

Fittings

Section F



F

Electrical Fittings

Table of Contents

Section F of the Cooper Crouse-Hinds Product Catalog lists a wide variety of conduit outlet bodies and boxes, cable fittings, unions, connectors, seals, breathers, and drains for both hazardous and non-hazardous area use. Information on applications, features, standard materials, standard finishes, options, size ranges, compliances and accessories is presented for ease of product selection. Information relating to product families in Section F is grouped as follows:

Section 1F Condulet® Conduit Bodies (for non-hazardous areas)

For installation in conduit systems to act as pull outlets, make 90° bends, provide for splices, taps, mounting outlets, etc.

Form 7	Mogul	SLB
Form 8	LBD	LBV
Mark 9	LBNEC	ET
Form 5		
Series 5		
Form 7 SnapPack		

Section 2F Condulet Cast Outlet Boxes (for non-hazardous areas)

Round cast outlet boxes and accessories for use in conjunction with threaded rigid conduit to serve as junction boxes, pull outlets, accommodate wiring devices and support lighting fixtures.

GRF	VXF
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Section 3F Condulet Cast Device Boxes (for non-hazardous areas)

For installation in conduit systems to:

- accommodate wiring devices
- act as pull boxes
- provide openings for taps and splices.

Provided in two box depths with a wide variety of hub configurations and sizes. Boxes can accommodate single or multiple devices.

FS	FD	COVERS
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Section 4F Condulet Conduit Bodies and Outlet Bodies (for hazardous areas)

For use with rigid conduit systems:

- act as pull and splice boxes
- act as mounting outlets or supports for lighting fixtures

• act as sealing fittings			
CPS	ET	LBH	STL
EAB	GUA	LBV	EAJ
EKC	HTL	OE	GUR

Section 5F Cable and Cord Fittings (for hazardous and non-hazardous areas)

Includes listings of cable and cord connectors and cable terminators for armored and unarmored cable and cord, and aluminum sheathed cable.

Used to:

- provide means for passing cord, cable or flexible conduit through bulkhead and into boxes and cabinets
 - form watertight seal
 - form non-slip connection or termination for flexible cord, cable or flexible conduit
 - provide grounding continuity
- | | | | |
|-------|-------|-----------|-------|
| CAPRI | LCC | TGC | TUCFB |
| CGB | LCCF | THRU-WALL | TUSC |
| CGFP | TAB | TMC | TWDC |
| EBY | TACFB | TMCX | |

Section 6F Junction Boxes (for hazardous and non-hazardous areas)

Wide variety of boxes for use as:

- pull boxes
- enclosures for splices and taps
- mounting boxes for control stations
- housings for apparatus, instruments, etc.

EGJ	GUE, GUB	RS, RSM, RSS
EJB	GUAG	W Series
	GUP	Custom panels
	GUAH	NeXT Series
	GUAP	STB Series
		HVB Series
		QBX Series
		ExCell Series

Section 7F Elbows, Couplings, Hubs, Grounding Devices, Plugs, Reducers, Service Entrance and Unions (for hazardous and non-hazardous areas)

Includes:

- service entrance heads
- grounding receptacles and straps
- unions and elbows for threaded conduit systems
- couplings for use where allowance must be made in conduit system for difficult bends or vibration
- reducers for connecting conduit of different dimensions
- plugs for unused conduit openings and hubs

ECGJH	GC	LNR	UNA	UNY
ECLK	GCR	PLG	UNF	UNYL
EL	GCT	RE	UNFL	XD
F	HUBS	REC	UNL	XJG

Section 8F Seals, Breathers and Drains (for hazardous areas)

Includes:

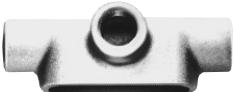
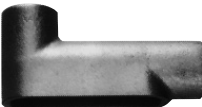
- seals used to prevent passage of gases or flames in conduit runs and from device enclosures
- sealing/drain fittings for retrofit applications
- breathers used to provide ventilation for enclosures
- drains used to prevent accumulation of moisture in conduit systems and enclosures
- *Chico*® sealing compound and fiber

Seal	Seal and drain	Breather
EYS	EYD	and drain
EZS	EZD	ECD
EYSR	EYDX	CD
EYSX		
Secondary Proces Sealing Fitting		
EYS Tool Kit		

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LBNEC	12
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Condulet® Conduit Bodies

Shape Selector Chart

SERIES	PAGE	SERIES	PAGE	SERIES	PAGE	SERIES	PAGE
C		L		LBNEC		BT	
							
Form 7	6	Form 7	6	LBNEC	12	Mogul	15
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Form 5	6						
Series 5	6	Form 7	6	Mogul	14	1/2 - 1"	13
E		T		BLB		LBD	
							
Form 7	6	Form 7	6	Mogul	14	1 1/4 - 6"	13
		Form 8	6				
LB		Mark 9	6				
		Form 5	6	BUB		SLB	
Form 7	6	Series 5	6				
Form 8	6			Mogul	15	Service Entrance Elbows	16
Mark 9	6	TB					
Form 5	6					LBY	
Series 5	6	Form 7	6				
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LL		Mark 9	6				
		Form 5	6			ET	
Form 7	6						
Form 8	6	X				Short Radius Elbows	16
Mark 9	6						
Form 5	6	Form 7	6				
Series 5	6	Form 8	6				
		Mark 9	6				
		Form 5	6				

Application:

Conduit outlet bodies are installed in conduit systems to:

- act as pull outlets for conductors being installed
- provide openings for making splices and taps in conductors
- act as mounting outlets for lighting fixtures and wiring devices
- connect conduit sections
- provide taps for branch conduit runs
- make 90° bends in conduit runs
- provide for access to conductors for maintenance and future system changes

Features:

Conduit Outlet Bodies

- Form 7 Condulet outlet bodies approach conduit in size for neat, compact installations.
- Form 8 and Mark 9 bodies provide more room for heavier conductors
- Many shapes and sizes are available for rigid threaded conduit – see complete listings on page 6.
- Conduit hubs have tapered threads and feature integral bushings for protection of wire insulation.
- Form 7 has exclusive snaptight and wedge-nut cover attachment to provide clear, unobstructed cover opening.
- Built-in rollers on all Form 5 1½" to 4" C and LB bodies to facilitate wire pulling.
- Series 5 bodies available in optional configuration with set screws on hubs for EMT conduit (add suffix -MT to catalog number).

Gaskets

Solid gaskets:

- are used with blank covers
- for Mark 9 and Form 5, can be converted to open type gaskets by tearing out center section along scored lines – ½" to 2" sizes
- for Form 7 are used with all covers

Open gaskets:

- for Form 8 – ½" to 4" sizes
- for Mark 9 – 2½" to 4" sizes

Blank Covers

Stainless steel cover screws are standard on Form 7, Form 8, Mark 9, Series 5 and Form 5 covers.

- Form 7

Wedge nut design facilitates installation and removal. Nuts are held captive in cover. Covers can be used with or without gaskets.

SNAPTIGHT™ Form 7 Covers with integral sealing gaskets are installed without the use of screws, reducing installation time and costs. Covers are reusable.

- Form 8

Two cover screws provided on all sizes to provide tight cover and gasket assembly. *Feraloy* iron alloy covers have dome shapes for added strength and extra wiring room.

- Mark 9

Self-retaining cover screws.

Standard Materials:

- Form 7, Form 8 outlet bodies – *Feraloy* iron alloy
- Mark 9 outlet bodies – copper-free aluminum
- Form 5 – malleable iron
- Series 5 – die cast aluminum

Standard Finishes:

- Form 7, Form 8 outlet bodies – electrogalvanized with aluminum acrylic paint
- Mark 9 outlet bodies – natural
- Form 5 – electrogalvanized with aluminum acrylic paint
- Series 5 – aluminum acrylic paint

Options:

Description	Suffix to be Added to Cat. #
Form 7 body and cover only: Copper-free aluminum.	SA
<i>Corro-free</i> ™ epoxy powder coat.	add suffix S752
• Series 5 in an EMT version with set screws on all hubs	add suffix -MT
• Series 5 pre-packaged with neoprene gasket and cover	add suffix -CGN

Certifications and Compliances:

Outlet Bodies –

- UL Standard: 514B
- Fed. Spec.: W-C-586D
- CSA Standard 22.2 No. 18

Size comparison of 1½" Form 7, Mark 9, Form 8, and Mogul bodies. Round backs on Form 7 and Mogul; flat backs on Form 8 and Mark 9. The round back conduit body is a registered trademark of Cooper Industries, Inc.

- Raintight (when installed with cover and gasket)



Form 7



Mark 9

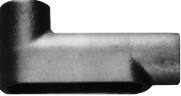
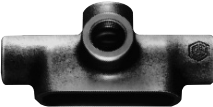


Form 8



Mogul

Threaded Rigid Bodies

		Hub Size									
Shape	Style	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4
	C										
	Form 7	C17	C27	C37	C47	C57	C67	C77	C87		
	Form 8	C18	C28	C38	C448	C58	C68	C78	C88		
	Mark 9	C19	C29	C39	C49	C59	C69	C789	C889	C989	C1089
	Form 5	C50M	C75M	C100M	C125M	C150M	C200M	C250M	C300M	C350M	C400M
	Series 5	C15	C25	C35	C45	C55	C65	C75	C85	C95	C105
	E										
	Form 7	E17	E27	E37							
	L										
	Form 7	L17	L27	L37	L47	L57	L67				
Double faced – may be used as LL or LR – has 2 openings, one of which is furnished with a blank sheet steel cover											
	LB										
	Form 7	LB17	LB27	LB37	LB47	LB57	LB67	LB777	LB87	LB97	LB107
	Form 8	LB18	LB28	LB38	LB448	LB58	LB68	LB78	LB888	LB98	LB108
	Mark 9	LB19	LB29	LB39	LB49	LB59	LB69	LB789	LB889	LB989	LB1089
	Form 5	LB50M	LB75M	LB100M	LB125M	LB150M	LB200M	LB250M	LB300M	LB350M	LB400M
	Series 5	LB15	LB25	LB35	LB45	LB55	LB65	LB75	LB85	LB95	LB105
	LL										
	Form 7	LL17	LL27	LL37	LL47	LL57	LL67	LL777	LL87	LL97	LL107
	Form 8	LL18	LL28	LL38	LL448	LL58	LL68	LL78	LL888		
	Mark 9	LL19	LL29	LL39	LL49	LL59	LL69	LL789	LL889	LL989	LL1089
	Form 5	LL50M	LL75M	LL100M	LL125M	LL150M	LL200M	LL250M	LL300M	LL350M	LL400M
	Series 5	LL15	LL25	LL35	LL45	LL55	LL65	LL75	LL85	LL95	LL105
	LR										
	Form 7	LR17	LR27	LR37	LR47	LR57	LR67	LR777	LR87	LR97	LR107
	Form 8	LR18	LR28	LR38	LR448	LR58	LR68	LR78	LR888		
	Mark 9	LR19	LR29	LR39	LR49	LR59	LR69	LR789	LR889	LR989	LR1089
	Form 5	LR50M	LR75M	LR100M	LR125M	LR150M	LR200M	LR250M	LR300M	LR350M	LR400M
	Series 5	LR15	LR25	LR35	LR45	LR55	LR65	LR75	LR85	LR95	LR105
	T										
	Form 7	T17	T27	T37	T47	T57	T67	T77	T87	T97	T107
	Form 8	T18	T28	T38	T448	T58	T68	T78	T88		
	Mark 9	T19	T29	T39	T49	T59	T69	T789	T889	T989	T1089
	Form 5	T50M	T75M	T100M	T125M	T150M	T200M	T250M	T300M	T350M	T400M
	Series 5	T15	T25	T35	T45	T55	T65	T75	T85	T95	T105
	TA										
	Form 7	TA17	TA27	TA37	TA47	TA57	TA67				
	TB										
	Form 7	TB17	TB27	TB37	TB47	TB57	TB67				
	Form 8	TB18	TB28	TB38	TB448	TB58	TB68				
	Mark 9	TB19	TB29	TB39	TB49	TB59	TB69				
	Form 5	TB50M	TB75M	TB100M	TB125M	TB150M	TB200M				
	X										
	Form 7	X17	X27	X37	X47	X57	X67				
	Form 8	X18	X28	X38	X448	X58	X68				
	Mark 9	X19	X29	X39							
	Form 5	X50M	X75M	X100M	X125M	X150M	X200M				

Condulet® Conduit Outlet Bodies

1F

Covers and Gaskets

Dimensions Pgs. 9 to 11 (Dimensions for Form 5 – see Section CP)

Blank Covers



Sheet Steel

Size	Form 7 Wedgenut Cat. #	Form 7 Snaptight™ Covers† Cat. #	Form 7 Wedgenut w/Integral Gasket Cat. #	Form 8* Cat. #	Form 8 w/Integral Gasket Cat. #	Form 5 Cat. #
1/2	170	170-SG	170G	180	180G	K50S
3/4	270	270-SG	270G	280	280G	K75S
1	370	370-SG	370G	380	380G	K100S
1 1/4	470	470-SG	470G	480	480G	K125S
1 1/2	570	570-SG	570G	580	580G	K125S
2	670	670-SG	670G	680	680G	K200S
2 1/2	870			880		K250S
3	870			880		K250S
3 1/2	970			980		K350S
4	970			980		K350S



Sheet Aluminum



Feraloy® Iron Alloy



Cast Aluminum

Size	Mark 9 Cat. #	Mark 9 w/Integral Gasket Cat. #	Form 7 Cat. #	Form 7 w/Integral Gasket Cat. #	Series 5 Cat. #	Form 7 Wedgenut Cat. #	Form 7 Wedgenut w/Integral Gasket Cat. #	Form 8* Cat. #	Form 5 ♦ Cat. #	Form 7 Wedgenut Cat. #
1/2	190	190G	170-SA	170G-SA	150	170F	170FG	180F	K50CM	170F-SA
3/4	290	290G	270-SA	270G-SA	250	270F	270FG	280F	K75CM	270F-SA
1	390	390G	370-SA	370G-SA	350	370F	370FG	380F	K100CM	370F-SA
1 1/4	490	490G	470-SA	470G-SA	450	470F	470FG	480F	K125CM	470F-SA
1 1/2	590	590G	570-SA	570G-SA	450	570F	570FG	580F	K125CM	570F-SA
2	690	690G	670-SA	670G-SA	650	670F	670FG	680F	K200CM	670F-SA
2 1/2	889		870-SA		850D	870F		880F	K250CM	870F-SA
3	889		870-SA		850D	870F		880F	K250CM	870F-SA
3 1/2	989		970-SA		950D	970F		980F	K350CM	970F-SA
4	989		970-SA		950D	970F		980F	K350CM	970F-SA

Solid Gaskets

Neoprene



Size	Form 7 Cat. #	Form 8* Cat. #	Mark 9† Cat. #	Form 5 Cat. #	Series 5 Cat. #
1/2	GASK571	GASK851N	GASK1941	GK50N	GASK015N
3/4	GASK572	GASK852N	GASK1942	GK75N	GASK025N
1	GASK573	GASK853N	GASK1943	GK100N	GASK035N
1 1/4	GASK574	GASK854N	GASK1944	GK125N	GASK045N
1 1/2	GASK575	GASK805N	GASK1945	GK125N	GASK045N
2	GASK576	GASK806N	GASK1946	GK200N	GASK065N
2 1/2	GASK578	GASK808N	GASK808N	GK250N	GASK085N
3	GASK578	GASK808N	GASK808N	GK250N	GASK085N
3 1/2	GASK579	GASK809N	GASK8089N	GK350N	GASK095N
4	GASK579	GASK8089N	GASK809N	GK350N	GASK095N

* 1/2 – 1 1/4 are solid gaskets; 1 1/2 – 4 are open gaskets.

† 1/2 – 2 are solid gaskets; 2 1/2 – 4 are open gaskets.

* Two cover screws on 1/2" to 2" Form 8 covers and four cover screws on 2 1/2" and larger Form 8 covers.

† Form 7 Snaptight covers with integral sealing gasket are installed without the use of screws.

♦ Malleable Iron Covers.

1F Cast Conduit Outlet Bodies

Form 7 SnapPack™

Pre-Assembled Body, Gasket and Cover

Application:

Form 7 Condulets are installed in conduit systems to:

- act as pull outlets for conductors being installed
- provide an opening for making splices and taps in conductors
- connect conduit sections
- provide taps for branch conduit runs
- make 90-degree bends in conduit runs
- provide access to conductors in a conduit system for maintenance and future system changes

Features:

- All SnapPack product is individually bar coded to facilitate more efficient inventory control
- Distributors and end users need to stock a single SKU instead of three separate component numbers – order the body, cover and gasket with one catalog number – saving transaction costs, and making product selection and merchandising fast and easy
- Form 7 conduit bodies are compact with a round back design for neat, efficient installations
- Conduit hubs have tapered threads and integral bushings for protection of wire insulation
- Many shapes and trade sizes available
- Sheet-steel wedge nut cover is provided with integral gasket. The wedge nut design facilitates installation and removal. Nuts and screws are held captive in cover
- Cover screws are stainless steel with a combination slotted and Phillips head, for easy installation and superior corrosion protection

Standard Materials:

- Body – *Feraloy*® iron alloy
- Gasket – urethane
- Cover – sheet steel
- Cover screws – stainless steel

Standard Finishes:

- *Feraloy* – electrogalvanized with aluminum acrylic paint
- Sheet steel – electrogalvanized

Certifications and Compliances:

- UL Standard: 514B
- CSA Standard: C22.2 No. 18

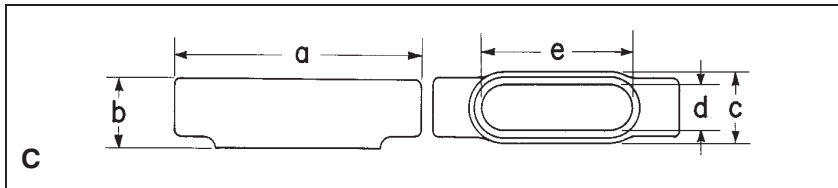
Ordering Information:

Trade Size	Shape	Cat. #
1/2"	C	C17-CG
3/4"	C	C27-CG
1"	C	C37-CG
1 1/4"	C	C47-CG
1 1/2"	C	C57-CG
2"	C	C67-CG
1/2"	LB	LB17-CG
3/4"	LB	LB27-CG
1"	LB	LB37-CG
1 1/4"	LB	LB47-CG
1 1/2"	LB	LB57-CG
2"	LB	LB67-CG
1/2"	LL	LL17-CG
3/4"	LL	LL27-CG
1"	LL	LL37-CG
1 1/4"	LL	LL47-CG
1 1/2"	LL	LL57-CG
2"	LL	LL67-CG
1/2"	LR	LR17-CG
3/4"	LR	LR27-CG
1"	LR	LR37-CG
1 1/4"	LR	LR47-CG
1 1/2"	LR	LR57-CG
2"	LR	LR67-CG
1/2"	T	T17-CG
3/4"	T	T27-CG
1"	T	T37-CG
1 1/4"	T	T47-CG
1 1/2"	T	T57-CG
2"	T	T67-CG
1/2"	TB	TB17-CG
3/4"	TB	TB27-CG
1"	TB	TB37-CG
1 1/4"	TB	TB47-CG
1 1/2"	TB	TB57-CG
2"	TB	TB67-CG
1/2"	X	X17-CG
3/4"	X	X27-CG
1"	X	X37-CG
1 1/4"	X	X47-CG
1 1/2"	X	X57-CG
2"	X	X67-CG

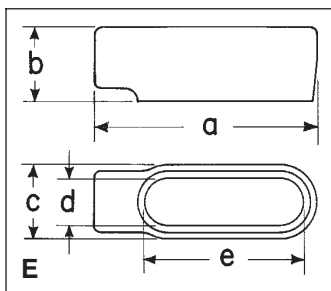
Note: Form 7 Condulets and covers are available in additional configurations, sizes and materials. For a complete listing of Form 7, Form 8 and Mark 9 conduit bodies and covers see pages 6 and 7.



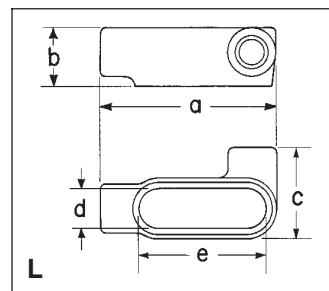
Dimensions



Size	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4
Form 7 C										
a	5 9/16	6	7	7 7/16	8 3/16	9 3/16	12	11 3/4		
b	1 3/8	1 5/8	1 7/8	2 5/16	2 9/16	3 1/8	3 5/8	4 3/8		
c	1 3/8	1 9/16	1 3/4	2 3/16	2 7/16	3	4 1/4	4 1/4		
d	1 5/16	1 1/8	1 3/8	1 3/4	1 15/16	2 7/16	3 9/16	3 9/16		
e	3 3/16	3 13/16	4 1/2	5	5 7/16	6 3/8	8 5/8	8 5/8		
Form 8 C										
a	5 11/16	6 9/32	7 5/16	8 1/2	10 3/8	12 1/4	15 5/8	15 5/8		
b	1 7/16	1 11/16	1 15/16	2 3/8	2 29/32	3 9/16	4 7/16	4 13/16		
c	1 3/8	1 3/16	1 3/4	2 3/16	2 3/4	3 3/4	5	5		
d	1	1 3/16	1 3/8	1 3/4	2 1/8	3	4 1/4	4 1/4		
e	3 5/16	3 15/16	4 9/16	5 5/16	6 1/2	8 9/16	10 7/8	10 7/8		
Mark 9 C										
a	5	5 11/16	6 19/32	7 1/2	8 1/4	10 1/2	15 5/8	15 5/8	18 3/4	18 3/4
b	1 3/8	1 5/8	1 7/8	2 1/2	2 3/4	3 7/16	4 7/16	4 13/16	5 11/16	5 15/16
c	1 3/8	1 9/16	1 3/4	2 3/16	2 1/2	3 3/16	5	5	6 1/4	6 1/4
d	1 3/16	1 3/8	1 1/2	1 15/16	2 1/4	2 7/8	4 1/4	4 1/4	5 7/16	5 7/16
e	3 3/16	3 15/16	4 9/16	5 5/16	6	8 1/16	10 7/8	10 7/8	13 7/16	13 7/16

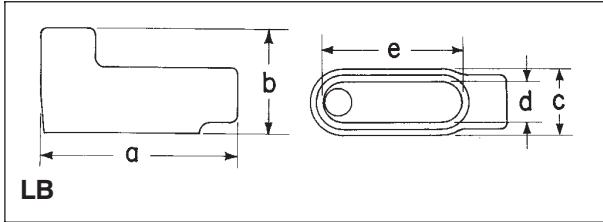


Size	1/2	3/4	1
Form 7 E			
a	4 9/16	5 3/16	6
b	1 3/8	1 5/8	1 7/8
c	1 3/8	1 9/16	1 3/4
d	1 5/16	1 1/8	1 3/8
e	3 3/16	3 13/16	4 1/2

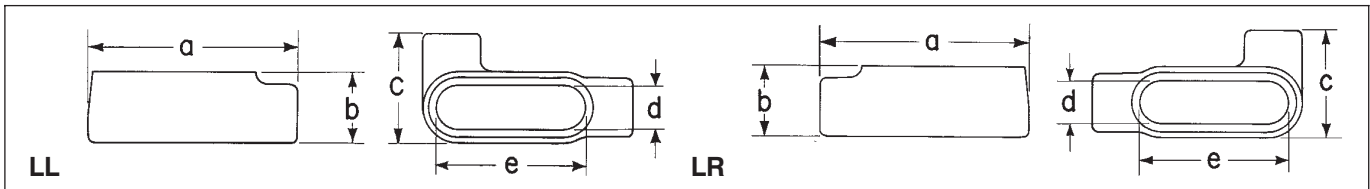


Size	1/2	3/4	1	1 1/4	1 1/2	2
Form 7 L						
a	4 9/16	5 3/16	6	6 1/2	7 1/8	8 3/8
b	1 3/8	1 5/8	1 7/8	2 5/16	2 9/16	3 1/8
c	2 1/4	2 7/16	2 3/4	3 3/16	3 9/16	4 1/8
d	1 5/16	1 1/8	1 3/8	1 3/4	1 15/16	2 7/16
e	3 3/16	3 13/16	4 1/2	5	5 7/16	6 3/8

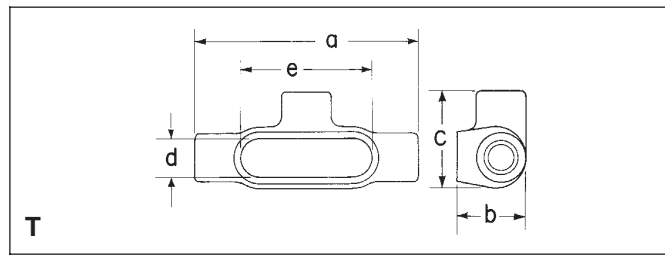
Dimensions



Size	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4
Form 7 LB										
a	4 9/16	5 3/16	6	6 1/2	7 1/8	8 1/8	10 1/2	10 1/2	12 11/16	12 11/16
b	2 1/4	2 1/2	2 7/8	3 5/16	3 11/16	4 1/4	5 1/8	5 7/8	6 9/16	7 1/16
c	1 3/8	1 9/16	1 3/4	2 3/16	2 7/16	3	4 1/4	4 1/4	5 1/4	5 1/4
d	1 5/16	1 1/8	1 3/8	1 3/4	1 5/16	2 7/16	3 9/16	3 9/16	4 1/2	4 1/2
e	3 3/16	3 13/16	4 1/2	5	5 7/16	6 3/8	8 3/8	8 3/8	10 1/4	10 1/4
Form 8 LB										
a	4 15/16	5 9/16	6 15/32	7 17/32	9 1/8	11	13 15/16	13 15/16	16 7/8	16 7/8
b	2 7/32	2 7/16	2 13/16	3 11/32	4 1/32	4 13/16	6 1/8	6 1/2	7 9/16	7 13/16
c	1 3/8	1 9/16	1 3/4	2 3/16	2 3/4	3 3/4	5	5	6 1/4	6 1/4
d	1	1 3/16	1 3/8	1 3/4	2 1/8	3	4 1/4	4 1/4	5 7/16	5 7/16
e	3 5/16	3 15/16	4 9/16	5 5/16	6 1/2	8 9/16	10 7/8	10 7/8	13 7/16	13 7/16
Mark 9 LB										
a	4 19/32	5 1/4	6 3/32	7 1/32	7 3/4	10 1/32	13 15/16	13 15/16	16 7/8	16 7/8
b	2 1/8	2 13/32	2 27/32	3 15/32	3 3/4	4 15/32	6 1/8	6 1/2	7 9/16	7 13/16
c	1 3/8	1 9/16	1 3/4	2 3/16	2 1/2	3 3/16	5	5	6 1/4	6 1/4
d	1 3/16	1 3/8	1 1/2	1 5/16	2 1/4	2 7/8	4 1/4	4 1/4	5 7/16	5 7/16
e	3 5/16	3 15/16	4 9/16	5 5/16	6	8 1/16	10 7/8	10 7/8	13 7/16	13 7/16



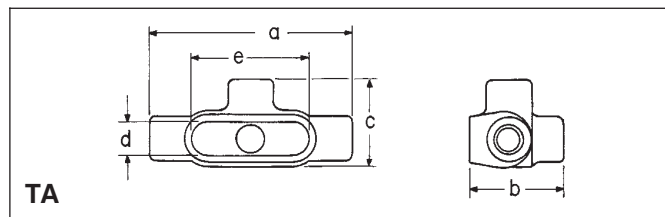
Size	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2	3	3 1/2	4
Form 7 LL & LR										
a	4 9/16	5 3/16	6	6 1/2	7 1/8	8 1/8	10 1/2	10 1/2	12 11/16	12 11/16
b	1 3/8	1 5/8	1 7/8	2 5/16	2 9/16	3 1/8	3 5/8	4 3/8	4 7/8	5 3/8
c	2 1/4	2 7/16	2 3/4	3 3/16	3 9/16	4 1/8	5 3/4	5 3/4	6 15/16	6 15/16
d	1 5/16	1 1/8	1 3/8	1 3/4	1 5/16	2 7/16	3 9/16	3 9/16	4 1/2	4 1/2
e	3 3/16	3 13/16	4 1/2	5	5 7/16	6 3/8	8 3/8	8 3/8	10 1/4	10 1/4
Form 8 LL & LR										
a	4 15/16	5 9/16	6 15/32	7 17/32	9 1/8	11	13 15/16	13 15/16	16 7/8	16 7/8
b	1 7/16	1 11/16	1 15/16	2 3/8	2 25/32	3 9/16	4 7/16	4 13/16	5 11/16	5 15/16
c	2 5/32	2 5/16	2 5/8	3 5/32	4	5	6 11/16	6 11/16	8 1/8	8 1/8
d	1	1 3/16	1 3/8	1 3/4	2 1/8	3	4 1/4	4 1/4	5 7/16	5 7/16
e	3 5/16	3 15/16	4 9/16	5 5/16	6 1/2	8 9/16	10 7/8	10 7/8	13 7/16	13 7/16
Mark 9 LL & LR										
a	4 19/32	5 1/4	6 3/32	7 1/32	7 3/4	10 1/32	13 15/16	13 15/16	16 7/8	16 7/8
b	1 3/8	1 5/8	1 7/8	2 1/2	2 3/4	3 7/16	4 7/16	4 13/16	5 11/16	5 15/16
c	2 1/8	2 3/8	2 5/8	3 3/32	3 7/16	4 1/8	6 11/16	6 11/16	8 1/8	8 1/8
d	1 3/16	1 3/8	1 1/2	1 5/16	2 1/4	2 7/8	4 1/4	4 1/4	5 7/16	5 7/16
e	3 5/16	3 15/16	4 9/16	5 5/16	6	8 1/16	10 7/8	10 7/8	13 7/16	13 7/16



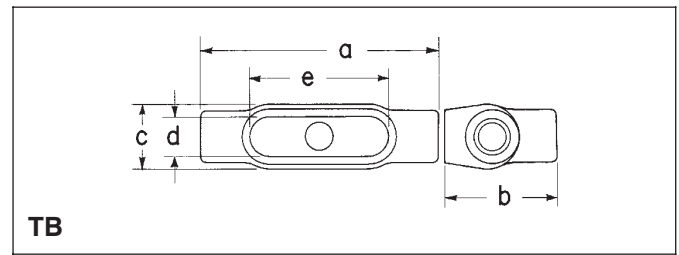
Size	a	b	c	d	e
Form 7T					
1/2	5 5/8	1 3/4	2 7/16	1 5/16	3 3/16
3/4	6 1/4	2	2 5/8	1 1/8	3 13/16
1	7 1/4	2 1/4	3	1 3/8	4 1/2
1 1/4	7 7/16	2 5/16	3 3/16	1 3/4	5
1 1/2	8 3/16	2 9/16	3 9/16	1 15/16	5 7/16
2	9 3/16	3 1/8	4 1/8	2 7/16	6 3/8
2 1/2	12	3 3/8	5 3/4	3 9/16	8 3/8
3	12 1/16	4 3/8	5 3/4	3 9/16	8 3/8
3 1/2	14 5/16	4 7/8	6 15/16	4 1/2	10 1/4
4	14 5/16	5 3/8	6 15/16	4 1/2	10 1/4

Form 8T					
1/2	5 11/16	1 3/4	2 5/32	1	3 5/16
3/4	6 9/32	2	2 5/16	1 3/16	3 15/16
1	7 7/16	2 1/4	2 5/8	1 3/8	4 9/16
1 1/4	8 1/2	2 5/8	3 5/32	1 3/4	5 5/16
1 1/2	10 3/8	2 25/32	4	2 1/8	6 1/2
2	12 1/4	3 9/16	5	3	8 9/16
2 1/2	15 5/8	4 7/16	6 11/16	4 1/4	10 7/8
3	15 5/8	4 13/16	6 11/16	4 1/4	10 7/8

Mark 9T					
1/2	5	1 3/8	2 1/8	1 3/16	3 5/16
3/4	5 11/16	1 3/8	2 3/8	1 3/8	3 15/16
1	6 19/32	1 7/8	2 5/8	1 1/2	4 9/16
1 1/4	7 1/2	2 1/2	3 3/32	1 15/16	5 5/16
1 1/2	8 1/4	2 3/4	3 7/16	2 1/4	6
2	10 1/2	3 7/16	4 1/8	2 7/8	8 1/16
2 1/2	15 5/8	4 7/16	6 11/16	4 1/4	10 7/8
3	15 5/8	4 13/16	6 11/16	4 1/4	10 7/8
3 1/2	18 3/4	5 11/16	8 1/8	5 7/16	13 7/16
4	18 3/4	5 15/16	8 1/8	5 7/16	13 7/16



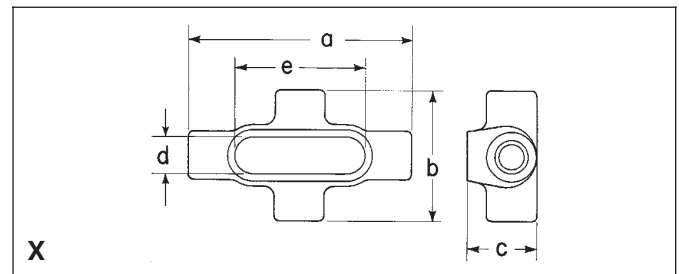
Size	a	b	c	d	e
Form 7TA					
1/2	5 5/8	2 5/8	2 7/16	1 5/16	3 3/16
3/4	6 1/4	2 7/8	2 5/8	1 1/8	3 13/16
1	7 1/4	3 1/4	3	1 3/8	4 1/2
1 1/4	7 7/16	3 9/16	3 3/16	1 3/4	5
1 1/2	8 3/16	3 11/16	3 9/16	1 15/16	5 7/16
2	9 3/16	4 1/4	4 1/8	2 7/16	6 3/8



Size	a	b	c	d	e
Form 7TB					
1/2	5 5/8	2 5/8	1 9/16	1 5/16	3 3/16
3/4	6 1/4	2 7/8	1 3/4	1 1/8	3 13/16
1	7 1/4	3 1/4	2	1 3/8	4 1/2
1 1/4	7 7/16	3 5/16	2 3/16	1 3/4	5
1 1/2	8 3/16	5	2 7/16	1 15/16	5 7/16
2	9 3/16	6 1/8	3	2 7/16	6 3/8

Form 8TB					
1/2	5 11/16	2 17/32	1 3/8	1	3 5/16
3/4	6 9/32	2 3/4	1 9/16	1 3/16	3 15/16
1	7 7/16	3 1/8	1 3/4	1 3/8	4 9/16
1 1/4	8 1/2	3 11/32	2 3/16	1 3/4	5 5/16
1 1/2	10 3/8	4 1/32	2 3/4	2 1/8	6 1/2
2	12 1/4	4 13/16	3 3/4	3	8 9/16

Mark 9TB					
1/2	5	2 1/8	1 3/8	1 3/16	3 5/16
3/4	5 11/16	2 13/32	1 9/16	1 3/8	3 15/16
1	6 19/32	2 27/32	1 3/4	1 1/2	4 9/16
1 1/4	7 1/2	3 15/32	2 3/16	1 15/16	5 5/16
1 1/2	8 11/32	3 7/8	2 1/2	2 5/32	5 7/8
2	10 5/8	4 19/32	3 7/32	2 13/16	8 3/32



Size	a	b	c	d	e
Form 7X					
1/2	5 5/8	3 5/16	1 3/4	1 5/16	3 3/16
3/4	6 1/4	3 1/2	2	1 1/8	3 13/16
1	7 1/4	4	2 1/4	1 3/8	4 1/2
1 1/4	7 7/16	4 1/8	2 5/16	1 3/4	5
1 1/2	8 3/16	4 5/8	2 9/16	1 15/16	5 7/16
2	9 3/16	5 3/16	3 1/8	2 7/16	6 3/8

Form 8X					
1/2	5 11/16	2 29/32	1 3/4	1	3 5/16
3/4	6 9/32	3 1/16	2	1 3/16	3 15/16
1	7 7/16	3 1/2	2 1/4	1 3/8	4 9/16
1 1/4	8 1/2	4 1/8	2 5/8	1 3/4	5 5/16
1 1/2	10 3/8	5 1/4	2 15/32	2 1/8	6 1/2
2	12 1/4	6 1/4	3 9/16	3	8 9/16

Mark 9X					
1/2	5 11/16	2 29/32	1 3/4	1	3 5/16
3/4	6 9/32	3 1/16	2	1 3/16	3 15/16
1	7 7/16	3 1/2	2 1/4	1 3/8	4 9/16

Application:

Die cast mogul pulling elbows are installed in conduit systems to provide:

- an accessible weather resistant chamber for containing heavy duty conductors
- a chamber for containing 90° turn in large stiff conductors. Used either to change conductor direction or to enter buildings
- a pull box for pulling large conductors
- a chamber for making splices and taps
- an accessible opening to accommodate future changes of the system

Features:

- Large dome cover permits easy, straight through pull
- Dimension from centerline of back hub to bushing of end hub exceeds six times the trade diameter of the conduit
- Tapered threads provide easy assembly, tight construction
- Heavy duty machine screws for cover
- Cover is gasketed
- Smooth design and finish make handling easy and complement any construction job

Standard Materials:

- Die cast copper-free aluminum

Standard Finishes:

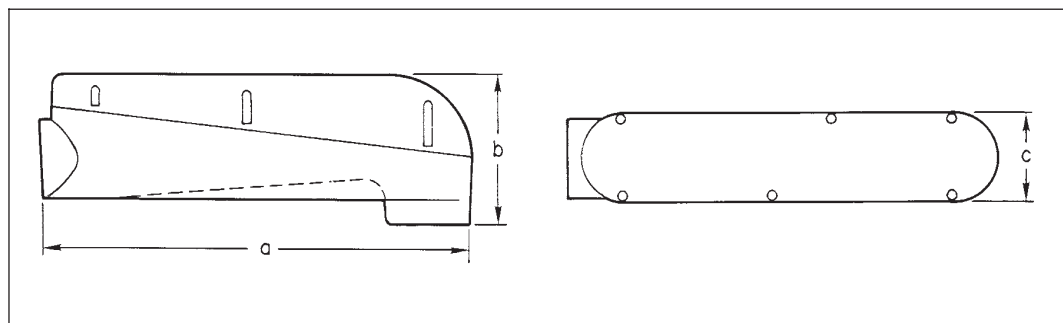
- Aluminum lacquer

Certifications and**Compliances:**

- UL Standard: 514B
- NEC: Article 370
- CSA C22.2 No. 18
- CEC: 22.1

**LBNEC Furnished With Cover, Gasket and Screws**

Size	Cat. #	Bending Radius
2½	LBNEC7	5¼
3	LBNEC8	5¾
3½	LBNEC9	7
4	LBNEC10	7¾

Dimensions

Cat. #	Size	a	b	c
LBNEC7	2½	21 ¹¹ / ₁₆	8 ⁹ / ₃₂	4½
LBNEC8	3	21 ¹¹ / ₁₆	8 ⁹ / ₃₂	4½
LBNEC9	3½	28 ¹¹ / ₁₆	9 ⁷ / ₃₂	5½
LBNEC10	4	28 ¹¹ / ₁₆	9 ⁷ / ₃₂	5½

Replacement Gaskets

Application:

LBD bodies are installed at 90° bends in rigid conduit to:

- act as pull outlets for conductors that are stiff due to large size or type of insulation
- make 90° bends in conduit system, allowing straight pull in either direction
- provide for conduit service entrance to buildings
- provide for conductor entrance to motors
- provide access to wiring for maintenance and future expansion

Features:

LBD bodies have:

- cover openings on an angle permitting conductors to be pulled straight thru hubs from either direction
- domed covers to permit easy conductor bends (relieves strain on insulation)
- cover and gasket furnished
- taper tapped hubs with integral bushings

Standard Materials:

- Body and cover – *Feraloy*® iron alloy
- Gasket – Neoprene

Standard Finishes:

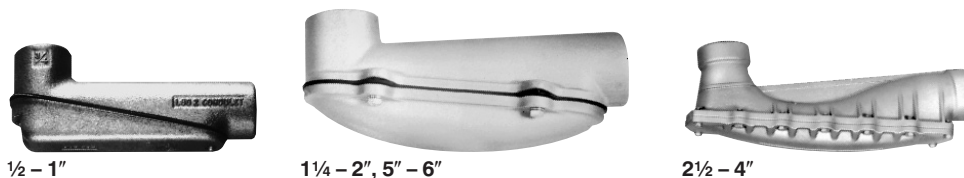
- *Feraloy* iron alloy: ½" to 4" sizes, electrogalvanized and aluminum acrylic paint; 5" and 6" sizes, zinc chromate primer and aluminum lacquer.
- Neoprene – natural

Options:

Description	Suffix to be Added to Cat. #
Material – All sizes, copper-free aluminum.	SA

Certifications and Compliances:

- UL Standard: 514B
- Fed. Spec.: W-C-586d
- CSA 22.2 No. 18



LBD

Size	Cat. #	Size	Cat. #	Size	Cat. #
½	LBD1100	1¼	LBD4400	3½	LBD9900
¾	LBD2200	1½	LBD5500	4	LBD10900
1	LBD3300	2	LBD6600	5	LBD012
		2½	LBD7700	6	LBD014
		3	LBD8800		

Replacement Gaskets for Above Sizes

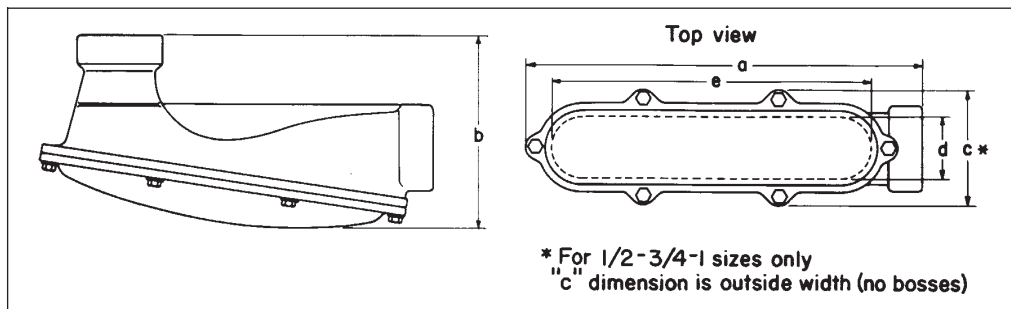
Rubber

Size	Cat. #	Size	Cat. #	Size	Cat. #
½	GASK680R	1¼	GASK683R	3½	GASK989R
¾	GASK681R	1½	GASK684R	4	GASK989R
1	GASK682R	2	GASK684R	5	GASK687R
		2½	GASK990R	6	GASK688R
		3	GASK990R		

Replacement Cover Assembly with Hardware

Size	Cat. #	Size	Cat. #	Size	Cat. #
½	LBD100	1¼	LBD400	3	LBD800
¾	LBD200	1½	LBD600	3½	LBD900
1	LBD300	2	LBD600	4	LBD900
		2½	LBD800	5	LBD120
				6	LBD140

Dimensions



Cat. #	Size	a	b	c	d	e
LBD1100	½	5	2⅝	1⅝	1	3⅛
LBD2200	¾	6¼	2⅝	1⅞	1¼	4⅞
LBD3300	1	6¼	2⅝	1⅞	1½	4⅞
LBD4400	1¼	8⅝	4¼	3½	1⅞	7⅞
LBD5500	1½	12⅞	5⅞	4⅝	2⅝	10⅞
LBD6600	2	12⅞	5⅞	4⅝	2⅝	10⅞
LBD7700	2½	19⅞	9⅞	5⅝	3	15¾
LBD8800	3	19⅞	9⅞	5⅝	3	15¾
LBD9900 (iron)	3½	20⅞	10⅞	7¼	4¾	19⅞
LBD10900 (iron)	4	20⅞	10⅞	7¼	4¾	19⅞
LBD9900 (-SA)	3½	27⅞	11⅞	7⅞	4	24
LBD10900 (-SA)	4	27⅞	11⅞	7⅞	4	24
LBD012	5	32⅞	12½	8⅝	5⅞	30
LBD014	6	41½	15	9¾	7	39

Application:

Mogul bodies are installed in conduit systems to:

- act as pull outlets for conductors that are stiff, due to large size or type of insulation
- provide the longer openings needed when pulling large conductors
- prevent sharp bends and kinks in large conductors (protects insulation during installation)
- provide ample openings for splices and taps
- provide access to wiring for maintenance and future system changes

Features:

Mogul bodies have:

- long openings
- provision for easy bends
- taper tapped hubs with integral bushings
- Stainless Steel cover screws
- Covers are provided with integral gasket

Standard Materials:

- Feraloy® iron alloy

Standard Finishes:

- Feraloy – electrogalvanized and aluminum acrylic paint

Options:

Description	Suffix to be Added to Cat. #
Material – copper-free aluminum.....	SA

Certifications and Compliances:

- UL Standard: 514B
- Fed. Spec.: W-C-586d
- CSA Standard: C22.2 No. 18



BC
Mogul Series

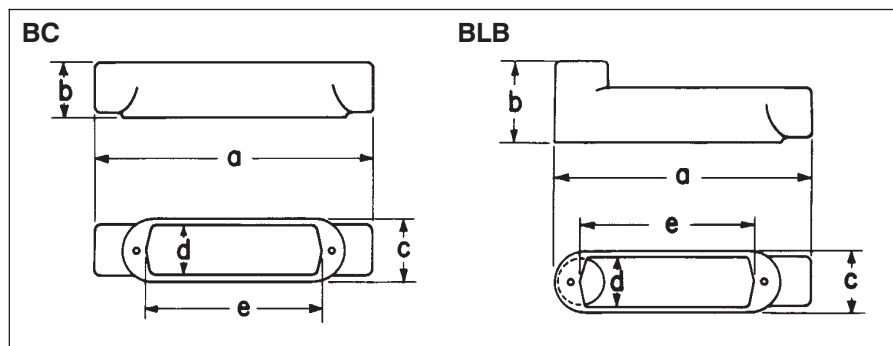
Size	Cat. #
1	BC3
1¼	BC4
1½	BC5
2	BC6
2½	BC7
3	BC8
3½	BC9
4	BC10



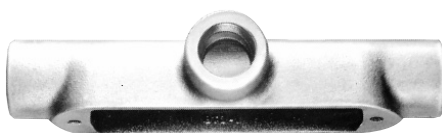
BLB†
Mogul Series

Size	Cat. #
1	BLB3
1¼	BLB4
1½	BLB5
2	BLB6
2½	BLB7
3	BLB8
3½	BLB9
4	BLB10

† For 5" size use LBD012.
For 6" size use LBD014.

Dimensions

	Size 1	1¼	1½	2	2½	3	3½	4
Mogul Series BC								
a	9 ⁹ / ₁₆	9 ⁹ / ₁₆	13 ³ / ₄	13 ³ / ₄	18 ³ / ₈	18 ³ / ₈	23 ³ / ₄	23 ³ / ₄
b	1 ⁷ / ₈	2 ⁵ / ₁₆	2 ⁹ / ₁₆	3 ¹ / ₈	3 ⁵ / ₈	4 ³ / ₈	4 ⁷ / ₈	5 ³ / ₈
c	2 ³ / ₁₆	2 ³ / ₁₆	3	3	4 ¹ / ₄	4 ¹ / ₄	5 ¹ / ₄	5 ¹ / ₄
d	1 ⁷ / ₈	1 ⁷ / ₈	2 ⁵ / ₈	2 ⁵ / ₈	3 ¹³ / ₁₆	3 ¹³ / ₁₆	4 ³ / ₄	4 ³ / ₄
e	6	6	10	10	15	15	20	20
Mogul Series BLB								
a	8 ¹⁹ / ₃₂	8 ¹⁹ / ₃₂	12 ¹¹ / ₁₆	12 ¹¹ / ₁₆	16 ²⁹ / ₃₂	16 ²⁹ / ₃₂	22 ¹ / ₈	22 ¹ / ₈
b	2 ²⁷ / ₃₂	3 ⁹ / ₃₂	3 ⁵ / ₈	4 ³ / ₁₆	5 ³ / ₃₂	5 ²⁷ / ₃₂	6 ¹ / ₂	7
c	2 ³ / ₁₆	2 ³ / ₁₆	3	3	4 ¹ / ₄	4 ¹ / ₄	5 ¹ / ₄	5 ¹ / ₄
d	1 ⁷ / ₈	1 ⁷ / ₈	2 ⁵ / ₈	2 ⁵ / ₈	3 ¹³ / ₁₆	3 ¹³ / ₁₆	4 ³ / ₄	4 ³ / ₄
e	6	6	10	10	15	15	20	20



BUB

Mogul Series

Size	Cat. #
1	BUB3
1¼	BUB4
1½	BUB5
2	BUB6
2½	BUB7
3	BUB8
3½	BUB9
4	BUB10

BT

Mogul Series

Size	Cat. #
1	BT3
1¼	BT4
1½	BT5
2	BT6
2½	BT7
3	BT8
3½	BT9
4	BT10

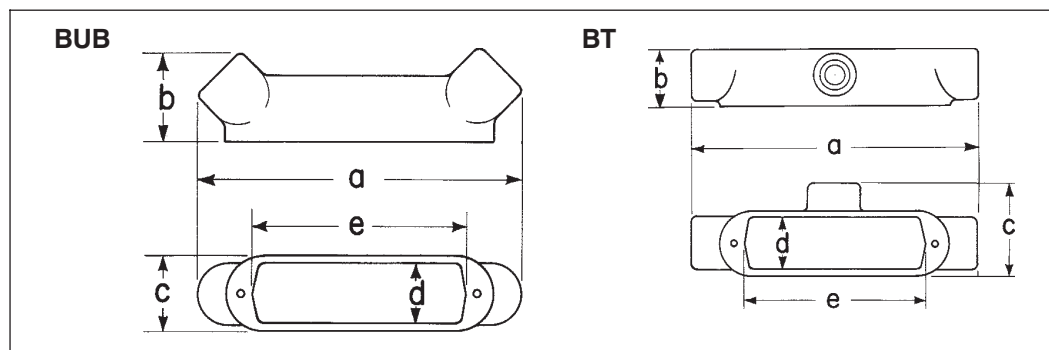
Blank Covers

For all Mogul Series

Feraloy® iron alloy

Size	With Round Neoprene Gasket Cat. #
1 or 1¼	BG48
1½ or 2	BG68
2½ or 3	BG88
3½ or 4	BG98

Dimensions



	Size 1	1¼	1½	2	2½	3	3½	4
Mogul Series BUB								
a	9⅞	9⅞	13½	13½	17¾	17⅞	23⅞	23¼
b	2⅞	3⅞	3½	4⅞	4⅞	5⅞	6⅞	6⅞
c	2⅞	2⅞	3	3	4¼	4¼	5¼	5¼
d	1⅞	1⅞	2⅞	2⅞	3⅞	3⅞	4¾	4¾
e	6	6	10	10	15	15	20	20
Mogul Series BT								
a	9⅞	9⅞	13¾	13¾	18⅞	18⅞	23¾	23¾
b	1⅞	2⅞	2⅞	3⅞	3⅞	4⅞	4⅞	5⅞
c	3⅞	3⅞	4⅞	4⅞	5⅞	5⅞	6⅞	6⅞
d	1⅞	1⅞	2⅞	2⅞	3⅞	3⅞	4¾	4¾
e	6	6	10	10	15	15	20	20

1F Condulet® Service Entrance Elbows and Tees

Conduit Outlet Bodies

Application:

SLB and LBY elbows are installed in conduit systems to:

- act as service entrance elbows between service entrance and vertical weatherhead conduit runs
- make 90° bends in conduit systems where space is limited
- act as pull outlets
- provide access to conductors for maintenance and future system changes

ET short radius tees are installed in conduit systems:

- in concealed conduit runs allowing single conduit stub up to outlet boxes located above or below main conduit run. Eliminates separate feed and return conduits to flush floor box or junction box

Features:

SLB elbows have:

- compact overall size and short hubs
- taper tapped hubs and integral bushing for standard threaded conduit
- covers and gaskets furnished

LBY elbows have:

- maximum volume for bends within a compact overall size
- screw-on cover for ease of installation and removal
- cover openings on an angle, permitting conductors to be pulled straight through either hub
- taper tapped hubs and integral bushing for standard threaded conduit

ET short radius tees have:

- compact size, small radius of bend for use in concealed or open conduit systems. Particularly suited for use in shallow floors or partitions
- taper tapped hubs and integral bushing for standard threaded conduit

Standard Materials:

- SLB elbows – copper-free aluminum
- LBY elbows – *Feraloy*® iron alloy
- ET tees – *Feraloy* iron alloy

Standard Finishes:

- Copper-free aluminum – natural
- *Feraloy* iron alloy – electrogalvanized and aluminum acrylic paint

Options:

- Finishes – LBY elbows:
Corro-free™ epoxy power coat add suffix S752
- Material (LBY only) – copper-free aluminum construction Add suffix –SA

Certifications and Compliances:

- UL Standard: 514B
- Fed. Spec.: W-C-586a



LBY (includes cover)

Size	Cat. #
1/2	LBY15
3/4	LBY25
1	LBY35
1 1/4	LBY45
1 1/2	LBY55



ET

Size	Cat. #
3/4 – 1/2 – 1/2	ET218
3/4 – 3/4 – 3/4	ET228
1 – 3/4 – 3/4	ET328

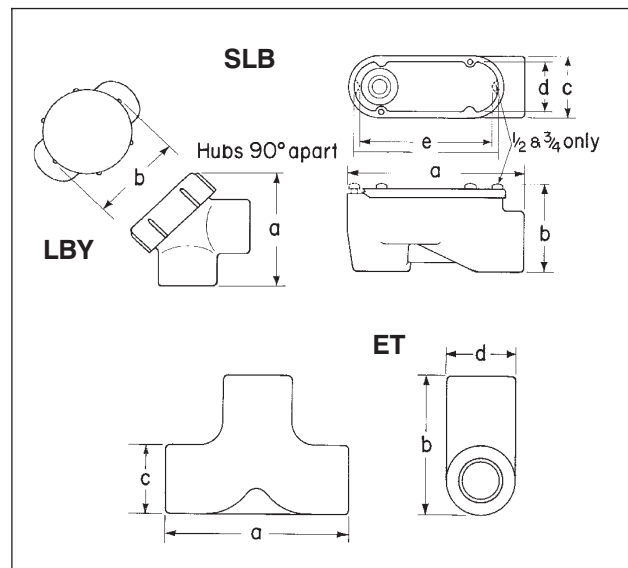
Largest hub shown at top of photo



SLB (includes cover)

Size	Cat. #
1/2	SLB1
3/4	SLB2
1	SLB3
1 1/4	SLB4
1 1/2	SLB5
2	SLB6

Dimensions



SLB	Size	1/2	3/4	1	1 1/4	1 1/2	2
	a	3 1/8	3 1/2	4 1/8	5 3/8	6 23/32	7 3/4
	b	1 25/32	2	1 9/32	2 25/32	3 1/32	3 29/32
	c	1 3/16	1 3/8	1 11/16	2 3/32	2 3/8	3
	d	1	1 3/16	1 15/32	1 7/8	2 5/32	2 5/8
	e	2 11/16	2 15/16	3 11/32	4 3/4	6 1/32	6 31/32
LBY							
	a	2 13/16	3 3/16	3 1/4	3 25/32	4 1/4	
	b	2	2 1/4	2 1/2	2 15/16	3 3/8	
ET	Size	3/4 – 1/2 – 1/2	3/4 – 3/4 – 3/4	1 – 3/4 – 3/4			
	a	4	4	4			
	b	2 5/8	3	3			
	c	1 1/4	1 1/2	1 1/2			
	d	1 1/2	1 1/2	1 3/4			

Description	Page No.
Application/Selection	18
Condulet® Cast Outlet Boxes	
GRF Series	19
VXF Series	19

Application:

Round cast outlet boxes are installed at appropriate locations in threaded rigid conduit systems to:

- act as support for lighting fixtures (with hub and fixture hanging covers)
- act as junction or fuse boxes when fitted with connection blocks or fuse blocks
- act as pull outlets for conductors to be installed in a conduit system (with blank covers; gasketed or ungasketed)
- act as mounting for wiring devices (wide variety available)
- provide openings for splices and taps in conductors
- provide access to conductors for maintenance and future system changes
- connect conduit sections and change direction of conduit runs

Considerations for Selection:

- Shape required – determine from configuration of conduit system and intended function of outlet boxes
- Size required – determine from conduit and conductor size
- Material required – determine from environmental conditions (corrosive fumes, buried in concrete, etc.)

Accessories:

- Blank & hub covers – for VXF, GRF
- Fixture hangers – for VXF, GRF series
- Gaskets – for VXF, GRF series

Options:

- *Corro-free*™ epoxy powder coat. Information available on request.

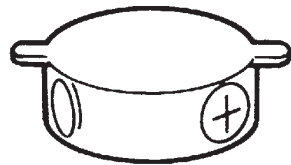
Quick Selector Chart

Series†	Conduit Sizes	Inside Dimensions		No. of Conduit Openings	Surface or Flush Mtg.	Standard Material	Finish	Covers
		Depth	Dia.					
VXF	½ and ¾	1¾	4¼	4 or 5	S	Copper-free aluminum	Epoxy Enamel	When box is used as junction or pull box, install GRF covers, gaskets.
GRF	½ to 1	1⅝ to 3⅝	3⅞	0 to 4	S – F	Feraloy iron alloy or aluminum	Electro-galvanized and aluminum paint	Blank, hub, standard 4" octagonal box covers, wiring devices, lighting fixture hangers, gaskets.

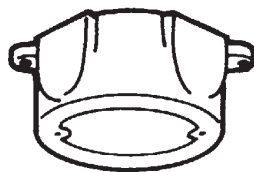
† Fit lighting fixture as follows: ARB & VGR

Shape Selector Chart

SERIES
VXF



GRF



Application:

VXF and GRF cast outlet boxes are installed in threaded rigid conduit systems to:

- act as junction boxes
- act as pull outlets
- accept round base wiring devices and covers intended for use on 4" outlet boxes (GRF boxes only)
- act as ceiling or wall mounting for *Vaporgard™* lighting fixtures (VXF boxes)
- mount enclosed and gasketed lighting fixtures: Series ARB and VGR; Series ARB fixture hangers (GRF boxes)

Features VXF:

- Compact, shallow design
- Takes GRF covers
- Multiple tapped conduit openings and pipe plugs for versatility
- 4 hubs and 3 plugs on VXF10 and VXF20
- 5 hubs and 4 plugs on VXFT10 and VXFT20

Features GRF:

- Surface mounting. Flush mounting can be obtained by nailing box to concrete form through mounting lug
- Drilled mounting lugs
- Four conduit bosses spaced 90° apart on sides and one boss on back
- Blank or drilled and tapped bodies (with 4 side bosses tapped and plugged, plus blank back boss)

Standard Materials:

- VXF – copper-free aluminum
- GRF – *Feraloy®* iron alloy or copper-free aluminum

Standard Finishes:

- VXF – epoxy enamel
- GRF – electrogalvanized and aluminum acrylic paint

Certifications and Compliances:

- UL Standard: boxes and covers – 514A
- CSA Standard: C22.2

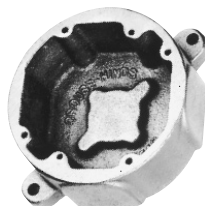


VXF Tapped Surface With Lugs
4 Hubs, 3 Plugs

Hub Size	Cat. #
1/2	VXF10
3/4	VXF20

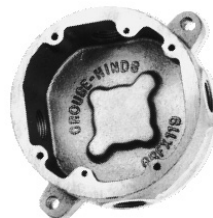
Surface With Lugs
5 Hubs, 4 Plugs

Hub Size	Cat. #
1/2	VXFT10
3/4	VXFT20



GRF Blank Surface With Lugs

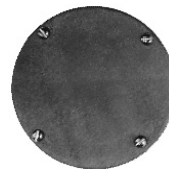
Inside Depth	Cat. #
1 3/8	GRF19
1 5/16	GRF29
3 1/8	GRF39



GRFX Tapped Surface With Lugs
4 Hubs, 3 Plugs
Blank Back Boss

Inside Depth	Size Tap	Iron Cat. #	Aluminum Cat. #
1 3/8	1/2	GRFX119	GRF119
1 3/8	3/4	GRFX219	GRF219
2 1/16	1/2	GRFX129	GRF129
2 1/16	3/4	GRFX229	GRF229
2 1/16	1	GRFX329	GRF329
3 1/8	1/2	GRFX139	GRF139
3 1/8	3/4	GRFX239	GRF239
3 1/8	1	GRFX339	GRF339

NOTE: See lighting section 8L for complete listing of lighting fixtures and hangers.



GRF Blank Cover

Description	Steel Cat. #	Aluminum Cat. #
Surface	GRF10	GRF110



Fixture weight to 125 lbs.

GRF Hub Covers

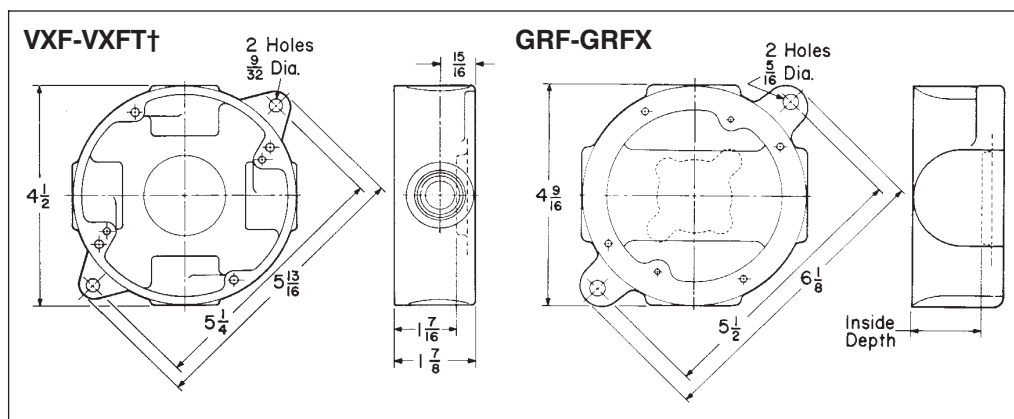
Description	Size	Iron Cat. #	Aluminum Cat. #
Surface	1/2	GRF11	GRF11-SA
Surface	3/4	GRF12	GRF12-SA



GRF Gasket

Description	Cat. #
Neoprene	GASK643

Dimensions

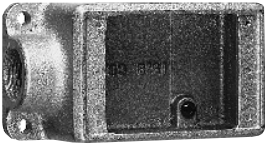
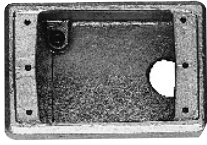
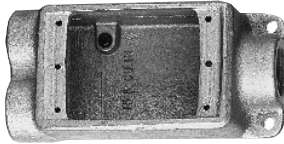
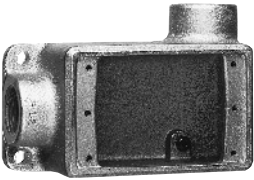
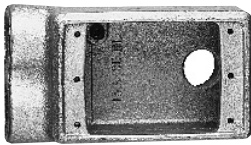
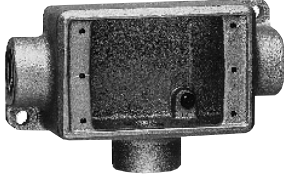
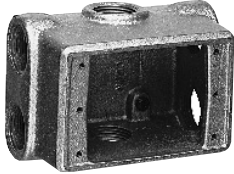
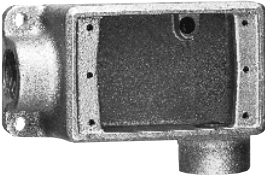
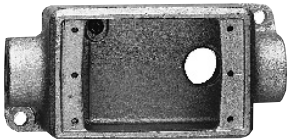
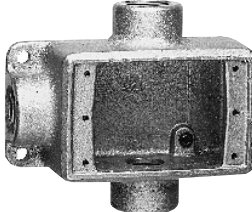
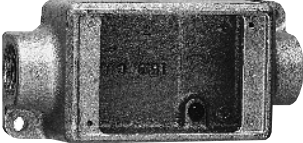
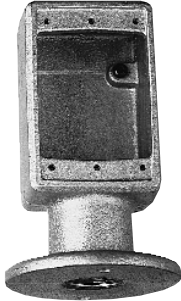
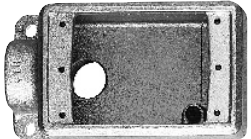


† VXFT has hubs on 4 sides and back; VXF has hubs on 4 sides only.

Notes Page

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Description	Page No.
Application/Selection	22-24
Boxes	
Conduit Bodies	
FS/FD Series	
Accessories	35-44
Single gang	
Blank	31-34
Cast hubs	25-28
Multi-gang	
Blank	31-34
Cast hubs	29-30
Covers	
DS/S Series, WLRS, WLRD Wet Locations Covers	
For NEMA Configuration Receptacles	
Blank	38, 43, 44
Pilot light	42
Push button	41
Receptacle	35-39, 43
Switch	39-41, 43, 44
Plug Receptacles	
DS Series	37
DS/WP Series	37
FSE Series	45

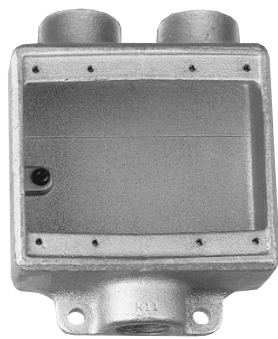
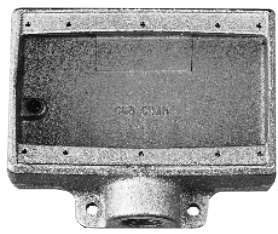
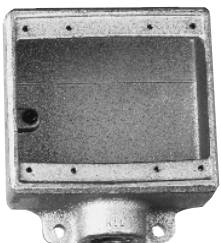
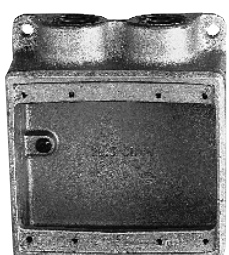
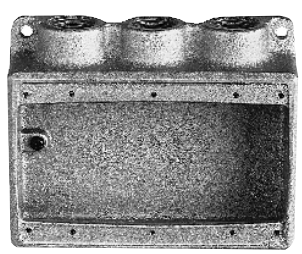
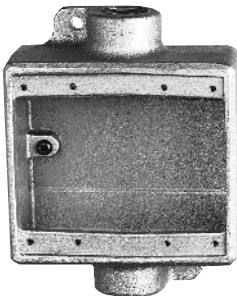
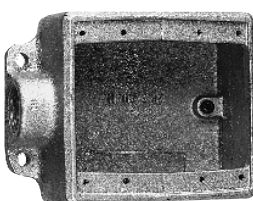
SERIES	PAGE	SERIES	PAGE	SERIES	PAGE	SERIES	PAGE
							
FS/FD	25	FSA/FDA	26	FSCC/FDCC	26	FSX/FDX	27
FS (Double face)	28						
FS-SA	25						
							
FSR/FDR	25	FSSA	26	FSCT/FDCT	27	FDXC	27
							
FSL/FDL	25	FSCA	26	FST/FDT	27	FSCD	27
							
FSC	25	FSS	26	FSY (With flange)	27		
FDC	25	FDD	26				
FSC (Double face)	28						
FSC-SA	25						
		FSLA/FDLA	26				

NOTE: If the hub configurations required are not available, drilled and tapped openings can be provided in blank boxes per your specifications. See pages 31 to 34 for details.

Condulet® Cast Device Boxes with Hubs

3F

Multi-Gang Shape Selector Chart

SERIES	PAGE	SERIES	PAGE	SERIES	PAGE
					
FSC (Two gang tandem) FS (Two gang tandem)	29 29	FSD (Two gang)	30	FS/FD (Three gang)	30
					
FS/FD (Two gang)	29	FSS/FDS (Two gang)	30	FSS (Three gang)	30
					
FSC/FDC (Two gang)	29	FSE (Two gang)	29		

NOTE: If the hub configurations required are not available, drilled and tapped openings can be provided in blank boxes per your specifications. See pages 31 to 34 for details.

Application:

Cast device boxes are installed in conduit and cable systems to:

- Accommodate wiring devices
- Act as pull boxes for conductors in a conduit system
- Provide openings to make splices and taps in conductors
- Provide access to conductors for maintenance and future system changes

Considerations for Selection of Device Box

Type of conduit system:

- Should be compatible with conduit or cable system
- Boxes are standard with mounting lugs and internal green ground screw.
- Boxes are available for rigid steel, IMC; rigid aluminum; flexible conduit and cable systems.

Number of devices to be used in the box:

- Standard flush devices require one gang each

Depth:

- Two box types are available – standard (FS) and deep (FD), single through five gang.
- Standard flush wiring devices will normally fit in the FS boxes.
- Some special purpose devices of higher ratings will require the deeper box (FD).
- In addition, the need for additional wiring space will require the deep box.

Hub configuration and size:

- The layout of the conduit system dictates the conduit opening locations of the box.

The table below indicates the types of conduit and the boxes available. Drilled and tapped openings can be supplied in blank boxes to meet your requirements.

- Hub size is the same as conduit size. A variety of hub sizes are available. Where the specific hub size is not available, reducing bushings can be used.

Materials and finishes:

- The environment and the use of the box will determine the material and finish needed.

Areas of the country with harsh weather and corrosive environments may require different materials and finishes for added protection.

- Standard material and finish is *Feraloy*® iron alloy with electrogalvanized and aluminum acrylic paint. Many items are also available in copper-free aluminum.

- Optional finishes can be obtained if environment warrants. See Options listings.

Considerations for Selection of Covers, Devices, and Accessories

Both general purpose and weatherproof, waterproof devices and covers are available. Selection will depend on individual conditions.

To provide for a wide variety of applications, the following covers and devices are available:

Covers	Pg.
General use snap switch.	39-41, 43, 44
Pushbutton switch	41
Plug and receptacle.	35-39, 43
Blank	38, 43, 44
Pilot light	42
Receptacle	35-39, 43

Devices	Pg.
Receptacle	37
Pilot lights	42
Wiring device	37

Accessories	Pg.
Gaskets	42
Box extensions	42
Flush mtg. adapter.	42

Options:

- *Corro-free*™ epoxy powder coat – add suffix S752

Quick Selector Chart

Box	Depth	Gang	Conduit Type	Standard Material	Standard Finish
FS	1 ¹¹ / ₁₆	1-3	Threaded rigid	<i>Feraloy</i> iron alloy (some are copper-free aluminum)	<i>Feraloy</i> iron alloy – electrogalvanized and aluminum acrylic paint. Copper-free aluminum – natural
FD	2 ¹ / ₂	1-3	Threaded rigid	<i>Feraloy</i> iron alloy	<i>Feraloy</i> iron alloy – electrogalvanized and aluminum acrylic paint
FS blank bodies Drilled and tapped	1 ¹⁵ / ₁₆	1-4 1-3	Threaded rigid	<i>Feraloy</i> iron alloy	<i>Feraloy</i> iron alloy – electrogalvanized and aluminum acrylic paint
FD blank bodies Drilled & tapped	2 ¹ / ₂	1-5 1-3	Threaded rigid	<i>Feraloy</i> iron alloy	<i>Feraloy</i> iron alloy – electrogalvanized and aluminum acrylic paint

Condulet® Single Gang Cast Device Boxes

Accessories Pages 35 to 44

3F

3F Cast Device Boxes

With and Without Mounting Lugs for Threaded Rigid and IMC Conduit

Application:

Cast device boxes are installed to:

- accommodate wiring devices
- act as pull boxes for conductors in a conduit system
- provide openings to make splices and taps in conductors
- provide access to conductors for maintenance and future system changes
- connect conduit sections
- FSF boxes for mounting surface devices on floor or bench (used with single gang covers)

Features:

- Internal green ground screw standard on boxes
- Suitable for use in wet locations when used with gasketed covers
- Mounting lugs standard on most boxes
- Tapered threaded hubs (NPT) with integral bushing
- Available for surface mounting (with mounting lugs) or flush mounting (without mounting lugs) as listed
- Available as shallow (FS) or deep (FD) configuration. Use FD if device to be enclosed exceeds 1 5/8" in depth
- Ample wiring room provided in either FS or FD configuration
- Wide selection of surface or flush covers available in three materials (sheet steel, *Feraloy*®, aluminum)
- Covers for flush mounting extend to conceal the rough plaster line
- Available in single gang and multi-gang configurations with hubs, and as blank bodies for drilled and tapped openings

Standard Materials:

- *Feraloy* iron alloy or copper-free aluminum.

Standard Finishes:

- *Feraloy* – electrogalvanized and aluminum acrylic paint
- Aluminum – natural

Options:

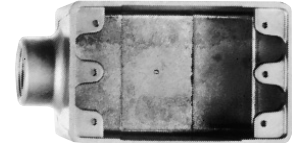
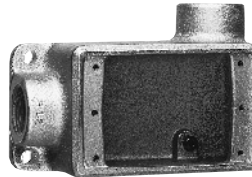
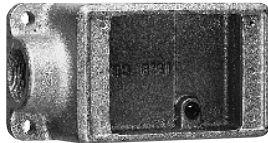
- Finishes:
Corro-free™ epoxy powder coat
 – add suffix S752

Size Ranges:

- Hubs – 1/2" to 1"

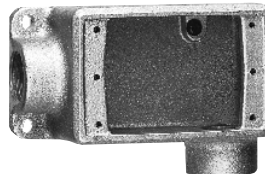
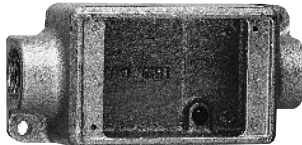
Certifications and Compliances:

- UL Standard: 514
- ANSI Standard: C33.84
- Fed. Spec.: W-C-5860
- CSA Standard: C22.2 No. 18



FS & FD

Size	Cat. #	Cat. #
1/2	FS1*	FD1**
3/4	FS2*	FD2**
1	FS3**	FD3**



Size	Cat. #	Cat. #
1/2	FSC1*	FDC1**
3/4	FSC2*	FDC2**
1	FSC3**	FDC3**

Die Cast Aluminum†

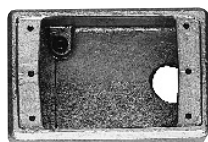
Size	Cat. #	Cat. #
1/2	FS1-SA	FSC1-SA
3/4	FS2-SA	FSC2-SA

† Mounting lugs and ground screw are not offered with standard die cast box – add suffix SCA to Cat. No. for sand cast aluminum box with mounting lugs and ground screw. (Example: FS1-SCA)

* Available in sandcast copper-free aluminum – add suffix SCA to Cat. No.

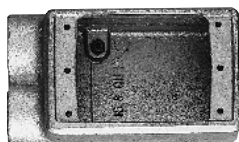
** Available in sandcast copper-free aluminum – add suffix SA to Cat. No.

With and Without Mounting Lugs for
Threaded Rigid and IMC Conduit



FS & FD

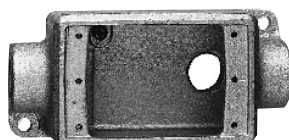
Size	Cat. # †	Cat. # †
1/2	FSA1	FDA1
3/4	FSA2	FDA2



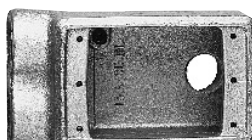
Size	Cat. #†	Cat. #†
1/2	FSS1*	FDD1
3/4	FSS2*	FDD2*
1	FSS3	FDD3



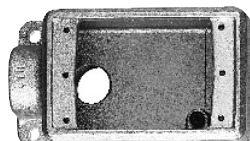
Size	Cat. #	Cat. #
1/2	FSCC1	FDCC1
3/4	FSCC2	FDCC2



Size	Cat. #
1/2	FSCA1
3/4	FSCA2

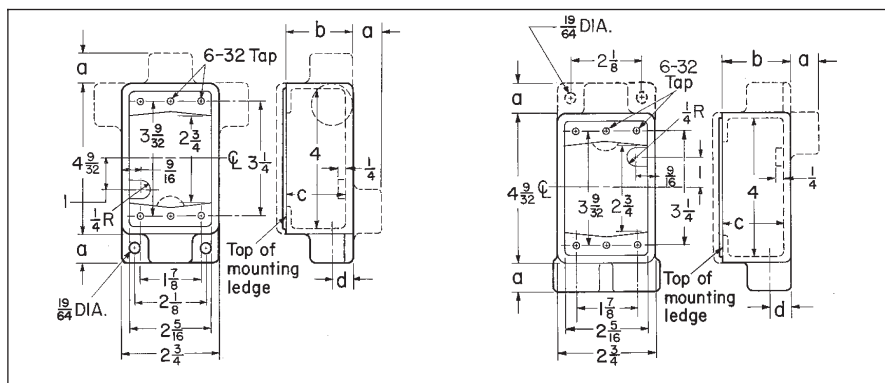


Size	Cat. #†
3/4	FSSA2



Size	Cat. #	Cat. #
1/2	FSLA1	FDLA1
3/4	FSLA2*	FDLA2

Dimensions



Series	Hub Size	a	b	c	d
FS	1/2	7/8	1 7/8	1 11/16	5/8
	3/4	7/8	1 7/8	1 11/16	3/4
	1	1	1 7/8	1 11/16	7/8
FD	1/2	7/8	2 11/16	2 1/2	5/8
	3/4	7/8	2 11/16	2 1/2	3/4
	1	1	2 11/16	2 1/2	7/8

* Available in copper-free aluminum; add suffix "SA".

† Mounting lugs not available.

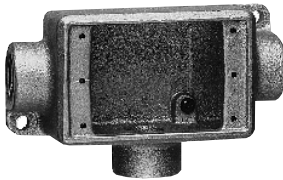
Condulet® Single Gang Cast Device Boxes

Accessories Pages 35 to 44

3F

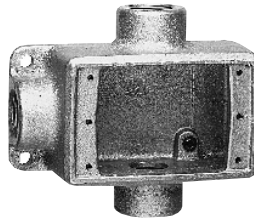
With and Without Mounting Lugs for Threaded Rigid and IMC Conduit

3F Cast Device Boxes

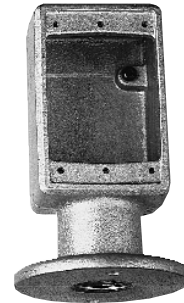


FS and FD

Size	Cat. #	Cat. #
1/2	FSCT1	FDCT1
3/4	FSCT2*	FDCT2*
1	FSCT3	FDCT3



Size	Cat. #	Cat. #
1/2	FST1*	FDT1
3/4	FST2*	FDT2
1		FDT3

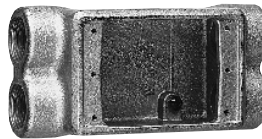


FSY

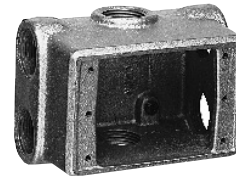
Description	Hub Size	Cat. # ‡
Single face	1	FSY311
Double face	1	FSY312



Size	Cat. #	Cat. #
1/2	FSX1	FDX1
3/4	FSX2	FDX2
1		FDX3



Size	Cat. #†
1/2	FSCD1
3/4	FSCD2



FDXC†

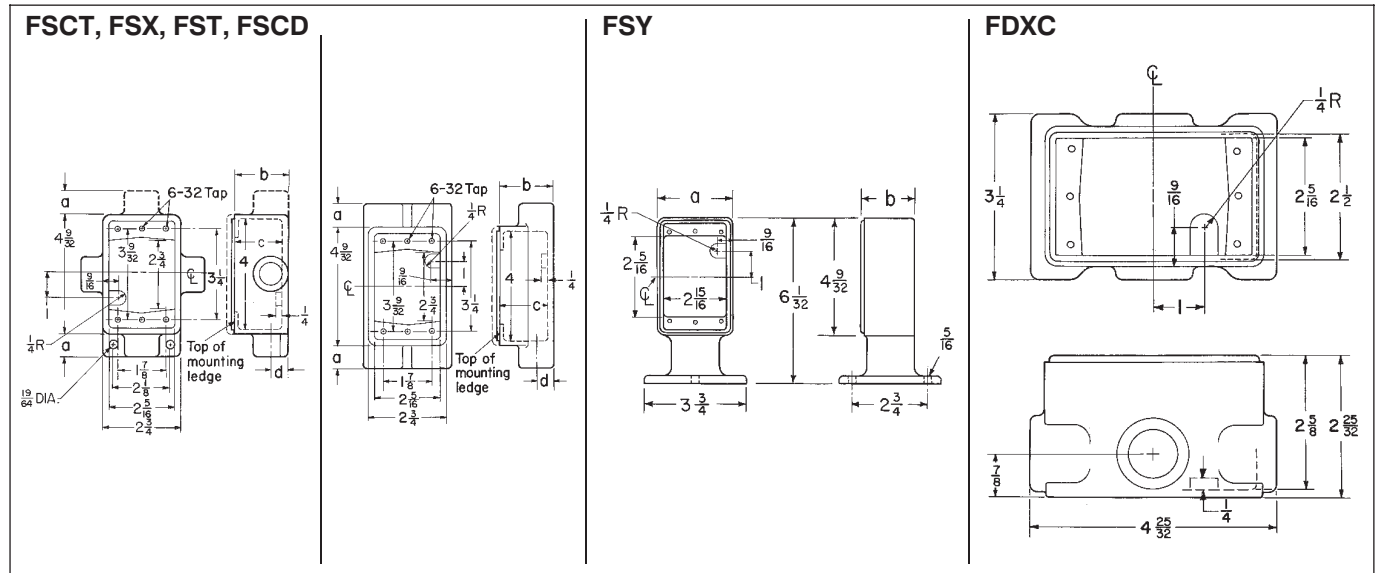
Hub Size	Cat. # ‡
3/4	FDXC219

† 6 Hubs – all 3/4" pipe tap.

* Available in copper-free aluminum; add suffix "SA".

‡ Not available with mounting lugs.

Dimensions



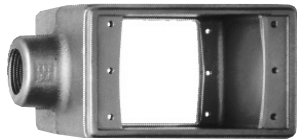
FSCT, FSX, FST, FSCD

Series	Hub Size	a	b	c	d
FS	1/2	7/8	17/8	11 1/16	5/8
	3/4	7/8	17/8	11 1/16	3/4
	1	1	17/8	11 1/16	7/8

FSY

Description	Hub Size	a	b
Single gang, single face	1	2 3/4	1 15/16
Single gang, double face	1	2 3/4	3 3/8

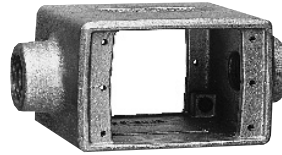
With and Without Mounting Lugs



FS

Double Face

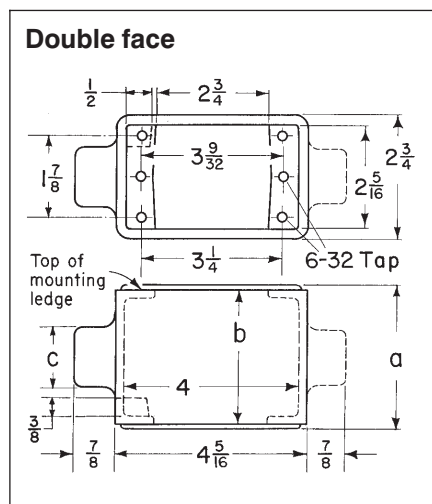
Size	Cat. # †
1/2	FS152
3/4	FS252



Double Face

Size	Cat. # †
1/2	FSC152
3/4	FSC252

Dimensions



Series	Hub Size	a	b	c
FS	1/2	3 5/16	3 1/8	1 1/4
	3/4	3 11/16	3 1/2	1 1/2

† Mounting lugs not available.

