |  |
|  |                      | Circuit B                    | O X                    | O O X                        | O O X                  | O X O                  | X X O                  | O X O |  |
| Normally Closed (NC)<br>Normally Open (NO)   | BT1B*                | Circuit B                    | X O                    | X X O                        | X X O                  | X O X                  | O O X                  | O O X |  |
|  |                      | Circuit A                    | O X                    | X O X                        | X O O                  | O X X                  | X O O                  | O O X |  |
| Normally Open (NO)<br>Normally Open (NO)     | BT2                  | Circuit A                    | O X                    | X O X                        | X O O                  | O X X                  | X O O                  | O O X |  |
|  |                      | Circuit B                    | O X                    | O O X                        | O O X                  | O X O                  | X X O                  | O X O |  |
| Normally Closed (NC)<br>Normally Closed (NC) | BT3                  | Circuit A                    | X O                    | O X O                        | O X X                  | X O O                  | O X X                  | X O O |  |
|  |                      | Circuit B                    | X O                    | X X O                        | X X O                  | X O X                  | O O X                  | O O X |  |

\* This contact block is same as BT1A one N.C. and one N.O. except rotated 180° when assembled to operator.

### Maximum Ampere Rating Control Circuit Contacts Type BT

| Volts                                  | AC  |     |     |     | DC  |     |     |
|--|-----|-----|-----|-----|-----|-----|-----|
|  | 110 | 220 | 440 | 550 | 120 | 240 | 600 |
| Make & Emergency Interrupting Capacity | 60. | 30. | 15. | 12. | 1.1 | 0.5 | 0.2 |
| Normal Load Break                      | 6.  | 3.  | 1.5 | 1.2 | 1.1 | 0.5 | 0.2 |
| Continuous Current                     | 10. | 10. | 10. | 10. | 10. | 10. | 10. |

## Explosionproof and Dust-tight Miniature Operators

### CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G; NEMA 4, 7 & 9

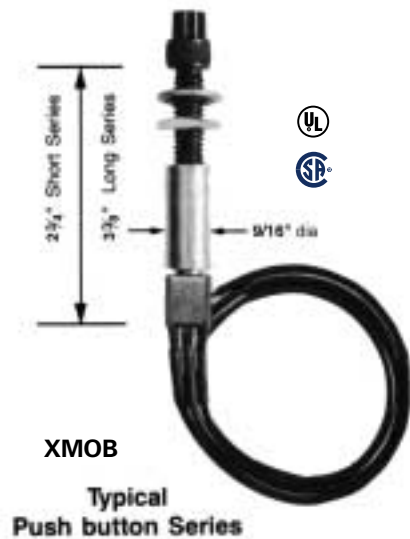
#### Features

- Reduce size of control enclosure requirements in hazardous environments.
- Mount on 1" centers vs. standard operators requiring 2 1/2" centers.
- No special enclosures required; can be installed in most Adalet standard explosionproof enclosures.

#### Push Button / Selector Switch Description

- 3/8"-16 UNC thread size body.
- Black anodized body, cap, button or knob
- Two lengths available:
 

|              |   |
|--------------|---|
| Long Series  | Accommodates up to 1 9/16" enclosure wall thickness |
| Short Series | Accommodates up to 13/16" enclosure wall thickness  |
- Stainless steel actuator shaft.
- Optional red or green button (Push button Operator only)



#### Push Buttons

| Catalog No. Panel Mount | Catalog No. Surface Mount | Contact Configurations | Weight Each |
|-------------------------|---------------------------|------------------------|-------------|
| XMOB-1                  | XMOBS-1                   | SPDT maintained        | 1 oz.       |
| XMOB-2                  | XMOBS-2                   | SPDT momentary         | 1 oz.       |
| XMOB-3*                 | XMOBS-3*                  | DPDT maintained        | 1 oz.       |
| XMOB-4                  | XMOBS-4                   | DPDT momentary         | 1 oz.       |

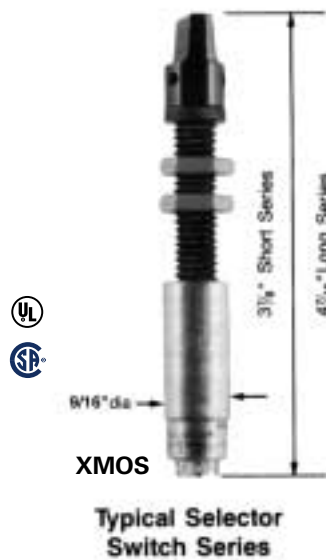
\* Not UL or CSA Approved

- Solid silver contacts rated 5 amps at 125 VAC, 3 amps at 250 VAC.
- Insulation resistance 1000 megohm minimum.
- Furnished with contact block having 8" wire leads, other lengths available.

#### Selector Switches

| Catalog No. Panel Mount | Catalog No. Surface Mount | Contact Configurations   | Weight Each |
|-------------------------|---------------------------|--------------------------|-------------|
| XMOS-1                  | XMOSS-1                   | Single Pole, 12 position | 1 oz.       |
| XMOS-2                  | XMOSS-2                   | Double Pole, 5 position  | 1 oz.       |
| XMOS-3                  | XMOSS-3                   | Three Pole, 3 position   | 1 oz.       |

- Selector switches provided with internal adjustable stop.
- Silver contacts rated 150 m.a. at 30 VAC, NEC CL 2 circuit.
- Insulation resistance 10,000 megohms minimum.
- Furnished with contact block having solder type wire connectors.



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## Explosionproof and Dust-tight Miniature Operators

### CLASS I, GROUPS B, C & D; CLASS II, GROUPS E, F & G; NEMA 4, 7, 9 For Explosionproof Control Enclosures

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#### Indicator Led Light Description

- Up to 100,000 hours lamp life.
- Standard 12 VDC furnished. Optional 24 VDC, or 12, 24, 120 VAC available.
- Black anodized body and lens cap.
- 3/8" - 16 UNC thread size body.
- One length-accommodates up to 1 5/16" enclosure wall thickness.
- Furnished with 8" flexible wire leads, other lengths available.

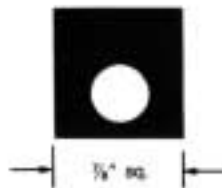
| Catalog No. | Description           | Weight Each |
|-------------|-----------------------|-------------|
| XMOLR       | Red Indicator Light   | 1 oz.       |
| XMOLA       | Amber Indicator Light | 1 oz.       |
| XMOLG       | Green Indicator Light | 1 oz.       |

#### Close-Up Plugs for Unused Operator Openings



| Catalog No. | Weight  |
|-------------|---------|
| XMPP        | 1/2 oz. |

#### Legend Plates Standard Marking



| Catalog No. | Description    | Weight Each |
|-------------|----------------|-------------|
| XMNP        | Specify legend | 1/2 oz.     |

| For Push Button |       |       | For Selector switches |
|-----------------|-------|-------|-----------------------|
| (BLANK)         | SLOW  | RESET | RUN-JOG               |
| START           | OPEN  | IN    | HAND-AUTO             |
| INCH            | CLOSE | OUT   | FWD-REV               |
| STOP            | UP    | LEFT  | FAST-SLOW             |
| RUN             | JOG   | RIGHT | OPEN-CLOSE            |
| FORWARD         | ON    | LOW   | UP-DOWN               |
| REVERSE         | OFF   | HIGH  | OFF-ON                |
| FAST            | BACK  |       |                       |

**Compliances:**  
NEC Class I, Groups B, C & D  
Class II, Groups E, F & G  
UL Standard 698  
CSA Standard C22.2 No. 30

- Legend plates are anodized aluminum with engraved letters on black background.
- Maximum 10 characters, 5/64" high offered as standard.

**NOTE:** Special engraved legend plates can be supplied.

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## PriStar Specifications

### Features and Benefits



- Lightweight, corrosion-resistant, copper-free aluminum alloy (0.3% max. copper content).
- All operating shafts are stainless steel for corrosion resistance.
- Durable cast on lugs cannot get lost.
- Ground screw is highly visible and accessible.
- Uniform wall thickness (not ribbed) for versatility of conduit openings assuring 5 full threads engagement and maximum available area for conduit drilling and tapping.
- Operators may be mounted through back wall for panel mounting.
- Box depth provides for the stacking of 2 contact blocks.
- Anodized aluminum operators install easily in the field.

