

# U-Line® Factory Sealed 20 Amp Plugs and Receptacles

## Explosionproof, Dust-Ignitionproof

Dead-Front Safety Construction. Choice of Aluminum or Thermoplastic Polyester Plug.

Class I, Division 1 and 2 Groups B\*, C, D  
Class II, Division 1 and 2 Groups F, G  
Class III  
NEMA 3, 3R, 7BCD, 9FG

### Applications

- Locations where receptacles are used with stationary or portable electrically operated devices such as:
  - Lighting systems
  - Conveyors
  - Heaters
  - Motor-generator sets
  - Air conditioners
  - Compressors
  - Pumps
- Locations with damp or corrosive conditions.
- Class I: classified locations where ignitable vapors or gases are present such as:
  - Petrochemical plants
  - Petroleum refineries
  - Paint and chemical plants
- Class II: classified locations such as:
  - Process industries where there are dust hazards from handling such products as flour, grain and starch or any location where ignitable amounts of dust are present or amounts which would adversely affect performance.



### Standard Materials

- U-Line receptacle and cover: copperfree (4/10 of 1% max.) aluminum
- U-Line mounting box: malleable iron
- U-Line M Series receptacle and mounting box: malleable iron
- ECP plugs: copperfree (4/10 of 1% max.) aluminum housings
- Insulating blocks: glass-filled reinforced polyester

### Standard Finishes

- Malleable iron mounting boxes: triple-coat—(1) zinc electroplate, (2) chromate and (3) epoxy powder coat
- U-Line receptacles: epoxy powder coat
- Cord connector housings and caps: epoxy powder coat

### Options

- U-Line all-aluminum receptacle cover and box. Add suffix **-A**.

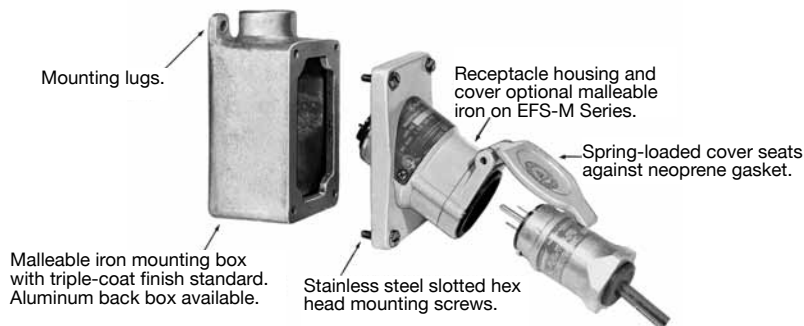
### Certifications and Compliances

- UL Listed: E10784, E81751
- UL Standard: 1203, 1010, 894
- CSA Standard: C22.2 No. 25, C22.2 No. 30, C22.2 No. 42, C22 No. 159
- CSA Certified: 038644

### Features

- Intermateable with competitor's plugs of like configurations.
- Factory sealed, external seals not required in most areas. Arcing is safely confined to receptacle interior.
- Choice of aluminum receptacle with malleable iron mounting box or all malleable iron receptacle and box.
- Energized receptacle contacts deeply recessed to reduce danger of accidental touching.
- Unique blade-type, brass contacts exert constant pressure along entire contact surface and provide superior electrical contact.
- Insulators provide superior dielectric and mechanical strength and lowest arc tracking.
- ECP plug fits any standard non-explosionproof receptacle (NEMA 5-20R, or 6-20R) as well as U-Line explosionproof receptacles.

### Illustrated Features



U-Line NEMA 4X corrosion resistance screw cover kit available: **ULINEREC4XKIT**.



♦ See *Plugs and Receptacles: Hazardous Locations* for items suitable for Class I, Group B, C and D; Class II, Groups F, G; and Class III.

Special U-Line receptacles are UL Classified to mount on Killark SWB boxes. Killark is a registered trademark of Hubbell Incorporated.

# U-Line® Factory Sealed 20 Amp Plugs and Receptacles

## Explosionproof, Dust-Ignitionproof

Dead-Front Safety Construction. Choice of Aluminum or Thermoplastic Polyester Plug.