Condulet® Multi-Gang Cast Device Boxes

Accessories Pages 35 to 44

3F

With and Without Mounting Lugs for Threaded Rigid and IMC Conduit

3F Cast Device Boxes



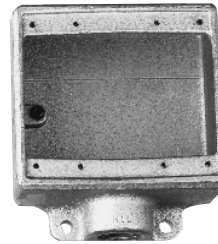
FS†
Two Gang Tandem

Size	Cat. #
1/2	FS17
3/4	FS27



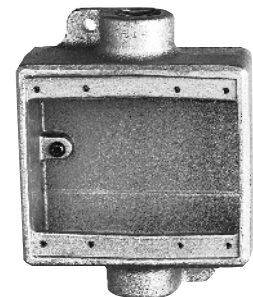
FSC†
Two Gang Tandem

Size	Cat. #
1/2	FSC17
3/4	FSC27



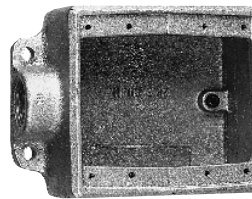
FS & FD
Two Gang

Size	Cat. #	Cat. #
1/2	FS12*	FD12
3/4	FS22*	FD22*
1	FS32	FD32



FSC & FDC
Two Gang

Size	Cat. #	Cat. #
1/2	FSC12	FDC12
3/4	FSC222	FDC222*
1	FSC32	FDC32



FSE
Two Gang

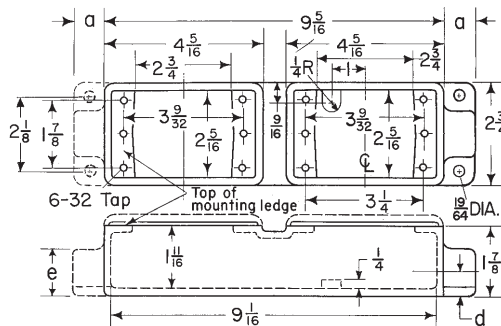
Size	Cat. #
3/4	FSE22

* Available in copper-free aluminum; add suffix "SA".

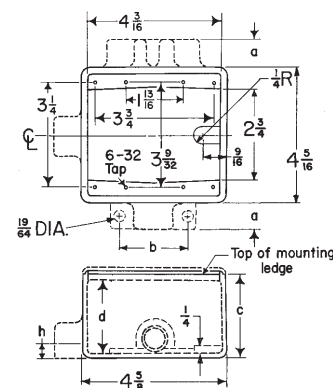
† Use single gang covers only.

Dimensions

Two gang tandem



Two gang



Two gang tandem

Series	Hub Size	a	d	e
FS	1/2	7/8	5/8	1 1/4
	3/4	7/8	3/4	1 1/2

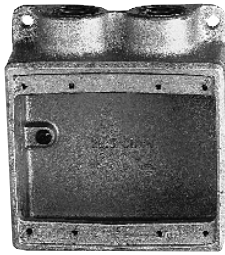
Two gang

Series	Hub Size	a	b	c	d	h
FS	1/2	7/8	2 1/4	1 7/8	1 11/16	5/8
	3/4	7/8	2 1/4	1 7/8	1 11/16	3/4
	1	1	2 1/2	1 7/8	1 11/16	7/8
FD	1/2	7/8	2 1/4	2 11/16	2 1/2	5/8
	3/4	7/8	2 1/4	2 11/16	2 1/2	3/4
	1	1	2 1/2	2 11/16	2 1/2	7/8

With and Without Mounting Lugs for
Threaded Rigid and IMC Conduit

Cast Device
Boxes

3F



FSS & FDS

Two Gang

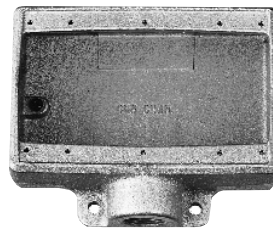
Size	Cat. #	Cat. #
3/4	FSS222	FDS222



FSD

Two Gang

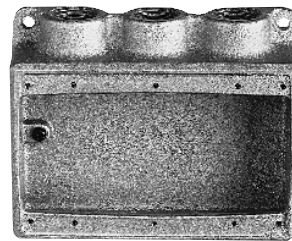
Size	Cat. #
3/4	FSD212*



FS & FD

Three Gang

Size	Cat. #	Cat. #
3/4	FS23	FD23
1	FS33	



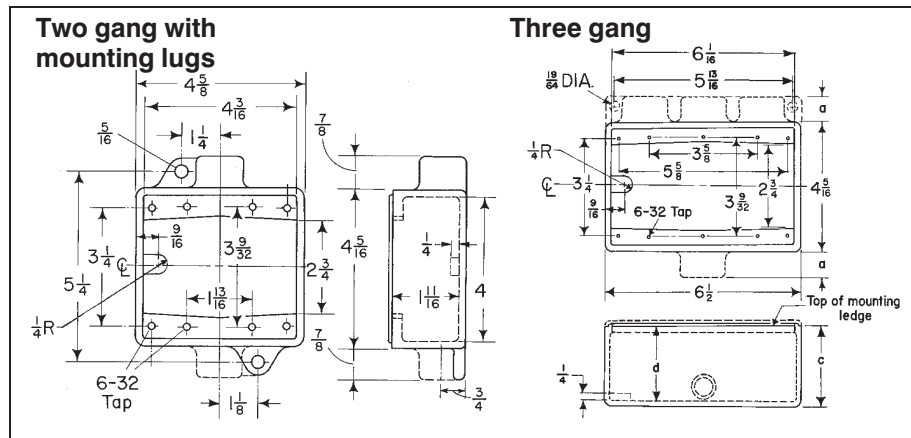
FSS

Three Gang

Size	Cat. #
3/4	FSS23

* Hubs on 2 hub side are 1/2".

Dimensions



Three gang

Series	Hub Size	a	c	d
FS	3/4	7/8	17/8	11 1/16
	1	1	17/8	11 1/16
FD	3/4	7/8	2 11/16	2 1/2

Blank Bodies With Mounting Lugs for Drilling and Tapping Single Gang, Multi-Gang, Tandem

Application:

- Blank cast device boxes are used:
- where several wiring devices are to be grouped together
- to assemble special combinations of wiring devices
- where special arrangements of conduit hubs or entrances are required

Features:

- Available in shallow (FS) or deep (FD) configurations.
- FS/FD bodies have thick walls for drilling and tapping conduit entrances.
- Internal green ground screw standard on boxes.
- Available in single, two, three, four and five gang and two gang tandem bodies.
- Cast mounting lugs at diagonally opposite corners.
- Wide selection of standard surface or flush covers listed on pages 35 to 44.

Standard Materials:

- *Feraloy* iron alloy

Standard Finishes:

- *Feraloy* – electrogalvanized and aluminum acrylic paint

Certifications and Compliances:

- UL Standard: 514A
- CSA Standard: C22.2 No. 18



FS019
FD019
single
gang



FS029
FD029
two gang



FS039, FD039 three gang



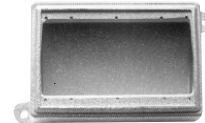
FD04 four gang



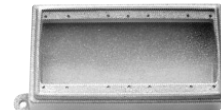
FD05 five gang



FS062
FD062
two gang



FS063
FD063
three gang



FS094
FD094
four
gang



FS097
FD097
Two gang
tandem

Ordering Information

Description	Shallow Cat. #	Deep Cat. #
Single gang	FS019	FD019*
Two gang	FS029	FD029*
Three gang	FS039	FD039*
Four gang		FD04
Five gang		FD05
Two gang (takes one two gang cover)	FS062	FD062
Three gang (takes one three gang cover)	FS063	FD063
Four gang (takes one four gang cover)	FS094	FD094
Two gang tandem	FS097	FD097

* Available in copper-free aluminum. To order add suffix SA to Cat. No.

Blank Bodies for Drilling and Tapping
Ordering Information

Ordering Information:

To order one of the blank bodies with drilled and tapped holes listed on page 31, proceed as follows:

Step 1

Select the required box.

Step 2

Select the arrangement that meets the requirements from Table 1.

Step 3

Determine the maximum size and spacing of conduit openings from Table 2.

Step 4

Substitute the appropriate symbol from Table 4 for each conduit entrance, using "0" (zero) for those locations on arrangement where an entrance is not required.

Example:

Step 1 – box required FS062

Step 2 – arrangement 1

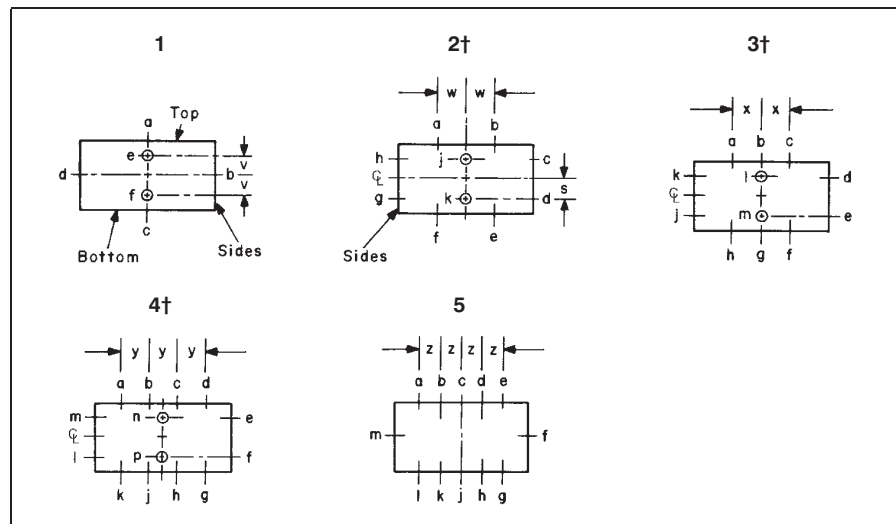
Step 3 – conduit entrances – ½" at "a", none at "b"; 1" at "c" and "d"; none at "e" and "f".

Step 4 – symbols are substituted and written in **alphabetical order starting with location "a"**. For this example **A0CC00**.

Complete Cat. No. is made up of three parts: Part 1 – box number; Part 2 – arrangement number; Part 3 – symbols for conduit entrances. For this example: **FS062-1-A0CC00**.

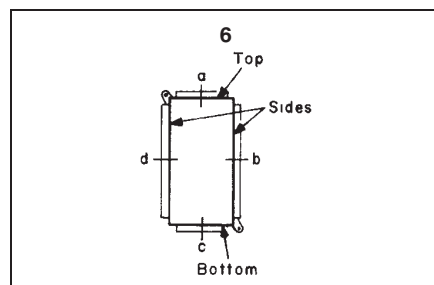
Table 1/Drilling and Tapping Arrangements*

Two, Three, Four and Five Gang

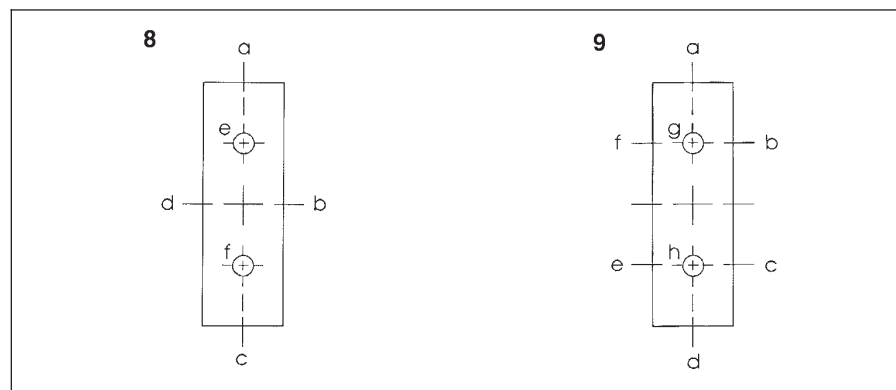


† If only one conduit entry is specified or permitted (see Table 2) on a side wall that conduit entry will be centered on the wall.

Single Gang Only (FS or FD019)



Two Gang Tandem (FS or FD097)



* Drilling and tapping arrangements other than those in Table 1 are available. Consult Cooper Crouse-Hinds.

Blank Bodies for Drilling and Tapping Ordering Information

Table 2/Maximum Number, Size and Spacing of Conduit Openings

Cat. #	Maximum Conduit Opening Size					Sides		Back	Spacings					
	Top and Bottom					1	2	2	s	v	w	x	y	z
FS019	1					1								
FD019	1½					1½								
FS029	1	1	1	¾		1					1⅞	1⅞	1⅝	
FD029	1½	1½	1	¾		1½					1⅞	1⅞	1⅝	
FS039	1	1	1	1	1	1					3¾	3¾	2½	1⅞
FD039	1½	1½	1½	1½	1	1½					3¾	3¾	2½	1⅞
FD04	1½	1½	1½	1½		1½	1	1		1⅜	1⅞	3¾	3¾	
FD05	1½	1½	1½	1½	1½	1½	1	1		1⅜	3¾	3¾	3¾	3¾
FS062	1	1	¾			1	1	1		1¼	29/32	1⅝		
FD062	1½	1¼	¾			1½	1	1¼	1	1	1	1⅝		
FS063	1	1	1	¾		1	1	1		1¼	1⅜	1⅜	1⅝	
FD063	1½	1¼	1	¾		1½	1	1¼	1	1	1⅜	2	1⅝	
FS094	1	1	1	1	¾	1	1	1		1¼	1⅜	1⅜	1⅜	1⅝
FD094	1½	1½	1½	1	¾	1½	1	1		1⅞	1½	2⅝	1⅜	1⅝
FS097	1	½				1	1	1½		1⅝	¾			
FD097	1½	1½				1½	1½	1½		1⅝	¾			

Table 3/Distance From Mounting Surface to Centerline of Conduit Opening ("u")

Cat. #	u
FS019	29/32
FD019	1⅜
FS029	29/32
FD029	1⅜
FS039	31/32
FD039	1⅜
FD04	1⅜
FD05	1⅜
FS062	1⅝
FD062	1⅝
FS063	1⅝
FD063	1⅝
FS094	1⅝
FD094	1⅜
FS097	1⅝
FD097	1⅜

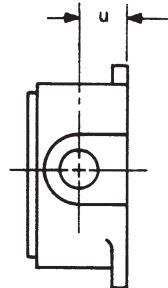
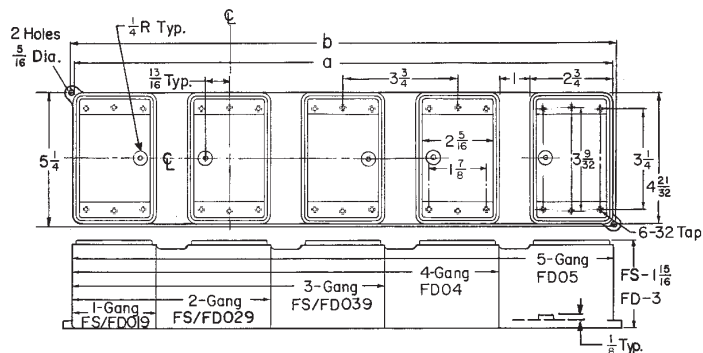


Table 4/Symbols for Openings

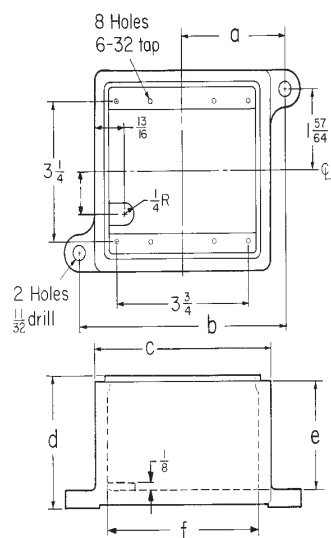
Conduit Size	Symbol
½	A
¾	B
1	C
1¼	E
1½	F
None	0

Dimensions



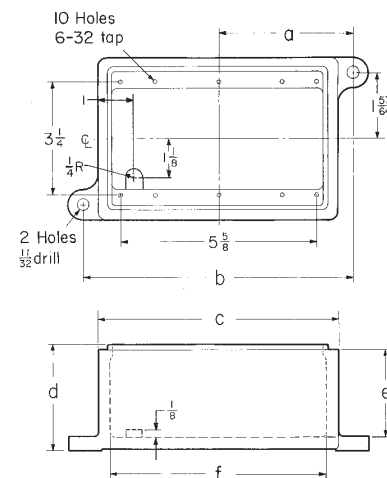
FS/FD019	a	3 1/4	b	3 1/4
FS/FD029		7		7
FS/FD039		10 3/4		10 3/4
FD04		14 3/8		15
FD05		18 1/8		18 3/4

FS/FD062



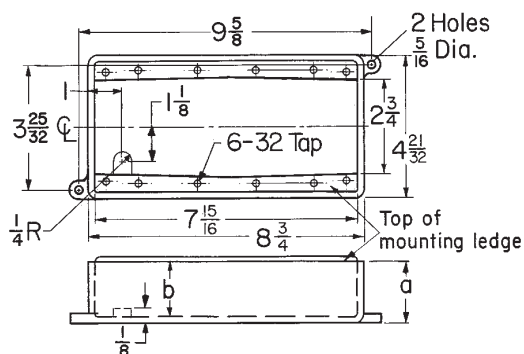
FS062	a	27/8	b	5 3/4	c	5	d	2 3/16	e	1 1/2	f	4 3/8
FD062		2 15/16		5 7/8		5 1/16		3 1/16		2 1/2		4 5/16

FS/FD063



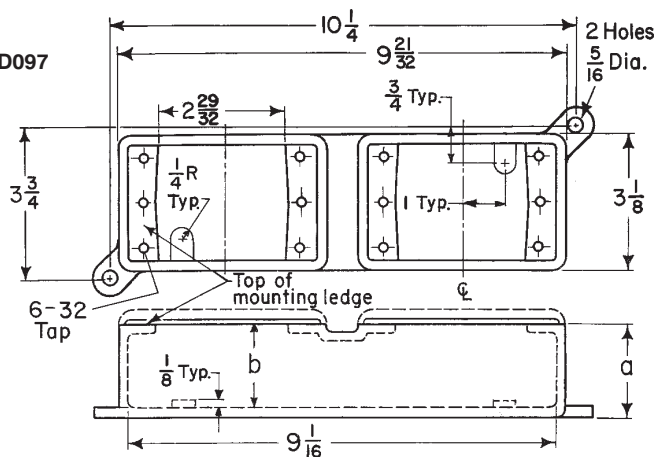
FS063	a	3 13/16	b	7 5/8	c	6 7/8	d	2 3/16	e	1 1/2	f	6 1/4
FD063		3 7/8		7 1/4		7 1/16		3 1/32		2 1/2		6 3/16

FS/FD094



FS094	a	2 3/16	b	1 45/64
FD094		3		2 1/2

FS/FD097



FS097	a	2 1/32	b	1 1/2
FD097		2 27/32		2 9/16

WLRS and WLRD Wet Location Covers

3F

For NEMA Configuration Receptacle Interiors
For FS and FD Cast Device Boxes
Flush Device Boxes

Application:

WLRS and WLRD series wiring device covers are designed to meet the total NEC code requirements for wet locations – Article 410-57:

“A receptacle installed in a wet location where the product intended to be plugged into it is not attended while in use shall have an enclosure that is weatherproof with the attachment plug cap inserted or removed.”

WLRS and WLRD series covers are suitable for use in wet and damp locations:

- wherever portable equipment is required
- as general purpose utility receptacle covers
- for industrial, commercial or residential use
- in areas where electrical requirements do not exceed medium duty ratings
- to mount FS and FD single-gang or multi-gang boxes having individual cover openings (see Sect. 3F for listings)
- to mount on most flush device boxes (see Accessories)

Features:

WLRS and WLRD covers:

- self closing spring door assures protection of wiring device at all times, in wet and damp locations
- one piece EPDM gasket provides environmental protection of wiring device at all times
- EPDM gasketing material offers excellent resistance to ozone, weather and temperature extremes of -50°F to 260°F
- die cast, copper-free aluminum construction with aluminum lacquer finish provides maximum corrosion resistance
- positive ground path ensured for all exposed metal parts

NEMA configuration receptacle interiors:

- comply with NEMA Standards WD-1 and WD-5
- grounded through an extra contact in all types except 3-phase applications; self grounded in duplex variety
- back and side wired
- offered in single and duplex configurations for use with standard plugs
- specification grade

Standard Materials:

- WLRS and WLRD face plate and cover – die cast copper-free aluminum
- Cover hinge spring – stainless steel
- Cover screws – corrosion resistant metal
- Gasket – ethylene propylene rubber (EPDM)

Standard Finishes:

- Copper-free aluminum – aluminum lacquer

Electrical Rating Ranges:

- 15 amperes; 125, 250, or 277 volts
- 20 and 30 amperes; 125, 250, 277, 480, 600, 125/250, 208/120, 480/277 or 600/347 volts

Accessories:

Flush mounting adapter – **WLRA-1** required for mounting on device boxes. (Order separately)

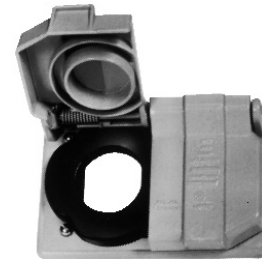
Certifications and Compliances:

- ANSI/UL Standard 514A
- NEC Code 410-57
- OSHA Standards, Subpart “S”
- NEMA Standards WD-1, 1974 (Straight Blade) and WD-5, 1972 (Locking Type)



Typical installation

Spring Door Covers – with Gasket*



Description
Cat. #

Single cover
WLRS-1
WLRD-2

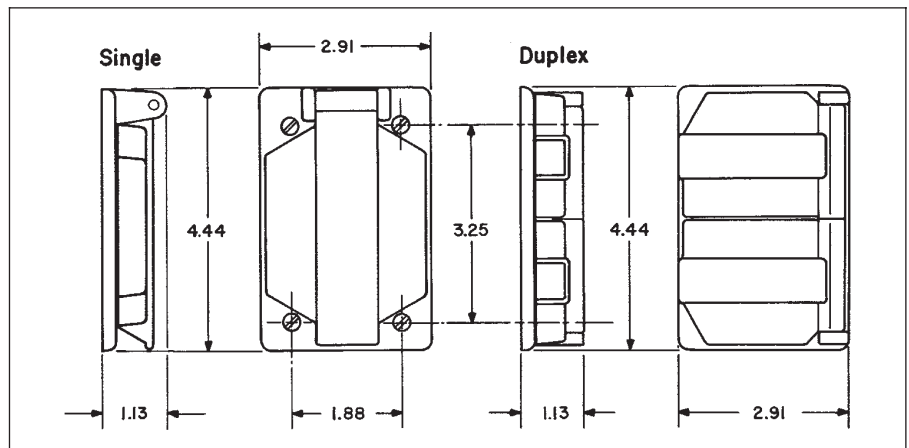
Diameter
1 3/8"
1 1/2"

Duplex cover
WLRD-1†

Diameter
1 3/8"

* Patent Number 4,058,358

Dimensions



† Horizontal mount only.

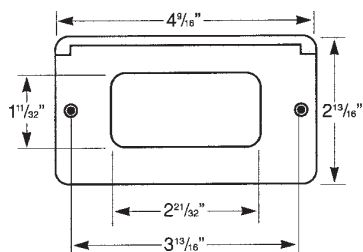
Covers with and without NEMA Configuration Receptacles

Single Device					Duplex Device				
Type	Volts	NEMA Configuration	Complete Cover with Receptacle Assy. Cat. #	Spring Door Cover & Gasket Only Cat. #†	Type	Volts	NEMA Configuration	Complete Cover with Receptacle Assy. Cat. #	Spring Door Cover & Gasket Only Cat. #†
For Non-Locking Blade Plugs									
2-Pole 3-Wire Grounding 15 Amp	125V	 5-15R	WLRS-5-15	WLRD-1	2-Pole 3-Wire Grounding 15 Amp	125V	 5-15R	WLRD-5-15	WLRD-1
	250V	 6-15R	WLRS-6-15	WLRD-1		250V	 6-15R	WLRD-6-15	WLRD-1
2-Pole 3-Wire Grounding 20 Amp	125V	 5-20R	WLRS-5-20	WLRD-1	2-Pole 3-Wire Grounding 20 Amp	125V	 5-20R	WLRD-5-20	WLRD-1
	250V	 6-20R	WLRS-6-20	WLRD-1		250V	 6-20R	WLRD-6-20	WLRD-1
For Locking Blade Plugs									
2-Pole 3-Wire Grounding 15 Amp	125V	 L5-15R	WLRS-L5-15	WLRD-1	2-Pole 3-Wire Grounding 15 Amp	125V	 L5-15R	WLRD-L5-15	WLRD-1
	250V	 L6-15R	WLRS-L6-15	WLRD-1					
2-Pole 3-Wire Grounding 20 Amp	125V	 L5-20R	WLRS-L5-20	WLRD-2					
	250V	 L6-20R	WLRS-L6-20	WLRD-2					

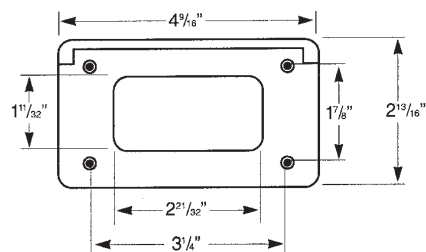
Wet Location Covers for GFCI Duplex Receptacles



Cat. No.	Description
WLGF	For Flush Device Boxes Spring Door Cover & Gasket Only Cat # WLGF



Cat. No.	Description
WLGF-FS	For FS and FD Cast Device Boxes Spring Door Cover & Gasket Only Cat. # WLGF-FS



† Must be used with a wet locations rated wiring device.

Application:

WP plugs and DS receptacles are used:

- wherever dust, dirt, moisture and corrosion are a problem
- outdoors or in locations where frequent washdowns occur, as in dairies and food processing plants

Features:

DS receptacle housings are used:

- with FS and FD cast device boxes, either surface mounted or installed flush in a wall
- with single gang, two gang tandem and multiple gang boxes having individual cover openings
- a threaded cap which effectively seals housing when not in use

WP plugs include:

- a molded Neoprene hood with integral sleeve to seal the cord entrance
- an aluminum ring which clamps the hood to receptacle housing face, to complete watertight seal when plug is in use

Standard Materials:

- Receptacle housings: body – *Feraloy*[®] iron alloy cap – copper-free aluminum
- Plug exteriors: hood – Neoprene; fastening ring – copper-free aluminum

Standard Finishes:

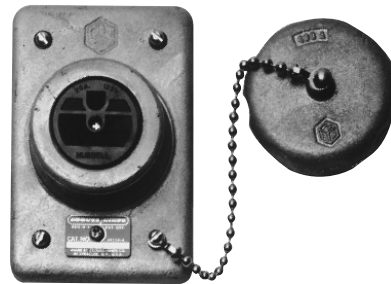
- *Feraloy* iron alloy – electrogalvanized and aluminum acrylic paint
- Copper-free aluminum – natural
- Neoprene – natural (black or yellow)

Electrical Rating Ranges:

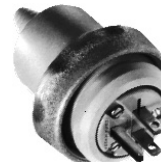
- 15 amperes, 125 volts
- 20 amperes, 125, 250 volts

Certifications and Compliances:

- UL Standards: 498; 514A
- NEMA/EEMAC: WD-1; WD-5
- CSA Standard: C22.2 No. 42*



DS Receptacle housings



WP Plugs



CC Replacement receptacle

Grounding Type Receptacles For Plugs with U shaped or Round Grounding Contacts

Rating	Cover With Recept. Cat. #	Diagram	Style	Plug Cat. #	Diagram	Cord Dia.	Repl. Recept. Cat. #
15 amps 125 volts	DS96*		2-wire, 3-pole†	WP820		.500 to .625	CC55
		NEMA: 5-15R			NEMA: 5-15P		
20 amps, 125 volts	DS222		2-wire, 3-pole†	WP832		.500 to .625	CC71
		NEMA: 5-20R			NEMA: 5-20P		
20 amps, 250 volts	DS290		2-wire, 3-pole†	WP930		.500 to .625	CC90
		NEMA: 6-20R			NEMA: 6-20P		

NOTE: For listing of typical FS cast devices boxes, see pages 22 and 23

† Third pole grounded.

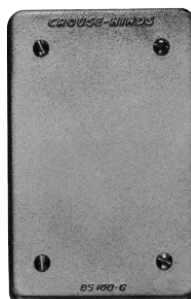
* Compliance.

For FS and FD Condulet® Cast Device Boxes Single Gang



Blank cover for enclosing splices and taps where device not used

Description	Material	Cat. #
Surface	Sheet aluminum	DS100
Flush	Sheet steel	DSS100



Blank cover with gasket for enclosing splices and taps where device not used

Description	Material	Cat. #
Surface or flush	Cast aluminum	DS100G



DS21



DS21G

For standard and 3-pole, 2-wire grounding type round flush receptacles. Opening diameter 1 $\frac{7}{16}$ ".

Description	Material	Cat. #
Surface	Sheet steel	DS21
Surface	Sheet aluminum	DS21-SA
Surface or flush	Feraloy® iron alloy with gasket	DS21G



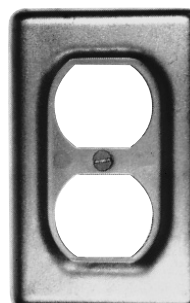
For GFI receptacles.

Description	Material	Cat. #
Surface	Sheet steel	DS23-GFI



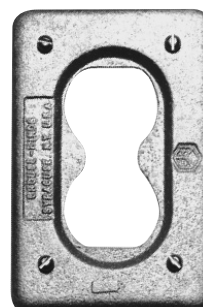
For flush plug receptacle requiring 1 $\frac{5}{8}$ " opening diameter.

Description	Material	Cat. #
Surface	Sheet steel	DS35



For duplex convenience receptacles.

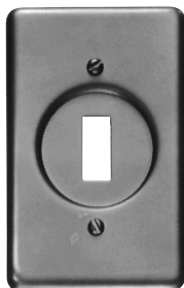
Description	Material	Cat. #
Surface	Sheet steel	DS23
Surface	Sheet aluminum	DS23-SA
Flush	Sheet steel	DSS23



For standard and 3-pole, 2-wire grounding type duplex convenience receptacles. Gasket included.

Description	Material	Cat. #
Surface or flush	Feraloy® iron alloy	DS23G

For FS and FD Condulet® Cast Device Boxes Single Gang



For square handle general use snap or toggle switches – unguarded.

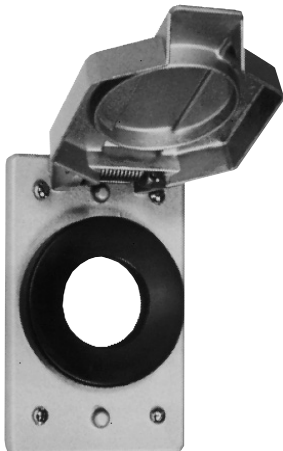
Description	Material	Cat. #
Surface	Sheet steel	DS32
Surface	Sheet aluminum	DS32-SA



For square handle general use snap or toggle switches – guarded.

Description	Material	Cat. #
Surface or flush	Feraloy® iron alloy with gasket	DS32G
Surface	Sheet steel	DS52

WLRS and WLRD Wet Locations Covers† For NEMA Configuration Receptacles*



For single convenience receptacles

Spring door with gasket

WLRS-1 cover takes 15 and 20 ampere non-locking type and 15 ampere locking type receptacles*

WLRS-2 cover takes 20 ampere locking type receptacles*

Description	Material	Cat. #
Surface	Die cast aluminum	WLRS-1 WLRS-2

Use WLRA-1 adapter for mounting on flush device boxes



For duplex convenience receptacles*

Spring doors with gasket

WLRD-1 cover takes 15 and 20 ampere non-locking type and 15 ampere locking type receptacles*

Description	Material	Cat. #
Surface	Die cast aluminum	WLRD-1

Use WLRA-1 adapter for mounting on flush device boxes.

Flush Device Adapter



Adapter plate for mounting WLRS/WLRD covers to flush device boxes.

Cat. #
WLRA-1

Also can be used to mount all covers with four corner screws listed on pages 35 to 42 to flush device boxes.

† Must be used with a wet locations rated wiring device.

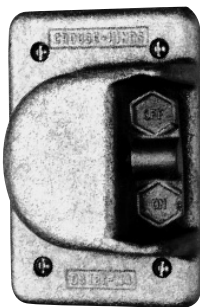
* Refer to pages 37 and 38 for receptacle specifications and listings of complete receptacle/cover combinations.

3F Raintight Covers (Gasket Included)

For FS and FD Condulet® Cast Device Boxes Single Gang

Cast Device Boxes

3F



For general use snap switches. Includes gasket.

Description	Material	Cat. #
For standard ON-OFF operation	Copper-free aluminum	DS181



For general use snap switches. Includes gasket.

Description	Material	Cat. #
For standard ON-OFF operation. With hole for lock	Die cast aluminum	DS185



For general use snap switches. Includes gasket.

Description	Material	Cat. #
For standard operation. Marked ON-OFF handle	Cast aluminum	DS128

Switches and Motor Control Push Button Covers

Raintight

3F

3F Cast Device Boxes

For FS and FD Condulet® Cast Device Boxes
Single Gang



For manual motor starting switches. Fits FS and FD boxes. Takes Westinghouse switches MST01 (1-pole) and MST02 (2-pole). Includes gasket.

Description	Material	Cat. #
For standard ON-OFF operation	Feraloy iron alloy	DS199



Furnished with buttons for operating motor control push button switches. Includes gasket.

Push Buttons				
Description	No.	Color	Material	Cat. #
Button (normally open) marked START	1	Green	Feraloy iron alloy	DS171F
Button (normally closed) marked STOP	1	Red	Feraloy iron alloy	DS171G
Button (normally open) marked START and button (normally closed) marked STOP	1	Green	Feraloy iron alloy	DS171
	1	Red		

Description	No.	Color	Material	Cat. #
Two push button	2	Black	Feraloy iron alloy	DS171J

NOTE: Markings other than shown can be supplied. Standard markings available are as follows:

HAND	CLOSE	OFF	AUTO.	UP	RUN
EMER.	DOWN	JOG	FORWARD	START	RESET
REVERSE	STOP	TRIP	OPEN	ON	TEST
LGT. ON					



Heavy duty motor control push button switch

No. of Buttons	Normal Positions		Cat. #
1	1 circuit universal		ED11
2	2 circuits universal		ED12

DS Covers use the switches shown in the list below.

Cover	Takes Switch	Cover	Takes Switch
DS171	ED12	DS171F	ED11
DS171G	ED11	DS266	ED12
DS265	ED11		



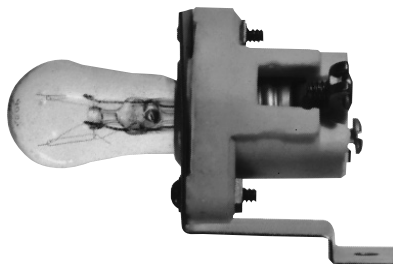
For pilot light units (furnished with jewels)

Description	Material	Jewel Color	Cat. #
Surface	Sheet steel	Red	DS24



For pilot light units (furnished with jewel and gasket).

Description	Material	Jewel Color	Cat. #
Surface or flush	Feraloy iron alloy	Red	DS24G



Pilot light unit (without transformer)

Circuit Voltage	Lamp Base	Watts	Cat. #
110	Candelabra	6	C3310



Pilot light (with transformer) †, FD only

Circuit Voltage	Lamp Base	Watts	Cat. #
440	Candelabra	6	C333



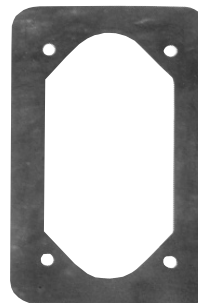
EXF Extensions (takes covers and flush rectangular wiring devices, or plug receptacles with housings)

Ext. Depth	Cat. #
1	EXF11
2½	EXF21



FS Flush mounting adapter (can be used with multi-gang bodies having individual cover openings. Furnished with gasket and screws)

Mtg. Style	Cat. #
Wall	FS031



Gaskets for use between device boxes and covers.

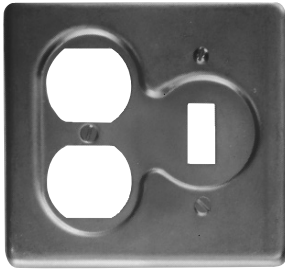
Material	Cat. #
Neoprene	GASK91 ‡

† Transformer 50-60 cycle, 440/110 volts.

‡ Not recommended as watertight.

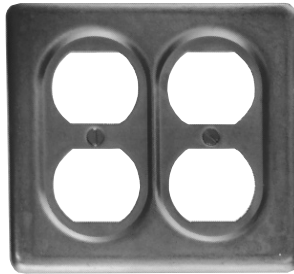
Covers

For FS and FD Condulet® Cast Device Boxes Two Gang



For flush general use snap switches with square handles

Description	Material	Cat. #
For standard duplex flush receptacles. Surface	Sheet steel	S32232



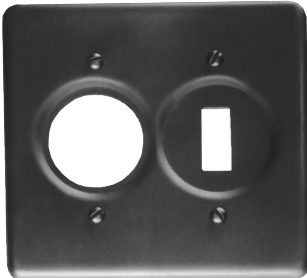
For duplex convenience receptacles, standard and 2-wire, 3-pole grounding

Description	Material	Cat. #
Surface	Sheet steel	S232



Blank. *Feraloy*® iron alloy

Description	Material	Cat. #
Surface	Sheet steel	S1002
Surface or flush	<i>Feraloy</i> iron alloy	S1002G*
Surface or flush	Copper-free aluminum	S1002G-SA



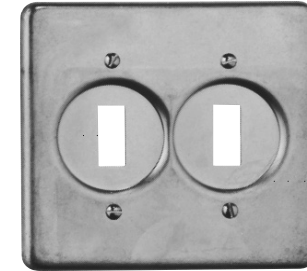
For flush general use snap switches with square handles

Description	Material	Cat. #
For round plug flush receptacles. Surface	Sheet steel	S32212



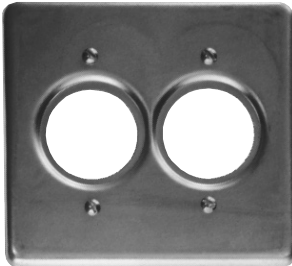
For GFI receptacles

Description	Material	Cat. #
Surface	Sheet steel	S232-GFI



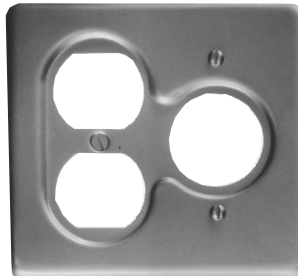
For flush general use snap switches with square handles

Description	Material	Cat. #
Surface	Sheet steel	S322



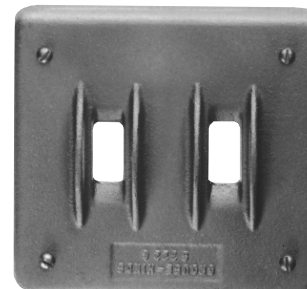
For standard and 2-wire, 3-pole grounding †

Description	Material	Cat. #
For round flush receptacles. Surface	Sheet steel	S212



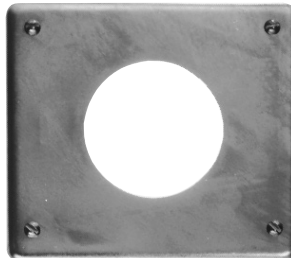
For round flush receptacles, duplex convenience receptacles, standard and 2-wire, 3-pole grounding

Description	Material	Cat. #
Surface	Sheet steel	S21232



For flush general use snap switches with square handles

Description	Material	Cat. #
Surface or flush	<i>Feraloy</i> iron alloy	S322G



For 20 amp., 250 volt receptacles

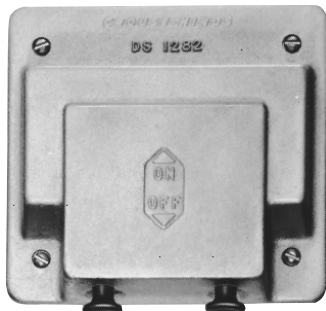
Description	Material	Cat. #
2-pole, ‡ Surface	Sheet steel	S612

* Includes gasket.

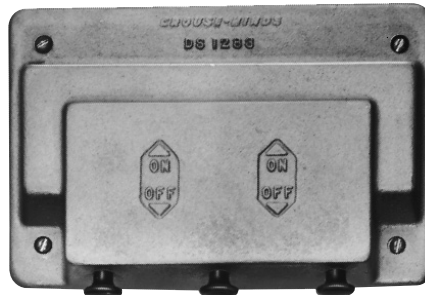
★ Hole diameter 1.688".

† Hole diameter 1.406".

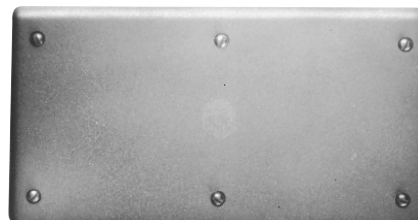
‡ Hole diameter 2 5/32".

**With operating mechanism and gasket**

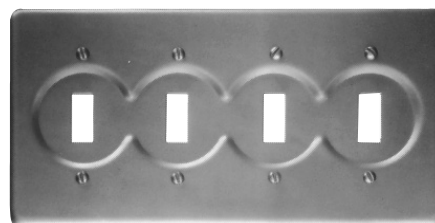
Description	Material	Cat. #
Two gang. For operation of general use snap switches. Surface or flush	Feraloy® iron alloy	DS1282*



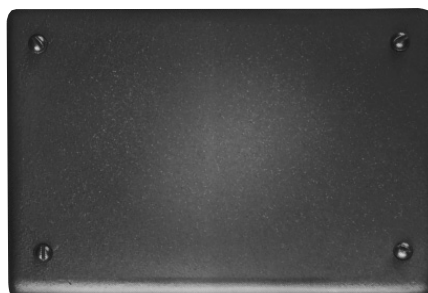
Description	Material	Cat. #
Three gang with gasket. For external operation of general use snap switches. Surface or flush. Includes gasket.	Feraloy iron alloy	DS1283*

**Blank. With gasket**

Description	Material	Cat. #
Surface or flush	Feraloy iron alloy	S1004G

**For flush general use snap switches with square handles**

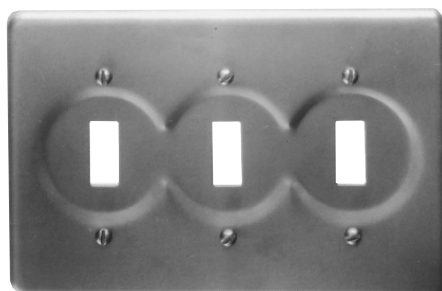
Description	Material	Cat. #
Surface, four gang†	Sheet steel	S324

**Blank.**

Description	Material	Cat. #
Surface	Sheet steel	S1003
Surface or flush	Feraloy iron alloy	S1003G*
Surface or flush	Copper-free aluminum	S1003G-SA

**Gasket for use between device box and cover**

Description	Material	Cat. #
Two gang	Rubber	GASK434
Three gang	Rubber	GASK460
Four gang	Rubber	GASK461

**For flush general use snap switches with square handles**

Description	Material	Cat. #
Surface, three gang	Sheet steel	S323

† For FS094 and FD094 boxes.

* Includes gasket.

Application:

FSE series assemblies are used in outdoor areas for supplying power in remote locations, particularly parking lots, automobile engine block heaters, marinas, drive-in theatres, trailer camps etc.

Features:

- Compact design.
- Suitable for a variety of combinations.
- U ground duplex receptacle.
- Circuit breaker protection.
- Breakers cannot be manually tripped.

Size:

- 2" integral hub for pole mounting.

Standard Materials:

- Body and cover – copper-free aluminum

Standard Finishes:

- Copper-free aluminum – natural

Electrical Ratings:

- 15A 120V

Certifications and Complies:

- CSA Standard C22.2 No. 18



FSE 6121



FSE 612

Cat.

FSE 612
FSE 6121
FSE 6122
FSE 61212

FSE 61211

Description

Double face receptacle body only
Fitting complete with 1-15 amp. duplex receptacle and blank cover.
Fitting complete with 2-15 amp. duplex receptacles.
Fitting complete with 1-15 amp. duplex receptacle and two 1- pole Mini-breakers
Fitting complete with 1-15 amp. duplex receptacle and one 1- pole Mini-breaker.
Other combinations available on request.

Notes Page

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Description	Page No.
Application/Selection	48, 49
Lubricants	
HTL	59
STL	59
Conduit Bodies & Outlet Boxes	
Cylindrical	
EKC	57
90° Elbow	
LBH	58
LBY	58
Rectangular	
OE	56
Round	
CPS	55
GUA	50-52
EAB	53
EAJ	54
GUR Universal	60
Tees	
Short Radius	
ET	58

Application:

Hazardous area conduit bodies and outlet boxes are installed in rigid conduit systems in Class I and II hazardous locations to:

- protect conductors
- act as pull and splice boxes
- connect lengths of conduit
- change conduit direction
- provide access to conductors for maintenance and future system changes
- act as mounting outlets for fixtures (with appropriate covers)
- act as sealing fittings (with appropriate covers)

Considerations for Selection:

- Determine the area classification per National Electrical Code Hazardous Area Groups. Based on this classification, select the product families that are acceptable for use in the particular location.
- Establish functional physical requirements – these will help to determine box size, cover, shape and mounting for the particular installation.
- Each product family has features suitable for specific functions:
 - i.e., boxes used as mountings for lighting fixtures are generally of a small size, and provided with mounting lugs when required to support lighting fixtures.
 - Boxes used for wire pulling should generally be larger to provide room for easy pulling.
 - Boxes used to splice and/or tap conductors should be large enough to permit ease of work and sufficient room for the required size and number of conductors.
 - Hub size and configuration – dependent on the conduit system configuration and the conduit size used.
 - Material and finish – determine from environmental conditions (corrosive fumes, weather, buried in concrete, etc.)

Options and Accessories:

- Flat blank covers (surface and flanged flush), fixture support and sealing covers and extensions are available. See specific product listing for details.
- Lubricant (STL and HTL) are available to make joints raintight, provide for easy cover removal and to lubricate shafts over a wide temperature range.
- *Corro-free*™ epoxy powder coat – information available on request.

Quick Selector Chart

Series	NEC Class I & II Groups	Normal Function	Cover Opening Diameter	Hub Size†	Cover Type
GUA	C, D E, F, G	Mtg. lgt. fixt., taps, pulling, splicing	2-5	1/2-2	Threaded
EAJ	A, B, C, D E, F, G	Pulling, splicing, taps	3 3/16 & 5	1/2-2	Threaded
EAB	A, B, C, D E, F, G	Pulling, splicing, taps	3	1/2-1	Threaded
CPS	C, D E, F, G	Fixt. support, pulling, splicing	3 1/2	1/2 & 3/4	Ground joint
OE	C, D E, F, G	Pulling		1/2-1	Ground joint
ET	C, D E, F, G	Stub up		1/2-1	
LBY	C, D E, F, G	Pulling		1/2-1 1/4	Threaded
LBH	B, C, D E, F, G	Pulling		1/2-4	Ground joint
EKC	C, D E, F, G	Pulling		1-3	Ground joint
GUR	C, D E, F, G	Pulling, splicing		1/2-1	Threaded

† See following table for standard hub configuration.

4F Condulet® Conduit Outlet Boxes

With Covers for Threaded Rigid and IMC

Cl. I, Div. 1 & 2, Groups C,D
Cl. II, Div. 1, Groups E,F,G
Cl. II, Div. 2, Groups F,G
Cl. III
NEMA 3,4,7CD,9EFG

Explosionproof
Dust-Ignitionproof
Raintight
Wet Locations

Application:

GUA series conduit outlet boxes are installed within hazardous area conduit systems to:

- protect conductors in threaded rigid conduit
- act as pull and splice boxes
- connect lengths of conduit
- change conduit direction
- provide access to conductors for maintenance and future system changes
- act as mounting outlets for fixtures (with appropriate covers)
- act as sealing fittings (with appropriate covers)

Features:

- GUA conduit boxes have:
- Neoprene "O" ring standard to meet NEMA 4 requirements
 - Cast ears on cover to permit easy removal and tightening
 - Internal green ground screw
 - Four standard mounting pads except for boxes with bottom hubs
 - threaded cover openings
 - ten different hub arrangements
 - taper threaded hubs to provide grounding continuity
 - smooth integral hub bushing protects conductor insulation when pulling
 - surface covers furnished with boxes
 - sealing covers, dome covers, and fixture hanger covers are available.
 - cover threads are 12 pitch.

Standard Materials:

- Bodies – *Feraloy* iron alloy
- Covers – Copper-free aluminum

Standard Finishes:

- *Feraloy* iron alloy – electrogalvanized and aluminum acrylic paint
- Aluminum – natural

Size Ranges:

- Hub – 1/2" to 2"
- Cover opening – 2" to 5" dia.

Options:

Description

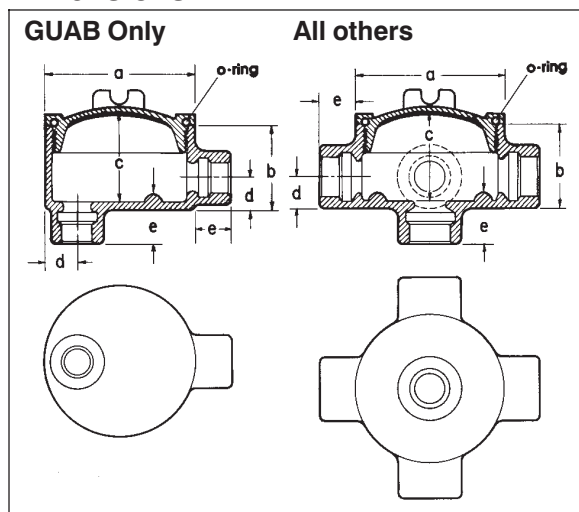
Bodies – copper-free aluminum SA†
Covers – *Feraloy* iron alloy – electrogalvanized and aluminum acrylic paint..... WOD
• GUA Form 6 (with 3" cover opening) are available with optional cover with viewing window..... -VW
Corro-free epoxy powder coat S752
To order box less cover add "0" to end of catalog number ie.GUAT260.

Certifications and Compliances:

- NEC/CEC:
Class I, Division 1 & 2, Groups C,D
Class II, Division 1, Groups E,F,G
Class II, Division 2, Groups F,G
Class III
- UL Standard: 886
- ANSI Standard: C33.27
- CSA Standard: C22.2 No. 30
- NEMA/EEMAC 3,4

NOTE: When assembled with sealing type cover, GUA series outlet boxes provide adequate sealing for 40% fill in hazardous areas – Class I, Groups C,D; Class II, Groups E,F,G; and Class III. Seals can be made in either horizontal or vertical positions. Use *Chico*® "A" sealing compound or *Chico*® SpeedSeal only. Conductor splices or connections must not be made in enclosures where sealing compound is to be used per NEC.

Dimensions



Suffix to be Added to Cat. #



GUA

Hub Size	Cover Opening Dia.	Cat. #
1/2	2	GUA14
3/4	2	GUA24
1/2	3	GUA16
3/4	3	GUA26*
1	3	GUA36
1 1/4	3 3/8	GUA47
1 1/2	5	GUA59



GUAC

Hub Size	Cover Opening Dia.	Cat. #
1/2	2	GUAC14†
3/4	2	GUAC24†
1/2	3	GUAC16*
3/4	3	GUAC26*
1	3	GUAC36*
1 1/4	3 3/8	GUAC47†
1 1/4	5	GUAC49
1 1/2	5	GUAC59†
2	5	GUAC69†



GUAB

Hub Size	Cover Opening Dia.	Cat. #
1/2	2	GUAB14†
3/4	2	GUAB24
1/2	3	GUAB16*
3/4	3	GUAB26*
1	3	GUAB36*
1 1/4	3 3/8	GUAB47†
1 1/2	5	GUAB59†
2	5	GUAB69†



GUAD

Hub Size	Cover Opening Dia.	Cat. #
1/2	2	GUAD14†
3/4	2	GUAD24
1/2	3	GUAD16
3/4	3	GUAD26†
1	3	GUAD36†
1 1/4	5	GUAD49

Length of Hub

Hub Size
1/2-3/4
1-1 1/4
1 1/2-2

Dimension "e" Length

Length
7/8
1
1 1/16

GUA, GUAD, GUAM, GUAW, GUAX

Cat. #	a	b	c	d
14	2 1/2	1 13/16	1 3/4	5/8
24	2 1/2	2	2	3/4
16	3 1/2	2	1 7/8	5/8
26	3 1/2	2	1 7/8	3/4
36	3 1/2	2 5/16	2 3/16	7/8
37	4 1/4	2 5/16	2 3/8	7/8
47	4 1/4	2 11/16	2 3/4	1 3/32
49	5 3/4	3 13/16	3 3/4	1 3/32
59	5 3/4	3 13/16	3 3/4	1 3/32
69	5 3/4	4 1/16	4	1 1/16

† Available in copper-free aluminum, add suffix -SA.

* Available in copper-free aluminum, add suffix -SA. GUA outlet boxes marked with * when ordered with suffix -SA are listed for Class I, Division 1 & 2, Groups B, C and D, Class II, Division 1, Groups E, F, G and Class III. Covers have 16 pitch threads. Replacement cover is a GUA06-GB.

Condulet® Conduit Outlet Boxes

With Covers for Threaded Rigid and IMC

Cl. I, Div. 1 & 2, Groups C,D
Cl. II, Div. 1, Groups E,F,G
Cl. II, Div. 2, Groups F,G
Cl. III
NEMA 3,4,7CD,9EFG

Explosionproof
Dust-Ignitionproof
Raintight
Wet Locations

4F

4F
Conduit Outlet
Boxes & Bodies



GUAL

Hub Size	Cover Opening Dia.	Cat. #
1/2	2	GUAL14†
3/4	2	GUAL24†
1/2	3	GUAL16*
3/4	3	GUAL26*
1	3	GUAL36*
1 1/4	3 5/8	GUAL47†
1 1/4	5	GUAL49†
1 1/2	5	GUAL59†
2	5	GUAL69†

GUAN

Hub Size	Cover Opening Dia.	Cat. #
1/2	2	GUAN14
3/4	2	GUAN24
1/2	3	GUAN16
3/4	3	GUAN26
1	3	GUAN36†
1 1/4	3 5/8	GUAN47
1 1/2	5	GUAN59†
2	5	GUAN69

GUAT

Hub Size	Cover Opening Dia.	Cat. #
1/2	2	GUAT14†
3/4	2	GUAT24†
1/2	3	GUAT16*
3/4	3	GUAT26*
1	3	GUAT36*
1	3 5/8	GUAT37
1 1/4	3 5/8	GUAT47†
1 1/4	5	GUAT49†
1 1/2	5	GUAT59†
2	5	GUAT69†

GUAX

Hub Size	Cover Opening Dia.	Cat. #
1/2	2	GUAX14†
3/4	2	GUAX24†
1/2	3	GUAX16*
3/4	3	GUAX26*
1	3	GUAX36*
1	3 5/8	GUAX37†
1 1/4	3 5/8	GUAX47†
1 1/4	5	GUAX49
1 1/2	5	GUAX59†
2	5	GUAX69†



GUAM

Hub Size	Cover Opening Dia.	Cat. #
1/2	2	GUAM14†
3/4	2	GUAM24
1/2	3	GUAM16
3/4	3	GUAM26
1	3	GUAM36
1 1/4	3 5/8	GUAM47
2	5	GUAM69

GUAW

Hub Size	Cover Opening Dia.	Cat. #
1/2	2	GUAW14†
3/4	2	GUAW24†
1/2	3	GUAW16
3/4	3	GUAL26†

Dimensions

GUAC, GUAT

Cat. #	a	b	c	d
14	2 1/2	2 1/4	2 3/16	5/8
24	2 1/2	2	2	3/4
16	3 1/2	2	1 7/8	5/8
26	3 1/2	2	1 7/8	3/4
36	3 1/2	2 5/16	2 3/16	7/8
37	4 1/4	2 9/16	2 3/8	7/8
47	4 1/4	2 11/16	2 3/4	1 3/32
49	5 3/4	3 13/16	3 3/4	1 9/32
59	5 3/4	3 13/16	3 3/4	1 9/32
69	5 3/4	4 1/16	4	1 9/16

GUAN

Cat. #	a	b	c	d
14	2 1/2	2 1/8	2 1/16	5/8
24	2 1/2	2 5/16	2 1/4	3/4
16	3 1/2	2	1 7/8	3/4
26	3 1/2	2	1 7/8	3/4
36	3 1/2	2 5/16	2 3/8	7/8
47	4 1/4	2 11/16	2 3/4	1 3/32
59	5 3/4	4 1/16	4	1 9/32
69	5 3/4	4 1/16	4	1 9/16

GUAB, GUAL

Cat. #	a	b	c	d
14	2 1/2	2 1/4	2 3/16	5/8
24	2 1/2	2 1/2	2 7/16	3/4
16	3 1/2	2	1 7/8	5/8
26	3 1/2	2	1 7/8	3/4
36	3 1/2	2 5/16	2 3/16	7/8
47	4 1/4	2 11/16	2 3/4	1 3/32
49	5 3/4	3 13/16	3 3/4	1 5/32
59	5 3/4	3 13/16	3 3/4	1 9/32
69	5 3/4	4 1/16	4	1 9/16

* Available in copper-free aluminum, add suffix -SA. GUA outlet boxes marked with * when ordered with suffix-SA are listed for Class I, Division 1&2, Groups B, C and D, Class II, Division 1, Groups E, F, G and Class III. Covers have 16 pitch threads. Replacement cover is a GUA06-GB.

† Available in copper-free aluminum, add suffix -SA.

4F Covers and Accessories

For GUA Condulet® Conduit Outlet Boxes

Application:

Threaded covers, canopies and extensions are used:

- to provide a seal in hazardous areas (sealing cover). See note at right
- to mount pendant lighting fixtures such as EVA listed in lighting section (fixture canopy)
- to mount EVA pendant lighting fixtures on cover which is then screwed into outlet box without twisting conductors (union hub cover)
- to mount pendant lighting fixtures on cover which is then screwed into outlet box as above, for wiring after fixture stem is installed (nipple cover)
- to provide means of increasing outlet box depth (threaded extension)

Features:

- Surface covers are supplied with GUA boxes
- Sealing cover has removable plug for filling enclosure with sealing compound after installation. Sealing cover meets 40% fill requirement of the NEC®. See note at right.
- Fixture canopy has a threaded cover in its side to provide access for making splices or taps. Fixture with its conduit stem and canopy can be assembled and wired before installation and conductors can be spliced in canopy after it has been screwed into the body
- Cover threads are 12 pitch.

Standard Materials:

- Surface and dome covers, union hub covers, nipple covers – copper-free aluminum
- Sealing covers, fixture canopies, threaded extensions – *Feraloy*® iron alloy

Standard Finishes:

- Aluminum – natural
- *Feraloy* iron alloy – electrogalvanized and aluminum acrylic paint

Options:

- *Corro-free*™ epoxy powder coat – add suffix S752
- To order an iron surface cover, add suffix – WOD ie. GUA06 – WOD.

Size Ranges:

- Fixture stems – 3/4"
 - Body openings – 2" to 5"
- NOTE: Depth of sealing compound in body must satisfy requirements of NEC section 501-5 (C-3). Splices and taps in sealing fittings are prohibited by NEC.

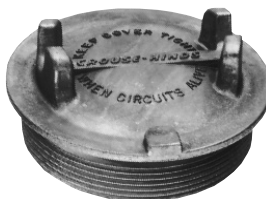


GUA Threaded Extension

Cover Opening Dia.	Ext. Depth	Cat. #
3	1 1/4	GUA0631

GUA

Cover Opening	Replacement O-Ring Gasket Cat. #
2"	GASK1713
3"	GASK1151
3 5/8"	GASK1589
5"	GASK925



Surface Cover

Cover Opening Dia.	Thread Pitch	Cat. #
2	12	GUA04
3	12	GUA06
3	16	GUA06-GB*
3 5/8	12	GUA07
5	12	GUA09



Dome Cover

Cover Opening Dia.	Ext. Depth	Thread Pitch	Cat. #
2	2	12	GUA047
3	2	12	GUA067
3 5/8	2	12	GUA077
3 5/8	4	12	GUA0716
5	4	12	GUA514
5	10	12	GUA5110



Sealing Cover

Cover Opening Dia.	Thread Pitch	Cat. #
2	12	GUA041
3	12	GUA062
3	16	GUA062-GB*
3 5/8	12	GUA072†
5	12	GUA092



Nipple Cover

Cover Opening Dia.	Fixt. Stem Size	Thread Pitch	Cat. #
3	3/4	12	GUA0672



Fixture Cover Union Hub Type

Cover Opening Dia.	Fixt. Stem Size	Thread Pitch	Cat. #
3	3/4	12	GUA0687



Fixture Canopy

Cover Opening Dia.	Fixt. Stem Size	Thread Pitch	Cat. #
3	3/4	12	GUA068

† Also used with GUP bodies on page 138 or GU and GUE bodies on page 122.

* GUA covers with 16 pitch threads are used with GUA bodies ordered with -SA suffix identified with * symbol on pages 50 and 51.

Condulet® Conduit Outlet Boxes With Covers

Cl. I, Div. 1 & 2, Groups A,B,C,D
Cl. II, Div. 1, Groups E,F,G
Cl. II, Div. 2, Groups F,G
Cl. III
NEMA 3,4,7ABCD,9EFG

Explosionproof
Dust-Ignitionproof
Raintight
Wet Locations

4F

4F
Conduit Outlet
Boxes & Bodies

Application:

EAB series conduit outlet boxes are installed in conduit systems within hazardous areas to:

- provide protection against exterior explosion where acetylene, hydrogen and other hazardous gases are present
- protect conductors in threaded rigid conduit
- act as pull and splice boxes
- interconnect lengths of conduit
- change conduit direction
- provide access to conductors for maintenance and future system changes

Features:

EAB series conduit outlet boxes have:

- five different hub configurations
- taper threaded hubs to provide ground continuity
- smooth integral hub bushing to protect conductor insulation when pulling
- threaded cover openings
- surface covers furnished with boxes
- Neoprene "o"-ring gasket and green ground screw are both standard.
- Four standard mounting pads, except for EABY.
- Cover threads are 16 pitch.

Standard Materials:

- Body – *Feraloy*® iron alloy
- Cover – copper-free aluminum

Standard Finishes:

- *Feraloy* – electrogalvanized and aluminum acrylic paint
- Aluminum – natural

Options:

Description

Bodies – copper-free aluminum SA†

Covers – *Feraloy* iron alloy – electrogalvanized and aluminum acrylic paint WOD

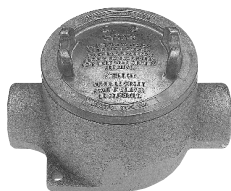
Corro-free epoxy power coat S752

Size Ranges:

- Hub – 1/2" to 1"
- Cover opening – 3" dia.

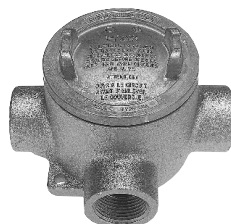
Certifications and Compliances:

- NEC/CEC:
Class I, Division 1 & 2, Groups A,B,C,D
Class II, Division 1, Groups E,F,G
Class II, Division 2, Groups F,G
Class III
- UL Standard: 886
- CSA Standard: C22.2 No. 30



EABC

Hub Size	Cat. #
1/2	EABC16†
3/4	EABC26†
1	EABC36†



EABT

Hub Size	Cat. #
1/2	EABT16†
3/4	EABT26†
1	EABT36†



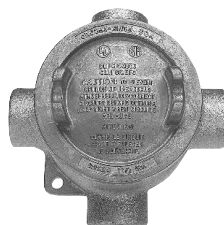
EABY

Hub Size	Cat. #
1/2	EABY16†
3/4	EABY26†



EABL

Hub Size	Cat. #
1/2	EABL16†
3/4	EABL26†
1	EABL36†



EABX

Hub Size	Cat. #
1/2	EABX16†
3/4	EABX26†
1	EABX36†

Replacement Cover:

Size	Cat. #
3"	EAB06

Replacement O-Ring:

Cat. #	GASK1151
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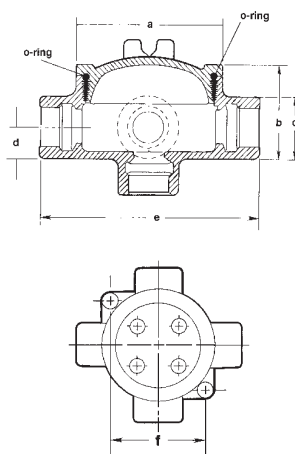
Fixture Cover:

Union Hub Type

Cover Opening Dia.	Fixt. Stem Size	Cat. #
3"	3/4	EAB0687*

Dimensions

EAB Series



† Available in copper-free aluminum, add suffix -SA.

* EAB0687 is listed for Group C & D only.

Cat. #	a	b	c	d	e	f
16	3/4	2 17/32	1 1/2	3/4	5 5/16	3 3/32
26	3/4	2 25/32	1 3/4	7/8	5 9/16	3 3/32
36	3/4	2 25/32	1 3/4	7/8	5 9/16	3 3/32

Cl. I, Div. 1 & 2, Groups A†,B,C,D
 Cl. II, Div. 1, Groups E,F,G
 Cl. II, Div. 2, Groups F,G
 Cl. III
 NEMA 3, 4, 7ABCD, 9EFG

Explosionproof
 Dust-Ignitionproof
 Raintight
 Wet Locations

Application:

EAJ series conduit outlet boxes are installed in conduit systems within hazardous areas to:

- protect conductors in threaded rigid conduit
- act as pull and splice boxes
- interconnect lengths of conduit
- change conduit direction
- provide access to conductors for maintenance and future system changes

Features:

EAJ conduit outlet boxes have:

- water shedding cover – suitable for wet locations when mounted in upright position
- external cover threads on body protecting conductors from damage during pulling
- no pinching of conductors during cover installation
- six different hub arrangements
- taper threaded hubs to provide ground continuity
- smooth integral hub bushing to protect conductor insulation when pulling
- internally threaded cover openings for additional wiring room
- flat overlapping threaded covers furnished with boxes
- weather-resistant finish
- green ground screw standard in all boxes
- four standard mounting pads, except for EAJB and EAJD

Standard Materials:

- Body – *Feraloy*® iron alloy
- Cover – copper-free aluminum

Standard Finishes:

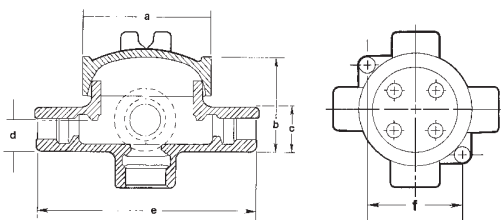
- *Feraloy* iron alloy – electrogalvanized and aluminum acrylic paint
- Aluminum – natural

Size Ranges:

- Hub – 1/2" to 2"
- Cover opening – 3/16" to 5" dia.

Dimensions

EAJ Series



Certifications and Compliances:

- NEC/CEC:
 Class I, Division 1 & 2, Groups A†,B,C,D
 Class II, Division 1, Groups E,F,G
 Class II, Division 2, Groups F,G
 Class III
- UL Standard: 886
- CSA Standard: C22.2 No. 30

Options:

Description

Bodies – copper-free aluminum SA†

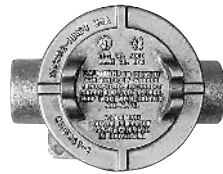
Covers – *Feraloy* iron alloy – electrogalvanized and aluminum acrylic paint WOD

Corro-free epoxy power coat S752



EAJB

Cover Opening Dia.	Hub Size	Cat. #
3/16	1/2	EAJB16†
3/16	3/4	EAJB26†
3/16	1	EAJB36†



EAJC

Cover Opening Dia.	Hub Size	Cat. #
3/16	1/2	EAJC16†
3/16	3/4	EAJC26†
3/16	1	EAJC36†



EAJD

Cover Opening Dia.	Hub Size	Cat. #
3/16	1/2	EAJD16†
3/16	3/4	EAJD26†
3/16	1	EAJD36†



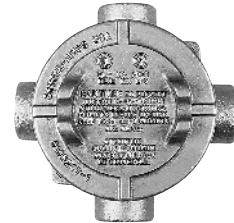
EAJL

Cover Opening Dia.	Hub Size	Cat. #
3/16	1/2	EAJL16†
3/16	3/4	EAJL26†
3/16	1	EAJL36†



EAJT

Cover Opening Dia.	Hub Size	Cat. #
3/16	1/2	EAJT16†
3/16	3/4	EAJT26†
3/16	1	EAJT36†
5	1 1/4	EAJT49†
5	1 1/2	EAJT59†
5	2	EAJT69†



EAJX

Cover Opening Dia.	Hub Size	Cat. #
3/16	1/2	EAJX16†
3/16	3/4	EAJX26†
3/16	1	EAJX36†

EAJ Threaded Covers Flat Covers

Cover Opening Diameter	Cat. #
3/16	EAJ06
5	EAJ09



Dome Covers

Cover Opening Dia.	Depth	Cat. #
3/16	2	EAJ0612



Fixture Covers Union Hub Type

Cover Opening Dia.	Fixt. Stem Size	Cat. #
3/16	3/4	EAJ0687*



Cat. #	a	b	c	d	e	f
16	3/4	2 17/32	1 1/2	3/4	5 5/16	3 3/32
26	3/4	2 25/32	1 3/4	7/8	5 9/16	3 3/32
36	3/4	2 25/32	1 3/4	7/8	5 9/16	3 3/32
49	5/4	4 1/16	2 3/16	1 3/32	7 5/16	4 3/4
59	5/4	4 1/16	3	1 1/2	7 13/16	4 3/4
69	5/4	4 1/16	3	1 1/2	7 13/16	4 3/4

* EAJ0687 is listed for Group C & D only.

† Available in copper-free aluminum, add suffix -SA.
 ‡ Form 9 products with 5" cover opening are not suitable for Group A.

Condulet® Conduit Outlet Boxes With Covers

Cl. I, Div. 1 & 2, Groups C,D
Cl. II, Div. 1, Groups E,F,G
Cl. II, Div. 2, Groups F,G
Cl. III
NEMA 7CD,9EFG

Explosionproof
Dust-Ignitionproof

4F

4F
Conduit Outlet
Boxes & Bodies

Application:

CPS series conduit outlet boxes are installed in conduit systems in hazardous areas to:

- protect conductors in threaded rigid conduit
- act as pull and splice boxes
- change conduit direction
- interconnect lengths of conduit
- act as fixture hangers with hub covers
- provide access to conductors for maintenance and future system changes

Features:

CPS conduit outlet boxes have:

- two types of cover:
 - blank for splice or pull box use
 - threaded hub for mounting light fixtures
- wide, accurately machined body and cover mating surfaces, to insure flamtight joint
- blind tapped holes for cover screws to further insure flamtightness
- removable mounting feet for flush or surface mounting to wall or ceiling

Standard Materials:

- Feraloy® iron alloy

Standard Finishes:

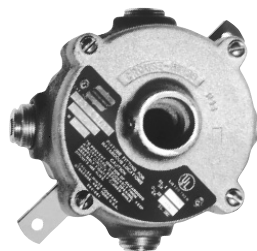
- Electrogalvanized and aluminum acrylic paint

Options:

- Corro-free™ epoxy powder coat add suffix - S752

Certifications and Complies:

- NEC/CEC:
 - Class I, Division 1 & 2, Groups C,D
 - Class II, Division 1, Groups E,F,G
 - Class II, Division 2, Groups F,G
 - Class III
- UL Standard: 886
- CSA Standard C22.2 No. 30



Box with Hub Cover

Hub Size		
Body†	Cover	Cat. #
3/4	1/2	CPS12021
3/4	3/4	CPS12022



Box with Blank Cover

Hub Size	Cat. #
3/4	CPS12026

CPS Covers



Blank Covers

Description	Cat. #
Form 20	CPS026



Hub Covers*

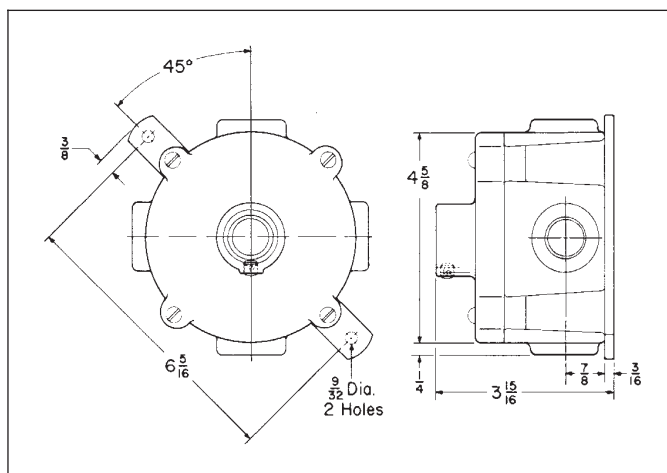
Description	Hub Size	Cat. #
Form 20	1/2	CPS021
Form 20	3/4	CPS022

* Fixture weight up to 125 lbs.

Note: complete line of fixture hangers are located in section 8L of this catalog.

† Furnished with four 3/4" standard taper tapped, integrally bushed hubs. Three hubs are plugged.

Dimensions



Application:

OE series are installed in conduit systems within hazardous areas to:

- protect conductors in threaded rigid conduit
- act as pulling and splice fittings
- interconnect lengths of conduit
- change direction of conduit
- provide access for maintenance and future system changes

Features:

- OE conduit outlet bodies have:
- taper threaded hubs for ground continuity
 - smooth integral hub bushings to protect conductor insulation when pulling
 - five different hub arrangements
 - accurately machined body with blind tapped screw holes
 - most compact design of all hazardous area outlet bodies

Standard Materials:

- Feraloy® iron alloy (1/2" and 3/4" fittings)
- Copper-free aluminum (1" fittings)

Standard Finishes:

- Electrogalvanized and aluminum acrylic paint

Options:

- Corro-free™ epoxy powder coat..... add suffix - S752

Size Ranges:

- Hub – 1/2" to 1"

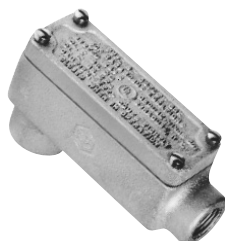
Certifications and Complies:

- NEC/CEC:
Class I, Division 1 & 2, Groups C,D
Class II, Division 1, Groups E,F,G
Class II, Division 2, Groups F,G
Class III
- UL Standard: 886
- CSA Standard: C22.2 No. 30



OEC

Hub Size	Cat. #
1/2	OEC1
3/4	OEC2
1	OEC3-SA



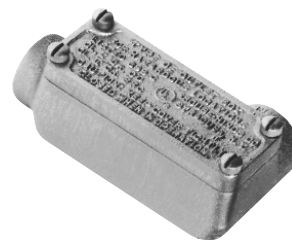
OELB

Hub Size	Cat. #
1/2	OELB1
3/4	OELB2
1	OELB3-SA



OELL

Hub Size	Cat. #
1/2	OELL1
3/4	OELL2
1	OELL3-SA



OELR

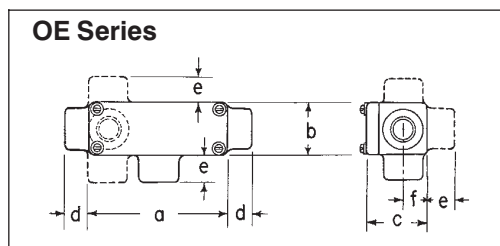
Hub Size	Cat. #
1/2	OELR1
3/4	OELR2
1	OELR3-SA



OET

Hub Size	Cat. #
1/2	OET1
3/4	OET2
1	OET3-SA

Dimensions



Hub Size	a	b	c	d	e	f
1/2	4 1/16	1 9/16	1 13/16	1 1/16	7/8	5/8
3/4	4 5/16	1 7/8	2 1/16	1 1/16	7/8	3/4

Condulet® Pull Boxes and Outlet Bodies

Cl. I, Div. 1 & 2, Groups C,D
Cl. II, Div. 1, Groups E,F,G
Cl. II, Div. 2, Groups F,G
Cl. III
NEMA 7CD,9EFG

Explosionproof
Dust-Ignitionproof

4F

4F Conduit Outlet Boxes & Bodies

Application:

EKC series conduit outlet bodies are installed in conduit systems within hazardous areas to:

- provide convenient opening in conduit system for pulling or splicing conductors

Features:

EKC bodies have:

- accurately machined body and cover mating surfaces to ensure flamtight joint when properly assembled
- extra long cover opening to facilitate pulling and splicing of conductors
- taper threaded hubs and integral bushing for rigid threaded conduit

Standard Materials:

- EKC bodies – *Feraloy* iron alloy

Standard Finishes:

- *Feraloy* – electrogalvanized and aluminum acrylic paint

Options:

- EKC series:
Corro-free™ epoxy powder coat
– add suffix S752

Size Ranges:

- EKC bodies – hub size – 1" to 3"

Certifications and Compliances:

- NEC:
EKC 30 – 60
Class I, Division 1 & 2, Groups C,D
Class II, Division 1, Groups E,F,G
Class II, Division 2, Groups F,G
Class III
EKC 70, 80
Class I, Division 1 & 2, Group D
Class II, Division 1, Groups E,F,G
Class II, Division 2, Groups F,G
Class III
- UL Standard: 886
- CSA Standard: C22.2 No. 30

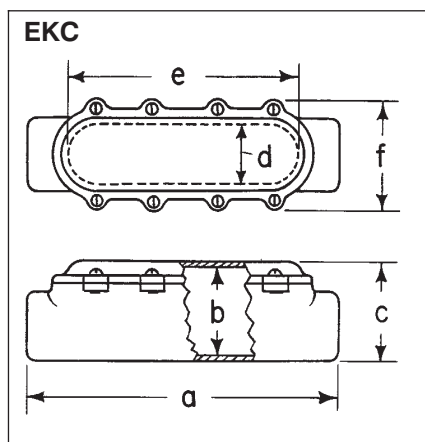


EKC

EKC Outlet Bodies

Hub Size	Cat. #
1	EKC30
1¼	EKC40
1½	EKC50
2	EKC60
2½	EKC70
3	EKC80

Dimensions



EKC

Size	a	b	c	d	e	f
1 – 1¼	12⅝	3⅛	3⅞	1¾	9	4
1½ – 2	15⅞	3⅞	4⅞	2½	12	5
2½ – 3	21¾	5½	6	3¾	16	6⅝

Cl. I, Div. 1 & 2, Groups A,B,C,D*
 Cl. II, Div. 1, Groups E,F,G
 Cl. II, Div. 2, Groups F,G
 Cl. III
 NEMA 7ABCD,9EFG

Explosionproof
 Dust-Ignitionproof

Application:

LBH conduit outlet bodies are installed in hazardous areas to:

- act as pull outlets especially for conductors that are stiff due to large size or type of insulation
- make 90° bends in conduit system, allowing straight pull in either direction
- provide for conduit service entrance to buildings
- provide for conductor entrance to motors
- provide access to wiring for maintenance and future system changes

LBY elbows are installed in conduit systems within hazardous areas to:

- make 90° bends in conduit systems where space is limited
- act as pull outlets
- provide access to conductors for maintenance and future system changes

ET series short radius tees are installed in conduit systems within hazardous areas to:

- allow single conduit stub up to outlet and device boxes located above or below main conduit runs. Eliminates separate feed and return conduits

Features:

LBH bodies have:

- cover openings on an angle, permitting conductors to be pulled straight through hubs from either direction
- domed covers to permit easy conductor bends (relieves strain on insulation)
- taper threaded hubs with integral bushings

LBY elbows have:

- maximum volume for bends within a compact overall size
- screw on cover for ease of installation and removal
- cover opening on an angle, permitting conductors to be pulled straight through either hub
- taper threaded hubs and integral bushing for rigid threaded conduit

ET short radius tees have:

- compact size and small radius of bend for use in concealed, or open conduit systems. Particularly suited for use in shallow floors or partitions
- taper threaded hubs and integral bushing for rigid threaded conduit

‡ Largest hub is shown at top of photo.

Standard Materials:

• LBH, LBY and ET – *Feraloy*® iron alloy

Standard Finishes:

• LBH, LBY and ET – electrogalvanized and aluminum acrylic paint

Options:

Description	Suffix to be Added to Cat. #
LBH and LBY series – copper-free aluminum	SA
LBH and LBY series – <i>Corro-free</i> ™ epoxy powder coat	add suffix S752

Size Ranges:

• LBH bodies – hub size 1/2" to 4"
 • LBY elbows – hub size 1/2" to 1 1/2"

Certifications and Compliances:

• NEC:
LBH 10-20 –
 Class I, Division 1 & 2, Groups B,C,D
 Class II, Division 1, Groups E,F,G
 Class II, Division 2, Groups F,G
 Class III

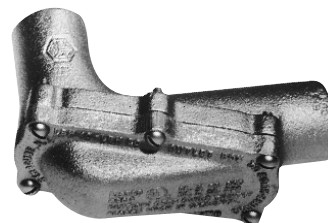
LBH 30-100
 Class I, Division 1 & 2, Group D
 Class II, Division 1, Groups E,F,G
 Class II, Division 2, Groups F,G
 Class III

LBY –
 Class I, Division 1 & 2, Groups C,D
 Class II, Division 1, Groups E,F,G
 Class II, Division 2, Groups F,G
 Class III

ET –
 Class I, Division 1 & 2, Groups A,B,C,D
 Class II, Division 1, Groups E,F,G
 Class II, Division 2, Groups F,G
 Class III

• UL Standard: 886
 • CSA Standard: C22.2 No. 30

* See Compliances for classification of each product.



LBH

Size	Cat. #
1/2	LBH10
3/4	LBH20
1	LBH30
1 1/4	LBH40
1 1/2	LBH50
2	LBH60
2 1/2	LBH70
3	LBH80
3 1/2	LBH90
4	LBH100

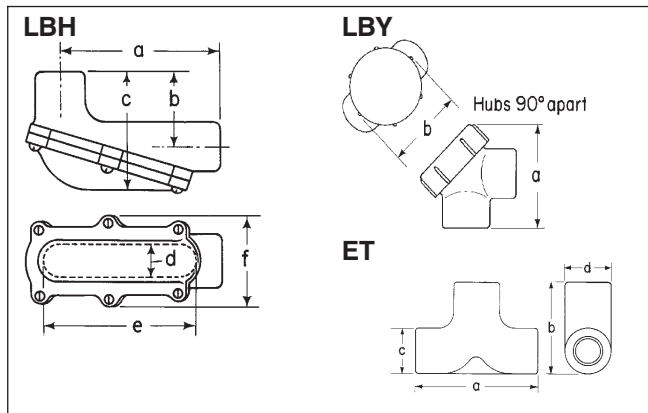
Size	Cat. #
1/2	LBH15
3/4	LBH25
1	LBH35
1 1/4	LBH45
1 1/2	LBH55



ET

Size	Cat. #
3/4-1/2-1/2‡	ET218
3/4-3/4-3/4‡	ET228
1-3/4-3/4‡	ET328

Dimensions



LBH

Size	a	b	c	d	e	f
1/2 – 3/4	5 1/16	2 19/32	4	1 3/16	4	2 3/4
1 – 1 1/4	7 7/8	3 13/32	5 1/4	1 3/4	7	4
1 1/2	10 15/16	4 1/2	7 9/32	2 1/2	10	5
2	10 21/32	4 25/32	7 3/32	2 1/2	10	5
2 1/2 – 3	15 5/8	5 1/2	9 1/2	3	15 3/4	5 5/8
3 1/2 – 4	23 9/16	6 1 1/16	11 3/4	4	24	7 1/8

LBY

Size	a	b	Size	a	b	c	d
1/2	2 9/16	2	3/4-1/2-1/2	4	2 5/8	1 1/4	1 1/2
3/4	2 13/16	2 1/4	3/4-3/4-3/4	4	3	1 1/2	1 1/2
1	3 3/32	2 1/2	1-3/4-3/4	4	3	1 1/2	1 3/4
1 1/4	3 3/4	2 15/16					
1 1/2	4 1/4	3 3/8					

Application:

- STL thread lubricant is used between any screw thread and its tapped opening, on any rotating shaft – threaded or plain, and to inhibit corrosion on any metal-to-metal joint of apparatus and control enclosures.
- HTL high temperature lubricant is used on lighting fixture threaded joints and on threaded joints of the enclosures of any heat-producing apparatus or control.