### Certifications/Compliances



\*CSA certified products require guarded pilot devices.

Class I, Groups C&D

Class II, Groups E, F, G

Class III

For NEMA 4 or special machining options, see XIFC Series in Section 5.

**Table A2** Control Station Boxes

| Number of Operators | Surface Mount | Panel Mount | Std. Cond. Size (inches) |
|---------------------|---------------|-------------|--------------------------|
| 1                   | X1            | X1P         | 3/4                      |
| 2                   | X2            | X2P         | 3/4                      |
| 3                   | X3            | X3P         | 3/4                      |
| 4                   | X4            | X4P         | 1                        |
| 5                   | X5            | X5P         | 1 1/4                    |
| 6                   | X6            | X6P         | 1 1/4                    |
| 7                   | X7            | X7P         | 1 1/4                    |
| 8                   | X8            | X8P         | 1 1/4                    |
| 12                  | X12           | X12P        | 1 1/2                    |
| 15                  | X15           | X15P        | 1 1/2                    |
| 18                  | X18           | X18P        | 1 1/2                    |

Surface Mount: Operators mounted in cover

Panel Mount: Operators mounted in back

**Note: All operator holes are 3/4"-14 NPSM**

### Applicable Standard

Underwriters Laboratories: UL 698, CSA C22.2 No. 30.

**Table B2** Pilot Lights & Lighted Pushbutton

| Lens Color | Suffix Nos. for Std. Pilot Lt. Candelabra Base 1000 Hr. Lamp | Suffix Nos. for Guarded Pilot Lt. Candelabra Base | Suffix Nos. for Pilot Lt. Slide Base 5000 Hr. Lamp | Suffix Nos. for Guarded Pilot Lt. Slide Base | Suffix Nos. for Lighted Pushbutton |
|------------|--|---|--|--|------------------------------------|
| Amber      | 60   | 337   | 66   | 343  | 30                                 |
| Blue       | 61   | 338   | 67   | 344  | 35                                 |
| Clear      | 62   | 339   | 68   | 345  | 40                                 |
| Green      | 63   | 340   | 69   | 346  | 45                                 |
| Red        | 64   | 341   | 70   | 347  | 50                                 |
| White      | 65   | 342   | 71   | 348  | 55                                 |

## PriStar Box & Suffix Numbers

**Table C2** Selector & Key Switch Suffix Numbers

| Contact Block/Cam Included | Contact Sequence | Selector Switch Suffix Numbers |                        |                               |                           |                           | Key Switch Suffix Numbers |                               |                           |                           |
|----------------------------|------------------|--------------------------------|------------------------|-------------------------------|---------------------------|---------------------------|---------------------------|-------------------------------|---------------------------|---------------------------|
|                            |                  | Standard Sel. Switch           | Sel. Switch w/ Padlock | Spring Ret. Center from R & L | Spring Ret. Center from R | Spring Ret. Center from L | Standard Key Switch       | Spring Ret. Center from R & L | Spring Ret. Center from R | Spring Ret. Center from L |
| BT1A/1<br>NO<br>NC         | XO<br>OX         | 6                              | 283                    |                               |                           |                           | 82                        |                               |                           |                           |
| BT1B/1<br>NC<br>NO         | OX<br>XO         | 7                              | 284                    |                               |                           |                           | 83                        |                               |                           |                           |
| BT2/1<br>NO<br>NO          | OX<br>OX         | 8                              | 285                    |                               |                           |                           | 84                        |                               |                           |                           |
| BT3/1<br>NC<br>NC          | XO<br>XO         | 9                              | 286                    |                               |                           |                           | 85                        |                               |                           |                           |
| BT2/3<br>NO<br>NO          | XOO<br>OOX       | 10                             | 293                    | 111                           | 135                       | 159                       | 86                        | 229                           | 249                       | 269                       |
| BT1B/2<br>NC<br>NO         | XOX<br>XXO       | 11                             | 288                    | 112                           | 136                       | 160                       | 87                        | 224                           | 244                       | 264                       |
| BT2/2<br>NO<br>NO          | XOX<br>OOX       | 12                             | 289                    | 113                           | 137                       | 161                       | 88                        | 225                           | 245                       | 265                       |
| BT3/2<br>NC<br>NC          | OXO<br>XXO       | 13                             | 290                    | 114                           | 138                       | 162                       | 89                        | 226                           | 246                       | 266                       |
| BT3/3<br>NC<br>NC          | OXX<br>XXO       | 14                             | 294                    | 115                           | 139                       | 163                       | 90                        | 230                           | 250                       | 270                       |
| BT1A/2<br>NO<br>NC         | OXO<br>OOX       | 15                             | 287                    | 116                           | 140                       | 164                       | 91                        | 223                           | 243                       | 263                       |
| BT1A/3<br>NO<br>NC         | OXX<br>OOX       | 16                             | 291                    | 117                           | 141                       | 165                       | 92                        | 227                           | 247                       | 267                       |
| BT1B/3<br>NC<br>NO         | XOO<br>XXO       | 17                             | 292                    | 118                           | 142                       | 166                       | 93                        | 228                           | 248                       | 268                       |

O = Contact Open  
X = Contact Closed

Contact blocks and cam included with selector switch.

**Table D2** Pushbutton Suffix Numbers

|      | Contact Configuration | Momentary Pushbutton | Momentary Pushbutton w/ Padlock | Mushroom Head <sup>1</sup> Momentary Pushbutton | Dual Pushbutton <sup>2</sup> Momentary | Dual Pushbutton <sup>2</sup> w/ Lockout | Dual Pushbutton <sup>2</sup> Maint. | Dual Pushbutton <sup>2</sup> Maint. w/ Lock |
|------|-----------------------|----------------------|---------------------------------|---|--|---|-------------------------------------|---|
| BT1A | 1NO/1NC               | 1                    | 307                             | 106   | 72                                     | 322                                     | 77                                  | 327   |
| BT2  | 2NO                   | 2                    | 308                             | 107   | 73                                     | 323                                     | 78                                  | 329   |
| BT3  | 2NC                   | 3                    | 309                             | 108   | 74                                     | 324                                     | 79                                  | 329   |
| BT4  | 1NO                   | 4                    | 310                             | 109   |  |   |                                     |   |
| BT5  | 1NC                   | 5                    | 311                             | 110   |  |   |                                     |   |

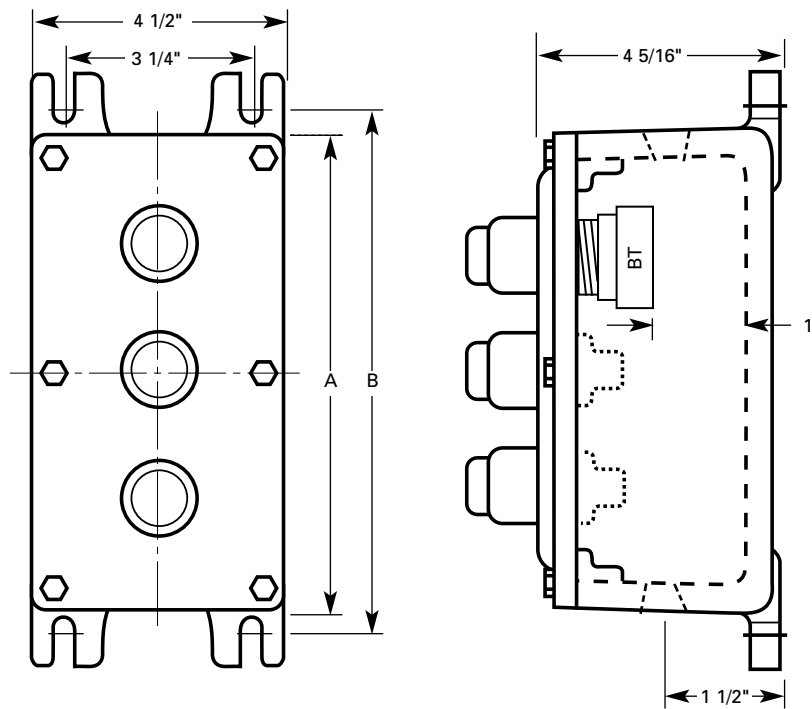
Pushbuttons furnished with Black collars and knobs as standard.  
Optional knobs: Green, Red. Optional Collars: Blue, Green, Gold, Red or Aluminum (unpainted).

