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, 3RX, 4X▼, 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.

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 malleable iron receptacle and mounting box or aluminum receptacle and mounting 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
- 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
- U-Line™ EFSR-K receptacle covers are UL Classified when used with Killark * SWB mounting boxes.



Standard Materials

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

Standard Finishes

- U-Line™ M Series mounting boxes: triple-coat—(1) zinc electroplate, (2) chromate and (3) epoxy powder coat
- U-Line™ receptacle covers and mounting boxes: epoxy powder

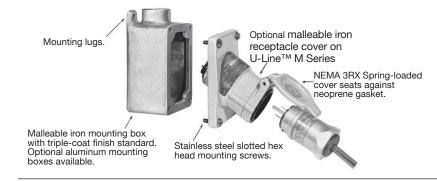
Options

U-Line™ all-aluminum receptacle cover and mounting box. Add

NEC/CEC 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

Illustrated Features



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



- ▼ NEMA 3RX when the spring-loaded cover is installed and closed. NEMA 4X when the screw cover is installed and fully engaged.
- ◆ Select items suitable for Class I, Group B, C and D; Class II, Groups F, G; and Class III. See product selection pages for suitable items. Note: Special U-Line™ receptacles are UL Classified when used with Killark SWB mounting 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.

NEC/CEC: Class I, Division 1 and 2, Groups B*, C, D Class II, Division 1 and 2, Groups F, G Class III NEMA 3, 3R, 3RX, 4X*, 7BCD, 9FG

Illustrated Features

Spring-loaded 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, springloaded cover seats against neoprene gasket to seal receptacle from corrosive atmospheres.



No

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.

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

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.





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.

◆ Select items suitable for Class I, Group B, C and D; Class II, Groups F, G; and Class III. See product selection pages for suitable items.



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.

NEC/CEC: Class I, Division 1 and 2, Groups B*, C, D Class II, Division 1 and 2, Groups F, G Class III NEMA 3, 3R, 3RX, 4X*, 7BCD, 9FG

Aluminum Receptacle Cover and Malleable Iron Mounting Box ①

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

Single Gang

Class I, Division 1 and 2 Groups B♦, 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. ②





Feed-Thru

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



Replacement Receptacle Covers and Spare Parts



20A Receptacle Cover 2W, 3P (aluminum)	EFSR-2023	EFSR-20232
Spring-loaded Cover Replacement Assembly (aluminum)		ULSCA
Receptacle cover for use on Killark * SWB mounting boxes.	EFSR-2023K	EFSR-20232K



NEMA 4X Screw Cover Kit ▼

ULINEREC4XKIT



① Standard mounting box malleable iron. For aluminum mounting box, add suffix **-A** to catalog number.

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

[▼] NEMA 3RX when the spring-loaded cover is installed and closed. NEMA 4X when the screw cover is installed and 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.

NEC/CEC: Class I, Division 1, Groups B+, C, D Class I, Division 2, Groups B, C, D Class II, Division 1 and 2, Groups F, G Class III NEMA 3, 3R, 3RX, 7BCD, 9FG

Malleable Iron Receptacle Cover and Mounting Box

					Catalog	Number
		Туре	Wire/Pole	Hub Size (Inches)	125 Vac, 1 HP	250 Vac, 2 HP
Single Gang — Class	s I, Group B					
Class I, Division 1 and 2	2 Groups B, C, D; Class II	, Division 1 and 2 Groups	F, G; Class III		chamber— suitable for C Class I, Groups C and D,	eparate factory sealed class I, Group B as well as Class II, Groups F, G and nal seals required.
		5	0144 015	1/2	EFSB150-2023M	EFSB150-20232M
		Dead-End	2W, 3P	3/4	EFSB175-2023M	EFSB175-20232M
		- LT	0144 0.0	1/2	EFSCB150-2023M	EFSCB150-20232M
Fe Fe	Feed-Thru	2W, 3P	3/4	EFSCB175-2023M	EFSCB175-20232M	
Dead–End	Feed–Thru					B

Single Gang

Class I, Division 1 and 2 Groups B♦, 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. ①

rate Se



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



① Seals (not furnished—see Hazardous Location Fittings Section) must be placed within 2 inches from each conduit opening. Seals are not required in Class I, Division 2 locations.

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.

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

Malleable Iron Receptacle Cover and Malleable Iron Mounting Box

			Catalog	Number
Туре	Wire/Pole	Hub Size (Inches)	125 Vac, 1 HP	250 Vac, 2 HP
-7F-		()		

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.



Malleable Iron Replacement Receptacle



20A Receptacle Cover 2W, 3P (iron)

EFSR-2023M

EFSR-20232M

Spring-loaded Cover Replacement Assembly (iron)

ULSCM

• Select items suitable for Class I, Group B, C and D; Class II, Groups F, G; and Class III. See product selection pages for suitable items.



U-Line™ Factory Sealed 20 Amp Receptacles

Explosionproof, Dust-Ignitionproof

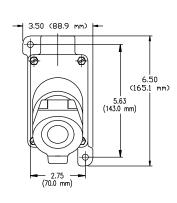
125 Vac, 20 Amp, 1 HP; 250 Vac, 20 Amp, 2 HP. Dead-Front Safety Construction.