Class I, Division 1 and 2 Groups B+, C, D

Class II, Division 1 and 2 Groups F, G

Class III

NEMA 3, 3R, 7BCD, 9FG

### Illustrated Features

**Spring door cover** keeps dust out of receptacle when plug is not in use, which may be rotated 180° or completely removed. Stainless steel cover spring-completely enclosed for protection from corrosive environments.

**With plug in use**, neoprene gasket in throat of receptacle “seals” around plug keeping out dirt, water, dust and other foreign matter.

**With plug not in use**, spring-loaded door seats against neoprene gasket to seal receptacle from corrosive atmospheres.



**Factory sealed receptacle/switch interior.** Switch is an integral part of receptacle interior, contained in an aluminum sleeve. Protective xylan coating on inside of sleeve provides smooth “rotating” action of internal switch, which is activated by rotating plug in receptacle. Entire aluminum sleeve is sealed at both ends with neoprene O-rings to protect receptacle/switch interior against moisture.

**For safety...** Ordinary location plug will NOT activate explosionproof U-Line receptacle.

**Plug mechanical cable clamps** on the plug prevent strain on cables and meet or exceed UL 150 lb. strain relief pull-out test for classified locations.



**ECP Interchanger™ plug** fits ordinary location receptacles (NEMA 5-20R and NEMA 6-20R) and explosionproof U-Line receptacle as well competitors comparable NEMA blade configured receptacles.

**A twist of the plug** produces audible “click” to indicate fast make and break of built-in switch contacts. Twisting plug locks it in place—cannot be accidentally pulled out.

**Special neoprene watertight plug bushing** accommodates flexible cord ranging from .538” to .639” in diameter.



**Solderless lugs**—all terminals are pressure type to facilitate wiring.

**Longer plug housing** for better gripping and easier plug insertion and withdrawal.

◆ Shaded items on following pages indicate items suitable for Class I, Group B, C and D; Class II, Groups F, G; and Class III.

# U-Line® Factory Sealed 20 Amp Aluminum Receptacles

## Explosionproof, Dust-Ignitionproof

125 Vac, 20 Amp, 1 HP; 250 Vac, 20 Amp, 2 HP. Dead-Front Safety Construction.

Class I, Division 1 Groups B<sup>+</sup>, C, D  
 Class I, Division 2 Groups B, C, D  
 Class II, Division 1 and 2 Groups F, G  
 Class III

### Aluminum Receptacle and Malleable Iron Mounting Box †

Type	Wire/Pole	Hub Size (Inches)	Catalog Number	
			125 Vac, 1 HP 	250 Vac, 2 HP 

#### Single Gang

Class I, Division 1 and 2 Groups B<sup>+</sup>, C, D; Class II, Division 1 and 2 Groups F, G; Class III.

Suitable for use in Class I, Division 1, Group B when used with external seals. †



Dead-End



Feed-Thru

Dead-End	2W, 3P	1/2	1/2	1
		3/4		
Feed-Thru	2W, 3P	1/2	1/2	1
		3/4		
		1		

EFS150-2023	EFS150-20232
EFS175-2023	EFS175-20232
EFS110-2023	EFS110-20232
EFSC150-2023	EFSC150-20232
EFSC175-2023	EFSC175-20232
EFSC110-2023	EFSC110-20232

#### Two Gang

Class I, Division 1 and 2 Groups C, D; Class I, Division 2, Groups B, C, D; Class II, Division 1 and 2 Groups F, G; Class III.



Dead-End



Feed-Thru

Dead-End	2W, 3P	1/2	1/2	1
		3/4		
		1		
Feed-Thru	2W, 3P	1/2	1/2	1
		3/4		
		1		

EFS250-2023	EFS250-20232
EFS275-2023	EFS275-20232
EFS210-2023	EFS210-20232
EFSC250-2023	EFSC250-20232
EFSC275-2023	EFSC275-20232
EFSC210-2023	EFSC210-20232

#### Replacement Receptacles



2W, 3P  
 Spring Door Replacement Assembly (aluminum)  
 Receptacle for use on Killark † SWB Boxes.

EFSR-2023	EFSR-20232
ULSCA	
EFSR-2023K	EFSR-20232K



NEMA 4X Corrosion Resistance Kit ▼

ULINEREC4XKIT

† Standard back box malleable iron. For aluminum back box, add suffix -A to catalog number.