Features:

STL thread lubricant is lithium based, anti-galling and:

- is especially effective between parts made of dissimilar metals
- is effective and stable from -20°F to +300°F
- **maintains grounding continuity; should not be used on exposed current-carrying parts**
- has excellent adhesion qualities

A liberal application on threaded joints maintains raintightness and inhibits corrosion.

HTL is a high temperature, anti-seize, conductive thread lubricant:

- effective and stable from -70°F to +1800°F
- prevents seizure, galling, rust, galvanic action
- maintains grounding continuity; should not be used on exposed current-carrying parts
- effective between parts made of dissimilar metals



STL Thread Lubricant

**Net
Wt.**
1 3/4 oz. (tube)
8 oz. (can)



Cat. #
STL2
STL8



HTL High Temperature Thread Lubricant

**Net
Wt.**
4 oz. (tube)

Cat. #
HTL4

MSDS Sheets are available at www.crouse-hinds.com

Cl. I, Div. 1 & 2, Groups C,D
 Cl. II, Div. 1, Groups E,F,G
 Cl. II, Div. 2, Groups F,G
 Cl. III
 NEMA 3,4,7CD,9EFG

Explosionproof
 Dust-Ignitionproof
 Raintight
 Wet Locations

Application:

GUR conduit outlet boxes are installed within hazardous areas:

- to protect conductors in threaded rigid conduit
- to act as pull and splice boxes
- to connect lengths of conduit
- to provide access to conductors for maintenance and future system changes
- to change conduit direction
- where space is limited, such as underneath gasoline pumps

Features:

GUR outlet boxes feature:

- neoprene O-ring standard in cover to meet NEMA 4/UL Type 4 requirements
- internal green ground screw
- five standard hubs with three pipe plugs included
- threaded cover opening
- recesses in cover to assist in cover tightening and removal
- smooth, integral hub bushing to protect conductor insulation when pulling
- compact design for confined spaces
- UL and cUL listing
- optional all-aluminum construction

Standard Materials:

- Bodies – *Feraloy*® iron alloy
- Covers – copper-free aluminum

Standard Finishes:

- *Feraloy* iron alloy – electrogalvanized with aluminum acrylic paint
- Aluminum – natural

Certifications and

Compliances:

- NEC/CEC:
 - Class I, Division 1 and 2, Groups C and D
 - Class II, Division 1, Groups E, F and G
 - Class III
 - Zone 1 and 2
- UL Standard 886
- cUL to CSA Standard C22.2 No. 30
- NEMA 4

Options:

- Bodies – copper-free aluminum (add suffix -SA)

Ordering Information

Hub Size

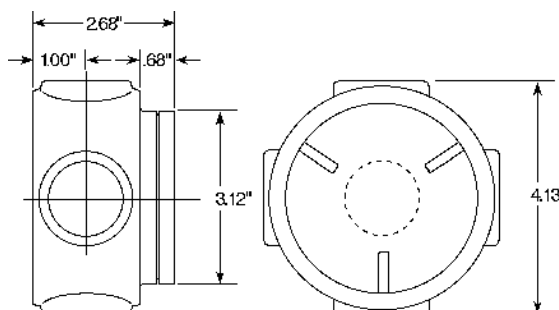
1/2"
 3/4"
 1"

Cat.

GUR1
 GUR2
 GUR3



Dimensions



Description	Page No.	Description	Page No.
Application/Selection	62, 63	Cable Tray Clamps	
Cable/Conduit Sealing Devices		Conduit	
Thru-Wall Barrier®		LCC, LCCF Series	99
TW Series	101-106	Grounding Conductor	
Link Seal – For Conduit		TGC Series	100
Environmental Seal	107, 108, 110	Cord and Cable Fittings	
Fire Seal	107, 109, 110	Straight Body, Male Thread	
Cable Fittings		CGB Series	64-66, 72
Metal Clad and Tray Cable		CGFP Series	73
TMC, TMCX Series	74, 75	NCG Series	67
Teck Cable		Straight Body, Male Thread, Sealing	
TECK Series	76, 77	CGB-SG Series	68, 69
Steel Wire Armour		45° Angle Body, Male Thread	
TWDC Series	78, 79	CGD Series	70
CAPRI Series	94, 95	90° Angle Body, Male Thread	
TAB Series	80, 81	CGE Series	71
TAS Series	80, 81	Cord Fittings	
TACFB Series	82, 83	Portable Cord	
TACFS Series	82, 83	EBY Series	97
Unarmoured Cable		Sealing	
TUSC Series	84, 85	CGBS Series	98
TUCFB Series	86, 87	Brass Accessories	
TUCFS Series	86, 87	Locknuts, Earth Tags, Sealing	
Steel Wire Braid		Washers, PVC Shrouds	92, 93
TBDC Series	78, 79	Non Hazardous Drain	96
TUSC Series	84, 85	NEMA 4X Breather/Drain	90
CAPRI Series	94, 95		
TAB Series	80, 81		
TAS Series	80, 81		
TACFB Series	82, 83		
TACFS Series	82, 83		
Steel Tape			
CAPRI Series	94, 95		
TAB Series	80, 81		
TAS Series	80, 81		
TACFB Series	82, 83		
TACFS Series	82, 83		
Conduit Fitting			
TCCF Series	88, 89		

Application:

Cord and cable fittings are installed to:

- provide means for passing a cord, cable (armored or unarmored) or flexible conduit into an enclosure, through a bulkhead or into a rigid conduit
- form a mechanical grip and water and/or oil resistant seal for cord and unarmored or jacketed armored, round cables
- form a non-slip connection or termination for flexible cord, cable (armored or unarmored), or flexible conduit
- provide grounding continuity for cable armor and flexible conduit

Cable fittings with sealing fitting or epoxy are installed to:

- provide means for passing armored, metal clad, jacketed or unjacketed and unarmored cables through a bulkhead or enclosure in hazardous areas. These fittings are suitable for use in Class I, Groups C, D, locations only when *Chico*® A sealing compound or TSC epoxy (TMCX) is used to make the seal in the fitting.*
- form a mechanical grip and water and/or oil-resistant termination
- provide ground continuity of cable armor and flexible conduit

TMC (non-hazardous) and TMCX (hazardous) fittings are designed for use with Type MC jacketed steel or aluminum metal clad cables with interlocked or corrugated armor and Type TC tray cable (TMCX).

LCC cable tray conduit clamps are used for installation on cable tray side rails with inside flanges (requiring inside tray mounting) and outside flanges; LCCF clamps are for use exclusively on inside flanges. LCC/LCCF series cable tray conduit clamps are installed to:

- provide a means of clamping metal conduit (rigid steel or aluminum, IMC and EMT) to cable tray for the exit of power and/or control cables from tray
- provide a means to firmly bond exiting conduit to cable tray for best grounding continuity

TW series THRU-WALL BARRIER® cable/conduit sealing devices are installed to:

- seal cables or conduits penetrating fire-rated walls, ceilings or floors
- restrict entrance of water and dust and contain treated air
- provide a seal for cable/conduit penetrations through steel, masonry or concrete; to restrict the entrance of contaminants through cable/conduit penetrations into clean areas

TGC cable tray grounding conductor clamp provides a means for securely attaching a grounding conductor to cable tray to provide grounding continuity for the entire tray system. TGC cable tray grounding conductor clamps provide a reliable method for carrying ground fault current for equipment protection. TGC clamp may be installed on most types of cable trays – with inside or outside flanges.

Considerations for Selection:

- Selection of the proper device or fitting involves consideration of the type of cable to be installed and the environment that will surround the cable after installation.
- A proper matching of the cable and its fitting is necessary to prevent physical damage to the cable when installed. Some types of cable fittings depend on gripping methods (set screws etc.) which may lead to damage of the cable outer covering. Cooper Crouse-Hinds cord and cable fittings utilize compression of split lead or tapered neoprene bushings to provide high gripping strength for adequate cable support and strain relief without damage to the cable sheath.
- Compression of bushing provides a strong electrical bond that assures grounding continuity.
- Compression of a tapered neoprene bushing, assures the watertight integrity of Cooper Crouse-Hinds fittings. Additional watertightness, to prevent water seepage into the fitting body, can be obtained by use of a potting head filled with a hot pouring compound.
- To meet National Electrical Code requirements for electrical installations in hazardous atmospheres, a sealing fitting may be required in conjunction with the cable or cord fitting.

Standard Materials:

- Cord and cable fittings ½" through 1" bodies and gland nuts – steel; larger sizes – *Feraloy*® iron alloy
- TMC/TMCX – copper free aluminum
- LCC/LCCF series bodies – cast malleable iron; hook, set screws and clamping nut – steel
- TW series frames and compression plates – cast malleable iron; sealing material – special elastomeric compound; clamping hardware – steel
- TGC clamp body – cast malleable iron; set screw and clamping screw – steel

Standard Finishes:

- *Feraloy* iron alloy, cast iron and cast malleable iron materials – electrogalvanized and aluminum acrylic paint
- Steel bodies and nuts – electrogalvanized and chromate treatment
- Steel hardware – electrogalvanized

Accessories:

CGB series:

- SG sealing gaskets – for use with locknuts to provide a watertight seal in slip holes of sheet metal structures and boxes

CGS series:

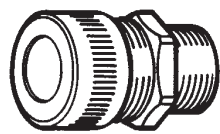
- Sealing compounds – for use in making field cable seals in hazardous locations

CGB, CGK, CGD and CGE series:

- Wire mesh grips – for strain relief of unarmored cable and portable cord

* With specific cords and cables when installed in accordance with NEC/CEC requirements.

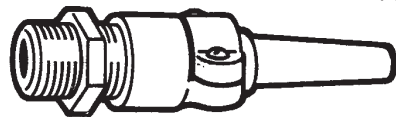
† Registered trademark of E.I. DuPont de Nemours Company.



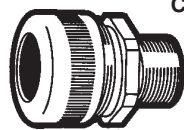
CGB/pg. 64



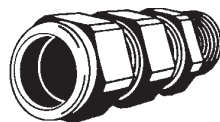
CGB-SG/pg. 68



CGB 1013/pg. 72



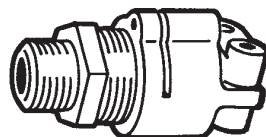
CGFP/pg. 73



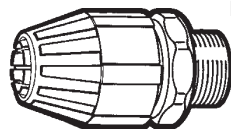
TMC/TMCX/pg. 74



EBY/pg. 97



CGBS/pg. 98

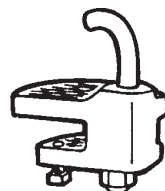


NCG/pg. 67

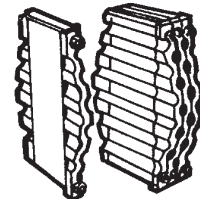
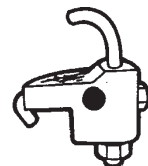
Series	Cable Type	Environment
CGB, CGD, CGE with neoprene bushing; CGB-SG	Portable cords and types MV (unarmored), PLTC, SE (round), TC and UF cables	Class I, Div. 2; dry or wet
CGB1013 series	Portable cord	Class I, Div. 2; dry or wet
CGFP	Portable cord and types MV, CLTC, SE (round), TC and UF jacketed unarmored cables	Class I, Div. 2; dry or wet
TMC/TMCX	Type MC jacketed steel or aluminum metal clad cables with interlocked or corrugated armor and Type TC tray cable (TMCX)	Non-hazardous, Class I, Div.; dry or wet
EBY	Portable cord	Class I, Groups B, C & D; Class II, Group G; dry
CGBS	Portable cord and types MV (unarmored), PLTC, SE (round), TC and UF cables	Class I, Groups C & D; Class II, Group G; Class III; wet
NCG	Type SO portable cords	Dry or wet
LCC/LCCF	Conduit only, to exit cables out of cable tray	Dry or wet
TGC	Grounding conductor to provide cable tray grounding continuity	Dry or wet
Thru Wall	Cable/conduit sealing device	Dry or wet
TECK	Teck cable	Class II, Groups E, F, G; dry or wet
TWDC	Steel wire armour lead sheath	EEx d IIC/EEx e II; dry or wet
TBDC	Steel wire braid	EEx d IIC/EEx e II; dry or wet
TAB/TAS	Steel wire armour, braided or steel tape	EEx d IIC/EEx e II; dry or wet
TACFB/TACFS	Steel wire armour, braided or steel tape	EEx d IIC/EEx e II; dry or wet
TUCFB/TUCFS	Unarmoured	EEx d IIC/EEx e II; dry or wet
TCCF	Conduit	EEx d IIC/EEx e II; dry or wet
TUSC	Unarmoured or braided	EEx d IIC/EEx e II; dry or wet
CAPRI	Steel wire armour, braided or steel tape	EEx d IIB/EEx e II; dry or wet
LSA	Conduit sealing system	Wet, corrosive, fire rated



TGC/pg. 100



LCC/LCCF/pg. 99



TWB/pg. 101

Application:

CGB, CGD and CGE cord and cable fittings with neoprene bushing are for use with portable cords and Types MV (unarmored), PLTC, SE (round), TC and UF cables. CGB, CGD and CGE cord and cable fittings are installed to:

- provide means for passing a cord, cable (unarmored) or flexible conduit into an enclosure, through a bulkhead or into a rigid conduit
- form an environmental seal for cord or unarmored round cables
- form a secure connection or termination for flexible cord, cable (unarmored), or flexible conduit

Features:

- Rugged construction protects cord and cable from damage.
- Compact, permitting close grouping of several cords and/or cables
- Tightening one nut makes watertight seal
- Large range of NPT sizes for use with any conduit system
- Available for straight, 45° or 90° entrance
- Many combinations of gland nuts and bushings can be used to make up connectors, provided parts of the same form are used together

Standard Materials:

- CGB series – Form A through Form D bodies and gland nuts – steel. Form E & F bodies and gland nuts – *Feraloy*® iron alloy
- CGD & CGE series – all bodies are *Feraloy* iron alloy. Form A through Form D gland nuts – steel. Form E & F gland nuts – *Feraloy* iron alloy.
- Bushing – neoprene

Standard Finishes:

- Steel – zinc electroplate with chromate finish coat
- *Feraloy* – electrogalvanized and aluminum acrylic paint

Size Ranges:

- Cable O.D. – .125" to 2.500"
- NPT thread – 3/8" to 3"

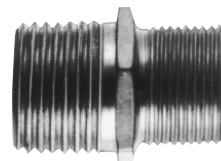
Certifications and Complies:

- UL Standard: 514B
- NEC: Class I, Division 2*; Class II, Class III
- Wet locations
- CSA Standard: C22.2 No. 18, 25
- CEC: Class II, Division 1, Groups E,F,G; Class II, Division 2, Groups F,G; Class III

Complete with gland nut and Neoprene bushing



Body only



Neoprene bushing

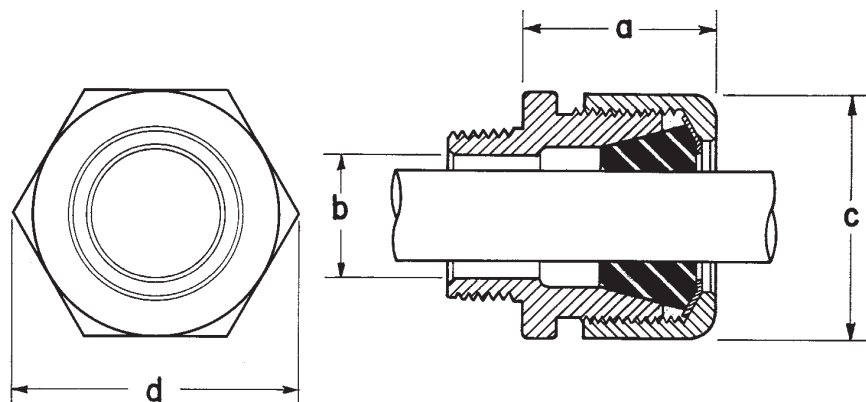
**CGB With Gland Nut and Tapered Neoprene Bushing†**

Male Thread NPT Trade Size	Form	Cord Range Dia.	Inside Body Dia.	Complete with Gland Nut & Neoprene Bushing ♦ Cat. #	Body Only Cat. #	Neoprene Bushing Cat. #
3/8	A	.125 to .250	.469	CGB3814	CGB:17123B	BUSH214
3/8	A	.250 to .375	.469	CGB3816	CGB:17123B	BUSH216
3/8	A	.375 to .437	.469	CGB3817	CGB:17123B	BUSH217
3/8	B	.125 to .250	.500	CGB3892	CGB:4315A	BUSH92
3/8	B	.250 to .375	.500	CGB3893	CGB:4315A	BUSH93
3/8	B	.375 to .500†	.500	CGB3894	CGB:4315A	BUSH94
1/2	A	.125 to .250	.469	CGB114\$	CGB:17122B	BUSH214
1/2	A	.250 to .375	.469	CGB116\$	CGB:17122B	BUSH216
1/2	A	.375 to .437	.469	CGB117\$	CGB:17122B	BUSH217
1/2	B	.125 to .250	.625	CGB192\$	CGB:010435\$	BUSH92
1/2	B	.250 to .375	.625	CGB193\$	CGB:010435\$	BUSH93
1/2	B	.375 to .500	.625	CGB194\$	CGB:010435\$	BUSH94
1/2	B	.500 to .625	.625	CGB195\$	CGB:010435\$	BUSH05
1/2	C	.625 to .750†	.625	CGB196\$	CGB:1702A	BUSH96
1/2	C	.750 to .875†	.625	CGB197\$	CGB:1702A	BUSH97
3/4	B	.125 to .250	.688	CGB292\$	CGB:0104438\$	BUSH92
3/4	B	.250 to .375	.688	CGB293\$	CGB:0104438\$	BUSH93
3/4	B	.375 to .500	.688	CGB294\$	CGB:0104438\$	BUSH94
3/4	B	.500 to .625	.688	CGB295\$	CGB:0104438\$	BUSH05
3/4	C	.625 to .750†	.750	CGB296\$	CGB:4318A	BUSH96
3/4	C	.750 to .875†	.750	CGB297\$	CGB:4318A	BUSH97
3/4	D	.875 to 1.000†	.813	CGB298\$	CGB:4320A	BUSH98

Continued on page 65.

Dimensions (see next page)

* \$†‡ ♦ For description of symbols, see page 65.

CGB Series

Cord and Cable Fittings

Straight Body Male Thread

Sizes 3/8" – 3"

Cl. I, Div. 2*, Groups A,B,C,D

Cl. II, DIV. 1, Groups E,F,G

Cl. II, Div. 2, Groups F,G

Cl. III

Wet Locations

5F

5F Cable and
Cord Fittings

Gland nut

Wire mesh grip



Gland Nut	Wire Mesh
Cat. #	Grip ♦ Cat. #
NUT217	
NUT217	
NUT217	
NUT94	
NUT94	
NUT94	RPE417-115
NUT217	
NUT217	
NUT217	
NUT94	
NUT94	
NUT94	RPE417-115
NUT94	RPE417-116
NUT95	RPE417-117
NUT95	RPE421-119
NUT94	
NUT94	
NUT94	RPE417-115
NUT94	RPE417-116
NUT95	RPE417-117
NUT95	RPE421-119
NUT98	16676N

Dimensions (see previous page for line art)

CGB assembly

Thread Size	Form	a	b	c	d
3/8	A	1 1/16	1 5/32	7/8	7/8
3/8	B	1 5/16	1/2	1 3/16	1 3/16
1/2	A	1	1 5/32	7/8	1 3/16
1/2	B	1 5/16	5/8	1 3/16	1 9/32
1/2	C	1 3/4	5/8	1 5/8	1 21/32
3/4	B	1 3/8	1 1/16	1 3/16	1 13/32
3/4	C	1 3/4	3/4	1 5/8	1 1/4
3/4	D	2 1/2	1 3/16	2 1/4	2 1/8
1	B	1 3/8	1 1/16	1 3/16	1 5/8
1	C	1 11/16	3 1/32	1 5/8	1 7/8
1	D	2 3/8	1 1/32	2 1/4	2 3/8
1 1/4	D	2 5/16	1 1/4	2 1/4	2 1/4
1 1/4	E	2 5/8	1 1/4	3 1/8	3
1 1/2	D	2 5/16	1 7/16	2 1/4	2 1/4
1 1/2	E	2 5/8	1 7/16	3 1/8	3
2	E	2 5/8	1 29/32	3 1/8	3
2	F	2 9/16	1 7/8	3 7/8	3 3/4
2 1/2	E	2 5/8	2 1/16	3 1/8	3 1/8
2 1/2	F	2 5/8	2 5/16	3 7/8	3 3/4
3	F	2 5/8	2 3/4	3 7/8	3 3/4

PORTABLE CORD SELECTION CHART**

2 conductors	Cord Type	SV0, SV, SVT	SJ, SJ0 SJT, SJT0				S, S0, ST, ST0												
	Cord Size	#18	#18	#16	#14	#18	#16	#14	#12	#10	#8	#6	#4	#3	#2	#1	#1/0	#2/0	#3/0
	Cord Diameter, prox.	.250	.305	.330	.365	.380	.400	.540	.615	.675	.810	.940	1.080	1.170	1.270	1.440	1.520	1.650	1.770

3 conductors	Cord Type	SV0, SV, SVT	SJ, SJ0 SJT, SJT0				S, S0, ST, ST0												
	Cord Size	#18	#18	#16	#14	#18	#16	#14	#12	#10	#8	#6	#4	#3	#2	#1	#1/0	#2/0	#3/0
	Cord Diameter, prox.	.255	.325	.350	.385	.390	.420	.565	.645	.710	.850	1.000	1.070	1.240	1.340	1.510	1.650	1.750	1.800

4 conductors	Cord Type	CORD TYPE SJ, SJ0, SJT, SJT0				S, S0, ST, ST0													
	Cord Size	#18	#16	#14	#18	#16	#14	#12	#10	#8	#6	#4	#3	#2	#1	#1/0	#2/0	#3/0	#4/0
	Cord Diameter, prox.	.355	.385	.425	.420	.450	.610	.700	.765	.970	1.100	1.270	1.340	1.480	1.580	1.790	1.930	2.070	2.260

5 conductors	Cord Type	CORD TYPE S, S0, ST, ST0						
	Cord Size	#18	#16	#14	#12	#10	#8	#6
	Cord Diameter, prox.	.500	.540	.695	.760	.830	1.060	1.180

** Cable diameters are approximate and may vary depending on the manufacturer. Check cord/cable manufacturer for actual diameters.

† Remove sufficient outer covering of cord or cable to pass conductors through the connector body.

‡ A wide variety of connectors may be made up using combinations of bodies, gland nuts and Neoprene bushings providing all parts are of the same form.

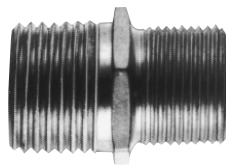
♦ Order wire mesh grip separately.

§ Available in copper-free aluminum. To order, add suffix SA to Cat. No.

* May be used in hazardous locations with specific cords and cables when installed in accordance with NEC/CEC requirements.

Complete with gland nut
and Neoprene bushing

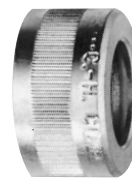
Body only



Neoprene bushing



Gland nut

CGB With Gland Nut
and Tapered Neoprene Bushing†

Wire mesh grip



Thread Size	Form	Cord Range Dia.	Inside Body Dia.	Complete with Gland Nut & Neoprene Bushing ♦ Cat. #	Body Only Cat. #	Neoprene Bushing Cat. #	Gland Nut Cat. #	Wire Mesh Grip ♦ Cat. #
1	B	.250 to .375	.688	CGB393§	CGB:19478A	BUSH93	NUT94	
1	B	.375 to .500	.688	CGB394§	CGB:19478A	BUSH94	NUT94	RPE417-115
1	C	.500 to .625	.969	CGB395§	CGB:4319A	BUSH95	NUT95	RPE417-129
1	C	.625 to .750	.969	CGB396§	CGB:4319A	BUSH96	NUT95	RPE417-117
1	C	.750 to .875	.969	CGB397§	CGB:4319A	BUSH97	NUT95	RPE421-119
1	C	.875 to 1.000†	.969	CGB3239§	CGB:4319A	BUSH239	NUT95	RPE421-120
1	D	.875 to 1.000†	1.031	CGB398§	CGB:4321A	BUSH98	NUT98	16676N
1	D	1.000 to 1.188†	1.031	CGB399§	CGB:4321A	BUSH99	NUT98	RPE421-121
1	D	1.188 to 1.375†	1.031	CGB3911§	CGB:4321A	BUSH911	NUT98	RPE433-122
1¼	D	.875 to 1.000	1.250	CGB498	CGB:4322A	BUSH98	NUT98	16676N
1¼	D	1.000 to 1.188	1.250	CGB499	CGB:4322A	BUSH99	NUT98	RPE421-121
1¼	D	1.188 to 1.375†	1.250	CGB4911	CGB:4322A	BUSH911	NUT98	RPE433-122
1¼	E	1.375 to 1.625†	1.250	CGB4913	CGB:5472B	BUSH913	NUT913	RPE433-123
1¼	E	1.625 to 1.875†	1.250	CGB4915	CGB:5472B	BUSH915	NUT913	17317N
1½	D	.875 to 1.000	1.438	CGB598	CGB:5397B	BUSH98	NUT98	16676N
1½	D	1.000 to 1.188	1.438	CGB599	CGB:5397B	BUSH99	NUT98	RPE421-121
1½	D	1.188 to 1.375	1.438	CGB5911	CGB:5397B	BUSH911	NUT98	RPE433-122
1½	E	1.375 to 1.625†	1.438	CGB5913	CGB:5473B	BUSH913	NUT913	RPE433-123
1½	E	1.625 to 1.875†	1.438	CGB5915	CGB:5473B	BUSH915	NUT913	17317N
2	E	1.375 to 1.625	1.875	CGB6913	CGB:5474B	BUSH913	NUT913	RPE433-123
2	E	1.625 to 1.875†	1.875	CGB6915	CGB:5474B	BUSH915	NUT913	17317N
2	F	1.875 to 2.188†	1.875	CGB6917	CGB:5475B	BUSH917	NUT917	17345N ♦ ♦ ♦
2	F	2.188 to 2.500†	1.875	CGB6920	CGB:5475B	BUSH917	NUT917	16772N ♦ ♦ ♦ ♦
2½	E	1.375 to 1.625	2.062	CGB7913	CGB:1278B	BUSH913	NUT913	RPE433-123
2½	E	1.625 to 1.875	2.062	CGB7915	CGB:1278B	BUSH915	NUT913	17317N
2½	F	1.875 to 2.188	2.313	CGB7917		BUSH917		17345N ♦ ♦ ♦
2½	F	2.188 to 2.500	2.313	CGB7920		BUSH920		16772N ♦ ♦ ♦ ♦
3	F	1.875 to 2.188	2.750	CGB8917		BUSH917		17345N ♦ ♦ ♦
3	F	2.188 to 2.500	2.750	CGB8920		BUSH920		16772N ♦ ♦ ♦ ♦

NOTE: Use CGFP series on page 73 for larger sizes.

See page 64 for dimensions.

§ Available in copper-free aluminum. To order, add suffix SA to Cat. No.

* May be used in hazardous locations with specific cords and cables when installed in accordance with NEC/CEC requirements.

† Remove sufficient outer covering of cord or cable to pass conductors through the connector body.

‡ A wide variety of connectors may be made up using combinations of bodies, gland nuts and Neoprene bushings providing all parts are of the same form.

♦ Order wire mesh grip separately.

Diameter Cord Range

Wire Mesh Grip

♦ ♦ ♦ 1.875 to 2.000

♦ ♦ ♦ ♦ 2.000 to 2.250

Neoprene Bushing

1.875 to 2.188

2.188 to 2.500

Cord And Cable Connectors

NCG Series Nonmetallic Cord Grips

Applications

For use with portable cord, NCG Series watertight cord grips terminate and protect conductors from mechanical damage due to vibration and movement. A neoprene bushing seals out oils, coolants, water, dust and other abusive agents. NCG cord grips may be used with types S, SO, STO, SJ, SJT, SJTO and SVO portable cords.

Typical applications include the termination of wiring for:

- machine tools
- motors
- transformers
- food processing equipment
- robotics
- air conditioning units
- illuminated signs
- terminal boxes
- control cabinets

Standard Materials

- cable gland body and nut - polyamide 6
- bushing - neoprene
- locknut - polyamide 6

Features

- Available in 3/8" to 1" trade sizes.
- Neoprene bushings cover a large cable range, reducing the number of different fittings required.
- Polyamide nonmetallic construction stands up to most corrosive environments.
- Polyamide locknut available, order separately.
- UL listed and cUL third party certified.
- Rain-tight and watertight construction for outdoor use.
- Tightening one nut creates watertight seal.

Certifications & Compliances

- UL Standard 514B
- cUL to CSA Standard C22.2 No.18
- IP 68
- NEMA 4X Watertight
- Zone 2, Division 2 use per Code



Ordering Information

TRADE SIZE	CABLE RANGE INCHES (MM)	CATALOG NUMBER	CARTON QTY.
3/8"	0.1-0.35 (2.5-8)	NCG38-35	25
1/2"	0.20-0.50 (5-12)	NCG50-50	25
3/4"	0.35-0.75 (9-18)	NCG75-75	25
1"	0.55-1.00 (14-25)	NCG100-100	20

Locknuts – must be ordered separately



TRADE SIZE	CATALOG NUMBER	CARTON QTY.
3/8"	10N	25
1/2"	11N	25
3/4"	12N	25
1"	13N	20

Application:

For use with portable cord and types MV (unarmored), PLTC, SE (round), TC and UF cables.

CGB – SG cord and cable fittings are installed to:

- provide means for passing a cord or cable into an enclosure or through a bulkhead
- form a seal for cord or cable

Features:

- Rugged construction protects cord and cable from damage
- Compact, permitting close grouping of several cords and/or cables
- Tightening one nut makes watertight seal
- Large range of NPT sizes for use with any conduit system
- Available for straight entrance
- Armored sealing gaskets facilitate assembly of connectors to sheet metal boxes and cabinets. The steel ring positively retains the PVC gasket for a distortion-free 100% seal; it can't squirt out of the body-to-box joint

Standard Materials:

- Form B through Form D bodies and gland nuts – steel. Forms E & F bodies and gland nuts – *Feraloy*® iron alloy
- Bushing – neoprene
- Sealing gasket – steel and PVC

Standard Finishes:

- Steel – electrogalvanized with chromate treatment
- *Feraloy* iron alloy – electrogalvanized and aluminum acrylic paint
- PVC – natural

Size Ranges:

- Cable O.D. – .125" to 2.50"
- NPT thread – 1/2" to 1"

Certifications and Complies:

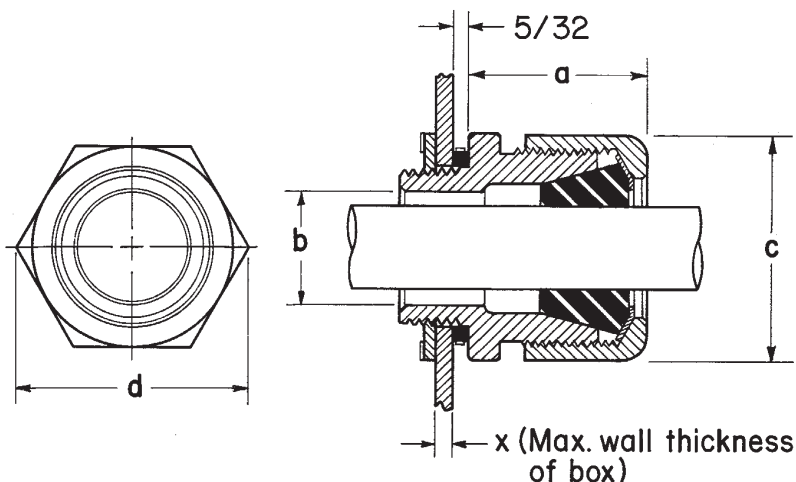
- UL Standard: 514B
- CSA Standards: C22.2
- NEC/CEC: Class I, Division 2*
- Wet locations



Complete with locknut, sealing gasket, gland nut and Neoprene bushing.

Dimensions**Thread**

Size	Form	a	b	c	d	x
1/2	B	1 5/16	5/8	1 3/16	1 9/32	3/16
1/2	C	1 3/4	5/8	1 5/8	1 21/32	3/16
3/4	C	1 3/4	3/4	1 5/8	1 21/32	3/16
3/4	D	2 1/2	13/16	2 1/4	2 1/8	3/16
1	C	1 11/16	31/32	1 5/8	1 7/8	1/4
1	D	2 3/8	1 1/32	2 1/4	2 3/8	3/16

CGB – SG Series

* May be used in hazardous locations with specific cords and cables when installed in accordance with NEC/CEC requirements.

Cord and Cable Fittings

**Straight Body Male Thread
Sealing Gaskets and Locknuts
Sizes 1/2" – 1"**

Cl. I, Div. 2*, Groups A,B,C,D
Cl. II, Div. 1, Groups E,F,G
Cl. II, Div. 2, Groups F,G
Cl. III
Wet Locations*

5F

Complete with locknut, sealing gasket, gland nut and Neoprene bushing



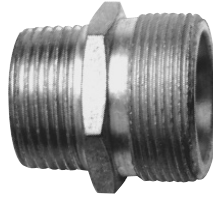
Locknut



Sealing gasket



Body only



Neoprene bushing



Gland nut



Wire mesh grip



5F Cable and
Cord Fittings

**CGB-SG With Locknut,
Sealing Gasket, Gland Nut and
Tapered Neoprene Bushing†**

Complete with
Locknut, Sealing
Gasket, Gland

Thread Size	Form	Cord Range Dia.	Inside Body Dia.	Complete with Locknut, Sealing Gasket, Gland Nut & Neoprene Bushing ♦ Cat. #	Sealing Gasket Cat. #	Body Only Cat. #	Neoprene Bushing Cat. #	Gland Nut Cat. #	Wire Mesh Grip ♦ Cat. #
1/2	B	.125 to .250	.625	CGB192-SG	SG1	CGB:0104355	BUSH92	NUT94	
1/2	B	.250 to .375	.625	CGB193-SG	SG1	CGB:0104355	BUSH93	NUT94	
1/2	B	.375 to .500	.625	CGB194-SG	SG1	CGB:0104355	BUSH94	NUT94	RPE417-115
1/2	B	.500 to .625	.625	CGB195-SG	SG1	CGB:0104355	BUSH05	NUT94	RPE417-116
1/2	C	.625 to .750†	.625	CGB196-SG	SG1	CGB:1702A	BUSH96	NUT95	RPE417-117
1/2	C	.750 to .875†	.625	CGB197-SG	SG1	CGB:1702A	BUSH97	NUT95	RPE421-119
3/4	C	.625 to .750†	.750	CGB296-SG	SG2	CGB:4318A	BUSH96	NUT95	RPE417-117
3/4	C	.750 to .875†	.750	CGB297-SG	SG2	CGB:4318A	BUSH97	NUT95	RPE421-119
3/4	D	.875 to 1.000†	.813	CGB298-SG	SG2	CGB:4320A	BUSH98	NUT98	16676N
1	C	.500 to .625	.969	CGB395-SG	SG3	CGB:4319A	BUSH95	NUT95	RPE417-129
1	C	.625 to .750	.969	CGB396-SG	SG3	CGB:4319A	BUSH96	NUT95	RPE417-117
1	C	.750 to .875	.969	CGB397-SG	SG3	CGB:4319A	BUSH97	NUT95	RPE421-119
1	D	.875 to 1.000†	1.031	CGB398-SG	SG3	CGB:4321A	BUSH98	NUT98	16676N
1	D	1.000 to 1.188†	1.031	CGB399-SG	SG3	CGB:4321A	BUSH99	NUT98	RPE421-121
1	D	1.188 to 1.375†	1.031	CGB3911-SG	SG3	CGB:4321A	BUSH911	NUT98	RPE433-122

* May be used in hazardous locations with specific cords and cables when installed in accordance with NEC/CEC requirements.

† Remove sufficient outer covering of cord or cable to pass conductors through the connector body.

‡ A wide variety of connectors may be made up using combinations of bodies, gland nuts and Neoprene bushings, providing all parts are of the same form.

♦ Order wire mesh grip separately.

Cord and Cable Fittings

45° Angle Body Male Thread

Sizes 1/2" - 3/4"

Cl. I, Div. 2*, Groups A,B,C,D

Cl. II, Div. 1, Groups E,F,G

Cl. II, Div. 2, Groups F,G

Cl. III

Wet Locations*

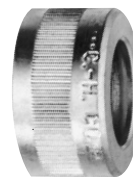
Complete with gland nut
and Neoprene bushing

Body only

Neoprene bushing

Gland nut

Wire mesh grip



CGD 45° With Gland Nut and Tapered Neoprene Bushing†

Thread Size	Form	Cord Range Dia.	Inside Body Dia.	Complete with Gland Nut & Neoprene Bushing ♦ Cat. #	Body Only Cat. #	Neoprene Bushing Cat. #	Gland Nut Cat. #	Wire Mesh Grip ♦ Cat. #
1/2	B	.125 to .250	.500	CGD192	CGD:3832A	BUSH92	NUT94	
1/2	B	.250 to .375	.500	CGD193	CGD:3832A	BUSH93	NUT94	
1/2	B	.375 to .500†	.500	CGD194	CGD:3832A	BUSH94	NUT94	RPE417-115
1/2	B	.500 to .625†	.500	CGD195	CGD:3832A	BUSH05	NUT94	RPE417-116
1/2	C	.625 to .750†	.500	CGD196	CGD:5636B	BUSH96	NUT95	RPE417-117
1/2	C	.750 to .875†	.500	CGD197	CGD:5636B	BUSH97	NUT95	RPE421-119
3/4	B	.125 to .250	.688	CGD292	CGD:3967B	BUSH92	NUT94	
3/4	B	.250 to .375	.688	CGD293	CGD:3967B	BUSH93	NUT94	
3/4	B	.375 to .500	.688	CGD294	CGD:3967B	BUSH94	NUT94	RPE417-115
3/4	B	.500 to .625	.688	CGD295	CGD:3967B	BUSH05	NUT94	RPE417-116
3/4	C	.625 to .750†	.688	CGD296	CGD:5643B	BUSH96	NUT95	RPE417-117
3/4	C	.750 to .875†	.688	CGD297	CGD:5643B	BUSH97	NUT95	RPE421-119

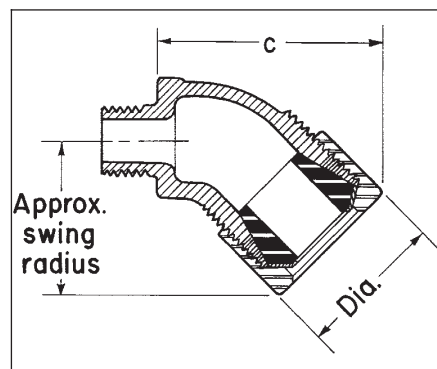
* May be used in hazardous locations with specific cords and cables when installed in accordance with NEC/CEC requirements.

† Remove sufficient outer covering of cord or cable to pass conductors through the connector body.

‡ A wide variety of connectors may be made up using combinations of bodies, gland nuts and Neoprene bushings, providing all parts are of the same form.

♦ Order wire mesh grip separately.

Dimensions



CGD assembly

Cat. #	Approx. Swing Radius	Dia.	c
CGD192	1 3/16	1 3/16	1 11/16
CGD193	1 3/16	1 3/16	1 11/16
CGD194	1 3/16	1 3/16	1 11/16
CGD195	1 3/16	1 3/16	1 11/16
CGD196	1 11/16	1 5/8	2 1/16
CGD197	1 11/16	1 5/8	2 1/16
CGD292	1 1/4	1 9/64	1 15/16
CGD293	1 1/4	1 9/64	1 15/16
CGD294	1 1/4	1 1/8	1 15/16
CGD295	1 1/4	1 1/8	1 15/16
CGD296	1 11/16	1 5/8	2
CGD297	1 11/16	1 5/8	2

Cord and Cable Fittings

90° Angle Body Male Thread

Sizes 1/2" - 1"

Cl. I, Div. 2*, Groups A,B,C,D

Cl. II, Div. 1, Groups E,F,G

Cl. II, Div. 2, Groups F,G

Cl. III

Wet Locations*

5F

5F
Cable and
Cord Fittings



Body Only

Optional
Sealing
Gasket§

Optional
Locknut§



Complete with
gland nut,
Neoprene
bushing, optional
locknut and
sealing gasket§



Neoprene Bushing



Gland Nut

Optional
Wire Mesh
Grip ♦



CGE 90° With Gland Nut and Tapered Neoprene Bushing

Thread Size	Form	Cord Range Dia.	Inside Body Dia.	Complete with Gland Nut & Neoprene Bushing ♦ Cat. #	Wire Mesh Grip ♦ Cat. #
1/2	B	.125 to .250	.531	CGE192	
1/2	B	.250 to .375	.531	CGE193	
1/2	B	.375 to .500	.531	CGE194	RPE417-115
1/2	B	.500 to .625†	.531	CGE195	RPE417-116
1/2	C	.625 to .750†	.500	CGE196	RPE417-117
1/2	C	.750 to .875†	.500	CGE197	RPE421-119
3/4	B	.125 to .250	.688	CGE292	
3/4	B	.250 to .375	.688	CGE293	
3/4	B	.375 to .500	.688	CGE294	RPE417-115
3/4	B	.500 to .625	.688	CGE295	RPE417-116
3/4	C	.625 to .750†	.688	CGE296	RPE417-117
3/4	C	.750 to .875†	.688	CGE297	RPE421-119
1	C	.500 to .625	.906	CGE395	RPE417-129
1	C	.625 to .750	.906	CGE396	RPE417-117
1	C	.750 to .875	.906	CGE397	RPE421-119
1	C	.875 to 1.000†	.906	CGE3239	RPE421-120
1	D	.875 to 1.000†	.906	CGE398	16676N
1	D	1.000 to 1.188†	.906	CGE399	RPE421-121
1	D	1.188 to 1.375†	.906	CGE3911	RPE433-122

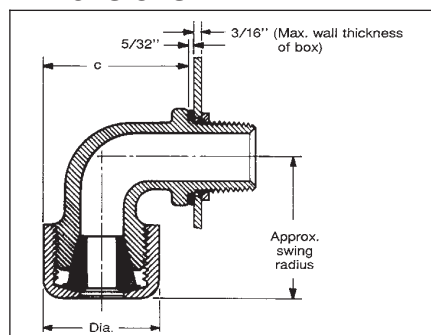
§1/2" and 3/4" sizes can be furnished with sealing gasket and locknut. To order, add suffix "SG" to cat. no. For example: CGE192-SG. Application, features, materials and finishes are detailed on page 68.

* May be used in hazardous locations with specific cords and cables when installed in accordance with NEC/CEC requirements.

† Remove sufficient outer covering of cord or cable to pass conductors through the connector body.

♦ Order wire mesh grip separately.
Diameter Cord Range
Wire Mesh Grip

Dimensions



CGE assembly

Cat. #	Approx. Swing Radius	Dia.	c	Cat. #	Approx. Swing Radius	Dia.	c
CGE192	1 9/16	1 3/16	1 7/16	CGE396	2 3/16	1 5/8	2 3/32
CGE193	1 9/16	1 3/16	1 7/16	CGE397	2 3/16	1 5/8	2 3/32
CGE194	1 9/16	1 3/16	1 7/16	CGE398	2 5/8	2 1/4	2 21/32
CGE195	1 9/16	1 3/16	1 7/16	CGE399	2 5/8	2 1/4	2 21/32
CGE196	1 7/8	1 5/8	2	CGE3239	2 3/16	1 5/8	2 3/32
CGE197	1 7/8	1 5/8	2	CGE3911	2 5/8	2 1/4	2 21/32
CGE292	1 5/8	1 3/16	1 13/32				
CGE293	1 5/8	1 3/16	1 13/32				
CGE294	1 5/8	1 3/16	1 13/32				
CGE295	1 5/8	1 3/16	1 13/32				
CGE296	2	1 5/8	1 7/8				
CGE297	2	1 5/8	1 7/8				
CGE395	2 3/16	1 5/8	2 3/32				

5F

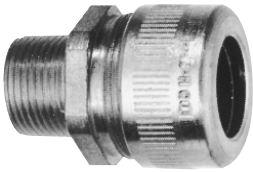
Cord and Cable Fittings Straight Body Male Thread Portable Cord

Cl. I, Div. 2*, Groups A,B,C,D
Cl. II, Div. 1, Groups E,F,G
Cl. II, Div. 2, Groups F,G
Cl. III
Wet Locations

For portable cord



With oil impregnated flax packing



CGB with Tapered Neoprene Bushing and Cable Clamp

For Portable Cord*

Size	Range Dia.	Cat. #
1/2	.312 to .437	CGB1013
1/2	.375 to .500	CGB1014
1/2	.500 to .625	CGB1015
3/4	.312 to .437	CGB2013
3/4	.375 to .500	CGB2014
3/4	.500 to .625	CGB2015

CGB with Oil Impregnated Flax Packing

Size	Cable Dia.	Cat. #
1/2	.250 to .625	CGB1
3/4	.594 to .688	CGB2
1	.688 to .968	CGB3
1 1/4	.906 to 1.219	CGB4
1 1/2	1.219 to 1.438	CGB5
2	1.438 to 1.875	CGB6
2 1/2	1.875 to 2.313	CGB7
3	2.313 to 2.625	CGB8

* May be used in hazardous locations with specific cords and cables when installed in accordance with NEC/CEC requirements.

Cord and Cable Fittings

CGFP Wet Locations

Cl. I, Div. 2*, Groups A,B,C,D
Cl. II, Div. 1, Groups E,F,G
Cl. II, Div. 2, Groups F,G
Cl. III

5F

5F
Cable and
Cord Fittings

Application:

- CGFP series for use with portable cords and Types MV (unarmored), PLTC, SE (round), TC and UF jacketed unarmored cables
- CGFP cord and cable fittings are installed to:
- Form a mechanically gripping water and/or oiltight termination
- SG series sealing gaskets can be used with locknuts to provide a watertight seal in slip holes of sheet metal structures and boxes.
- RSMP series terminating hub plates can be used on panels, junction boxes and bulkheads.

Features:

- Superior pull out strength.
- Rugged construction protects cable against mechanical damage.
- Compact size permitting close grouping of cables.
- Complete range of sizes for all types of cable.
- Provide double seal against water entry.

Standard Materials:

- 1/2" to 1" body and gland nut – turned steel
- Over 1" body and gland nut – *Feraloy*® iron alloy

Standard Finishes:

- Steel – electrogalvanized and chromate treatment
- Feraloy* iron alloy – electrogalvanized with aluminum acrylic paint

Size Ranges:

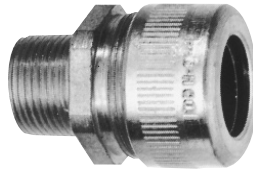
- Cable O.D. – .125" to 3.500"
- NPT threads – 1/2" to 4"

Certifications and Complies:

- UL Standard: 514B
- NEC: Class I, Division 2*
- Wet locations

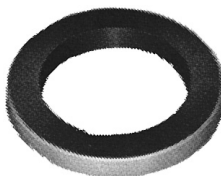
* May be used in hazardous locations with specific cords and cables when installed in accordance with NEC requirements.

† All parts of the same form may be used together in an assembly.



CGFP With Neoprene Bushing for Wet Locations

Male Thread Size	O.D. Range	Form†	Cat. #
1/2	.125 to .250	B	CGFP192
1/2	.250 to .375	B	CGFP193
1/2	.375 to .500	B	CGFP194
1/2	.500 to .625	B	CGFP195
3/4	.625 to .750	C	CGFP296
3/4	.750 to .875	C	CGFP297
3/4	.875 to 1.000	C	CGFP2239
1	.625 to .750	C	CGFP396
1	.750 to .875	C	CGFP397
1	.875 to 1.000	C	CGFP3239
1 1/4	1.000 to 1.188	D	CGFP499
1 1/4	1.188 to 1.375	D	CGFP4911
1 1/2	1.000 to 1.188	D	CGFP599
1 1/2	1.188 to 1.375	D	CGFP5911
2	1.375 to 1.625	E	CGFP6913
2	1.625 to 1.875	E	CGFP6915
2 1/2	1.875 to 2.188	F	CGFP7917
2 1/2	2.188 to 2.500	F	CGFP7920
3	1.875 to 2.188	F	CGFP8917
3	2.188 to 2.500	F	CGFP8920
3 1/2	2.500 to 3.000	G	CGFP923
3 1/2	3.000 to 3.500	G	CGFP927
4	2.500 to 3.000	G	CGFP1023
4	3.000 to 3.500	G	CGFP1027



Sealing Gaskets For CGF terminators

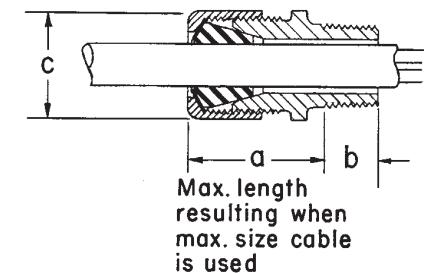
Armored sealing gaskets can be used with locknuts for watertight seals in slip holes of sheet metal structures and boxes. The steel ring positively retains the PVC gasket for a distortion-free 100% seal.

Conduit Size	Cat. #
3/8 – 1/2	SG1
3/4	SG2
1	SG3
1 1/4	SG4
1 1/2	SG5
2	SG6
2 1/2	SG7
3	SG8
3 1/2	SG9
4	SG10

Dimensions

CGFP Cat. #	a	b	c (max.)
CGFP192	1 3/8	3/4	1 9/32
CGFP193	1 3/8	3/4	1 9/32
CGFP194	1 3/8	3/4	1 9/32
CGFP195	1 3/8	3/4	1 9/32
CGFP296	1 3/4	3/4	1 25/32
CGFP297	1 3/4	3/4	1 25/32
CGFP2239	1 3/4	3/4	1 25/32
CGFP396	1 3/4	15/16	1 25/32
CGFP397	1 3/4	15/16	1 25/32
CGFP3239	1 3/4	15/16	1 25/32
CGFP499	2 3/8	15/16	2 1/4
CGFP4911	2 3/8	15/16	2 1/4
CGFP599	2 3/8	15/16	2 1/4
CGFP5911	2 3/8	15/16	2 1/4
CGFP6913	3 1/4	1	3 1/4
CGFP6915	3 1/4	1	3 1/4
CGFP7917	3 1/4	1 7/16	3 7/8
CGFP7920	3 1/4	1 7/16	3 7/8
CGFP8917	3 1/4	1 1/2	3 7/8
CGFP8920	3 1/4	1 1/2	3 7/8
CGFP923	4 1/4	1 9/16	5 1/2
CGFP927	4 1/4	1 9/16	5 1/2
CGFP1023	4 1/4	1 5/8	5 1/2
CGFP1027	4 1/4	1 5/8	5 1/2

CGFP



TERMINATOR™ Cable Fittings

for Metal Clad Cable and Tray Cable ♦

TMC/TMCX Series

Cl. I, Div. 1†, Groups A*,B,C,D
 Cl. II, Div. 1†, Groups F,G
 Cl. III♦, Div. 1† & 2
 Wet Locations

Application:

Terminator cable fittings are designed for use with the following cables:

- Type MC – corrugated aluminum, interlocked aluminum and interlocked steel
- Type TC Tray Cable ♦

Terminator cable fittings are installed:

- to provide a means for terminating type MC and TC cable at junction boxes, control centers, panelboards and enclosures for motor control and electrical distribution equipment
- to form a mechanical watertight connection
- to provide ground continuity of cable armor
- indoors and outdoors in wet and dry locations
- in vertical and horizontal cable runs
- in non-hazardous and hazardous (classified) locations. Both TMC and TMCX series can be used in Class I and Class II, Division 2 locations. TMCX series may be used in Division 1 locations and when a seal is required.

Features:

- Ten fittings cover cable O.D. range of .440" to 4.020", in 1/2" to 4" NPT sizes.
- Quick and easy to install. No disassembly is required for TMC installation.
- Unique stainless steel grounding/retaining spring with copper plate finish provides positive ground continuity and superior pull-out resistance exceeding that required by UL/CSA.
- Neoprene bushing provides a watertight seal.
- Lightweight, corrosion-resistant/copper-free aluminum construction provides long, maintenance-free service life in industrial environments
- Optional all brass construction available.
- Hex design for easy wrenching.
- Compact size for close nesting of cables.
- TMC fittings are furnished complete with epoxy sealing compound.†
- TMCX fittings with sealing chamber have a red colored gland nut for easy identification.
- Hazardous location TMCX Terminators are reusable. An integral union feature simplifies installation on new construction and allows installed TMCX Terminator cable fittings to be disassembled and reused when performing repairs or replacement of equipment.
- Optional Cold-Shrink® Kit for extra corrosion protection against corrosive elements like salt water.

Standard Materials:

- Body, intermediate body, gland nut, and armor stop insert – copper-free aluminum
- Bushing – neoprene
- Grounding/retaining spring – stainless steel
- Slip washer and armor stop reducer – nylon
- Cold Shrink Kit — EPDM Rubber

Standard Finishes:

- Copper-free aluminum – natural
- Neoprene – natural
- Stainless steel – copper flash
- Nylon – natural

Options:

- All brass construction add suffix -BR to catalog number.
- All brass construction with nickel plate finish on entry threads add suffix -BR-NP to catalog number.

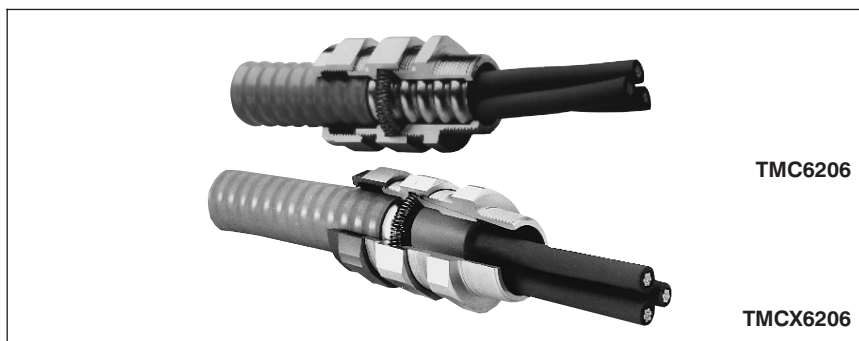
Certifications and Complies:

- NEC: Class I, Groups A*,B,C,D
 Class II, Groups F,G
 Class III, Div. 1 and 2 (except when used with Tray Cable)
 Article 334, 340, 501-4(b), 502-4(b), 503-3(a)
- NEMA: FB1-1989
- UL Standards: 514B, 886
- Fed. Spec.: W-F-406B



- CSA Standard C22.2 No. 18-M1987
 Class I, A,B,C,D SL
 Class II, E,F,G
 Class III, Enc. 4 locations

NPT Thread Size	Armor O.D. Range	Non-Hazardous Cat. #	Hazardous Cat. #*	Optional Cold Shrink® Kit Cat. #
1/2	.440 to .650	TMC165	TMCX165 ♦	TMC-K1
3/4	.600 to .850	TMC285	TMCX285 ♦	TMC-K2
1	.800 to 1.120	TMC3112	TMCX3112 ♦	TMC-K3
1 1/4	1.100 to 1.400	TMC4140	TMCX4140 ♦	TMC-K4
1 1/2	1.330 to 1.610	TMC5161	TMCX5161 ♦	TMC-K5
2	1.570 to 2.060	TMC6206	TMCX6206 ♦	TMC-K6
2 1/2	1.930 to 2.470	TMC7247	TMCX7247 ♦	TMC-K7
3	2.450 to 3.020	TMC8302	TMCX8302	TMC-K8
3 1/2	2.950 to 3.520	TMC9352	TMCX9352	TMC-K9
4	3.500 to 4.020	TMC10402	TMCX10402	TMC-K10



* Hazardous location fittings are supplied with sealing compound for one termination. Additional compound may be ordered separately. See following page.

† TMCX series is suitable for use in hazardous locations when installed in accordance with NEC articles 501-4(b), 501-5(e), 502-4(b), 502-5 and 503-3(a).

♦ TMCX catalog numbers listed are suitable for use with Type TC tray cable in hazardous locations when installed in accordance with NEC articles 501-5(e) and 502-5. TMCX series is not suitable for use in Class III locations when used with tray cable.

‡ In Canada order separately Cat. # TSC1 - 1 oz. TSC4 - 4 oz.

* Terminators ordered in all brass construction (suffix – BR) are *not* suitable for Class I, Group A hazardous area environments.

TMC-K Corrosion Protection Kits

TMC-K Corrosion Protection Kits are specially designed for Cooper Crouse-Hinds TMC and TMCX fittings to provide protection against corrosive elements like salt spray and moisture. The TMC-K kit is made of a Cold Shrink material that is quick and easy to install on the fitting. The Cold Shrink material is made of EPDM rubber that contains no chlorides or sulfurs.



The protection kit installs easily over the fitting *without* the use of a heat source to shrink the material tightly over the fitting. Just slide the kit over the fitting and pull out the inner core. The kit shrinks tightly over the fitting forming a watertight seal. The Cold Shrink material can be removed easily from the fitting by simply cutting it off.

See ordering information for complete offering of TMC-K Cold Shrink kits for corrosion protection.

Cold Shrink is a registered trademark of the 3M Company.

TERMINATOR™ Cable Fittings

for Metal Clad Cable and Tray Cable♦

TMC/TMCX Series

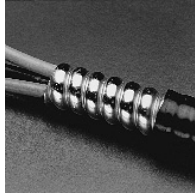
Accessories, Dimensions

Cl. I, Div. 1†, Groups A,B,C,D
Cl. II, Div. 1†, Groups F,G
Cl. III, Div. 1† & 2
Wet Locations

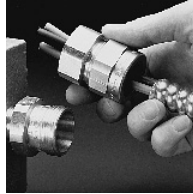
5F

5F Cable and
Cord Fittings

Installing a TMCX Terminator



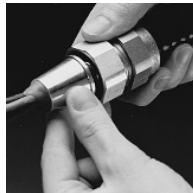
1. Prepare cable.



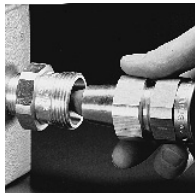
2. Install body into enclosure. Slide gland nut and intermediate body onto cable.



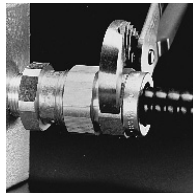
3. Mix sealing compound and pack conductors over armor.



4. Slide armor stop insert over conductor and sealing compound, then back against armor. Pack remaining sealing compound.



5. Insert cable assembly into body.



6. Thread intermediate body with gland nut onto body. Tighten intermediate body, then gland nut.



TSC Epoxy Sealing Compound

A two part epoxy sealing compound is used to seal TMCX cable fittings. It is quick and easy to measure, mix and install. The compound is kneaded until a uniform color is obtained. It is then packed around the conductors and cable armor to effectively seal the cable.

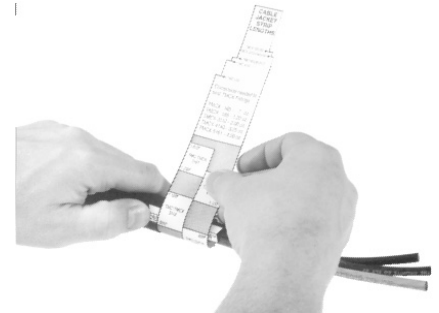
Each hazardous location fitting is supplied with enough sealing compound for one termination. Additional compound may be ordered separately in one and four ounce packages.

Std. Ctn.

Qty.	Tube Size	Cat. #**
10	0.5 oz	TSC05
10	1.0 oz	TSC1
5	4.0 oz.	TSC4

Approximate Amount of Compound Required to Seal Fittings

NPT Size	Cat. #	Ounces Required
1/2	TMCX165	0.25
3/4	TMCX285	0.50
1	TMCX3112	0.70
1 1/4	TMCX4140	1.50
1 1/2	TMCX5161	1.85
2	TMCX6206	4.50
2 1/2	TMCX7247	8.65
3	TMCX8302	15.75
3 1/2	TMCX9352	25.55
4	TMCX10402	38.95



Cable Gauge and Sizer

TMC and TMCX cable fittings are supplied with a cable gauge and sizer. This installation tool is used:

- to measure the cable armor and select the proper cable fitting.
- to determine how much cable jacket should be removed to ensure proper installation, eliminating any guesswork.
- as a gauge of how much compound to pack around the cable in order to meet UL requirements and ensure a safe, proper installation for TMCX fittings.

† TMCX series is suitable for use in hazardous locations when installed in accordance with NEC articles 501-4(b), 501-5(e), 502-4(b), 502-5 and 503-3(a).

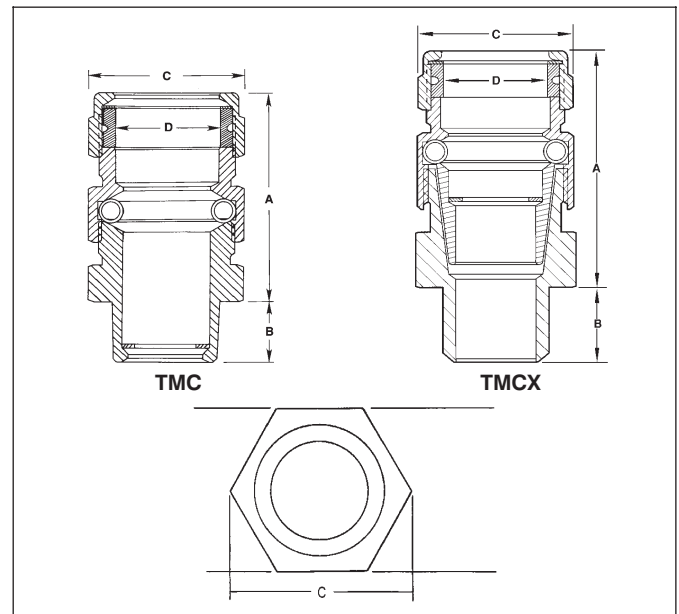
♦ TMCX catalog numbers listed are suitable for use with Type TC tray cable in hazardous locations when installed in accordance with NEC articles 501-5(e) and 502-5. TMCX series is not suitable for use in Class III locations when used with tray cable.

** Order quantity of one (1) TSC1 equals 10 1.0 oz. tubes; one (1) TSC4 equals 5 4.0 oz. tubes.

Dimensions

NPT Size	TMC Cat. #	A	TMCX Cat. #	A	TMC/TMCX		
					B	C	D
1/2	TMC165	2 3/8	TMCX165	2 3/8	3/4	1 1/8	2 9/32
3/4	TMC285	2 5/8	TMCX285	2 7/8	2 5/32	1 5/8	1
1	TMC3112	2 5/8	TMCX3112	3 1/8	1 5/16	2	1 5/16
1 1/4	TMC4140	2 3/4	TMCX4140	3 1/8	3 1/32	2 7/16	1 5/8
1 1/2	TMC5161	2 3/4	TMCX5161	3 3/8	3 1/32	2 3/4	1 29/32
2	TMC6206	4 1/2	TMCX6206	5 5/16	1	3 1/2	2 5/16
2 1/2	TMC7247	4 3/4	TMCX7247	6 1/16	1 7/16	4	2 23/32
3	TMC8302	4 7/8	TMCX8302	6 1/16	1 7/16	4 7/8	3 3/32
3 1/2	TMC9352	5 3/8	TMCX9352	7 3/4	1 5/8	5 3/8	3 29/32
4	TMC10402	5 1/2	TMCX10402	8 5/16	1 5/8	5 7/8	4 9/32

(Dimensions also apply to brass product, suffix — BR)



TECK TERMINATOR™ Cable Fittings

for Teck Cable

Cl. II, Division 1, Groups E,F,G
 Cl. II, Division 2, Groups F,G
 Cl. III
 IP56
 Wet Locations

Application:

TECK TERMINATORS have a wide array of applications in pulp and paper mills, chemical and petrochemical plants, petroleum refineries, waste treatment facilities, coal mines, electric power generating plants, grain handling and storage facilities, and many other industrial applications.

TECK TERMINATORS are CSA Certified for use with TECK armoured cable:

- to provide a means to terminate at junction boxes, control centers, panelboards, and enclosures for motor control and electrical distribution equipment
- to form a watertight (Encl 4/IP 56) seal around cable and at enclosure entry
- to provide ground continuity of cable armour
- to provide excellent cable pullout protection exceeding CSA requirements
- indoors or outdoors, in wet and dry locations
- in vertical or horizontal cable runs; and
- with TMC-K Series Cold Shrink™ corrosion protection kits to protect fitting from corrosive elements like salt water

Features:

- **CSA Certified** for ordinary and hazardous locations assuring a safe and reliable termination in adverse environments
- **No disassembly required**, resulting in a quick-and-easy installation and lower labour costs
- Available in aluminum, steel, stainless steel and PVC-coated aluminum construction for almost any type of corrosive environment
- **Unique stainless steel grounding spring** provides 360° positive grounding and superior pullout resistance
- Neoprene bushing creates a **watertight seal** to protect electrical equipment
- Neoprene O-ring on connector provides an **environmental seal** when fitting is installed in knockout
- **Hex surfaces** provide a large wrenching area for easy installation
- Hex surfaces on aluminum fittings have **slots for screwdriver tightening/loosening**
- **Compact design** allows close spacing of connectors
- Available in ½" to 4" trade sizes for application flexibility

Assembly Detail Shown with TECK Cable Installed



Standard Materials/Finishes:

- Body, Gland Nut – aluminum/natural, steel/zinc electrogalvanized, *Feraloy*®/zinc electrogalvanized, stainless steel/natural
- Drive Washer – aluminum/natural, steel/electrogalvanized, stainless steel/natural
- Bushing, O-ring – neoprene/natural
- Grounding Spring – stainless steel/copper-plated
- Cold Shrink Corrosion Protection Kit – EPDM rubber
- Slip Washer – nylon/natural

Certifications and Compliances:

- CEC: Class II, Division 1 and 2
Groups E, F and G
Class III
- CSA Standard: C22.2 No. 18
- Encl 4/IP 56

TECK TERMINATOR™ Cable Fittings

for Teck Cable

Cl. II, Division 1, Groups E,F,G
Cl. II, Division 2, Groups F,G
Cl. III
IP56
Wet Locations

5F

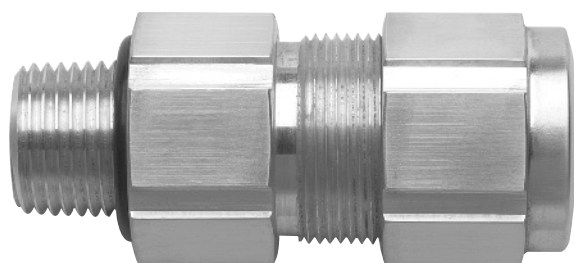
5F Cable and Cord Fittings

Ordering Information:

Hub Size	Aluminum Cat. #	Steel Cat. #	Stainless Steel Cat. #	PVC Cat. #	Range Over Jacket		Range Over Armour	
					Min.	Max.	Min.	Max.
1/2"	TECK050-1	TECK050-1S	TECK050-1SS	TECK050-1PVC	0.525	0.650	0.415	0.570
1/2"	TECK050-2	TECK050-2S	TECK050-2SS	TECK050-2PVC	0.600	0.760	0.490	0.680
1/2"	TECK050-3	TECK050-3S	TECK050-3SS	TECK050-3PVC	0.725	0.885	0.615	0.805
1/2"	TECK050-4	TECK050-4S	TECK050-4SS	TECK050-4PVC	0.825	0.985	0.715	0.905
3/4"	TECK075-5	TECK075-5S	TECK075-5SS	TECK075-5PVC	0.880	1.065	0.770	0.985
3/4"	TECK075-6	TECK075-6S	TECK075-6SS	TECK075-6PVC	1.025	1.205	0.915	1.125
1"	TECK100-7	TECK100-7S	TECK100-7SS	TECK100-7PVC	1.187	1.375	1.077	1.295
1 1/4"	TECK125-8	TECK125-8S	—	TECK125-8PVC	1.350	1.625	1.240	1.545
1 1/4"	TECK125-9	TECK125-9S	—	TECK125-9PVC	1.500	1.625	1.390	1.545
1 1/4"	TECK125-10	TECK125-10S	—	TECK125-10PVC	1.600	1.875	1.490	1.795
1 1/2"	TECK150-11	TECK150-11S	—	TECK150-11PVC	1.700	1.965	1.590	1.885
1 1/2"	TECK150-12	TECK150-12S	—	TECK150-12PVC	1.900	2.187	1.790	2.107
2"	TECK200-13	TECK200-13S	—	TECK200-13PVC	1.900	2.187	1.790	2.107
2"	TECK200-14	TECK200-14S	—	TECK200-14PVC	2.100	2.375	1.990	2.280
2"	TECK200-15	TECK200-15S	—	TECK200-15PVC	2.300	2.565	2.190	2.485
2"	TECK200-16	TECK200-16S	—	TECK200-16PVC	2.500	2.750	2.390	2.656
2 1/2"	TECK250-17	TECK250-17S	—	TECK250-17PVC	2.380	2.640	2.240	2.560
2 1/2"	TECK250-18	TECK250-18S	—	TECK250-18PVC	2.580	2.840	2.440	2.750
3"	TECK300-19	TECK300-19S	—	TECK300-19PVC	2.790	3.060	2.640	2.970
3"	TECK300-20	TECK300-20S	—	TECK300-20PVC	3.000	3.270	2.870	3.190
3"	TECK300-21	TECK300-21S	—	TECK300-21PVC	3.210	3.480	3.042	3.390
3 1/2"	TECK350-22	TECK350-22S	—	TECK350-22PVC	3.420	3.690	3.270	3.590
3 1/2"	TECK350-23	TECK350-23S	—	TECK350-23PVC	3.610	3.870	3.440	3.770
4"	TECK400-24	TECK400-24S	—	—	3.810	4.030	3.600	3.930
4"	TECK400-25	TECK400-25S	—	—	3.965	4.185	3.755	4.065
4"	TECK400-26	TECK400-26S	—	—	4.120	4.340	3.910	4.220

Optional Cold Shrink Corrosion Protection Kits

Trade Size	Cat. #	Trade Size	Cat. #
1/2"	TMC-K1	2"	TMC-K6
3/4"	TMC-K2	2 1/2"	TMC-K7
1"	TMC-K3	3"	TMC-K8
1 1/4"	TMC-K4	3 1/2"	TMC-K9
1 1/2"	TMC-K5	4"	TMC-K10



Dimensions (inches)

Cat. #	A - Throat Dia.	B - Overall	C - Max.
TECK050-1	0.395	2.16	1.34
TECK050-2	0.485	2.24	1.47
TECK050-3	0.612	2.20	1.61
TECK050-4	0.612	2.24	1.61
TECK075-5	0.819	2.37	2.14
TECK075-6	0.819	2.42	2.14
TECK100-7	1.039	2.42	2.41
TECK125-8	1.184	3.42	3.20
TECK125-9	1.375	3.34	3.20
TECK125-10	1.375	3.34	3.20
TECK150-11	1.577	3.81	3.60
TECK150-12	1.600	3.81	3.72
TECK200-13	1.715	4.14	4.20
TECK200-14	1.995	4.06	4.20
TECK200-15	2.063	3.84	4.40
TECK200-16	2.063	3.92	4.40
TECK250-17	2.250	5.15	4.79
TECK250-18	2.437	5.10	4.79
TECK300-19	2.630	4.91	4.89
TECK300-20	2.875	4.97	5.30
TECK300-21	3.032	4.97	5.30
TECK350-22	3.260	5.12	5.90
TECK350-23	3.437	5.25	5.90
TECK400-24	3.594	4.90	6.53
TECK400-25	3.750	4.90	6.53
TECK400-26	3.900	4.90	6.53

TWDC/TBDC SERIES
ATEX and CENELEC Range
for Steel Wire Armour or Steel Wire
Braid Cable

ATEX and CENELEC Dual E Exd IIC/E Exe II
Zone 1 or 2 Hazardous Areas
IP66/67



Certifications and Compliances

- ATEX E Exd IIC/E Exe II with SIRA 03ATEX2078X
- Standards EN50014:1998, EN50018:2000, EN50019:2000 and EN50281-1-1:1998
- IP66 and IP67
- GOST R - Exd IICU/Exe IIU

Design Data (millimeters)

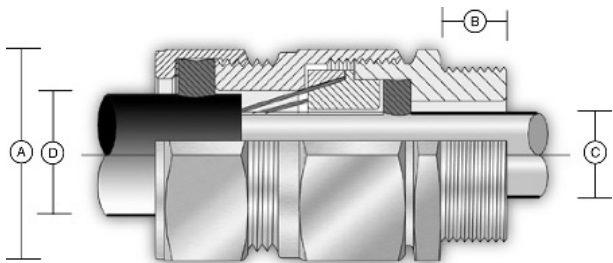
Gland Size	A (across corners)	B
16	25.5	16.0
20S	26.5	16.0
20	33.0	16.0
25	41.4	16.0
32	50.6	16.0
40	60.5	16.0
50S	71.5	16.0
50	71.5	16.0
63S	88.0	19.0
63	88.0	19.0
75S	99.0	19.0
75	99.0	19.0
80	115.2	25.0
80H	115.2	25.0
85	115.2	25.0
90	125.7	25.0
90H	125.7	25.0
100	125.7	25.0

Application

For use in Zone 1 or 2 hazardous areas with ATEX/CENELEC certified equipment and armoured or braided cable.

Features

- All TWDC and TBDC glands offer:
- a flameproof or increased safety seal on the inner sheath of the cable
 - mechanical clamping, providing retention of armour or braid
 - a weatherproof seal to the outer sheath of the cable
 - brass construction (optional stainless steel)
 - optional nickel-plate finish
 - metric or NPT threads
- TW3DC/TB3DC cable glands offer a zero halogen version for extreme high and low temperature applications (-60°C to +180°C).



TWDC/TBDC Brass Cable Glands

for Steel Wire Armour or
Steel Wire Braid Cable

EEx d IIC
EEx e II
Zone 1 and 2
IP 66/67

5F

Ordering Information

Build your catalog number from the information below. All catalog numbers consist of three main sections:

1. Select the Gland Type based on cable type and seal required (i.e., TW1DC)
2. Select the Gland Size based on cable specifications (i.e., 20S)
3. Specify Thread Size (i.e., 075NPT)

Ordering example:

TW1DC/NP/20S/075NPT

Step 1 – Select Gland Type from Table below:

Gland Types

Gland Type	Description
TW1DC	For steel wire armour with neoprene seal.
TW3DC	For steel wire armour with silicone seal for extreme temperatures.
TB1DC	For braided cable with neoprene seal.
TB3DC	For braided cable with silicone seal for extreme temperatures.

For optional nickel-plate finish add suffix/NP after Gland Type (i.e., TW1DC/NP).

For reduced bore gland add "R" at the end of Gland Type (i.e., TW1DCR).

For optional poly-bagged kit including gland, brass locknut, brass earth tag, sealing washer and PCP shroud, add "K1" at the end of Gland Type (i.e. TW1DCK1).

For stainless steel construction add "S" at the end of Gland Type (i.e., TW1DCS).

Step 2 – Select Gland Size based on Cable Size from Table below:

Cable Sizes (Dimensions are all in millimeters)

Gland Size	Available Entry Threads		Gland Seal Range						Armour Acceptance Range		Shroud Size†
			Cable Inner Sheath [C]		Cable Outer Sheath [D]						
					Standard		Reduced		SWA	Braided	
16	M20	½"or ¾"	3.5	8.4	8.4	13.5	4.9	10.0	0.90	0.15 – 0.35	L24
20S	M20	½"or ¾"	8.0	11.7	11.5	16.0	9.4	12.5	0.90 – 1.25	0.15 – 0.35	L24
20	M20	½"or ¾"	6.7	14.0	15.5	21.1	12.0	17.6	0.90 – 1.25	0.15 – 0.50	L30
25	M25	¾"or 1"	13.0	20.0	20.3	27.4	16.8	23.9	1.25 – 1.60	0.15 – 0.50	L38
32	M32	1" or 1¼"	19.0	26.3	26.7	34.0	23.2	30.5	1.60 – 2.00	0.15 – 0.55	L46
40	M40	1¼" or 1½"	25.0	32.2	33.0	40.6	28.6	36.2	1.60 – 2.00	0.20 – 0.60	L55
50S	M50	1½" or 2"	31.5	38.2	39.4	46.7	34.8	42.4	2.00 – 2.50	0.20 – 0.60	L65
50	M50	2"	36.5	44.1	45.7	53.2	41.1	48.5	2.00 – 2.50	0.30 – 0.80	L65
63S	M63	2" or 2½"	42.5	50.1	52.1	59.5	47.5	54.8	2.50	0.30 – 0.80	L80
63	M63	2½"	49.5	56.0	58.4	65.8	53.8	61.2	2.50	0.30 – 0.80	L80
75S	M75	2½" or 3"	54.5	62.0	64.8	72.2	60.2	68.0	2.50	0.30 – 1.00	L90
75	M75	3"	60.5	68.0	71.1	78.0	66.5	73.4	2.50	0.30 – 1.00	L90
80	M80 × 2	3" or 3½"	62.2	72.0	77.0	84.0	---	---	3.15	0.45 – 1.00	L104
80H	M80 × 2	3" or 3½"	62.2	72.0	79.6	90.0	---	---	3.15	0.45 – 1.00	L104
85	M85 × 2	3" or 3½"	69.0	78.0	79.6	90.0	75.0	85.4	3.15	0.45 – 1.00	L104
90	M90 × 2	3½" or 4"	74.0	84.0	88.0	96.0	---	---	3.15	0.45 – 1.00	L114
90H	M90 × 2	3½" or 4"	74.0	84.0	92.0	102.0	---	---	3.15	0.45 – 1.00	L114
100	M100 × 2	3½" or 4"	82.0	90.0	92.0	102.0	87.4	97.4	3.15	0.45 – 1.00	L114

† For PVC or PCP shrouds see Accessories, page 93.

Step 3 – Specify Thread Size from Table below:

Metric Thread Sizes

Thread Size	Add to Catalog Number
M16	M16
M20	M20
M25	M25
M32	M32
M40	M40
M50	M50
M63	M63
M75	M75
M80	M80
M85	M85
M90	M90
M100	M100

NPT Thread Sizes

Thread Size	Add to Catalog Number
1/2" NPT	050NPT
3/4" NPT	075NPT
1" NPT	100NPT
1 1/4" NPT	125NPT
1 1/2" NPT	150NPT
2" NPT	200NPT
2 1/2" NPT	250NPT
3" NPT	300NPT
3 1/2" NPT	350NPT
4" NPT	400NPT
—	—
—	—



ATEX and CENELEC Dual
E Exd IIC/E Exe II
CSA Exd IIC/Exe II
Class I, Zone 1

Zone 1 or 2 Hazardous Areas
IP66/68
Enclosure Type 4X
DTS01 1991 Deluge



Certifications and Compliances

- ATEX E Exd IIC/E Exe II with SIRA 03ATEX2077X
- Standards EN50014:1998, EN50018:2000, EN50019:2000 and EN50281-1-1:1998
- IP66 and IP68 at 25 meters
- DTS01 1991 deluge
- CSA Exd IIC/Exe II, Class I, Zone 1
- Enclosure Type 4X
- Zone 1 and Zone 2
- Ignitable dusts, Zones 21 and 22
- GOST R - Exd IICU/Exe IIU

Design Data (millimeters)

Gland Size	A (across corners)	B
16	28.0	16
20S	28.0	16
20	33.0	16
25	41.4	16
32	50.6	16
40	60.5	16
50S	71.5	16
50	71.5	16
63S	88.0	19
63	88.0	19
75S	99.0	19
75	99.0	25
80	115.2	25
80H	115.2	25
85	115.2	25
90	125.7	25
90H	125.7	25
100	125.7	25

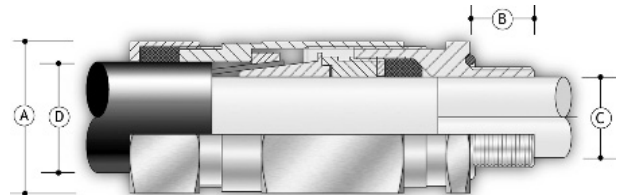
Application

For use in Zone 1 or 2 hazardous areas with ATEX/CENELEC equipment and wire, braided or tape armoured cables. For use in Zone 1 or 2 hazardous areas with CSA equipment with braided and marine shipboard cable.

Features

All TAB and TAS Cable glands:

- offer a universal armour clamp for all armoured cable types (wire, braided, tape, marine shipboard)
- come with no reversible components, eliminating installer error
- maintain Flameproof Exd and Increase Safety Exe methods of explosion protection
- provide a seal on the inner sheath
- provide a seal on the outer sheath offering IP66/68 and Type 4X protection
- provide an O-Ring on the entry seal (metric entry threads only)
- meet DTS01 1991 deluge requirements
- are constructed of all brass or all stainless steel material
- incorporate anti-twist assembly reducing the amount of cable twist during installation
- are available with metric or NPT threads
- are available with optional nickel-plate finish
- are available with optional silicone zero halogen seal for extreme high and low temperature applications (-60°C to +180°C).





Ordering Information

Build your catalog number from the information below. All catalog numbers consist of three main sections:

1. Select the Gland Type based on cable type and seal required (i.e., TAB1)
2. Select the Gland Size based on cable specifications (i.e., 20S)
3. Specify Thread Size (i.e., 075NPT) (Available sizes listed in step 2)

Ordering example:

TAB1/20S/075NPT

Step 1 – Select Gland Type from Table below:

Gland Types

Gland Type	Description
TAB1	Universal gland for steel wire, steel braid & steel tape with neoprene seal - brass construction
TAB3	Universal gland for steel wire, steel braid & steel tape with silicone seal - brass construction
TAS1	Universal gland for steel wire, steel braid & steel tape with neoprene seal - stainless steel construction
TAS3	Universal gland for steel wire, steel braid & steel tape with silicone seal - stainless steel construction

For optional nickel-plate finish add suffix /NP after Gland Type (i.e., TAB1/NP).

For reduced bore gland add "R" at the end of gland type (i.e. TAB1R).

For optional poly-bagged kit including gland, locknut, earth tag, sealing washer and PVC shroud, add "K1" at the end of Gland Type (i.e., TAB1K1).