1 Standard knob is Red. Black or Green available.

2 Standard with one Green knob labeled "Start" and one Red knob labeled "Stop." Unlabeled Black knobs available.

**Other pilot devices available – Consult Factory.**

## PriStar Dimensions



### Dimensions

| Enclosure | Nom. Inside Dim. | Dim. in Inches |       | Est. Weight (lbs.) | *Std. Conduit Size (inches) |
|-----------|------------------|----------------|-------|--------------------|-----------------------------|
|           |                  | A              | B     |                    |                             |
| X1        | 030303           | 4 1/2          | 5 1/2 | 5                  | 3/4                         |
| X2        | 030603           | 7              | 8     | 7                  | 3/4                         |
| X3        | 030703           | 8              | 9     | 8                  | 3/4                         |
| X4        | 030903           | 10             | 11    | 10                 | 1                           |
| X5        | 031103           | 12             | 13    | 11                 | 1 1/4                       |
| X6        | 031303           | 14             | 15    | 12                 | 1 1/4                       |
| X7        | 031503           | 16             | 17    | 13                 | 1 1/4                       |
| X8        | 031803           | 19             | 20    | 16                 | 1 1/4                       |
| X12       | 032403           | 25             | 26    | 21                 | 1 1/2                       |
| X15       | 033003           | 31             | 32    | 28                 | 1 1/2                       |
| X18       | 033603           | 37             | 38    | 33                 | 1 1/2                       |

Control Stations have conduit openings centered on top and bottom.  
 \*Consult factory for other conduit sizes.

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## PriStar Ordering Information

### To Order

To order control stations, determine the number of operators required. Select the control station box by operator quantity and mounting type from Table A2. Order operators by suffix numbers from Tables B2, C2 and D2. Add suffix numbers to box number and separate

by dashes. All operator holes must be filled by an operator. Use suffix "0" for plugs to fill unused space. Installation of operators will be made from top to bottom in sequence as listed. Select optional legend plates from Table F2 below.

**Table F2** Legend Plate Standard Markings

| Pushbuttons/Pilot Lights |       |        | Selector Switches |                     |
|--------------------------|-------|--------|-------------------|---------------------|
| Blank                    | Slow  | Reset  | Run-Jog           | Open-Off-Close      |
| Start                    | Open  | In     | Hand-Auto         | Fast-Off-Slow       |
| Inch                     | Close | Out    | Forward-Reverse   | Run-Auto-Jog        |
| Stop                     | Up    | Left   | Fast-Slow         | Hand-Off-Auto       |
| Run                      | Jog   | Right  | Open-Close        | Forward-Off-Reverse |
| Forward                  | On    | Low    | Up-Down           | 1-Off-2             |
| Reverse                  | Off   | High   | Off-On            | Up-Off-Down         |
| Fast                     | Back  | Down   |                   |                     |
|                          |       | E-Stop |                   |                     |

Legend plates are anodized aluminum with engraved letters on black background. Stop has red and start has green background. Special engraved legend plates can be supplied.

### Contact Ratings PriStar

|                              |   | AC  |     |     |     | DC  |     |     |
|------------------------------|---|-----|-----|-----|-----|-----|-----|-----|
|                              |   | 110 | 220 | 440 | 550 | 120 | 240 | 600 |
| Volts                        |   |     |     |     |     |     |     |     |
| Make & Interrupting Capacity | A | 60  | 30  | 15  | 12  | 1.1 | 0.5 | 0.2 |
| Normal Load Break            | A | 6.0 | 3.0 | 1.5 | 1.2 | 1.1 | 0.5 | 0.2 |
| Continuous Current           | A | 10  | 10  | 10  | 10  | 10  | 10  | 10  |

## Explosionproof Enclosures With Threaded Cover



**Solid Threaded Cover**



**Threaded Dome Cover**



**Threaded Glass Cover**

### Applications:

- Adalet Junction Boxes and Instrument Housings are designed for installation in electrical conduit systems for hazardous environments.
  - Wiring: Pull boxes, splices, taps and terminal strips.
  - Housing for apparatus, instruments and other equipment.

### Features

- Rugged sand-cast aluminum copper-free alloy — 0.3% max. copper content.
- Tumbled for quality appearance.
- Cast-on mounting lugs, ease of field installation.
- Grounding screw standard.

### Options

- NEMA 3, 4 available; Features installation of an O-ring gasket on cover.
- Conduit openings available, drilled and tapped to customer requirements.
- Cast-on mounting buttons, bosses and pads available.

### Notes:

Where reference is made to Class I and Class II hazardous locations, the equipment is suitable for use in both Division 1 and Division 2 hazardous locations.



## Explosionproof Enclosures With Threaded Cover

**CLASS I GROUPS C & D; CLASS II GROUPS E, F, & G;  
NEMA 3, 4 (optional); NEMA 7, 9**



XJD



XJDA



XJS  
(Can be tapped on side pads only)



XJL



XJT



XJX



XJM



XJMA



XJMC



XJHA



XJHC



XJHB



XJK



XJKA



XJN



XJWH



XJWT

### Certifications



### Compliance

- NEC Class I, Groups C & D, Class II, Groups E, F & G
- UL Standard 1203
- Investigated to CSA Standard C22.2 No. 30 by UL

Drilled and tapped to specification, attach layout sheet.

6A-2

## Explosionproof Enclosures With Threaded Window Cover

### METER AND INSTRUMENT HOUSINGS EXPLOSIONPROOF AND DUST-TIGHT CLASS I, GROUPS C & D; CLASS II GROUPS E, F, & G; NEMA 3, 4 (optional); NEMA 7, 9



**XJDGC  
XJDFGC\***



**XJMCGC\***



**XJTGC  
XJTFGC\***



**XJMG\***



**XJMAGC\***



**XJXGC**



**XJLGC**

\* includes internal flange and meter mounting plate.



**XJNGC 6 & 12**



**XJHAGC**



**XJHBGC**



**XJHCGC**



**XJKGC**



**XJKAGC**



**\*\*XJOGC**



**XJWHGC**



**XJWTGC**

#### Certifications



#### Compliance

- NEC Class I, Groups C & D, Class II, Groups E, F & G
- UL Standard 1203
- Investigated to CSA Standard C22.2 No. 30 by UL

Drilled and tapped to specification, attach layout sheet.

\*\*XJOGC Enclosure is UL Classified and CSA Certified

**Back wall mounting plates optional on some housings. Consult factory.**

## Explosionproof Enclosures With Threaded Cover

**CLASS I GROUPS B, C & D; CLASS II GROUPS E, F, & G;  
NEMA 3, 4 (optional); NEMA 7, 9**



**XJDH**



**XJDAH**



**XJSH**  
(Can be tapped on side pads only)



**XJLH**



**XJTH**



**XJXH**



**XJMH**



**XJMAH**



**XJMCH**



**XJHAH**



**XJHCH**



**XJHBH**



**XJKH**



**XJKAH**



**XJNH 6 & 12**



**XJWHH**



**XJWTH**

### Certifications



### Compliance

- NEC Class I, Groups B, C & D, Class II, Groups E, F & G
- UL Standard 1203
- Investigated to CSA Standard C22.2 No. 30 by UL

Drilled and tapped to specification, attach layout sheet.

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## Explosionproof Enclosures With Threaded Window Cover

### METER AND INSTRUMENT HOUSINGS EXPLOSIONPROOF AND DUST-TIGHT CLASS I, GROUPS B, C & D; CLASS II GROUPS E, F, & G; NEMA 3, 4 (optional); NEMA 7, 9



\* includes internal flange and meter mounting plate.



#### Certifications



#### Compliance

- NEC Class I, Groups B, C & D, Class II, Groups E, F & G
- UL Standard 1203
- Investigated to CSA Standard C22.2 No. 30 by UL

Drilled and tapped to specification, attach layout sheet.