‡ Seals (not furnished—see Fittings Section) must be placed within 2 inches from each conduit opening. Seals are not required in Class I, Division 2 locations.

▼ NEMA Type 4X when the screw cover is installed and the cover is fully engaged.

◆ Shaded area indicates items suitable for Class I, Group B, C and D; Class II, Groups F, G; and Class III.

◇ Killark is a registered trademark of Hubbell Incorporated.

# U-Line® Factory Sealed 20 Amp Malleable Iron Receptacles

## Explosionproof, Dust-Ignitionproof

125 Vac, 20 Amp, 1 HP; 250 Vac, 20 Amp, 2 HP. Dead-Front Safety Construction.

Class I, Division 1 Groups B<sup>+</sup>, C, D  
 Class I, Division 2 Groups B, C, D  
 Class II, Division 1 and 2 Groups F, G  
 Class III

### Malleable Iron Receptacle and Malleable Iron Mounting Box

Type	Wire/Pole	Hub Size (Inches)	Catalog Number	
			125 Vac, 1 HP 	250 Vac, 2 HP 

#### Single Gang — Class I, Group B

Class I, Division 1 and 2 Groups B, C, D; Class II, Division 1 and 2 Groups F, G; Class III

These models have separate factory sealed chamber—suitable for Class I, Group B as well as Class I, Groups C and D, Class II, Groups F<sup>+</sup>, G and Class III. No external seals required.



Dead-End



Feed-Thru

Dead-End	2W, 3P	1/2	1/2	1/2
		3/4		
Feed-Thru	2W, 3P	1/2	1/2	1/2
		3/4		

EFSB150-2023M	EFSB150-20232M
EFSCB150-2023M	EFSCB150-20232M



Separate Sealing Chamber  
Factory Sealed

#### Single Gang

Class I, Division 1 and 2 Groups B<sup>+</sup>, C, D; Class II, Division 1 and 2 Groups F, G; Class III

Suitable for use in Class I, Division 1, Group B when used with external seals. †



Dead-End



Feed-Thru

Dead-End	2W, 3P	1/2	1/2	1/2
		3/4		
		1		
Feed-Thru	2W, 3P	1/2	1/2	1/2
		3/4		
		1		

EFS150-2023M	EFS150-20232M		
		EFS175-2023M	EFS175-20232M
		EFS110-2023M	EFS110-20232M
EFSC150-2023M	EFSC150-20232M		
		EFSC175-2023M	EFSC175-20232M
		EFSC110-2023M	EFSC110-20232M

#### Two Gang

Class I, Division 1 and 2 Groups C, D; Class I, Division 2, Groups B, C, D; Class II, Division 1 and 2 Groups F, G; Class III.



Dead-End



Feed-Thru

Dead-End	2W, 3P	1/2	1/2	1/2
		3/4		
		1		
Feed-Thru	2W, 3P	1/2	1/2	1/2
		3/4		
		1		

EFS250-2023M	EFS250-20232M		
		EFS275-2023M	EFS275-20232M
		EFS210-2023M	EFS210-20232M
EFSC250-2023M	EFSC250-20232M		
		EFSC275-2023M	EFSC275-20232M
		EFSC210-2023M	EFSC210-20232M

#### Malleable Iron Replacement Receptacle Only



2W, 3P

Spring door replacement assembly (iron)

EFSR-2023M

EFSR-20232M

ULSCM

† Seals (not furnished—see Fittings Section) must be placed within 2 inches from each conduit opening. Seals are not required in Class I, Division 2 locations.

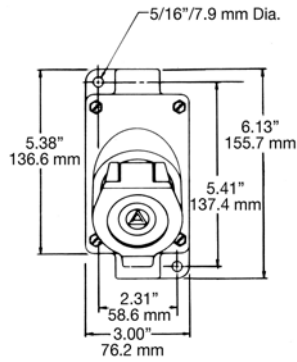
♦ Shaded area indicates items suitable for Class I, Group B, C and D; Class II, Groups F, G; and Class III.