Step 2 – Select Gland Size based on Cable Size from Table below:

Cable Sizes (Dimensions are all in millimeters)

Gland Size	Available Entry Threads		GLAND SEAL RANGE						Armour Acceptance Range	Shroud Size
			Cable Inner Sheath [C]	Cable Outer Sheath [D]						
				Standard		Reduced				
	Metric	NPT	Min	Max	Min	Max	Min	Max		
16	M20	½" or ¾"	3.4	8.4	9.0	13.5	6.7	10.3	0.15 - 1.25	L24
20S	M20	½" or ¾"	7.2	11.7	11.5	16.0	9.4	12.5	0.15 - 1.25	L24
20	M20	½" or ¾"	9.4	14.0	15.5	21.1	12.0	17.6	0.15 - 1.25	EL30
25	M25	¾" or 1"	13.5	20.0	20.3	27.4	16.8	23.9	0.15 - 1.60	EL38
32	M32	1" or 1¼"	19.5	26.3	26.7	34.0	23.2	30.5	0.15 - 2.00	EL46
40	M40	1¼" or 1½"	23.0	32.2	33.0	40.6	28.6	36.2	0.20 - 2.00	EL55
50S	M50	1½" or 2"	28.1	38.2	39.4	46.7	34.8	42.4	0.30 - 2.50	EL65
50	M50	2"	33.1	44.1	45.7	53.2	41.1	48.5	0.30 - 2.50	EL65
63S	M63	2" or 2½"	39.3	50.1	52.1	59.5	47.5	54.8	0.30 - 2.50	EL80
63	M63	2½"	46.7	56.0	58.4	65.8	53.8	61.2	0.30 - 2.50	EL80
75S	M75	2½" or 3"	52.3	62.0	64.8	72.2	60.2	68.0	0.30 - 2.50	EL90
75	M75	3"	58.0	68.0	71.1	78.0	66.5	73.4	0.30 - 2.50	EL90
80	M80 x 2	3" or 3½"	61.9	72.0	77.0	84.0	-	-	0.45 - 3.15	L104
80H	M80 x 2	3" or 3½"	61.9	72.0	79.6	90.0	-	-	0.45 - 3.15	L104
85	M85 x 2	3" or 3½"	69.1	78.0	79.6	90.0	75.0	85.4	0.45 - 3.15	L104
90	M90 x 2	3½" or 4"	74.1	84.0	88.0	96.0	-	-	0.45 - 3.15	L114
90H	M90 x 2	3½" or 4"	74.1	84.0	92.0	102.0	-	-	0.45 - 3.15	L114
100	M100 x 2	3½" or 4"	81.8	90.0	92.0	102.0	87.4	97.4	0.45 - 3.15	L114

Step 3 – Specify Thread Size from Table below:

Metric Thread Sizes

Thread Size	Add to Catalog Number
M16	M16
M20	M20
M25	M25
M32	M32
M40	M40
M50	M50
M63	M63
M75	M75
M80	M80
M85	M85
M90	M90
M100	M100

NPT Thread Sizes

Thread Size	Add to Catalog Number
1/2" NPT	050NPT
3/4" NPT	075NPT
1" NPT	100NPT
1 1/4" NPT	125NPT
1 1/2" NPT	150NPT
2" NPT	200NPT
2 1/2" NPT	250NPT
3" NPT	300NPT
3 1/2" NPT	350NPT
4" NPT	400NPT
-	-
-	-



Atex and CENELEC Range



TACF

Certifications and Compliances

- ATEX E Exd I & IIC with SIRA 03ATEX1552X
- Standards EN50014, EN50018 and EN50281-1-1:1998
- IP66 and IP68 at 100 meters
- DTS01 1991 deluge
- CSA Exd I & IIC
- Type 4X
- Zone 1 and Zone 2
- Ignitable dusts, Zones 21 and 22
- GOST R-Exd I & IICU
- Mining Equipment Group I, M2

Application

The TACF series is a flameproof E Exd compound filled barrier cable gland for use in Zone 1 or 2 hazardous areas with ATEX/CENELEC equipment and steel wire armoured, steel wire braided, steel tape armoured and unarmoured cables. Also, for use in Exd and Exe hazardous areas with CSA equipment and braided and marine shipboard cable. The TACF series will maintain the flameproof Exd integrity of any volume enclosure with an internal ignition source for all gas groups when used with any armoured or unarmoured cable types.

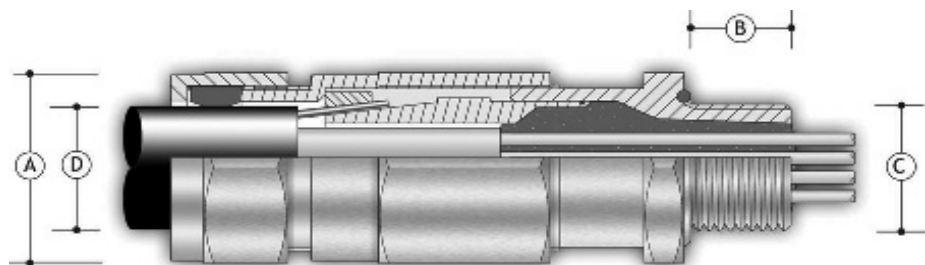
Features:

All TACF Cable glands:

- are available in all brass or all stainless steel construction.
- offer a universal armour clamp for all armoured cable types (steel wire, steel braid, steel tape, marine shipboard) and unarmoured cable.
- are provided with sealing compound that cures in 4 hours at 21°C.
- come with no reversible components, eliminating installer error.
- maintain Flameproof Exd and Increase Safety Exe methods of explosion protection.
- provide a seal on the outer sheath offering IP66/68 and Type 4X protection.
- provide an entry thread seal (metric threads only).
- meet DTS01 1991 deluge requirements.
- may be terminated 1 hour after creation of seal.
- may be energized 4 hours after creation of seal.
- incorporate anti-twist assembly reducing the amount of cable twist during installation.
- are available with metric or NPT threads.
- are available with optional nickel-plate finish.
- are provided with silicone seals, temperature range -60°C to +85°C.

Design Data (millimeters)

Gland Size	A (across corners)	B
16	28.0	16
20S	28.0	16
20	33.0	16
25	41.4	16
32	50.6	16
40	60.5	16
50S	71.5	16
50	71.5	16
63S	88.0	19
63	88.0	19
75S	99.0	19
75	99.0	19
80	115.2	25
85	115.2	25
90	125.7	25
100	125.7	25



TACF Series Barrier Gland

Atex and CENELEC Range

ATEX and CENELEC E Exd & IIC ATEX I M2 II 2 GD
Ignitable dusts, Zones 21 and 22 CSA Exc I IIC
Class I, Zone 1 or 2 Hazardous Areas
Type 4X, IP66/88
DTS01 1991 Deluge

5F



Ordering Information

Build your catalog number from the information below. All catalog numbers consist of three main sections:

1. Select the Gland Type based on material required (i.e., TACFB)
2. Select the Gland Size based on cable specifications (i.e., 20S)
3. Specify Thread Size (i.e., 075NPT) (Available sizes listed in step 2)

Ordering example:
TACFB/20S/075NPT

Step 1: Select Gland Type from Table below:

Gland Types

Gland Type	Description
TACFB	Compound filled universal gland for steel wire, steel braid & steel tape w/ silicone seal - Brass construction
TACFS	Compound filled universal gland for steel wire, steel braid & steel tape w/ silicone seal - Stainless steel construction

For optional nickel-plate finish on brass glands add suffix /NP after Gland Type (i.e., TACFB/NP).

For reduced bore gland add "R" at the end of Gland Type (i.e., TACFBR).

For optional poly-bagged kit including gland, locknut, earth tag, sealing washer and PVC shroud, add "K1" at the end of Gland Type (i.e., TACFBK1).

Step 2: Select Gland Size based on Cable Size from Table below:

Cable Sizes (Dimensions are all in millimeters)

Gland Size	Available Entry Threads		GLAND SEAL RANGE							Armour Acceptance Range	Shroud Size
			Cable Inner Sheath/Cores [C]			Cable Outer Sheath [D]					
						Standard		Reduced			
	Metric	NPT	Max No. of Cores	Max Over Cores	Max Inner Sheath	Min	Max	Min	Max		
16	M20	½" or ¾"	7	9.0	11.7	9.0	13.5	6.7	10.3	0.15 - 1.25	L24
20S	M20	½" or ¾"	8	10.4	11.7	11.5	16.0	9.4	12.5	0.15 - 1.25	L24
20	M20	½" or ¾"	14	12.5	14.0	15.5	21.1	12.0	17.6	0.15 - 1.25	EL30
25	M25	¾" or 1"	25	17.8	20.0	20.3	27.4	16.8	23.9	0.15 - 1.60	EL38
32	M32	1" or 1¼"	50	23.5	26.3	26.7	34.0	23.2	30.5	0.15 - 2.00	EL46
40	M40	1¼" or 1½"	80	28.8	32.2	33.0	40.6	28.6	36.2	0.20 - 2.00	EL55
50S	M50	2"	100	34.2	38.2	39.4	46.8	34.8	42.4	0.20 - 2.50	EL65
50	M50	2"	100	39.4	44.1	45.7	53.2	41.1	48.5	0.20 - 2.50	EL65
63S	M63	2½"	120	44.8	50.1	52.1	59.5	47.5	54.8	0.30 - 2.50	EL80
63	M63	2½"	120	50.0	56.0	58.4	65.8	53.8	61.2	0.30 - 2.50	EL80
75S	M75	3"	140	55.4	62.0	64.8	72.2	60.2	68.0	0.30 - 2.50	EL90
75	M75	3"	140	60.8	68.0	71.1	78.0	66.5	73.4	0.30 - 2.50	EL90
80	M80 x 2	3" or 3½"	160	64.4	72.0	77.0	84.0	—	—	0.45 - 3.15	L104
85	M85 x 2	3" or 3½"	180	69.8	78.0	79.6	90.0	75.0	85.4	0.45 - 3.15	L104
90	M90 x 2	3½" or 4"	200	75.1	84.0	88.0	96.0	—	—	0.45 - 3.15	L114
100	M100 x 2	3½" or 4"	220	80.5	90.0	92.0	102.0	87.4	97.4	0.45 - 3.15	L114

Step 3: Specify Thread Size from Table below:

Metric Thread Sizes

Thread Size	Add to Catalog Number
M16	M16
M20	M20
M25	M25
M32	M32
M40	M40
M50	M50
M63	M63
M75	M75
M80	M80
M85	M85
M90	M90
M100	M100

NPT Thread Sizes

Thread Size	Add to Catalog Number
1/2" NPT	050NPT
3/4" NPT	075NPT
1" NPT	100NPT
1 1/4" NPT	125NPT
1 1/2" NPT	150NPT
2" NPT	200NPT
2 1/2" NPT	250NPT
3" NPT	300NPT
3 1/2" NPT	350NPT
4" NPT	400NPT
—	—
—	—



Certifications and Compliances

- ATEX E Exd IIC/E Exe II with SIRA 03ATEX2079X
- Standards EN50014:1998, EN50018:2000, EN50019:2000 and EN50281-1-1:1998
- Class I, Zone 1
- CSA Exd IIC/Exe II
- Enclosure Type 4X
- IP66, IP67 and IP68
- GOST R - Exd IICU/Exe IIU

Design Data (millimeters)

Gland Size	A (across corners)	B (thread length)
16	28.0	16.0
20S	28.0	16.0
20	33.0	16.0
25	41.4	16.0
32	50.6	16.0
40	60.5	16.0
50S	71.5	16.0
50	71.5	16.0
63S	88.0	19.0
63	88.0	19.0
75S	99.0	19.0
75	99.0	19.0
80	115.2	25.0
85	115.2	25.0
90	125.7	25.0
100	125.7	25.0

Application

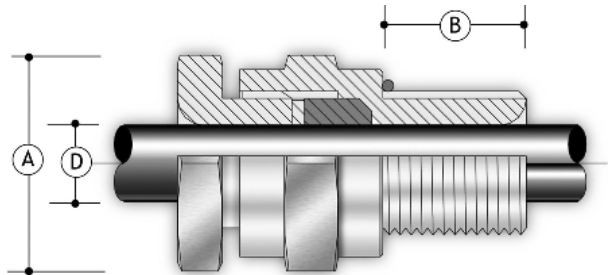
For use in Zone 1 or 2 hazardous areas with ATEX/CENELEC certified equipment and unarmoured, braided or marine shipboard cable.

Features

All TUSC cable glands offer:

- a flameproof or increased safety seal on the outer sheath of unarmoured or braided cable
- a weatherproof seal to the outer sheath of the cable
- integral entry thread seal (metric entry threads only)
- brass construction (optional stainless steel)
- optional nickel-plate finish
- metric or NPT threads

TU3SC cable glands offer a zero halogen version for extreme high and low temperature applications (-60°C to +180°C).



TUSC Brass Cable Glands

ATEX and CENELEC Range for Unarmoured or Braided Cable

ATEX and CENELEC Dual E Exd IIC/E Exe II
Zone 1 or 2 Hazardous Areas
CSA Exd IIC/Exe II, Class I, Zone 1
Enclosure Type 4X
IP66/67/68

5F

5F Cable and
Cord Fittings

Ordering Information

Build your catalog number from the information below. All catalog numbers consist of three main sections:

1. Select the Gland Type (i.e., TU1SC)
2. Select the Gland Size based on cable specifications (i.e., 20S)
3. Specify Thread Size (i.e., 075NPT)

Ordering example:

TU1SC/NP/20S/075NPT

Step 1 – Select Gland Type from Table below:

Gland Types

Gland Type	Description
TU1SC	For Unarmoured or Braided cable with neoprene seal – brass construction.
TU3SC	For Unarmoured or Braided cable with silicone seal for extreme temp. – brass construction.
TU1SCS	For Unarmoured or Braided cable with neoprene seal – stainless steel construction.
TU3SCS	For Unarmoured or Braided cable with silicone seal for extreme temp. – stainless steel construction.

For optional nickel-plate finish add suffix /NP after Gland Type (i.e., TU1SC/NP).

For optional poly-bagged kit including gland, brass locknut, sealing washer and PCP shroud, add "K1" at the end of Gland Type (i.e. TU1SCK1).

Step 2 – Select Gland Size based on Cable Size from Table below:

Cable Sizes (Dimensions are all in millimeters)

Gland Size	Available Entry Threads		Cable Outer Sheath [D]		Shroud Size †
	Metric	NPT	Min	Max	
16	M20	½" or ¾"	3.4	8.4	L24
20S	M20	½" or ¾"	7.2	11.7	L24
20	M20	½" or ¾"	9.6	14.0	L30
25	M25	¾" or 1"	13.5	20.0	L38
32	M32	1" or 1¼"	19.5	26.3	L46
40	M40	1¼" or 1½"	23.0	32.2	L55
50S	M50	1½" or 2"	28.2	38.2	L65
50	M50	2"	33.2	44.1	L65
63S	M63	2" or 2½"	39.3	50.1	L80
63	M63	2½"	46.7	56.0	L80
75S	M75	2½" or 3"	52.3	62.0	L90
75	M75	3"	58.1	68.0	L90
80	M80 × 2	3" or 3½"	62.3	72.0	L104
85	M85 × 2	3" or 3½"	69.1	78.0	L104
90	M90 × 2	3½" or 4"	74.1	84.0	L114
100	M100 × 2	3½" or 4"	82.1	90.0	L114

† For PVC or PCP shrouds see Accessories, page 93

Step 3 – Specify Thread Size from Table below:

Metric Thread Sizes

Thread Size	Add to Catalog Number
M16	M16
M20	M20
M25	M25
M32	M32
M40	M40
M50	M50
M63	M63
M75	M75
M80	M80
M85	M85
M90	M90
M100	M100

NPT Thread Sizes

Thread Size	Add to Catalog Number
½" NPT	050NPT
¾" NPT	075NPT
1" NPT	100NPT
1¼" NPT	125NPT
1½" NPT	150NPT
2" NPT	200NPT
2½" NPT	250NPT
3" NPT	300NPT
3½" NPT	350NPT
4" NPT	400NPT
–	–
–	–



Atex and CENELEC Range



TUCF

Certifications and Compliances

- ATEX E Exd I & IIC with SIRA 03ATEX1552X
- Standards EN50014, EN50018 and EN50281-1-1:1998
- IP66 and IP68 at 100 meters
- DTS01 1991 deluge
- CSA Exd I & IIC
- Type 4X
- Zone 1 and Zone 2
- Ignitable dusts, Zones 21 and 22
- GOST R-Exd I & IICU
- Mining Equipment Group I, M2

Application

The TUCF series is a flameproof E Exd compound filled barrier cable gland for use in Zone 1 or 2 hazardous areas with ATEX/CENELEC equipment and unarmoured cable. Also, for use in Exd and Exe hazardous areas with CSA equipment and unarmoured cable. The TUCF series will maintain the flameproof Exd integrity of any volume enclosure with an internal ignition source for all gas groups when used with any unarmoured cable types.

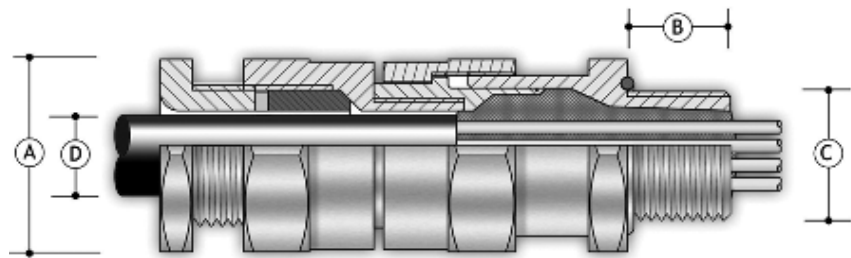
Features:

All TUCF Cable glands:

- are available in all brass or all stainless steel construction.
- are provided with sealing compound that cures in 4 hours at 21°C.
- maintain Flameproof Exd methods of explosion protection.
- provide a secondary seal on the outer sheath offering IP66/68 and Type 4X protection.
- provide an entry thread seal (metric threads only).
- meet DTS01 1991 deluge requirements.
- may be terminated 1 hour after creation of seal.
- may be energized 4 hours after creation of seal.
- are available with metric or NPT threads.
- are available with optional nickel-plate finish.
- are provided with silicone seals, temperature range -60°C to +85°C.

Design Data (millimeters)

Gland Size	A (across corners)	B
16	28.0	16
20S	28.0	16
20	33.0	16
25	41.4	16
32	50.6	16
40	60.5	16
50S	71.5	16
50	71.5	16
63S	88.0	19
63	88.0	19
75S	99.0	19
75	99.0	19
80	115.2	25
85	115.2	25
90	125.7	25
100	125.7	25



TUCF Series Barrier Gland

Atex and CENELEC Range

ATEX and CENELEC E Exd I & IIC ATEX I M2 II 2 GD
Ignitable dusts, Zones 21 and 22 CSA Exc I & IIC
Class I, Zone 1 or 2 Hazardous Areas
Type 4X, IP66/68
DTS01 1991 Deluge

5F



5F Cable and Cord Fittings

Ordering Information

Build your catalog number from the information below. All catalog numbers consist of three main sections:

1. Select the Gland Type based on material required (i.e., TUCFB)
2. Select the Gland Size based on cable specifications (i.e., 20S)
3. Specify Thread Size (i.e., 075NPT) (Available sizes listed in step 2)

Ordering example:
TUCFB/20S/075NPT

Step 1: Select Gland Type from Table below:

Gland Types

Gland Type	Description
TUCFB	Compound filled universal gland for steel wire, steel braid & steel tape w/ silicone seal - Brass construction
TUCFS	Compound filled universal gland for steel wire, steel braid & steel tape w/ silicone seal - Stainless steel construction

For optional nickel-plate finish on brass glands add suffix /NP after Gland Type (i.e., TUCFB/NP). For reduced bore gland add "R" at the end of Gland Type (i.e., TUCFBR). For optional poly-bagged kit including gland, locknut, earth tag, sealing washer and PVC shroud, add "K1" at the end of Gland Type (i.e., TUCFBK1).

Step 2: Select Gland Size based on Cable Size from Table below:

Cable Sizes (Dimensions are all in millimeters)

Gland Size	Available Entry Threads		GLAND SEAL RANGE					Shroud Size
			Cable Inner Sheath/Cores [C]			Cable Outer Sheath [D]		
						Standard		
	Metric	NPT	Max No. of Cores	Max Over Cores	Max Inner Sheath	Min	Max	
16	M20	½" or ¾"	7	8.4	8.4	3.4	8.4	L24
20S	M20	½" or ¾"	8	10.4	11.7	4.8	11.7	L24
20	M20	½" or ¾"	14	12.5	14.0	9.5	14.0	EL30
25	M25	¾" or 1"	25	17.8	20.0	11.7	20.0	EL38
32	M32	1" or 1¼"	50	23.5	26.3	18.1	26.3	EL46
40	M40	1¼" or 1½"	80	28.8	32.2	22.6	32.2	EL55
50S	M50	2"	100	34.2	38.2	28.2	38.2	EL65
50	M50	2"	100	39.4	44.1	33.1	44.1	EL65
63S	M63	2½"	120	44.8	50.1	39.3	50.1	EL80
63	M63	2½"	120	50.0	56.0	46.7	56.0	EL80
75S	M75	3"	140	55.4	62.0	52.3	62.0	EL90
75	M75	3"	140	60.8	68.0	58.0	68.0	EL90
80	M80 x 2	3" or 3½"	160	64.4	72.0	61.9	72.0	L104
85	M85 x 2	3" or 3½"	180	69.8	78.0	69.1	78.0	L104
90	M90 x 2	3½" or 4"	200	75.1	84.0	74.1	84.0	L114
100	M100 x 2	3½" or 4"	220	80.5	90.0	81.8	90.0	L114

Step 3: Specify Thread Size from Table below:

Metric Thread Sizes

Thread Size	Add to Catalog Number
M16	M16
M20	M20
M25	M25
M32	M32
M40	M40
M50	M50
M63	M63
M75	M75
M80	M80
M85	M85
M90	M90
M100	M100

NPT Thread Sizes

Thread Size	Add to Catalog Number
1/2" NPT	050NPT
3/4" NPT	075NPT
1" NPT	100NPT
1 1/4" NPT	125NPT
1 1/2" NPT	150NPT
2" NPT	200NPT
2 1/2" NPT	250NPT
3" NPT	300NPT
3 1/2" NPT	350NPT
4" NPT	400NPT
—	—
—	—



Atex and CENELEC Range



TCCF

Certifications and Compliances

- ATEX E Exd I & IIC with SIRA 03ATEX1552X
- Standards EN50014, EN50018 and EN50281-1-1:1998
- IP66 and IP68 at 100 meters
- DTS01 1991 deluge
- CSA Exd I & IIC
- Type 4X
- Zone 1 and Zone 2
- Ignitable dusts, Zones 21 and 22
- GOST R-Exd I & IICU
- Mining Equipment Group I, M2

Application

The TCCF series is a flameproof E Exd compound filled barrier cable gland for use in Zone 1 or 2 hazardous areas with ATEX/CENELEC equipment and conduit. The gland provides a flameproof Exd seal on the cables individual conductors within a conduit. Also, for use in Exd and Exe hazardous areas with CSA equipment and braided and marine shipboard cable. The TCCF series will maintain the flameproof Exd integrity of any volume enclosure with an internal ignition source for all gas groups when used with conduit.

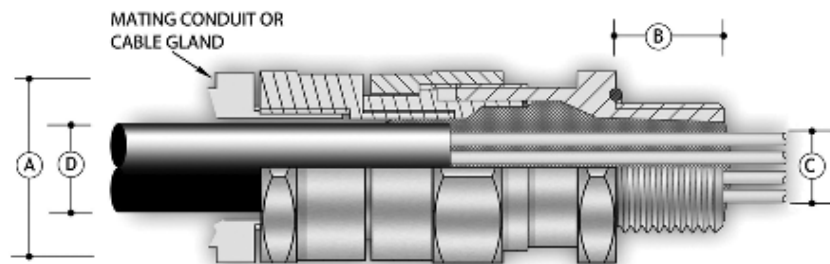
Features:

All TCCF Cable glands:

- are available in all brass or all stainless steel construction.
- are provided with sealing compound that cures in 4 hours at 21°C.
- maintain Flameproof Exd and Increase Safety Exe methods of explosion protection.
- provide a seal on the conduit offering IP66/68 and Type 4X protection.
- provide an entry thread seal (metric threads only).
- meet DTS01 1991 deluge requirements.
- may be terminated 1 hour after creation of seal.
- may be energized 4 hours after creation of seal.
- are available with metric or NPT threads.
- are available with optional nickel-plate finish.
- have a temperature range of -60°C to +85°C.

Design Data (millimeters)

Gland Size	A (across corners)	B
20	33.0	16
25	41.4	16
32	50.6	16
40	60.5	16
50	71.5	16
63	88.0	19
75	99.0	19
80	115.2	25
85	115.2	25
90	125.7	25
100	125.7	25



TCCF Series Barrier Gland

Atex and CENELEC Range

ATEX and CENELEC E Exd & IIC ATEX I M2 II 2 GD
Ignitable dusts, Zones 21 and 22 CSA Exc I IIC
Class I, Zone 1 or 2 Hazardous Areas
Type 4X, IP66/88
DTS01 1991 Deluge

5F



5F Cable and Cord Fittings

Ordering Information

Build your catalog number from the information below. All catalog numbers consist of three main sections:

1. Select the Gland Type based on material required (i.e., TCCFB)
2. Select the Fitting Size based on entry threads (i.e., 20)
3. Specify Male Entry Thread Size (i.e., 075NPT)
4. Specify Female Entry Thread Size (i.e., 075NPT)

Ordering example:
TCCFB/20S/075NPT

Step 1: Select Gland Type from Table below:

Gland Types

Gland Type	Description
TCCFB	Cable gland for conduit - Brass construction
TCCFS	Cable gland for conduit - Stainless steel construction

For optional nickel-plate finish on brass glands add suffix /NP after Gland Type (i.e., TCCFB/NP).

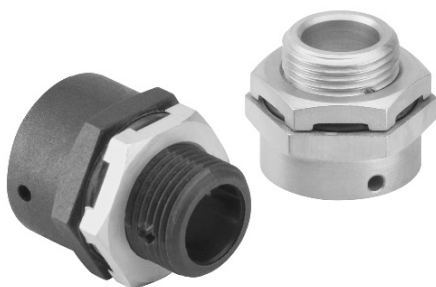
Step 2: Select Gland Size based on Cable Size from Table below:

Cable Sizes (Dimensions are all in millimeters)

Fitting Size Ref	Male Entry Threads		Female Entry Threads		SEALING RANGE		
					Cable Conductors / Cores		
	Metric	NPT	Metric	NPT	Max No. of Cores	Max Over Cores [C]	Max Cable Inside Fitting [D]
20	M20	1/2" or 3/4"	M20	1/2" or 3/4"	14	12.5	14.0
25	M25	3/4" or 1"	M25	3/4" or 1"	25	17.8	20.0
32	M32	1" or 1 1/4"	M32	1" or 1 1/4"	50	23.5	26.3
40	M40	1 1/4" or 1 1/2"	M40	1 1/4" or 1 1/2"	80	28.8	32.2
50	M50	2"	M50	2"	100	39.4	44.1
63	M63	2 1/2"	M63	2 1/2"	120	50.0	56.0
75	M75	3"	M75	3"	140	60.8	68.0
80	M80 x 2	3" or 3 1/2"	M80 x 2	3" or 3 1/2"	160	64.4	72.0
85	M85 x 2	3" or 3 1/2"	M85 x 2	3" or 3 1/2"	180	69.8	78.0
90	M90 x 2	3 1/2" or 4"	M90 x 2	3 1/2" or 4"	200	75.1	84.0
100	M100 x 2	3 1/2" or 4"	M100 x 2	3 1/2" or 4"	220	80.5	90.0

Step 3: Specify Male Thread Size from Table Above:

Step 4: Specify Female Thread Size from Table Above:

**Certifications and Compliances**

- SIRA 99 ATEX 3050U
- I M2 II 2GD, E Exe I & II (Stainless Steel & Brass only)
- II 2GD, E Exe II (Nylon only)
- CSA Class I, Division 2, Groups A, B, C & D, Exe II
- Enclosure Type 4X
- IP66

Operating Temperature

- -50°C to +85°C

Application

For use in enclosures to provide a method to effectively drain moisture while allowing the enclosure to breathe.

Features

All NEMA 4X breather/drains offer:

- Castellated locknuts that allow moisture to pass between the enclosure and the locknut to the drain holes in the fitting.
- Available in brass, stainless steel (Type 316) or 30% glass filled nylon.
- Captive "O" ring on recess of the face of the breather/drain to optimize ingress protection.
- ATEX and CSA Certified for worldwide market acceptance.
- Available with metric or NPT threads.

Ordering Information**NEMA 4X Breather/Drain**

Entry Method	Material	Catalog Number
M20	Brass	ACDPEB/M20/15
M20	Stainless Steel	ACDPES/M20/15
M20	Nylon	ACDPEBN/M20/15
M25	Brass	ACDPEB/M25/15
M25	Stainless Steel	ACDPES/M25/15
M25	Nylon	ACDPEBN/M25/15
1/2"	Brass	ACDPEB/050NPT/15
1/2"	Stainless Steel	ACDPES/050NPT/15
3/4"	Brass	ACDPEB/075NPT/15
3/4"	Stainless Steel	ACDPES/075NPT/15

Thread Data (Dimensions are all in millimeters)

Thread Size	Major Diameter	Pitch	Length	Min. Hex
M16	15.97	1.50	16.00	24
M20	19.97	1.50	16.00	30
M25	24.97	1.50	16.00	38
M32	31.97	1.50	16.00	46
M40	39.97	1.50	16.00	55
M50	49.97	1.50	16.00	65
M63	62.97	1.50	19.00	80
M75	74.97	1.50	19.00	90
M80	79.97	2.00	25.00	104
M85	84.97	2.00	25.00	104
M90	89.97	2.00	25.00	114
M100	99.97	2.00	25.00	114
1/2" NPT	21.22	1.81	19.90	24
3/4" NPT	26.57	1.81	20.10	30
1" NPT	33.23	2.20	25.00	38
1 1/4" NPT	41.99	2.20	25.60	46
1 1/2" NPT	48.05	2.20	26.00	55
2" NPT	60.09	2.20	26.90	65
2 1/2" NPT	72.7	3.18	39.90	80
3" NPT	88.61	3.18	41.50	90
3 1/2" NPT	101.36	3.18	42.80	104
4" NPT	113.97	3.18	44.00	114

Weight Data (Weights are all in grams)

Gland Size	TWDC/TBDC	TWCF/TBCF	TWSC/TBSC	TUSC	TUDC
16	141	—	116	85	139
20S	131	191	110	86	129
20	190	188	161	120	176
25	265	275	234	167	246
32	424	429	355	253	396
40	673	673	590	375	626
50S	966	962	532	588	898
50	743	740	616	459	691
63S	1389	—	1255	836	1258
63	1142	—	999	693	1030
75S	1690	—	1473	1091	1537
75	1347	—	1122	844	1225
80	2615	—	—	1690	2379
85	2335	—	—	1510	2124
90	3470	—	—	1650	3157
100	3090	—	—	1520	2811

Glossary of Terms

I M2 - Gas Group 1, M2 is the ATEX category for equipment suitable for Zones 21 & 22 (Mining applications).

II 2GD - Gas Group II, 2 is the ATEX category for equipment suitable for Zones 1 & 2, GD denotes suitability for both Gas and Dust atmospheres.

ATEX - The ATEX Directive (94/9/EC) applies to equipment and protective systems intended for use in potentially explosive atmospheres within Europe. The directive outlines the conformity assessment procedures and product classification for explosion protected (Ex) products. All explosion protected products placed on the market within Europe after 30th June 2003 must comply with these requirements.

Cable Glands - A fitting designed to terminate cable or flexible cord at junction boxes, control centers, lighting fixtures, panelboards and other enclosures. Also provides strain relief and environmental sealing.

CENELEC - The standards-writing body of the European Union.

Deluge Areas - A deluge area is one where the cable gland may be temporarily submersed in water. (Shell DTS01 tested).

Earth Tag - Designed as a ground connection that is affixed to the entry threads of the cable gland.

E Exe I & II - Increased Safety, Gas Groups I (Mining) & II (Surface).

E Exe II - Increased Safety, Gas Group II (Surface).

GOST - Gosstandart is the state approvals and standards body of the Russian Federation.

IEC - International Electrotechnical Commission.

IP Rating - IP stands for ingress protection and is a term used by the IEC. The IP rating indicates the degree of protection provided by the cable gland from environmental elements. It is similar to NEMA ratings. IP54 is protected against dusts and no ingress of water sprayed from all directions. IP66 is completely dust proof and no ingress of water from jets similar to heavy seas. IP67 is completely dust proof and no ingress of water from immersion at 1 meter depth. IP68 is completely dust proof and no ingress of water from deeper and prolonged immersion.

PCP - polychloroprene.

PVC - poly-vinyl-chloride.

Reduced Bore - Options available on CENELEC certified Terminator Brass Cable Glands for a reduced bore on outer neoprene seal for smaller OD cable.

Shroud - A PVC, PCP or SIO accessory that is designed to cover the cable gland for added environmental protection.

SIO - Silicone, low smoke, zero halogen shroud.

Locknuts, Earth Tags, Sealing Washers,
Metric Adapters, PVC Shrouds,
PCP Shrouds



Brass Locknut – Standard locknut to affix a hazardous area brass cable gland in a plain hole

Size	Cat. #	Size	Cat. #	Size	Cat. #
M16	BLN/M16	M80	BLN/M80	1½"	BLN/150NPT
M20	BLN/M20	M85	BLN/M85	2"	BLN/200NPT
M25	BLN/M25	M90	BLN/M90	2½"	BLN/250NPT
M32	BLN/M32	M100	BLN/M100	3"	BLN/300NPT
M40	BLN/M40	1½"	BLN/050NPT	3½"	BLN/350NPT
M50	BLN/M50	¾"	BLN/075NPT	4"	BLN/400NPT
M63	BLN/M63	1"	BLN/100NPT	–	–
M75	BLN/M75	1¼"	BLN/125NPT	–	–



Brass Earth Tag – Standard earth connection for threaded cable glands

Size	Cat. #	Size	Cat. #	Size	Cat. #
M16	BET/M16	M80	BET/M80	1½"	BET/150NPT
M20	BET/M20	M85	BET/M85	2"	BET/200NPT
M25	BET/M25	M90	BET/M90	2½"	BET/250NPT
M32	BET/M32	M100	BET/M100	3"	BET/300NPT
M40	BET/M40	1½"	BET/050NPT	3½"	BET/350NPT
M50	BET/M50	¾"	BET/075NPT	4"	BET/400NPT
M63	BET/M63	1"	BET/100NPT	–	–
M75	BET/M75	1¼"	BET/125NPT	–	–



Sealing Washer – Required to maintain IP ratings above IP54

Size	Cat. #	Size	Cat. #	Size	Cat. #
M16	RNSW/M16	M80	RNSW/M80	1½"	RNSW/150NPT
M20	RNSW/M20	M85	RNSW/M85	2"	RNSW/200NPT
M25	RNSW/M25	M90	RNSW/M90	2½"	RNSW/250NPT
M32	RNSW/M32	M100	RNSW/M100	3"	RNSW/300NPT
M40	RNSW/M40	1½"	RNSW/050NPT	3½"	RNSW/350NPT
M50	RNSW/M50	¾"	RNSW/075NPT	4"	RNSW/400NPT
M63	RNSW/M63	1"	RNSW/100NPT	–	–
M75	RNSW/M75	1¼"	RNSW/125NPT	–	–

Brass Cable Gland Accessories

Locknuts, Earth Tags, Sealing Washers,
Metric Adapters, PVC Shrouds,
PCP Shrouds



Type A



Type B

Metric/NPT Thread Adapters – Brass adapters used to change the thread form and/or size

Adapters: NPT → Metric

Cat. #	Male Thread	Female Thread	Body Style
CAPRI: 740454	1/2"	20mm	B
CAPRI: 740714	1/2"	25mm	B
CAPRI: 740464	3/4"	20mm	A
CAPRI: 740724	3/4"	25mm	B
CAPRI: 740474	1"	20mm	A
CAPRI: 740734	1"	25mm	A
CAPRI: 740994	1"	32mm	B
CAPRI: 740744	1 1/4"	25mm	A
CAPRI: 741004	1 1/4"	32mm	A
CAPRI: 741274	1 1/2"	40mm	A
CAPRI: 741284	2"	40mm	A
CAPRI: 741544	2"	50mm	A
CAPRI: 741804	2"	63mm	B
CAPRI: 741814	2 1/2"	63mm	A

Class I, Zone I, Group IIC & Class II

Adapters: Metric → NPT

Cat. #	Male Thread	Female Thread	Body Style
CAPRI: 744704	20mm	1/2"	B
CAPRI: 744964	20mm	3/4"	B
CAPRI: 744714	25mm	1/2"	A
CAPRI: 744974	25mm	3/4"	B
CAPRI: 744984	32mm	3/4"	A
CAPRI: 745244	32mm	1"	B
CAPRI: 745254	40mm	1"	A
CAPRI: 745514	40mm	1 1/4"	B
CAPRI: 745524	50mm	1 1/4"	A
CAPRI: 745794	63mm	1 1/2"	A

Class I, Zone I, Group IIC & Class II

Adapters are available with optional nickel-plate finish, add suffix -NP (i.e., ANM21-NP)



Black PVC Shroud – Covers the gland as added environmental protection

Size	Cat. #	Size	Cat. #
L24	PVC-L24	L65	PVC-L65
L30	PVC-L30	L80	PVC-L80
L38	PVC-L38	L90	PVC-L90
L46	PVC-L46	L104	PVC-L104
L55	PVC-L55	L114	PVC-L114



Black PCP Shroud – Covers the gland as added environmental protection†

Size	Cat. #†	Size	Cat. #†
L24	PCP-L24	L65	PCP-L65
L30	PCP-L30	L80	PCP-L80
L38	PCP-L38	L90	PCP-L90
L46	PCP-L46	L104	PCP-L104
L55	PCP-L55	–	–

† For a zero halogen version shroud, to be used with cable glands for extreme high and low temperature applications (i.e. TW3DC) change PCP catalog number to SIO (i.e., PCP-L24 becomes SIO-L24).

CAPRI Series Brass Cable Glands

One Gland for Steel-Wire Armour,
Steel Wire Braid and Steel-Tape Cable

EEx e II
EEx d IIB
Zone 1 or 2
IP 68

Universal clamping with
standard nickel plate finish



Certifications and Compliances

- ATEX E Exd IIC / E Exe II by Securite LCIE 97 ATEX 6006X
- Standards EN50014, EN50018, EN50019:2000, EN50281-1-1 and 2.
- IP68

Application

For terminating cable in Zone 1 or 2 hazardous areas with ATEX/ CENELEC certified equipment and steel wire armoured, braided or steel-tape cable. For use indoors or outdoors.

- E Exe II rating • E Exd IIB rating • E Exd IIC <2000 cm³

Features

All CAPRI Series brass cable glands offer:

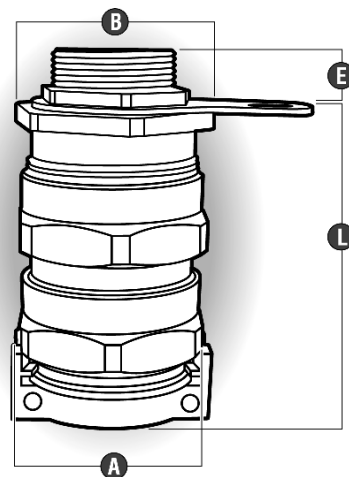
- one gland for 3 types of cable.
- a standard nickel plate finish.
- clamping and bonding on the armour.
- a flameproof seal on the inner sheath of the cable.
- a weatherproof seal to the outer sheath of the cable.
- IP68 ingress protection.
- a neoprene bushing temperature range of -40°C to 100°C.
- an optional earthing washer for use with lead sheath cable.
- metric or NPT entry threads.
- a perfect fit for cables with an inner sheath diameter of 4 mm to 82 mm.

Metric Design Data (millimeters)

Thread Gland					
Size	Size	A	B	E	L
16	5	19.0	19.0	15.0	36.0
16	6	24.0	24.0	15.0	42.0
20	5	19.0	24.0	15.0	36.0
20	6	24.0	24.0	15.0	42.0
20	7	30.0	30.0	15.0	46.0
25	6	24.0	30.0	15.0	42.0
25	7	30.0	30.0	15.0	46.0
25	8	41.0	41.0	15.0	56.0
32	8	41.0	41.0	15.0	56.0
32	9	48.0	48.0	15.0	63.0
40	9	48.0	48.0	15.0	63.0
40	10	55.0	55.0	15.0	68.0
50	10	55.0	55.0	16.0	68.0
50	11	64.0	64.0	16.0	74.0
63	12	72.0	72.0	17.0	77.0
63	13	85.0	85.0	17.0	85.0
75	13	85.0	85.0	18.0	85.0
75	14	95.0	95.0	18.0	92.0
80	14	95.0	95.0	20.0	92.0
80	15	110.0	110.0	20.0	104.0
90	15	110.0	110.0	22.0	104.0
90	16	120.0	110.0	22.0	108.0

NPT Design Data (millimeters)

Thread Gland					
Size	Size	A	B	E	L
1/2"	5	19.0	24.0	16.0	36.0
1/2"	6	24.0	24.0	16.0	42.0
1/2"	7	30.0	30.0	16.0	46.0
3/4"	6	24.0	30.0	16.0	42.0
3/4"	7	30.0	30.0	16.0	46.0
3/4"	8	41.0	41.0	16.0	56.0
1"	8	41.0	41.0	20.0	46.0
1"	9	48.0	48.0	20.0	63.0
1 1/4"	9	48.0	48.0	20.0	63.0
1 1/4"	10	55.0	55.0	20.0	68.0
1 1/2"	10	55.0	55.0	20.0	68.0
1 1/2"	11	64.0	64.0	20.0	74.0
2"	12	72.0	72.0	20.0	77.0
2"	13	85.0	85.0	20.0	85.0
2 1/2"	13	85.0	85.0	28.0	85.0
2 1/2"	14	95.0	95.0	28.0	92.0
3"	15	110.0	110.0	30.0	104.0
3"	16	120.0	120.0	30.0	108.0



CAPRI Series Brass Cable Glands cont.

One Gland for Steel-Wire Armour,
Steel Wire Braid and Steel-Tape Cable

EEx e II
EEx d IIB
Zone 1 or 2
IP 68

5F

5F Cable and
Cord Fittings

Ordering Information

Capri ADE 4F Series – Metric

Thread Size	Gland Size	GLAND SEAL RANGE				Armour Range	Catalog Number
		Cable Inner Sheath		Cable Outer Sheath			
		Min	Max	Min	Max		
16	5	4.0	8.5	6.0	12.0	0.90	CAPRI:846594
16	6	6.0	12.0	8.5	16.0	1.25	CAPRI:846504
20	5	4.0	8.5	6.0	12.0	0.90	CAPRI:846674
20	6	6.0	12.0	8.5	16.0	1.25	CAPRI:846694
20	7	8.5	15.5	12.0	21.0	1.25	CAPRI:846604
25	6	6.0	12.0	8.5	16.0	1.25	CAPRI:846774
25	7	8.5	16.0	12.0	21.0	1.25	CAPRI:846794
25	8	12.0	20.5	16.0	27.5	1.60	CAPRI:846704
32	8	12.0	21.0	16.0	27.5	1.25	CAPRI:846894
32	9	16.0	27.5	21.0	34.0	1.60	CAPRI:846804
40	9	16.0	27.5	21.0	34.0	2.00	CAPRI:846994
40	10	21.0	34.0	27.0	41.0	2.00	CAPRI:846904
50	10	21.0	34.0	27.0	41.0	2.50	CAPRI:847094
50	11	27.0	41.0	33.0	48.0	2.50	CAPRI:847004
63	12	33.0	48.0	40.0	56.0	2.50	CAPRI:847294
63	13	40.0	56.0	47.0	65.0	2.50	CAPRI:847204
75	13	40.0	56.0	47.0	65.0	2.50	CAPRI:847394
75	14	47.0	65.0	54.0	74.0	3.15	CAPRI:847304
80	14	47.0	65.0	54.0	74.0	3.15	CAPRI:847494
80	15	54.0	73.0	63.0	83.0	3.15	CAPRI:847404
90	15	54.0	74.0	63.0	83.0	3.15	CAPRI:847594
90	16	63.0	82.0	72.0	93.0	3.15	CAPRI:847504

Clamping Module

Gland Size	Cable Dia.		Catalog Number
	Min	Max	
5	8.0	12.0	CAPRI:810534
6	8.5	16.0	CAPRI:810634
7	12.0	21.0	CAPRI:810734
8	16.0	27.5	CAPRI:810834
9	21.0	34.0	CAPRI:810934
10	27.0	41.0	CAPRI:811034
11	33.0	48.0	CAPRI:811134
12	40.0	56.0	CAPRI:811234
13	47.0	65.0	CAPRI:811334
14	54.0	74.0	CAPRI:811434
15	63.0	83.0	CAPRI:811534
16	72.0	93.0	CAPRI:811634

PVC Shroud

Gland Size	Cable Dia.		Catalog Number
	Min	Max	
5	6.0	12.0	CAPRI:506050
6	8.5	16.0	CAPRI:506060
7	12.0	21.0	CAPRI:506070
8	16.0	27.5	CAPRI:506080
9	21.0	34.0	CAPRI:506090
10	27.0	41.0	CAPRI:506100
11	33.0	48.0	CAPRI:506110
12	40.0	56.0	CAPRI:506120
13	47.0	65.0	CAPRI:506130
14	54.0	74.0	CAPRI:506140
15	63.0	83.0	CAPRI:506150
16	72.0	93.0	CAPRI:506160

Capri ADE 4F Series – NPT

Thread Size	Gland Size	GLAND SEAL RANGE				Armour Range	Catalog Number
		Cable Inner Sheath		Cable Outer Sheath			
		Min	Max	Min	Max		
1/2"	5	4.0	8.5	6.0	12.0	0.90	CAPRI:848674
1/2"	6	6.0	12.0	8.5	16.0	1.25	CAPRI:848694
1/2"	7	8.5	15.5	12.0	21.0	1.25	CAPRI:848604
3/4"	6	6.0	12.0	8.5	16.0	1.25	CAPRI:848774
3/4"	7	8.5	16.0	12.0	21.0	1.25	CAPRI:848794
3/4"	8	12.0	20.5	16.0	27.5	1.60	CAPRI:848704
1"	8	12.0	21.0	16.0	27.5	1.25	CAPRI:848894
1"	9	16.0	26.0	21.0	34.0	1.60	CAPRI:848804
1 1/4"	9	16.0	27.5	21.0	34.0	2.00	CAPRI:848994
1 1/4"	10	21.0	34.0	27.0	41.0	2.00	CAPRI:848904
1 1/2"	10	21.0	34.0	27.0	41.0	2.00	CAPRI:849094
1 1/2"	11	27.0	41.0	33.0	48.0	2.50	CAPRI:849004
2"	12	33.0	48.0	40.0	56.0	2.50	CAPRI:849294
2"	13	40.0	53.0	47.0	65.0	2.50	CAPRI:849204
2 1/2"	13	40.0	56.0	47.0	65.0	2.50	CAPRI:849494
2 1/2"	14	47.0	62.5	54.0	74.0	2.50	CAPRI:849404
3"	15	54.0	74.0	63.0	83.0	3.15	CAPRI:849594
3"	16	63.0	78.0	72.0	93.0	3.15	CAPRI:849504

Lead Sheath Earthing Washer

Gland Size	Catalog Number
5	CAPRI:506050
6	CAPRI:506060
7	CAPRI:506070
8	CAPRI:506080
9	CAPRI:506090
10	CAPRI:506100
11	CAPRI:506110
12	CAPRI:506120
13	CAPRI:506130
14	CAPRI:506140
15	CAPRI:506150
16	CAPRI:506160

Earth Tags, Locknuts, Washers – for CAPRI Series only

Thread Size	Nickel Plated Brass Earth Tag	Nickel Plated Brass Locknut	Neoprene Sealing Washer	Thread Size	Nickel Plated Brass Earth Tag	Nickel Plated Brass Locknut	Neoprene Sealing Washer
1/2"	CAPRI:567064	CAPRI:280124	CAPRI:229012	M16	CAPRI:567034	CAPRI:221694	CAPRI:221649
3/4"	CAPRI:567084	CAPRI:280134	CAPRI:229034	M20	CAPRI:567054	CAPRI:222094	CAPRI:222049
1"	CAPRI:567104	CAPRI:280144	CAPRI:229010	M25	CAPRI:567074	CAPRI:222594	CAPRI:222549
1 1/4"	CAPRI:567134	CAPRI:280154	CAPRI:229114	M32	CAPRI:567094	CAPRI:223294	CAPRI:223249
1 1/2"	CAPRI:567154	CAPRI:280164	CAPRI:229112	M40	CAPRI:567124	CAPRI:224094	CAPRI:224049
2"	CAPRI:567174	CAPRI:280174	CAPRI:229020	M50	CAPRI:567154	CAPRI:225094	CAPRI:225049
2 1/2"	CAPRI:567194	CAPRI:280184	CAPRI:229212	M63	CAPRI:567184	CAPRI:226394	CAPRI:226349
				M75	CAPRI:567194	CAPRI:227594	CAPRI:227549

Application:

CD Series drains are for use in conduit systems to:

- Drain accumulated condensate.
- Provide ventilation to minimize condensation.

Drains are installed in hubs or drilled and tapped openings.

Standard Materials:

- CD bodies and nuts – steel or aluminum
- CD screen – stainless steel

Standard Finishes:

- Steel – electrogalvanized with chromate treatment.

Certifications and Compliances:

- UL Standard 514B

Options:

- Copper-free aluminum construction – add suffix -SA

**Ordering Information:**

Size	Cat. #
1/2	CD1
3/4	CD2

Portable Cord Connector

20A 460V AC/DC

Cl. I, Div. 1 & 2, Groups B,C,D
Cl. II, Div. 1 & 2, Group G
NEMA 3,4

5F

5F Cable and
Cord Fittings

Application:

EBY portable cord connectors are installed to:

- provide means for passing cord into an enclosure, through a bulkhead or into a rigid conduit in hazardous areas.
- form a non-slip connection or termination for cord

Features:

EBY portable cord connectors have:

- heavy duty rating
- factory sealing
- three, 12 inch long, #12 type SF-2 (150° C rating) stranded pigtails; 2 circuit wires and one identified grounding wire
- 3 pressure connectors for 3-conductor cord, range #18 to #12 AWG
- rugged construction to protect cable and cord from mechanical damage
- compact size permitting close grouping of several cords and/or cables
- cord clamp
- long neck bushings to prevent fraying of cord

Standard Materials:

- Copper-free aluminum
- Insulators – phenolic
- Bushing – Neoprene

Standard Finishes:

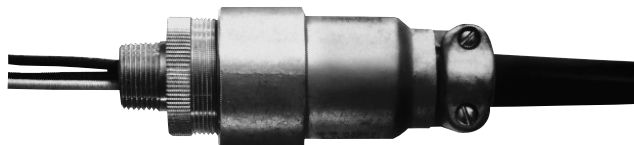
- Natural

Size Ranges:

- Thread – NPT 3/4" only
- Cord O.D. – .250" to .625"

Certifications and Compliances:

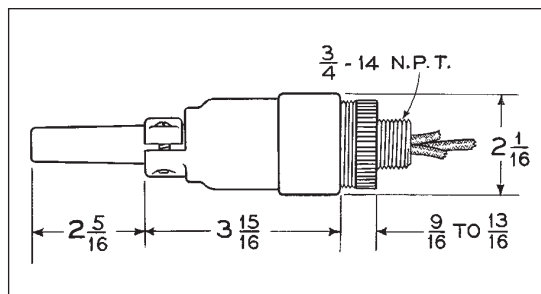
- NEC: Class I, Division 1 & 2, Groups B,C,D
Class II, Division 1 & 2, Group G
- UL Standard: 886



EBY

Nipple Size	Cord Dia.	Cat. #
3/4	.250 to .437	EBY2672
3/4	.375 to .500	EBY2682
3/4	.500 to .625	EBY26102

Dimensions



Application:

CGBS sealing connectors are for use with portable cords and types MV (unarmored), PLTC, SE (round), TC and UF cables.

CGBS sealing connectors are installed to:

- provide means for passing cord into an enclosure, through a bulkhead or into a rigid conduit in hazardous areas

These connectors are suitable for use in Class I, Groups C, D, Class II, Group G, and Class III locations.

- form a watertight seal for cord
- form a non-slip connection of termination for cord

Features:

CGBS sealing connectors have:

- rugged construction to protect cable and cord from mechanical damage
- compact size permitting close grouping of several cords and/or cables
- body well for Chico A sealing compound
- watertight seal by tightening one nut
- cord clamp
- large range of NPT sizes to permit use with any conduit system
- long neck bushings prevent cord fraying

Standard Materials:

- Body – steel
- Gland nut – copper-free aluminum
- Bushing – Neoprene

Standard Finishes:

- Steel – electrogalvanized with chromate treatment
- Aluminum – natural

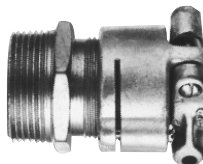
Size Ranges:

- Thread – NPT 1/2" to 1 1/4"
- Cord O.D. – 5/16" to 1 3/16"

Certifications and Complies:

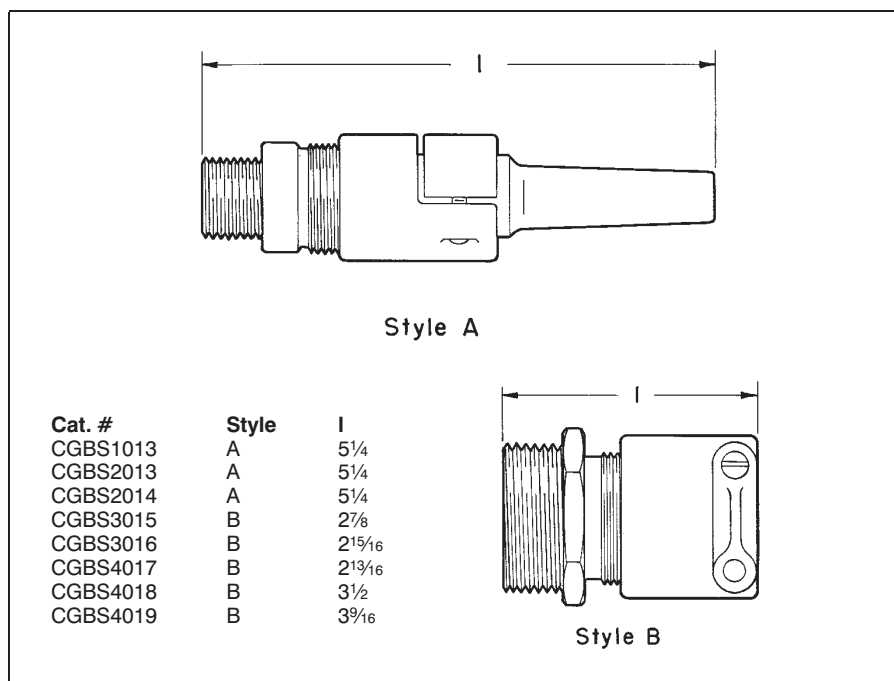
- NEC: Class I, Division 1 & 2, Groups C,D
Class II, Division 1 & 2, Group G
Class III

* Supplied complete with wire mesh grip in Canada.

Style A**Style B*****CGBS**

Size	Style	Cord Dia.	Complete with Gland Nut and Neoprene Bushing Cat. #	Neoprene Bushing Cat. #
1/2	A	.312 to .437	CGBS1013	BUSH013
3/4	A	.312 to .437	CGBS2013	BUSH013
3/4	A	.375 to .500	CGBS2014	BUSH014
1	B	.500 to .625	CGBS3015	BUSH95
1	B	.625 to .750	CGBS3016	BUSH96
1 1/4	B	.750 to .875	CGBS4017	BUSH97
1 1/4	B	.875 to 1.000	CGBS4018	BUSH98
1 1/4	B	1.000 to 1.188	CGBS4019	BUSH99

Note: See page 196 for Chico A Sealing Compound required to complete seal installation on CGBS series.

Dimensions

Application:

LCC cable tray conduit clamps are used for installation on cable tray side rails with inside flanges (requiring inside tray mounting) and outside flanges; LCCF clamps are for use exclusively on inside flanges.

LCC/LCCF cable tray conduit clamps:

- provide a means of clamping metal conduit (rigid steel or aluminum, IMC and EMT) to cable tray to provide for the exit of power and/or control cables from tray
- provide a means to firmly bond exit conduit to cable tray for best grounding continuity
- provide strong mechanical support for exit conduits and cables
- can be used indoors or outdoors, wherever cable tray systems are installed
- facilitate the safe exit of cables from tray – insure protection of cables from damage

Features:

- Quick and easy installation – low installed cost. Merely tighten clamp nut and/or set screw(s)
- Swivel hook clears conduit. No disassembly required for installation
- No drilling or welding necessary for installation
- Provides superior ground continuity between conduit and cable tray
- Clamps conduit at any angle with relation to tray – facilitates wire pulling, minimizes conduit bending
- Malleable iron body provides great strength
- Knurled body has no-slip surface for conduit and tray – positive grip assured
- Compact design has low profile – minimum tray space required for assembly
- Design accommodates all popular types of cable tray
- Accommodates wide range of conduit sizes – 1/2" through 4"

LCCF features:

- Outside mounting facilitates inside rail installation
- Adjustable hook assures positive grip on inside rail
- Accommodates 3/4" through 1 3/4" wide flange

Standard Materials:

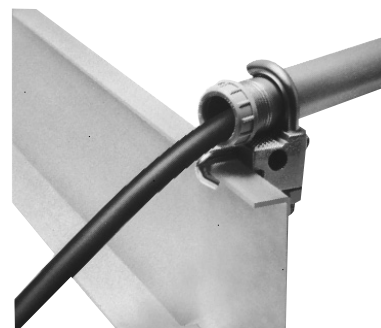
- Body – cast iron
- Hook – steel
- Set screws and clamping nut – steel
- Hook cap – vinyl

Standard Finishes:

- Cast iron – electrogalvanized and aluminum acrylic paint
- Steel – zinc electroplate
- Vinyl – natural



LCC – for use with outside rail tray



LCCF – for use with inside rail tray

Conduit Size Ranges:

- 1/2" to 4"

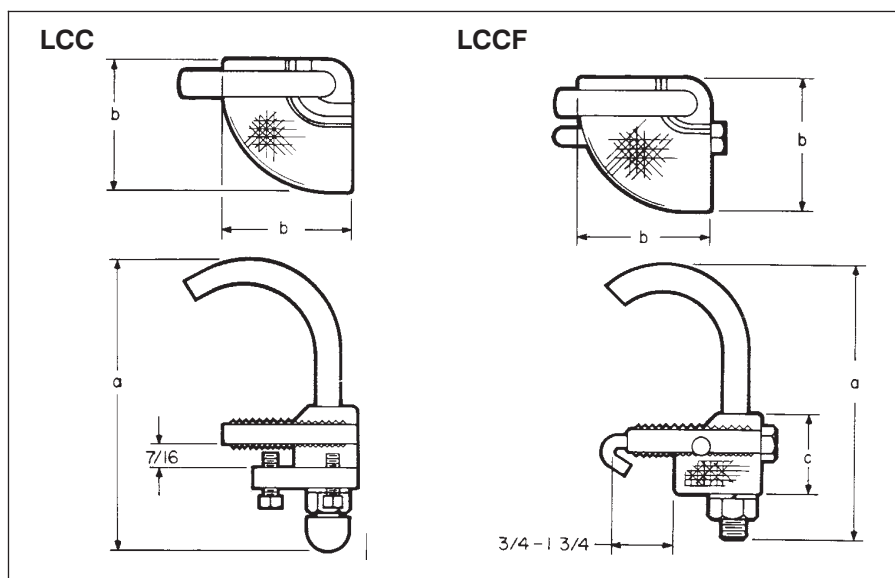
Certifications and Compliances:

- UL Standard: 467 (grounding and bonding equipment)

Conduit Size

Conduit Size	Cat. #	Cat. #
1/2	LCC1	LCCF1
3/4	LCC2	LCCF2
1	LCC3	LCCF3
1 1/4	LCC4	LCCF4
1 1/2	LCC5	LCCF5
2	LCC6	LCCF6
2 1/2	LCC7	LCCF7
3	LCC8	LCCF8
3 1/2	LCC9	LCCF9
4	LCC10	LCCF10

Dimensions



Conduit Size	LCC a	LCC b
1/2	3 3/16	1 11/16
3/4	3 7/16	1 11/16
1	3 9/16	1 11/16
1 1/4	4	1 11/16
1 1/2	4 13/16	2 11/16
2	5 5/16	2 11/16
2 1/2	5 13/16	2 11/16
3	6 13/16	3 3/4
3 1/2	7 5/16	3 3/4
4	7 13/16	3 3/4

LCCF a	LCCF b	LCCF c
3 1/8	1 5/8	1 11/32
3 11/32	1 5/8	1 11/32
3 19/32	1 5/8	1 11/32
3 15/16	1 5/8	1 11/32
4 3/4	2 3/4	1 11/16
5 1/4	2 3/4	1 11/16
5 3/4	2 3/4	1 11/16
6 3/4	3 11/16	2 3/16
7 1/4	3 11/16	2 3/16
7 3/4	3 11/16	2 3/16

Application:

Cable tray grounding conductor clamps are designed for use in heavy industrial applications:

- to provide a means for securely attaching a grounding conductor to cable tray to maintain grounding continuity for the entire cable tray system
- to provide protection of equipment through a reliable method for carrying ground fault currents
- to meet UL and NEC code requirements
- for installation indoors or outdoors, with most types of cable trays with inside or outside flanges

Features:

- Meets requirements of NEC code Article 318-7 for grounding and bonding
- Quick and easy installation – low installed cost. No drilling or special tools required.
- Accommodates solid (where suitable) or stranded aluminum or copper grounding conductors in sizes from #6 to 2/0
- Set screw bonds the clamp to the tray and another set screw securely attaches the grounding conductor to the clamp – outstanding pull-out and vibration resistance
- Design accommodates most popular types of cable tray
- Mechanical device – can be easily inspected
- Malleable iron body provides high strength

Standard Materials:

- Body – malleable iron
- Set screws – steel

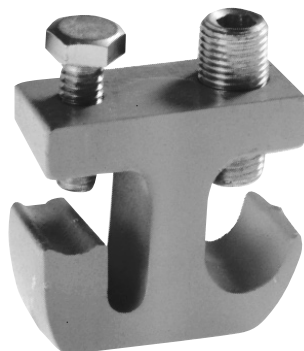
Standard Finishes:

- Malleable iron and steel – electrogalvanized

Certifications and

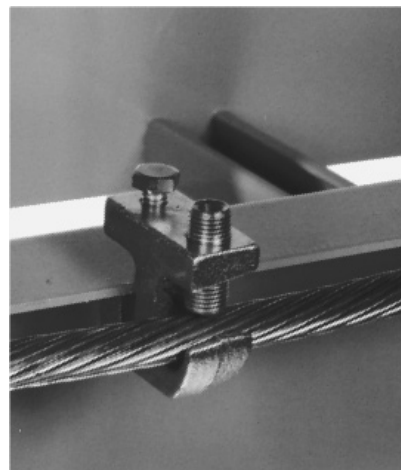
Compliances:

- UL Standard: 467 (Grounding and Bonding Equipment)



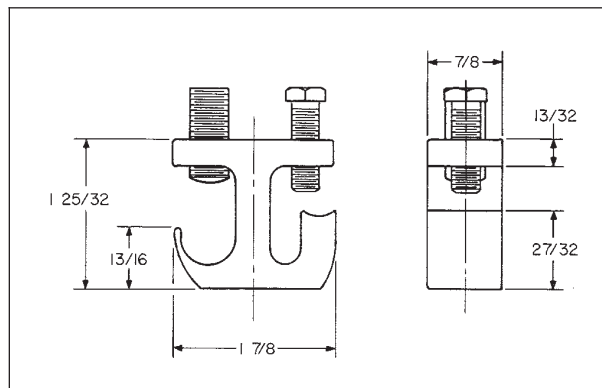
Ground Wire Size
#6 to 2/0

Cat. #
TGC40



TGC Clamp installs on cable trays with inside or outside flanges

Dimensions



TW Series THRU-WALL BARRIER® Cable/Conduit Sealing Device

5F

Ordering Information Pgs. 102 to 105
Dimensions Pgs. 105 and 106

Application:

THRU-WALL BARRIER cable/conduit sealing device is used wherever there is a need to seal cables or conduits penetrating fire- or non-fire-rated walls, ceilings, floors, bulkheads or decks. For non-fire-rated walls, ceilings, floors, bulkheads or decks, THRU-WALL BARRIER also restricts water and dust and will help contain treated air.

THRU-WALL BARRIER is designed:

- to provide a seal for cable/conduit penetrations through masonry, concrete or steel; to restrict the entrance of contaminants through cable/conduit penetrations into clean areas
- for use with most types of power, instrument and control cables as well as conduits
- to be used indoors or outdoors, in new construction or existing structures

Features:

System

- Few parts required to seal a wide range of diameters of cables or conduits
- Easy and fast installation, using factory assembled components
- High degree of flexibility with interchangeable sealing block assemblies and a selection of different sizes of frames

Mounting frame

- One-piece cast malleable iron or steel mounting frame can be cast into concrete during wall construction, grouted in masonry surfaces or welded into steel bulkheads at any time
- Retrofit frame allows for easy installation of frame where cables/conduit are already installed
- Available in sizes to accommodate a wide range of cable tray sizes and loadings including single and multiple layers of cables for power or instrument applications
- Cast keyways in mounting frame align and position sealing block assemblies
- Frames can be installed in wall such that sealing block assemblies can be inserted in either horizontal or vertical position

Sealing block assembly

- Specially formulated elastomeric material between cast malleable iron pressure plates protects cable from mechanical damage; provides high pullout resistance and positive cable separation; expands during fire to seal any voids left by burned cable insulation
- Interchangeable sealing block assemblies fit all THRU-WALL BARRIER mounting frames
- Cast stops on front pressure plate prevent sealing block assembly from slipping through mounting frame during installation
- Assemblies are offered for all cable/conduit outside diameters from .250" to 4.500" (6.4 mm to 114.3 mm). Cables with diameters less than .250" can be accommodated – consult Cooper Crouse-Hinds.



- Sealing block openings will accommodate undersize and out-of-round cable
- Each sealing block assembly seals multiple cables/conduits. Compact design permits close nesting of cables, saving space.
- Reducers permit sealing block assemblies to accept cables with smaller O.D. than the specified range
- Plugs are used to fill unused openings in sealing block assemblies. Blank sealing block assemblies fill unused spaces in mounting frames, providing for future expansion.

Standard Materials:

- Mounting frame:
 - TWF, TWFR – cast malleable iron
 - TWFS – cast carbon steel, ASTM A27 Grade 60-30
- Pressure plate – cast malleable iron
- Sealing material – special elastomeric material
- Clamping hardware – steel

Standard Finish:

- Malleable iron and hardware – electrogalvanized
- Steel – aluminized weldable paint
- Special elastomeric material – natural

Certifications and Compliances:

- ASTM Standard E-119
- NFPA 251
- UL Classification per UL Standard 1479
- USCG Acceptance – consult Cooper Crouse-Hinds
- NAVSEA Approval – Electric Plant Installation Standard Methods No. S9300-AW-EDG-010/EPISM – TWFS/TWBS assemblies

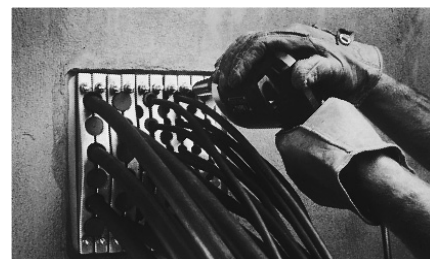
Easy three step installation



1. Cast, grout or weld the one-piece mounting frame into masonry or steel surface.



2. Feed cables/conduit through the frame.



3. Position cables/conduit, insert factory-assembled sealing blocks into keyways in mounting frame, and tightened nuts on clamping hardware to effect the seal.

5F
Cable and
Cord Fittings

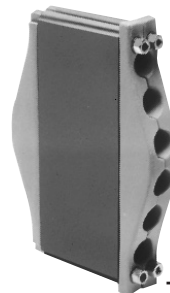
TW Series THRU-WALL BARRIER® Cable Conduit Sealing Device

Sealing Block Assemblies & Mounting Frames
Dimensions Pgs. 105 and 106

TWB Sealing Block Assemblies

TWB sealing block assemblies are offered for cable/conduit outside diameters (O.D.) from .250" to 4.500" (6.4 mm to 114.3 mm). Cables with diameters less than .250" can be accommodated – consult Cooper Crouse-Hinds. Each assembly opening will accommodate a .250" (6.4 mm) O.D. range. When clamping hardware is tightened, the elastomeric material is uniformly compressed around all cable/conduits for a completely tight fit.

Sealing block assemblies are offered for use in marine applications. Each assembly has the required lubrication and sealing gaskets to meet U.S. Navy Hydrostatic Pressure Test Requirements. Assemblies for marine applications are available for cable/conduit outside diameters (O.D.) from .250" (6.4 mm) through 3.500" (88.9 mm). To order, add suffix S to TWB sealing block assembly Cat. No. **Example: TWBS4036.**



TWB2063

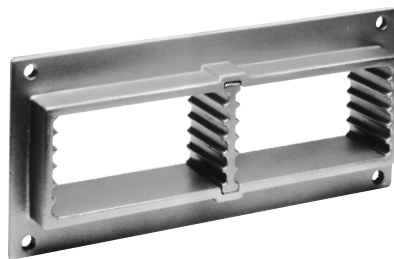
Depending on opening size range, a standard sealing block assembly will seal from one to eleven cables

Opening Size Range { In. mm	.250-.500 6.4-12.7	.500-.750 12.7-19.1	.750-1.000 19.1-25.4	1.000-1.250 25.4-31.8	1.250-1.500 31.8-38.1	1.500-1.750 38.1-44.5	1.750-2.000 44.5-50.8	2.000-2.250 50.8-57.2	2.250-2.500 57.2-63.5	
No. Openings In Block	11 Added*	6 11 Added*	6	5	4	3	3	3	2	
Sealing Block Assembly Cat. #	TWB2111 TWB1111	TWB2062 TWB2112	TWB2063	TWB3054	TWB3045	TWB30355	TWB4036	TWB40366	TWB5027	
Frame Spaces Required	2 1	2 2	2	3	3	3	4	4	5	
Plug Cat. #	TWP1		TWP3		TWP5		TWP6		TWP7	
Reducer Cat. #§	—	TWR2	TWR3	TWR4	TWR5	TWR55	TWR6	TWR66	TWR7	

TWF Mounting Frames

TWF(S) mounting frames may be installed either horizontally or vertically. TWFR retrofit frames are used wherever cables/conduits are already installed through a fire- or non-fire-rated wall, floor or ceiling. They are designed with a removable section to permit installation around cables/conduits. TWFR retrofit frames can be grouted into walls, floors, or ceilings; or welded into steel bulkheads or decks. TWFR retrofit frames will perform in the same manner as the one-piece TWF(S) frames.

TWFS steel mounting frames are welded directly into steel bulkheads, decks and prepared sleeves. For marine applications, keeper bars are provided to securely hold TWBS sealing block assemblies in position when installed.



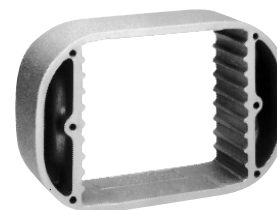
TWF12



TWF6



TWF10



TWFS10

No. of Spaces Available
6
10
12
20
24
30

Frame Cat. #
TWF6
TWF10
TWF12 ♦
TWF20
TWF24
TWF30

Retrofit Frame Cat. #
TWFR6
TWFR10
TWFR12 ♦
TWFR20
TWFR24
TWFR30

Cast Steel Frame Cat. #
TWFS10
TWFS20
TWFS30

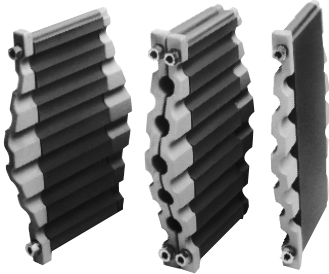
TW Series THRU-WALL BARRIER® Cable/Conduit Sealing Device

5F

Plugs, Reducers, Closure Cover Kits, Anchors & Lubricant
Ordering Information

5F Cable and
Cord Fittings

TWB2062



TWB2112

TWP Plugs



TWP plugs will close any unused openings in sealing block assemblies. See table for plug catalog numbers which match specific sealing block assemblies.

TWR Reducers



TWR reducers will reduce openings by .250" (6.4 mm) in sealing block assemblies. See table for reducer catalog numbers which match specific sealing block assemblies. More than one reducer can be used in a single opening.

It is possible to increase cable fill density with double-sided sealing block assemblies (TWB1111 and TWB2112) sandwiched between halves of a standard assembly.

	2.500-2.750 63.5-69.9	2.750-3.000 69.9-76.2	3.000-3.250 76.2-82.6	3.250-3.500 82.6-88.9	3.500-4.250† 101.6-108.0	4.250-4.500 108.0-114.3	Blank – No Openings	
	2	2	2	2	1	1	None	None
	 TWB50277	 TWB5028	 TWB60288	 TWB6029	 TWB7011010	 TWB70111	 TWB1	 TWB3
	5	5	6	6	7	7	1	3
	TWP7	TWP8		TWP9	TWP10	TWP11	—	
	◀ TWR77	TWR8	TWR88	TWR9 TWR99	TWR1010 TWR10	TWR11	—	

TWB Closure Cover Kits

TWB closure cover kits offer an optional method to close TWF frames installed for future expansion or those that are abandoned. Closure cover kits include two covers clamped to opposite sides of the frame with hardware provided. The insulating material provided is sandwiched between the two covers to maintain the fire rating of the assembly. See table below for closure kit catalog numbers.

No. of Spaces Available	Closure Cover Kit Cat. #**
6	TWB600
10	TWB1000
12	TWB600‡
20	TWB2000
24	TWB2400
30	TWB3000

TWK Anchors

TWK anchor assemblies are used to attach mounting frames to wall, ceiling or floor when grouting in frames.

Mounting Type
Flush
Recessed

Cat. #
TWK1
TWK2

† For 3.5" - 4" cable/conduit – use TWB7011010 assembly and reduce down using TWR reducers.

* Catalog # TWB1111 and TWB2112 are used between TWB2111 and TWB2062 in cases where the number of cables to be sealed in .250-.750 range exceeds the number of openings in standard assemblies. Use as many of these higher density assemblies as needed, sandwiched between halves of a standard assembly.

** TWB closure cover kits are not designed to provide a watertight seal in marine/shipboard applications or washdown areas. One kit seals one unused frame opening of same size. Example: use one TWB2000 kit to seal one TWF20, or TWR20 frame.

‡ Use two TWB600 kits to seal one TWF12 or TWR12 frame opening.

§ TWR reducers match TWB sealing block assemblies shown in column above Cat. No. and reduce openings to accept cable size ranges shown in adjacent column to the left (in direction of arrow).

◆ Includes removable partition.

TW Series THRU-WALL BARRIER® Cable/Conduit Sealing Device

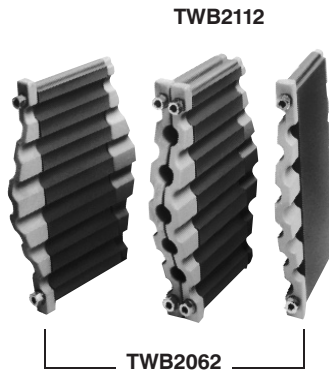
Ordering Information Ordering Example A

Product Information

Selecting and specifying THRU-WALL BARRIER components is a simple procedure. Primary components for the THRU-WALL BARRIER consist of TWF mounting frames in various sizes and TWB sealing block assemblies for cable/conduit outside diameters (O.D.) in 1/4-inch increments from .250" to 4.500" (6.4 mm to 114.3 mm). Cables with diameters less than .250" can be accommodated – consult Cooper Crouse-Hinds.

Cable/conduit sizes can be mixed within a sealing block assembly by inserting TWR reducers to accommodate smaller diameters. The use of reducers can decrease the number of sealing block assemblies required. More than one reducer can be used in a single opening.

Another way to increase density is to use TWB1111 and TWB2112 sealing block assemblies wherever there is a large number of cables/conduits in sizes ranging from .250" to .750".



Shown here is a double-sided sealing block assembly (TWB2112) sandwiched between halves of a standard sealing block assembly (TWB2062). Additional double-sided sealing block assemblies may be used to accommodate larger quantities of cables or conduits.

Unused sealing block openings must be closed with TWP plugs. Blank sealing block assemblies TWB1 and TWB3 are used to fill each unused opening in the mounting frame and permit future expansion of the system. Typical practice is to include space allowance of 20 to 50% for future expansion. TWP closure kits are used to seal entire frames and permit future system expansion.

Specifying & Ordering

The selection of components is based on the quantity and sizes of cables or conduits going through the penetrations. Once these are known, the sealing block assemblies and frames can be selected.

Step 1. Group cables/conduits by outside diameter (O.D.) and rank from the largest to the smallest.

Step 2. Keeping in mind that sealing block assemblies are available in one-quarter inch increments, group cables/conduits that fall within the same sealing block assembly O.D. size range.

Step 3. Starting with the largest cable/conduit O.D., select the sealing block assemblies required. All openings in each

sealing block assembly must be filled. Specify TWR reducers to accommodate smaller diameter cables where possible and TWP plugs to fill openings not used.

Step 4. Total the frame spaces required for the specified sealing block assemblies and select an appropriate mounting frame(s). Frames are available in 6-, 10-, 12-, 20-, 24- and 30-space sizes. Keep future expansion requirements in mind when specifying frame. Specify blank sealing block assemblies to fill unused mounting frame space and TWB closure cover kits to fill unused frames.

Step 5. Check specification/order to be sure it includes 1) frames, 2) sealing block assemblies, 3) plugs and 4) reducers.

Ordering Example A:

Cable tray size: 24"

Cables specified: 5 power cables – sizes ranging from 1.960" to 2.200" O.D.

Spare capacity required: 50%

Step 1. Group cables by O.D. and rank from largest to smallest.

Cable Qty.	Cable O.D.
4	2.200
1	1.960
Total 5	

Step 2. Group cables that fall within the same sealing block assembly size.

Cable Qty.	Sealing Block O.D. Range
4	2.000-2.250
1	1.750-2.000
Total 5	

Step 3. Starting with the largest cable O.D., select the quantity of sealing block assemblies required. Specify TWR reducers to accommodate smaller diameter cables

Sealing Block Assy Cat. #	O.D. Range	Number of Openings	Cables to be Sealed	Openings Not Used	Frame Spaces Required
TWB40366	2.000-2.250	3	3	—	4
TWB40366	2.000-2.250	3	2	1	4
	Totals 66		5	1	8

Step 5. Bill of materials for specification/order should read:

- (1) TWF12
- (2) TWB40366
- (4) TWB1
- (1) TWR66
- (1) TWP6

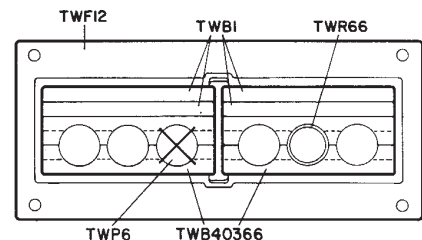
where possible and TWP plugs to fill openings not used. (See Example A diagram.)

Note: In the example, one TWR66 reducer is required to accommodate the cable with 1.960" O.D. and one TWP6 plug is required for the unused opening.

Step 4. Total the frame spaces required for sealing block assemblies and select appropriate size mounting frame. Factor in spare capacity required for future expansion.

Total frame spaces required	8
Specification requires 50% spare capacity	4
Total spaces	12

Selection: One TWF12 mounting frame with capacity of 12 spaces. Four TWB1 blank sealing block assemblies to fill unused frame space. (Choice of frame could vary based on future expansion needs and/or specific cable arrangement.)



Example A diagram

TW Series THRU-WALL BARRIER® Cable/Conduit Sealing Device

5F

5F Cable and
Cord Fittings

Ordering Example B Dimensions

Ordering Example B:

Cable tray size: 24"

Cables specified: 6 power cables – sizes ranging from 2.140" to 2.180" O.D.
31 control cables – sizes ranging from .550" to .945" O.D.

Spare capacity required: 25%

Step 1. Group cables by O.D. and rank from largest to smallest

Cable Qty.	Cable O.D.
4	2.180
2	2.140
1	.945
4	.890
7	.700
9	.637
10	.550

Total 37

Step 2. Group cables that fall within the same sealing block assembly O.D. range.

Cable Qty.	Sealing Block O.D. Range
6	2.000-2.250
5	.750-1.000
26	.500-.750

Total 37

Step 3. Starting with the largest cable O.D., select the quantity of sealing block assemblies required. Specify TWR reducers to accommodate smaller diameter cables where possible and TWP plugs to fill openings not used. (See Example B diagram.)

Sealing Block Assy Cat. #	O.D. Range	Number of Openings	Cables to be Sealed	Openings Not Used	Frame Spaces Required
TWB40366	2.000-2.250	3	3	—	4
TWB40366	2.000-2.250	3	3	—	4
TWB2063	.750-1.000	6	5	1	2
TWB2062	.500-.750	6	6	—	2
TWB2112	.500-.750	11	11	—	2
TWB2112	.500-.750	11	9	2	2
Totals 40			37	3	16

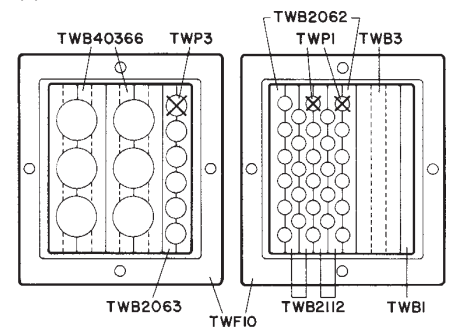
Note: In this example, two TWB2112 sealing block assemblies are sandwiched between two halves of a TWB2062. This dramatically increases cable density in minimum frame space. One TWP3 plug is required for unused opening in TWB2063 and two TWP1 plugs are required for unused openings in the TWB2112.

Step 4. Total the frame spaces required for sealing block assemblies and select appropriate size mounting frame(s). Factor in spare capacity required for future expansion.
Total frame spaces required 16
Specification requires 25% spare capacity 4
Total 20 spaces

Selection: Two TWF10 (or one TWF20) mounting frames with total capacity of 20 spaces. One TWB3 and one TWB1 blank sealing block assembly to fill unused frame space. (Choice of frame could vary based on future expansion needs and/or specific cable/conduit arrangement.)