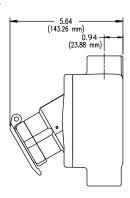
NEC/CEC: Class I, Division 1, Groups B •, C, D Class I, Division 2, Groups B, C, D Class II, Division 1 and 2, Groups F, G Class III

NEMA 3, 3R, 3RX, 7BCD, 9FG

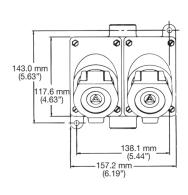
Dimensions in Millimeters (Inches)

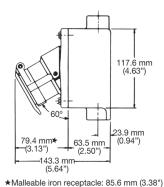
Single Gang Mounting Box with Receptacle Cover



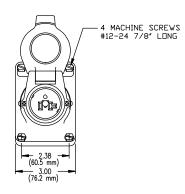


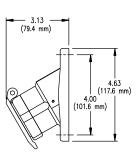
Two Gang Mounting Box with Receptacle Covers





Receptacle Cover





[◆] Select items suitable for Class I, Group B, C and D; Class II, Groups F, G; and Class III. See product selection pages for suitable items.

U-Line™ Interchanger Sealed 15 and 20 Amp Plugs

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

These watertight ① plugs also fit NEMA 5-15R, 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, Group F, G Class III NEMA Type 4, 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
- Insulators provide superior dielectric and mechanical strength and lowest arc tracking.
- Longer plug housing for better gripping and easier plug insertion and withdrawal.

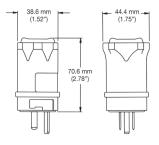
- Plugs fits any standard non-explosionproof receptacle (NEMA 5-15R, 5-20R, or 6-20R) as well as U-Line™ explosionproof receptacles.
- ECP plug: a twist of the plug produces audible "click" to indicate fast make and break of built-in switch contacts. Twisting plug locks it in place and cannot be accidentally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

Standard Materials

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

					Catalog	Number
	Amp	Diagram	Wire/ Pole	Cable Dia., (Inches)	125 Vac	250 Vac
U-Line™ Interchanger ECP	Standard Plug					
	15		2W, 3P	0.538 to 0.639	ECP-1523	
	20	-1	2W, 3P	0.538 to 0.639	ECP-2023	
	20	•	2W, 3P	0.538 to 0.639		ECP-20232
NCP Plug						
	15		2W, 3P	0.538 to 0.639	NCP-1523	
4. The state of th	20	•	2W, 3P	0.538 to 0.639	NCP-2023	
	20	(<u>*</u> -	2W, 3P	0.538 to 0.639		NCP-20232

Dimensions in Millimeters (Inches)



① Watertight when unmated.



EFSR-GFI Factory Sealed Ground Fault Circuit Interrupter

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

125 Vac branch circuits. Installs on standard EFD Mounting Boxes.

NEC/CEC: Class I, Division 1, Groups B+, C, D Class I, Division 2, Groups B, C, D Class II, Division 1 and 2, Groups F, G Class III NEMA 3, 3R, 3RX, 7BCD, 9FG

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.

eatures

- 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.
- Choice of malleable iron or aluminum, dead-end or feed-thru mounting boxes.

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

NEC/CEC Certifications and Compliances

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



EFSR-GFI cover mounted on single gang EFD mounting 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 mounting 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.



EFSR-GFI Factory Sealed Ground Fault Circuit Interrupter

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

125 Vac branch circuits. Installs on standard EFD Mounting Boxes.

NEC/CEC: Class I, Division 1, Groups B+, C, D Class I, Division 2, Groups B, C, D Class II, Division 1 and 2, Groups F, G Class III NEMA 3, 3R, 3RX, 7BCD, 9FG

		Hub Size	Catalog	Catalog Number				
	Description	(Inches)	Malleable Iron	Aluminum				
GFI Cover and Mounting Box — Single Gang								
A Production of the Control of the C		1/2	EFS150-GFI	EFS150A-GFI				
	Dead-End	3/4	EFS175-GFI	EFS175A-GFI				
		1	EFS110-GFI	EFS110A-GFI				
Appleton of the second of the		1/2	EFSC150-GFI	EFSC150A-GFI				
	Feed-Thru	3/4	EFSC175-GFI	EFSC175A-GFI				
		1	EFSC110-GFI	EFSC110A-GFI				
Receptacle with GFI Cover –	- Two Gang							
Appleton S		1/2	EFS250-2023GFI	EFS250A-2023GFI				
A STATE OF THE STA	Dead-End	3/4	EFS275-2023GFI	EFS275A-2023GFI				
		1	EFS210-2023GFI	EFS210A-2023GFI				
Appleton		1/2	EFSC250-2023GFI	EFSC250A-2023GFI				
	Feed-Thru	3/4	EFSC275-2023GFI	EFSC275A-2023GFI				
		1	EFSC210-2023GFI	EFSC210A-2023GF				

Aluminum Ground Fault Interrupter Cover/Device



Cover may be used with other EFD mounting boxes and U-Line $^{\text{TM}}$ EFS receptacles in this section.