# U-Line® Factory Sealed 20 Amp Receptacles Dimensions

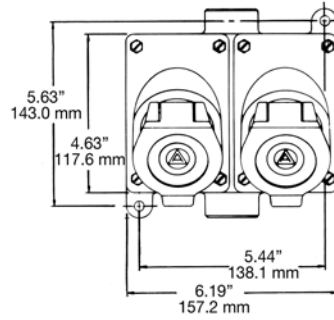
## Explosionproof, Dust-Ignitionproof

125 Vac, 20 Amp, 1 HP; 250 Vac, 20 Amp, 2 HP. Dead-Front Safety Construction.

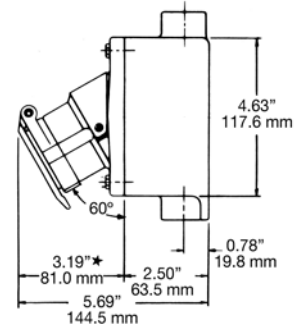
Single Gang Box



Two Gang Box



Side View



★ Malleable iron receptacle: 3.38"/85.6 mm

# 20 Amp Plugs

## For U-Line® 20 Amp Receptacles. Explosionproof, Dust-Ignitionproof

These watertight plugs also fit NEMA 5-20R or 6-20R receptacles in nonclassified areas. Choice of Aluminum or Thermoplastic Polyester Plug.

**Class I, Division 1 and 2 Groups B, C, D**  
**Class II, Division 1 and 2 Groups F, G**  
**Class III**  
**NEMA 3, 3R, 7BCD, 9FG**

### Applications

- U-Line® Interchanger™ ECP plug: suitable for use in such areas as refineries, petrochemical plants, and other areas subject to where ignitable gases are present.
- NCP Plug: ideal where moisture or corrosion is a constant problem, such as production facilities on marine platforms, and pipeline transportation facilities.











### Features

- Unique blade-type, brass contacts exert constant pressure along entire contact surface and provide superior electrical contact.
- Insulators provide superior dielectric and mechanical strength and lowest arc tracking.
- Longer plug housing for better gripping and easier plug insertion and withdrawal.

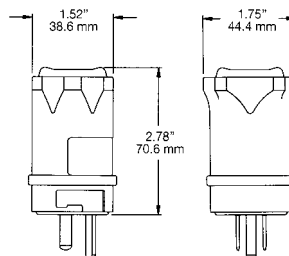
- Plugs fits any standard non-explosionproof receptacle (NEMA 5-15R, 5-20R, or 6-20R) as well as U-Line explosionproof receptacles.
- ECP plug: a twist of the plug produces audible “click” to indicate fast make and break of built-in switch contacts. Twisting plug locks it in place and cannot be accidentally pulled out.
- NCP plug: special neoprene watertight plug bushing accommodates flexible cord ranging from .538” to .639” diameter.

### Standard Materials

- ECP plug: copperfree (less than 4/10ths of 1%) aluminum
- NCP plug: 30% glass-reinforced thermoplastic polyester

	Amp	Diagram	Wire/ Pole	Cable Dia., (Inches)	Catalog Number	
					125 Vac 	250 Vac 
<b>U-Line® Interchanger™ ECP Standard Plug</b>						
	15		2W, 3P	.538 to .639	<b>ECP-1523</b>	—
	20		2W, 3P	.538 to .639	<b>ECP-2023</b>	—
	20		2W, 3P	.538 to .639	—	<b>ECP-20232</b>
<b>NCP Plug</b>						
	15		2W, 3P	.538 to .639	<b>NCP-1523</b>	—
	20		2W, 3P	.538 to .639	<b>NCP-2023</b>	—
	20		2W, 3P	.538 to .639	—	<b>NCP-20232</b>

### Dimensions in Inches/Millimeters



# EFSR-GFI Factory Sealed Ground Fault Circuit Interrupter

For U-Line® 20 Amp Receptacles. Explosionproof, Dust-Ignitionproof

125 Vac branch circuits. Installs in standard EFD Mounting Box.

Class I, Division 1 Groups B+, C, D  
 Class I, Division 2 Groups B, C, D  
 Class II, Division 1 and 2 Groups E, F, G  
 Class III  
 NEMA 3, 3R, 7BCD, 9EFG

## Applications

- Provides required ground fault protection for portable electrically-operated devices. Meets all UL and CSA requirements for ground fault protection in hazardous locations.
- Well suited for use in highly corrosive atmospheres and wet locations.
- Can be used in conjunction with U-Line® factory sealed receptacle on 20 Amp, 125 Vac 50/60 Hz branch circuits.