Step 5. Bill of materials for specification/order should read:

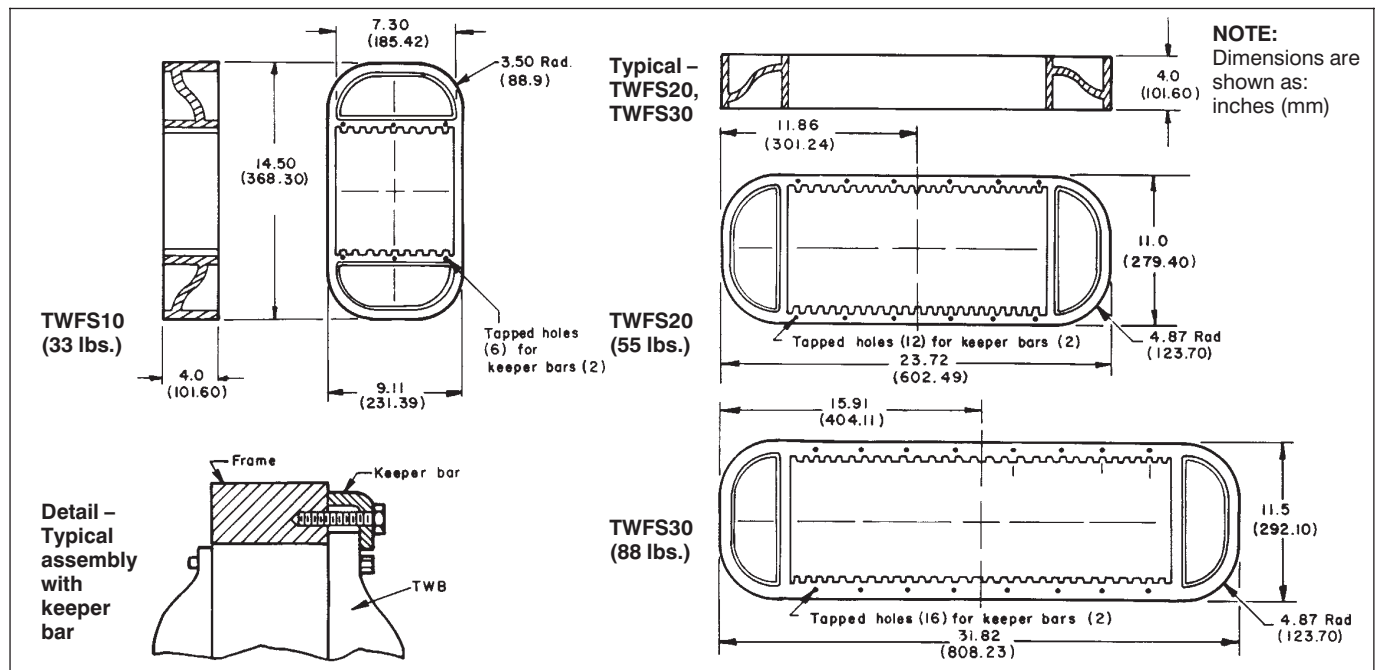
- (2) TWF10 or (1) TWF20
- (2) TWB40366
- (1) TWB2063
- (1) TWB2062
- (2) TWB2112
- (1) TWP3
- (2) TWP1
- (1) TWB3
- (1) TWB1

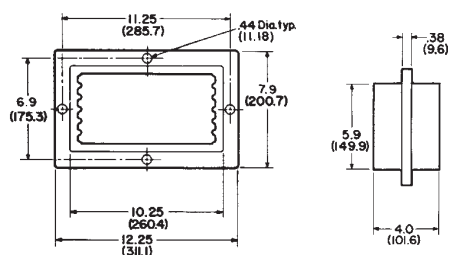
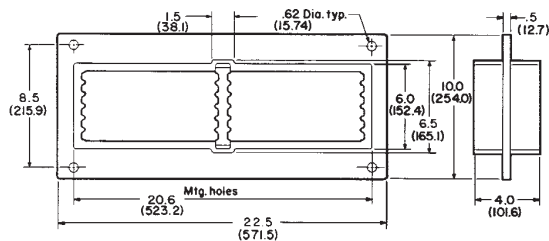
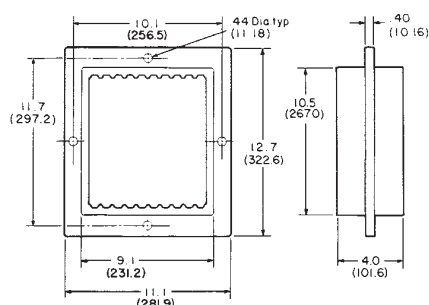
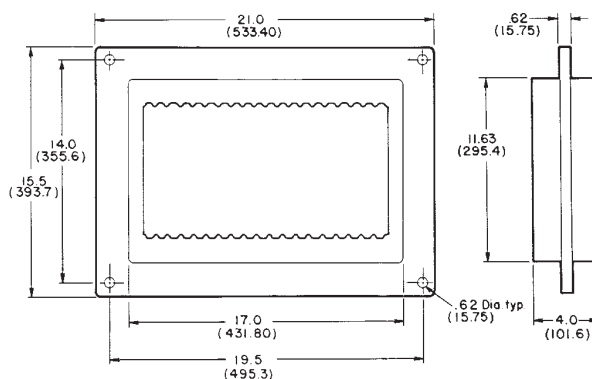
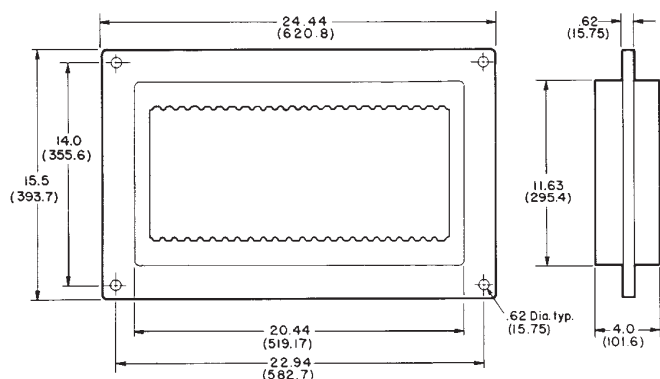
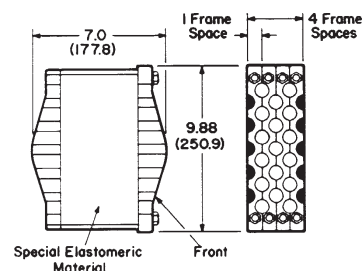


Example B diagram

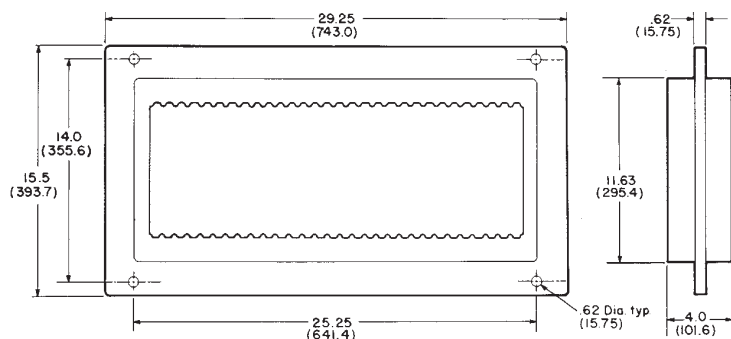
* For TWFS mounting frame hole dimensions, contact Cooper Crouse-Hinds ECM field representative or headquarters.

Dimensions*

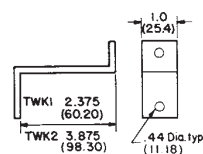


Cable/Conduit Sealing Device
Dimensions*TWF6
(20 lbs.)TWF12
(38 lbs.)TWF10
(25 lbs.)TWF20
(82 lbs.)TWF24
(88 lbs.)

TWB



TWF30 (97 lbs.)



TWK

NOTES:

1. Dimensions are shown as inches (mm).
2. Dimensions shown for TWF frames also apply for TWF retrofit frames.

* For TWF mounting frame hole dimensions, contact Cooper Crouse-Hinds ECM field representative or headquarters.

Environmental Seal for Conduit passing through Concrete Walls, Floors or Ceilings

Link-Seal® Devices

Application:

Cooper Crouse-Hinds Link-Seal® is the quick, economical way to seal around conduit in concrete walls, floors and casings. Link-Seal is a modular mechanical seal used for any type of penetration.

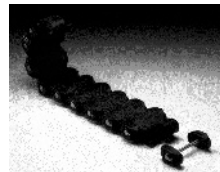
Features & Benefits:

- Saves time and money – Link-Seal installs in up to 75% less time than competition products
- Positive Hydrostatic Sealing – properly installed, Link-Seal is rated at 20 psig (40 feet of head), which exceeds the performance requirements of most applications
- Environment Seals – Link-Seal environmental seal is designed for long life and use as a permanent seal. Seal elements are specially compounded to resist aging, ozone, sunlight, water and a wide range of chemicals
- Fire Seals – for fire protection in floor and wall penetrations Link-Seal is Factory Mutual approved
- Resistance to high and low temperatures – Link-Seal environmental seal is manufactured from special compounds that resist temperatures from -40°F to +250°F. Link-Seal Fire Seal is manufactured from a silicone material that resists temperatures from -67°F to +400°F
- Corrosion protection – where installation against galvanic corrosion (or electrolysis) is required, Link-Seal provides complete separation pipe and casing. Metal-to-metal contact is eliminated
- Compensates for misalignment – Link-Seal allows for some angular and off-center conduit conditions and still seals effectively

- Absorbs shock, sound and vibration – this inherent benefit of Link-Seal helps reduce conduit failure due to fatigue and threaded connections

Standard Materials:

- Rubber Seal Elements:
EPDM (Black) –
Environmental Seals
Silicone (Grey) –
Fire Seals
- Pressure Plates:
Glass Reinforced Nylon –
Environmental Seals
Steel w/Zinc Dichromate
Plate – Fire Seals
- Fasteners:
Carbon Steel, Zinc
Dichromate Plate –
Environmental Seals
316 Stainless Steel –
Environmental with Option
S316
Carbon Steel w/Zinc
Dichromate – Fire Seals



Environmental Conduit Seal

Ordering Information:

It's easy. Locate the conduit size and type you are installing in the columns on the left. Then locate the seal and sleeve part numbers under the installation method you've selected. No sleeve is needed for cored or cast hole installation.

Cored or Cast Hole Method:

Note the appropriate hole diameter and select the seal part number. Example: For 3/4" EMT conduit through a cored hole – Core a 2" diameter hole and install the conduit using Link-Seal Part number LSA200-C-04.

Sleeve Methods:

Select either the plastic or metal sleeve. Both types of sleeves are designed to be cast into concrete walls or floors. Sleeves are ordered separately. Remember to add the wall or floor thickness to the steel sleeve part number to insure the sleeve is provided in the proper length. Plastic sleeves are a standard 16" long and can be modified in the field.

Materials:

The standard product for environmental conduit seals is made from EPDM supplied with steel bolts and nuts with a zinc dichromate finish. These seals are suitable for use in water, direct ground burial and atmospheric conditions. They provide electrical insulation where cathodic protection is required. EPDM rubber is resistant to most inorganic acids and alkalis, and some organic chemicals (acetone, alcohol, ketones).

Options:

To order the standard product with 316 stainless steel bolts and nuts, for corrosive environments, replace the "C" in the seal catalog number with "S316". For example, a 1/2" seal for rigid steel conduit for a cored hole is an LSA200-C-04; ordered with stainless steel bolts and nuts the catalog number becomes LSA200-S316-04.

Environmental Seal for Conduit passing through Concrete Walls, Floors or Ceilings

Wet Locations
Corrosive Environments

Ordering Information

Environmental Conduit Seal

Cable and
Cord Fittings
5F

Conduit Nominal Size	Conduit Type*	Conduit Actual O.D. (inches)	Cast/Cored Hole Dia. (inches)	Seal for Cast/Cored Hole Cat. #	Plastic Sleeve Cat. #	Seal for Plastic Sleeve Cat. #	Steel Sleeve Cat. #	Seal for Steel Sleeve Cat. #
1/2"	EMT	.706	2.000	LSA275-C-04	LS-CS-2-16	LSA200-C-04	WS2-15-**	LSA275-C-04
1/2"	IMC	.815	2.000	LSA200-C-04	LS-CS-2-16	LSA200-C-04	WS2-21-**	LSA200-C-04
1/2"	RSC	.840	2.000	LSA200-C-04	LS-CS-2-16	LSA200-C-04	WS2-21-**	LSA200-C-04
3/4"	EMT	.922	2.000	LSA200-C-04	LS-CS-3-16	LSA315-C-04	WS2-15-**	LSA200-C-04
3/4"	IMC	1.029	2.500	LSA275-C-06	LS-CS-3-16	LSA315-C-04	WS2-15-**	LSA200-C-04
3/4"	RSC	1.050	2.500	LSA275-C-06	LS-CS-3-16	LSA315-C-04	WS2.5-20-**	LSA275-C-06
1"	EMT	1.163	3.000	LSA315-C-04	LS-CS-3-16	LSA300-C-04	WS2.5-20-**	LSA275-C-06
1"	IMC	1.290	3.000	LSA300-C-04	LS-CS-3-16	LSA300-C-04	WS2.5-10-**	LSA275-C-06
1"	RSC	1.315	3.000	LSA300-C-04	LS-CS-3-16	LSA300-C-04	WS2.5-20-**	LSA200-C-05
1 1/4"	EMT	1.510	3.000	LSA300-C-04	LS-CS-3.5-16	LSA315-C-05	WS3.5-22-**	LSA315-C-05
1 1/4"	IMC	1.638	3.000	LSA275-C-07	LS-CS-3.5-16	LSA300-C-05	WS3.5-22-**	LSA315-C-05
1 1/4"	RSC	1.660	3.000	LSA275-C-07	LS-CS-3-16	LSA200-C-06	WS3.5-22-**	LSA315-C-05
1 1/2"	EMT	1.740	3.500	LSA315-C-05	LS-CS-3.5-16	LSA300-C-05	WS3.5-32-**	LSA315-C-05
1 1/2"	IMC	1.883	3.500	LSA300-C-05	LS-CS-3.5-16	LSA275-C-08	WS3.5-22-**	LSA300-C-05
1 1/2"	RSC	1.900	3.500	LSA300-C-05	LS-CS-3.5-16	LSA275-C-08	WS3.5-22-**	LSA300-C-05
2"	EMT	2.197	4.000	LSA315-C-06	LS-CS-4-16	LSA315-C-06	WS4-23-**	LSA315-C-06
2"	IMC	2.360	4.000	LSA300-C-06	LS-CS-4-16	LSA300-C-06	WS4-23-**	LSA300-C-06
2"	RSC	2.375	4.000	LSA300-C-06	LS-CS-4-16	LSA300-C-06	WS4-23-**	LSA300-C-06
2 1/2"	EMT/RSC	2.875	4.000	LSA200-C-09	LS-CS-4-16	LSA200-C-09	WS4-23-**	LSA200-C-09
2 1/2"	IMC	2.857	4.000	LSA200-C-09	LS-CS-4-16	LSA200-C-09	WS4-23-**	LSA200-C-09
3"	EMT/RSC	3.500	5.000	LSA300-C-08	LS-CS-5-16	LSA300-C-08	WS5-25-**	LSA300-C-08
3"	IMC	3.476	5.000	LSA300-C-08	LS-CS-5-16	LSA300-C-08	WS5-25-**	LSA300-C-08
3 1/2"	EMT/RSC	4.000	6.000	LSA325-C-05	LS-CS-6-16	LSA325-C-05	WS6-28-**	LSA325-C-05
3 1/2"	IMC	3.971	6.000	LSA325-C-05	LS-CS-6-16	LSA325-C-05	WS6-28-**	LSA325-C-05
4"	EMT/RSC	4.500	6.000	LSA300-C-10	LS-CS-6-16	LSA300-C-10	WS6-28-**	LSA300-C-10
4"	IMC	4.466	6.000	LSA300-C-10	LS-CS-6-16	LSA300-C-10	WS6-28-**	LSA300-C-10
5"	RSC	5.563	8.000	LSA425-C-06	LS-CS-8-16	LSA425-C-06	WS8-32-**	LSA425-C-06
6"	RSC	6.625	10.000	LSA475-C-10	LS-CS-10-16	LSA475-C-10	WS8-18-**	LSA300-C-15

* EMT – Electrical Metallic Tubing; IMC – Intermediate Metal Conduit;
RSC – Rigid Steel Conduit

** Specify length of steel sleeve in inches. Example: WS6-28-08 is 8" long. All plastic sleeves
come in standard 16" lengths and can be field cut to desired length.

Note: The last two digits of the seal part number indicate the number of links (and the number
of bolts) per seal.

Fire Seal for Conduit passing through Concrete Walls, Floors or Ceilings

Fire Conduit Seal

Ordering Information:

Locate the conduit size and type you are installing in the columns on the left. Then locate the seal and sleeve part number under the installation method you've selected. No sleeve is needed for cored or cast hole installation.

Cored or Cast Hole Method:

Note the appropriate hole diameter and select the seal part number. Example: For ¾" EMT conduit through a cored hole – Core a 2" diameter hole and install the conduit using Link-Seal Part number LSA200-T-04.

Sleeve Methods:

Select the appropriate metal sleeve for the size and type of conduit being installed. The sleeve should be ordered separately. Remember to add the wall or floor thickness to the steel sleeve part number to insure the sleeve is provided in the proper length.

Materials:

The standard product for fire conduit seals is made from grey silicone supplied with steel bolts and nuts with a zinc dichromate finish. These seals are Factory Mutual approved for use as a 1-hour fire stop and can handle temperature extremes of -67°F to +400°F.

Options:

To order the fire seal for a 3-hour rating, replace the "T" in the seal catalog number with a "FS". For example, a ½" seal for rigid steel conduit for a cored hole is an LSA200-T-04; ordered with option FS the catalog number becomes LSA200-FS-04. A 3-hour fire seal can also be made by using two Model T's back-to-back.

The Model FS is basically two Model T's back-to-back. In Model FS, a tie rod tightens both seals simultaneously – for use when only one side of an opening is accessible.

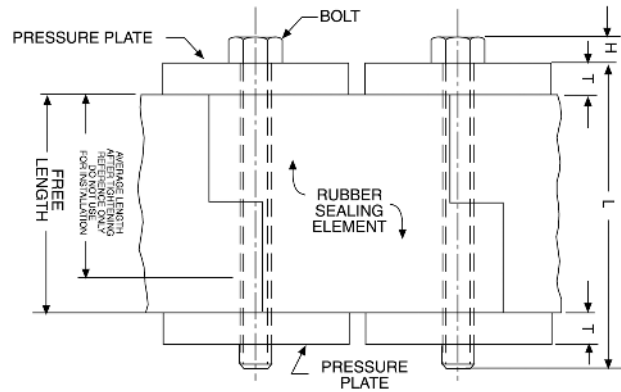
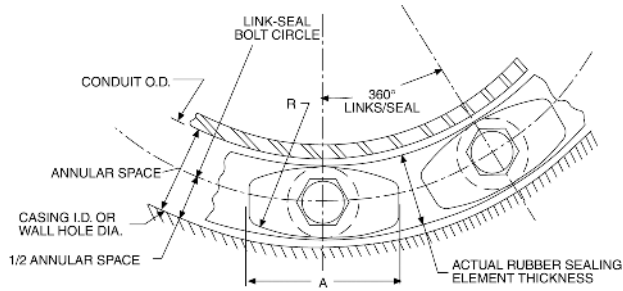
Conduit Nominal Size	Conduit Type*	Conduit Actual O.D. (inches)	Cast/Cored Hole Dia. (inches)	Seal for Cast/Cored Hole Cat. #	Steel Sleeve Cat. #	Seal for Steel Sleeve Cat. #
½"	EMT	.706	2.000	LSA275-T-04	WS2-15-**-	LSA275-T-04
½"	IMC	.815	2.000	LSA200-T-04	WS2-21-**-	LSA200-T-04
½"	RSC	.840	2.000	LSA200-T-04	WS2-21-**-	LSA200-T-04
¾"	EMT	.922	2.000	LSA200-T-04	WS2-15-**-	LSA200-T-04
¾"	IMC	1.029	2.500	LSA275-T-06	WS2-15-**-	LSA200-T-04
¾"	RSC	1.050	2.500	LSA275-T-06	WS2.5-20-**-	LSA275-T-06
1"	EMT	1.163	3.000	LSA315-T-04	WS2.5-20-**-	LSA275-T-06
1"	IMC	1.290	3.000	LSA300-T-04	WS2.5-10-**-	LSA275-T-06
1"	RSC	1.315	3.000	LSA300-T-04	WS2.5-20-**-	LSA200-T-05
1¼"	EMT	1.510	3.000	LSA300-T-04	WS3.5-22-**-	LSA315-T-05
1¼"	IMC	1.638	3.000	LSA275-T-07	WS3.5-22-**-	LSA315-T-05
1¼"	RSC	1.660	3.000	LSA275-T-07	WS3.5-22-**-	LSA300-T-05
1½"	EMT	1.740	3.500	LSA315-T-05	WS3.5-32-**-	LSA300-T-05
1½"	IMC	1.883	3.500	LSA300-T-05	WS3.5-22-**-	LSA300-T-05
1½"	RSC	1.900	3.500	LSA300-T-05	WS3.5-22-**-	LSA275-T-08
2"	EMT	2.197	4.000	LSA315-T-06	WS4-23-**-	LSA315-T-06
2"	IMC	2.360	4.000	LSA300-T-06	WS4-23-**-	LSA300-T-06
2"	RSC	2.375	4.000	LSA300-T-06	WS4-23-**-	LSA300-T-06
2½"	EMT/RSC	2.875	4.000	LSA200-T-09	WS4-23-**-	LSA200-T-09
2½"	IMC	2.857	4.000	LSA200-T-09	WS4-23-**-	LSA200-T-09
3"	EMT/RSC	3.500	5.000	LSA300-T-08	WS5-25-**-	LSA300-T-08
3"	IMC	3.476	5.000	LSA300-T-08	WS5-25-**-	LSA300-T-08
3½"	EMT/RSC	4.000	6.000	LSA325-T-05	WS6-28-**-	LSA325-T-05
3½"	IMC	3.971	6.000	LSA325-T-05	WS6-28-**-	LSA325-T-05
4"	EMT/RSC	4.500	6.000	LSA300-T-10	WS6-28-**-	LSA300-T-10
4"	IMC	4.466	6.000	LSA300-T-10	WS6-28-**-	LSA300-T-10
5"	RSC	5.563	8.000	LSA425-T-06	WS8-32-**-	LSA425-T-06
6"	RSC	6.625	10.000	LSA475-T-10	WS8-18-**-	LSA300-T-15

* EMT – Electrical Metallic Tubing; IMC – Intermediate Metal Conduit;
RSC – Rigid Steel Conduit

* * Specify length of steel sleeve in inches.
Example: WS6-28-08 is 8" long.

Note: The last two digits of the seal part number indicate the number of links (and the number of bolts) per seal.

Technical Information



Link-Seal Model #	Rubber Sealing Element			Pressure Plate			Bolt			
	Actual Thickness (inches)	Free Length (inches)	Avg. Length After Tightening (inches)	A (inches)	R (inches)	T (inches)	Hex Across Flats	H (inches)	Thread Size (inches)	L
LSA200-C	.478	1¾	1⅝	1⅙	2¼	⅝	M5	.180	M5	2½
LSA275-C	.607	1¾	1⅝	⅞	1⅞	⅝	slotted hex M5	.180	M5	2½
LSA300-C	.687	2½	2	1½	2½	⅞	1/2	⅞	⅝-⅝	3½
LSA315-C	.807	2½	2	1⅞	2½	⅞	1/2	⅞	⅝-⅝	3½
LSA325-C	.875	3	2⅝	3⅞	2	1/2	1/2	⅞	⅝-⅝	4
LSA425-C	1.062	3½	2¾	3½	3	¾	9/16	1/4	¾-¾	5
LSA475-C	1.562	3½	2¾	3½	3½	1/2	9/16	1/4	¾-¾	4½

Description	Page No.
Application/Selection	112
Boxes	
Flush	
EGJ Series	139
WJBF Recessed Sidewalk Cover Series	116
Service Station	
EGJ Series	139
GUA Series	137
GUP Series	138
Surface	
EJB Series	128-136
GUB/GUE Series	122-127
GUA Series	137
GUP Series	138
RS/RSM/RSS Series	121
WAB Unflanged Cover Series	113
WCB Overlapping Cover Series	114
WJB Flanged Cover Series	115
WEB Internal Recess Flange	117
IEC Junction Boxes	
Ex-Cell Stainless Steel Enclosures	141-143
NexT Series	144-148
STB Series	149-152
HVB Series	153-155
QBX Series	156-158
Custom-Built Control Panels	
EJB Series	136
Equipment Housings	
GUE/GUB Series	122
Covers	126
W Series	113-120
Conduit Liners	
LNR Series	140
Explosion Protected Terminal Boxes	
GHG Series	159-161

Application:

Junction boxes, designed for hazardous and non-hazardous locations, are used in a variety of industries to perform the following functions:

- as a pull box
- to provide enclosures for splices and taps
- as a mounting box for multi-device control stations
- for housing apparatus, instruments, and other devices

Considerations for Selection:

- Environmental location – the physical location of the junction box will call for proper construction of the box to meet National Electrical Code requirements and

will affect the material and finish needed to meet weather and corrosive conditions, if present.

- Number and size of conductors – combined with the function to be performed (i.e., splicing, pull box), determines the amount of space needed, and therefore, the required physical dimensions of the box.
- Conduit layout – determines the number, size, and location of the conduit openings in the box. It will also determine the type of mounting required (i.e., flush or surface positioning of the box).
- Flexibility required – if changes in the electrical system are anticipated, the box chosen should be easily adaptable, either by construction (i.e., detachable hub plates) or size to the future system.

Options and Accessories:

A wide variety of options and accessories for special application are available for the various junction box families. These can be selected once the type of junction box has been determined. These options are shown on the individual pages. Some of the options available include:

- Special covers
- Hinged covers
- Materials and finishes
- Equipment mounting plates
- Openings for control station and other device mounting
- *Corro-free*[™] epoxy powder coat – information available on request

Quick Selector Chart

Junction Boxes	NEC/CEC Hazardous Area Compliance	Environmental Capability/Type Designation	Size Range† L, W, D Inside	Max. Conduit Opening Size	Mtg.	Type of Conduit Opening	Cover Type	Page No.
WAB		Raintight/Type 3, Dust-tight/Type 12	4 x 4 x 2 to 24 x 24 x 8	5	Surface	Drilled and tapped, slip holes	Unflanged	113
WCB		Raintight/Type 3, Watertight/Type 4, Dust-tight/Type 12	4 x 4 x 2 to 24 x 24 x 8	5	Surface	Drilled and tapped, slip holes	Overlapping	114
WJB		Raintight/Type 3, Watertight/Type 4	4 x 4 x 3 to 36 x 24 x 24	6	Surface	Drilled and tapped, slip holes	Flanged	115
WJBF		Raintight/Type 3, Watertight/Type 4	4 x 4 x 4 to 36 x 24 x 24	6	Flush	Drilled and tapped, slip holes	External flanged recessed sidewalk	116
WEB		Raintight/Type 3	4 x 4 x 3 to 36 x 36 x 12	6	Flush	Drilled and tapped, slip holes	Internal Flanged	117
RS, RSM, RSS		Raintight/Type 3	4½ x 4½ x 4 to 8½ x 8½ x 4	3	Surface	Detachable hub plates	Flanged	121
GU, GUE, GUB	Cl. I, Div. 1 & 2, Groups B, C, D; Cl. II, Div. 1, Groups E, F, G; Cl. II, Div. 2, Groups F, G; Cl. III	Raintight/Type 3 Watertight/Type 4‡ Hazardous/Types 7,9	4⅝ x 4⅝ x 4⅝ to 17 x 16⅜ x 17⅜	4	Surface	Drilled and tapped	Threaded, glass window and domed covers available	122
EJB	Cl. I, Div. 1 & 2, Groups B, C, D; Cl. II, Div. 1, Groups E, F, G; Cl. II, Div. 2, Groups F, G; Cl. III	Raintight/Type 3 Watertight/Type 4 (Style C only) Hazardous/Types 7,9	6 x 4 x 4 to 60 x 22 x 12*	6	Surface	Drilled and tapped	Ground joint	136
GUA	Cl. I, Div. 1 & 2, Groups C, D; Cl. II, Div. 1, Groups E, F, G; Cl. II, Div. 2, Groups F, G; Cl. III	Raintight/Type 3 Watertight/Type 4 Hazardous/Types 7,9	3⅝ x 3⅝ x 1⅞	1	Surface	Union hubs	Threaded	137
GUP	Cl. I, Div. 1 & 2, Groups C, D; Cl. II, Div. 1, Groups E, F, G; Cl. II, Div. 2, Groups F, G; Cl. III	Raintight/Type 3 Watertight/Type 4 Hazardous/Types 7,9	3⅝ x 3⅝ x 2¼	1	Surface	Drilled and tapped cast hubs	Threaded	138
EGJ	Cl. I, Div. 1 & 2, Groups D; Cl. II, Div. 1, Groups E, F, G; Cl. II, Div. 2, Groups F, G; Cl. III	Raintight/Type 3 Hazardous/Types 7,9	5½ x 5½ x 4 to 6¾ x 6¾ x 5	1	Flush	Drilled and tapped	Threaded	139

† Length and width are inside dimensions. Depth is inside dimension without cover.

‡ All except GUB01110 and GUB15151.

* EJB602212 is suitable for Class I, Div. 1, Groups C and D.

WAB Junction Boxes

Heavy Duty

Unflanged for Surface Mounting

Ordering Info. Pages 118 to 120

Dimensions Pages 119 and 120

Dust-proof
Weatherproof
Raintight
NEMA 3

6F



6F
Junction Boxes

Application:

Where a heavy duty dustproof or weatherproof enclosure is desired, WAB boxes are installed in conduit system to:

- act as pull box for conductors
- provide openings and space for making splices and taps in conductors
- provide for branch conduit runs
- provide access to conductors for maintenance and future system changes
- enclose and protect electrical devices

Features:

- Covers are suitable for vehicular traffic (H-20 loading)
- Flat neoprene gasket cemented to the cover.
- Wide range of drilled and tapped and slip hole conduit entrance sizes and locations permits extreme flexibility of use in conduit system.
- Internal equipment mounting pads available blind tapped for 1/4" – 20 mounting screws.
- Blind tapped into internal mounting pads.
- Mounting straps are standard on all boxes.

Standard Materials:

- Feraloy® iron alloy body
- Heavy-gauge steel cover
- Neoprene gaskets
- Stainless steel cover screws
- Steel mounting straps

Standard Finishes:

- Feraloy iron alloy and heavy gauge steel – hot dip galvanized

Options:

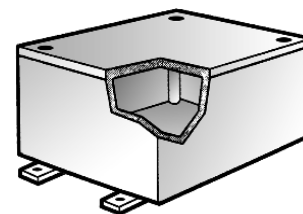
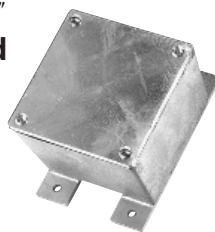
- Factory installed mounting plate... add suffix –MP.
- See Ordering Information, beginning pg. 118 for:
Drilled and tapped conduit holes
Slip holes

Size Ranges:

- 4" x 4" x 2" to 24" x 24" x 8"

Certifications and Compliances:

- UL Standard: 50
- Dust-proof
- Weatherproof
- H-20 Vehicle Load Rating



Flat Covers

Cat. #	Wall Thickness (in.)	Length (in.)	Width (in.)	Depth (in.)	Lightning Service
WAB040402	5/32	4	4	2	✓
WAB040403	3/16	4	4	3	✓
WAB040404	1/4	4	4	4	✓
WAB050503	1/4	5	5	3	✓
WAB050504	1/4	5	5	4	✓
WAB060403	1/4	6	4	3	✓
WAB060404	7/32	6	4	4	✓
WAB060603	1/4	6	6	3	✓
WAB060604	3/16	6	6	4	✓
WAB060606	9/32	6	6	6	✓
WAB080403	5/16	8	4	3	
WAB080604	7/32	8	6	4	✓
WAB080606	5/16	8	6	6	✓
WAB080804	5/16	8	8	4	✓
WAB080806	5/16	8	8	6	✓
WAB080808	5/16	8	8	8	✓
WAB090604	5/16	9	6	4	
WAB100604	1/4	10	6	4	
WAB100804	1/4	10	8	4	✓
WAB100806	9/32	10	8	6	✓
WAB101006	1/4	10	10	6	✓
WAB120604	9/32	12	6	4	✓
WAB120606	9/32	12	6	6	✓
WAB120806	9/32	12	8	6	✓
WAB120808	3/8	12	8	8	
WAB121204	9/32	12	12	4	✓
WAB121206	9/32	12	12	6	✓
WAB121208	9/32	12	12	8	✓
WAB160606	1/4	16	6	6	
WAB161208	5/16	16	12	8	✓
WAB181206	5/16	18	12	6	✓
WAB181208	5/16	18	12	8	
WAB181210	3/8	18	12	10	
WAB181806	3/8	18	18	6	✓
WAB181812	7/16	18	18	12	✓
WAB241212	7/16	24	12	12	
WAB242408	1 1/32	24	24	8	

NOTE: For conduit liner ordering information, see page 140.

✓ – available with Lightning Service™
See Section G for complete details



WCB Junction Boxes

Heavy Duty

Overlapping Cover for Surface Mounting

Ordering Info. Pages 118 to 120

Dimensions Pages 119 and 120

Dust-tight
Weatherproof
Raintight
Watertight
NEMA 3,4

Application:

Where a heavy duty dust-tight, weatherproof, raintight, or watertight enclosure is desired, WCB boxes are installed in conduit systems to:

- act as pull box for conductors
- provide openings and space for making splices and taps in conductors
- provide for branch conduit runs
- provide access to conductors for maintenance and future system changes
- enclose and protect electrical devices

Features:

- Flat neoprene gasket cemented to cover.
- Overlapping cover sheds environment.
- Wide range of drilled and tapped and slip hole conduit entrance sizes and locations permits maximum flexibility of use in conduit system.
- Internal equipment mounting pads available blind tapped for 1/4" – 20 mounting screws.
- Blind tapped into internal mounting pads.
- Mounting straps are standard on all boxes.

Standard Materials:

- Feraloy® iron alloy cover and body
- Neoprene gaskets
- Stainless steel cover screws
- Steel mounting straps

Standard Finishes:

- Feraloy iron alloy – hot dip galvanized

Options:

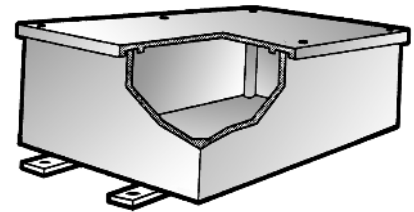
- Factory installed mounting plate... add suffix -MP.
- See Ordering Information, beginning pg. 118, for:
Drilled and tapped conduit holes
Slip holes

Size Ranges:

- 4" x 4" x 2" to
24" x 24" x 8"

Certifications and Compliances:

- UL Standard: 50
- Dust-tight
- Weatherproof
- Raintight
- Watertight



Ordering Information

Cat. #	Wall Thickness (in.)	Length (in.)	Width (in.)	Depth (in.)	Lightning Service
WCB040402	5/32	4	4	2	
WCB040403	3/16	4	4	3	✓
WCB040404	1/4	4	4	4	✓
WCB050503	1/4	5	5	3	✓
WCB050504	1/4	5	5	4	✓
WCB060403	1/4	6	4	3	✓
WCB060404	7/32	6	4	4	✓
WCB060603	1/4	6	6	3	✓
WCB060604	3/16	6	6	4	✓
WCB060606	9/32	6	6	6	✓
WCB080403	5/16	8	4	3	
WCB080604	7/32	8	6	4	✓
WCB080606	5/16	8	6	6	✓
WCB080804	5/16	8	8	4	✓
WCB080806	5/16	8	8	6	✓
WCB080808	5/16	8	8	8	✓
WCB090604	5/16	9	6	4	✓
WCB100604	1/4	10	6	4	
WCB100804	1/4	10	8	4	✓
WCB100806	9/32	10	8	6	✓
WCB101006	1/4	10	10	6	✓
WCB120604	9/32	12	6	4	✓
WCB120606	9/32	12	6	6	✓
WCB120806	9/32	12	8	6	✓
WCB120808	3/8	12	8	8	
WCB121204	9/32	12	12	4	✓
WCB121206	9/32	12	12	6	✓
WCB121208	9/32	12	12	8	✓
WCB160606	1/4	16	6	6	
WCB161208	5/16	16	12	8	✓
WCB181206	5/16	18	12	6	✓
WCB181208	5/16	18	12	8	
WCB181210	3/8	18	12	10	
WCB181806	3/8	18	18	6	✓
WCB181812	7/16	18	18	12	✓
WCB241212	7/16	24	12	12	
WCB242408	11/32	24	24	8	✓

NOTE: For conduit liner ordering information, see page 140.

✓ – available with Lightning Service™
See Section G for complete details

WJB Junction Boxes

Heavy Duty

Flanged for Surface Mounting

Ordering Info Pages 118 to 120

Dimensions Pages 119 and 120

Weatherproof
Watertight
Raintight
NEMA 3,4

6F



6F Junction Boxes

Application:

WJB boxes are standard with mounting straps and are primarily designed for surface mounting. WJB heavy duty junction boxes are installed in conduit systems to:

- act as pull box for conductors
- provide openings and space for making splices and taps in conductors
- provide for branch conduit runs
- provide access to conductors for maintenance and future system changes
- enclose and protect electrical equipment

Features:

- Covers are suitable for vehicular traffic (H-20 loading)
- Neoprene gasket cemented to cover.
- Wide range of drilled and tapped conduit entrance sizes and locations permits extreme flexibility of use in conduit system.
- Internal equipment mounting pads may be drilled and tapped for 1/4" – 20 mounting screws.
- Blind tapped into internal mounting pads.

Standard Materials:

- Feraloy® iron alloy body
- Heavy-gauge steel – cover and mounting straps
- Neoprene gaskets

Standard Finishes:

- Feraloy iron alloy and heavy-gauge steel – hot-dip galvanized

Options:

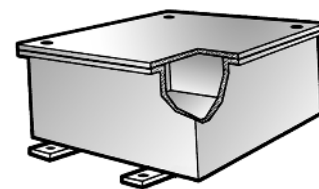
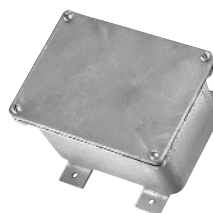
- Factory installed mounting plate... add suffix -MP.
- See Ordering Information, beginning pg. 118 for:
Drilled and tapped conduit holes
Slip holes

Size Ranges:

- 4" x 4" x 3" to 36" x 24" x 24"

Certifications and Compliances:

- UL Standard: 50
- CSA Standard C22.2
- Weatherproof
- Watertight
- CEC: Class II, E, F, G Class III
- Encl. 3-4
- H-20 Vehicle Load Rating



Ordering Information

Cat. #	Wall Thickness (in.)	Length (in.)	Width (in.)	Depth (in.)	Lightning Service
WJB040403	1/4	4	4	3	
WJB040404	1/4	4	4	4	✓
WJB060404	1/4	6	4	4	
WJB060604	1/4	6	6	4	✓
WJB060606	1/4	6	6	6	✓
WJB080604	1/4	8	6	4	
WJB080606	1/4	8	6	6	✓
WJB080804	1/4	8	8	4	✓
WJB080806	1/4	8	8	6	
WJB080808	1/4	8	8	8	
WJB100806	1/4	10	8	6	
WJB100808	1/4	10	8	8	
WJB101006	1/4	10	10	6	✓
WJB101008	1/4	10	10	8	
WJB120606	1/4	12	6	6	
WJB120806	1/4	12	8	6	
WJB120808	1/4	12	8	8	
WJB120810	1/4	12	8	10	
WJB121206	5/16	12	12	6	✓
WJB121208	5/16	12	12	8	✓
WJB121212	5/16	12	12	12	
WJB121218	5/16	12	12	18	
WJB140806	5/16	14	8	6	
WJB141410	5/16	14	14	10	
WJB161206	5/16	16	12	6	
WJB161208	5/16	16	12	8	
WJB161606	5/16	16	16	6	
WJB180806	5/16	18	8	6	
WJB180808	5/16	18	8	8	
WJB181006	5/16	18	10	6	
WJB181206	5/16	18	12	6	
WJB181208	5/16	18	12	8	✓
WJB181210	5/16	18	12	10	
WJB181212	5/16	18	12	12	
WJB181218	3/8	18	12	18	
WJB181806	3/8	18	18	6	
WJB181808	3/8	18	18	8	
WJB181812	3/8	18	18	12	
WJB181818	3/8	18	18	18	
WJB241208	3/8	24	12	8	
WJB241212	3/8	24	12	12	
WJB241808	3/8	24	18	8	
WJB241810	3/8	24	18	10	
WJB241812	3/8	24	18	12	
WJB241818	9/16	24	18	18	
WJB242412	9/16	24	24	12	
WJB242418	9/16	24	24	18	
WJB242424	9/16	24	24	24	
WJB302412	9/16	30	24	12	
WJB302418	9/16	30	24	18	
WJB362418	9/16	36	24	18	
WJB362424	9/16	36	24	24	

NOTE: For conduit liner ordering information, see page 140.

✓ – available with Lightning Service™
See Section G for complete details



WJBF Checkered Cover Sidewalk Junction Boxes

**Heavy Duty
External Flanged for Flush Mounting**

Ordering Information Pages 118 to 120
Dimensions Pages 119 and 120
Weatherproof
Watertight
Raintight
NEMA 3,4

Application:

WJBF boxes are standard with mounting feet and have a recessed flat checkered sidewalk cover for mounting in walls or floors. They may be ordered less mounting feet. WJBF heavy duty junction boxes are installed in conduit systems to:

- act as pull box for conductors
- provide openings and space for making splices and taps in conductors
- provide for branch conduit runs
- provide access to conductor for maintenance and future system changes
- enclose and protect electrical equipment

Features:

- Covers are suitable for vehicular traffic (H-20 loading)
- Neoprene gasket cemented to cover
- Wide range of drilled and tapped conduit entrance sizes and locations permits extreme flexibility of use in conduit system
- Internal equipment mounting pads may be drilled and tapped for 1/4" – 20 mounting screws
- Blind tapped into internal mounting pads

Standard Materials:

- Feraloy® iron alloy – body
- Heavy-gauge steel (checkered) – cover, mounting straps
- Neoprene gaskets

Standard Finishes:

- Feraloy iron alloy and heavy-gauge steel – hot dip galvanized

Options:

- Factory installed mounting plate... add suffix -MP.
- See Ordering Information, beginning pg. 118, for:
Drilled and tapped conduit holes
Slip holes

Size Ranges:

- 4" x 4" x 4" to 36" x 24" x 24"

Certifications and

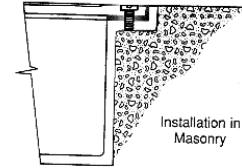
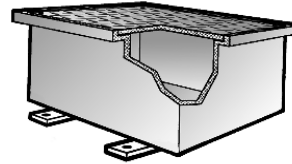
Compliances:

- UL Standard: 50
- CSA Standard C22.2 No. 40
- Weatherproof
- Watertight
- CEC:
- Class II, Division 1, Groups E,F,G
- Class III
- Encl. 3, 4
- H-20 Vehicle Load Rating

NOTE: For conduit liner ordering information, see page 140.

✓ – available with Lightning Service™

See Section G for complete details



Ordering Information

Cat. #	Wall Thickness (in.)	Length (in.)	Width (in.)	Depth (in.)	Lightning Service
WJBF040404	1/4	4	4	4	✓
WJBF060404	1/4	6	4	4	✓
WJBF060604	1/4	6	6	4	✓
WJBF060606	1/4	6	6	6	✓
WJBF080604	1/4	8	6	4	✓
WJBF080606	1/4	8	6	6	✓
WJBF080804	1/4	8	8	4	✓
WJBF080806	1/4	8	8	6	✓
WJBF080808	1/4	8	8	8	✓
WJBF100806	1/4	10	8	6	
WJBF100808	1/4	10	8	8	
WJBF101006	1/4	10	10	6	✓
WJBF101008	1/4	10	10	8	✓
WJBF120606	1/4	12	6	6	
WJBF120806	1/4	12	8	6	
WJBF120808	1/4	12	8	8	✓
WJBF120810	5/16	12	8	10	
WJBF121206	1/4	12	12	6	✓
WJBF121208	1/4	12	12	8	✓
WJBF121212	5/16	12	12	12	✓
WJBF121218	5/16	12	12	18	
WJBF140806	1/4	14	8	6	
WJBF141410	5/16	14	14	10	
WJBF161206	1/4	16	12	6	
WJBF161208	1/4	16	12	8	✓
WJBF161606	1/4	16	16	6	
WJBF180806	1/4	18	8	6	
WJBF180808	1/4	18	8	8	
WJBF181006	5/16	18	10	6	
WJBF181206	5/16	18	12	6	
WJBF181208	5/16	18	12	8	✓
WJBF181210	3/8	18	12	10	
WJBF181212	5/16	18	12	12	
WJBF181218	3/8	18	12	18	
WJBF181806	3/8	18	18	6	
WJBF181808	3/8	18	18	8	
WJBF181812	3/8	18	18	12	✓
WJBF181818	3/8	18	18	18	
WJBF241208	3/8	24	12	8	
WJBF241212	3/8	24	12	12	
WJBF241808	3/8	24	18	8	
WJBF241810	3/8	24	18	10	✓
WJBF241812	3/8	24	18	12	
WJBF241818	3/8	24	18	18	
WJBF242412	3/8	24	24	12	
WJBF242418	3/8	24	24	18	
WJBF242424	3/8	24	24	24	
WJBF302412	3/8	30	24	12	
WJBF302418	3/8	30	24	18	
WJBF362418	3/8	36	24	18	
WJBF362424	3/8	36	24	24	

WEB Junction Box

Heavy Duty Internal Recess Flange for Flush Mounting

Dust-tight
Raintight
NEMA 3

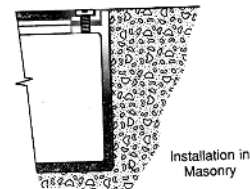
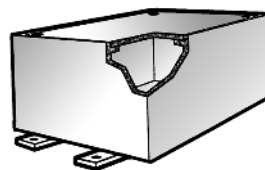
6F

6F
Junction Boxes

Application:

WEB Junction Boxes are installed:

- Where a heavy duty, dust-tight or raintight enclosure is desired
- To act as pull box for conductors
- To provide openings and space for making splices and taps in conductors
- To provide for branch conduit runs
- To provide access to conductors for maintenance and future system changes
- To enclose and protect electrical devices



Installation in
Masonry

Features:

- Flat neoprene gasket cemented to cover
- Internal equipment mounting pads
- Standard attachable heavy-gauge steel straps for mounting box
- Stainless-steel cover screws
- Internal ground screw
- Optional drilled and tapped conduit entries or slip holes
- Optional mounting plate

Standard Materials:

- Body-*Feraloy*® iron alloy, hot dip galvanized
- Cover – heavy-gauge steel, hotdip galvanized
- Cover screws – stainless steel
- Mounting Strap – heavy-gauge steel, electrogalvanized
- Gasket – neoprene

Certifications and Compliances:

- UL Standard 50
- CSA certified C22.2

Options:

- All boxes are available with optional mounting plate, add suffix -MP.
See ordering information beginning on pg. 118 for:
- Drilled and tapped conduit holes
 - Slip holes

Ordering Information

Cat. #	Wall Thickness (in.)	Length (in.)	Width (in.)	Depth (in.)
WEB040403	$\frac{7}{32}$	4	4	3
WEB040404	$\frac{1}{4}$	4	4	4
WEB060604	$\frac{9}{32}$	6	6	4
WEB060606	$\frac{1}{4}$	6	6	6
WEB080804	$\frac{9}{32}$	8	8	4
WEB080806	$\frac{1}{4}$	8	8	6
WEB121206	$\frac{9}{32}$	12	12	6
WEB160606	$\frac{9}{32}$	16	6	6
WEB160806	$\frac{1}{4}$	16	8	6
WEB180808	$\frac{5}{16}$	18	8	8
WEB240606	$\frac{9}{32}$	24	6	6
WEB240808	$\frac{5}{16}$	24	8	8
WEB241010	$\frac{3}{8}$	24	10	10
WEB241210	$\frac{5}{16}$	24	12	10
WEB241212	$\frac{5}{16}$	24	12	12
WEB241812	$\frac{3}{8}$	24	18	12
WEB361212	$\frac{3}{8}$	36	12	12
WEB361812	$\frac{3}{8}$	36	18	12
WEB362412	$\frac{7}{16}$	36	24	12
WEB363612	$\frac{7}{16}$	36	36	12

6F W Series Junction Boxes

Ordering Information

DRILLED AND TAPPED CONDUIT OPENINGS OR SLIP HOLES

All W-Series cast-iron junction boxes may be ordered with drilled and tapped conduit openings or slip holes – subject to minimum spacing limitations listed in Table 1.

To order a box from the factory with conduit openings:

Options 1:

Send in a sketch of the box with openings specified (subject to spacing limitations specified in Table 1). **OR**

Option 2:

- Step 1: Select one of the four standard arrangements in Table 2, based on number and location of conduit entries.
- Step 2: Pick a symbol from Table 3 for each opening in the arrangement (see example).
- Step 3: Table 4 lists the maximum size and number of conduit openings by box size and the spacing dimensions. Use Table 4 to verify the openings selected are permitted.

Example – Catalog number logic:

- Select box required: WAB121208.
- User wants one 1/2" drilled and tapped hole in the top of the box, two 1" drilled and tapped holes on both sides and three 1/2" slip holes in the bottom of the box.
- Select arrangement 3 because it allows up to three openings per side.
- Next the symbols for the openings are substituted and written in clockwise order starting with location "a". The catalog number is written in three parts; part 1 – box number, part 2 – arrangement number, part 3 – symbols for the conduit openings.
- For this example the box would be ordered as:

WAB121208-3-0AO C0C 1A1A1A C0C

Box Cat. # Arrangement # Symbols for openings

Table 1
Minimum spacing between centers of conduits

Size of Conduit	6"	5"	4"	3 1/2"	3"	2 1/2"	2"	1 1/2"	1 1/4"	1"	3/4"	1/2"
1/2"	5	4 3/8	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"	5 1/8	4 1/2	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"	5 1/4	4 5/8	4	3 5/8	3 1/4	3	2 5/8	2 3/8	2 1/4	2		
1 1/4"	5 1/2	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"	5 5/8	5	4 1/4	4	3 5/8	3 1/4	3	2 5/8				
2"	6	5 3/8	4 5/8	4 1/4	3 7/8	3 5/8	3 1/4					
2 1/2"	6 1/4	5 5/8	4 7/8	4 5/8	4 1/4	3 7/8						
3"	6 5/8	6	5 3/8	5	4 5/8							
3 1/2"	7	6 1/4	5 5/8	5 1/4								
4"	7 1/4	6 5/8	5 7/8									
5"	8	7 1/4										
6"	8 5/8											

Table 2
Standard conduit arrangements

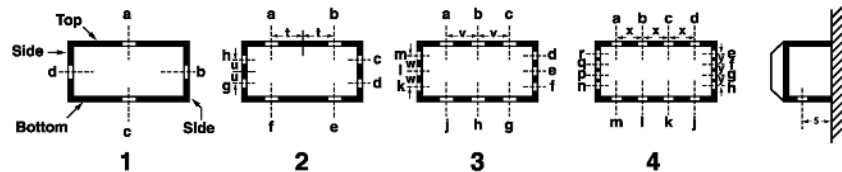
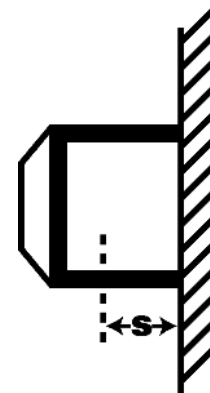


Table 3
Symbols for openings

Conduit Size	Drilled and Tapped Hole	Slip Hole
1/2"	A	1A
3/4"	B	1B
1"	C	1C
1 1/4"	E	1E
1 1/2"	F	1F
2"	G	1G
2 1/2"	H	1H
3"	J	1J
3 1/2"	K	1K
4"	L	1L
5"	M	1M
6"	N	1N
None	0 (Zero)	0 (Zero)



S = Dimension from wall to hole center line

Ordering Information

Table 4

W Series Cat. #	Maximum Size and Number of Drilled and Tapped Conduit Openings Top and Bottom†				Sides				Spacing Dimensions†						
	1	2	3	4	1	2	3	4	s	t	u	v	w	x	y
040402	¾	¾	—	—	¾	¾	—	—	1¼	⅞	⅞	—	—	—	—
040403	1¼	¾	—	—	1¼	¾	—	—	1⅝	⅞	⅞	—	—	—	—
040404	2	¾	—	—	2	¾	—	—	2¼	⅞	⅞	—	—	—	—
050503	1¼	¾	—	—	1¼	¾	—	—	1⅝	1¼	1¼	—	—	—	—
050504	2	1	—	—	2	1	—	—	2¼	1¼	1¼	—	—	—	—
060403	1¼	¾	¾	—	1¼	¾	—	—	1⅝	1⅝	⅞	1¾	—	—	—
060404	2	1½	¾	—	2	¾	—	—	2¼	1⅝	⅞	1¾	—	—	—
060603	1¼	1¼	¾	—	1¼	1¼	¾	—	1¼	1⅝	1⅝	1¾	1¾	—	—
060604	2	1½	¾	—	2	1½	¾	—	2¼	1⅝	1⅝	1¾	1¾	—	—
060606	4	1½	¾	—	4	1½	¾	—	3⅝	1⅝	1⅝	1¾	1¾	—	—
080403	1¼	1¼	1	¾	1¼	¾	—	—	1⅝	1⅝	⅞	2½	—	—	—
080604	2	2	1	¾	2	1½	¾	—	2¼	1⅝	1⅝	2½	1¾	1¾	—
080606	4	2	1	¾	4	1½	¾	—	3⅝	1⅝	1⅝	2½	1¾	1¾	—
080804	2	2	1	¾	3	2	1	¾	2¼	1⅝	1⅝	2½	2½	1¾	1¾
080806	4	2	1	¾	4	2	1	¾	3⅝	1⅝	1⅝	2½	2½	1¾	1¾
080808	4	2	1	¾	4	2	1	¾	4¼	1⅝	1⅝	2½	2½	1¾	1¾
090604	2	1¼	1½	1	2	1½	¾	—	2¼	2¼	1⅝	3	1¾	2	—
100604	2	2	1½	1	2	1½	¾	—	2¼	2½	1⅝	2¾	1¾	2½	—
100804	2	2	1½	1	2	2	1	¾	2¼	2½	1⅝	2¾	2½	2½	1¾
100806	4	3	1½	1	4	2	1	¾	3⅝	2½	1⅝	2¾	1¾	2½	1¾
100808	5	3	1½	1	5	2	1	¾	4½	2½	1⅝	2¾	2½	2½	1¾
101006	4	3	1½	1	3	3	1½	1	2⅝	2½	2½	2¾	2¾	2½	2½
101008	5	3	1½	1	5	3	1½	1	4¼	2½	2½	2¾	2¾	2½	2½
120604	2	2	2	1½	2	1½	¾	—	2¼	3	1⅝	4	1¾	2¾	—
120606	4	4	2½	1½	4	1½	¾	—	3⅝	3	1⅝	4	1¾	2¾	—
120806	4	4	2½	2½	4	2	1	¾	3⅝	3	1⅝	4	2½	2¾	1¾
120808	5	4	2½	2½	5	2	1	¾	4¼	3	1⅝	4	2½	2¾	1¼
121204	2	2	2	1½	2	2	2	1½	2¼	3	3	4	4	2¾	2¾
121206	4	4	2½	1½	4	4	2½	1½	3⅝	3	3	4	4	2¾	2¾
121208	5	4	2½	1½	5	4	2½	1½	4¼	3	3	4	4	2¾	2¾
121212	6	4	2½	1½	6	4	2½	1½	5	3	3	4	4	2¾	2¾
121218	6	4	2½	1½	6	4	2½	1½	5	3	3	4	4	2¾	2¾
140806	4	4	3	2	4	2	1	¾	3⅝	3½	1⅝	4½	2½	3½	1¾
141206	4	4	3	2	4	4	2½	1½	3⅝	3½	3	4½	4	3½	2¾
141410	6	4	3	2	6	4	3	2	5	3½	3½	4½	4½	3½	3½
160606	4	4	3½	2½	4	1½	¾	—	3⅝	4	1½	5⅝	2	4	—
160806	4	4	3½	2½	4	2½	1½	¾	3⅝	4	2	5⅝	2⅝	4	2
161206	4	4	3½	2½	4	4	2½	1½	3⅝	4	3	5⅝	4	4	3
161208	5	5	3½	2½	5	4	2½	1½	4¼	4	3	5⅝	4	4	3
161606	4	4	3½	2½	4	4	3½	2½	3⅝	4	4	5⅝	5⅝	4	4
180806	4	4	4	2½	4	2½	1¼	¾	3⅝	4½	2	6	2⅝	4½	2
180808	5	5	4	2½	5	2½	1¼	¾	4¼	4½	2	6	2⅝	4½	2
181206	4	4	4	2½	4	4	2½	1½	3⅝	6½	2⅞	5½	3⅞	4	2¾
181208	5	5	4	2½	5	4	2½	1½	4¼	4½	3	5½	4	4	2¾
181210	6	5	4	2½	6	4	2½	1½	5	4¼	3	5½	4	4	2¾

†Spacing dimensions apply to drilled and tapped holes. Space has been provided for a locknut and bushing when drilled and tapped holes are required.

‡Top and bottom are the longer dimensions on enclosures which are not square.

6F W Series Junction Boxes

Ordering Information

Table 4 (continued)

W Series Cat. #	Maximum Size and Number of Drilled and Tapped Conduit Openings								Spacing Dimensions†							
	Top and Bottom‡				Sides											
	1	2	3	4	1	2	3	4	s	t	u	v	w	x	y	
181212	6	5	4	2½	6	4	2½	1½	5	4½	3	5½	4	4	2¼	
181218	6	5	4	2½	6	4	2½	1½	5	4½	3	5½	4	4	2¾	
181806	4	4	4	2½	5	5	4	2½	3¾	4½	4	6	5¾	4½	4	
181808	5	5	4	2½	5	5	3½	2½	4¼	4½	4	6	5¾	4½	4	
181812	6	6	4	2½	6	6	4	2½	5	4½	4½	6	6	4½	4½	
240606	4	4	4	4	4	1½	¾	—	3¾	6¾	1¾	8	1¾	6	—	
240808	5	5	5	4	5	2½	1¼	¾	4¼	6¾	4½	8	2¾	6	2	
241010	6	6	5	4	6	3	1½	1	5	6½	2½	7	2¾	5¾	2½	
241208	5	5	5	4	5	4	2½	1½	4¼	6½	2¾	7	3¾	5¾	2¾	
241210	6	6	5	4	6	4	2½	1½	5	6½	3	7	4	5¾	2¾	
241212	6	6	5	4	6	4	2½	1½	5	6½	2¾	7	3¾	5¾	2¾	
241808	5	5	5	4	5	5	4	2½	4¼	6½	4½	7	5¾	5¾	4	
241810	6	6	5	4	6	6	4	2½	5	6½	4½	7	5¾	5¾	4	
241812	6	6	5	4	6	5	4	2½	5	6½	4½	7	5¾	5¾	4	
242408	5	5	5	4	5	5	5	4	4¼	6½	6½	7	7½	5¾	5¾	
242412	6	6	5	4	6	6	5	4	5	6½	6½	7	7½	5¾	5¾	
242424	6	6	5	4	6	6	5	4	6½	6¾	6½	7	7½	5¾	5¾	
302412	6	6	6	5	6	6	5	4	5	7½	6¾	10	8	7½	6	
361212	6	6	6	6	6	4	2½	1½	5	8¾	3	12	4	9	2¾	
361812	6	6	6	6	6	5	4	2½	5	8¾	4½	12	4½	9	4	
362412	6	6	6	6	6	6	5	4	5	8¾	6¾	12	8	9	6	
363612	6	6	6	6	6	6	6	6	5	8¾	8¾	12	12	9	9	

†Spacing dimensions apply to drilled and tapped holes. Space has been provided for a locknut and bushing when drilled and tapped holes are required.

‡Top and bottom are the longer dimensions on enclosures which are not square.

Application:

RS, RSM, RSS junction boxes are installed in conduit systems to:

- act as pull box for conductors
- provide openings and space for making splices and taps in conductors
- provide for branch conduit runs
- provide access to conductors for maintenance and future system changes

Features:

- Junction box bodies accept wide range of hub plates permitting varied hub arrangements and sizes.
- Stocking a few components provides for many specific needs.
- Future system expansion easily accomplished by substituting hub plates for currently installed plates.
- Suitable for use where boxes with integral hubs cannot satisfy requirements.
- Suitable for surface mounting outdoors or indoors in rigid conduit runs.

Standard Materials:

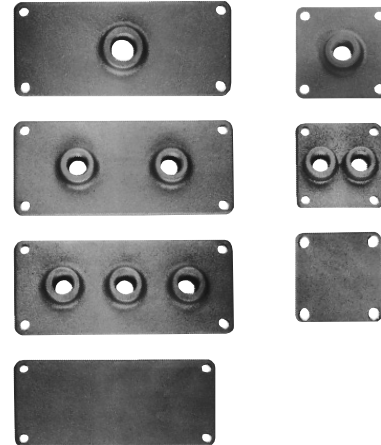
- Bodies and hub plates – Feraloy® iron alloy
- Gaskets – cork

Standard Finishes:

- Feraloy iron alloy – electrogalvanized and aluminum acrylic paint

Certifications and Compliances:

- UL Standard: 514A
- CSA Standard: C22.2 No. 18



Junction Boxes†

Approximate Inside Dimensions

Size	Cat. #
8½ x 8½ x 4	RS1
8½ x 4½ x 4	RSM1
4½ x 4½ x 4	RSS1

Replacement Cover Gaskets

Size	Cat. #
8½ x 8½	GASK61
8½ x 4½	GASK63
4½ x 4½	GASK64

Conduit Hub Plates‡

For 8½ x 4 inch Sides of RS and RSM Boxes

	One Hub	Two Hubs	Three Hubs
Size	Cat. #	Cat. #	Cat. #
½	RSP1	RSP11	RSP111
¾	RSP2	RSP22	RSP222
1	RSP3	RSP33	RSP333
1¼	RSP4	RSP44	RSP444
1½	RSP5	RSP55	RSP555
2	RSP6	RSP66	
2½	RSP7		
3	RSP8		

Blank Hub Plate
Cat. #
RSP0

For 4½ x 4 inch Sides of RSM and RSS Boxes

	One Hub	Two Hubs
Size	Cat. #	Cat. #
½	RSMP1	RSMP11
¾	RSMP2	RSMP22
1	RSMP3	
1¼	RSMP4	
1½	RSMP5	
2	RSMP6	
2½	RSMP7	

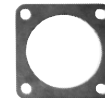
Blank Hub Plate
Cat. #
RSMP0

Replacement Hub Plate Gaskets



Size
8½ x 4

Cat. #
GASK66



Size
4½ x 4

Cat. #
GASK65

† Includes body, top cover with gasket, 4 gaskets for side plates, and 20 bolts.
‡ Hub plates only. Gaskets not included.

NOTE: For conduit liner ordering information, see page 140.



Cl. I, Div. 1 & 2, Groups B,C,D
 Cl. II, Div. 1, Groups E,F,G
 Cl. II, Div. 2, Groups F,G
 Cl. III
 NEMA 4*, 7BCD, 9EFG
 EEx d IIC T6, IP66†

Explosionproof
 Dust-Ignitionproof
 Raintight
 Wet Locations
 Watertight

Application:

GUE, GUB series junction boxes are used in threaded rigid conduit systems in hazardous areas:

- to function as a splice box, pull box or equipment and device enclosure
- indoors and outdoors

Features:

- Threaded construction throughout permits use in hazardous areas.
- Bodies have thick walls so they can be factory or field drilled and tapped to meet NEC/CEC requirements for Class I hazardous areas.
- Covers are provided with a neoprene "O" ring gasket to meet NEMA/EEMAC 4 requirements for a watertight seal*
- Internal grounding lug provides a means to ground enclosed equipment.
- Boxes are machined for field installed mounting plates.
- GUB boxes are CENELEC certified when ordered with Suffix SA ATEX.

Standard Materials:

- Bodies – *Feraloy*® iron alloy
- Covers – copper-free aluminum

Standard Finishes:

- *Feraloy* iron alloy – GU, GUE, GUB01, GUB02 – electrogalvanized and aluminum acrylic paint. All other boxes – zinc chromate primer and aluminum acrylic paint
- Copper-free aluminum – natural

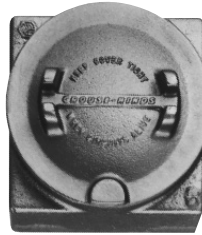
Options:

Description	Suffix to be Added to Cat. #
Material –	
<i>Feraloy</i> iron alloy covers.	WOD
For GU, GUE, GUB01, GUB02, GUB03 and GUB06 to be furnished in copper-free aluminum.	SA
Copper-free aluminum boxes with ATEX certification.	SA ATEX
Factory installed mounting plate for relays, terminal blocks, electrical devices, etc.	MP
Factory installed terminal blocks.	Information on request

Certifications and Compliances:

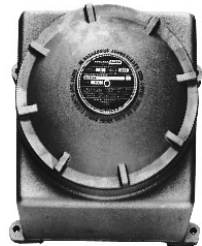
- NEC/CEC:
 - Class I, Division 1 & 2, Groups B,C,D
 - Class II, Division 1, Groups E,F,G
 - Class II, Division 2, Groups F,G
 - Class III
 - UL Standard: 886
 - CSA Standard: C22.2 No. 30
 - CENELEC: EEx d IIC, IP66† ATEX
- Certificate: PTB 01 ATEX 1019 U
- ✓ – available with Lightning Service™
 See Section G for complete details

Junction Boxes Without Hubs**



GU ✓
 4¹⁵/₁₆" x 4¹⁵/₁₆" x 4¹/₈"
 3⁵/₈" cover opening

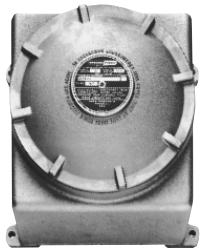
GUE
 5⁵/₁₆" x 5⁵/₁₆" x 5³/₈"
 3⁵/₈" cover opening



GUB01 ✓
 6¹/₂" x 7" x 5³/₄"
 5³/₈" cover opening

GUB02 ✓
 8" x 10" x 5⁷/₈"
 7" cover opening

GUB06 8¹/₂" x 10" x 6⁷/₈"
 7" cover opening



GUB03
 11" x 12" x 8¹³/₁₆"
 9⁵/₈" cover opening

GUB01110★
 14" x 18" x 13¹/₂"
 12¹/₄" cover opening

GUB15151 19" x 21" x 16⁵/₈"
 16³/₄" cover opening



GUB04
 11" x 12" x 8¹¹/₁₆"
 9⁵/₈" cover opening

GUB08
 7" cover opening
 8¹/₂" x 10" x 6¹³/₁₆"

Ordering Information:

Junction boxes listed can be furnished with drilled and tapped conduit openings, subject to the limitations of maximum opening, number and spacing shown in Tables 1, 2 and 4.

To Order:

Step 1

Select the box required from photos at left and dimensional drawings on page 123.

Step 2

Select standard conduit arrangement from Table 1.

Step 3

Determine maximum size conduit opening required from Table 2 (consider conduit opening spacing from Table 4).

Step 4

Select appropriate symbol for required drilled and tapped holes from Table 3.

Example:

Step 1 – box required GUB06

Step 2 – arrangement 108

Step 3 – openings – 1¹/₂" at "a" and "c"; 1" at "b" and "d".

Step 4 – symbols are substituted and written in **clockwise order starting with location "a"**. For this example: FCFC Complete Cat. No. is made up of three parts: Part 1 – box number; Part 2 – arrangement number; Part 3 – symbols for conduit openings. For this example: GUB06-108-FCFC. When no opening is required at a particular location, use symbol "0" (zero).

If none of the standard arrangements meet requirements, send a sketch showing junction box number with size and location of each opening desired.

* Not available on GUB01110 and GUB15151.

** External dimensions provided.

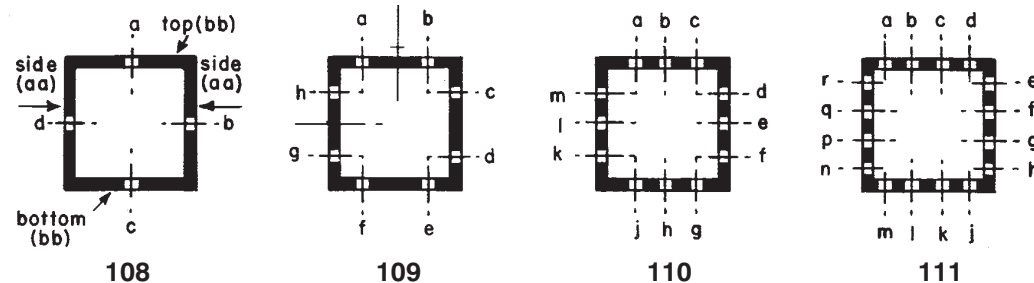
† Order suffix SA ATEX. GUB01110 and GUB15151 are rated IP54.

NOTE: For conduit liner ordering information, see page 140.

★ GUB01110 listed for Class I, Div. 1, Groups C & D only in Canada (CSA).

Ordering Information

Table 1/Arrangements of Drilled and Tapped Conduit Openings –
For other arrangements, send sketch and complete description



Conduit opening arrangements shown in the illustration should meet the majority of requirements.

These GUB junction boxes will be supplied with drilled and tapped openings up to the maximum size and number shown in Table 2.

Table 2/Maximum Size & No. of Drilled & Tapped Holes

Cat. #	Top & Bottom (bb) †				Each Side (aa) †				Back ‡			
	1	2	3	4	1	2	3	4	1	2	3	4
Group D*												
GU	1	1			1	1			3	1	3/4	3/4
GUE	2	1			2	1			2	1	3/4	3/4
GUB01	2	1 1/2	3/4		2	1 1/2	1	1/2	1	3/4	3/4	3/4
GUB02	2	2	1	3/4	2	2	1 1/2	1	3/4	3/4	3/4	3/4
GUB06	2	2	1	3/4	2	2	1 1/2	1	2	2	2	2
GUB08	2	2	1	3/4	2	2	1 1/2	1	2	2	2	2
GUB03	2	2	1 1/2	1	2	2	2	1 1/4	4	4	3 1/2	3
GUB04	2	2	1 1/2	1	2	2	2	1 1/4	4	4	3 1/2	3
GUB01110	2	2	2	1 1/2	2	2	2	2	6	6	4	3 1/2
GUB15151	5	4	3 1/2	2 1/2	5	4	4	3	6	6	6	6
Group C ♦												
GU	1	1			1	1			3	1	3/4	3/4
GUE	2	1			2	1			2	1	3/4	3/4
GUB01	2	1 1/4	1/2		2	1 1/4	1/2		3/4	3/4	3/4	3/4
GUB02	2	1 1/2	3/4		2	2	1 1/4	1/2	3/4	3/4	3/4	3/4
GUB06	2	1 1/2	3/4		2	2	1 1/4	1/2	2	2	2	1 1/2
GUB08	2	1 1/2	3/4		2	2	1 1/4	1/2	2	2	2	1 1/2
GUB03	2	2	1 1/4	3/4	2	2	1 1/2	1	4	3 1/2	2 1/2	2 1/2
GUB04	2	2	1 1/4	3/4	2	2	1 1/2	1	4	3 1/2	2 1/2	2 1/2
GUB01110	2	2	2	1 1/4	2	2	2	2	6	6	4	3 1/2
GUB15151	5	4	3	2	5	4	3 1/2	2 1/2	6	6	6	5
Group B ♦ ♦												
GU	1	1			1	1			3	1	3/4	3/4
GUE	2	1			2	1			2	1	3/4	3/4
GUB01	2	1 1/4	1/2		2	1 1/4	1/2		3/4	3/4	3/4	3/4
GUB02	2	1 1/2	3/4		2	2	1 1/4	1/2	3/4	3/4	3/4	3/4
GUB06	2	1 1/2	3/4		2	2	1 1/4	1/2	2	2	2	1 1/2
GUB08	2	1 1/2	3/4		2	2	1 1/4	1/2	2	2	2	1 1/2
GUB03	2	2	1 1/4	3/4	2	2	1 1/2	1	4	3 1/2	2 1/2	2 1/2
GUB04	2	2	1 1/4	3/4	2	2	1 1/2	1	4	3 1/2	2 1/2	2 1/2
GUB01110	2	2	2	1 1/4	2	2	2	2	4	4	4	4
GUB15151	4	4	3 1/2	2 1/2	4	4	3 1/2	2 1/2	4	4	4	4

Table 3/Drilled & Tapped Holes

Size	Symbol
1/2	A
3/4	B
1	C
1 1/4	E
1 1/2	F
2	G
2 1/2	H
3	J
3 1/2	K
4	L
none	O

* Group D chart is based on use of staggered unions. If adjacent unions are desired, additional spacing may be necessary.

† Sidewall and top and bottom sizes are based on all openings being in line.

‡ Backwall sizes are based on: two per side – diagonal corners; four per side – one in each corner; three per side – triangular pattern with two on adjacent corners on long wall and third in center of opposite long wall.

♦ Conduit seals are required within 1 1/2" of all conduit entrances for Class I, Group C hazardous locations.

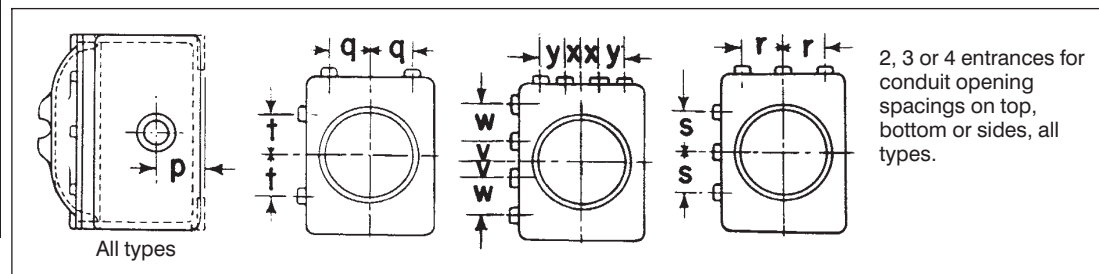
♦ ♦ Conduit seals are required within 1 1/2" of all conduit entrances for Class I, Group B hazardous locations.

NOTE: For conduit liner ordering information, see page 140.

6F GUB Junction Boxes

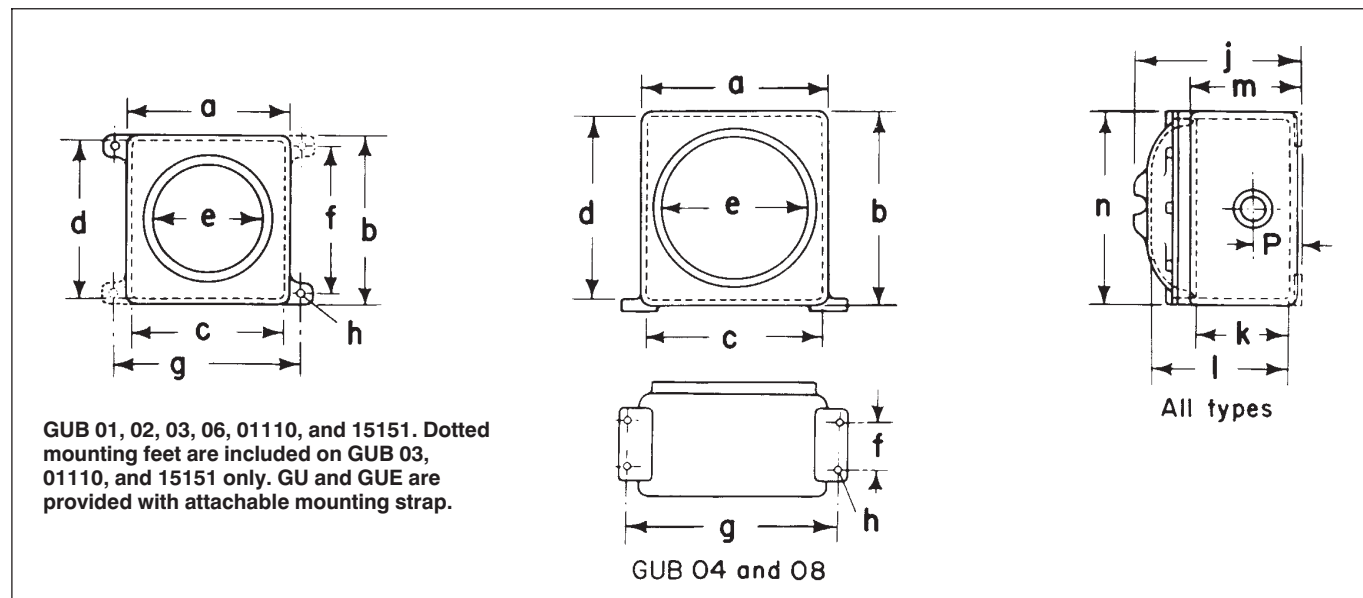
Dimensions

Table 4/Conduit Spacings



Type	p	q	r	s	t	v	w	x	y
GU	1 $\frac{3}{8}$	1	—	—	1	—	—	—	—
GUE	1 $\frac{7}{8}$	1 $\frac{1}{8}$	1 $\frac{1}{8}$	—	1 $\frac{1}{8}$	—	—	—	—
GUB01	2 $\frac{1}{16}$	1 $\frac{5}{8}$	2 $\frac{1}{8}$	2 $\frac{1}{8}$	1 $\frac{5}{8}$	7 $\frac{7}{8}$	1 $\frac{3}{4}$	2 $\frac{5}{32}$	1 $\frac{9}{16}$
GUB02	2 $\frac{1}{16}$	1 $\frac{21}{32}$	2 $\frac{1}{16}$	2 $\frac{5}{16}$	1 $\frac{21}{32}$	1 $\frac{1}{32}$	2 $\frac{1}{16}$	7 $\frac{7}{8}$	1 $\frac{3}{4}$
GUB06	2 $\frac{1}{16}$	1 $\frac{21}{32}$	2 $\frac{5}{16}$	2 $\frac{5}{16}$	1 $\frac{21}{32}$	1 $\frac{1}{32}$	2 $\frac{1}{16}$	7 $\frac{7}{8}$	1 $\frac{3}{4}$
GUB08	2 $\frac{1}{16}$	1 $\frac{21}{32}$	2 $\frac{1}{16}$	2 $\frac{1}{16}$	1 $\frac{21}{32}$	1 $\frac{1}{32}$	2 $\frac{1}{16}$	7 $\frac{7}{8}$	1 $\frac{3}{4}$
GUB03	3 $\frac{3}{8}$	2 $\frac{1}{2}$	3 $\frac{5}{16}$	3 $\frac{5}{16}$	3	1 $\frac{5}{32}$	2 $\frac{5}{16}$	1 $\frac{5}{32}$	2 $\frac{5}{16}$
GUB04	3 $\frac{3}{8}$	1 $\frac{21}{32}$	3 $\frac{5}{16}$	3 $\frac{5}{16}$	3	1 $\frac{5}{32}$	2 $\frac{5}{16}$	1 $\frac{5}{32}$	2 $\frac{5}{16}$
GUB01110	4 $\frac{3}{4}$	3	4	6	4	2	4	1 $\frac{21}{32}$	3 $\frac{5}{16}$
GUB15151	6	4	5 $\frac{1}{4}$	5 $\frac{7}{8}$	4	2	4	2	4

Dimensions

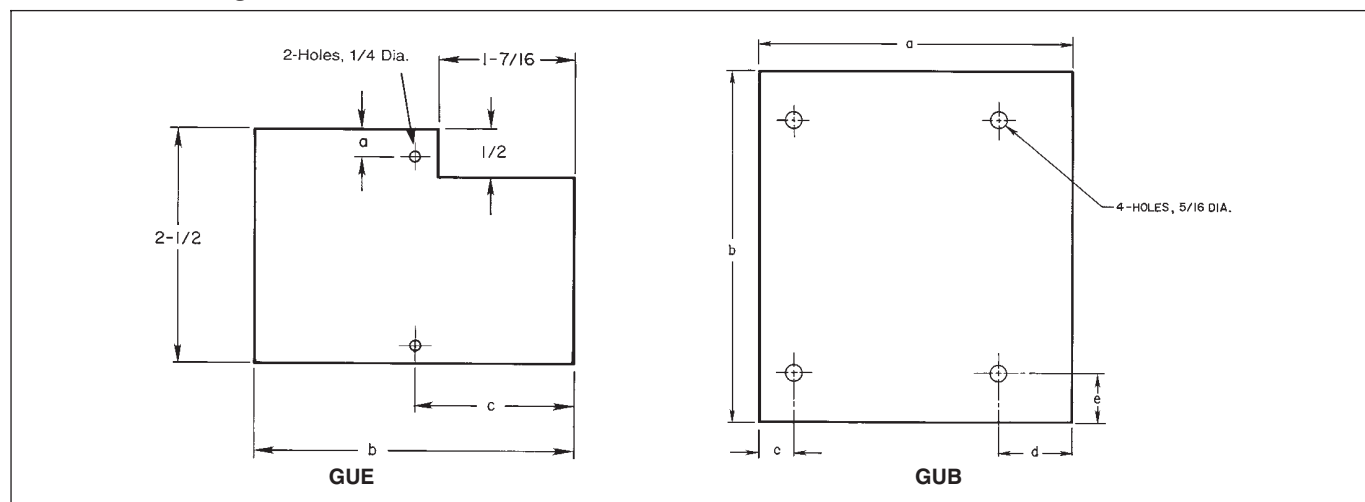


Type	a	b	c†	d†	e	f	g	h	j	k†	l†	m	n
GU	4 $\frac{15}{16}$	4 $\frac{15}{16}$	3 $\frac{13}{16}$	3 $\frac{13}{16}$	3 $\frac{5}{8}$	—	—	—	4 $\frac{1}{8}$	1 $\frac{9}{16}$	3 $\frac{7}{16}$	2 $\frac{3}{8}$	4 $\frac{1}{8}$
GUE	5 $\frac{5}{16}$	5 $\frac{5}{16}$	4 $\frac{3}{16}$	4 $\frac{3}{16}$	3 $\frac{5}{8}$	—	—	—	5 $\frac{3}{8}$	2 $\frac{1}{4}$	3 $\frac{7}{16}$	3 $\frac{1}{2}$	4 $\frac{1}{8}$
GUB01	6 $\frac{1}{2}$	7	6 $\frac{1}{2}$	5 $\frac{7}{8}$	5 $\frac{3}{8}$	5 $\frac{3}{4}$	7 $\frac{1}{2}$	1 $\frac{3}{32}$	5 $\frac{3}{4}$	3 $\frac{1}{16}$	4 $\frac{1}{2}$	4 $\frac{1}{16}$	6 $\frac{1}{4}$
GUB02	8	10	7 $\frac{7}{8}$	9 $\frac{1}{8}$	7	8 $\frac{3}{4}$	9	1 $\frac{3}{32}$	5 $\frac{7}{8}$	3	4 $\frac{5}{8}$	4 $\frac{1}{16}$	7 $\frac{3}{4}$
GUB06	8 $\frac{1}{2}$	10	7 $\frac{3}{8}$	8 $\frac{7}{8}$	7	8 $\frac{3}{4}$	9 $\frac{1}{2}$	7 $\frac{1}{16}$	7 $\frac{3}{8}$	4 $\frac{1}{4}$	5 $\frac{13}{16}$	5 $\frac{1}{4}$	7 $\frac{3}{4}$
GUB08	8 $\frac{1}{2}$	10	7 $\frac{3}{8}$	8 $\frac{7}{8}$	7	2 $\frac{1}{2}$	9 $\frac{5}{8}$	7 $\frac{1}{16}$	7 $\frac{3}{8}$	4 $\frac{1}{4}$	5 $\frac{3}{16}$	5 $\frac{1}{4}$	7 $\frac{3}{4}$
GUB03	11	12	9 $\frac{3}{4}$	10 $\frac{3}{4}$	9 $\frac{5}{8}$	10 $\frac{3}{4}$	12 $\frac{1}{8}$	7 $\frac{1}{16}$	8 $\frac{19}{16}$	5	7 $\frac{3}{8}$	6 $\frac{3}{8}$	11
GUB04	11	12	9 $\frac{3}{4}$	10 $\frac{3}{4}$	9 $\frac{5}{8}$	3 $\frac{1}{2}$	12 $\frac{1}{8}$	7 $\frac{1}{16}$	8 $\frac{11}{16}$	5	7 $\frac{3}{8}$	6 $\frac{1}{2}$	11
GUB01110	14 $\frac{1}{16}$	18 $\frac{1}{16}$	13	17	12 $\frac{1}{4}$	16	16	1	13 $\frac{1}{2}$	6 $\frac{13}{16}$	10 $\frac{3}{4}$	9 $\frac{3}{4}$	14
GUB15151	20 $\frac{7}{8}$	18 $\frac{7}{8}$	19 $\frac{1}{8}$	17 $\frac{1}{8}$	16 $\frac{3}{4}$	18	21	1	16 $\frac{5}{8}$	9	13 $\frac{3}{16}$	11 $\frac{3}{8}$	18

† Inside Dimensions

NOTE: For conduit liner ordering information, see page 140.