EFSR-GFI



[◆] Shaded area indicated items suitable for Class I, Group B.

U-Line™ 20 Amp Portable Receptacle with Ground Fault Circuit Interrupter

Explosionproof, Dust-Ignitionproof

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

NEC/CEC: Class I, Division 1 and 2, Groups C, D Class II, Division 1 and 2, Groups F, G Class III NEMA 3, 3R, 3RX, 7CD, 9EFG

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 0.91 meter (3 foot) 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

- GFI, receptacle covers, and mounting boxes: 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 mounting boxes: baked gray epoxy clad finish

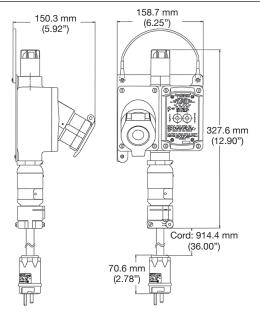
Options

 Incandescent pilot light available, contact local sales representative.

NEC/CEC Compliances and Certifications

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

Dimensions in Millimeters (Inches)





Amp	Pilot Light	Catalog Number
20	Green LED	U2023PGFID1G3
20	Red LED	U2023PGFID1R3



U-Line™ 20 Amp Receptacle Mounting Boxes

Furnished with internal ground screw. ①

NEC/CEC: NECICEC:
Class I, Division 1, Groups, 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, 7CD, 9EFG

EFD Cast Device Mounting Boxes

		Hub Size	Catal	og Number
	Туре	(Inches)	Malleable Iron	Aluminum
ingle Gang				
		1/2	EFD150NLQ	EFD150ANLQ
	Dead-End	3/4	EFD175NLQ	EFD175ANLQ
		1	EFD110NLQ	EFD110ANLQ
		1/2	EFDC150NLQ	EFDC150ANLQ
	Feed-Thru	3/4	EFDC175NLQ	EFDC175ANLQ
		1	EFDC110NLQ	EFDC110ANLQ
wo Gang				
		1/2	EFD250NLQ	EFD250ANLQ
	Dead-End	3/4	EFD275NLQ	EFD275ANLQ
		1	EFD210NLQ	EFD210ANLQ
		1/2	EFDC250NLQ	EFDC250ANLQ
	Feed-Thru	3/4	EFDC275NLQ	EFDC275ANLQ
0 -		1	EFDC210NLQ	EFDC210ANLQ
Tandem ②				
		1/2	EFDT50NLQ	_
	Dead-End	3/4	EFDT75NLQ	_
		1	EFDT10NLQ	_
		1/2	EFDCT50NLQ	
	Feed-Thru	3/4	EFDCT75NLQ	_
	. 5555	1	EFDCT10NLQ	_
		ı	LIBOTIONE	

Blank Mounting Boxes for Brazed Hubs ③

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.



1 Gang	EFD1NL	_
2 Gang	EFD2NL	_
3 Gang	EFD3NL	_
4 Gang	EFD4NL	_
5 Gang	EFD5NL	_



① 1 Gang, 2 Gang and 5 Gang mounting boxes only.

② For tandem mounting boxes, eternal seals must be installed within 1.52 meters (5 feet) of each conduit entrance or Class I, Group C and D.

³ Blank EFD mounting boxes are non-UL Listed.

U-Line™ 20 Amp Receptacle Mounting Boxes

EFD Blank Cast Device Mounting Boxes, Drilling Information for Brazed Threaded and Union Hubs Single, Two, Three, Four and Five Gang Mounting Boxes.

Determine catalog number as follows:

- (1) Select EFD device mounting 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 mounting 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

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 mounting 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.

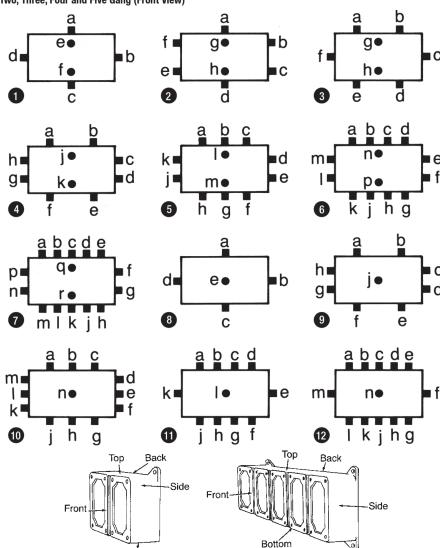
Symbol Table

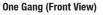
Hub Size (Inches)	Brazed Threaded Hub Symbol	Brazed Union Hub Symbol
Blank	0	0
1/2	1	1E
3/4	2	2E
1	3	3E

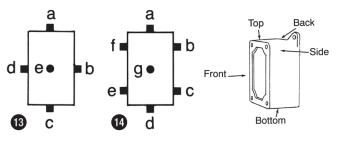
Standard Hub Arrangement Diagrams

Hub "a" is always TOP of mounting boxes

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







Bottom