## Features

- Factory sealed construction; **no external seals are required.** Arcing is confined within the device's interior sealed chamber.
- Rated 20 Amp, 125 Vac, 5 mA trip setting.
- Smooth-operating test and reset buttons.
- Can be installed in standard EFD Series mounting boxes. Choice of malleable iron or aluminum, dead-end or feed-thru styles.

## Standard Materials

- Cover and sealing chamber: cast copperfree (less than 4/10ths of 1%) aluminum
- Cover bolts, test and reset buttons and shafts: stainless steel

## Standard Finish

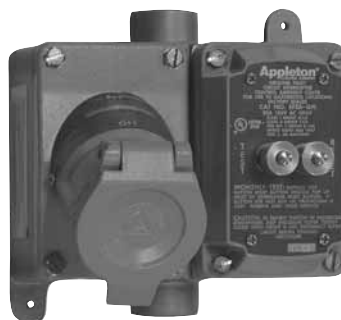
- Cover and sealing chamber: baked gray epoxy clad finish

## Certifications and Compliances

- UL Listed: E81751
- UL Standard: 943, 1203



EFSR-GFI cover mounted on single-gang EFD box. The GFI cover has separate factory sealed sealing chamber and is suitable for Class I, Group B as well as Class I, Groups C and D; Class II, Groups E, F, G and Class III.



EFSR-GFI cover installed on two-gang EFD box together with U-Line 20 Amp, 125 Vac factory sealed receptacle. Receptacle listed for Class I, Groups C and D, Class II, Groups F and G, and Class III.

Plugs and Receptacles

PLUGS AND RECEPTACLES: HAZARDOUS LOCATION

Description	Hub Size (Inches)	Catalog Number	
		Malleable Iron	Aluminum
<b>GFI Cover and Box – Single Gang</b>			
Dead-End	1/2	EFS150-GFI	EFS150A-GFI
	3/4	EFS175-GFI	EFS175A-GFI
	1	EFS110-GFI	EFS110A-GFI
Feed-Thru	1/2	EFSC150-GFI	EFSC150A-GFI
	3/4	EFSC175-GFI	EFSC175A-GFI
	1	EFSC110-GFI	EFSC110A-GFI
<b>GFI Cover, U-Line Receptacle and Box – Two Gang</b>			
Dead-End	1/2	EFS250-2023GFI	EFS250A-2023GFI
	3/4	EFS275-2023GFI	EFS275A-2023GFI
	1	EFS210-2023GFI	EFS210A-2023GFI
Feed-Thru	1/2	EFSC250-2023GFI	EFSC250A-2023GFI
	3/4	EFSC275-2023GFI	EFSC275A-2023GFI
	1	EFSC210-2023GFI	EFSC210A-2023GFI
<b>Aluminum Ground Fault Interrupter Cover/Device</b>			
Cover may be used with other EFD boxes and U-Line® receptacles in this section.		EFSR-GFI	

♦ Shaded area indicated items suitable for Class I, Group B.

# U-Line® 20 Amp Portable Receptacle with GFCI

## Explosionproof, Dust-Ignitionproof

125 Vac. For use on Hazardous or Non-Hazardous Receptacles.

Class I, Division 1 and 2 Groups C, D  
 Class II, Division 1 and 2 Groups F, G  
 Class III  
 NEMA 3, 3R, 7CD, 9FG

### Applications

- Provides required portable ground fault protection for electrically-operated devices. Meets all UL and CSA requirements for ground fault protection in hazardous locations.
- Well suited for use in highly corrosive atmospheres and wet locations.

### Features

- Arcing is confined within the device's interior.
- Rated 20 Amp, 125 Vac, 5 mA trip setting.
- Provides open neutral protection to maximize safety.
- High intensity LED pilot light rated at 100,000 hours
- Smooth operating test and reset buttons.
- Heavy duty 3 foot/0.91 meter SO power cord with U-Line 20 Amp NEMA 5-20R plug.
- Lightweight design.
- Convenient carry/hanging handle.
- Plug mates with competitors comparable receptacles. The receptacle also accepts their respective plugs.