**Back wall mounting plates optional on some housings. Consult factory.**

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## Explosionproof Enclosures With Threaded Cover

**CLASS I GROUPS C & D; CLASS II GROUPS E, F, & G;  
NEMA 3, 4 (optional); NEMA 7, 9  
EExd IIB + H2 IP60, IP66 (optional); Exd IIB + H2 IP60, IP66 (optional)**



XJDJ



XJDAX



XJSX  
(Can be tapped on  
side pads only)



XJLX



XJTX



XJXX



XJMX



XJMAX



XJMCX



XJHAX



XJHCX



XJHBX



XJKX



XJKAX



XJNX 6 & 12



XJWHX



XJWTX

### Certifications



### Compliance

- NEC Class I, Groups C & D, Class II, Groups E, F & G
  - UL Standard 1203, 2279
  - Investigated to CSA Standard C22.2 No. 30 by UL
  - CENELEC EN 50.014 & 50.018 EExd IIB+H2 IP60, (optional IP66 with o-ring seal)
  - IEC 79 Exd IIB + H2 IP60, (optional IP66 with o-ring seal)
  - Demko Certified 99E. 124129U
  - UL Classified, Class I, Zone 1, Group IIB
- Drilled and tapped to specification, attach layout sheet.

6A-6

## Explosionproof Enclosures With Threaded Window Cover

**METER AND INSTRUMENT HOUSINGS  
EXPLOSIONPROOF AND DUST-TIGHT  
CLASS I, GROUPS C & D; CLASS II GROUPS E, F, & G;  
NEMA 3, 4 (optional); NEMA 7, 9  
EExd IIB + H2 IP60, IP66 (optional); Exd IIB + H2 IP60, IP66 (optional)**



\* includes internal flange and meter mounting plate.



**Back wall mounting plates optional on some housings. Consult factory.**

### Certifications



### Compliance

- NEC Class I, Groups C & D, Class II, Groups E, F & G
  - UL Standard 1203, 2279
  - Investigated to CSA Standard C22.2 No. 30 by UL
  - CENELEC EN 50.014 & 50.018 EExd IIB+H2 IP60, (optional IP66 with o-ring seal)
  - IEC 79 Exd IIB + H2 IP60, (optional IP66 with o-ring seal)
  - Demko Certified 99E. 124129U
  - UL Classified, Class I, Zone 1
- Drilled and tapped to specification, attach layout sheet.

## Explosionproof Enclosures With Threaded Cover

**CLASS I GROUPS B, C & D; CLASS II GROUPS E, F, & G;  
NEMA 3, 4 (optional); NEMA 7, 9  
EExd IIB + H2 IP60, IP66 (optional); Exd IIB + H2 IP60, IP66 (optional)**



XJDHX



XJDAHX



XJSHX  
(Can be tapped on side pads only)



XJLHX



XJTHX



XJXHX



XJMHX



XJMAHX



XJMCHX



XJHAHX



XJHCHX



XJHBHX



XJKHX



XJKAHX



XJNHX 6 & 12

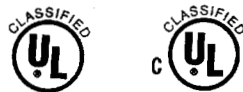


XJWHHX



XJWTHX

### Certifications



### Compliance

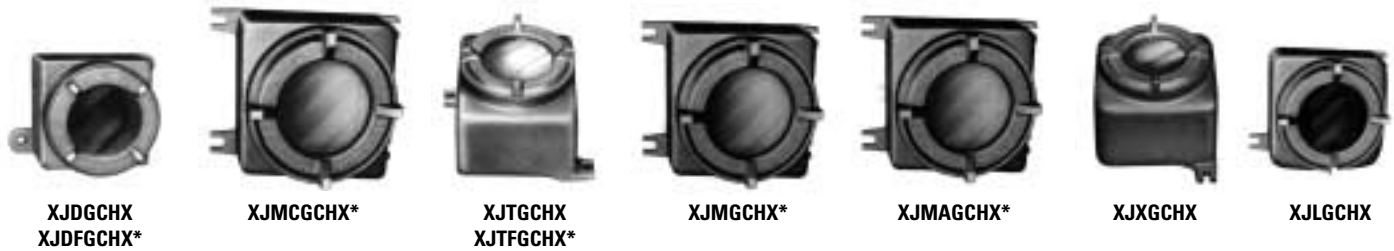
- NEC Class I, Groups B, C & D, Class II, Groups E, F & G
- UL Standard 1203, 2279
- Investigated to CSA Standard C22.2 No. 30 by UL
- CENELEC EN 50.014 & 50.018 EExd IIB + H2 IP60, (optional IP66 with o-ring seal)
- IEC 79 Exd IIB + H2 IP60, (optional IP66 with o-ring seal)
- Demko Certified 99E.124129U
- UL Classified, Class I, Zone 1, Group IIB + H2

Drilled and tapped to specification, attach layout sheet.

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## Explosionproof Enclosures With Threaded Window Cover

### METER AND INSTRUMENT HOUSINGS EXPLOSIONPROOF AND DUST-TIGHT CLASS I, GROUPS B, C & D; CLASS II GROUPS E, F, & G; NEMA 3, 4 (optional); NEMA 7, 9 EExd IIB + H2 IP60; IP66 (optional); Exd IIB + H2 IP66 (optional)



\* includes internal flange and meter mounting plate.



**Back wall mounting plates optional  
on some housings. Consult factory.**

#### Certifications



#### Compliance

- NEC Class I, Groups B, C & D, Class II, Groups E, F & G
  - UL Standard 1203, 2279
  - Investigated to CSA Standard C22.2 No. 30 by UL
  - CENELEC EN 50.014 & 50.018 EExd IIB + H2 IP60, (optional IP66 with o-ring seal)
  - IEC 79 Exd IIB + H2 IP60, (optional IP66 w/o-ring seal)
  - Demko Certified 99E.124129U
  - UL Classified, Class I, Zone 1, Group IIB + H2
- Drilled and tapped to specification, attach layout sheet.



## Explosionproof Meter Instrument Housings

### METER AND INSTRUMENT HOUSINGS SQUARE WINDOW THREADED STYLE CLASS I, GROUPS C & D; CLASS II GROUPS E, F, & G; NEMA 7 & NEMA 9 Designed for 3 1/2" Rectangular Meters



XJSWGC

**Non Magnetic Copper-free aluminum casting designed for specific instruments and meters**

#### Features

Recessed window with no exposed hardware or protrusions on the cover. Provides clean finished appearance compatible with rectangular meters. Designed for 3 1/2" rectangular and 4 1/2" round meters. Furnished with cast inside mounting ears to support adapter plate for meter mounting. Interior neck opening has clearance for meter face, diagonal dimension 3 13/16" x 3 1/4".

#### Mounting

Can be surface mounted or panel mounted in panels up to 1/4" thick. Panel mounting requires 5 5/8" round opening allowing neck to protrude through the panel and the cover only appears on the front surface of the panel. Cover locks in position with set screw. For additional support, the front surface under the cover of the box can be drilled and tapped with blind holes on 5 1/2" x 5 1/2" centers for screw attachment. Requires countersunk screw openings in panel.

For specific meter application consult factory.

(Meter not included)

#### Certifications

- UL Classified E81696
- CSA Certified LR27991

#### Compliance

- NEC Class I, Groups C & D, Class II, Groups E, F & G
- UL Standard 1203
- CSA Standard C22.2 No. 30

Drilled and tapped to specification, attach layout sheet.