Table 5/Mounting Plate Dimensions



Box Cat. #	Mounting Plate Kit Cat. #	a	b	c	d	e
GU	GU-MPK1	9/32	3 3/8	1 43/64	—	—
GUE	GUE-MPK1	9/32	3 3/8	1 43/64	—	—
GUB01	GUB-MP01	4 3/8	5	3/8	1	1
GUB02	GUB-MP02	5 9/16	6 1/4	5/8	1 5/16	7/8
GUB03	GUB-MP03	8	9	1 5/16	1 5/16	1 1/2
GUB04	GUB-MP03	8	9	1 5/16	1 5/16	1 1/2
GUB06	GUB-MP02	5 9/16	6 1/4	5/8	1 5/16	7/8
GUB08	GUB-MP02	5 9/16	6 1/4	5/8	1 5/16	7/8
GUB01110	GUB-MP01110	8 3/4	12	7/16	1 7/16	1 3/4
GUB15151	GUB-MP15151	14	14	1 5/8	1 5/8	1 5/8

NOTE: For conduit liner ordering information, see page 140.

Cl. I, Div. 1 & 2, Groups B,C,D
 Cl. II, Div. 1, Groups E,F,G
 Cl. II, Div. 2, Groups F,G
 Cl. III
 NEMA 7B,C,D,9EFG

Explosionproof
 Dust-Ignitionproof
 Raintight
 Wet Locations
 Watertight

Application:

GUB and EPC threaded covers are used with GUB boxes in control systems in hazardous areas:

- indoors and outdoors
- in three categories:
 Flat – for normal use; furnished with standard GUB boxes
 Glass window – to provide visibility of meter indications when used to enclose meters
 Domed – for increasing volume of GUB to make it easier to splice and pull large conductors

Features:

- Domed – more suitable for use when splices of heavy conductors are made and enclosed, since the conductors may be pulled in with the ends outside the box. After the splices are made, they do not have to be crowded back into the box
- Glass window – has maximum diameter glass to give best visibility. In selecting, the diameter of the meter face should match or be slightly smaller than window diameter.

Standard Materials:

- Copper-free aluminum

Standard Finishes:

- Natural

Certifications and Compliances:

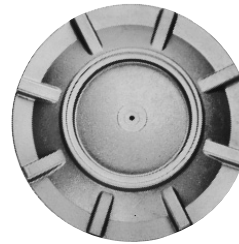
- NEC:
 GUB0101, -0102, -0103, -714, -7110, EPC2110, EPC2151
 Class I, Division 1 & 2, Groups B,C,D
 Class II, Division 1, Groups E,F,G
 Class II, Division 2, Groups F,G
 Class III

All other covers:

Class I, Division 1 & 2, Group D
 Class II, Division 1, Groups E,F,G
 Class II, Division 2, Groups F,G
 Class III

- CEC:
 Class I, Division 1 & 2, Group D
 Class II, Division 1, Groups E,F,G
 Class II, Division 2, Groups F,G
 Class III

Note: GUB covers are suitable for use in hazardous areas only when used with appropriate GUB series enclosures.



GUB flat cover



GUB glass cover



GUB dome cover

Body† Size	Flat Cover Cat. #	Glass Window Cover Cat. #	Dome Cover	
			Cat. #	Nominal Depth
GUB01	GUB0101	GUB0110	GUB714 GUB7110	4 10
GUB02 GUB06 GUB08	GUB0102	GUB0108	GUB726	6
GUB03 GUB04	GUB0103	GUB0109	GUB738 GUB7316	10 17
GUB01110	EPC2110		EPC2115	5
GUB15151	EPC2151		EPC21116	16

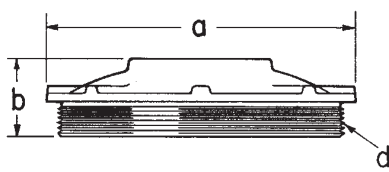
† Bodies are grouped by size of cover opening and take any of the covers shown in the group.

‡ Check certifications and compliances for specific hazardous area ratings for each catalog #.

Specify body and conduit openings in normal manner (see page 120) and state Cat. No. of cover required.

Dimensions

Flat covers



Flat Covers

Cat. #	a	b	Thread Size d
GUB0101	6 ⁵ / ₁₆	1 ²³ / ₃₂	5 ⁸ / ₁₆ -12
GUB0102	7 ¹³ / ₁₆	1 ¹⁵ / ₁₆	7 ⁸ / ₁₆ -12
GUB0103	11 ¹ / ₁₆	2 ³ / ₄	9 ³ / ₄ -8
EPC2110	12 ⁷ / ₈	5 ⁵ / ₃₂	12.660-8
EPC2151	17	5 ⁹ / ₁₆	16.910-8

Glass Covers

Cat. #	a	b	Window Opening c	Thread Size d
GUB0110	6 ⁵ / ₁₆	1 ¹³ / ₁₆	3 ⁵ / ₈	5 ⁸ / ₁₆ -12
GUB0108	7 ¹³ / ₁₆	2 ¹ / ₁₆	4 ³ / ₄	7 ¹ / ₈ -12
GUB0109	11 ¹ / ₁₆	1 ¹⁵ / ₁₆	6 ¹ / ₁₆	9 ³ / ₄ -8

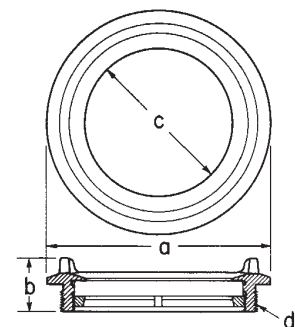
Dome Covers

Cat. #	a	b
GUB714	5 ¹ / ₁₆	2 ³ / ₄
GUB7110	5 ¹ / ₁₆	9 ¹ / ₈
GUB726	6 ³ / ₈	5 ¹ / ₈
GUB738	8 ⁷ / ₈	8
GUB7316	8 ⁷ / ₈	15 ¹ / ₄
EPC2115	11 ⁹ / ₁₆	3 ⁹ / ₁₆
EPC21116	11 ⁹ / ₁₆	14 ⁹ / ₁₆

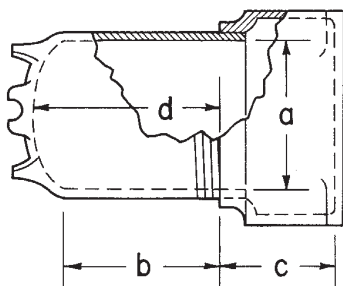
For Dimensions C

GUB02	GUB06	GUB08	all others	d
			4 ³ / ₁₆	4
			4 ³ / ₁₆	10 ³ / ₈
4 ¹ / ₈	5 ¹ / ₈	5 ¹ / ₈	6 ⁵ / ₈	10 ¹ / ₂
			6 ⁵ / ₈	17 ³ / ₈
			8 ¹ / ₂	6 ⁹ / ₁₆
			8 ¹ / ₂	17 ⁹ / ₁₆

Glass covers



GUB with dome covers



NOTE: For conduit liner ordering information, see page 140.

Application:

GUB equipment housings are used in threaded rigid conduit systems in hazardous areas:

- to house relays, contactors, terminal blocks or other equipment and devices
- indoors or outdoors

Features:

- Supplied with dome cover and adjustable mounting position plate which extends into dome cover.
- Mounting plate is adjustable. It may be located in center of cover so small devices can be mounted on both sides of plate or toward either side of dome cover when larger devices are mounted on one side of plate (see dimension "p").

Standard Materials:

- Bodies – *Feraloy*® iron alloy
- Covers – copper-free aluminum
- Mounting plates – sheet steel

Standard Finishes:

- *Feraloy* iron alloy – electrogalvanized and aluminum acrylic paint
- Copper-free aluminum – natural
- Sheet steel – zinc plated

Options:

Description

Material – Bodies, copper-free aluminum. SA

Other sizes of boxes and covers available Information on request

Suffix to be Added to Cat. #

Certifications and Compliances:

- NEC:
GUB3100, GUB3177
Class I, Division 1 & 2, Group D
Class II, Division 1, Groups E,F,G
Class II, Division 2, Groups F,G
Class III

GUB1440, GUB1100
Class I, Division 1 & 2, Groups B,C,D
Class II, Division 1, Groups E,F,G
Class II, Division 2, Groups F,G
Class III

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



GUB with cover removed showing mounting plate.



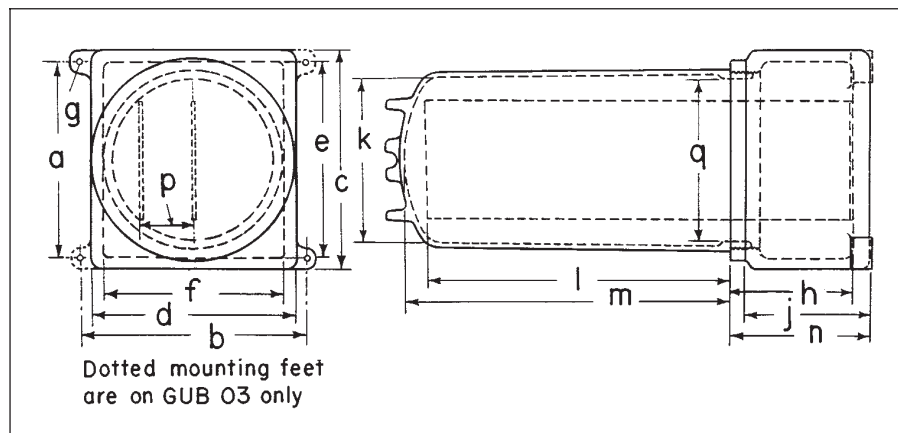
GUB with dome cover.

Body Size	Nominal Depth of Cover	Dimension		Width of Mounting Plate	Cat. #
		l	m		
GUB01	4	3 ⁵ / ₁₆	4	3 ¹ / ₁₆	GUB1440
	10	9 ³ / ₁₆	10 ⁷ / ₁₆		GUB1100
GUB03	10	9 ¹ / ₈	10 ¹ / ₁₆	6 ¹ / ₂	GUB3100
	17	16 ³ / ₈	17 ³ / ₈		GUB3177

NOTE: Conduit seals are required within 1½" of all conduit entrances for Class I, Division 1, Group B hazardous areas. For other sealing requirements consult the National Electrical Code®/Canadian Electrical Code.

†Check Certifications and Compliances for specific hazardous area ratings for each catalog #.

Dimensions



Body Size

	GUB01	GUB03
a	5 ³ / ₄	10 ³ / ₄
b	7 ¹ / ₂	12 ¹ / ₈
c	7	12
d	6 ¹ / ₂	11
e	6 ¹ / ₂	10 ³ / ₄
f	5 ⁷ / ₈	9 ³ / ₄
g	1 ³ / ₃₂	7 ¹ / ₁₆
h	4 ³ / ₁₆	6 ⁵ / ₈
j	4	6 ⁵ / ₈
k	5	9 ¹ / ₈
l	see listing	
m	see listing	
n	4 ⁷ / ₈	7 ⁵ / ₈
p	1 ¹ / ₂ max	2 ⁷ / ₈ max
q	5 ¹ / ₁₆	8 ⁷ / ₈

NOTE: For conduit liner ordering information, see page 140.

Cl. I, Div. 1 & 2, Groups B,C,D
 Cl. II, Div. 1, Groups E,F,G
 Cl. II, Div. 2, Groups F,G
 Cl. III
 NEMA 3,4,7,9
 EEx d IIB+H₂ T6, IP66**

Explosionproof
 Dust-Ignitionproof
 Raintight
 Wet Locations

Application:

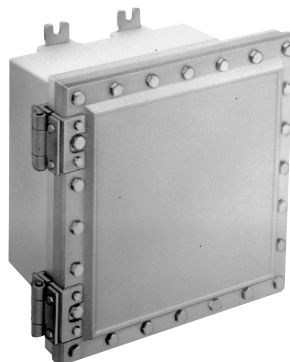
EJB junction boxes are used in threaded rigid conduit systems in hazardous areas:

- As a junction or pull box
- To provide enclosures for splices and branch circuit taps
- For housing terminal blocks, relays and other electrical devices
- Indoors or outdoors in damp, wet, dusty, corrosive, hazardous locations
- Where exposure to frequent or heavy rain, water, spray, moisture, and humidity is common; such as: offshore drilling facilities, cooling towers, coal preparation and handling facilities and sewage and waste water treatment plant
- In areas which are hazardous due to the presence of hydrogen or gases and vapors of equivalent hazard such as found in process industries, missile bases and gas manufacturing plants

Features:

- Style C boxes provided with Aluminum plate cover as standard, allowing for field addition of cover device holes.
- Stainless steel cover bolts (Style C only).
- Ground joint cover opening provides maximum opening for pulling wires or mounting equipment.
- Walls of bodies may be drilled and tapped for conduit entries as shown in listings.
- Stud bolts in diagonally opposite corners of body aid in aligning cover to body during installation (not furnished with hinged covers).
- All Style C bodies are provided with captive, quick release hex head stainless steel bolts with spring loaded action which provides clear indication that cover bolts are fully retracted from the body.
- External flange design – wide unobstructed cover opening provides a completely accessible interior for wiring and electrical equipment.
- Square corners of enclosure body provide maximum interior space and area for conduit openings.
- Internal grounding lug provides a means to ground enclosed equipment.
- Special neoprene cover gasket provides a watertight seal to meet NEMA 4 requirements, and provides superior protection for enclosed equipment against water/corrosion.
- Enclosures are machined for field installed mounting plates.
- Detachable mounting feet provide mounting flexibility. No need to replace enclosure if mounting feet are broken.
- Optional stainless steel hinges provide convenient and easy access for inspection, maintenance and systems changes.
- Enclosures are machined to accept field installed hinges.
- CENELEC certified when ordered with suffix ATEX (Style C only).

NOTE: For conduit liner ordering information, see page 140.



EJB121208 with optional hinged cover

Standard Materials:

- Body and cover – copper-free aluminum (suffix-SA items and Style C); *Feraloy*® iron alloy (Style D)
- Gasket – neoprene
- Cover bolts – stainless steel (Style C), steel (Style D)
- Hinges – stainless steel

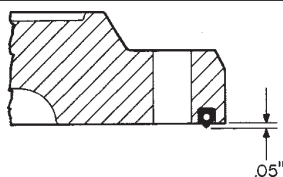
Standard Finishes:

- Copper-free aluminum – natural
- *Feraloy* iron alloy – electrogalvanized and aluminum acrylic paint
- Steel – electrogalvanized
- Extruded aluminum – natural

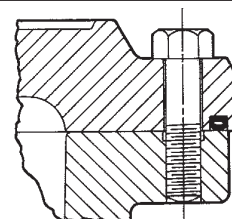
Certifications and Compliances:

- NEC/CEC
 Class I, Divisions 1 and 2, Groups B*, C† and D‡
 Class II, Division 1, Groups E, F and G
 Class II, Division 2, Groups F and G
 Class III
 Class I, Zones 1 and 2
- UL Standard 886
- cUL to CSA Standard C22.2 No. 30
- Style C only: CENELEC EEx d IIB + H₂ T6, IP66
 ATEX certificate: PTB 01 ATEX 1020 U (when ordered with-ATEX suffix)
- Enclosure Type 3, 3R, 4, 7BCD, 9EFG

Gasket Detail



Cross section of cover. Gasket extends beyond flange surface by .05".



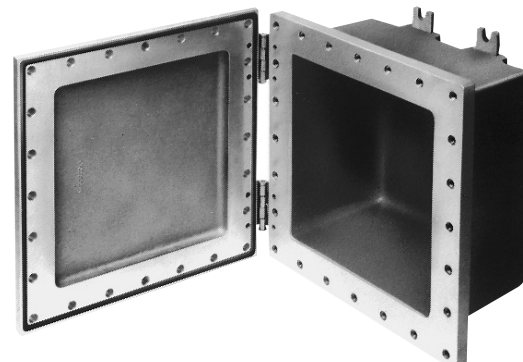
Bolted cover and body assembled. Compressed gasket forms watertight seal.

* For Group B, install sealing fitting in each conduit run within 18" of the enclosure.

† EJB361208, 361808, 362408 and all style D enclosures require sealing fittings within 18" of enclosure for each conduit run for Group C locations.

‡ Style D enclosures require sealing fittings within 18" of enclosure for each conduit run for Group D locations.

* * Order suffix ATEX (style C only).



EJB121208 with optional hinged cover and standard neoprene cover gasket

Options

Description	Suffix to be added to Cat. No.
Hinged covers. Hinges mounted on left (short side) S598	
Available on all Style C and the following Style D enclosures: EJB101008-SA, EJB120804, EJB120804-SA, EJB120808-SA, & EJB141006-SA	
Hinge kits for field installation (no field machining required) –	
EJB100806 through 361208	EJB KIT 1 (2 hinges)
EJB361808	EJB KIT 3 (3 hinges)
EJB362408	EJB KIT 4 (4 hinges)

For EJB101008-SA, EJB120804, EJB120804-SA, EJB120808-SA & EJB141006-SA EJB KIT 5 (2 hinges)

Factory installed mounting plates for relays, terminal blocks, electrical devices, etc. –

Aluminum MP
 Mounting plate kit for field installation (kit includes aluminum mounting plate, pillars and mounting hardware). No field machining required. See Ordering Information on page 130

Factory installed terminal blocks Information on request

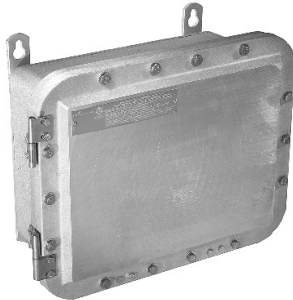
EJB Junction Boxes

Dimensions Pg. 132

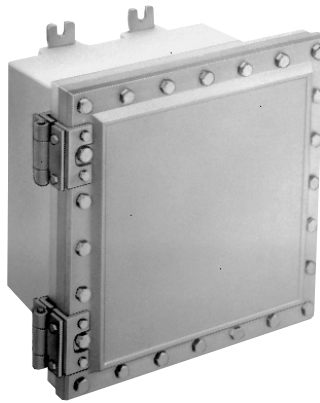
Cl. I, Div. 1 & 2, Groups B,C,D
Cl. II, Div. 1, Groups E,F,G
Cl. II, Div. 2, Groups F,G
Cl. III
NEMA 3,4,7,9
EEx d IIB+H₂ T6, IP66**

Explosionproof
Dust-Ignitionproof
Raintight
Wet Locations

6F



Style D



Style C – EJB121208† with optional hinged cover

Style D

Cat. #	Nominal Inside Dimensions		
	Sides (aa)	Top & Bottom (bb)	Depth
Iron			
EJB060404✓	4	6	4
EJB080604✓	6	8	4
EJB080606✓	6	8	6
EJB080806✓	8	8	6
EJB120804✓	8	12	4
EJB160404	4	16	4
Aluminum			
EJB060404-SA✓	4	6	4
EJB080604-SA	6	8	4
EJB080606-SA✓	6	8	6
EJB080806-SA	8	8	6
EJB120604-SA	6	12	4
EJB120804-SA✓	8	12	4
EJB120808-SA	8	12	8
EJB160404-SA	4	16	4
EJB101008-SA✓	10	10	8
EJB141006-SA✓	10	14	6

Style C

Cat. #	Nominal Inside Dimensions		
	Sides (aa)	Top & Bottom (bb)	Depth
EJB100806	10	8	6
EJB121204	12	12	4
EJB121206✓	12	12	6
EJB121208✓	12	12	8
EJB161606✓	16	16	6
EJB161608✓	16	16	8
EJB181206	12	18	6
EJB181208	12	18	8
EJB241208	12	24	8
EJB241210	12	24	10
EJB241808✓	18	24	8
EJB242408	24	24	8
EJB242410	24	24	10
EJB361208	12	36	8
EJB361808	18	36	8
EJB362408	24	36	8
EJB602212†	60	22	12

Ordering Information:

Junction boxes listed can be furnished with drilled and tapped openings, subject to material required and the limitations of maximum size and number of openings as well as spacing, as shown in Tables 1 and 2.

To Order:

Step 1

Select the box required from photos at left, listings, and dimensional drawings on pages 130 to 132.

Step 2

Select standard conduit arrangement from Table 1 and maximum size conduit opening required from Table 2.

Step 3

Select appropriate symbol for required drilled and tapped opening from Table 3.

Example:

Step 1 – Box required – EJB080806

Step 2 – Arrangement – 2

Step 3 – Openings – two 1" drilled and tapped holes in top and bottom and two 2" drilled and tapped holes on each side.

Step 4 – Symbols are substituted and written in clockwise order starting with "a." When no opening is required at a particular location, use symbol "0" (zero).

For this example: CC,GG,CC,GG. Complete Cat. No. is made up of three parts: Part 1 – box number; Part 2 – arrangement number; Part 3 – symbols for conduit openings. For this example:

EJB080806-2-CC-GG-CC-GG

If none of the standard arrangements meet requirements, send a sketch showing junction box number with size and location of each conduit opening desired.

EJB Mounting Plate Kits

(For Field Installation)

Select kit number that matches junction box number.

Example: EJB-MP1410 is used in EJB141006-SA

Cat.

Style C

EJB-MP1008
EJB-MP1212
EJB-MP1616
EJB-MP1812
EJB-MP2412
EJB-MP2418
EJB-MP2424
EJB-MP3612
EJB-MP3618
EJB-MP3624

Cat.

Style D

EJB-MP0604
EJB-MP0806
EJB-MP0808
EJB-MP1206
EJB-MP1208
EJB-MP1604
EJB-MP1010
EJB-MP1410

* See Compliances on page 128.

** Order suffix ATEX (Style C only).

† Class I, Div. 1 and 2, Groups C and D only.

NOTE: For conduit liner ordering information, see page 140.

✓ - Available with Lightning Service™. See Section G for complete details.

Table 1/Conduit Arrangement Diagrams

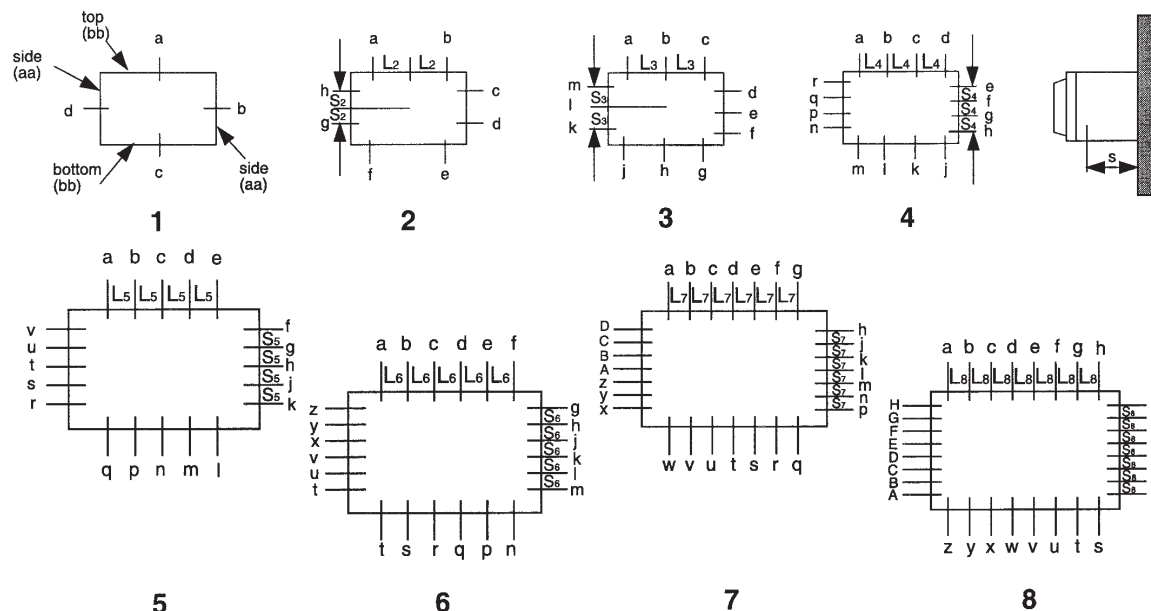


Table 2/Conduit Arrangements – Style D

Cat. #	Maximum Trade Size and Number of Openings								Spacing Dimensions						
	Top and Bottom (bb)*				Sides (aa)				S	L ₂	S ₂	L ₃	S ₃	L ₄	S ₄
EJB060404	1	2	3	4	1	2	3	4	2 ⁵ / ₈	1 ⁵ / ₈	1 ¹ / ₁₆	2 ¹ / ₈	—	—	—
EJB080604	2	2	1	1/2	2	1 1/4	1/2	—	2 ⁵ / ₈	2 ¹ / ₈	1 ⁵ / ₈	2 ³ / ₄	2 ¹ / ₈	2 ¹ / ₁₆	—
EJB080606	3 1/2	2	1	1/2	3 1/2	1 1/4	1/2	—	3 ³ / ₄	2 ¹ / ₄	1 ⁵ / ₈	2 ³ / ₄	2 ¹ / ₈	2 ¹ / ₁₆	—
EJB080806	3 1/2	2	1	1/2	3 1/2	2	1	1/2	3 ³ / ₄	2 ¹ / ₄	2 ¹ / ₄	2 ³ / ₄	2 ³ / ₄	2 ¹ / ₁₆	2 ¹ / ₁₆
EJB101008	4	2 1/2	1 1/2	1	4	2 1/2	1 1/2	1	4 ³ / ₄	2 ³ / ₄	2 ³ / ₄	3 ⁵ / ₈	3 ⁵ / ₈	2 ⁹ / ₁₆	2 ⁹ / ₁₆
EJB120604	2	2	2	1 1/4	2	1 1/2	1/2	—	2 ³ / ₄	3	1 ⁵ / ₈	4 ¹ / ₈	2 ¹ / ₈	3 ¹ / ₈	—
EJB120804	2	2	2	1 1/4	2	2	1	1/2	2 ¹ / ₈	3	2 ¹ / ₄	4 ¹ / ₈	2 ³ / ₄	3 ¹ / ₁₆	2 ¹ / ₁₆
EJB120808	4	4	2	1 1/4	4	2	1	1/2	4 ³ / ₄	3 ¹ / ₄	2 ¹ / ₄	4 ¹ / ₈	2 ³ / ₄	3 ¹ / ₁₆	2 ¹ / ₁₆
EJB141006	3 1/2	3 1/2	2 1/2	1 1/2	3 1/2	2 1/2	1 1/2	1	3 ⁷ / ₈	3 ³ / ₄	2 ³ / ₄	5	3 ⁹ / ₁₆	3 ⁵ / ₈	2 ⁹ / ₁₆
EJB160404	2	2	2	2	2	1/2	—	—	2 ⁵ / ₈	3	1 ¹ / ₁₆	6	—	4 ¹ / ₈	—

NOTE: Conduit seals are required in all conduit entrances for Class I, Division 1, Group B hazardous areas, and for EJB361208, EJB361808, EJB362408, and all Style D enclosures when used in Class I, Division 1, Group C hazardous areas. For other sealing requirements, consult the National Electrical Code*. Where standard arrangements are not adequate, special drilling and tapping can be ordered, or instructions can be provided for field drilling and tapping. Breathers and drains must be ordered separately. Maximum trade size for Group B application is 4".

* Top and bottom are longer dimensions on enclosures which are not square.

Table 2/Conduit Arrangements (Continued)

Style C Drilled and Tapped Openings – Groups B***, C and D

Cat. #	Maximum Trade Size and Number of Openings															
	Top and Bottom (bb)**								Sides (aa)							
	1	2	3	4	5	6	7	8	1	2	3	4	5	6	7	8
EJB100806	3½	3	1½	1¼	—	—	—	—	3½	2½	1½	1¼	—	—	—	—
EJB121204	1½	1½	1½	1¼	1	¾	½	—	1½	1½	1½	1¼	1	¾	½	—
EJB121206	3½	3½	1½	1¼	1	¾	½	—	3½	3½	1½	1¼	1	¾	½	—
EJB121208	5	3½	1½	1¼	1	¾	½	—	5	3½	1½	1¼	1	¾	½	—
EJB161606	3½	3½	2½	2	1½	1¼	1	¾	3½	3½	2½	2	1½	1¼	1	¾
EJB161608	5	5	3	2	1½	1¼	1	¾	5	5	3	2	1½	1¼	1	¾
EJB181206	3½	3½	3½	2½	1½	1½	1	¾	3½	3½	1½	1¼	1	¾	½	—
EJB181208	5	5	3½	2½	2	1½	1	1	5	3½	1½	1¼	1	¾	½	—
EJB241208	5	5	5	3½	3	2½	2	1½	5	3½	1½	1¼	1	1	½	—
EJB241210	6	6	5	3½	3	2½	2	1½	6	3½	1½	1¼	1	1	½	—
EJB241808	5	5	5	3½	3	2½	2	1½	5	5	3½	2½	2	1½	1¼	1
EJB242408	5	5	5	3½	3	2½	2	1½	5	5	5	3½	3	2½	2	1½
EJB242410	6	6	5	3½	3	2½	2	1½	6	6	5	3½	3	2½	2	1½
EJB361208	5	5	5	5	4	4	3½	2½	5	3½	1½	1¼	1	¾	½	—
EJB361808	5	5	5	5	4	4	3½	2½	5	5	3½	2½	2	1½	1¼	1
EJB362408	5	5	5	5	4	4	3½	2½	5	5	5	3½	3	2½	2	1½

Spacing Dimensions ♦ ♦

Cat. #	S	L2	S2	L3	S3	L4	S4	L5	S5	L6	S6	L7	S7	L8	S8
EJB100806	3⅜	2¾	1⅞	3	2⅝	2¼	1¾	—	—	—	—	—	—	—	—
EJB121204	3	2¼	2¼	3⅝	3⅝	3¼	3¼	2	2	1¾	1¾	1½	1½	—	—
EJB121206	3¾	3	3	3⅝	3⅝	3¼	3¼	2	2	1¾	1¾	1½	1½	—	—
EJB121208	4¾	3	3	3⅝	3⅝	3¼	3¼	2	2	1¾	1¾	1½	1½	—	—
EJB161606	3¾	3	3	4⅝	4⅝	4¾	4¾	2¾	2¾	2½	2½	2	2	1¾	1¾
EJB161608	4¾	3¼	3¼	4⅝	4⅝	4¾	4¾	2¾	2¾	2½	2½	2	2	1¾	1¾
EJB181206	3¾	3	3	6	3⅝	4⅝	3¼	2¾	2	2¾	1¾	2	1½	1¾	—
EJB181208	4¾	4¾	3	6	3⅝	4⅝	3¼	3¼	2	2¾	1¾	2	1½	2	—
EJB241208	5⅞	4¾	3	8⅞	3⅝	6	3¼	4⅝	2	3⅞	2	3¼	1½	2¾	—
EJB241210	6⅞	4¾	3	8⅞	3⅝	6	3¼	4⅝	2	3⅞	2	3¼	1½	2¾	—
EJB241808	5¼	4¾	4¾	8⅞	6	6	4⅝	4⅝	3¼	3⅞	2¾	3¼	2½	2¾	2
EJB242408	5⅝	4¾	4¾	8⅞	8⅞	6	6	4⅝	4⅝	3⅞	3⅞	3¼	3¼	2¾	2¾
EJB242410	6⅝	4¾	4¾	8⅞	8⅞	6	6	4⅝	4⅝	3⅞	3⅞	3¼	3¼	2¾	2¾
EJB361208	4¾	4¾	3	8⅞	3⅝	8⅞	3¼	5¾	2	5¾	1¾	5⅞	1½	3⅞	—
EJB361808	5½	4¾	4¾	8⅞	6	8⅞	4⅝	5¾	3¼	5¾	2¾	5⅞	2½	3⅞	2
EJB362408	6	4¾	4¾	8⅞	8⅞	8⅞	6	5¾	4⅝	5¾	3⅞	5⅞	3¼	3⅞	2¾

Table 3 / Symbols for Openings

Conduit Size
Drilled and Tapped Hole Symbol

½	A
¾	B
1	C
1¼	E
1½	F
2	G
2½	H
3	J
3½	K
4	L
5	M
6	N
None	O

NOTE: Conduit seals are required in all conduit entrances for Class I, Division 1, Group B hazardous areas, and for EJB361208, EJB361808 and EJB362408 enclosures when used in Class I, Division 1, Group C hazardous areas. For other sealing requirements, consult the National Electrical Code®. Where standard arrangements are not adequate, special drilling and tapping can be ordered, or instructions can be provided for field drilling and tapping. Breathers and drains must be ordered separately – see page 195.

** Top and bottom are longer dimensions on enclosures which are not square.

♦ ♦ Spacing dimensions for Group B boxes are based on use of EYS11-101 sealing fitting in conduit.

§ Drilled and tapped openings for vertical mounted enclosures with horizontal conduit entries – consult Cooper Crouse-Hinds for proper pouring space for seals.

NOTE: For conduit liner ordering information, see page 140.

*** Maximum trade size for Group B applications is 4"

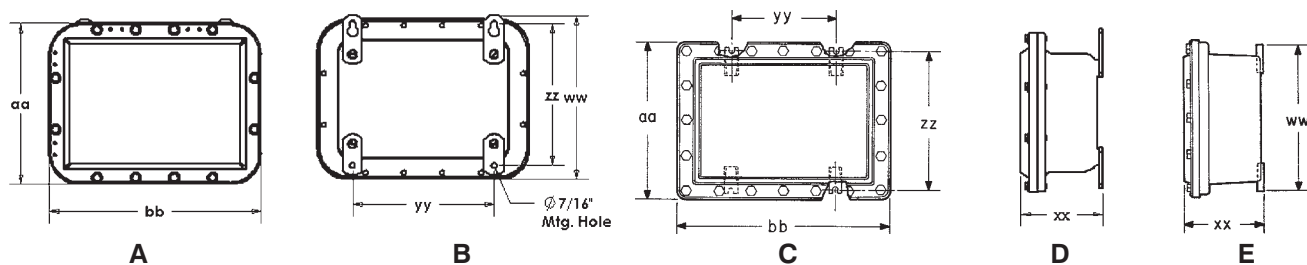


Table 4/Outside Dimensions

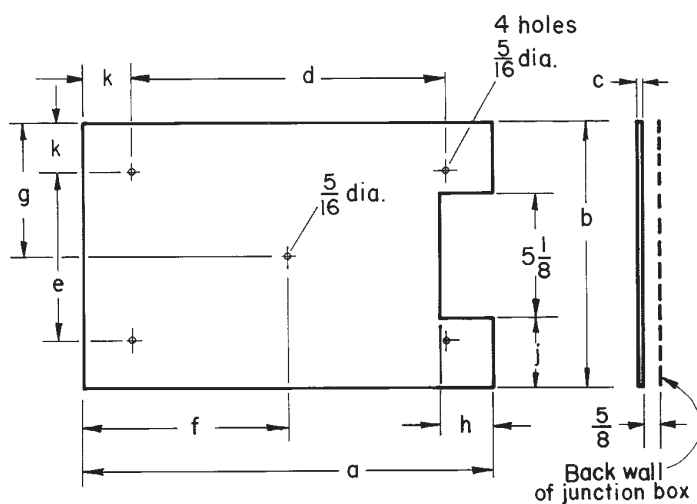
Cat. #†	Diagram	aa	bb	Mtg. Hole	ww	xx	yy	Net Weight (lbs.) With Cover	
								zz	w/Cover
EJB060404	A, B, D	8 ¹¹ / ₃₂	10 ¹¹ / ₃₂	7/16	8 ³ / ₄	6 ¹ / ₈	5	7 ¹ / ₈	43
EJB080604		10 ¹⁵ / ₃₂	12 ¹⁵ / ₃₂	7/16	10 ²⁵ / ₃₂	6 ³ / ₁₆	7	9 ¹ / ₈	64
EJB080606		10 ¹⁵ / ₃₂	12 ¹⁵ / ₃₂	7/16	10 ²⁵ / ₃₂	8 ³ / ₁₆	7	9 ¹ / ₈	84
EJB080806		12 ¹⁵ / ₃₂	12 ¹⁵ / ₃₂	7/16	12 ²⁵ / ₃₂	8 ⁷ / ₃₂	7	11 ¹ / ₈	98
EJB120804		12 ¹ / ₂	16 ¹ / ₂	7/16	12 ¹³ / ₁₆	6 ³ / ₈	11	11 ¹ / ₈	103
EJB160404		8 ¹ / ₂	20 ¹ / ₂	7/16	8 ¹³ / ₁₆	6 ⁵ / ₃₂	15	7 ¹ / ₈	86
EJB060404-SA		8 ¹¹ / ₃₂	10 ¹¹ / ₃₂	7/16	8 ³ / ₄	6 ¹ / ₈	5	7 ¹ / ₈	16
EJB080604-SA		10 ¹⁵ / ₃₂	12 ¹⁵ / ₃₂	7/16	10 ²⁵ / ₃₂	6 ³ / ₁₆	7	9 ¹ / ₈	24
EJB080606-SA		10 ¹⁵ / ₃₂	12 ¹⁵ / ₃₂	7/16	10 ²⁵ / ₃₂	8 ³ / ₁₆	7	9 ¹ / ₈	32
EJB080806-SA		12 ¹⁵ / ₃₂	12 ¹⁵ / ₃₂	7/16	12 ²⁵ / ₃₂	8 ⁷ / ₃₂	7	11 ¹ / ₈	37
EJB120604-SA		10 ¹ / ₂	16 ¹ / ₂	7/16	10 ¹³ / ₁₆	6 ³ / ₁₆	11	9 ¹ / ₈	32
EJB120804-SA		12 ¹ / ₂	16 ¹ / ₂	7/16	12 ¹³ / ₁₆	6 ³ / ₈	11	11 ¹ / ₈	39
EJB120808-SA		12 ¹ / ₂	16 ¹ / ₂	7/16	12 ¹³ / ₁₆	10 ³ / ₈	11	11 ¹ / ₈	56
EJB160404-SA		8 ¹ / ₂	20 ¹ / ₂	7/16	8 ¹³ / ₁₆	6 ⁵ / ₃₂	15	7 ¹ / ₈	33
EJB101008-SA		14 ²¹ / ₃₂	14 ²¹ / ₃₂	7/16	14 ⁷ / ₈	10 ³ / ₈	9	13 ¹ / ₈	59
EJB141006-SA		14 ²¹ / ₃₂	18 ²¹ / ₃₂	7/16	14 ⁷ / ₈	8 ¹⁵ / ₃₂	13	13 ¹ / ₈	66
EJB100806	C and E	13 ¹ / ₃₂	15 ¹ / ₃₂	9/16	12 ¹ / ₄	8 ⁹ / ₁₆	5 ¹ / ₂	11 ¹ / ₄	60
EJB121204		17 ¹ / ₁₆	17 ¹ / ₁₆	9/16	16 ¹ / ₈	6 ¹³ / ₁₆	5 ¹ / ₂	15 ¹ / ₈	60
EJB121206		17 ¹ / ₁₆	17 ¹ / ₁₆	9/16	16 ¹ / ₈	8 ⁷ / ₈	5 ¹ / ₂	15 ¹ / ₈	70
EJB121208		17 ¹ / ₁₆	17 ¹ / ₁₆	9/16	16 ¹ / ₈	10 ⁷ / ₈	5 ¹ / ₂	15 ¹ / ₈	80
EJB161606		21 ³ / ₁₆	21 ³ / ₁₆	9/16	20 ¹ / ₈	8 ⁷ / ₈	9 ¹ / ₂	19 ¹ / ₈	103
EJB161608		21 ³ / ₁₆	21 ³ / ₁₆	9/16	20 ¹ / ₈	10 ⁷ / ₈	9 ¹ / ₂	19 ¹ / ₈	113
EJB181206		17 ⁵ / ₁₆	23 ⁵ / ₁₆	9/16	16 ¹ / ₈	8 ⁷ / ₈	11 ¹ / ₂	15 ¹ / ₈	101
EJB181208		17 ⁵ / ₁₆	23 ⁵ / ₁₆	9/16	16 ¹ / ₈	10 ⁷ / ₈	11 ¹ / ₂	15 ¹ / ₈	110
EJB241208		17 ⁹ / ₁₆	29 ⁹ / ₁₆	9/16	16 ¹ / ₈	11 ³ / ₄	17 ¹ / ₂	15 ⁵ / ₈	149
EJB241210		17 ⁹ / ₁₆	29 ⁹ / ₁₆	9/16	16 ¹ / ₈	13 ³ / ₄	17 ¹ / ₂	15 ⁵ / ₈	160
EJB241808		23 ⁹ / ₁₆	29 ⁵ / ₈	1 ¹ / ₁₆	23 ¹ / ₂	12 ¹ / ₄	17 ¹ / ₄	21 ⁷ / ₈	243
EJB242408		29 ⁹ / ₁₆	29 ⁹ / ₁₆	1 ¹ / ₁₆	29 ¹ / ₂	12 ⁵ / ₁₆	16 ¹ / ₄	27 ⁷ / ₈	296
EJB242410		29 ⁹ / ₁₆	29 ⁹ / ₁₆	1 ¹ / ₁₆	29 ¹ / ₂	14 ⁵ / ₁₆	16 ¹ / ₄	27 ⁷ / ₈	322
EJB361208		17 ¹ / ₁₆	41 ¹ / ₁₆	9/16	16 ¹ / ₈	11 ¹¹ / ₁₆	29 ¹ / ₂	15 ¹ / ₈	185
EJB361808		23 ¹⁵ / ₁₆	41 ¹⁵ / ₁₆	1 ¹ / ₁₆	23 ¹ / ₂	12 ⁷ / ₁₆	28 ¹ / ₄	21 ⁷ / ₈	351
EJB362408		30 ³ / ₁₆	42 ³ / ₁₆	1 ¹ / ₁₆	31 ¹ / ₄	12 ⁵ / ₈	28 ¹ / ₄	29 ¹ / ₂	571

☆ Mounting strap location varies with body. In some cases, they extend beyond the sides.

* See Certifications and Compliances on page 128.

NOTE: For conduit liner ordering information, see page 140.

Table 5/Mounting Plate Dimensions



Style C

Style C

Cat. #	a	b	c	d	e	f	g	h	j	k
EJB-MP1008†	9	7	.125	7	5			1 3/8	1 1/2	1
EJB-MP1212†	11	11	.125	9	9			1 3/8	1 1/2	1
EJB-MP1616†	15	15	.125	13	13			1 3/8	1 1/2	1
EJB-MP1812	17	11	.125	13	7	8 1/2	5 1/2	2 3/8	2 1/2	2
EJB-MP2412	23	11	.125	19	7	11 1/2	5 1/2	2 3/8	2 1/2	2
EJB-MP2418	22	16	.125	19	13	11	8	1 7/8	2	1 1/2
EJB-MP2424	22	22	.125	19	19	11	11	1 7/8	2	1 1/2
EJB-MP3612	34	10	.125	31	7	17	5	1 7/8	2	1 1/2
EJB-MP3618	33 1/2	15 1/2	.125	31	13	16 3/4	7 3/4	1 5/8	1 3/4	1 1/4
EJB-MP3624	34	22	.125	31	19	17	11	1 7/8	2	1 1/2

* See Certifications and Compliances on page 128.

† Plate has no center hole.

NOTE: For conduit liner ordering information, see page 140.

Application:

EJB602212 junction box is used in threaded rigid conduit systems in hazardous areas:

- as a junction or pull box.
- as an enclosure for splices and branch circuit taps.
- for housing terminal blocks, relays, and other electrical devices.
- as a mounting box for multi-device control panels with EMP barrel assemblies (see section 4C).
- indoors or outdoors in damp, wet, dusty, corrosive locations.
- where exposure to frequent or heavy rain, water, spray, moisture, and humidity is common; such as: offshore drilling facilities, cooling towers, coal preparation and handling facilities, and sewage and waste water treatment plants.
- which are hazardous due to the presence of gases or vapors such as those found in process industries, missile bases, and gas manufacturing plants.

Features:

- Ground joint cover opening provides maximum opening for pulling wires or mounting equipment.
- Walls of enclosure may be drilled and tapped for conduit entries as shown in Table 2.
- External flange design – wide unobstructed cover opening provides a completely accessible interior for wiring and electrical equipment.
- Square corners of enclosure body provide maximum interior space and area for conduit openings.
- Flat cover provides maximum space for mounting a greater number of control devices.
- Internal grounding lug provides a means to ground enclosed equipment.
- Special neoprene cover gasket provides a watertight seal to meet UL Type 4 (NEMA 4) requirements, and provides superior protection for enclosed equipment against water/corrosion.
- Stainless steel cover bolts provide superior corrosion protection.
- Enclosure is machined for field installed mounting plates.
- Detachable mounting channels provide mounting flexibility. No need to replace enclosure if mounting channel is broken.
- Aluminum hinges provide convenient and easy access for inspection, maintenance, and systems changes.
- Safety chain attached to body and cover prevents accidental damage to hinges.

Standard Materials:

- Body and cover – copper-free aluminum
- Gasket – neoprene
- Cover bolts – stainless steel
- Hinges – extruded aluminum

NOTE: For conduit liner ordering information, see page 140.

Standard Finishes:

- Copper-free aluminum – natural
- Extruded aluminum – natural
- Stainless steel – natural
- Neoprene – natural

Certifications and Complies:

- NEC:
 Class I, Division 1 & 2, Groups C,D
 Class II, Division 1, Groups E,F,G
 Class II, Division 2, Groups F,G
 Class III
- UL Standard: 886
- UL Raintight
- CSA 22.2 No. 18 and 30
- NEMA 3,4,7CD,9EFG

Options:

Mounting plate kit for field installation (kit includes aluminum mounting plate, pillars, and mounting hardware). EJB-MP6022
 Factory installed aluminum mounting plate for relays, terminal blocks, electrical devices, etc. MP

Ordering Information:

EJB602212 can be furnished with drilled and tapped openings, subject to the limitations of maximum size and number of openings as well as spacing, as shown in Tables 1 and 2.

TO ORDER:

Step 1

Specify box catalog number – EJB602212

Step 2

Select standard conduit arrangement from Table 1 and maximum allowable size conduit opening from Table 2.

Step 3

Select appropriate symbol for required drilled and tapped opening from Table 3.

Example:

Step 1 – Box Cat. No. – EJB602212

Step 2 – Arrangement – 2

Step 3 – Openings – two 2" drilled and tapped holes in top and bottom and two 2½" drilled and tapped holes evenly spaced on each side.

Step 4 – Symbols are substituted and written in clockwise order starting with "a". When no opening is required at a particular location, use symbol "0" (zero). For this example: GG-0H0H0-GG-0H0H0. Complete Cat. No. is made up of three parts: Part 1 – box number; Part 2 – arrangement number; Part 3 – symbols for conduit openings. For this example the catalog number is: EJB602212-2-GG-0H0H0-GG-0H0H0.



Table 1 / Conduit Arrangement Diagrams

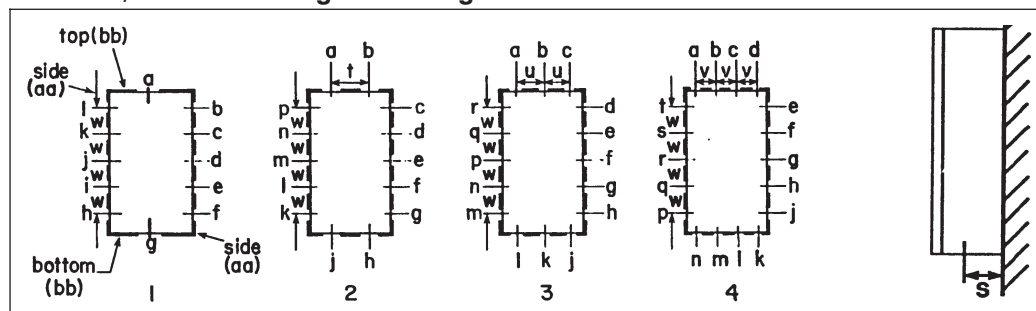


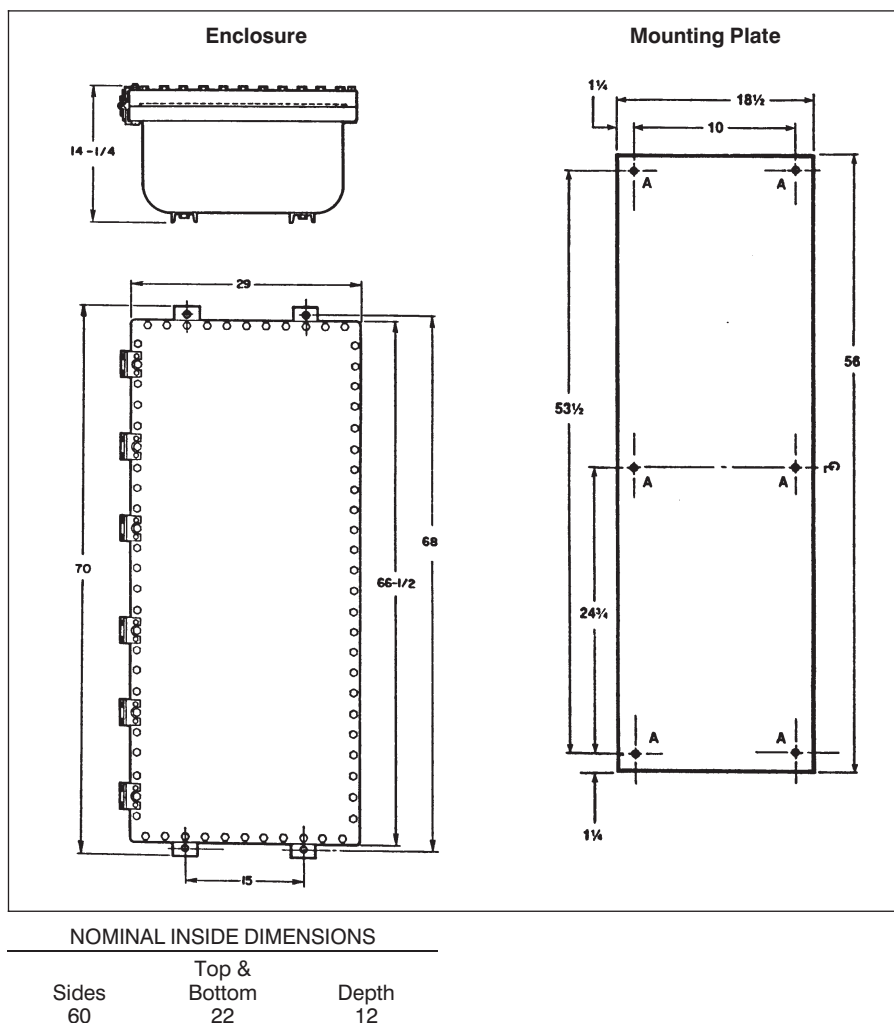
Table 2 / Conduit Arrangements

	MAXIMUM TRADE SIZE AND NUMBER OF OPENINGS										SPACING DIMENSIONS				
	Top and Bottom (bb)				Sides (aa)						s	t	u	v	w
EJB602212	1	2	3	4	1	2	3	4	5		6 3/4	10	7	5 3/8	10

Table 3 / Symbols for Openings

Conduit Size	Drilled and Tapped Hole Symbol
1/2	A
3/4	B
1	C
1-1/4	E
1-1/2	F
2	G
2-1/2	H
3	J
3-1/2	K
4	L
5	M
6	N
none	0

Note: Conduit sealing fittings are required on all conduit entrances (within 18" of the enclosure) when used in Class I, Division 1, Group C hazardous areas. For other sealing requirements consult the National Electrical Code.®



NOTE: For conduit liner ordering information, see page 140.



EJB Custom-Built Control Panels

Using EMP and EMPS Barrel Assemblies

Cl. I, Div. 1 & 2, Groups C,D
Cl. II, Div. 1, Groups E,F,G
Cl. II, Div. 2, Groups F,G
Cl. III
NEMA 3,7CD,9EFG
Ex d IIB + H₂ T6, IP66†

Explosionproof
Dust-Ignitionproof
Raintight
Wet Locations

Application:

EJB custom-built control panels are used with EMP and EMPS barrel assemblies:

- as a means of grouping control stations for centralized process control in hazardous areas in minimum space
- to provide the necessary pushbuttons, pilot lights, selector switches, tumbler switches and glass windows

Features:

- To reduce installation costs, panels can be supplied with control components factory wired to terminal blocks mounted in the box. Relays and other control devices can also be mounted in the boxes for special control functions
- Surface mounted control panels have the components assembled in the hinged cover, readily accessible for circuit checking and trouble shooting
- Panel mounted control assemblies have components installed in the back wall of the junction box. The protruding barrels are passed through holes drilled in the finished panel and locked to the panel in the same manner as individual EMP assemblies. Blank hinged covers are used, and are accessible from the rear of the panel to facilitate maintenance.
- Custom-built control panels to meet your exact requirements are a Cooper Crouse-Hinds specialty. Complete quotations will be supplied for any job, large or small.
- CENELEC certified when ordered with optional suffix ATEX.

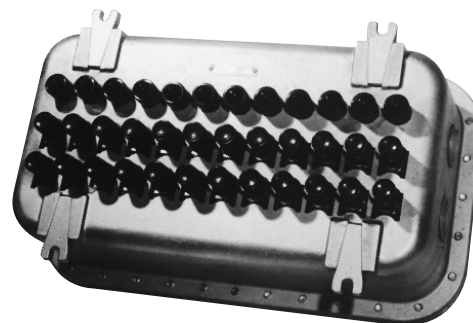
Certifications and Compliances:

EJB panels –

- NEC:
 - Class I, Division 1 & 2, Groups C,D
 - Class II, Division 1, Groups E,F,G
 - Class II, Division 2, Groups F,G
 - Class III
- NEMA/EMMAC: 3, 7CD, 9EFG
- UL Standard: 698
- CSA Standard: C22.2 No. 30
- CEC:
 - Class I, Division 1 & 2, Groups B,C,D
 - Class II, Division 1, Groups E,F,G
 - Class II, Division 2, Groups F,G
- CENELEC: Ex d IIB + H₂ T6 IP66 † ATEX Certificate: PTB 01 ATEX 1117 (control panels)



EJB surface mounted control panel – cover closed



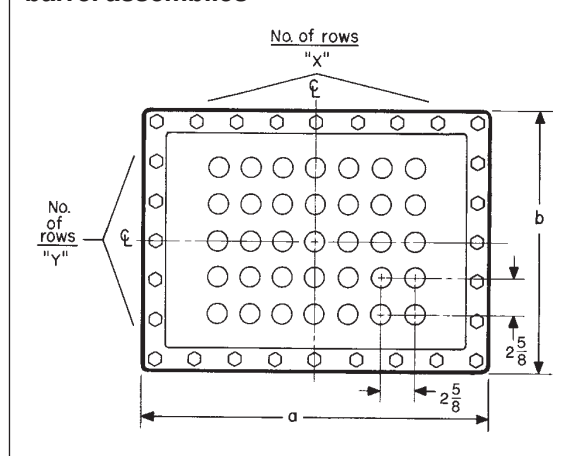
EJB panel mounted control assembly

Request Brochure # 3331
from your Cooper Crouse-Hinds
sales representative or
customer service to
design your own custom
control panel

Dimensions (in inches)*

Listed below are EJB boxes with standard spacing for most barrel assemblies. Depending on the number and type of barrel assemblies installed, closer spacing can be used and more devices assembled.

Standard spacing of barrel assemblies



Cat. #	a	b	x	y
EJB100806✓	15 ¹ / ₂	13 ¹ / ₂	3	3
EJB121204✓	17 ¹ / ₁₆	17 ¹ / ₁₆	4	4
EJB121206✓	17 ¹ / ₁₆	17 ¹ / ₁₆	4	4
EJB121208✓	17 ¹ / ₁₆	17 ¹ / ₁₆	4	4
EJB161606✓	21 ³ / ₁₆	21 ³ / ₁₆	6	6
EJB161608✓	21 ³ / ₁₆	21 ³ / ₁₆	6	6
EJB181206✓	23 ⁵ / ₁₆	23 ⁵ / ₁₆	6	4
EJB181208✓	23 ⁵ / ₁₆	17 ⁹ / ₁₆	6	4
EJB241208✓	29 ⁹ / ₁₆	17 ⁹ / ₁₆	9	4
EJB241210✓	29 ⁹ / ₁₆	17 ⁹ / ₁₆	9	4
EJB241808✓	29 ⁵ / ₈	23 ⁹ / ₁₆	9	6
EJB241810✓	29 ⁵ / ₈	23 ⁹ / ₁₆	9	6
EJB242408✓	29 ⁹ / ₁₆	29 ⁹ / ₁₆	9	9
EJB242410✓	29 ⁹ / ₁₆	29 ⁹ / ₁₆	9	9
EJB361208✓	40 ⁵ / ₁₆	16 ⁵ / ₁₆	13	4
EJB361808✓	41 ¹⁵ / ₁₆	23 ¹⁵ / ₁₆	13	6
EJB361810✓	41 ¹⁵ / ₁₆	23 ¹⁵ / ₁₆	13	6
EJB362408✓	42 ³ / ₁₆	30 ³ / ₁₆	13	9

Additional dimensional data for EJB is given on page 128.

✓ - Available with Lightning Service™. See Section G for complete details.

* Dimensions are approximate, not for construction purposes.
† Order with suffix ATEX.

NOTE: For conduit liner ordering information, see page 140.

GUA Junction Boxes with Union Hubs

Cl. I, Div. 1 & 2, Groups C,D
Cl. II, Div. 1, Groups E,F,G
Cl. II, Div. 2, Groups F,G
Cl. III

Explosionproof
Dust-Ignitionproof

6F

6F Junction Boxes

Application:

GUA junction boxes with union hubs are used in threaded rigid conduit systems in hazardous areas:

- to allow easy disassembly of conduit system
- to function as junction and pull box for multiple conductors and conduits
- indoors or outdoors where space is limited, such as in gasoline pumps

Features:

- Supplied with union hubs, which makes it a compact assembly.
- Have a variety of hub arrangements.
- Covers are threaded.
- Mounting straps are standard on all boxes.

Standard Materials:

- Bodies – *Feraloy*® iron alloy
- Covers – copper-free aluminum

Standard Finishes:

- *Feraloy* iron alloy – electrogalvanized and aluminum acrylic paint
- Copper-free aluminum – natural

Options:

Suffix to be Added to Cat. #

Description
Feraloy iron alloy cover . . . WOD

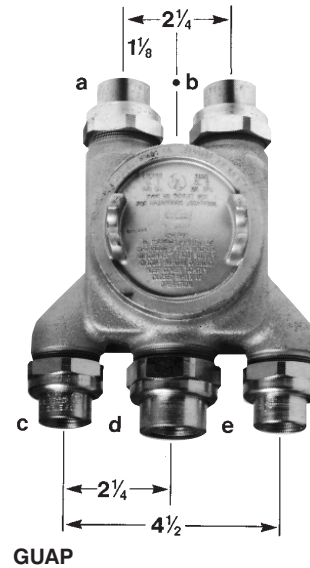
Size Ranges:

- 1/2" to 1" hubs

Certifications and Compliances:

- NEC/CEC:
Class I, Division 1 & 2, Groups C,D
Class II, Division 1, Groups E,F,G
Class II, Division 2, Groups F,G
Class III
- UL Standard: 886
- CSA Standard: C22.2 No. 30

With nuts and sleeves*



Hub Sizes

a	b	c	d	e
1/2	1/2	1/2		
3/4	3/4	3/4		
1/2	3/4	3/4		
3/4	1/2	1/2		
3/4	1	1		
3/4	1	3/4		
1	3/4	3/4		
1	3/4	1		
1	1	1		

Cat. #
With Nuts and Sleeves*
GUAG6665
GUAG7775
GUAG6775
GUAG7665

GUAG7885
GUAG7875
GUAG8775
GUAG8785
GUAG8885

GUAH7775
GUAP77775

Dimensions

x	y
1 1/8	2 1/4
1 3/16	2 3/8
See GUAH above	
See GUAP above	

Outside dimensions of body: length, 3 3/4"; depth, 1 5/16" at corners, 3 1/8" over corners; nominal diameter of cover opening, 3"; width, 3 3/4".
* Photo shown without standard mounting strap(s).

NOTE: For conduit liner ordering information, see page 140.



Application:

GUP series junction boxes are used in threaded rigid conduit systems in hazardous areas:

- to function as a junction or pull box
- where space is limited such as in gasoline pumps
- indoors or outdoors

Features:

- Compact in design.
- Supplied with a variety of hubs (6 hubs and 3 plugs or 10 hubs and 7 plugs).
- Cover sealed with standard "O" ring gasket for raintight enclosure.

Standard Materials:

- Bodies – *Feraloy*® iron alloy
- Covers – copper-free aluminum

Standard Finishes:

- *Feraloy* iron alloy – electrogalvanized and aluminum acrylic paint
- Copper-free aluminum – natural

Options:

Description

Feraloy iron alloy covers. WOD

Suffix to be
Added to
Cat. #

Certifications and Compliances:

- NEC/CEC:
 Class I, Division 1 & 2, Groups C,D
 Class II, Division 1, Groups E,F,G
 Class II, Division 2, Groups F,G
 Class III
- UL Standard: 886
- CSA Standard C22.2 No. 30



Ordering Information

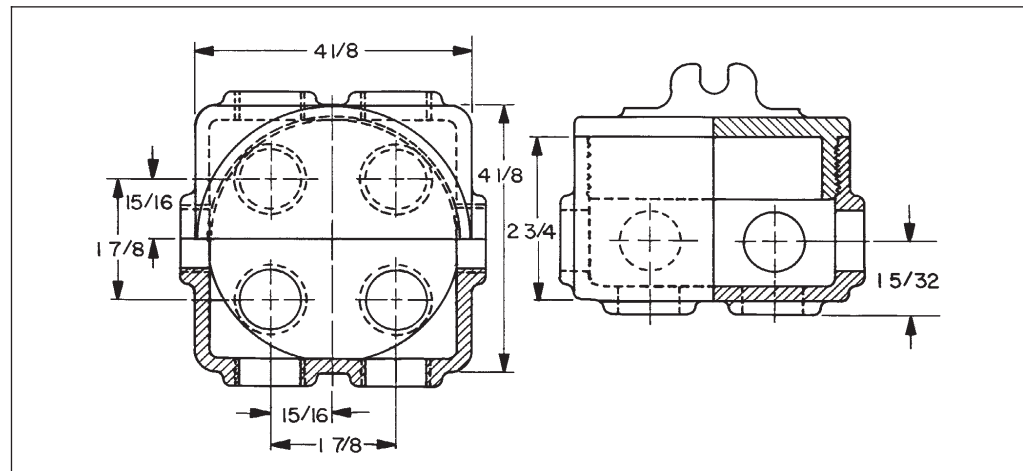
Top Hubs	Bottom Hubs	Side Hubs	Back Hubs	Catalog #
2-3/4"	2-3/4"	1-3/4"	None	GUP215*
2-3/4"	2-3/4"	1-3/4"	4-3/4"	GUP214**
2-3/4"	2-3/4"	1-3/4"	4-1"	GUP314***

* Furnished with 3-3/4" pipe plugs.

** Furnished with 7-3/4" pipe plugs.

*** Furnished with 4-3/4" pipe plugs and 3-1" pipe plugs

Dimensions



NOTE: For conduit liner ordering information, see page 140.

Application:

The EGJ series junction boxes are designed for flush installation in the concrete pump island of gasoline service stations.

Features:

- Cover sealed with "O" ring gasket to make unit raintight.
- Cover recess will accept tool used to open cover of gasoline storage tank.
- Two drilled and tapped conduit entrances on the bottom and six on the sides.
- Plugs are provided for the two bottom entrances and four of the side entrances for choice of conduit arrangement.
- ES sealing hubs thread into the bottom to seal the mainfeed.
- Caulking compound supplied for filling space between cover flange and body rim to prevent accumulation of water, dirt and ice. Compound remains pliable and is easily removed.

NOTE: Unused conduit entrances must be securely plugged with type PLG threaded pipe plugs to maintain flametight conditions (see section 7F page 169). See illustration for method of constructing seals.

Standard Materials:

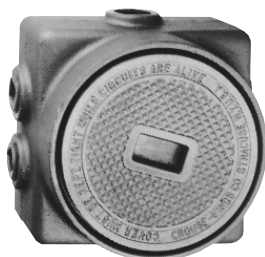
- Bodies – *Feraloy*® iron alloy
- Covers – copper-free aluminum

Standard Finishes:

- *Feraloy* iron alloy – electrogalvanized and aluminum acrylic paint
- Copper-free aluminum – natural

Certifications and Compliances:

- NEC/CEC:
Class I, Division 1 & 2, Group D
Class II, Division 1, Groups E,F,G
Class II, Division 2, Groups F,G
Class III
- UL Standard: 886
- CSA Standard: C22.2 No. 30



EGJ421



EGJ422

Drilled and Tapped Conduit Entrances

Body Size

Length & Width	Depth
5¾	4¾ ₁₆
7	5¾ ₃₂

No. of Hubs	Side	Size
6	6	¾
6	6	¾

No. of Hubs	Back	Size
2	2	¾
2	1	1

Cat. #
EGJ421
EGJ422

Replacement Cover

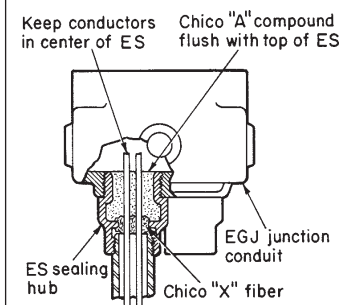
Cat. #
EGJ:10706L
EGJ:10705L

Sealing Hubs (order separately)

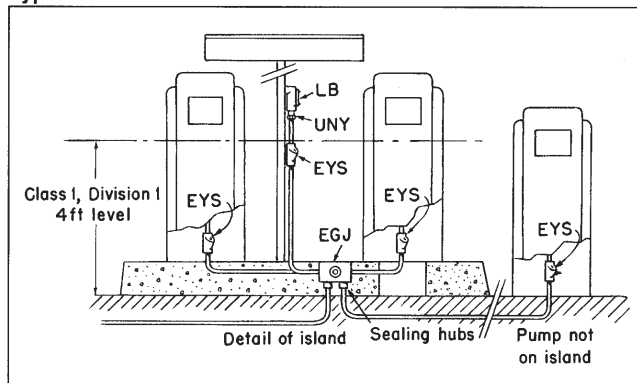
For	No.	Female Hub Size	Cat. #
EGJ421	2	1	ES53
EGJ422	2	1½	ES64



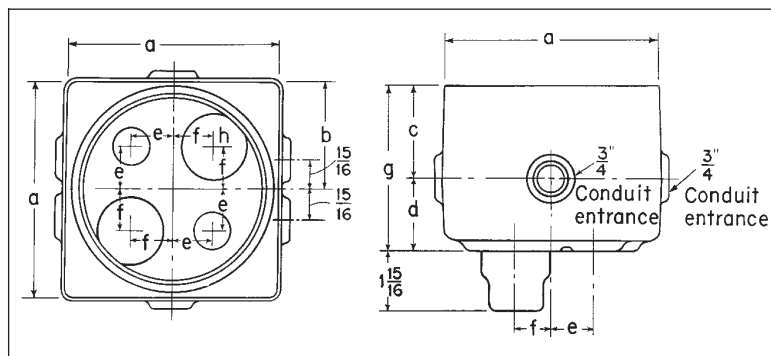
How to construct seal



Typical Installation



Dimensions



Cat. #	a	b	c	d	e	f	g	h
EGJ421	5¾	2⅞	27 ₁₆	1¾	1⅛	15 ₁₆	43 ₁₆	1½" entry
EGJ422	7	3½	3	29 ₃₂	1⅝	1⅝	59 ₃₂	2" entry

NOTE: For conduit liner ordering information, see page 140.

NOTE: Both the EGJ421 and EGJ422 junction boxes have 4 drilled and tapped conduit entrances in the back (see drawing above). The 2 larger diameter holes are for the ES Sealing Hubs and there are provisions for 2 smaller diameter conduit entrances.

Application:

- LNR conduit liners are installed in rigid metal conduit or IMC:
- to provide a smooth wire entry from conduit into enclosures to protect wires from abrasion as they are pulled.
 - with thin wall or thick wall enclosures.
 - entering drilled and tapped openings or slip holes.
 - entering an enclosure vertically or horizontally.
 - regardless of where the conduit ends in relation to the enclosure wall.

Features:

- UL listed and CSA certified.
- No need for threaded bushings, reducers, or special machining.
- Corrosion and heat resistant polypropylene material.
- Smooth flange providing easy wire pulling and protects conductors being installed.
- Space saving.
- Molded ribs ensure a tight fit, preventing the liner from sliding out while conductors are being pulled.
- Quick and easy to install.

Standard Materials:

- Polypropylene

Standard Finishes:

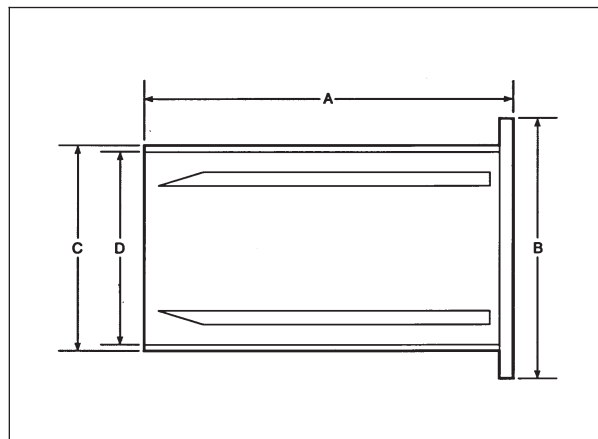
- Natural (clear)

Sizes:

- 1/2" through 4"

Certifications and Complies:

- NEC Article 346-8.
- UL Standard 514B.
- CSA Standard C22.2 No. 18.
- U.S. Patent No. 5,383,688.

**Dimensions:****Ordering Information:**

Cat. #	Size	A	B	C	D
LNR1	1/2"	1 3/16"	7/8"	5/8"	9/16"
LNR2	3/4"	1 9/16"	1 1/8"	1 3/16"	3/4"
LNR3	1"	2 1/16"	1 3/8"	1 1/16"	7/8"
LNR4	1 1/4"	2 1/16"	1 3/4"	1 3/8"	1 1/4"
LNR5	1 1/2"	2 9/16"	2"	1 5/8"	1 7/16"
LNR6	2"	2 9/16"	2 1/16"	2 1/16"	1 7/8"
LNR7	2 1/2"	2 7/8"	2 7/16"	2 1/4"	
LNR8	3"	2 7/8"	3 9/16"	3 1/16"	2 7/8"
LNR9	3 1/2"	3 1/16"	4 1/16"	3 9/16"	3 3/8"
LNR10	4"	3 1/16"	4 9/16"	4"	3 7/8"



Cooper Crouse-Hinds Ex-CELL Enclosures

Cooper Crouse-Hinds Ex-CELL enclosures are manufactured to meet the most demanding industrial and hazardous area environmental applications. Ex-CELL enclosures are available in a comprehensive range of sizes, each with various configurations for a multitude of applications. The Ex-CELL enclosure series is a UL/cUL and ATEX certified enclosure and termination solution for Type 3S, 4X and Zone 1 applications. They are certified to the impact, thermal and IP66 ingress requirements of EN 50014. The Ex-CELL series offers unique design features, precision manufacturing, and the highest quality materials making it the premier choice for instrumentation and electrical applications.



Certifications & Compliances

- ATEX II 2 GD EEx e II T6
- Certified IP66 to EN60529
- cULus to UL50
- C22.2 no. 94-M91
- Type 3S and 4X

Materials & Finishes

Enclosure:	316L (1.4404 to EN 10088) Stainless Steel 304 (1.4301 to EN 10088) Stainless Steel
Finish:	Superior corrosion resistant "Chromium enriched" electro-polished surface
Gasket:	High integrity "one piece" foam-in-place polyurethane gasket
Keyed Lock Fastening Mechanism:	Chromium plated zinc metal die cast
Door Hardware:	Stainless steel hinges on door
Enclosure Mounting:	4 x external 3mm Stainless Steel welded lugs, 11mm Ø holes/slots
Equipment Mounting:	4 x stand off pillars 9mm Ø, 25mm high, tapped M6 x10, for rail/mounting plate
Enclosure Earth:	M10 external & internal brass earth stud assembly
Operating Temp:	-20°C to +60°C
Impact Resistance:	7 J (Nm) to EN 50014

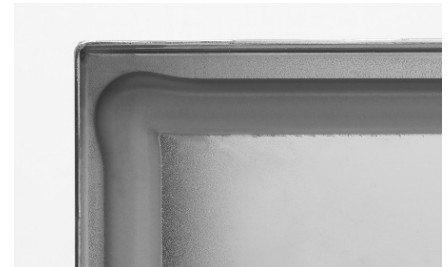
Features



The cover features a 1/4 turn slotted lock fastening mechanism that provides a rapid means of achieving a rating of IP66 environmental seal for reliable environmental protection.



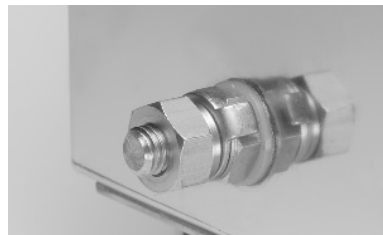
An integral drainage channel prevents liquids or other solid contaminants from running in or falling into the enclosure when the door is opened, and to minimize gasket path contamination.



The high integrity "one piece" sealing gasket provides an IP 66 rating and excellent recovery and re-sealing properties for continuous environmental protection



The enclosure is mounted by four heavy-duty 3mm thick surface welded and stainless steel lugs, with slotted bottom lugs for ease of mounting. These provide a secure, reliable means of mounting the enclosure.



This external & internal brass earth/ground stud assembly enables rapid and reliable protective earth/ground connection, which is mounted on the side of the enclosure for ease of access.



An option for up to 3 gland plates (3mm thick) on each side. Three possible combinations of 0, 1 or 3 gland-plates available. All sealed to IP 66 rating by a high integrity Chloroprene gasket and secured by rapid fixing "Hytork" fixing bolts.



Ordering Information - For Enclosures

All enclosures are provided with a keyed lock fastening cover and 1 gland plate. For other configurations see OPTIONS below.

Enclosure Size Outside Dim. (In.) (H x W x D)	Enclosure Size Outside Dim. (mm) (H x W x D)	Description	Enclosure Cat. # with Vertical Mtg Feet	Enclosure Cat. # with Horizontal Mtg Feet
9" x 6" x 5"	229 x 152 x 127	316L Stainless Steel Enclosure	XLVS10906051	XLHS12315131
12" x 8" x 6"	305 x 203 x 152	316L Stainless Steel Enclosure	XLVS11208061	XLHS13020151
12" x 12" x 6"	305 x 305 x 152	316L Stainless Steel Enclosure	XLVS11212061	XLHS13030151
16" x 12" x 6"	406 x 305 x 152	316L Stainless Steel Enclosure	XLVS11612061	XLHS14030151
16" x 12" x 8"	406 x 305 x 203	316L Stainless Steel Enclosure	XLVS11612081	XLHS14030201
16" x 16" x 6"	406 x 406 x 152	316L Stainless Steel Enclosure	XLVS11616061	XLHS14040151
16" x 16" x 8"	406 x 406 x 203	316L Stainless Steel Enclosure	XLVS11616081	XLHS14040201
16" x 20" x 6"	406 x 508 x 152	316L Stainless Steel Enclosure	XLVS11620061	XLHS14050151
16" x 20" x 8"	406 x 508 x 203	316L Stainless Steel Enclosure	XLVS11620081	XLHS14050201
20" x 16" x 6"	508 x 406 x 152	316L Stainless Steel Enclosure	XLVS12016061	XLHS15040151
20" x 16" x 8"	508 x 406 x 203	316L Stainless Steel Enclosure	XLVS12016081	XLHS15040201
20" x 20" x 6"	508 x 508 x 152	316L Stainless Steel Enclosure	XLVS12020061	XLHS15050151
20" x 20" x 8"	508 x 508 x 203	316L Stainless Steel Enclosure	XLVS12020081	XLHS15050201
20" x 24" x 8"	508 x 610 x 203	316L Stainless Steel Enclosure	XLVS12024081	XLHS15060201
24" x 16" x 6"	610 x 406 x 152	316L Stainless Steel Enclosure	XLVS12416061	XLHS16040151
24" x 16" x 8"	610 x 406 x 203	316L Stainless Steel Enclosure	XLVS12416081	XLHS16040201
24" x 20" x 6"	610 x 508 x 152	316L Stainless Steel Enclosure	XLVS12420061	XLHS16050151
24" x 20" x 8"	610 x 508 x 203	316L Stainless Steel Enclosure	XLVS12420081	XLHS16050201
24" x 24" x 6"	610 x 610 x 152	316L Stainless Steel Enclosure	XLVS12424061	XLHS16060151
24" x 24" x 8"	610 x 610 x 203	316L Stainless Steel Enclosure	XLVS12424081	XLHS16060201
24" x 30" x 8"	610 x 762 x 203	316L Stainless Steel Enclosure	XLVS12430081	XLHS16076201
30" x 20" x 8"	762 x 508 x 203	316L Stainless Steel Enclosure	XLVS13020081	XLHS17650201
30" x 24" x 8"	762 x 610 x 203	316L Stainless Steel Enclosure	XLVS13024081	XLHS17660201
30" x 30" x 8"	762 x 762 x 203	316L Stainless Steel Enclosure	XLVS13030081	XLHS17676201

Options

Material - standard enclosure is type 316L stainless steel

• For a 304 Stainless Steel Enclosure... change S1 to S2 in catalog number. ie. XLVS10906051 becomes XLVS20906051

Gland Plate - standard enclosure comes with 1 gland plate

• For no gland plates... change last digit from 1 to 0. ie. XLVS10906051 becomes XLVS10906050

• For 3 gland plates... change last digit from 1 to 3. ie. XLVS10906051 becomes XLVS10906053

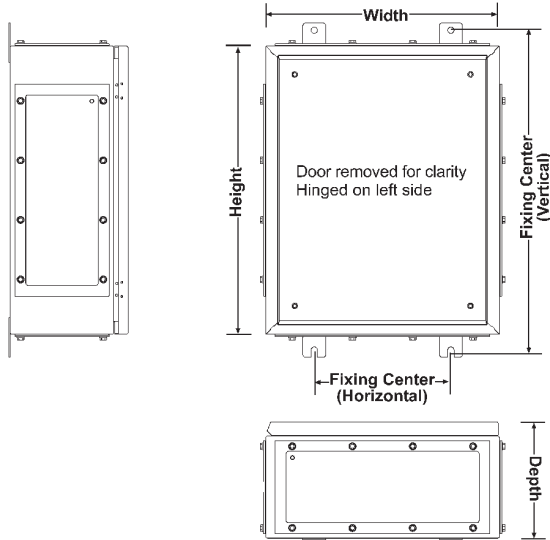
Cover Option - standard cover is a hinged cover with "1-Step" Keyed Lock Fastening device on "vertical mount" enclosures and double bit lock insert on "horizontal mount" enclosures.

• For a bolted cover... Add a suffix B at end of catalog number. ie. XLVS10906051 becomes XLVS10906051B

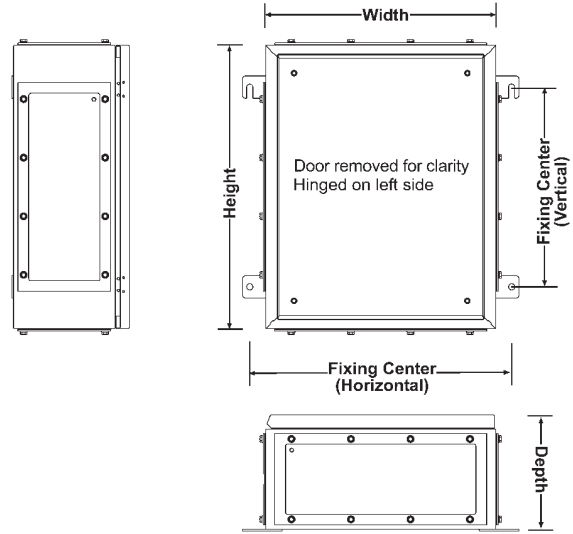
Mounting Plates - Fits both enclosures with vertical or horizontal mounting feet

Enclosure Size (in.)	Enclosure Size (mm)	Catalog #	Enclosure Size (in.)	Enclosure Size (mm)	Catalog #
9" x 6" x 5"	229 x 152 x 127	XLHZTMP2315	20" x 20" x 8"	508 x 508 x 203	XLHZTMP5050
12" x 8" x 6"	305 x 203 x 152	XLHZTMP3020	20" x 24" x 8"	508 x 610 x 203	XLHZTMP5060
12" x 12" x 6"	305 x 305 x 152	XLHZTMP3030	24" x 16" x 6"	610 x 406 x 152	XLHZTMP6040
16" x 12" x 6"	406 x 305 x 152	XLHZTMP4030	24" x 16" x 8"	610 x 406 x 203	XLHZTMP6040
16" x 12" x 8"	406 x 305 x 203	XLHZTMP4030	24" x 20" x 6"	610 x 508 x 152	XLHZTMP6050
16" x 16" x 6"	406 x 406 x 152	XLHZTMP4040	24" x 20" x 8"	610 x 508 x 203	XLHZTMP6050
16" x 16" x 8"	406 x 406 x 203	XLHZTMP4040	24" x 24" x 6"	610 x 610 x 152	XLHZTMP6060
16" x 20" x 6"	406 x 508 x 152	XLHZTMP4050	24" x 24" x 8"	610 x 610 x 203	XLHZTMP6060
16" x 20" x 8"	406 x 508 x 203	XLHZTMP4050	24" x 30" x 8"	610 x 762 x 203	XLHZTMP6076
20" x 16" x 6"	508 x 406 x 152	XLHZTMP5040	30" x 20" x 8"	762 x 508 x 203	XLHZTMP7650
20" x 16" x 8"	508 x 406 x 203	XLHZTMP5040	30" x 24" x 8"	762 x 610 x 203	XLHZTMP7660
20" x 20" x 6"	508 x 508 x 152	XLHZTMP5050	30" x 30" x 8"	762 x 762 x 203	XLHZTMP7676

DIMENSIONS Vertical Mounting



DIMENSIONS Horizontal Mounting



DIMENSIONS

Enclosures with vertical mtg feet	Enclosure Size Outside Dim. (In.) (H x W x D)	Mtg Hole Vertical (in.)	(Fixture Ctr.) Horizontal (in.)	Enclosures with horizontal mtg feet	Enclosures Size Outside Dim. (mm) (H x W x D)	Mtg Hole Vertical (mm)	(Fixture Ctr.) Horizontal (mm)
XLVS10906051	9" x 6" x 5"	10.24	3.5	XLHS12315131	229 x 152 x 127	152	208
XLVS11208061	12" x 8" x 6"	13.24	5.5	XLHS13020151	305 x 203 x 152	203	259
XLVS11212061	12" x 12" x 6"	13.24	9.5	XLHS13030151	305 x 305 x 152	203	361
XLVS11612061	16" x 12" x 6"	17.24	9.5	XLHS14030151	406 x 305 x 152	267	361
XLVS11612081	16" x 12" x 8"	17.24	9.5	XLHS14030201	406 x 305 x 203	267	361
XLVS11616061	16" x 16" x 6"	17.24	10	XLHS14040151	406 x 406 x 152	267	462
XLVS11616081	16" x 16" x 8"	17.24	10	XLHS14040201	406 x 406 x 203	267	462
XLVS11620061	16" x 20" x 6"	17.24	14	XLHS14050151	406 x 508 x 152	267	564
XLVS11620081	16" x 20" x 8"	17.24	14	XLHS14050201	406 x 508 x 203	267	564
XLVS12016061	20" x 16" x 6"	21.24	10	XLHS15040151	508 x 406 x 152	354	462
XLVS12016081	20" x 16" x 8"	21.24	10	XLHS15040201	508 x 406 x 203	354	462
XLVS12020061	20" x 20" x 6"	21.24	14	XLHS15050151	508 x 508 x 152	354	564
XLVS12020081	20" x 20" x 8"	21.24	14	XLHS15050201	508 x 508 x 203	354	564
XLVS12024081	20" x 24" x 8"	21.24	18	XLHS15060201	508 x 610 x 203	354	666
XLVS12416061	24" x 16" x 6"	25.24	10	XLHS16040151	610 x 406 x 152	445	462
XLVS12416081	24" x 16" x 8"	25.24	10	XLHS16040201	610 x 406 x 203	445	462
XLVS12420061	24" x 20" x 6"	25.24	14	XLHS16050151	610 x 508 x 152	445	564
XLVS12420081	24" x 20" x 8"	25.24	14	XLHS16050201	610 x 508 x 203	445	564
XLVS12424061	24" x 24" x 6"	25.24	18	XLHS16060151	610 x 610 x 152	445	666
XLVS12424081	24" x 24" x 8"	25.24	18	XLHS16060201	610 x 610 x 203	445	666
XLVS12430081	24" x 30" x 8"	25.24	24	XLHS16076201	610 x 762 x 203	445	818
XLVS13020081	30" x 20" x 8"	31.24	14	XLHS17650201	762 x 508 x 203	508	564
XLVS13024081	30" x 24" x 8"	31.24	18	XLHS17660201	762 x 610 x 203	508	666
XLVS13030081	30" x 30" x 8"	31.24	24	XLHS17676201	762 x 762 x 203	508	818

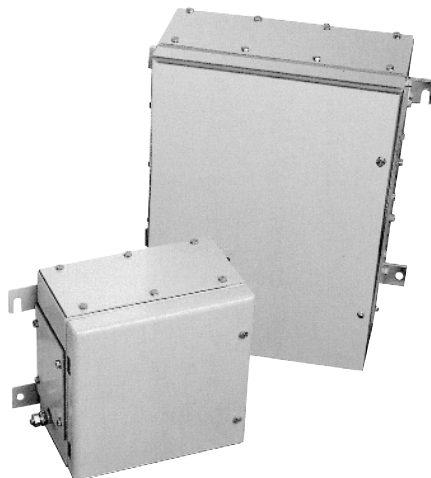
NexT Series

Features/Applications:

The NexT series of enclosures available in two types of material finish have been designed to accommodate rail mounted terminals or other electrical components. Stainless steel is recommended to give maximum protection for components in outdoor/aggressive environments.