### Standard Materials

- Covers and back box: cast copperfree (less than 4/10ths of 1%) aluminum
- Cover bolts, test and reset buttons and shafts: stainless steel
- Carry/hanging handle: nylon covered galvanized steel

### Standard Finish

- Covers and back box: baked gray epoxy clad finish

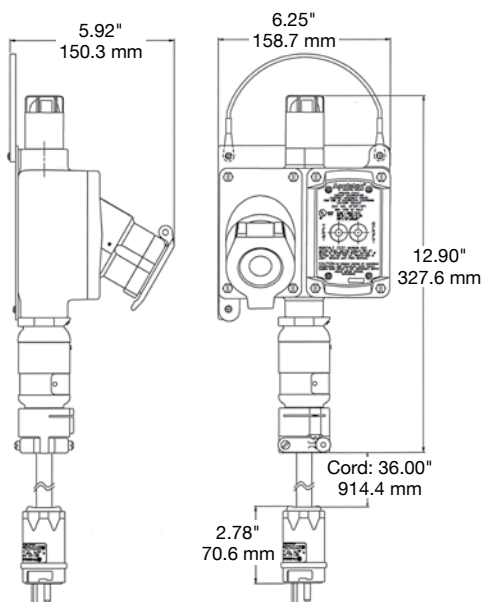
### Options

- Incandescent pilot light available, contact local sales representative.

### Compliances

- UL Standard: 943, 1203
- CSA Standard: C22.2 No. 30

### Dimensions



Plugs and Receptacles

PLUGS AND RECEPTACLES: HAZARDOUS LOCATION

Amp	Pilot Light	Class I, Division 1 and 2
20	Green LED	U2023PGFID1G3
	Red LED	U2023PGFID1R3







# EFD Cast Device Mounting Boxes

## For U-Line® 20 Amp Receptacles

Single, Two, Tandem, and One through Five Gang Boxes.

Plugs and Receptacles

PLUGS AND RECEPTACLES: HAZARDOUS LOCATION

	Type	Hub Size (Inches)	Catalog Number	
			Malleable Iron	Aluminum
<b>Single Gang</b>				
	Dead-End	1/2	EFD150-NL-Q	EFD150A-NL-Q
		3/4	EFD175-NL-Q	EFD175A-NL-Q
		1	EFD110-NL-Q	EFD110A-NL-Q
	Feed-Thru	1/2	EFDC150-NL-Q	EFDC150A-NL-Q
		3/4	EFDC175-NL-Q	EFDC175A-NL-Q
		1	EFDC110-NL-Q	EFDC110A-NL-Q
<b>Two Gang</b>				
	Dead-End	1/2	EFD250-NL-Q	EFD250A-NL-Q
		3/4	EFD275-NL-Q	EFD275A-NL-Q
		1	EFD210-NL-Q	EFD210A-NL-Q
	Feed-Thru	1/2	EFDC250-NL-Q	EFDC250A-NL-Q
		3/4	EFDC275-NL-Q	EFDC275A-NL-Q
		1	EFDC210-NL-Q	EFDC210A-NL-Q
<b>Tandem †</b>				
	Dead-End	1/2	EFDT50-NL-Q	—
		3/4	EFDT75-NL-Q	—
		1	EFDT10-NL-Q	—
	Feed-Thru	1/2	EFDC250-NL-Q	—
		3/4	EFDC275-NL-Q	—
		1	EFDC210-NL-Q	—
<b>Blank Bodies for Brazed Hubs</b>				
<i>Construct complete catalog number per following page. Hubs will be located in center of walls and evenly spaced unless otherwise specified. Where spacings are critical, submit sketch showing spacing requirements.</i>				
	1 Gang		EFD-1-NL	—
	2 Gang		EFD-2-NL	—
	3 Gang		EFD-3-NL	—
	4 Gang		EFD-4-NL	—
	5 Gang		EFD-5-NL	—

† For tandem bodies, eternal seals must be installed within 5 feet/1.52 meters of each conduit entrance or Class I, Group C and D.

# EFD Blank Cast Device Boxes

## Drilling Information for Brazed Threaded and Union Hubs for U-Line® 20 Amp Receptacles

Single, Two, Three, Four and Five Gang Boxes.

### Determine catalog number as follows:

- (1) Select EFD device box catalog number.
- (2) Select "Standard Hub Arrangement Diagram" number.
- (3) Select symbols that represent hub sizes from "Symbol Table." (Use "0" where no hub is required, and separate the various divisions of the complete catalog number by dashes.)