## Explosionproof Enclosures With Threaded Cover

### JUNCTION BOXES THREADED DOME COVER STYLE EXPLOSIONPROOF AND DUST-TIGHT CLASS I, GROUP C & D; CLASS II GROUPS E, F, & G; NEMA 3, 4 (optional); NEMA 7, 9



**XJLD**



**XJTD**



**XJHAD**



**XJHAD**  
Without Cover  
To show Mounting Plate  
(Optional)



**XJHCD**



**XJKD**



**XJKAD**



**XJWT**



**XJW**



**XJSD**



**XJWH**



**XJW Modified**  
To house transfer switch  
Modification  
(Not UL or CSA)

#### Certifications

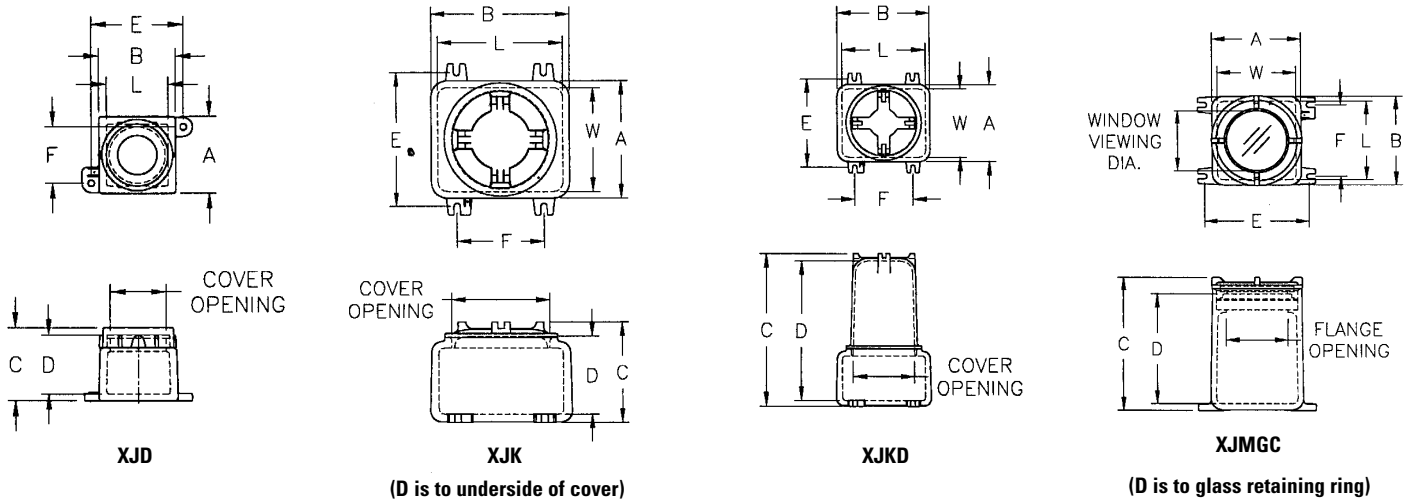
- UL Listed E10493
- CSA Certified LR27991

#### Compliance

- NEC Class I, Division I, Groups C & D, Class II, Groups E, F & G
- UL Standard 886
- CSA Standard C22.2 No. 30

Drilled and tapped to specification, attach layout sheet.

# Explosionproof Enclosures With Threaded Cover



| Base Catalog Number | Inside Nominal Dimensions |         |         | Overall Dimensions |         |          | Mounting CL to C L |       | Cover Opening Dia. | Window Viewing Dia. | Flange Opening Dia. | Max. Conduit Size | Mount. Bolt Size | Ship. Wt. Pounds |
|---------------------|---------------------------|---------|---------|--------------------|---------|----------|--------------------|-------|--------------------|---------------------|---------------------|-------------------|------------------|------------------|
|                     | W                         | L       | D       | A                  | B       | C        | E                  | F     |                    |                     |                     |                   |                  |                  |
| XJD                 | 4 1/8                     | 4 1/8   | 3 7/8   | 5 5/16             | 5 5/16  | 4 7/8    | 6 3/16             | 3 3/4 | 3 3/4              | -                   | -                   | 2                 | 3/8              | 5 3/4            |
| XJDGC               | 4 1/8                     | 4 1/8   | 4 1/16  | 5 5/16             | 5 5/16  | 5 9/16   | 6 3/16             | 3 3/4 | 3 3/4              | 3                   | -                   | 2                 | 3/8              | 5                |
| XJDFGC**            | 4 1/8                     | 4 1/8   | 4 1/16  | 5 5/16             | 5 5/16  | 5 9/16   | 6 3/16             | 3 3/4 | 2 7/8              | 3                   | 2 3/4               | 2                 | 3/8              | 6                |
| XJDA                | 5 3/4                     | 5 3/4   | 5 7/8   | 7 1/16             | 7 1/16  | 7 1/4    | 8 3/8              | 5 1/4 | 4 3/16             | -                   | -                   | 2                 | 3/8              | 12               |
| XJS                 | 4 DIA.                    |         | 3 3/8   | 4 7/8              | 4 7/8   | 4 1/2    | 3 3/4              | 3 3/4 | 4                  | -                   | -                   | 1                 | 1/4              | 3                |
| XJSD                | 4 DIA.                    |         | 4 7/16  | 4 7/8              | 4 7/8   | 5 1/2    | 3 3/4              | 3 3/4 | 4                  | -                   | -                   | 1                 | 1/4              | 3 1/2            |
| XJL                 | 6                         | 6       | 4 7/8   | 7                  | 7       | 6 1/8    | 8 3/8              | 5 1/4 | 5 3/8              | -                   | -                   | 2                 | 3/8              | 11               |
| XJLD4               | 6                         | 6       | 8 9/16  | 7                  | 7       | 9 7/8    | 8 3/8              | 5 1/4 | 5 3/8              | -                   | -                   | 2                 | 3/8              | 12               |
| XJLD6               | 6                         | 6       | 10 1/6  | 7                  | 7       | 11 7/16  | 8 3/8              | 5 1/4 | 5 3/8              | -                   | -                   | 2                 | 3/8              | 12 1/4           |
| XJLD10              | 6                         | 6       | 14 9/16 | 7                  | 7       | 15 15/16 | 8 3/8              | 5 1/4 | 5 3/8              | -                   | -                   | 2                 | 3/8              | 14               |
| XJLD13              | 6                         | 6       | 17 9/16 | 7                  | 7       | 18 15/16 | 8 3/8              | 5 1/4 | 5 3/8              | -                   | -                   | 2                 | 3/8              | 15               |
| XJLGC               | 6                         | 6       | 3 7/8   | 7                  | 7       | 6 3/16   | 8 3/8              | 5 1/4 | 5 3/8              | 4                   | -                   | 2                 | 3/8              | 11               |
| XJT                 | 5 13/16                   | 6 9/16  | 5 7/16  | 6 13/16            | 7 9/16  | 6 5/8    | 7 3/4              | 6     | 5 3/8              | -                   | -                   | 2                 | 7/16             | 12 3/4           |
| XJTD4               | 5 13/16                   | 6 9/16  | 9 1/16  | 6 13/16            | 7 9/16  | 10 3/8   | 7 3/4              | 6     | 5 3/8              | -                   | -                   | 2                 | 7/16             | 13 1/2           |