Features of this series included thirteen basic sizes in two standard depths to optimize the accommodation of rail-mountable terminals or components.

- Fully removable hinged cover, concealed hinges provide 180° opening
- Cover mounting, two or three stainless steel captive screws on one side.
- Lip on upstand increases gasket contact area, ensuring high degree of ingress protection.
- Internal/external ground stud.
- 40mm wide mounting lugs for assembly on standard frames.
- Option of 0, 1, 2, 3 or 4 gland plates
- One piece gasket on cover and gland plates.
- Padlock hasp available optional.



Specifications:

Material	NXT 2215-5035 NXT 6245-9874 Gland plate	0.059" sheet steel or 316L stainless steel 0.080" sheet steel or 316L stainless steel 0.128" sheet steel or 316L stainless steel
Finish	Painted 316L Stainless steel	RAL 7032 (Textured) Bright Chemical Dip (polished appearance)
Gasket	All types	Neoprene (standard)
Cover Mounting	All types	Fully detachable hinged cover with 2 or 3 x M6 hexagon head captive stainless steel screws
Grounding	All types	M10 internal/external ground stud
Box Mounting	All types	4 x external lugs, 0.394" clearance holes/slots
Equipment Mounting	All types	4 x stand off pillars 0.394" OD, tapped M6 x 0.394"
Ingress Protection	All types	IP66 to IEC529
Temperature Range	RA104 HT800	-49°F to 203°F -85°F to 275°F
Ambient Temperature	RA104 Gaskets HT800	-49°F to 104°F T6 -49°F to 131°F T5 -85°F to 104°F T6 -85°F to 131°F T5
Impact Resistance	All types	7 J (Nm) to EN 50014
Deluge Test	All types	Spec. No. DTS 01

Factory Options (Consult Factory):

Material	Special materials or thickness according to customer specification
Finish	Special colors according to customer specification
Sizes	Special sizes according to customer specification
Equipment	Terminals, glands, and Myers Hubs assembled according to customer specification
Gland plates	Drilled cable glands fitted to customer specification
Ground Studs	Also available fitted to gland plates and cover
EMC	Versions for maximum shielding from EMI/RFI, 0 gland plate only
Cover Attachments	e.g. Handles

Certifications and Compliances:



UL50/C22.2 N094-M91 mild steel: Types 3S, 4; stainless steel: Type 4X.

CSA – selected sizes only
Germanischer Lloyd (GL)

ATEX 1. Component Certificate KEMA99ATEX3174 U
Codes  II 2 G EEx e II
II 2 D ≥ IP64

ATEX 2. Certificate of Conformity KEMA99ATEX3172X
Codes  II 2 G EEx e II T6 or T5
II 2 D T100°C ≥ IP64
 II 1 G EEx ia IIC T6 or T5
II 2 D T100°C ≥ IP64
 II 2 (1) G EEx e ia IIC T6 or T5
II 2 D T100°C ≥ IP64

Next Series

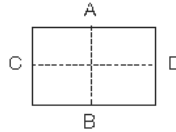
Sheet or Stainless Steel Hinged Cover

IP66
EEx e II
EEx ia IIC
EEx e ia IIC

6F

6F Junction Boxes

Top A
Bottom B
Left hand side C
Right hand side D



NXT 221513

Height 9.02"
Width 5.98"
Depth 5.31"
Weight 7.17 lb
Gland Plate A/B 3.54/5.51"
Gland Plate C/D 3.54/5.51"

NXT 262616

Height 10.23"
Width 10.23"
Depth 6.30"
Weight 12.13 lb
Gland Plate A/B 4.72/10"
Gland Plate C/D 4.72/6.06"

NXT 262620

Height 10.23"
Width 10.23"
Depth 9.07"
Weight 12.13 lb
Gland Plate A/B 6.46/10"
Gland Plate C/D 6.46/6.06"

NXT 303016

Height 12.05"
Width 12.05"
Depth 6.30"
Weight 15.43 lb
Gland Plate A/B 4.33/11.42"
Gland Plate C/D 4.33/7.48"

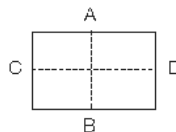
Ordering Data:

0 Gland Plates	Paint Finish Stainless Steel Finish	Cat. No. NXTPS2215130 NXTS12215130	Cat. No. NXTPS2626160 NXTS12626160	Cat. No. NXTPS2626200 NXTS12626200	Cat. No. NXTPS3030160 NXTS13030160
1 Gland Plate Side B (Bottom)	Paint Finish Stainless Steel Finish	NXTPS2215131 NXTS12215131	NXTPS2626161 NXTS12626161	NXTPS2626201 NXTS12626201	NXTPS3030161 NXTS13030161
2 Gland Plates Sides A + B (Top and Bottom)	Paint Finish Stainless Steel Finish	NXTPS2215132 NXTS12215132	NXTPS2626162 NXTS12626162	NXTPS2626202 NXTS12626202	NXTPS3030162 NXTS13030162
3 Gland Plates Sides B, C + D (Bottom and Sides)	Paint Finish Stainless Steel Finish	NXTPS2215133 NXTS12215133	NXTPS2626163 NXTS12626163	NXTPS2626203 NXTS12626203	NXTPS3030163 NXTS13030163
4 Gland Plates Sides A, B, C + D (All Sides)	Paint Finish Stainless Steel Finish	NXTPS2215134 NXTS12215134	NXTPS2626164 NXTS12626164	NXTPS2626204 NXTS12626204	NXTPS3030164 NXTS13030164

Gland Sizes (mm) Per Plate (Reference Only)

		Top/Bottom	Left/Right	Top/Bottom	Left/Right	Top/Bottom	Left/Right	Top/Bottom	Left	Right
Brass Glands	M16	6	6	20	9	33	18	26	20	26
Brass Glands	M20	3	3	10	6	15	9	14	10	14
Brass Glands	M25	2	2	6	3	12	5	8	8	8
Brass Glands	M32	1	1	3	2	6	4	4	3	4
Brass Glands	M40	1	1	3	1	5	2	3	3	3
Brass Glands	M50	1	1	2	1	3	1	3	2	3

Top A
Bottom B
Left hand side C
Right hand side D



NXT 303020

Height 12.05"
Width 12.05"
Depth 8.07"
Weight 15.43 lb
Gland Plate A/B 4.33/11.42"
Gland Plate C/D 4.33/7.48"

NXT 382616

Height 14.96"
Width 10.24"
Depth 6.29"
Weight 15.43 lb
Gland Plate A/B 4.72/10"
Gland Plate C/D 4.72/10"

NXT 382620

Height 14.96"
Width 10.24"
Depth 8.07"
Weight 15.43 lb
Gland Plate A/B 6.46/10"
Gland Plate C/D 6.46/10"

NXT 453820

Height 18.031"
Width 15.039"
Depth 8.071"
Weight 21.45 lb
Gland Plate A/B 4.33/14.57"
Gland Plate C/D 4.33/14.57"

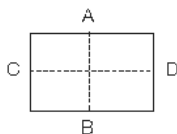
Ordering Data:

0 Gland Plates	Paint Finish Stainless Steel Finish	Cat. No. NXTPS3030200 NXTS13030200	Cat. No. NXTPS3826160 NXTS13826160	Cat. No. NXTPS3826200 NXTS13826200	Cat. No. NXTPS4538200 NXTS14538200
1 Gland Plate Side B (Bottom)	Paint Finish Stainless Steel Finish	NXTPS3030201 NXTS13030201	NXTPS3826161 NXTS13826161	NXTPS3826201 NXTS13826201	NXTPS4538201 NXTS14538201
2 Gland Plates Sides A + B Top and Bottom	Paint Finish Stainless Steel Finish	NXTPS3030202 NXTS13030202	NXTPS3826162 NXTS13826162	NXTPS3826202 NXTS13826202	NXTPS4538202 NXTS14538202
3 Gland Plates Sides B, C + D (Bottom and Sides)	Paint Finish Stainless Steel Finish	NXTPS3030203 NXTS13030203	NXTPS3826163 NXTS13826163	NXTPS3826203 NXTS13826203	NXTPS4538203 NXTS14538203
4 Gland Plates Sides A, B, C + D (All Sides)	Paint Finish Stainless Steel Finish	NXTPS3030204 NXTS13030204	NXTPS3826164 NXTS13826164	NXTPS3826204 NXTS13826204	NXTPS4538204 NXTS14538204

Gland Sizes (mm) Per Plate (Reference Only)

		Top/Bottom	Left	Right	Top/Bottom	Left/Right	Top/Bottom	Left/Right	Top/Bottom	Left/Right
Brass Glands	M16	32	38	32	20	20	33	33	44	44
Brass Glands	M20	18	15	18	10	10	15	15	24	24
Brass Glands	M25	15	12	15	6	6	12	12	20	20
Brass Glands	M32	8	6	8	3	3	6	6	10	10
Brass Glands	M40	6	5	6	3	3	5	5	8	8
Brass Glands	M50	3	3	3	2	2	3	3	4	4

Top A
Bottom B
Left hand side C
Right hand side D

**NXT 484820**

Height 18.898"
Width 18.898"
Depth 8.071"
Weight 22.88 lb
Gland Plate A/B 4.33/14.57"
Gland Plate C/D 4.33/14.57"

NXT 503520

Height 19.695"
Width 13.78"
Depth 8.071"
Weight 23.1 lb
Gland Plate A/B 6.46/13.54"
Gland Plate C/D 6.46/13.54"

NXT 624520

Height 24.41"
Width 17.72"
Depth 8.07"
Weight 37.48 lb
Gland Plate A/B 6.46/17.48"
Gland Plate C/D 6.46/17.48"

NXT 745520

Height 29.13"
Width 17.72"
Depth 8.07"
Weight 37.48 lb
Gland Plate A/B 6.46/17.48"
Gland Plate C/D 6.46/17.48"

Ordering Data:

0 Gland Plates **Paint Finish**
 Stainless Steel Finish

Cat. No.
NXTPS4848200
NXTS14848200

Cat. No.
NXTPS5035200
NXTS15035200

Cat. No.
NXTPS6245200
NXTS16245200

Cat. No.
NXTPS7455200
NXTS17455200

1 Gland Plate **Paint Finish**
Side B **Stainless Steel Finish**
(Bottom)

NXTPS4848201
NXTS14848201

NXTPS5035201
NXTS15035201

NXTPS6245201
NXTS16245201

NXTPS7455201
NXTS17455201

2 Gland Plates **Paint Finish**
Sides A + B **Stainless Steel Finish**
(Top and Bottom)

NXTPS4848202
NXTS14848202

NXTPS5035202
NXTS15035202

NXTPS6245202
NXTS16245202

NXTPS7455202
NXTS17455202

3 Gland Plates **Paint Finish**
Sides B, C + D **Stainless Steel Finish**
(Bottom and Sides)

NXTPS4848203
NXTS14848203

NXTPS5035203
NXTS15035203

NXTPS6245203
NXTS16245203

NXTPS7455203
NXTS17455203

4 Gland Plates **Paint Finish**
Sides A, B, C + D **Stainless Steel Finish**
(All Sides)

NXTPS4848204
NXTS14848204

NXTPS5035204
NXTS15035204

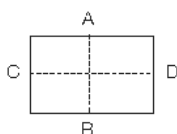
NXTPS6345204
NXTS16245204

NXTPS7455204
NXTS17455204

Gland Sizes (mm) Per Plate (Reference Only)

		Top/Bottom	Left	Right	Top/Bottom	Left/Right	Top/Bottom	Left/Right	Top/Bottom	Left/Right
Brass Glands	M16	53	44	53	40	40	53	53	60	60
Brass Glands	M20	30	24	30	24	24	30	30	39	39
Brass Glands	M25	24	20	24	18	18	24	24	30	30
Brass Glands	M32	14	10	14	10	10	14	14	18	18
Brass Glands	M40	11	8	11	7	7	11	11	13	13
Brass Glands	M50	5	4	5	4	4	5	5	6	6

Top A
Bottom B
Left hand side C
Right hand side D

**NXT 765020**

Height 30"
Width 20"
Depth 8.07"
Weight 51.81 lb
Gland Plate A/B 4.33/19.69"
Gland Plate C/D 4.33/19.69"

NXT 866420

Height 33.86"
Width 25.20"
Depth 8.07"
Weight 63.93 lb
Gland Plate A/B 6.46/24.96"
Gland Plate C/D 6.46/24.96"

NXT 916120

Height 35.99"
Width 24.02"
Depth 8.07"
Weight 68.34 lb
Gland Plate A/B 5.512/23.62"
Gland Plate C/D 5.512/23.62"

NXT 987420

Height 38.58"
Width 29.13"
Depth 8.07"
Weight 83.76 lb
Gland Plate A/B 6.46/13.54"
Gland Plate C/D 2x6.46/17.48"

Ordering Data:

0 Gland Plates **Paint Finish**
 Stainless Steel Finish

Cat. No.
NXTPS7650200
NXTS17650200

Cat. No.
NXTPS8664200
NXTS18664200

Cat. No.
NXTPS9161200
NXTS19161200

Cat. No.
NXTPS9874200
NXTS19874200

1 Gland Plate **Paint Finish**
Side B **Stainless Steel Finish**
(Bottom)

NXTPS7650201
NXTS17650201

NXTPS8664201
NXTS18664201

NXTPS9161201
NXTS19161201

NXTPS9874201
NXTS19874201

2 Gland Plates **Paint Finish**
Sides A + B **Stainless Steel Finish**
Top and Bottom

NXTPS7650202
NXTS17650202

NXTPS8664202
NXTS18664202

NXTPS9161202
NXTS19161202

NXTPS9874202
NXTS19874202

3 Gland Plates **Paint Finish**
Sides B, C + D **Stainless Steel Finish**
(Bottom and Sides)

NXTPS7650203
NXTS17650203

NXTPS8664203
NXTS18664203

NXTPS9161203
NXTS19161203

NXTPS9874203
NXTS19874203

4 Gland Plates **Paint Finish**
Sides A, B, C + D **Stainless Steel Finish**
(All Sides)

NXTPS7650204
NXTS17650204

NXTS18664214
NXTS18664204

NXTPS9161204
NXTS19161204

NXTPS9874204
NXTS19874204

Gland Sizes (mm) Per Plate (Reference Only)

		Top/Bottom	Left/Right	Top/Bottom	Left/Right	Top/Bottom	Left/Right	Top/Bottom	Left/Right
Brass Glands	M16	53	72	72	40	72	72	40	53
Brass Glands	M20	30	45	45	24	42	42	24	30
Brass Glands	M25	24	35	35	18	24	24	18	24
Brass Glands	M32	14	20	20	10	18	18	10	14
Brass Glands	M40	11	13	13	7	8	8	7	11
Brass Glands	M50	5	7	7	4	7	7	4	5

Next Series

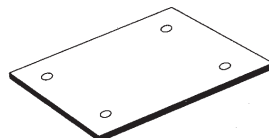
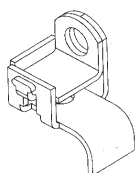
Sheet or Stainless Steel Hinged Cover Accessories

IP66
EEx e II
EEx ia IIC
EEx e ia IIC

6F

6F
Junction Boxes

Accessories



Mounting Plates:

Material: Tufnol, zinc coated or stainless steel

Enclosure Size	Tufnol Cat. No.	Zinc Coated Steel Cat. No.	Stainless Steel Cat. No.
NXT2215	NXTTLM2215	NXTZTMP2215	NXTS1MP2215
NXT2626	NXTTLM2626	NXTZTMP2626	NXTS1MP2626
NXT3030	NXTTLM3030	NXTZTMP3030	NXTS1MP3030
NXT3826	NXTTLM3826	NXTZTMP3826	NXTS1MP3826
NXT4538	NXTTLM4538	NXTZTMP4538	NXTS1MP4538
NXT4848	NXTTLM4848	NXTZTMP4848	NXTS1MP4848
NXT5035	NXTTLM5035	NXTZTMP5035	NXTS1MP5035
NXT6245	NXTTLM6245	NXTZTMP6245	NXTS1MP6245
NXT7455	NXTTLM7455	NXTZTMP7455	NXTS1MP7455
NXT7650	NXTTLM7650	NXTZTMP7650	NXTS1MP7650
NXT8664	NXTTLM8664	NXTZTMP8664	NXTS1MP8664
NXT9161	NXTTLM9161	NXTZTMP9161	NXTS1MP9161
NXT9874	NXTTLM9874	NXTZTMP9874	NXTS1MP9874

Stand-off Pillars

Type	Inches	Cat. No.
SP15	0.60	ACCSOP15
SP20	0.80	ACCSOP20
SP30	1.20	ACCSOP30

Lock:

Type	Cat. No.
NP6 Brass Lock and 2 Keys	NXTNP6BL2K

Hasp:

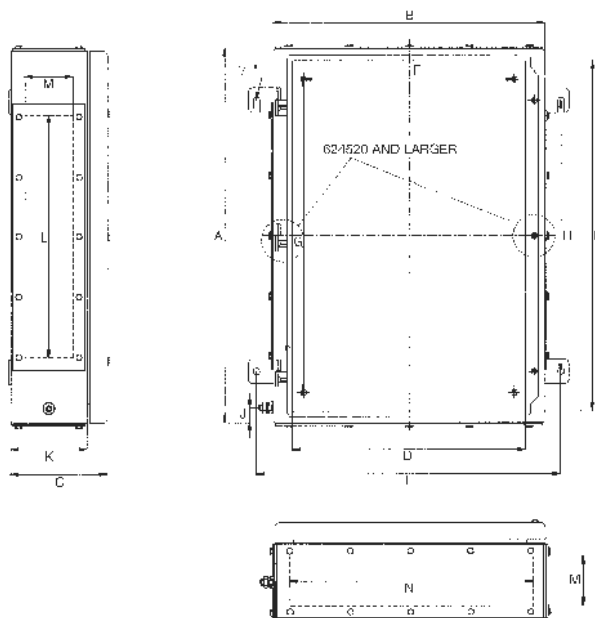
Type	Cat. No.
NPA6	NXTNPAHASP
Stainless Steel, for Type NP6 Padlocks	
Mount on Enclosure by Removing Cover Screw and Fitting Hasp Between Cover and Screw.	

Assembly Rail:

Type		Cat. No.
TS35	78.74" length	ACCTS352M
TAS20	78.74" length	ACCTAS202M

Ground Stud Kits:

Type	Cat. No.
M10 Brass	ACCBSESM10KIT
M10 Stainless Steel	ACCS1ESM10KIT
M14 Brass	ACCBSESM14KIT



NexT Enclosure Series Dimensions (in inches):

Dimensions:

Code Type	A	B	C	D	E	F	G	H	I	J	K	L	M	N
NXT* 221513**	9.02	5.98	5.12	3.50	7.48	2.05	5**	5.98	8.19	0.98	4.01	4.25	2.28	4.25
NXT 262616 (262620)	10.24	10.24	6.30 (8.08)	7.76	8.70	6.30	6.30	6.69	12.44	0.98	4.96 (6.77)	4.49	3.15 (4.88)	8.43
NXT* 303016 (303020)	12.04	12.05	6.30 (8.08)	9.57	10.51	8.11	8.11	7.99	14.21	0.98	4.96 (6.77)	Left 8.43 Right 10.28	3.15 (4.88)	10.28
NXT 382616 (382620)	14.97	10.24	6.30 (8.08)	7.76	13.43	6.30	11.02	9.84	12.44	0.98	4.96 (6.77)	8.43	3.15 (4.88)	8.43
NXT* 453820	18.01	15.04	8.08	12.56	16.50	11.10	14.09	12.00	17.21	0.98	6.77	13.27	4.88	13.27
NXT* 484820	18.90	18.90	8.08	16.42	17.36	14.96	14.96	12.87	21.06	0.98	6.77	Left 13.27 Right 15.91	4.88	15.91
NXT 503520	19.69	13.79	8.08	11.30	18.15	9.84	15.75	13.78	15.98	0.98	6.77	11.97	4.88	11.97
NXT 624520	24.41	17.72	8.08	15.24	22.87	13.78	20.47	17.72	19.92	0.98	6.77	15.91	4.88	15.91
NXT 745520	29.13	21.66	8.08	19.18	27.60	17.72	25.18	21.26	23.86	0.98	6.77	19.84	4.88	19.84
NXT* 765020	30.00	20.00	8.08	17.52	28.47	16.06	26.06	20.00	22.21	0.98	6.77	23.39	4.25	18.27
NXT 866420	33.86	25.20	8.08	22.72	32.32	21.26	29.92	22.44	27.40	0.98	6.77	2 x 11.97	4.88	23.39
NXT* 916120	35.98	24.02	8.08	21.54	34.45	20.08	32.05	22.00	26.22	0.98	6.77	22.32	4.25	22.28
NXT 987420	38.58	29.13	8.08	26.65	37.05	25.20	34.65	27.56	31.34	0.98	6.77	2 x 15.91	4.88	2 x 11.97

*Note: Subtract 1.18" from dimension 'I' for mounting center when side gland plates are not used.

**Note: NXT 221513 has two stand off pillars only, mounted on the center line.

STB Series Junction Boxes

Sheet or Stainless Steel

IP66
EEx e II
EEx ia IIC
EEx e ia IIC

6F

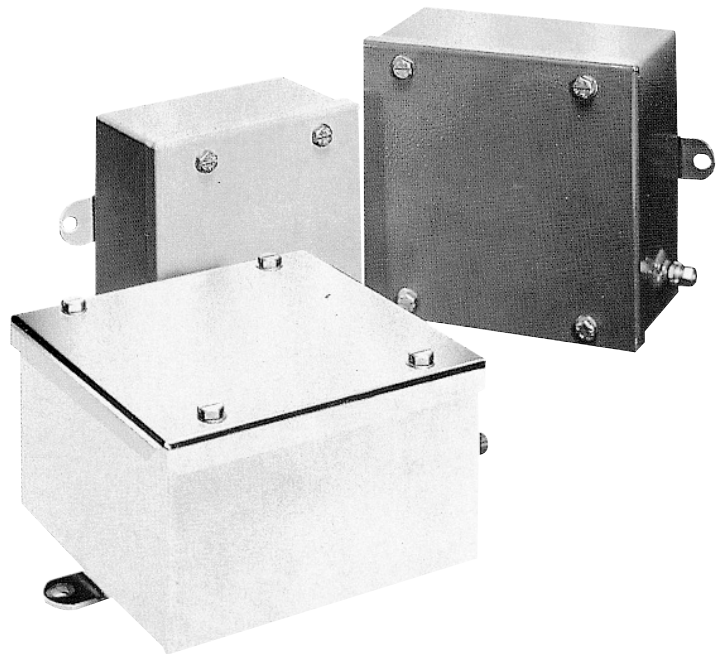
STB Series Small Sheet Steel Enclosures

Features/Applications:

The STB series of sheet steel enclosures are designed to meet the requirement for distribution and lighting junction boxes.

Available in eight sizes with standard finishes of painted or 316L stainless steel, together with the high IP rating make these enclosures suitable for all environmental conditions.

The stainless steel versions are particularly recommended for use in marine or other corrosive environments. Painting of these enclosure uses a two stage electrophoretic dip coat system. Treatment includes iron phosphate and paint application followed by electrostatic polyester powder coating. When applied to a mild steel substrate gives a minimum of 500 hours salt spray resistance.



6F
Junction Boxes

Specifications:

Material		0.059" Sheet Steel 0.059" 316L Stainless Steel
Finish		Painted – RAL 7032, Grey Stainless Steel – 'Bright Chemical Dip'
Gasket		HT800 Silicone
Cover Mounting		4 x M6 Slotted, Hexagon Head, Captive Screws
Grounding		M6 Internal/External Ground Stud
Box Mounting	STB 121208-252512	2 x External Lugs with 0.315" Clearance Holes
	STB 163812-254013	4 x External Lugs with 0.315" Clearance Holes
Equipment Mounting		TAS 20 Rail Welded to Base of Enclosure, to Which Equipment is Mounted by Means of Sliding Mounting Nut and Screw (1 Rail STB 121208-191910, Rails STB 252512-254030)
Ingress Protection		IP66 BSEN 60529
Temperature Range		-85°F to +275°F
Ambient Temperature		T5 -85°F to +131°F T6 -85°F to +104°F
Impact Resistance		7 J(Nm) to EN 50014

Factory Options (Consult Factory):

Finishes	Alternative paint colours
Assembly	Supplied with terminals, glands, drilled or drilled and tapped entries, breather/drains, and Myers Hubs

Certifications and Compliances:



UL50/C22.2 No. 94-M91 mild steel: Types 3S, 4; stainless steel: Type 4X.

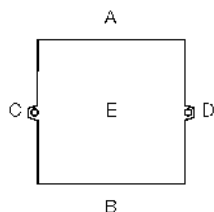
Germanischer Lloyd (GL)
(Excluding STB151208 & STB 191509)

ATEX 1. Component Certificate KEMA99ATEX7895 U

Codes	II 2 G	EEx e II
	II 2 D	≥ IP64

ATEX 2. Certificate of Conformity KEMA99ATEX7894 X

Codes	II 2 G	EEx e II T6 or T5
	II 2 D	T100°C ≥ IP64
	II 1 G	EEx ia IIC T6 or T5
	II 2 D	T100°C ≥ IP64
	II 2 (1) G	EEx e ia IIC T6 or T5
	II 2 D	T100°C ≥ IP64



A = Top
B = Bottom
C = Left Hand Side
D = Right Hand Side
E = Base

Ordering Data:

Standard Paint Finish
Stainless Steel Finish

Guide to Gland Entries:

Max. Gland Area Dimensions

STB 121208

Height 4.73"
Width 4.72"
Depth 3.15"
Weight 3.09 lb

STBPS121208UL
STBS1121208UL

Sides	Size
A, B, C	4.49" x 2.48"
D	2.76" x 2.48"
E	2.36" x 2.36"

STB 151208

Height 5.91"
Width 4.72"
Depth 3.15"
Weight 3.50 lb

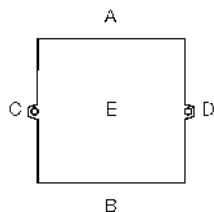
STBPS151208UL
STBS1151208UL

Sides	Size
A, B	4.49" x 2.48"
C	5.67" x 2.48"
D	3.94" x 2.48"
E	3.54" x 2.36"

Gland Sizes (mm) per Side (Reference Only):

		Side A	Side B	Side C	Side D
Brass Glands with Locknuts	16	5	5	6	4
	20	3	2	3	2
	25	2	2	2	1
	32	1	1	2	1
	40	-	-	-	-
	50	-	-	-	-

Side A	Side B	Side C	Side D
6	5	7	5
3	2	4	3
2	2	3	2
1	1	2	1
-	-	-	-
-	-	-	-



A = Top
B = Bottom
C = Left Hand Side
D = Right Hand Side
E = Base

Ordering Data:

Standard Paint Finish
Stainless Steel Finish

Guide to Gland Entries:

Max. Gland Area Dimensions

STB 151509

Height 5.91"
Width 5.91"
Depth 3.54"
Weight 4.19 lb

STBPS151509UL
STBS1151509UL

Sides	Size
A, B, C	5.67" x 2.87"
D	3.94" x 2.87"
E	3.54" x 3.54"

STB 191509

Height 5.91"
Width 7.48"
Depth 3.54"
Weight 5.40 lb

STBPS191509UL
STBS1191509UL

Sides	Size
A, B	5.67" x 2.87"
C	7.24" x 2.87"
D	5.12" x 2.87"
E	5.12" x 3.54"

Gland Sizes (mm) per Side (Reference Only):

		Side A	Side B	Side C	Side D
Brass Glands with Locknuts	16	8	8	8	6
	20	5	4	5	3
	25	3	3	3	2
	32	2	2	2	1
	40	1	1	2	1
	50	-	-	-	-

Side A	Side B	Side C	Side D
9	8	12	8
5	4	7	5
3	3	4	3
2	2	3	2
2	1	2	2
-	-	-	-

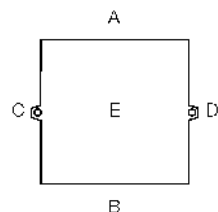
STB Series Junction Boxes

Sheet or Stainless Steel Ordering Information

IP66
EEx e II
EEx ia IIC
EEx e ia IIC

6F

6F
Junction Boxes



A = Top
B = Bottom
C = Left Hand Side
D = Right Hand Side
E = Base

Ordering Data:

Standard Paint Finish
Stainless Steel Finish

Guide to Gland Entries:

Max. Gland Area Dimensions

STB 191910
Height 7.48"
Width 7.48"
Depth 3.94"
Weight 6.61 lb

STBPS191910UL
STBS1191910UL

Sides	Size
A, B, C	7.24" x 3.27"
D	5.51" x 3.27"
E	5.12" x 5.12"

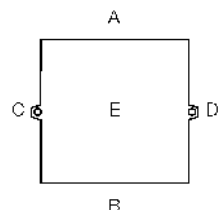
STB 252512
Height 9.84"
Width 9.84"
Depth 4.73"
Weight 8.16 lb

STBPS252512UL
STBS1252512UL

Sides	Size
A, B, C	9.61" x 4.05"
D	7.87" x 4.05"
E	7.48" x 7.48"

Gland Sizes (mm) per Side (Reference Only):

		Side A	Side B	Side C	Side D	Side A	Side B	Side C	Side D
Brass Glands with Locknuts	16	13	12	14	9	24	23	24	18
	20	8	7	8	6	13	12	13	10
	25	5	4	5	4	10	9	10	8
	32	3	3	3	2	5	5	5	4
	40	2	2	2	2	3	3	3	3
	50	2	1	2	1	3	2	3	2
	63	-	-	-	-	2	2	2	2



A = Top
B = Bottom
C = Left Hand Side
D = Right Hand Side
E = Base

Ordering Data:

Standard Paint Finish
Stainless Steel Finish

Guide to Gland Entries:

Max. Gland Area Dimensions

STB 163812
Height 8.30"
Width 14.96"
Depth 4.72"
Weight 8.14 lb

STBPS163812UL
STBS1163812UL

Sides	Size
A, B, C	14.64" x 4.05"
D	12.99" x 4.05"
E	12.60" x 3.93"

STB 254013
Height 9.84"
Width 15.74"
Depth 5.12"
Weight 11.88 lb

STBPS254013UL
STBS1254413UL

Sides	Size
A, B, C	15.51" x 4.45"
D	13.78" x 4.45"
E	13.39" x 7.48"

Gland Sizes (mm) per Side (Reference Only):

		Side A	Side B	Side C	Side D	Side A	Side B	Side C	Side D
Brass Glands with Locknuts	16	36	35	15	9	48	47	30	24
	20	21	21	7	5	27	27	17	14
	25	16	15	6	4	16	16	10	8
	32	9	9	3	2	11	11	7	6
	40	6	5	2	1	7	6	4	3
	50	4	4	1	1	5	5	3	2
	63	3	3	1	1	4	3	2	2

Accessories:**Mounting Hardware**

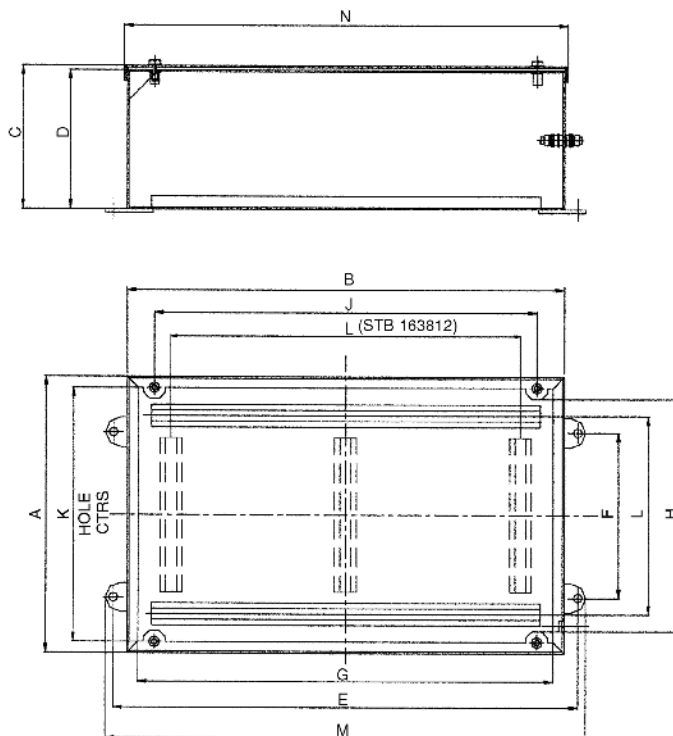
Sliding mounting nuts and screws for mounting assemblies or components to the support rail type TAS 20

M5 screw for TS 32/TS 35
M4 screw for TS15
M3 screw for terminal strips**Type**SFNS 5
SFNS 4
SFNS 3**Cat. No.**ACCSFNM5
ACCSFNM4
ACCSFNM3**Ground Stud Kits****Type**

M6 Brass

Cat. No.

ACCBSESM6KIT

**STB Enclosure Series Dimensions (in inches):**

Catalog Number	A	B	C	D	E	F	G	H	J	K	L	M	N
STB 121208UL	4.72	4.72	3.15	2.99	5.71	N/A	3.94	3.15	2.76	3.94	N/A	6.26	4.96
STB 151208UL	5.90	4.72	3.15	2.99	5.71	N/A	5.12	3.15	3.94	3.94	N/A	6.26	6.14
STB 151509UL	5.90	5.90	3.54	3.39	6.89	N/A	3.94	5.12	3.94	5.12	N/A	7.44	6.14
STB 191509UL	7.48	5.90	3.54	3.39	6.89	N/A	6.69	4.33	5.12	5.51	N/A	7.44	7.72
STB 191910UL	7.48	7.48	3.94	3.78	8.46	N/A	6.69	5.90	5.51	6.69	N/A	9.02	7.72
STB 252512UL	9.84	9.84	4.72	4.57	10.83	N/A	9.05	8.27	9.05	9.05	7.09	11.38	16.08
STB 163812UL	6.30	14.96	4.72	4.57	15.94	3.15	14.17	4.72	12.99	5.51	11.81	16.50	15.20
STB 254030UL	9.84	15.75	5.12	4.96	16.73	5.90	14.96	8.27	13.78	9.05	7.09	17.28	15.98

Sheet or Stainless Steel High Voltage Junction Box

HVB Series High Voltage Junction Boxes

Features & Applications:

The high voltage junction boxes have been designed for the termination of high voltage pumps ("down hole" pumps).

The HVB's are available in both stainless steel, fully polished or sheet steel with paint finish.

Gland plates are provided top and bottom for cable entry.

The units are complete with 3 or 4 pole assemblies to accept standard cable lugs up to 1.18" wide and an M12 hole

Live parts are protected by a clear cover, giving protection to IP 2X

High voltage warning labels are fitted to the cover and enclosure cover.

When using the enclosures at their full potential (i.e. 6.6 kV), high voltage cable termination kits have to be used to avoid breakdown of the cable long term.



Specifications:

Material	HVB 463820	0.059" steel or 316L stainless steel
	HVB 765120, 916120	0.080" steel or 316L stainless steel
	Gland Plates	0.128" steel or 316L stainless steel
Finish	Painted RAL 7032	
	Stainless Bright Chemical Dip (polished appearance)	
Gasket	Neoprene (cover & gland plates)	
Cover Mounting	Fully detachable hinged cover with 4 or 6 x M6 hexagon head captive screws	
Grounding	M10 internal/external stud	
	M14 internal/external stud for 5.91in ² phase conductor only	
Box Mounting	4 x external lugs with 0.39" clearance holes/slots	
Ingress Protection	IP66 & IP67 to IEC 529	
Temperature Range	-4°F to 104°F (ambient)	
Impact Resistance	7 J (Nm)	
Gland Plates	Top & Bottom	
Ratings	Voltage	6.6 kV 50Hz* ac 3 phase (grounded or ungrounded supply systems) *At frequencies above 50 Hz, current carrying capacities may require derating (e.g. motor variable speed controllers).

Maximum Current Rating (amps):

To allow American Wire Gauge (AWG) cables and current ratings for T6 to T4 temperature classes.

Conductor Size	Current A	
AWG (max. 5.91in ²)	T6 (185°F)	T5 (212°F)
6	42	59
4	55	80
3	64	92
2	73	107
1	81	121
1/0	101	141
2/0	150	173
3/0	160	180
		T4 (275°F)
		65
		88
		102
		118
		134
		156
		192
		200

Maximum Wiring Space for HV Cable Termination Kits:

Enclosure Type	Distance Between Bolt & Gland Plate
HVB 463820	7.09"
HVB 765120	13.19"
HVB 916126	16.14"

Connections:

3 or 4 pole, consists of 6 or 8 post insulators with 0.24" brass busbars, tin lead plated. Cable alignment restrictors prevent misalignment of the conductors. Accepts standard cable lugs up to 1.18" wide and an M12 hole.

Certifications and Compliances:

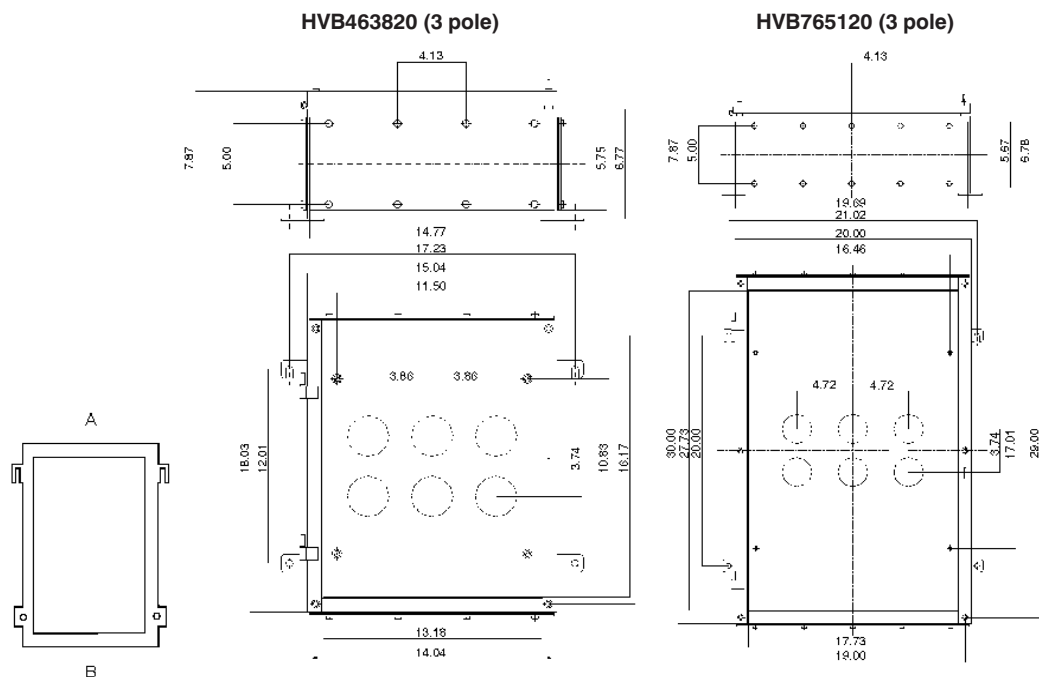


EEx'e' II T4 200A, T5 180A, T6 160A to EN 50019.
Certificate of Conformity Ex 91C3217X (enclosure & connection assembly)



UL50/C22.2 No. 94-M91 mild steel: Types 3S, 4; stainless steel: Type 4X

Sheet or Stainless Steel
High Voltage Junction Box
Ordering Information



For dimensions marked with a *
subtract 1.18" for 2 gland
plate versions

All dimensions in inches.

Ordering Data:

M10 Ground Stud Phase Standard Paint Finish
Conductor 4.72in² Max. Stainless Steel Finish

M14 Ground Stud Phase Standard Paint Finish
Conductor 5.91in² Only Stainless Steel Finish

Cat. No.
HVBPS463820M10
HVBS1463820M10

HVBPS463820M14
HVBS1463820M14

Cat. No.
HVBPS765120M10
HVBS1765120M10

HVBPS765120M14
HVBS1765120M14

Guide to Gland Entries:

Max. Gland Area Dimensions

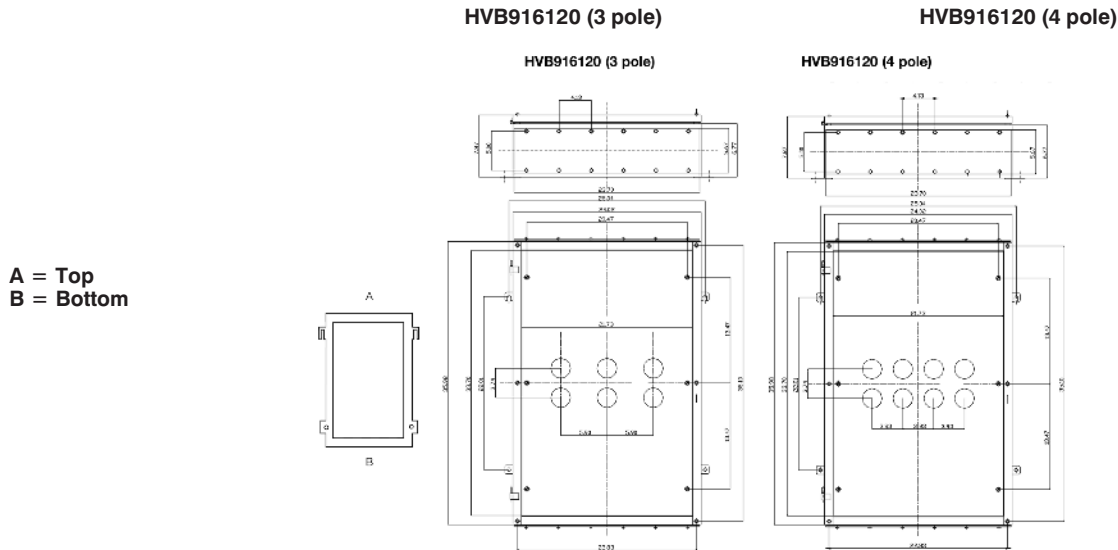
Side
A + B
Size
13.27" x 4.25"

Side
A + B
Size
18.27" x 4.25"

Gland Sizes (mm) Brass (Per Plate):

40	6	8
50	4	6
63	3	4
75	3	4

Sheet or Stainless Steel High Voltage Junction Box Ordering Information



For dimensions marked with a *
subtract 1.18" for 2 gland
plate versions
All dimensions in inches.

	Height 35.98" Width 24.20" Depth 7.87" Weight 99.21 lb	Height 35.98" Width 24.02" Depth 7.87" Weight 103.62lb
Ordering Data:	Cat. No.	Cat. No.
M10 Ground Stud Phase Standard Paint Finish	HVBPS916120M10	HVBPS916120M104P
Conductor 4.72in² Max. Stainless Steel Finish	HVBS1916120M10	HVBS1916120M104P
M14 Ground Stud Phase Standard Paint Finish	HVBPS916120M14	HVBPS916120M144P
Conductor 5.91in² Only Stainless Steel Finish	HVBS1916120M14	HVBS1916120M144P
Guide to Gland Entries:	Side	Side
Max. Gland Area Dimensions	A + B	A + B
	Size	Size
	22.28" x 4.25"	22.28" x 4.25"
Gland Sizes (mm) Brass (Per Plate):		
40	8	8
50	7	7
63	5	5
75	4	4

Sheet or Stainless Steel Removable Hinge Cover

QBX Series

Features/Applications:

The QBX series of enclosures are available in two types of material and have been developed for the light industrial market.

Stainless steel is recommended to give maximum protection for components in outdoor/aggressive environments.

Specifically designed for the accommodation of rail mounted terminals or other electro/pneumatic components. The QBX series is user friendly and offers good access internally.

- Fully removable hinged cover, concealed hinges provide 180° opening
- Cover mounting, one or two ¼ turn latches (slot shape)
- 10 key lockable variations
- Form-in-place polyurethane gasket
- M6 ground stud in box and cover
- Mounting through internal holes (types 3S and 4) or with external lugs (type 4X)
- Pole mounting kit available



Specifications:

Material	All Types	0.125" Steel or 304 Stainless Steel
Finish	Flat Electro Polished Finish	Flat Electro Polished Finish
Gasket	All Types	Form-In-Place Polyurethane
Cover Mounting	All Types	2 or 3 Hinges /1 or 2 ¼ Turn Latches
Gland Plates	QBX302012, 303012, 403012, 403022 All Other Sizes	1 Gland Plate Bottom Face 2 Gland Plates on Bottom Face
Grounding	All Types	M6 Studs in Base and Cover
Enclosure Mounting	All Types	Holes Through Back of Enclosure or Using External Mounting Lugs
Equipment Mounting	All Types	IP 65 to BSEN60529
Temperature Range	All Types	-4°F to +176°F

Factory Options (Consult Factory)

Material	Special Materials or Thickness According to Customer Specification
Finish	Special Colors According to Customer Specification
Sizes	Special Sizes According to Customer Specification
Equipment	Terminals, Myers Hubs, and Glands Assembled According to Customer Specification
Gland Plates	Drilled Cable Glands Fitted to Customer Specification
Ground Studs	Also Available Fitted to Gland Plates
Cover Attachments	e.g. Handles and Locks

Certifications and Compliances:



UL50/C22.2 No. 94-M91 mild steel: Types 3S, 4; stainless steel: Type 4X

Sheet or Stainless Steel Removable Hinge Cover Ordering Information and Accessories

QBX Series Ordering Information

Painted Sheet Steel RAL 7032 Depth 4.72"

	Cat. No.	Weight (lb)
11.81" × 7.87"	QBXPS302012UL	6.13
11.81" × 11.81"	QBXPS303012UL	7.96
15.75" × 11.81"	QBXPS403012UL	10.74
15.75" × 15.75"	QBXPS404012UL	13.14
19.68" × 15.75"	QBXPS504012UL	14.15
23.62" × 15.75"	QBXPS604012UL	16.33

Stainless Steel (304) Brushed Depth 4.72"

	Cat. No.	Weight (lb)
11.81" × 7.87"	QBXSS2302012UL	6.48
11.81" × 11.81"	QBXSS2303012UL	8.43
15.75" × 11.81"	QBXSS2403012UL	10.74
15.75" × 15.75"	QBXSS2404012UL	12.34
19.68" × 15.75"	QBXSS2504012UL	14.98
23.62" × 15.75"	QBXSS2604012UL	18.43

Painted Sheet Steel RAL 7032 Depth 8.66"

	Cat. No.	Weight (lb)
11.81" × 11.18"	QBXPS303022UL	11.35
11.81" × 15.75"	QBXPS304022UL	13.73
15.75" × 11.81"	QBXPS403022UL	13.73
15.75" × 15.75"	QBXPS404022UL	16.42
15.75" × 19.68"	QBXPS405022UL	19.11
19.68" × 15.75"	QBXPS504022UL	19.11
19.68" × 19.68"	QBXPS505022UL	22.13
19.68" × 23.62"	QBXPS506022UL	25.15
23.62" × 15.75"	QBXPS604022UL	21.62
23.62" × 19.68"	QBXPS605022UL	25.15
23.62" × 23.62"	QBXPS606022UL	28.66
27.56" × 19.68"	QBXPS705022UL	28.17
27.56" × 23.62"	QBXPS706022UL	31.81
31.50" × 23.62"	QBXPS806022UL	34.50

Stainless Steel (304) Brushed Depth 8.66"

	Cat. No.	Weight (lb)
11.81" × 11.18"	QBXSS2303022UL	11.40
11.81" × 15.75"	QBXSS2304022UL	13.78
15.75" × 11.81"	QBXSS2403022UL	13.78
15.75" × 15.75"	QBXSS2404022UL	16.49
15.75" × 19.68"	QBXSS2405022UL	19.19
19.68" × 15.75"	QBXSS2504022UL	19.19
19.68" × 19.68"	QBXSS2505022UL	22.22
19.68" × 23.62"	QBXSS2506022UL	25.25
23.62" × 15.75"	QBXSS2604022UL	22.26
23.62" × 19.68"	QBXSS2605022UL	25.25
23.62" × 23.62"	QBXSS2606022UL	29.98
27.56" × 19.68"	QBXSS2705022UL	28.28
27.56" × 23.62"	QBXSS2706022UL	31.95
31.50" × 23.62"	QBXSS2806022UL	34.75

All enclosures are supplied with zinc coated mounting plate

Accessories:

Stand-Off Pillars M6:

Type	Cat. No.	Length Inches
SP15 (Set of 2)	ACCSOP15	0.59"
SP20 (Set of 2)	ACCSOP20	0.79"
SP30 (Set of 2)	ACCSOP30	1.18"

Mounting Feet:

Type	Cat. No.	
QMF (Set of 4)	QBXPSMF	For All Types (Steel)
QSF (Set of 4)	QBXSS1MF	For All Types (Stainless Steel)

Rail Mounting Bracket:

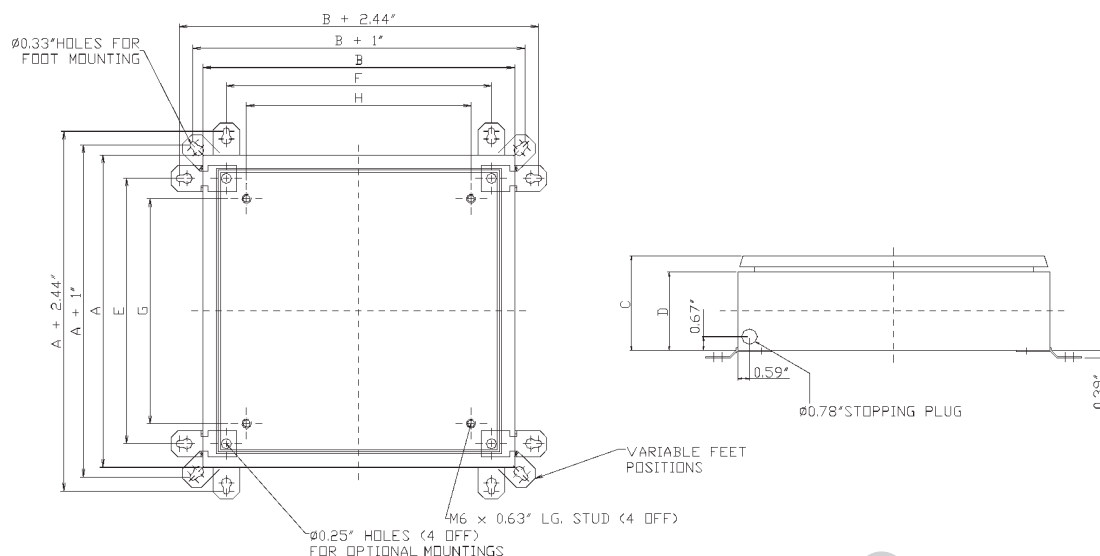
Type	Cat. No.	
QZFB	QBXRMB	For All Types

Further Accessories:

Type	Cat. No.
Ground Cable	QBXEARTHCB
Grounding Accessory Kit	QBXEARTHKIT

Type	Lock Inserts (Key Not Included Unless Stated) Cat. No.	Keys Cat. No.
Slot Shape	QBXLKSLT	N/A
Eastern European (D Shape)	QBXLKKEE	QBXKEYEE
Double Bit Shape	QBXLKDBS	QBXKEYDBS
Square 8mm	QBXLKSQ8	QBXKEYSQ8
Square 7mm	QBXLKSQ7	QBXKEYSQ7
Triangular 8mm	QBXLKTR8	QBXKEYTR8
Triangular 7mm	QBXLKTR7	QBXKEYTR7
Crown Shape	QBXLKWCWN	QBXKEYCWN
Wing Knob Insert with Standard Key	QBXLKWKI	QBXKEYWNI
L Padlockable Handle 10mm	QBXLKPAD	N/A

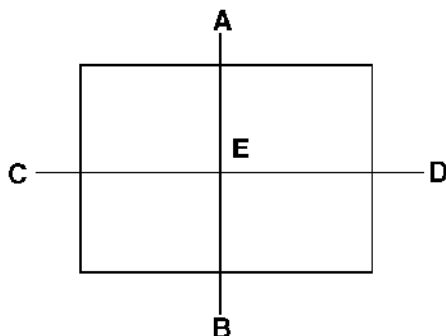
Sheet or Stainless Steel
Removable Hinge Cover
Dimensions



QBX Enclosure Series Dimensions (in inches):

Enclosure Type	A	B	C	D	E	F	G	H
4.72" Depth	Length	Width	Height					
QBX302012	11.81	7.87	4.72	9.34	9.45	5.51	7.40	3.46
QBX303012	11.81	11.81	4.72	9.34	9.45	9.45	7.40	7.40
QBX403012	15.75	11.81	4.72	9.34	13.39	9.45	11.34	7.40
QBX404012	15.75	15.75	4.72	9.34	13.39	13.39	11.34	11.34
QBX504012	19.68	15.75	4.72	17.32	17.32	13.39	15.28	11.34
QBX604012	23.62	15.75	4.72	21.26	21.26	13.39	19.21	11.34
8.66" Depth	Length	Width	Height					
QBX303022	11.81	11.81	8.66	7.87	9.45	9.45	7.40	7.40
QBX304022	11.81	15.75	8.66	7.87	9.45	13.39	7.40	11.34
QBX403022	15.75	11.81	8.66	7.87	13.39	9.45	11.34	7.40
QBX404022	15.75	15.75	8.66	7.87	13.39	13.39	11.34	11.34
QBX405022	15.75	19.68	8.66	7.87	13.39	17.32	11.34	15.28
QBX504022	19.68	15.75	8.66	7.87	17.32	13.39	15.28	11.34
QBX505022	19.68	19.68	8.66	7.87	17.32	17.32	15.28	15.28
QBX506022	23.62	15.75	8.66	7.87	17.32	21.26	15.28	19.21
QBX604022	23.62	15.75	8.66	7.87	21.26	13.39	19.21	11.34
QBX605022	23.62	19.68	8.66	7.87	21.26	17.32	19.21	15.28
QBX606022	23.62	23.62	8.66	7.87	21.26	21.26	19.21	19.21
QBX705022	27.56	19.68	8.66	7.87	25.20	17.32	23.15	15.28
QBX706022	27.56	23.62	8.66	7.87	25.20	21.26	23.15	19.21
QBX806022	31.49	23.62	8.66	7.87	29.15	21.26	27.08	19.21

Enclosure side identification



A: Top
B: Bottom
C: Left
D: Right
E: Back

Series GHG 744, 745, 746, 749

UL/cUL Listed
Class I, Division 2, Groups A, B, C, D
Class I, Zones 1 and 2, AEx de IIB + H₂, T6
Class II, Division 1, Groups E, F, G (cUL)
CENELEC - PTB ATEX CERTIFIED

EEx de IIC, T6, Zones 1 and 2
EEx de IIC, T6 Zones 21 and 22
IP66, NEMA 4X

6F

Application:

Explosion protected terminal boxes are used in a metallic conduit or cable system for a marshalling cabinet between main circuits to the control room and branch circuits into the field.

- Junction boxes for intrinsically safe or increased safety connections
- Are designed for industrial areas such as chemical plants, oil and gas refineries, paint and varnish manufacturing plants, gasoline bulk loading terminals and finishing areas where nonmetallic, weatherproof enclosures



Features:

- Enclosures can be mounted on walls, conduits or strut systems
- Connection terminals accessible from all sides
- Snap-out brass plates for metallic entry and grounding continuity
- Snap-out terminal rails
- Clip-in grounding PE rail
- Different sizes to accommodate any number of terminal connections

Standard Materials:

- Fiberglass - reinforced polyester housings
- Enclosure gasket - silicone
- Cover screws - stainless steel
- Metal entry plates - brass
- Conduit entries - zinc Myers hubs

Technical Data:

- Suitable from 1 to 296 terminal blocks (2.5mm²)
- Suitable for up to 90 - 3/4" hubs (largest size)
- Suitable for up to 72 - 3/4" metallic hubs
- Suitable for use as control panels
- Ex-e boxes and brass flanges can be field drilled

Ordering Data:

Contact factory for catalog numbers and pricing. Call 315 477-5531

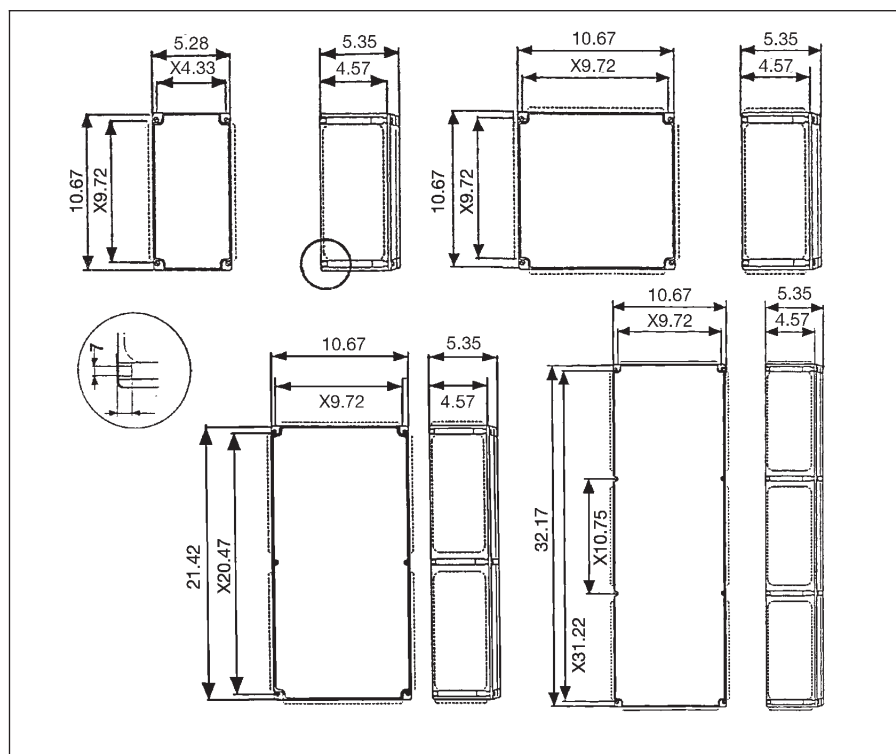
Have the following information ready -

- Number and size of terminals (Table 1)
 - Number, size and location of entries (Tables 2 & 3)
 - Required ground points (Table 4)
- Cooper Crouse-Hinds will provide you with an extended list

Certifications & Compliances:

- UL/cUL Listed
- Class I, Division 2, Groups A, B, C, D
- Class I, Zones 1 and 2, (A)Ex de IIB+H₂, T6
- Class II, Division 1, Groups E, F, G (cUL)
- CENELEC - PTB ATEX CERTIFIED
- EEx de IIC, T6, Zones 1 and 2
- EEx de IIC, T6, Zones 21 and 22
- IP 66, NEMA 4X

Dimensions:



Explosion Protected Terminal Boxes

Series GHG 744, 745, 746, 749

UL/cUL Listed
Class I, Division 2, Groups A, B, C, D
Class I, Zones 1 and 2, AEx de IIB + H₂, T6
Class II, Division 1, Groups E, F, G (cUL)
CENELEC - PTB ATEX CERTIFIED

EEx de IIC, T6, Zones 1 and 2
EEx de IIC, T6 Zones 21 and 22
IP66, NEMA 4X

Panel and Side Designation

The sides of the enclosures are designated as W, X, Y & Z alphabetically in a clockwise rotation.
The narrow sides are always W & Y and the long sides are X & Z

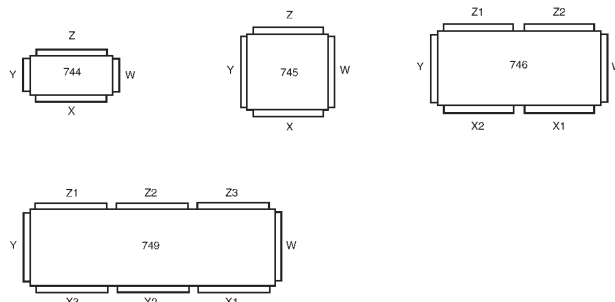


Table 1
Maximum number of built-in terminals supplied with enclosure

Type	Terminal cross section in mm ²							Length of terminal rail
	2.5	4	6	10	16	25	35	
GHG 44	40	33	25	20	17	17	–	(1) 230 mm
GHG 45	(2) 41	(2) 34	(2) 26	(2) 20	17	17	14	(2) 235 mm
GHG 46	(2) 94	(2) 78	(2) 26	(2) 20	40	40	32	(2) 510 mm
GHG 49	(2) 148	(2) 124	(2) 94	(2) 75	63	63	51	(2) 795 mm

Table 2
Flange Arrangement for Each Enclosure

Enclosure	744	745	746	749
Removable Flanges	2 total 1 - top & bottom	4 total 1 per side	6 total 2 top & bottom 1 each side	8 total 3 top and bottom 1 each side
Covers *	Shallow	Deep or shallow	Deep or shallow	Shallow
# of DIN rails	1	1 or 2	1, 2, or 4	1, 2, or 6

* The shallow cover is standard for terminal boxes. The deep cover is used when mounting larger sized terminal (>95 mm²) or switches for 80 amps and larger.

Table 3
Maximum number of Glands per Side

Type	Side	M12	M16	M20	M25	M32	M40	M50	M63
NPT equivalent				1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
GHG 744	X/Z	60	36	26	18	10	7	4	3
GHG 745	X/Z	60	36	26	18	10	7	4	3
GHG 746	X/Z	120	72	52	36	20	14	8	6
GHG 749	X/Z	180	108	78	54	30	21	12	9
# of glands /flange*		46	25	20	11	8	4	3	2
# of Myers hubs /flange*			–	10	9	6	3	3	2

If flanges are used, fewer glands can be installed. See Table 1 for flange arrangement.
Example: In the GHG 745 box a maximum of (10) 1/2" Myers hubs can be installed on each brass flange plates.
Each side will take one brass flange for a total of (40) 1/2" Myers hubs.

Explosion Protected Terminal Boxes

Series GHG 744, 745, 746, 749

UL/cUL Listed
Class I, Division 2, Groups A, B, C, D
Class I, Zones 1 and 2, AEx de IIB + H₂, T6
Class II, Division 1, Groups E, F, G (cUL)
CENELEC - PTB ATEX CERTIFIED

EEx de IIC, T6, Zones 1 and 2
EEx de IIC, T6 Zones 21 and 22
IP66, NEMA 4X

6F

6F Junction Boxes

Ground Rails:

- Used to connect ground points to common ground
- PE "potential earth" - European designation
- Designated by 3 number ordering code (see Table 4)

Table 4
Explanation of 14 × 2 × 4 mm²

Number	Meaning	Example
1 st	Number of screw terminals	14 screw terminals on strip
2 nd	# wires that can be connected on each terminal	2 ground wires can be connected
3 rd	Maximum conductor diameter	4 mm ² conductors can be terminated on the ground rail (28 total, 14 terminals; 2 wires per terminal)

Use Table 5 as a conversion from AWG to mm²

Table 5
Equivalent of AWG Conductor to mm²

AWG	Area mm ²
14	2.08
12	3.31
10	5.26
8	8.37
6	13.3
4	21.15
3	26.66
2	33.63
1	42.41
1/2	53.51
2/3	67.44
3/4	85.03
4/5	107.22

[illegible]

Elbows, Couplings, Hubs, Grounding Devices, Plugs, Reducers, Service Entrance and Unions Hazardous and Non-Hazardous

7F

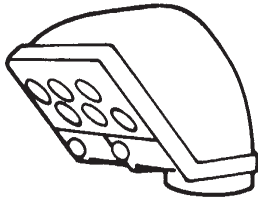
7F Elbows, Couplings,
Grounding Devices,
Plugs, Etc.

Description	Page No.
Application/Selection	164, 165
Elbows	
EL Series	167
Flexible & Expansion Joint Couplings	
EC Series	170, 171
XD Series	172
XJG Series	173
XJG-EMT Series	174
XJGD Series	175
Grounding Devices, Straps, Clamps	
GC Series	177
Hubs	
HUB Series	176
Pipe Plugs	
PLG Series	169
Reducers	
RE Series	169
REA Series	169
REC Series	169
Service Entrance Fittings	
Heads	
F Series	178
Unions	
Non-Expansion	
UNA Series	167
UNF Series	166
UNL Series	166
UNY Series	166
Expansion	
UNF Series	168
UNY Series	168
UNFL Series	168
UNYL Series	168
Conduit Liners	
LNR Series	179

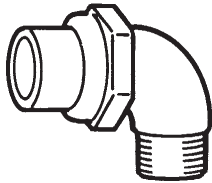
Elbows, Couplings, Hubs, Grounding Devices, Plugs, Reducers, Service Entrance and Unions

Application and Selection

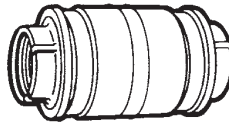
SERIES F PAGE 178



SERIES UNL PAGE 166



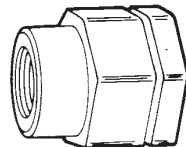
SERIES XD PAGE 172



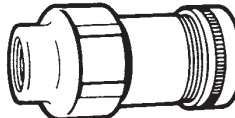
GCT 177



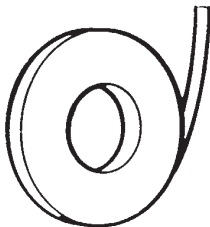
UNF 166



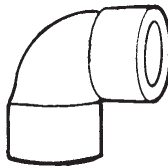
XJG 173



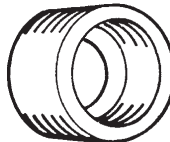
GC 177



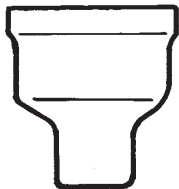
EL 167



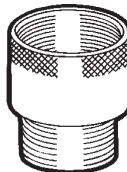
RE 169



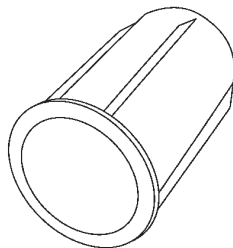
GCR 177



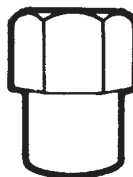
REA 169



LNR 179



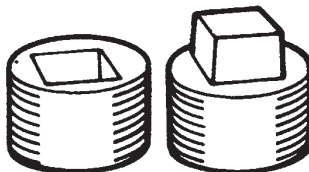
REC 169



UNYL 168



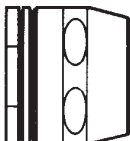
PLG 169



EC 170



HUB 176



XJGD
175



XJG-EMT
174

Application:

Service entrance heads, elbows, unions, couplings, grounding receptacle and stud and grounding straps with clamps are the miscellaneous fittings needed to complete an electrical conduit system from the overhead service entrance to machinery, lighting fixtures and/or final electrical outlets. These fittings are installed in conduit systems within non-hazardous areas to:

- Plug
- Connect
- Reduce
- Terminate
- Change direction
- Ground

Use in Hazardous Areas:

Most of the items shown above are also suitable for hazardous areas (see specific listings for compliance information).

Considerations for Selection:

Service Heads:

- Size required – determine from size and number of conductors in service and conduit or mast size.
- Type required – (threaded, slip fit, clamp) – determine from conduit used with service head.

Elbows, Unions, Reducers, Couplings and Grounding Receptacles/Connectors:

- Size required – determine from conduit size.
- Type required – determine from intended function in system (i.e. male and female thread for connecting conduit to outlet box etc.)
- Material and finish required – determine from environmental conditions (corrosive fumes, buried in concrete, etc.)

Options:

- Corro-free™ epoxy powder coat – add suffix S752

Quick Selector Chart

Series	Description	Size Range	Conduit Type	Standard Materials
XD	Expansion/deflection coupling	1" to 6"	Threaded rigid	<i>Feraloy</i> ® iron alloy hubs, neoprene outer jacket, tinned copper grounding strap
F	Threaded service entrance head	½" to 4" conduit	Threaded rigid	Copper-free aluminum
F	Clamp type service entrance head	¾" to 2" conduit	Threadless rigid or EMT	Copper-free aluminum
GCT	Ground connector and stud	.312" to .406"	Used to provide "quick connect" static electricity grounding connections with portable cable	Bronze connector body; aluminum cable clamp; brass stud
GC100	Grounding strap	50' coil	Used for bonding and grounding	Flexible copper, tinned
GCR	Grounding receptacle	¾" threaded grounding rod	Used to provide static electricity grounding connection	Bronze body, cap and chain; brass grounding stud
GC102	Grounding clamp	Adjustable	Used as clamp for GC100	Brass
HUB	Conduit hub	½" to 4"	Threaded rigid	Steel or <i>Feraloy</i> iron alloy
UNL	Union, 90° angle; for connecting conduit to cast boxes	½" - ½" to ¾" - ¾"	Threaded rigid	<i>Feraloy</i> iron alloy
UNY	Union, male; for connecting conduit to cast boxes	½" to 6"	Threaded rigid	Steel or <i>Feraloy</i> iron alloy
	Expansion union, male; for connecting conduit to cast boxes	½" to 1"	Threaded rigid	Steel
UNF	Union, female; for connecting conduit to conduit	½" to 6"	Threaded rigid	Steel or <i>Feraloy</i> iron alloy
	Expansion union, female; for connecting conduit to conduit	½" to 1"	Threaded rigid	Steel
UNA Male	Union, 90° to 180° adjustable; for connecting conduit to boxes for conduit support	½" to 1"	Threaded rigid	<i>Feraloy</i> iron alloy
EL-45°	45° elbow, female	12" to 4"	Threaded rigid	<i>Feraloy</i> iron alloy
EL-90°	90° elbow, male; 90° elbow, female; 90° elbow, male and female	½" to 1¼" male; ½" to 2½" female; ½" to 1¼" male and female	Threaded rigid	<i>Feraloy</i> iron alloy
RE	Reducer, threaded	½" - ½" to 6" - 5"	Threaded rigid	Steel or <i>Feraloy</i> iron alloy
REA	Adapter fitting	½" male to ¾" female; ¾" male to 1" female; 1" male to 1¼" female	Threaded rigid	Steel
REC	Reducer coupling	¾" - ½" to 5" - 4"	Threaded rigid	<i>Feraloy</i> iron alloy
PLG	Pipe plug, recessed head or square head	½" to 4"	Threaded rigid	Steel or <i>Feraloy</i> iron alloy
EC	Flexible coupling	½" to 4"	See catalog page 7F for details	
LNR	Conduit liner	½" to 4"	Threaded rigid & IMC	Polypropylene
XJG	Expansion Fitting	½" to 6"	Threaded rigid or IMC	<i>Feraloy</i> iron alloy
XJG-EMT	Expansion Fitting	½" to 4"	EMT	<i>Feraloy</i> iron alloy
XJGD	Expansion-Deflection	1" to 4"	Threaded rigid	<i>Feraloy</i> iron alloy

Cl. I, Div. 1 & 2, Groups A,B,C,D†
 Cl. II, Div. 1, Groups E,F,G
 Cl. II, Div. 2, Groups F,G
 Cl. III

Explosionproof
 Dust-Ignitionproof

Application:

UNY and UNF unions are installed in threaded thickwall conduit systems:

- UNY – to connect conduit to a conduit fitting, junction box or device enclosure
- UNF – to connect conduit to conduit, or to provide a means for future modification of the conduit system

UNA unions are used in conduit and fitting installations when entrance angle is between 90° and 180°.

EL elbows are installed in conduit run or in box or fitting hub:

- to change direction in threaded rigid conduit run by 90°, or when terminating at a box or fitting

Features:

UNY, UNF and UNL unions have:

- compact design which permits assembly with a minimum of clearance to other adjacent conduit and/or equipment
- strong and durable construction

UNA unions:

- have a single clamping nut on angle, making it both a union and a connector
- permit conduit joints at angles between 90° and 180°

EL elbows have a smooth interior and are both strong and compact.

Standard Materials:

- UNY, UNF unions – 1/2" to 1" – steel
- UNY, UNF unions – 1 1/4" to 6" – *Feraloy*® iron alloy
- UNL, UNA unions – *Feraloy* iron alloy
- EL elbows – *Feraloy* iron alloy or ductile iron

Standard Finishes:

- Steel – electrogalvanized with chromate treatment
- *Feraloy* iron alloy, malleable iron – electrogalvanized and aluminum acrylic paint

Options:

- Copper-free aluminum – add suffix SA to Cat. No. (not available on UNA or 5" and 6" UNY/UNF)

† See compliances for classification of each product.

Certifications and Compliances:

• NEC/CEC:

Class I, Division 1 & 2, Groups A,B,C,D
 Class II, Div. 1, Groups E,F,G
 Class II, Division 2, Groups F,G
 Class III
 EL 1/2", 3/4", 1"
 UNF/UNY 105, -215, -205, -305
 UNL 105, -125, -215, -205

Class I, Division 1 & 2, Groups B,C,D
 Class II, Division 1, Groups E,F,G
 Class II, Division 2, Groups F,G
 Class III
 UNF/UNY406, -506,
 -606, -706, -806,
 -905, -1005

Class I, Division 1 & 2, Groups C,D
 Class II, Division 1, Groups E,F,G
 Class II, Division 2, Groups F,G
 Class III
 EL, UNF, UNL, UNY -
 all sizes

Class I, Division 1 & 2, Group D
 Class II, Division 1, Groups E,F,G
 Class II, Division 2, Groups F,G
 Class III
 UNA

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

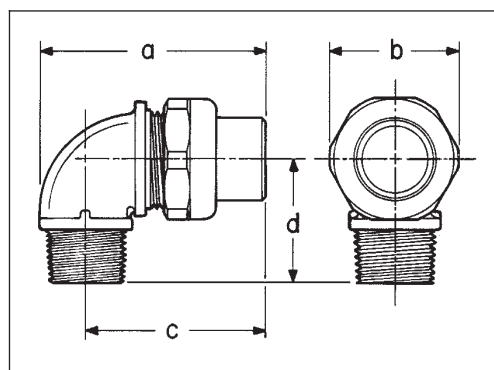


UNL

90° Angle

Size	Cat. #
1/2 to 1/2	UNL105
3/4 female to 1/2 male	UNL125
1/2 female to 3/4 male	UNL215
3/4 to 3/4	UNL205

Dimensions



1/2" - 4"



5" - 6"

UNY Male

Size	Cat. #
1/2	UNY105
1/2 female to 3/4 male	UNY215
3/4	UNY205
1	UNY305
1 1/4	UNY405
1 1/4	UNY406
1 1/2	UNY505
1 1/2	UNY506
2	UNY605
2	UNY606
2 1/2	UNY705
2 1/2	UNY706
3	UNY805
3	UNY806
3 1/2	UNY905
4	UNY1005
5	UNY012
6	UNY014



1/2" - 4"

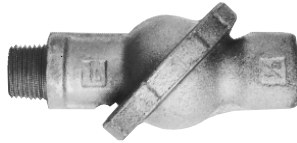


5" - 6"

UNF Female

Size	Cat. #
1/2	UNF105
3/4 to 1/2	UNF215
3/4	UNF205
1	UNF305
1 1/4	UNF405
1 1/4	UNF406
1 1/2	UNF505
1 1/2	UNF506
2	UNF605
2	UNF606
2 1/2	UNF705
2 1/2	UNF706
3	UNF805
3	UNF806
3 1/2	UNF905
4	UNF1005
5	UNF012
6	UNF014

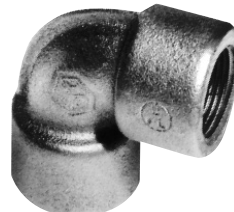
	UNY	Max.	UNF	Max.
Size	Length	Dia.	Length	Dia.
1/2	2 3/8	1 1/2	1 13/16	1 1/2
3/4-1/2	2 7/16	1 13/16	1 3/4	1 13/16
3/4	2 7/16	1 13/16	1 3/4	1 13/16
1	2 3/4	1 7/8	2	1 7/8
1 1/4	3 3/16	2 3/4	2 1/4	2 3/4
1 1/2	3 3/16	3 1/16	2 5/8	3 1/16
2	3 3/4	3 13/16	2 9/16	3 13/16
2 1/2	4 5/8	4 5/16	3 1/16	4 5/16
3	5	5 1/16	3 7/16	5 1/16
3 1/2	5 1/2	5 11/16	4 1/8	5 11/16
4	5 5/8	6 3/16	4 1/8	6 3/16
5	5 1/4	8 3/16	3 13/16	8 3/16
6	5 3/8	9 5/16	3 13/16	9 5/16
	UNL			
Dim.	105	125	215	205
a	2 11/16	2 11/16	2 7/8	2 7/8
b	1 17/32	1 13/16	1 13/16	1 13/16
c	2 1/16	2 1/16	2 1/4	2 1/4
d	1 7/16	1 7/16	1 5/8	1 5/8



Male (with removable nipple)



90° Male



90° Female



45° Female



90° Male and female

UNA

Male

Size	Cat. #
1/2	UNA16
3/4	UNA26
1	UNA36

EL

90° Male

Size	Cat. #
1/2	EL195
3/4	EL295
1	EL395

45° Female

Size	Cat. #
1/2	EL1
3/4	EL2
1	EL3
1 1/4	EL4
1 1/2	EL5
2	EL6
2 1/2	EL7
3	EL8
3 1/2	EL9
4	EL10

90° Female

Size	Cat. #
1/2	EL19*
3/4	EL29*
1	EL39*
1 1/4	EL49*
1 1/2	EL59*
2	EL69*
2 1/2	EL79

90° Male and Female

Size	Cat. #
1/2	EL196*
3/4	EL296*
1	EL396*
1 1/4	EL496

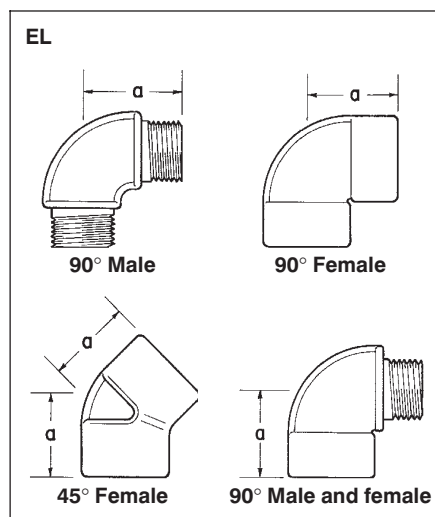
* Available in copper free aluminum – add suffix SA to catalog number.

Dimensions

UNA

Male

Size	Length	Width
1/2	4 5/16	2 5/8
3/4	4 13/16	2 7/8
1	5 11/16	3 1/2



EL

45° Female

90° Male

90° Female

90° Male & Female

Size	a	a	a	a
1/2	1 3/16	1 7/16	1 17/32	1 17/32
3/4	1 3/8	1 5/8	1 3/4	1 5/8
1	1 21/32	1 7/8	2	1 7/8
1 1/4	1 3/4		2 1/4	2 1/8
1 1/2	1 15/16		4	
2	2 1/4		5	
2 1/2	2 3/4		6 7/16	
3	3 1/6			
3 1/2	3 7/16			
4	3 5/8			

† See compliances for classification of each product.

Application:

UNF/UNY expansion unions are designed to be used in all threaded rigid metal† conduit systems indoors and outdoors, in hazardous locations to:

- connect conduit to conduit
- connect conduit to a junction box or device enclosure
- compensate for conduit cut too short
- allow for expansion and contraction of conduit
- connect stub-ups to threaded conduit
- replace sections of conduit runs

Features:

- Compact design
- Internal beryllium copper grounding spring to insure positive grounding continuity.
- Knurled surface on body and sleeve allows secure gripping with wrench.
- Steel construction for maximum strength.
- Available in two styles – short length where space is limited, long length when extra expansion is required.