### Example

The blank body device box selected is EFD3NL and the hub arrangement is diagram #8. Hub "a" is to be 3/4" brazed threaded; hub "b", 1" brazed threaded; hub "c", 3/4" brazed threaded; hub "d", no hub is required; and hub "e", 1" brazed union.

The complete catalog number will be:  
**EFD-3NL-8-23203E**

If a "Standard Hub Arrangement" is not suitable for the application, or when hubs are to be more accurately spaced, submit sketch locating hubs (1) from centerlines of walls and (2) from outside back of box (or from mounting lug surface if lugs are supplied).

**All hubs will be located in centerlines of walls and evenly spaced unless otherwise specified.**

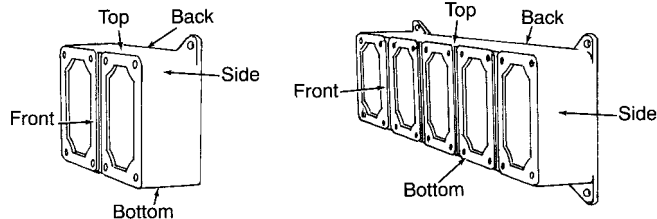
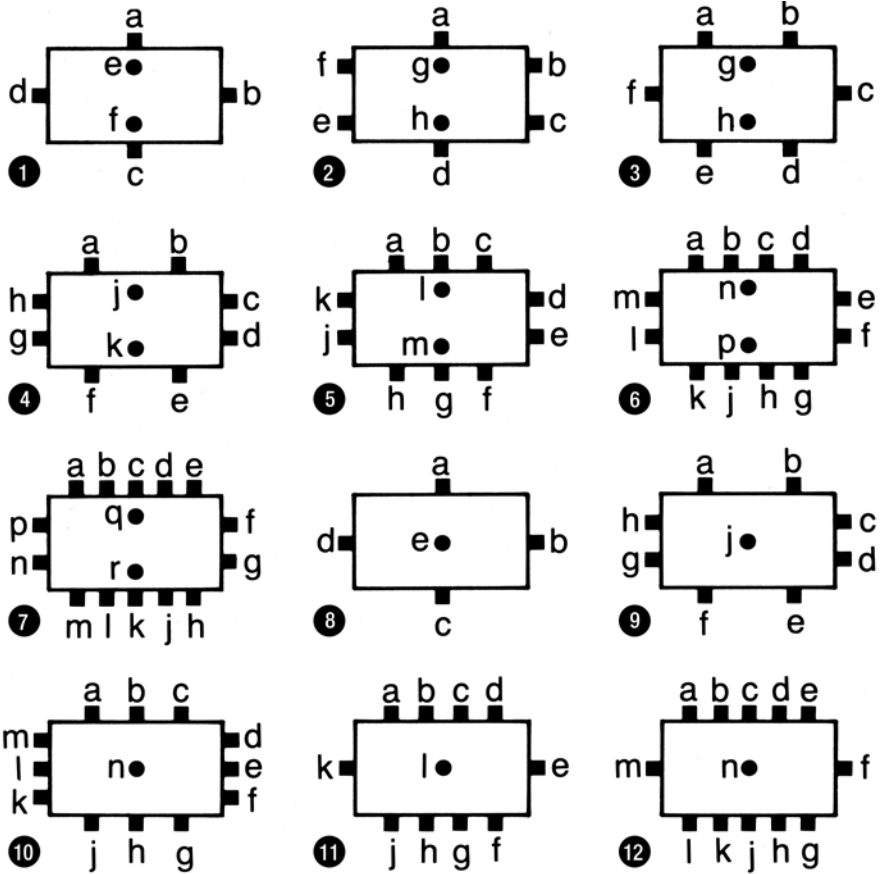
### Symbol Table

Hub Size (Inches)	Brazed Threaded Hub Symbol	Brazed Union Hub Symbol
Blank	0	0
1/2	1	1E
3/4	2	2E
1	3	3E

### Standard Hub Arrangement Diagrams

Hub "a" is always TOP of box

#### Two, Three, Four and Five Gang (Front View)



#### One Gang (Front View)