| XJTD6               | 5 13/16                   | 6 9/16  | 10 9/16 | 6 13/16            | 7 9/16  | 11 15/16 | 7 3/4              | 6     | 5 3/8              | -                   | -                   | 2                 | 7/16             | 14               |
| XJTD10              | 5 13/16                   | 6 9/16  | 15 1/16 | 6 13/16            | 7 9/16  | 16 7/16  | 7 3/4              | 6     | 5 3/8              | -                   | -                   | 2                 | 7/16             | 15 1/2           |
| XJTD13              | 5 13/16                   | 6 9/16  | 18 1/16 | 6 13/16            | 7 9/16  | 19 7/16  | 7 3/4              | 6     | 5 3/8              | -                   | -                   | 2                 | 7/16             | 16 1/2           |
| XJTGC               | 5 13/16                   | 6 9/16  | 4 5/16  | 6 13/16            | 7 9/16  | 6 5/8    | 7 3/4              | 6     | 5 3/8              | 4                   | -                   | 2                 | 7/16             | 12 3/4           |
| XJTFGC**            | 5 13/16                   | 6 9/16  | 4 5/16  | 6 13/16            | 7 9/16  | 6 5/8    | 7 3/4              | 6     | 5 3/8              | 4                   | 4 1/8               | 2                 | 7/16             | 13               |
| XJX                 | 4 3/4                     | 4 3/4   | 4 3/16  | 5 3/4              | 5 3/4   | 5 1/2    | 6 3/4              | 4 3/4 | 4 5/8              | -                   | -                   | 2                 | 1/4              | 7                |
| XJXGC               | 4 3/4                     | 4 3/4   | 3 5/16  | 5 3/4              | 5 3/4   | 5 3/8    | 6 3/4              | 4 3/4 | 4 5/8              | 3                   | -                   | 2                 | 1/4              | 7                |
| XJM                 | 6 3/4                     | 6 3/4   | 10 3/16 | 7 3/4              | 7 3/4   | 11 11/16 | 9 1/8              | 6 1/4 | 7                  | -                   | -                   | 2                 | 3/8              | 22 1/2           |
| XJMGC**             | 6 3/4                     | 6 3/4   | 9 1/8   | 7 3/4              | 7 3/4   | 11 1/2   | 9 1/8              | 6 1/4 | 7                  | 5 1/4               | 5 3/8               | 2                 | 3/8              | 22 1/2           |
| XJMA                | 6 13/16                   | 6 13/16 | 7 3/16  | 7 13/16            | 7 13/16 | 8 11/16  | 9 1/8              | 6 1/4 | 7                  | -                   | -                   | 2                 | 3/8              | 17               |
| XJMAGC**            | 6 13/16                   | 6 13/16 | 6 1/8   | 7 13/16            | 7 13/16 | 8 1/2    | 9 1/8              | 6 1/4 | 7                  | 5 1/4               | 5 1/4               | 2                 | 3/8              | 17               |
| XJMC                | 6 3/4                     | 6 3/4   | 5 3/16  | 7 13/16            | 7 13/16 | 6 11/16  | 9 1/8              | 6 1/4 | 7                  | -                   | -                   | 2                 | 3/8              | 13 1/2           |
| XJMCGC**            | 6 3/4                     | 6 3/4   | 4 1/8   | 7 13/16            | 7 13/16 | 6 1/2    | 9 1/8              | 6 1/4 | 7                  | 5 1/4               | 5 3/8               | 2                 | 3/8              | 13 3/4           |
| XJHA                | 7 3/16                    | 9 3/16  | 5 1/4   | 8 3/16             | 10 3/16 | 6 3/4    | 9 3/4              | 8 3/4 | 7                  | -                   | -                   | 2                 | 1/2              | 16 1/2           |
| XJHAD6              | 7 3/16                    | 9 3/16  | 11      | 8 3/16             | 10 3/16 | 12 7/16  | 9 3/4              | 8 3/4 | 7                  | -                   | -                   | 2                 | 1/2              | 19 3/4           |
| XJHAD9              | 7 3/16                    | 9 3/16  | 14      | 8 3/16             | 10 3/16 | 15 7/16  | 9 3/4              | 8 3/4 | 7                  | -                   | -                   | 2                 | 1/2              | 21 1/2           |
| XJHAD12             | 7 3/16                    | 9 3/16  | 17      | 8 3/16             | 10 3/16 | 18 7/16  | 9 3/4              | 8 3/4 | 7                  | -                   | -                   | 2                 | 1/2              | 23 1/2           |
| XJHAGC              | 7 3/16                    | 9 3/16  | 4 3/16  | 8 3/16             | 10 3/16 | 6 9/16   | 9 3/4              | 8 3/4 | 7                  | 5 1/4               | -                   | 2                 | 1/2              | 16 1/2           |
| XJHB                | 7 1/4                     | 9 1/8   | 7 1/4   | 8 3/8              | 10 1/4  | 8 13/16  | 9 3/4              | 8 7/8 | 7                  | -                   | -                   | 2                 | 1/2              | 22               |
| XJHBGC              | 7 1/4                     | 9 1/8   | 6 3/16  | 8 3/8              | 10 1/4  | 8 9/16   | 9 3/4              | 8 7/8 | 7                  | 5 1/4               | -                   | 2                 | 1/2              | 22               |

Note: Suffix H, X and HX enclosure types are dimensionally identical. \*\*Includes built-in meter mounting provisions; call factory for details.

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## Explosionproof Enclosures With Threaded Cover

| Base<br>Catalog<br>Number | Inside Nominal<br>Dimensions |         |          | Overall<br>Dimensions |          |          | Mounting<br>CL to CL |        | Cover<br>Opening | Window<br>Viewing | Flange<br>Opening | Max. Conduit<br>Size | Mount.<br>Bolt<br>Size | Ship.<br>Wt.<br>Pounds |
|---------------------------|------------------------------|---------|----------|-----------------------|----------|----------|----------------------|--------|------------------|-------------------|-------------------|----------------------|------------------------|------------------------|
|                           | W                            | L       | D        | A                     | B        | C        | E                    | F      | Dia.             | Dia.              | Dia.              |                      |                        |                        |
|                           | XJHC                         | 7 3/4   | 10 5/16  | 6 3/16                | 8 7/8    | 11 7/16  | 7 3/4                | 10 1/4 | 7 3/4            | 7                 | -                 | -                    | 2                      | 1/2                    |
| XJHCD6                    | 7 3/4                        | 10 5/16 | 11 15/16 | 8 7/8                 | 11 7/16  | 13 7/16  | 10 1/4               | 7 3/4  | 7                | -                 | -                 | 2                    | 1/2                    | 26 3/4                 |
| XJHCD9                    | 7 3/4                        | 10 5/16 | 14 15/16 | 8 7/8                 | 11 7/16  | 16 7/16  | 10 1/4               | 7 3/4  | 7                | -                 | -                 | 2                    | 1/2                    | 28 1/2                 |
| XJHCD12                   | 7 3/4                        | 10 5/16 | 17 15/16 | 8 7/8                 | 11 7/16  | 19 7/16  | 10 1/4               | 7 3/4  | 7                | -                 | -                 | 2                    | 1/2                    | 30 1/2                 |
| XJHCGC                    | 7 3/4                        | 10 5/16 | 5 1/8    | 8 7/8                 | 11 7/16  | 7 9/16   | 10 1/4               | 7 3/4  | 7                | 5 1/4             | -                 | 2                    | 1/2                    | 23 1/2                 |
| XJK                       | 9 1/2                        | 11 1/2  | 7 1/4    | 10 3/4                | 12 3/4   | 9 1/4    | 12 1/4               | 8      | 9                | -                 | -                 | 3                    | 1/2                    | 39 1/4                 |
| XJKD6                     | 9 1/2                        | 11 1/2  | 13 1/16  | 10 3/4                | 12 3/4   | 14 15/16 | 12 1/4               | 8      | 9                | -                 | -                 | 3                    | 1/2                    | 43 3/4                 |
| XJKD12                    | 9 1/2                        | 11 1/2  | 19 1/16  | 10 3/4                | 12 3/4   | 20 15/16 | 12 1/4               | 8      | 9                | -                 | -                 | 3                    | 1/2                    | 49                     |
| XJKD18                    | 9 1/2                        | 11 1/2  | 25 1/16  | 10 3/4                | 12 3/4   | 26 15/16 | 12 1/4               | 8      | 9                | -                 | -                 | 3                    | 1/2                    | 54 3/4                 |
| XJKGC                     | 9 1/2                        | 11 1/2  | 6 3/16   | 10 3/4                | 12 3/4   | 9 1/16   | 12 1/4               | 8      | 9                | 6 11/16           | -                 | 3                    | 1/2                    | 39 1/4                 |
| XJKA                      | 9 1/2                        | 11 1/2  | 9 1/8    | 10 3/4                | 12 3/4   | 11 3/16  | 12 3/8               | 8      | 9                | -                 | -                 | 3                    | 1/2                    | 45 3/4                 |
| XJKAD6                    | 9 1/2                        | 11 1/2  | 15       | 10 3/4                | 12 3/4   | 16 13/16 | 12 3/8               | 8      | 9                | -                 | -                 | 3                    | 1/2                    | 50 1/4                 |
| XJKAD12                   | 9 1/2                        | 11 1/2  | 21       | 10 3/4                | 12 3/4   | 22 13/16 | 12 3/8               | 8      | 9                | -                 | -                 | 3                    | 1/2                    | 55 1/4                 |
| XJKAD18                   | 9 1/2                        | 11 1/2  | 27       | 10 3/4                | 12 3/4   | 28 13/16 | 12 3/8               | 8      | 9                | -                 | -                 | 3                    | 1/2                    | 61 1/4                 |
| XJKAGC                    | 9 1/2                        | 11 1/2  | 8 1/16   | 10 3/4                | 12 3/4   | 11       | 12 3/8               | 8      | 9                | 6 11/16           | -                 | 3                    | 1/2                    | 45 3/4                 |
| XJN6                      | 11 1/2                       | 12 3/4  | 7 7/16   | 13 3/8                | 14 5/8   | 9 13/16  | 15 3/8               | 9      | 10 11/16         | -                 | -                 | 4                    | 1/2                    | 60 1/2                 |
| XJN12                     | 11 1/2                       | 12 3/4  | 13 9/16  | 13 9/16               | 14 13/16 | 15 15/16 | 15 3/8               | 9      | 10 11/16         | -                 | -                 | 4                    | 1/2                    | 87 1/2                 |
| XJNGC6                    | 11 1/2                       | 12 3/4  | 6 3/16   | 13 3/8                | 14 5/8   | 9 7/8    | 15 3/8               | 9      | 10 11/16         | 8                 | -                 | 2                    | 1/2                    | 60 1/2                 |
| XJNGC12                   | 11 1/2                       | 12 3/4  | 12 5/16  | 13 9/16               | 14 13/16 | 16       | 15 3/8               | 9      | 10 11/16         | 8                 | -                 | 2                    | 1/2                    | 87 1/2                 |
| XJWH                      | 6 5/8 DIA                    |         | 4 3/8    | 7 15/16               | 7 15/16  | 5 15/16  | 6 3/8                | 6 3/8  | 7                | -                 | -                 | 2                    | 3/8                    | 11 1/2                 |
| XJWH6                     | 6 5/8 DIA                    |         | 10 1/8   | 7 15/16               | 7 15/16  | 11 5/8   | 6 3/8                | 6 3/8  | 7                | -                 | -                 | 2                    | 3/8                    | 14 3/4                 |
| XJWH9                     | 6 5/8 DIA                    |         | 13 1/8   | 7 15/16               | 7 15/16  | 14 5/8   | 6 3/8                | 6 3/8  | 7                | -                 | -                 | 2                    | 3/8                    | 16 1/2                 |
| XJWH12                    | 6 5/8 DIA                    |         | 16 1/8   | 7 15/16               | 7 15/16  | 17 5/8   | 6 3/8                | 6 3/8  | 7                | -                 | -                 | 2                    | 3/8                    | 18 1/2                 |
| XJWHGC                    | 6 5/8 DIA                    |         | 3 5/16   | 7 15/16               | 7 15/16  | 5 3/4    | 6 3/8                | 6 3/8  | 7                | 5 1/4             | -                 | 2                    | 3/8                    | 11 1/2                 |
| XJW3                      | 4 7/8 DIA                    |         | 5 5/16   | 5 11/16               | 5 11/16  | 6 7/8    | 4 1/2                | 4 1/2  | 4 7/8            | -                 | -                 | 1 1/4                | 1/4                    | 5                      |
| XJW5                      | 4 7/8 DIA                    |         | 7 5/16   | 5 11/16               | 5 11/16  | 8 11/16  | 4 1/2                | 4 1/2  | 4 7/8            | -                 | -                 | 1 1/4                | 1/4                    | 5 3/4                  |
| XJWT                      | 5 3/8 DIA                    |         | 3 13/16  | 6 3/8                 | 6 3/8    | 5 1/8    | 5 1/8                | 5 1/8  | 5 3/8            | -                 | -                 | 2                    | 5/16                   | 8                      |
| XJWT4                     | 5 3/8 DIA                    |         | 7 9/16   | 6 3/8                 | 6 3/8    | 8 7/8    | 5 1/8                | 5 1/8  | 5 3/8            | -                 | -                 | 2                    | 5/16                   | 9                      |
| XJWT6                     | 5 3/8 DIA                    |         | 9 1/16   | 6 3/8                 | 6 3/8    | 10 3/8   | 5 1/8                | 5 1/8  | 5 3/8            | -                 | -                 | 2                    | 5/16                   | 9 1/2                  |
| XJWT10                    | 5 3/8 DIA                    |         | 13 9/16  | 6 3/8                 | 6 3/8    | 14 7/8   | 5 1/8                | 5 1/8  | 5 3/8            | -                 | -                 | 2                    | 5/16                   | 11                     |
| XJWT13                    | 5 3/8 DIA                    |         | 16 9/16  | 6 3/8                 | 6 3/8    | 17 7/8   | 5 1/8                | 5 1/8  | 5 3/8            | -                 | -                 | 2                    | 5/16                   | 12                     |
| XJWTGC                    | 5 3/8 DIA                    |         | 2 15/16  | 6 3/8                 | 6 3/8    | 5 1/8    | 5 1/8                | 5 1/8  | 5 3/8            | 4                 | -                 | 2                    | 5/16                   | 8                      |
| XJSWGC**                  | 5 1/4                        | 5 1/4   | 4 1/16   | 6 1/8                 | 6 1/8    | 5 5/8    | 7 1/8                | 4 3/4  | 5                | 3 3/8 x 3 3/8     | 3 3/4             | 3/4                  | 5/16                   | 8                      |
| XJOGC                     | 8                            | 8       | 5 1/4    | 9                     | 9        | 7 9/16   | 8                    | 8      | 7                | 5 1/4             | -                 | 2                    | 5/16                   | 20 1/4                 |

Note: Suffix H, X and HX enclosure types are dimensionally identical. \*\*Includes built-in meter mounting provisions; call factory for details.

# Conduit Drilling and Tapping Guidelines For Threaded Enclosure

When drilling & tapping enclosures for conduit, proper installation requires compliance with the following:

1. Must be tapped with at least 5 full NPT threads (suffix X enclosures require 6 NPT threads) in enclosure back or sides only; min. 1/2" conduit size.
2. Tapping depth of NPT holes must be plus 1/2 turn min. to plus 1-1/2 turns max. past standard NPT plug gage notch.
3. Inner end of conduit openings shall be smooth and well-rounded.

**TABLE I**

| Trade Size Of Conduit, Inches (NPT) | Minimum wall thickness at conduit entrance excluding suffix X enclosures (XCEX) |
|-------------------------------------|---|
| 1/2 - 3/4                           | 3/8 inch  |
| 1 - 2                               | 7/16 inch   |
| 2 1/2 - 5                           | 5/8 inch  |

**TABLE II**

| Conduit size, inches (NPT)                                       | 1/2    | 3/4    | 1      | 1 1/4 | 1 1/2 | 2     | 2 1/2 | 3       | 3 1/2   | 4     |
|--|--------|--------|--------|-------|-------|-------|-------|---------|---------|-------|
| Minimum Distance from conduit CL to inside corner or back of box | 1 5/16 | 1 7/16 | 1 9/16 | 1 3/4 | 1 7/8 | 2 1/8 | 2 3/8 | 2 11/16 | 2 15/16 | 3 1/4 |
| Approximate diameter of union                                    | 1 7/8  | 1 7/8  | 2 1/16 | 2 7/8 | 3 1/4 | 3 7/8 | 4 7/8 | 5 1/2   | 6       | 6 1/2 |

**TABLE III**

**NPT (METRIC) THREADS**

| SIZE         | 5     | 4     | 3 1/2 | 3 (M75) | 2 1/2 (M63) | 2 (M50) | 1 1/2 (M40) | 1 1/4 (M32) | 1 (M25) | 3/4 (M20) | 1/2 (M16) | 1/16 - 3/8 |
|--------------|-------|-------|-------|---------|-------------|---------|-------------|-------------|---------|-----------|-----------|------------|
| 1/16-3/8 NPT | 4 3/8 | 3 5/8 | 3 3/8 | 3       | 2 5/8       | 2 3/8   | 2           | 1 7/8       | 1 5/8   | 1 3/8     | 1 1/4     | 1 1/8      |
| 1/2 (M16)    | 4 3/8 | 3 5/8 | 3 3/8 | 3       | 2 5/8       | 2 3/8   | 2           | 1 7/8       | 1 5/8   | 1 3/8     | 1 1/4     |            |
| 3/4 (M20)    | 4 1/2 | 3 3/4 | 3 1/2 | 3 1/8   | 2 3/4       | 2 1/2   | 2 1/8       | 2           | 1 3/4   | 1 1/2     |           |            |
| 1 (M25)      | 4 5/8 | 3 7/8 | 3 5/8 | 3 1/4   | 2 7/8       | 2 3/4   | 2 1/4       | 2 1/8       | 1 7/8   |           |           |            |
| 1 1/4 (M32)  | 4 7/8 | 4 1/8 | 3 7/8 | 3 1/2   | 3 1/8       | 2 7/8   | 2 1/2       | 2 3/8       |         |           |           |            |
| 1 1/2 (M40)  | 5     | 4 1/4 | 4     | 3 5/8   | 3 1/4       | 3       | 2 5/8       |             |         |           |           |            |
| 2 (M50)      | 5 3/8 | 4 3/4 | 4 1/2 | 4       | 3 5/8       | 3 3/8   |             |             |         |           |           |            |
| 2 1/2 (M63)  | 5 1/2 | 4 7/8 | 4 5/8 | 4 1/4   | 3 7/8       |         |             |             |         |           |           |            |
| 3 (M75)      | 5 7/8 | 5 1/4 | 5     | 4 5/8   |             |         |             |             |         |           |           |            |
| 3 1/2        | 6 1/4 | 5 3/4 | 5 1/2 |         |             |         |             |             |         |           |           |            |
| 4            | 6 7/8 | 6     |       |         |             |         |             |             |         |           |           |            |
| 5            | 7 3/8 |       |       |         |             |         |             |             |         |           |           |            |

This information is compiled from data which we believe is reliable and is given in good faith. Since the methods of application and conditions under which our products are used are beyond our control, we are not able to guarantee the application and/or use of same. The user assumes all risks and liability in connection with the application and use of our products.

**Note:** All dimensions are in inches.

The Adalet engineering department is available to provide custom explosionproof enclosures for your products.

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# Explosionproof Enclosures With Threaded Cover

## METER & INSTRUMENT HOUSINGS EXPLOSIONPROOF AND DUST-TIGHT DRILLING & TAPPING LAYOUT INSTRUCTIONS

Consult factory for extensive machining options, i.e.  
mounting of operators, thread type and size thru wall, mounting pans.

Layout data sheets available.

**MINIMUM DISTANCE BETWEEN CENTERS OF AUXILIARY DEVICES AND CONDUIT ENTRIES**

| SIZE               | 5<br>NPSM | 4<br>NPSM | 3 1/2<br>NPSM | 3<br>NPSM | 2 1/2<br>NPSM | 2<br>NPSM | 1 1/2<br>NPSM | 1 1/4<br>NPSM | 1<br>NPSM | 3/4<br>NPSM | 1/4-3/8<br>NPSM | 1/4-1 UN |
|--------------------|-----------|-----------|---------------|-----------|---------------|-----------|---------------|---------------|-----------|-------------|-----------------|----------|
| 1/16-3/8<br>NPT    | 4 3/8     | 3 5/8     | 3 3/8         | 3         | 2 5/8         | 2 3/8     | 2             | 1 7/8         | 1 5/8     | 1 3/8       | 1 1/4           | 1 1/8    |
| 1/2NPT<br>(M16)    | 4 3/8     | 3 5/8     | 3 3/8         | 3         | 2 5/8         | 2 3/8     | 2             | 1 7/8         | 1 5/8     | 1 3/8       | 1 1/4           |          |
| 3/4 NPT<br>(M20)   | 4 1/2     | 3 3/4     | 3 1/2         | 3 1/8     | 2 3/4         | 2 1/2     | 2 1/8         | 2             | 1 3/4     | 1 1/2       |                 |          |
| 1 NPT<br>(M25)     | 4 5/8     | 3 7/8     | 3 5/8         | 3 1/4     | 2 7/8         | 2 3/4     | 2 1/4         | 2 1/8         | 1 7/8     |             |                 |          |
| 1 1/4 NPT<br>(M32) | 4 7/8     | 4 1/8     | 3 7/8         | 3 1/2     | 3 1/8         | 2 7/8     | 2 1/2         | 2 3/8         |           |             |                 |          |
| 1 1/2 NPT<br>(M40) | 5         | 4 1/4     | 4             | 3 5/8     | 3 1/4         | 3         | 2 5/8         |               |           |             |                 |          |
| 2 NPT<br>(M50)     | 5 3/8     | 4 3/4     | 4 1/2         | 4         | 3 5/8         | 3 3/8     |               |               |           |             |                 |          |
| 2 1/2 NPT<br>(M63) | 5 1/2     | 4 7/8     | 4 5/8         | 4 1/4     | 3 7/8         |           |               |               |           |             |                 |          |
| 3 NPT<br>(M75)     | 5 7/8     | 5 1/4     | 5             | 4 5/8     |               |           |               |               |           |             |                 |          |
| 3 1/2<br>NPT       | 6 1/4     | 5 3/4     | 5 1/2         |           |               |           |               |               |           |             |                 |          |
| 4<br>NPT           | 6 7/8     | 6         |               |           |               |           |               |               |           |             |                 |          |
| 5<br>NPT           | 7 3/8     |           |               |           |               |           |               |               |           |             |                 |          |

**MINIMUM DISTANCE BETWEEN CENTERS OF AUXILIARY DEVICES**

| SIZE            | 5<br>NPSM | 4<br>NPSM | 3 1/2<br>NPSM | 3<br>NPSM | 2 1/2<br>NPSM | 2<br>NPSM | 1 1/2<br>NPSM | 1 1/4<br>NPSM | 1<br>NPSM | 3/4<br>NPSM | 1/4-3/8<br>NPSM | 1/4-1 UN |
|-----------------|-----------|-----------|---------------|-----------|---------------|-----------|---------------|---------------|-----------|-------------|-----------------|----------|
| 1/4-1 UN        | 4 3/8     | 3 5/8     | 3 3/8         | 3         | 2 5/8         | 2 3/8     | 2             | 1 7/8         | 1 5/8     | 1 3/8       | 1 1/4           | 1 1/8    |
| 1/4-3/8<br>NPSM | 4 3/8     | 3 5/8     | 3 3/8         | 3         | 2 5/8         | 2 3/8     | 2             | 1 7/8         | 1 5/8     | 1 3/8       | 1 1/4           |          |
| 3/4<br>NPSM     | 4 1/2     | 3 3/4     | 3 1/2         | 3 1/8     | 2 3/4         | 2 1/2     | 2 1/8         | 2             | 1 3/4     | 1 1/2       |                 |          |
| 1<br>NPSM       | 4 5/8     | 3 7/8     | 3 5/8         | 3 1/4     | 2 7/8         | 2 3/4     | 2 1/4         | 2 1/8         | 1 7/8     |             |                 |          |
| 1 1/4<br>NPSM   | 4 7/8     | 4 1/8     | 3 7/8         | 3 1/2     | 3 1/8         | 2 7/8     | 2 1/2         | 2 3/8         |           |             |                 |          |
| 1 1/2<br>NPSM   | 5         | 4 1/4     | 4             | 3 5/8     | 3 1/4         | 3         | 2 5/8         |               |           |             |                 |          |
| 2<br>NPSM       | 5 3/8     | 4 3/4     | 4 1/2         | 4         | 3 5/8         | 3 3/8     |               |               |           |             |                 |          |
| 2 1/2<br>NPSM   | 5 1/2     | 4 7/8     | 4 5/8         | 4 1/4     | 3 7/8         |           |               |               |           |             |                 |          |
| 3<br>NPSM       | 5 7/8     | 5 1/4     | 5             | 4 5/8     |               |           |               |               |           |             |                 |          |
| 3 1/2<br>NPSM   | 6 1/4     | 5 3/4     | 5 1/2         |           |               |           |               |               |           |             |                 |          |
| 4<br>NPSM       | 6 7/8     | 6         |               |           |               |           |               |               |           |             |                 |          |
| 5<br>NPSM       | 7 3/8     |           |               |           |               |           |               |               |           |             |                 |          |

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