Standard Materials:

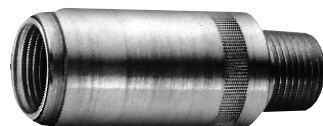
- Body and sleeve – steel
- Grounding spring – beryllium copper

Standard Finishes:

- Steel – electrogalvanized with chromate finish
- Beryllium copper – natural

Certifications and Complies:

- NEC/CEC:
 Class I, Division 1 & 2, Groups C,D
 Class II, Division 1, Groups E,F,G
 Class II, Division 2, Groups F,G
 Class III
- UL Standard: 886
- CSA Standard: C22.2 No. 30



UNYL



UNYL with sleeve extended

UNY

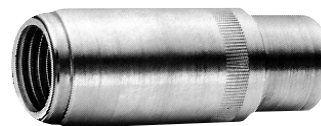
Male – Short

Conduit Size	Cat. #
1/2	UNY17
3/4	UNY27
1	UNY37

UNYL

Male – Long

Conduit Size	Cat. #
1/2	UNYL17
3/4	UNYL27
1	UNYL37



UNFL



UNFL with sleeve extended

UNF

Female – Short

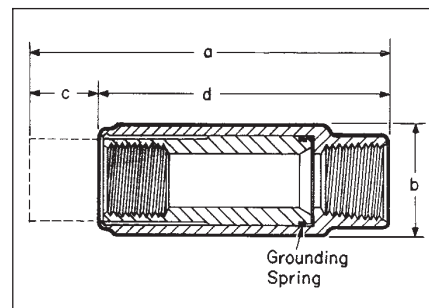
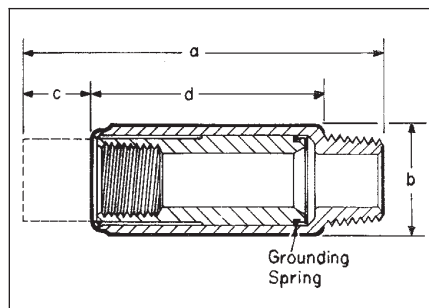
Conduit Size	Cat. #
1/2	UNF17
3/4	UNF27
1	UNF37

UNFL

Female – Long

Conduit Size	Cat. #
1/2	UNFL17
3/4	UNFL27
1	UNFL37

Dimensions



Size	Dimension			
	a*	b	c**	d
UNY				
1/2	3 5/16	1 3/16	1/2	2 1/16
3/4	3 3/8	1 7/16	1/2	2 1/8
1	3 13/16	1 11/16	5/8	2 1/4
UNYL				
1/2	4 5/16	1 3/16	1	2 9/16
3/4	4 1/2	1 7/16	1 1/16	2 11/16
1	5 3/16	1 11/16	1 5/16	2 15/16

Size	Dimension			
	a*	b	c**	d
UNF				
1/2	3 3/8	1 3/16	1/2	2 7/8
3/4	3 7/16	1 7/16	1/2	2 5/16
1	3 13/16	1 11/16	5/8	3 3/16
UNFL				
1/2	4 3/8	1 3/16	1	3 3/8
3/4	4 9/16	1 7/16	1 1/16	3 1/2
1	5 1/8	1 11/16	1 5/16	3 13/16

† Suitable with intermediate Metal Conduit in non-hazardous locations

* Overall length at maximum expansion

** Maximum expansion

Reducers, Couplings and Plugs

Cl. I, Div. 1 & 2, Groups A[†], B[‡], C, D
Cl. II, Div. 1, Groups E, F, G
Cl. II, Div. 2, Groups F, G
Cl. III

Explosionproof
Dust-Ignitionproof

7F

7F
Elbows, Couplings,
Fitting Devices,
Plugs, Etc.

Application:

RE and REC reducers are used in threaded heavy wall conduit systems.

RE reduces conduit hubs to a smaller size.

REA adapters enlarge drilled and tapped openings by 1 NPT size.

REC connects two different sizes of conduit together or is used to replace a coupling and reducer in an installation.

PLG plugs are used for closing threaded conduit hubs.

Features:

RE reducers have:

- integral bushing which prevents damage to wires
- full, clean cut tapered threads

REC reducers have:

- integral bushings in both ends which prevents damage to wires
- funnel shaped interior to guide the wires from large to small conduit, making it easy to pull wires

REA adapters have:

- Smooth integral bushing to protect wire insulation
- Knurled body for easy wrenching

PLG plugs:

- have clean tapered threads
- are available in two styles, flush (recessed), or square head type

Standard Materials:

- RE reducers – RE1108 through RE54 in steel; all others in *Feraloy*[®] iron alloy
- REA adapters – steel
- REC reducers – REC21 and REC32 in steel; all others in *Feraloy* iron alloy
- PLG plugs – *Feraloy* iron alloy and/or steel

Standard Finishes:

- *Feraloy* iron alloy – electrogalvanized and aluminum acrylic paint
- Steel – electrogalvanized with chromate treatment

Certifications and Compliances:

- NEC/CEC:
Class I, Division 1 & 2, Groups A, B, C, D
Class II, Division 1, Groups E, F, G
Class II, Division 2, Groups F, G
Class III

(see listings for specific Cat. Nos. suitable for Groups A or B)

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

Options:

- Copper-free aluminum – add suffix SA to Cat. No.



RE

Size

1/2-1/8
1/2-1/4
1/2-3/8
3/4-1/2
1-1/2
1-3/4
1 1/4-1/2
1 1/4-3/4
1 1/4-1
1 1/2-1/2
1 1/2-3/4
1 1/2-1
1 1/2-1 1/4
2-1/2
2-3/4
2-1
2-1-1/4
2-1-1/2
2 1/2-1
2 1/2-1 1/4
2 1/2-2
3-1
3-1-1/4
3-1-1/2
3-2
3-2-1/2
3 1/2-2
3 1/2-2 1/2
3 1/2-3
4-2
4-2-1/2
4-3
4-3-1/2
5-4
6-5

Cat.

RE1108*
RE1208*
RE1308
RE21†
RE31†
RE32†
RE41†
RE42†
RE43†
RE51†
RE52†
RE53†
RE54†
RE61†
RE62†
RE63†
RE64†
RE65†
RE73†
RE74†
RE75†
RE76†
RE83†
RE84†
RE85†
RE86†
RE87†
RE96†
RE97†
RE98†
RE106†
RE107†
RE108†
RE109†
RE01210
RE01412



REC

Large Hub Size

3/4
1
1
1 1/4
1 1/4
1 1/2
1 1/2
1 1/2
2
2
2
2 1/2
3
3 1/2
4
5

Small Hub Size

1/2
1/2
3/4
3/4
1
3/4
1
1 1/4
1 1/2
1 1/2
2 1/2
2
3
4

Cat.

REC21†
REC31†
REC32
REC42
REC43
REC52
REC53
REC54
REC602
REC603
REC604
REC605
REC75
REC86
REC97*
REC108*
REC01210*



REA

Male Hub Size

1/2
3/4
1

Female Hub Size

3/4
1
1 1/4

Cat.

REA12†
REA23†
REA34†



Recessed



Square Head

PLG

Recessed

Size

1/4
1/2
3/4
1
1 1/4
1 1/2
2
2 1/2
3
3 1/2
4

Cat.

PLG28†
PLG1†
PLG2†
PLG3†
PLG4†
PLG5†
PLG6†
PLG7†
PLG8†
PLG9†
PLG10†

Square Head

1/2
3/4
1
1 1/4
1 1/2
2
2 1/2
3
3 1/2
4

PLG15†
PLG25†
PLG35†
PLG45†
PLG55†
PLG65†
PLG75
PLG85
PLG95
PLG105

† Suitable for use in Class I, Groups A and B areas.

‡ Suitable for use in Class I, Group B areas.

* Not available in aluminum.

1/2"–2" Brass Construction

All Stainless Steel with suffix – S516

2 1/2"–4" Stainless Steel construction only

Cl. I†, Div. 1 & 2, Groups A,B,C,D

Cl. II, Div. 1, Groups E,F,G

Cl. II, Div. 2, Groups F,G

Cl. III

Explosionproof

Dust-

Ignitionproof

Wet Locations

Application:

EC couplings are used:

- in hazardous areas where a flexible member is required in a conduit system to accomplish difficult bends, or to allow for movement or vibration of connected equipment or units

Features:

- Rugged design to withstand explosive pressure (Class I)
- Mechanical abuse
- Liquid-tight for wet locations
- For use where lack of space makes use of rigid conduit difficult
- Wire duct liner in sizes 1/2" to 2" insulates against grounds and burn-through from short circuit
- No bonding jumpers required, metallic braid provides continuous electrical path
- ECGJH combination has two threaded male end fittings
- ECLK combination has one female union and one male threaded end fitting

Standard Materials:

- End fittings:
1/2" to 2" – forged brass
2 1/2" to 4" – stainless steel
- Female unions:
1/2" to 1" – steel
1 1/4" to 4" – *Feraloy*® iron alloy
- 1/2" to 2" have bronze braid covering and flexible brass inner core; packing is woven cotton braid impregnated with asphalt.
- 2 1/2" to 4" have a Type 304 stainless steel braid.

Standard Finishes:

- Brass and bronze – natural
- Steel – electrogalvanized with chromate treatment
- *Feraloy* iron alloy – electrogalvanized with aluminum acrylic paint
- Stainless steel – natural

Options:

Description **Suffix to be Added to Cat. #**

All stainless steel S516

For severely corrosive locations, a flexible PVC protective coating will be supplied. S758

Special coupling lengths available up to 144 inches.

To order, change last two digits in any standard catalog number to the two or three digit length desired in whole inches i.e. To order a 3/4" trade size 110 inches long, use catalog number ECGJH2110

Certifications and Compliances:

• NEC:

- 1/2" and 3/4" (Brass and S516) – Class I, Division 1 & 2, Groups A,B,C,D

1" to 2" (Brass and S516) – Class I, Division 1 & 2, Groups C,D

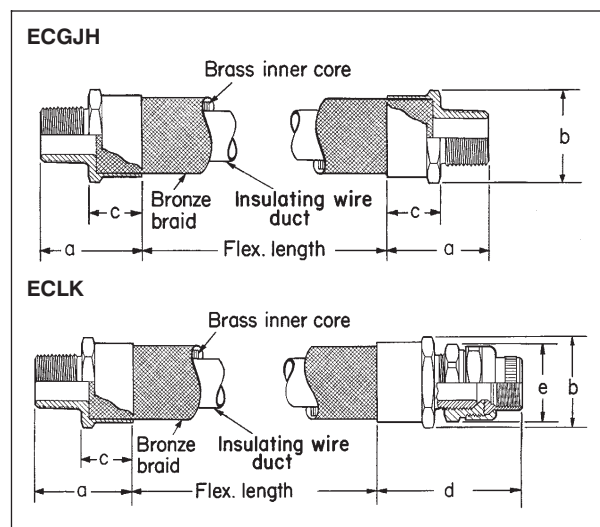
2 1/2" to 4" (Stainless Steel) – Class I, Division 1 & 2, Groups C,D

All sizes also for use in Class II, Division 1, Groups E,F,G, Division 2, Groups F,G and Class III

- UL Standard: 886

**ECGJH (Male connections both ends)**

Flexible Length	Size	Cat. #	Flexible Length	Size	Cat. #	Flexible Length	Size	Cat. #
4	1/2	ECGJH14	18	1	ECGJH318	27	2 1/2	ECGJH727
4	3/4	ECGJH24	18	1 1/4	ECGJH418	27	3	ECGJH827
6	1/2	ECGJH16	18	1 1/2	ECGJH518	27	4	ECGJH1027
6	3/4	ECGJH26	18	2	ECGJH618	30	1/2	ECGJH130
6	1	ECGJH36	18	2 1/2	ECGJH718	30	3/4	ECGJH230
8	1/2	ECGJH18	18	3	ECGJH818	30	1	ECGJH330
8	3/4	ECGJH28	18	4	ECGJH1018	30	1 1/4	ECGJH430
8	1	ECGJH38	21	1/2	ECGJH121	30	1 1/2	ECGJH530
10	1/2	ECGJH110	21	3/4	ECGJH221	30	2	ECGJH630
10	3/4	ECGJH210	21	1	ECGJH321	30	2 1/2	ECGJH730
10	1	ECGJH310	21	1 1/4	ECGJH421	30	3	ECGJH830
12	1/2	ECGJH112	21	1 1/2	ECGJH521	30	4	ECGJH1030
12	3/4	ECGJH212	21	2	ECGJH621	33	1/2	ECGJH133
12	1	ECGJH312	21	2 1/2	ECGJH721	33	3/4	ECGJH233
12	1 1/4	ECGJH412	21	3	ECGJH821	33	1	ECGJH333
12	1 1/2	ECGJH512	21	4	ECGJH1021	33	1 1/4	ECGJH433
12	2	ECGJH612	24	1/2	ECGJH124	33	1 1/2	ECGJH533
12	2 1/2	ECGJH712	24	3/4	ECGJH224	33	2	ECGJH633
12	3	ECGJH812	24	1	ECGJH324	33	2 1/2	ECGJH733
12	4	ECGJH1012	24	1 1/4	ECGJH424	33	3	ECGJH833
15	1/2	ECGJH115	24	1 1/2	ECGJH524	33	4	ECGJH1033
15	3/4	ECGJH215	24	2	ECGJH624	36	1/2	ECGJH136
15	1	ECGJH315	24	2 1/2	ECGJH724	36	3/4	ECGJH236
15	1 1/4	ECGJH415	24	3	ECGJH824	36	1	ECGJH336
15	1 1/2	ECGJH515	24	4	ECGJH1024	36	1 1/4	ECGJH436
15	2	ECGJH615	27	1/2	ECGJH127	36	1 1/2	ECGJH536
15	2 1/2	ECGJH715	27	3/4	ECGJH227	36	2	ECGJH636
15	3	ECGJH815	27	1	ECGJH327	36	2 1/2	ECGJH736
15	4	ECGJH1015	27	1 1/4	ECGJH427	36	3	ECGJH836
18	1/2	ECGJH118	27	1 1/2	ECGJH527	36	4	ECGJH1036
18	3/4	ECGJH218	27	2	ECGJH627			

Dimensions

†See certifications and compliances.

Couplings

1/2"–2" Brass Construction

All Stainless Steel with suffix – S516

2 1/2"–4" Stainless Steel construction only

Cl. I, Div. 1 & 2, Groups A,B,C,D† Explosionproof
Cl. II, Div. 1, Groups E,F,G Dust-
Cl. II, Div. 2, Groups F,G Ignitionproof
Cl. III Wet Locations

7F



ECLK (ECGJH provide with UNF Female union – male connection 1 end, female connection 1 end)

Flexible Length	Size	Cat. #	Flexible Length	Size	Cat. #	Flexible Length	Size	Cat. #
4"	1/2	ECLK14	18"	1	ECLK318	27"	2 1/2	ECLK727
4"	3/4	ECLK24	18"	1 1/4	ECLK418	27"	3	ECLK827
6"	1/2	ECLK16	18"	1 1/2	ECLK518	27"	4	ECLK1027
6"	3/4	ECLK26	18"	2	ECLK618	30"	1/2	ECLK130
6"	1	ECLK36	18"	2 1/2	ECLK718	30"	3/4	ECLK230
8"	1/2	ECLK18	18"	3	ECLK818	30"	1	ECLK330
8"	3/4	ECLK28	18"	4	ECLK1018	30"	1 1/4	ECLK430
8"	1	ECLK38	21"	1/2	ECLK121	30"	1 1/2	ECLK530
10"	1/2	ECLK110	21"	3/4	ECLK221	30"	2	ECLK630
10"	3/4	ECLK210	21"	1	ECLK321	30"	2 1/2	ECLK730
10"	1	ECLK310	21"	1 1/4	ECLK421	30"	3	ECLK830
12"	1/2	ECLK112	21"	1 1/2	ECLK521	30"	4	ECLK1030
12"	3/4	ECLK212	21"	2	ECLK621	33"	1/2	ECLK133
12"	1	ECLK312	21"	2 1/2	ECLK721	33"	3/4	ECLK233
12"	1 1/4	ECLK412	21"	3	ECLK821	33"	1	ECLK333
12"	1 1/2	ECLK512	21"	4	ECLK1021	33"	1 1/4	ECLK433
12"	2	ECLK612	24"	1/2	ECLK124	33"	1 1/2	ECLK533
12"	2 1/2	ECLK712	24"	3/4	ECLK224	33"	2	ECLK633
12"	3	ECLK812	24"	1	ECLK324	33"	2 1/2	ECLK733
12"	4	ECLK1012	24"	1 1/4	ECLK424	33"	3	ECLK833
15"	1/2	ECLK115	24"	1 1/2	ECLK524	33"	4	ECLK1033
15"	3/4	ECLK215	24"	2	ECLK624	36"	1/2	ECLK136
15"	1	ECLK315	24"	2 1/2	ECLK724	36"	3/4	ECLK236
15"	1 1/4	ECLK415	24"	3	ECLK824	36"	1	ECLK336
15"	1 1/2	ECLK515	24"	4	ECLK1024	36"	1 1/4	ECLK436
15"	2	ECLK615	27"	1/2	ECLK127	36"	1 1/2	ECLK536
15"	2 1/2	ECLK715	27"	3/4	ECLK227	36"	2	ECLK636
15"	3	ECLK815	27"	1	ECLK327	36"	2 1/2	ECLK736
15"	4	ECLK1015	27"	1 1/4	ECLK427	36"	3	ECLK836
18"	1/2	ECLK118	27"	1 1/2	ECLK527	36"	4	ECLK1036
18"	3/4	ECLK218	27"	2	ECLK627			

Dimensions

ECGJH and ECLK

Size	a	b	c	d	e
1/2	17/8	1 1/2	1 1/8	3	1 9/16
3/4	2 1/16	1 7/8	1 3/16	3 1/4	1 13/16
1	2 1/2	2 1/8	1 1/2	3 5/8	1 7/8
1 1/4	2 7/8	2 15/16	1 7/8	4 3/16	2 3/4
1 1/2	3 5/16	3 1/2	1 7/8	5 3/16	3 1/16
2	3 3/4	4 1/4	2	5 1/16	3 13/16
2 1/2	3	4 7/16	1 5/8	5 1/16	4 5/16
3	3 1/8	4 9/16	1 3/4	5 5/8	5 1/16
4	4 5/8	4 15/16	3 1/4	7 1/2	6 3/16

Minimum Recommended Radius of Bend

Size	Radius	Size	Radius
1/2	10	2	16
3/4	12	2 1/2	16
1	14	3	18
1 1/4	14	4	30
1 1/2	16		

†See certifications and compliances.

Application:

XD couplings can be installed indoors, outdoors, buried underground, or embedded in concrete in non-hazardous areas. XD's are used with standard rigid conduit or PVC rigid conduit. (PVC requires rigid metal conduit nipples and rigid metal-to-PVC conduit adapters.) XD's provide a flexible and watertight connection for protection of conduit wiring systems from damage due to movement.

Typical applications include:

- Underground conduit feeder runs
- Runs between sections of concrete subject to relative movement
- Runs between fixed structures
- Conduit entrances in high-rise buildings
- Bridges
- Marinas, docks, piers

Features:

- XD couplings accommodate the following movements without collapsing or fracturing the conduit, and damaging the wires it contains:
 1. Axial expansion or contraction up to $\frac{3}{4}$ "
 2. Angular misalignment of the axes of the coupled conduit runs in any direction to 30°
 3. Parallel misalignment of the axes of coupled conduit runs in any direction to $\frac{3}{4}$ "
- Inner sleeve maintains constant I.D. in any position and provides a smooth insulated wireway for protection of wire insulation
- Watertight flexible neoprene outer jacket is corrosion resistant and protects the grounding strap and the attachment points of the hubs
- Tinned copper flexible braid grounding straps assure grounding continuity
- Stainless steel jacket clamps for strength and corrosion resistance
- Standard tapered electrical threads fit standard rigid conduit
- Integral hub bushing protects insulation of conductors

Standard Materials:

- Hubs – *Feraloy*® iron alloy
- Outer jacket – molded neoprene
- Jacket clamps – stainless steel
- Inner sleeve – molded plastic
- Grounding straps – tinned copper flexible braid

Standard Finishes:

- *Feraloy* – electrogalvanized
- Neoprene – natural (black)
- Molded plastic – natural (brown)

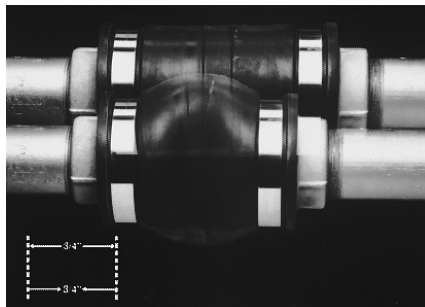
Certifications and

Compliances:

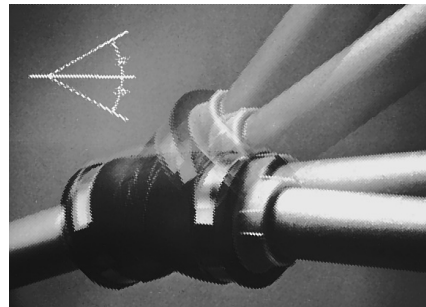
- UL standards: 514B

Size Ranges:

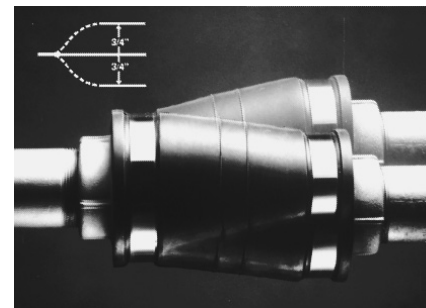
- 1" to 6" (Smaller sizes can be obtained by using reducing bushings)



1. Axial expansion/contraction.



2. Angular misalignment.



3. Parallel misalignment.

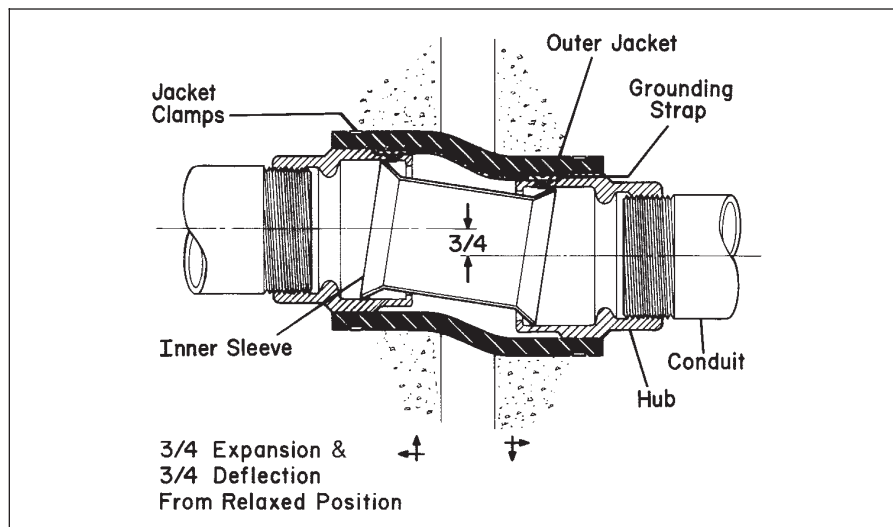
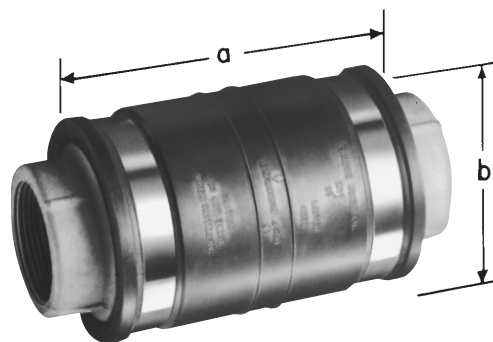
XD

Ordering Information

Hub Size	Cat. #	Hub Size	Cat. #
1	XD3	3	XD8
1 1/4	XD4	3 1/2	XD9
1 1/2	XD5	4	XD010
2	XD6	5	XD012
2 1/2	XD7	6	XD014

Dimensions

Hub Size	a	b
1	7	3 15/16
1 1/4	7 3/8	4 1/4
1 1/2	7 1/4	4 1/2
2	7 1/4	4 15/16
2 1/2	7 1/2	5 5/16
3	7 5/8	5 15/16
3 1/2	7 3/4	6 1/2
4	7 7/8	6 15/16
5	7 3/4	8
6	8 3/8	9



XJG Conduit Expansion Joints With Internal Grounding For Rigid Metal Conduit and IMC

Wet Locations

7F

Elbows, Couplings,
Reddy Devices,
Plugs, Etc.

Application:

XJG expansion couplings are used with rigid metal conduit and IMC:

- **without** the need for an external bonding jumper and clamps (up to 4")
- to couple together two (2) sections of conduit subject to longitudinal movement
- in long conduit runs to permit linear movement caused by thermal expansion and contraction.
- on long conduit runs to prevent conduit from buckling and ensuing circuit failures
- indoors or outdoors where conduit expansion occurs and there are wide temperature ranges
- in conduit runs that cross structural joints
- in conduit runs to prevent damage to conduit supports such as in a building or on a bridge
- **with optional redundant visible grounding strap**

Standard Materials and Finishes

Body

- Steel-electrogalvanized
- Copper-free aluminum - natural
- *Feraloy*[®] iron alloy - electrogalvanized (5" + 6" only)

Reducer

- ½" through 1" - Steel - electrogalvanized
- 1¼" through 6" - *Feraloy*[®] iron alloy - electrogalvanized and aluminum paint
- Copper-free aluminum - natural

Gland Nut

- ½" through 1" - Steel - electrogalvanized
- 1¼" through 6" - *Feraloy*[®] iron alloy - electrogalvanized and aluminum paint
- Copper-free aluminum - natural

Packing

- Teflon[®] (trademark of E.I. DuPont Co.)

Washer

- Steel - electrogalvanized
- Copper-free aluminum - natural

Gasket

- Vellum

Bushing

- ½" through 1" - Steel - electrogalvanized
- 1¼" through 6" - *Feraloy*[®] iron alloy - electrogalvanized and aluminum paint
- Copper-free aluminum - natural

Ground Springs

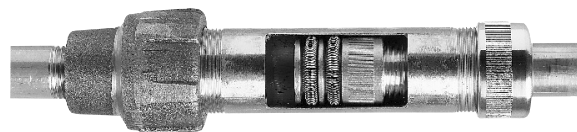
- Phosphor bronze - electrogalvanized

Ground Strap

- Braided tinned copper

U-Bolts

- Malleable iron - electrogalvanized



Patented Design

XJG – For use with rigid metal conduit and IMC

Conduit Size	Maximum Conduit Movement	Catalog Number	Optional Bonding Jumper†	A Diameter	B Length	Bonding Jumper Length
½	4	XJG14	BJ14	1.75	6.75	20"
	8	XJG18	BJ18	1.75	10.75	30"
¾	4	XJG24	BJ24	2.12	6.75	20"
	8	XJG28	BJ28	2.12	10.75	30"
1	4	XJG34	BJ34	2.43	7.25	20"
	8	XJG38	BJ38	2.43	11.25	30"
1¼	4	XJG44	BJ44	3.19	7.56	24"
	8	XJG48	BJ48	3.19	11.56	30"
1½	4	XJG54	BJ54	3.68	7.87	24"
	8	XJG58	BJ58	3.68	11.87	30"
2	4	XJG64	BJ64	4.75	8.25	24"
	8	XJG68	BJ68	4.75	12.25	30"
2½	4	XJG74	BJ74	4.87	9.31	24"
	8	XJG78	BJ78	4.87	13.31	36"
3	4	XJG84	BJ84	5.37	10.00	30"
	8	XJG88	BJ88	5.37	14.00	36"
3½	4	XJG94	BJ94	6.62	9.81	30"
	8	XJG98	BJ98	6.62	13.81	36"
4	4	XJG104	BJ104	6.62	9.81	30"
	8	XJG108	BJ108	6.62	13.81	36"
5	8	XJ128‡	-	7.64	15.50	-
6	8	XJ148‡	-	9.56	16.00	-

Options:

Available in copper-free aluminum – add suffix SA to Cat. No. (not available on 5" and 6" sizes)

Available with redundant† ground strap for visible indication of grounding – order separately (BJ Series)

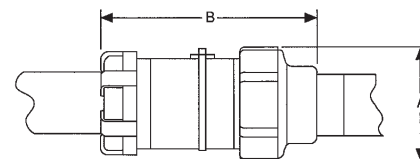
Size Ranges:

- ½" through 6" conduit size
- 4" and 8" maximum conduit movement

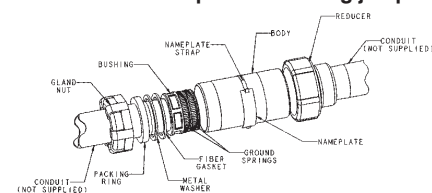
Certifications and Compliances:

- UL Standard: 514B
- CSA Standard: C22.2 No. 18
- NEC Articles 250-77 and 300-7 (b)
- NEMA FB1
- Wet Locations

Dimensions



XJG shown with optional bonding jumper



* Teflon[®] is a registered trademark of E.I. DuPont Co.

† XJG expansion couplings use a metallic bushing and ground springs to create a high integrity internal ground connection. External ground straps offer a redundant ground path and easy visible indication of ground

‡ XJ128 and XJ148 are not internally grounded. A pair of 36" bonding jumpers are provided with fitting.

XJG-EMT Conduit Expansion Joints With Internal Grounding For EMT Conduit

Application:

XJG expansion couplings are used with EMT Conduit:

- **without** the need for an external bonding jumper and clamps
- to couple together two (2) sections of conduit subject to longitudinal movement
- in long conduit runs to permit linear movement caused by thermal expansion and contraction.
- on long conduit runs to prevent conduit from buckling and ensuing circuit failures
- indoors or outdoors where conduit expansion occurs and there are wide temperature ranges
- in conduit runs that cross structural joints
- in conduit runs to prevent damage to conduit supports such as in a building or on a bridge
- **with optional redundant visible grounding strap**

Standard Materials and Finishes

Body

- Steel-electrogalvanized
- Copper-free aluminum - natural

Reducer

- 1/2" through 1" - Steel - electrogalvanized
- 1 1/4" through 4" - *Feraloy*® iron alloy - electrogalvanized and aluminum paint

Gland Nut

- 1/2" through 1" - Steel - electrogalvanized
- 1 1/4" through 4" - *Feraloy*® iron alloy - electrogalvanized and aluminum paint

Packing

- Teflon® (trademark of E.I. DuPont Co.)

Washer

- Steel - electrogalvanized

Gasket

- Vellum

Bushing

- 1/2" through 1" - Steel - electrogalvanized
- 1 1/4" through 4" - *Feraloy*® iron alloy - electrogalvanized and aluminum paint

Ground Springs

- Phosphor bronze - electrogalvanized

Ground Strap

- Braided tinned copper

U-Bolts

- Malleable iron - electrogalvanized

Options:

Available with redundant† ground strap for visible indication of grounding – order separately (BJ Series)

Size Ranges:

- 1/2" through 4" conduit size
- 4" maximum conduit movement

Certifications and Compliances:

- UL Standard: 514B
- CSA Standard: C22.2 No. 18
- NEC Articles 250-77 and 300-7 (b)
- NEMA FB1

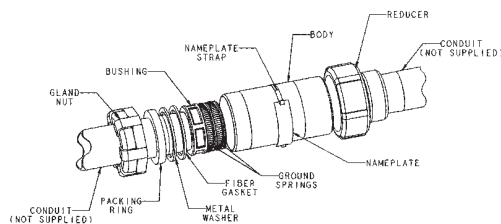


XJG-EMT – for use with EMT conduit

Conduit Size	Maximum Conduit Movement	Catalog Number	Optional Bonding Jumper	A Diameter	B Length
1/2"	4"	XJG14-EMT	BJ14	1 3/4"	10 3/4"
3/4"	4"	XJG24-EMT	BJ24	2 1/8"	11"
1"	4"	XJG34-EMT	BJ34	2 7/16"	11 1/2"
1 1/4"	4"	XJG44-EMT	BJ44	3 1/8"	15 1/4"
1 1/2"	4"	XJG54-EMT	BJ54	3 5/8"	15 1/2"
2"	4"	XJG64-EMT	BJ64	4 3/4"	15 1/2"
2 1/2"	4"	XJG74-EMT	BJ74	4 7/8"	18 3/4"
3"	4"	XJG84-EMT	BJ84	5 3/8"	19 7/8"
3 1/2"	4"	XJG94-EMT	BJ94	6 5/8"	21 1/4"
4"	4"	XJG104-EMT	BJ104	6 5/8"	21 1/4"



XJG shown with optional bonding jumper



* Teflon® is a registered trademark of E.I. DuPont Co.

† XJG expansion couplings use a metallic bushing and ground springs to create a high integrity internal ground connection. External ground straps offer a redundant ground path and easy visible indication of ground

XJGD Combination Expansion/Deflection Coupling and Expansion Joint Internally Grounded

Wet Locations

7F

Elbows, Couplings,
Grids, Devices,
Plugs, Etc.

Application:

XJGD combination fittings are used with rigid metal conduit and IMC:

- to accommodate axial expansion, angular misalignment and parallel misalignment
- to couple together two (2) sections of conduit subject to longitudinal movement
- to maintain a ground connection *without the need for an external bonding jumper and clamps*
- in long conduit runs to prevent conduit from buckling and causing circuit failures
- indoors or outdoors where conduit expansion occurs and there are wide temperature swings
- in conduit runs that cross structural joints
- in conduit runs to prevent damage to conduit supports such as in a building or on a bridge

Standard Materials:

- Body, Hubs, Gland Nut, Washer, Bushing – *Feraloy*[®]
- Packing – Teflon[®]
- Gasket – vellum
- Ground Spring – phosphor bronze
- Outer Jacket – molded neoprene
- Jacket Clamps – stainless steel
- Inner Sleeve – molded plastic
- Ground Straps – tinned copper braid

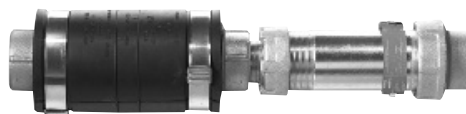
Standard Finishes:

- *Feraloy*[®] – electrogalvanized

Certifications and

Compliances:

- UL standard: 514B



XJGD Ordering Information

Hub Size	Maximum Conduit Movement	Catalog Number	A Diameter	B Length
1"	4"	XJGD34	3 ¹⁵ / ₁₆ "	17 ³ / ₄ "
1 ¹ / ₄ "	4"	XJGD44	4 ¹ / ₄ "	18 ¹ / ₈ "
1 ¹ / ₂ "	4"	XJGD54	4 ¹ / ₂ "	18 ⁵ / ₈ "
2"	4"	XJGD64	4 ¹⁵ / ₁₆ "	19 ¹ / ₄ "
2 ¹ / ₂ "	4"	XJGD74	5 ⁵ / ₁₆ "	20 ³ / ₄ "
3"	4"	XJGD84	5 ¹⁵ / ₁₆ "	21 ⁵ / ₈ "
3 ¹ / ₂ "	4"	XJGD94	6 ¹ / ₂ "	21 ⁵ / ₈ "
4"	4"	XJGD104	8"	27 ³ / ₄ "

(Also see Myers Hubs on page 234)

Application:

HUB Conduit Hubs:

- provide a convenient means for installing a threaded conduit hub on a junction box or device enclosure
- are used to connect conduit to a sheet metal or cast enclosure
- are used with threaded rigid conduit or IMC, steel or aluminum; indoors or outdoors

Features:

- Smooth insulated throat provides easier wire pulling and protection for conductors during installation.
- Neoprene sealing gasket provides a watertight seal.
- Compact design permits close spacing of conduit.
- Wide range of sizes from 1/2" to 4".

Standard Materials:

- 1/2" to 4" malleable iron

Standard Finishes:

- Feraloy iron alloy – electrogalvanized and aluminum acrylic paint

Size Ranges:

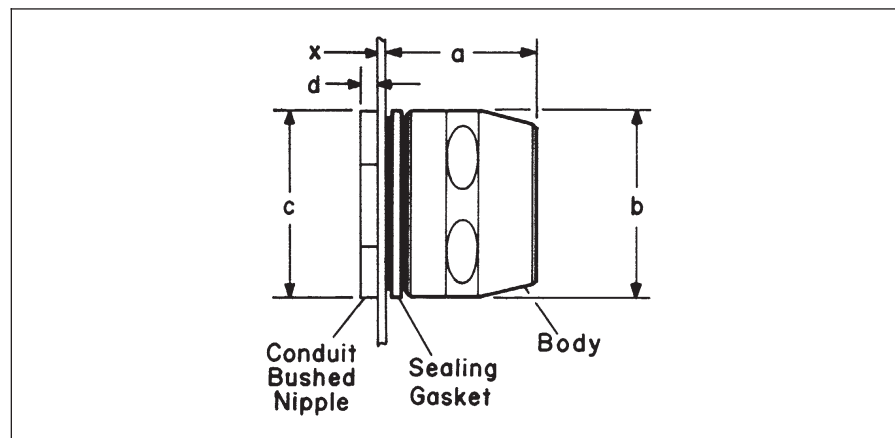
- 1/2" to 4"

Certifications and**Compliances:**

- UL Standard: 514B
- CSA Standard: C22.2 No. 18
- NEC/CEC:
Class I, Division 2, Groups A,B,C,D
Per NEC 501-4(b), 502-4(a) and 503-3(a)

**Conduit
Size****Cat. #**

1/2	HUB1
3/4	HUB2
1	HUB3
1 1/4	HUB4
1 1/2	HUB5
2	HUB6
2 1/2	HUB7
3	HUB8
3 1/2	HUB9
4	HUB10

Dimensions

Cat. #	Conduit Size	a	b	c	d	x
HUB1	1/2	1	1 1/4	1	1/8	9/64
HUB2	3/4	1 1/8	1 9/16	1 3/8	5/32	1/4
HUB3	1	1 3/8	1 7/8	1 5/8	3/16	9/32
HUB4	1 1/4	1 1/2	2 5/16	2	1/4	7/16
HUB5	1 1/2	1 5/8	2 1/2	2 3/8	1/4	7/16
HUB6	2	1 11/16	3	2 13/16	1/4	7/16
HUB7	2 1/2	2 3/16	3 5/8	3 7/16	1/4	7/16
HUB8	3	2 7/16	4 1/4	4 1/16	1/4	7/16
HUB9	3 1/2	2 7/16	4 3/4	4 1 1/16	5/16	3/4
HUB10	4	2 9/16	5 1/4	5 1/16	5/16	1 1/8

NOTE: Dimension "x" is maximum wall thickness of box that will meet the requirement for three full threads engagement of nipple and fitting body when liquidtight box connector or rigid conduit hub is installed in a knockout or slip hole.

Application:

GCR grounding receptacles are used to provide static electricity grounding connections; particularly suited for, but not limited to, use in aircraft hangar floors and airport aprons.

GCT ground connector and studs are used to provide "quick-connect" static electricity grounding connections with portable cable.

GC grounding strap and clamp are suitable for bonding and grounding equipment in wiring systems, such as meter circuits, service entrance equipment, and appliances per NEC requirements.

Features:

GCR grounding receptacles have:

- grounding stud integral with housing
- grounding stud designed to accept standard battery clip
- thread at bottom for attaching to $\frac{3}{4}$ " threaded grounding rod
- cover attached to receptacle by chain to prevent loss of cover
- corrosion resistant material

GCT grounding connector and studs have:

- substantial clip tension for grounding
- integral cable clamp to prevent cable from breaking free of connector or fraying at connector
- lock washer on stud to maintain good electrical contact

GC strap:

- is pliable, strong and corrosion resistant
- assures a lasting bond. Prongs on strap clamp engage strap perforations, preventing slippage.

Standard Materials:

- GCR – Bronze body, cap and chain
Brass grounding stud
- GCT – Bronze connector body, aluminum cable clamp, brass stud
- Strap – flexible copper
- Clamp – brass

Standard Finishes:

- Bronze, brass, aluminum parts – natural
- Flexible copper strap – tinned

Certifications and Complies:

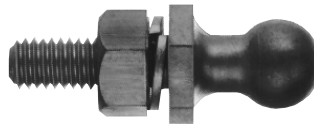
- UL Standard:
GC strap and clamps – 467
- CSA Standard: C22.2 No. 41



GCT Grounding Connector

Cable Dia.
.312" to .406"

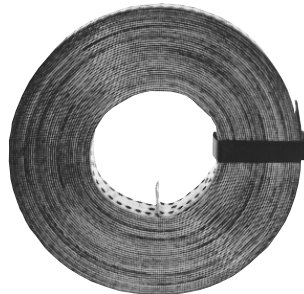
Cat. #
GCT8



GCT Stud*

Description	Thread Size	Cat. #
Brass	$\frac{3}{8}$ -16	GCT2

* Not a replacement for grounding stud in GCR receptacle.



GC Grounding Strap

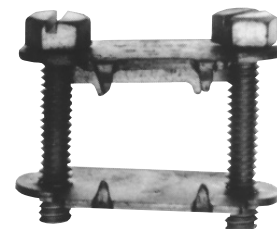
Used with GC102 Strap Clamp

Description	Cat. #
50' coil, 1" wide	GC100



GCR Receptacles For Static Electricity Grounding

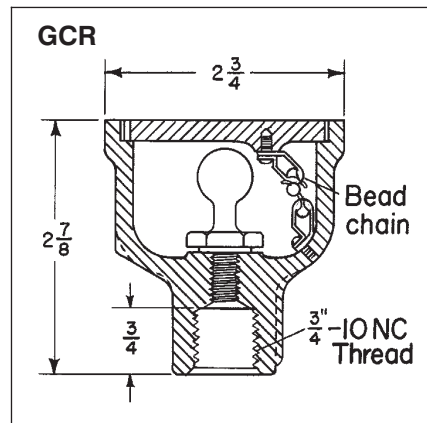
Description	Thread Size	Cat. #
With cap and chain	$\frac{5}{16}$ -18	GCR210



Strap Clamp

Description	Cat. #
Brass	GC102

Dimensions



Application:

F type service entrance heads are used:

- for overhead service entrance to buildings
- with threaded rigid, threadless rigid or threadless thinwall (EMT) conduit and rigid conduit masts

Features:

Two types available:

- threaded rigid – threads to conduit.
- threadless rigid or EMT – clamps to conduit.
- Available knockouts in covers allow use with variety of sizes and numbers of wires.
- Simple construction and easy assembly.
- Consists of only two pieces plus the insulating knockout cover.
- Easy to install.

Standard Materials:

- Copper-free aluminum

Standard Finishes:

- Natural

Certifications and Compliances:

- UL Standard: 514B
- CSA Standard: C22.2 No. 18



1/2" size



3/4" – 2" size



1/2" – 4" size



Clamp type

F Service Heads

Threaded Rigid

Conduit Size	Number and Dia. of Cover Knockouts	Cat. #	Replace-ment Cover Cat. #
1/2	6 - 9/32	F186	CF690
3/4	2 - 3/8 and 3 - 13/32	F285	5-H
1	2 - 7/16 and 3 - 1/2	F385	5-NS
1 1/4	2 - 27/64 and 3 - 5/8	F485	5-NL
1 1/2	2 - 27/64 and 3 - 5/8	F585	5-NL
2	2 - 7/8, 1 - 13/16, 1 - 11/16, 1 - 9/16 and 1 - 21/32	F686	CF60
2 1/2	2 - 17/16, 1 - 17/32, 1 - 1 1/64, 1 - 61/64 and 1 - 55/64	F766	CF707
3	2 - 17/16, 1 - 17/32, 1 - 1 1/64, 1 - 61/64 and 1 - 55/64	F866	CF707
3 1/2	3 - 1 3/4, 1 - 17/16, 1 - 1 5/16 and 1 - 1 3/16	F966	CF708
4	3 - 1 3/4, 1 - 17/16, 1 - 1 5/16 and 1 - 1 3/16	F1066	CF708

Clamp Type – Threaded Rigid or EMT

Conduit Size	Number and Dia. of Cover Knockouts	Cat. #	Replace-ment Cover Cat. #
3/4	2 - 3/8 and 3 - 13/32	F235	5-H
1	2 - 7/16 and 3 - 1/2	F335	5-NS
1 1/4	2 - 27/64 and 3 - 5/8	F435	5-NL
1 1/2	2 - 27/64 and 3 - 5/8	F535	5-NL
2	2 - 7/8, 1 - 13/16, 1 - 11/16, 1 - 9/16 and 1 - 21/32	F636	CF60

Overall Dimensions of Replacement Covers for F Series Service Heads

Cat. #	Dim.
CF690	1 1/2 dia.
5-H	1 31/32 dia.
5-NS	2 15/64 dia.
5-NL	2 19/32 dia.
CF60	3 9/16 dia.
CF707	7 13/16 x 3 11/16
CF708	10 1/4 x 4 3/4

Application:

LNR conduit liners are installed in rigid metal conduit or IMC:

- to provide a smooth wire entry from conduit into enclosures to protect wires from abrasion as they are pulled.
- with thin wall or thick wall enclosures.
- entering drilled and tapped openings or slip holes.
- entering an enclosure vertically or horizontally.
- regardless of where the conduit ends in relation to the enclosure wall.

Features:

- UL listed and CSA certified.
- No need for threaded bushings, reducers, or special machining.
- Corrosion and heat resistant polypropylene material.
- Smooth flange providing easy wire pulling and protects conductors being installed.
- Space saving.
- Molded ribs ensure a tight fit, preventing the liner from sliding out while conductors are being pulled.
- Quick and easy to install.

Standard Materials:

- Polypropylene

Standard Finishes:

- Natural (clear)

Sizes:

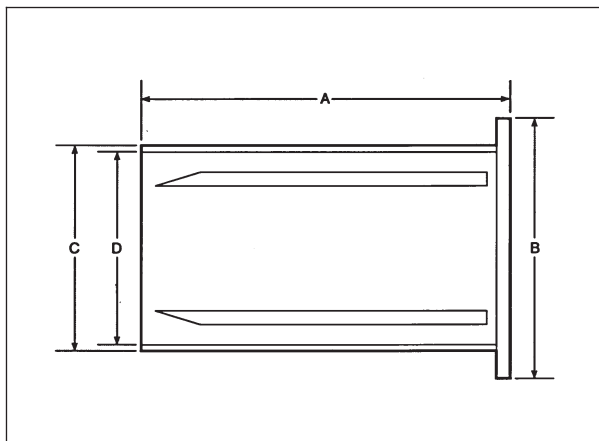
- 1/2" through 4"

Certifications and Compliances:

- NEC Article 346-8.
- UL Standard 514B.
- CSA Standard C22.2 No. 18.
- U.S. Patent No. 5,383,688.



Dimensions:



Ordering Information:

Cat. #	Size	A	B	C	D
LNR1	1/2"	1 3/16"	7/8"	5/8"	9/16"
LNR2	3/4"	1 9/16"	1 1/8"	13/16"	3/4"
LNR3	1"	2 1/16"	1 3/8"	1 1/16"	7/8"
LNR4	1 1/4"	2 1/16"	1 3/4"	1 3/8"	1 1/4"
LNR5	1 1/2"	2 9/16"	2"	1 5/8"	1 7/16"
LNR6	2"	2 9/16"	2 7/16"	2 1/16"	1 7/8"
LNR7	2 1/2"	2 7/8"	2 7/16"	2 1/4"	
LNR8	3"	2 7/8"	3 9/16"	3 1/16"	2 7/8"
LNR9	3 1/2"	3 1/16"	4 1/16"	3 9/16"	3 3/8"
LNR10	4"	3 1/16"	4 9/16"	4"	3 7/8"

[illegible]

Description	Page No.
Application/Selection	182, 183
Breathers & Drains	
Standard	
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CD Series (Non Hazardous)	196
Universal	
ECD Series	195
Sealing Compound	
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Application:**Seals:**

Seals are installed in conduit runs to prevent the passage of gases, vapors or flames from one portion of the electrical installation to another through the conduit, limiting any explosion to the enclosure and preventing precompression or "pressure piling."

- While not a National Electrical Code requirement, many engineers consider it good practice to sectionalize long conduit runs by inserting seals not more than 50' to 100' apart, depending on the conduit size, to minimize the effects of "pressure piling."

Breathers:

- Breathers (vents), are installed in the top of enclosures to provide ventilation to minimize condensation in enclosures.

Drains:

- Drains are used in humid atmospheres or in wet locations where it is likely that water can gain entrance to the interiors of enclosures or raceways. The raceways should be inclined so that water will not collect in enclosures or on seals, but will be led to low points where it may pass out through ECD drains.

- Frequently the arrangement of raceway runs makes this method impractical if not impossible. In such instances, EZD or EYD drain seal fittings should be used. These fittings prevent harmful accumulations of water above the seal.

Considerations for Selection:**Seals:**

- Select the proper sealing fitting for the hazardous vapor involved; i.e., Class I, Division 1 & 2, Groups A, B, C or D.
- Select the appropriate seal for new or retrofit installations.
- Select a sealing fitting for the proper use in respect to mounting position. This is particularly critical when the conduit runs between hazardous and non-hazardous areas. Improper positioning of a seal may permit hazardous gases or vapors to enter the system beyond the seal and permit them to escape into another portion of the hazardous area or to enter a non-hazardous area. Some seals are designed to be mounted in any position; others are restricted to vertical mounting.

NOTE: The amount of *Chico*® fiber and compound required for any seal is determined by volume, hub size and mounting position of the seal.

Drains:

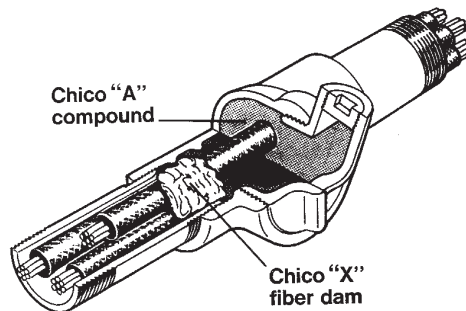
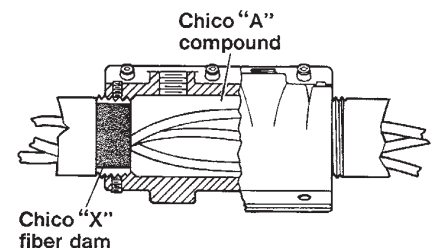
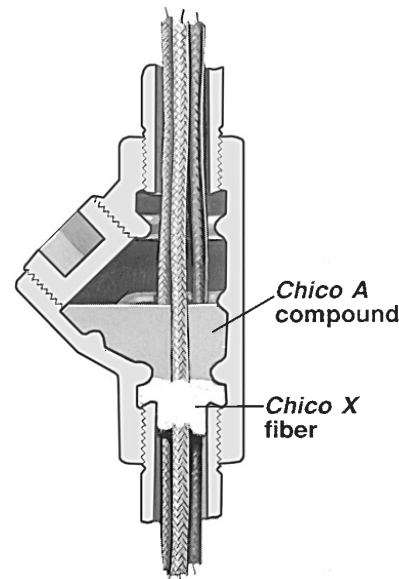
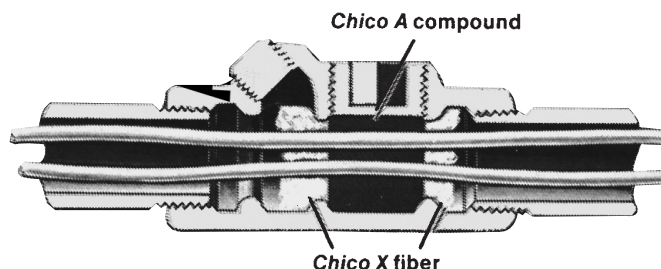
- in locations which are usually considered dry, surprising amounts of water frequently collect in conduit systems. No conduit system is airtight, therefore, it may "breathe". Alternate increases and decreases in temperature and/or in barometric pressure, due to weather changes or due to the nature of the process

carried on in the location where the conduit is installed, will cause "breathing," resulting in condensation and water accumulation.

- In view of this likelihood, it is therefore good practice to insure against such water accumulations and probable subsequent insulation failures by installing breathers, drain seals, or inspection seals, even though conditions prevailing at the time of planning or installing do not indicate their need.

Options:

- *Corro-free*™ epoxy powder coat
..... add suffix - S752

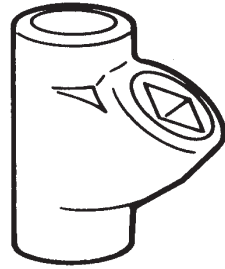
**EZS Horizontal seal****EYSR Retrofit seal****EYS 1 Vertical sealing****EYS Horizontal seal**

Condulet® Seals, Breathers and Drains

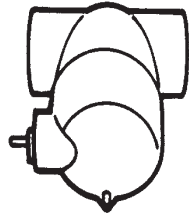
8F

Shape Selector Chart Quick Selector Chart

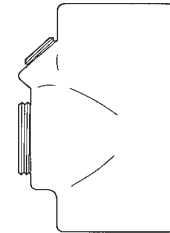
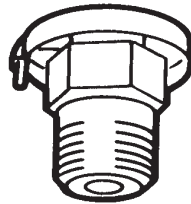
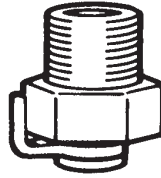
SERIES	PAGE	SERIES	PAGE	SERIES	PAGE	SERIES	PAGE	SERIES	PAGE
EYS	184	EZD	187	ECD Standard	195	ECD Universal	195	EYSX	188



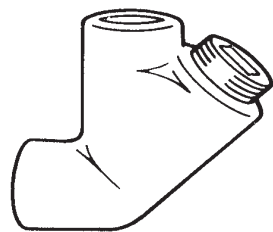
EYS
Elbow Seal 185



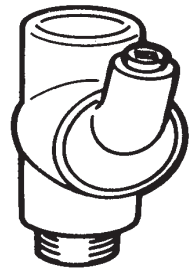
ES 191



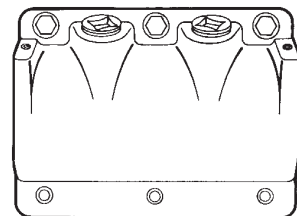
EYDX 189



EZS 185



EYSR 190



EYD 186



Quick Selector Chart

Series	Description	NEC Hazardous Group	For Conduit Angle
EYS	Seal	Class I, Groups A,B,C,D Class II, Groups E,F,G	Vertical and Horizontal
EYS 29	Elbow Seal	Class I, Groups C,D Class II, Groups E,F,G	90° turn
EYSR	Retrofit Seal/Drain Seal*	Class I, Div. 2, Groups C,D Class II, Div. 2, Groups E,F,G Class III	Vertical and Horizontal
EYSX	Expanded Fill Sealing Fittings	Class I, Groups B,C,D Class II, Groups E,F,G	Vertical and Horizontal
EZS	Seal	Class I, Groups C,D Class II, Groups E,F,G	All
ES	Sealing Hub	Class I, Groups C,D	Vertical
EYD	Seal and Drain	Class I, Groups B,C,D Class II, Groups F,G	Vertical
EYDX	Expanded Fill Sealing Fittings and Drain	Class I, Groups B,C,D Class II, Groups F,G	Vertical
EZD	Inspection Seal and Drain – Inspection Seal only	Class I, Groups C,D Class II, Groups E,F,G	Vertical
ECD	Standard Breather only Drain only	Class I, Groups B,C,D Class II, Groups E,F,G Class III	
ECD	Universal Drain – Breather	Class I, Groups C,D Class II, Groups F,G	
CD	Non - Hazardous Drain	–	–

* Drain purchased separately.

Application:

EYS and EZS sealing fittings:

- restrict the passage of gases, vapors or flames from one portion of the electrical installation to another at atmospheric pressure and normal ambient temperatures
- limit explosions to the sealed-off enclosure
- limit precompression or "pressure piling" in conduit systems

Sealing fittings are required:

- at each entrance to an enclosure housing an arcing or sparking device when used in Class I, Division 1 and 2 hazardous locations. To be located as close as practicable and, in no case, more than 18" from such enclosures
- at each conduit entrance of 2" size or larger to an enclosure or fitting housing terminals, splices or taps when used in Class I, Division 1 hazardous locations. To be located as close as practicable and, in no case, more than 18" from such enclosures
- in conduit systems when leaving Class I, Division 1 or Division 2 hazardous locations
- in cable systems when the cables either do not have a gas/vaportight continuous sheath or are capable of transmitting gases or vapors through the cable core when those cables leave the Class I, Division 1 or Division 2 hazardous locations

Features:

EYS and EZS sealing fittings include:

- minimum turning radius
- large openings with threaded closures to provide easy access to conduit hubs for making dams
- integral bushings in conduit hubs to protect conductor insulation from damage
- taper-tapped hubs to ensure ground continuity

EYS sealing fittings are available for installation in either vertical only or in both horizontal or vertical positions.

EZS sealing fittings for installation at any angle; the covers with opening for sealing compound can be properly positioned to accept the compound.

Standard Materials:

- Bodies – *Feraloy*® iron alloy and/or ductile iron
- Plugs – *Feraloy* iron alloy and/or steel
- Removable nipples – steel

Standard Finishes:

- *Feraloy* iron alloy and ductile iron – electrogalvanized and aluminum acrylic paint
- Steel – electrogalvanized

Options:

- Copper-free aluminum bodies, nipples and enclosures – add suffix - SA*

Size Ranges:

- 1/2" – 6"

Certifications and Compliances:

NEC/CEC:

- **EYS1-3, 11-31, 16-36, 116-316**
Class I, Division 1 & 2, Groups A,B,C,D
Class II, Division 1, Groups E,F,G
Class II, Division 2, Groups F,G
Class III
- **EYS41-101, 416-1016**
Class I, Division 1 & 2, Groups B,C,D
Class II, Division 1, Groups E,F,G
Class II, Division 2, Groups F,G
Class III
- **EYS29, 4-014, 46-0146**
EZS1-8, 16-86
Class I, Division 1 & 2, Groups C,D
Class II, Division 1, Groups F,G
Class II, Division 2, Groups F,G
Class III

- UL Standard: 886
- CSA Standard: C22.2

Dimensions**EYS 16 Series**

Size	a	b	Turning Radius
1/2	3 ⁹ / ₃₂	1 ¹ / ₄	1 ⁵ / ₈
3/4	3 ¹² / ₁₆	1 ¹ / ₂	1 ²⁹ / ₃₂
1	4 ⁵ / ₁₆	1 ³ / ₄	2 ³ / ₈

EYS 46 Series

1 ¹ / ₄	5 ¹ / ₁₆	2 ³ / ₁₆	1 ²³ / ₃₂
1 ¹ / ₂	5 ¹ / ₂	2 ⁷ / ₁₆	2 ¹ / ₁₆
2	6 ¹ / ₄	3	2 ⁵ / ₁₆
2 ¹ / ₂	7 ¹ / ₂	3 ¹ / ₂	2 ¹¹ / ₁₆
3	8 ¹ / ₂	4 ¹ / ₄	3 ⁵ / ₁₆
3 ¹ / ₂	9 ³ / ₁₆	4 ³ / ₄	3 ⁷ / ₁₆ ‡
4	9 ³ / ₄	5 ¹ / ₄	3 ¹¹ / ₁₆ ‡
5	11 ¹ / ₁₆	6 ¹ / ₂	4 ¹⁹ / ₃₂ ‡
6	12 ¹ / ₈	7 ⁵ / ₈	5 ¹¹ / ₃₂ ‡

Vertical female



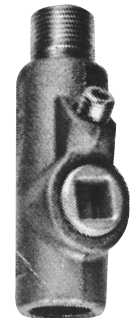
Vertical male & female



Vertical or horizontal female



Vertical or horizontal male & female

**EYS****For Sealing in Vertical Positions Only**

Hub Size	Female Hub Cat. #	Male & Female Hub Cat. #	Approximate Internal Volume in Cubic Inches
1/2	EYS1*	EYS16*	1
3/4	EYS2*	EYS26*	2
1	EYS3*	EYS36*	3 ³ / ₄

For Sealing in Vertical or Horizontal Positions

Hub Size	Female Hub Cat. #	Male & Female Hub Cat. #	Approximate Internal Volume in Cubic Inches	
			Vertical	Horizontal
1/2	EYS11*	EYS116*	1	1
3/4	EYS21*	EYS216*	2	2
1	EYS31*	EYS316*	3	3 ³ / ₄
1 ¹ / ₄	EYS41	EYS416	6	8
1 ¹ / ₂	EYS51	EYS516	10 ³ / ₄	12 ¹ / ₄
2	EYS61	EYS616	19	22 ³ / ₄
2 ¹ / ₂	EYS71	EYS716	25 ¹ / ₂	30
3	EYS81	EYS816	56	64 ¹ / ₂
3 ¹ / ₂	EYS91	EYS916	72	82
4	EYS101	EYS1016	95	110

NOTE: Sealing fittings are approved for use in hazardous locations only when *Chico*® Xfiber and *Chico A* sealing compound or Chico SpeedSeal are used to make the seal.

EYS 116 Series

a	b	Turning Radius
3 ¹¹ / ₁₆	1 ¹ / ₄	1 ⁵ / ₈
3 ¹¹ / ₁₆	1 ¹ / ₂	1 ¹ / ₄
4 ⁵ / ₁₆	1 ³ / ₄	1 ⁵ / ₈
5 ¹ / ₁₆	2 ³ / ₁₆	1 ²³ / ₃₂
5 ¹ / ₂	2 ⁷ / ₁₆	2 ¹ / ₁₆
6 ¹ / ₄	3	2 ⁵ / ₁₆
7 ¹ / ₂	3 ¹ / ₂	2 ¹¹ / ₁₆
8 ¹ / ₂	4 ¹ / ₄	3 ⁵ / ₁₆
9 ³ / ₁₆	4 ³ / ₄	3 ⁷ / ₁₆ ‡
9 ³ / ₄	5 ¹ / ₄	3 ¹¹ / ₁₆ ‡

* Available in copper-free aluminum – to order, add suffix SA to Cat. No.

‡ With cover removed.

Condulet® Sealing Fittings

Chico Sealing Compound and
Fiber Page 193

Cl. I, Div. 1 & 2, Groups C,D
Cl. II, Div. 1, Groups E,F,G
Cl. II, Div. 2, Groups F,G
Cl. III

Explosionproof
Dust-Ignitionproof

8F

Seals, Breathers
& Drains

Vertical or
horizontal
male & female



EYS

For Sealing in Vertical or
Horizontal Positions

Hub Size	Female Hub Cat. #	Male & Female Hub Cat. #	Approximate Internal Volume in Cubic Inches*	
			Verti- cal	Hori- zontal
1 1/4	EYS4*	EYS46*	6	8
1 1/2	EYS5*	EYS56*	10 3/4	12 1/4
2	EYS6*	EYS66*	19	22 3/4
2 1/2	EYS7*	EYS76*	25 1/2	30
3	EYS8*	EYS86*	56	64 1/2
3 1/2	EYS9*	EYS96*	72	82
4	EYS10*	EYS106*	95	110
5	EYS012	EYS0126	200	222
6	EYS014	EYS0146	290	315

Elbow seal



EYS

Elbow Seal - For Sealing
in Vertical Positions

Hub Size	Cat. #	Approximate Internal Volume in Cubic Inches
3/4	EYS29	1 3/4

Male & Female hub



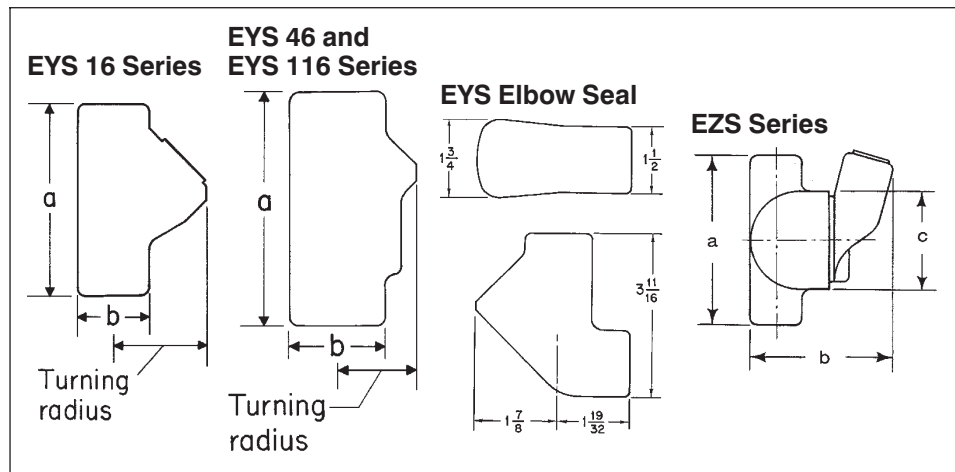
EZS

For Sealing
at Any Angle

Hub Size	Female Hub Cat. #	Male & Female Hub Cat. #	Approximate Internal Volume in Cubic Inches	
			Verti- cal	Hori- zontal
1/2	EZS1	EZS16	6 1/4	6 1/4
3/4	EZS2	EZS26	6 1/2	6 1/2
1	EZS3	EZS36	10 1/4	10 1/4
1 1/4	EZS4	EZS46	12 1/2	12 1/2
1 1/2	EZS5	EZS56	14 1/2	14 1/2
2	EZS6	EZS66	46	46
2 1/2	EZS7	EZS76	55	55
3	EZS8	EZS86	90	90

* Available in copper-free aluminum – to order, add suffix SA to Cat. No.

Dimensions



EYS Elbow Seal

Size	a	b	Turning Radius (Vertical)
3/4	3 11/16	1 3/4	1 7/8

EZS Series

Size	a	b	c	Turning Radius†
1/2	4 3/16	3 5/8	2 1/2	1 7/8
3/4	4 3/16	3 5/8	2 1/2	1 7/8
1	4 15/16	3 31/32	3	2 1/8
1 1/4	5 1/16	4 13/32	3	2 5/16
1 1/2	5 3/16	4 9/16	3 1/4	2 11/32
2	7 1/16	5 13/32	5 3/16	3 9/32
2 1/2	7 15/16	5 27/32	5 3/16	3 3/8
3	8 5/8	6 1/2	5 7/8	3 7/8

† With cover removed.

Application:

EYD drain and EZD drain and inspection sealing fittings:

- restrict the passage of gases, vapors or flames from one portion of the electrical installation to another at atmospheric pressure and normal ambient temperatures
- limit explosions to the sealed-off enclosure
- prevent precompression or "pressure piling" in conduit systems

Drain sealing fittings are installed in vertical conduit runs and at low points in conduit systems to prevent accumulation of condensate above seal.

These sealing fittings are required as described on page 184.

Features:

EYD and EZD drain sealing fittings include:

- drain to provide continuous, automatic drainage of condensate
- large openings with threaded closures to provide easy access to conduit hubs for making dams
- integral bushings to protect conductor insulation from damage
- taper-tapped hubs to ensure ground continuity

EZD drain and inspection sealing fittings also include:

- removable covers for periodic inspection of seals
- barrier for sealing compound easily installed after dams are made and before compound is poured.

Standard Materials:

- Bodies, and inspection or drain covers – *Feraloy*® iron alloy and/or ductile iron
- Closure for drain – copper-free aluminum or ductile iron
- Small closure plug – *Feraloy* iron alloy and/or steel
- Drain – stainless steel
- Removable nipples – steel

Standard Finishes:

- *Feraloy* iron alloy and ductile iron – electrogalvanized and aluminum acrylic paint
- Copper-free aluminum – natural
- Stainless steel – natural
- Steel – electrogalvanized

Options:

- Copper-free aluminum bodies, nipples and enclosures – add suffix - SA*

Size Ranges:

- EYD – ½" – 4"
- EZD – ½" – 2"

Certifications and Compliances:

NEC/CEC:

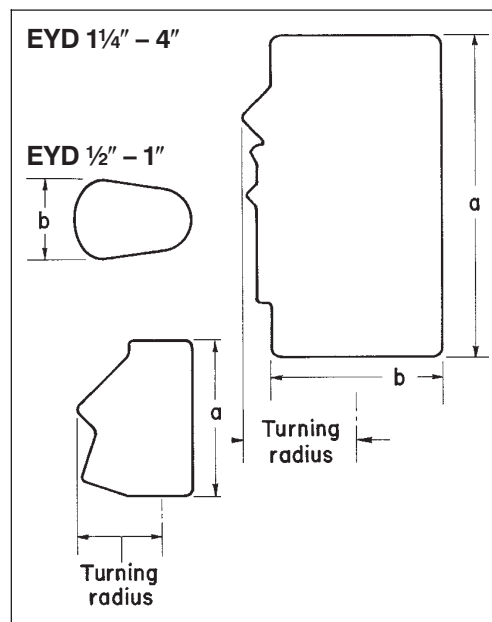
- **EYD11-101, 116-1016**
Class I, Division 1 & 2, Groups B,C,D
Class II, Division 1, Groups E,F,G
Class II, Division 2, Groups F,G
Class III
- **EYD1-10, 16-106**
EZD10-60, 111-611
Class I, Division 1 & 2, Groups C,D
Class II, Division 1, Groups F,G
Class II, Division 2, Groups F,G
Class III
- UL Standard: 886
- CSA Standard: C22.2

NOTE: Sealing Fittings are approved for use in hazardous locations only when *Chico*® X fiber and *Chico A* sealing compound or *Chico SpeedSeal* are used to make the seal.

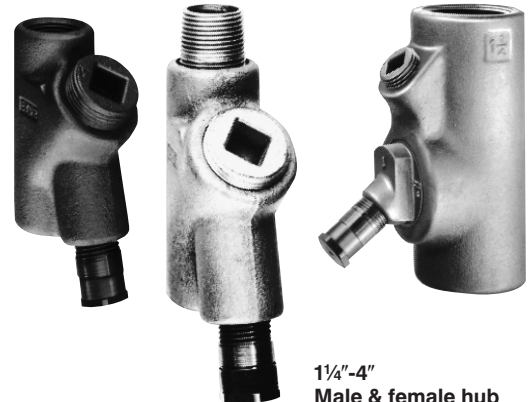
EYD Drain Seal

Hub Size	Female Hub Cat. #	Male & Female Hub Cat. #	Female Hub Cat. #	Male & Female Hub Cat. #	Approximate Internal Volume in Cubic Inches
½	EYD1*	EYD16*	EYD11	EYD116	1
¾	EYD2*	EYD26*	EYD21	EYD216	2
1	EYD3*	EYD36*	EYD31	EYD316	3¾
1¼	EYD4*	EYD46*	EYD41	EYD416	8
1½	EYD5*	EYD56*	EYD51	EYD516	10¾
2	EYD6*	EYD66*	EYD61	EYD616	20
2½	EYD7*	EYD76*	EYD71	EYD716	35
3	EYD8*	EYD86*	EYD81	EYD816	57
3½	EYD9*	EYD96*	EYD91	EYD916	75
4	EYD10*	EYD106*	EYD101	EYD1016	105

Dimensions



½"-1" Female hub ½"-1" Male & female hub 1¼"-4" Female hub



1¼"-4" Male & female hub



EYD Drain Seal

Size	a	b	Turning Radius
½	3⅞	1½	1⅝
¾	3⅞	1¾	1⅞
1	4⅞	2⅞	2⅞
1¼	5⅞	2⅞	1⅞
1½	5⅞	2⅞	2⅞
2	6⅞	3	2⅞
2½	7⅞	3½	2⅞
3	8⅞	4¼	3⅞
3½	9⅞	4¾	3⅞
4	9¾	5¼	3⅞

\$ See Certifications and Compliances for classification of each product.

† With cover removed.

* Available in copper-free aluminum – to order, add suffix SA to Cat. No.

Condulet® Sealing Fittings with Drain and Inspection Cover

Chico Sealing Compound and Fiber
Page 193

Cl. I, Div. 1 & 2, Groups C,D
Cl. II, Div. 1, Groups E,F,G
Cl. II, Div. 2, Groups F,G
Cl. III

Explosionproof
Dust-Ignitionproof

8F

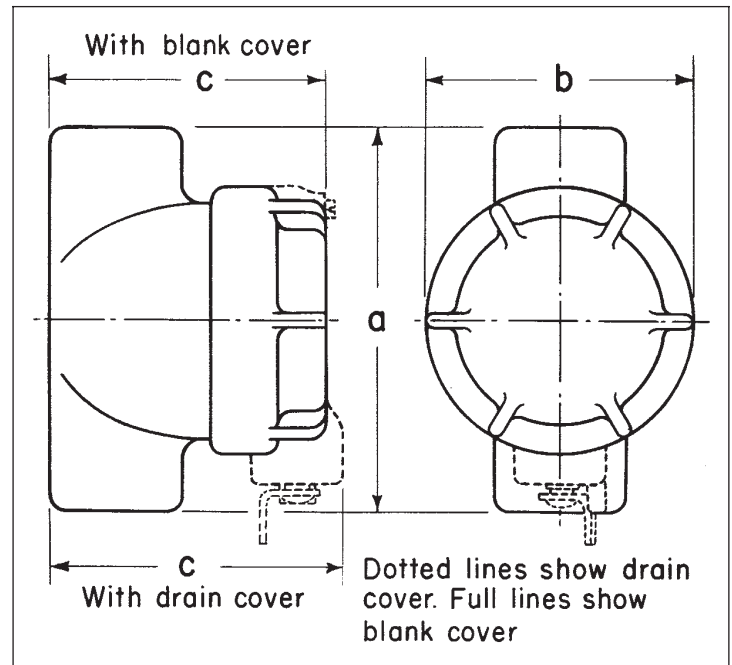
Seals, Breathers
& Drains



ESD With Drain Cover

Hub Size	Cat. #	Approximate Internal Volume in Cubic Inches
1/2	ESD111	5
3/4	ESD211	6
1	ESD311	10
1 1/4	ESD411	11
1 1/2	ESD511	13
2	ESD611	40

Dimensions



ESD Drain and Inspection Seals

Size	a	b	Drain Cover c	Turning Radius†
1/2	4 3/16	3	3 3/8	2 1/16
3/4	4 3/16	3	3 5/8	2 3/16
1	4 15/16	3 1/2	3 7/8	2 7/16
1 1/2	4 15/16	3 1/2	4 9/16	2 5/8
1 1/2	5 3/16	3 1/2	4 9/16	2 11/16
2	7 1/8	5 9/16	5 1/4	3 11/16

† With Cover removed.

EYSX Expanded Fill Sealing Fittings

Chico Sealing Compound and
Fiber Page 193

Cl. I, Div. 1 & 2, Groups B,C,D ♦ Explosionproof
Cl. II, Div. 1, Groups E,F,G Dust-Ignitionproof
Cl. II, Div. 2, Groups F,G
Cl. III

Application:

EYSX Expanded Fill Sealing Fittings:

- restrict the passage of gases, vapors or flames from one portion of the electrical installation to another at atmospheric pressure and normal ambient temperatures
- limit explosions to the sealed-off enclosure
- limit precompression or "pressure piling" in conduit systems
- provide 40% wire fill capacity to allow uninterrupted runs in a conduit system

Sealing fittings are required:

- at each entrance to an enclosure housing an arcing or sparking device when used in Class I, Division 1 and 2 hazardous locations. To be located as close as practicable and, in no case, more than 18" from such enclosures
- at each entrance of 2" size or larger to an enclosure or fitting housing terminals, splices or taps when used in Class I, Division 1 hazardous locations. To be located as close as practicable and, in no case, more than 18" from such enclosures
- in conduit systems when leaving Class I, Division 1 or 2 hazardous locations
- in cable systems when the cables either do not have a gas/vaportight continuous sheath or are capable of transmitting gases or vapors through the cable core when those cables leave the Class I, Division 1 or 2 hazardous locations

Features:

EYSX Expanded Fill Sealing Fittings provide:

- a 40% wire fill capacity for expanded fill sealing
- large openings with threaded closures to provide easy access to conduit hubs for making dams
- integral bushings in conduit hubs to protect conductor insulation from damage
- taper-tapped hubs to ensure ground continuity
- minimum turning radius

EYSX Expanded Fill Sealing Fittings are available for installation in both horizontal or vertical positions.

Standard Materials:

- Bodies – *Feraloy*® iron alloy and/or ductile iron or copper-free aluminum (SA Suffix)
- Closures – *Feraloy* iron alloy and/or steel or copper-free aluminum (SA Suffix)

Standard Finishes:

- *Feraloy* iron alloy and ductile iron – electrogalvanized and aluminum acrylic paint
- Steel – electrogalvanized
- Copper-free aluminum – natural

Options:

- Copper-free aluminum bodies and enclosures - add suffix SA

Size Ranges:

- ½" – 4"

Certifications and Compliances:

NEC/CEC:

EYSX11 – EYSX81

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

EYSX9, EYSX10, EYSX1 SA – EYSX10 SA

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

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

EYSX Expanded Fill Sealing Fittings For Sealing in Vertical or Horizontal Positions

Hub Size	Female Hub Cat. #	Internal Volume in Cubic Inches	
		Vertical	Horizontal
½	EYSX11*	2	2
½	EYSX1 SA	2	2
¾	EYSX21*	3	3¾
¾	EYSX2 SA	3	3¾
1	EYSX31	6	8
1	EYSX3 SA	6	8
1¼	EYSX41	19	22¾
1¼	EYSX4 SA	19	22¾
1½	EYSX51	19	22¾
1½	EYSX5 SA	19	22¾
2	EYSX61	56	64½
2	EYSX6 SA	56	64½
2½	EYSX71	72	82
2½	EYSX7 SA	72	82
3	EYSX81	95	110
3	EYSX8 SA	95	110
3½	EYSX9*	200	222
3½	EYSX9 SA	200	222
4	EYSX10*	200	222
4	EYSX10 SA	200	222

Vertical or horizontal female



NOTE: Sealing fittings are approved for use in hazardous locations only when *Chico*® X fiber and *Chico A* sealing compound or *Chico SpeedSeal* are used to make the seal.

NPT Size	A	B	Turning Radius
½	3 1/16	1 1/2	1 1/4
¾	4 5/16	1 3/4	1 3/8
1	5 1/16	2 3/16	1 23/32
1¼	6 1/4	3	2 5/16
1½	6 1/4	3	2 5/16
2	8 1/2	4 1/4	3 5/16
2½	9 3/16	4 3/4	3 11/16 ‡
3	9 3/4	5 1/4	3 11/16 ‡
3½	11 1/16	6 1/2	4 19/32 ‡
4	11 1/16	6 1/2	4 19/32 ‡

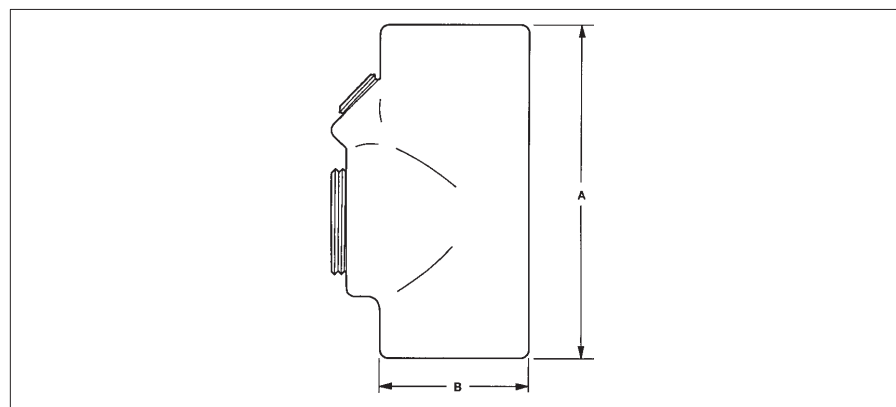
‡ With plug cover removed.

♦ See Certifications and Compliances for classification of each product.

* *Feraloy*®

‡ With cover removed.

Dimensions



EYDX Expanded Fill Sealing Fittings With Drains

Chico Sealing Compound and Fiber
Page 193

Cl. I, Div. 1 & 2, Groups B,C,D§
Cl. II, Div. 1, Groups E,F,G
Cl. II, Div. 2, Groups F,G
Cl. III

Explosionproof
Dust-Ignitionproof

8F

8F
Seals, Breathers
& Drains

Application:

EYDX Expanded Fill Sealing Fittings with drains:

- restrict the passage of gases, vapors or flames from one portion of the electrical installation to another at atmospheric pressure and normal ambient temperatures
- limit explosions to the sealed-off enclosure
- prevent precompression or "pressure piling" in conduit systems
- provide 40% wire fill capacity to allow uninterrupted runs in a conduit system

Drain sealing fittings are installed in vertical conduit runs and at low points in conduit systems to prevent accumulation of condensate above seal.

These sealing fittings are required as described on page 184.

Features:

EYDX Expanded Fill drain sealing fittings provide:

- a 40% wire fill capacity for expanded fill sealing
- drain to provide continuous, automatic drainage of condensate
- large openings with threaded closures to provide easy access to conduit hubs for making dams
- integral bushings to protect conductor insulation from damage
- taper-tapped hubs to ensure ground continuity

Standard Materials:

- Bodies and drain covers – *Feraloy*® iron alloy, and ductile iron or copper-free aluminum (SA Suffix)
- Closure for drain – copper-free aluminum or malleable iron
- Small closure plug – *Feraloy* iron alloy and/or steel or copper-free aluminum (SA Suffix)
- Drain – stainless steel

Standard Finishes:

- *Feraloy* iron alloy and ductile iron – electrogalvanized and aluminum acrylic paint
- Copper-free aluminum – natural
- Stainless steel – natural
- Steel – electrogalvanized

Options:

- Copper-free aluminum bodies and closures - add suffix - SA

Size Ranges:

- EYDX – ½" – 3"

Certifications and Compliances:

NEC/CEC:

EYDX11 – EYDX81

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

EYDX1 SA – EYDX8 SA

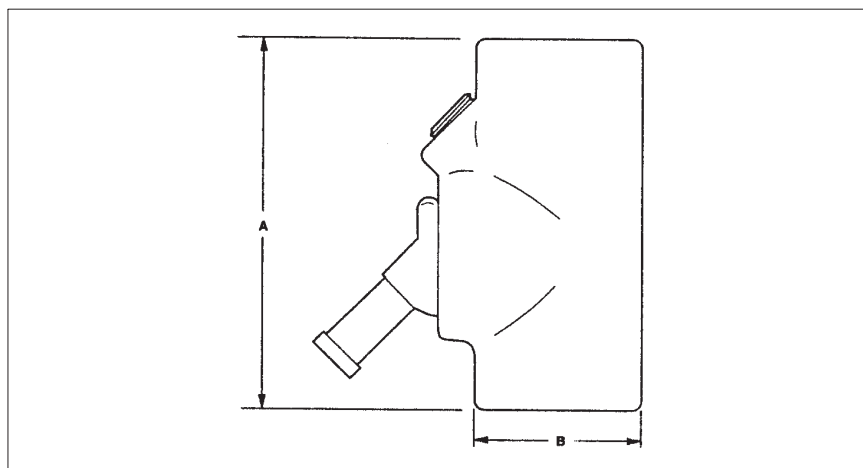
Class I, Division 1 and 2, Groups C,D
Class II, Division 1, Groups F,G
Class II, Division 2, Groups F,G
Class III

- UL Standard: 886

- CSA Standard: C22.2 No. 30

NOTE: Sealing Fittings are approved for use in hazardous locations only when *Chico*® X fiber and *Chico A* sealing compound or Chico SpeedSeal are used to make the seal.

Dimensions:



EYDX NPT Size	A	B	Turning Radius
½	3 11/16	1 ¾	1 29/32
¾	4 5/16	2 3/16	2 3/8
1	5 1/16	2 3/16	1 27/32†
1 ¼	6 ¼	3	2 5/16†
1 ½	6 ¼	3	2 5/16†
2	8 ½	4 ¼	3 3/16†
2 ½	9 3/16	4 ¾	3 7/16†
3	9 ¾	5 ¼	3 ½†

EYDX Expanded Fill Sealing Fittings

Hub Size	Female Hub Cat. #	Internal Volume in Cubic Inches
½	EYDX11*	2
½	EYDX1 SA	2
¾	EYDX21*	3 ¾
¾	EYDX2 SA	3 ¾
1	EYDX31	8
1	EYDX3 SA	8
1 ¼	EYDX41	20
1 ¼	EYDX4 SA	20
1 ½	EYDX51	20
1 ½	EYDX5 SA	20
2	EYDX61	57
2	EYDX6 SA	57
2 ½	EYDX71	75
2 ½	EYDX7 SA	75
3	EYDX81	105
3	EYDX8 SA	105

§ See Certifications and Compliances for classification of each product.

† With drain cover removed.

* *Feraloy*®

Application:

Application:

EYSR retrofit sealing fittings are installed:

- in rigid metal conduit systems in Class I, Division 2 hazardous locations
- to replace installed Cooper Crouse-Hinds type EYS or EYD sealing fittings
- without disassembly of the conduit system
- in vertical or horizontal positions, indoors or outdoors
- to restrict the passage of gases, vapors, or flames from one portion of the electrical system to another at atmospheric pressures and normal ambient temperatures
- to limit explosions to the sealed-off enclosure
- to limit precompression or "pressure piling" in the conduit system
- to prevent accumulation of water in the conduit system when installed with an ECD15 drain

Features:

- Seal may be installed in the existing conduit run without disassembly of the conduit system saving time and labor
- Overall length and spacing requirements do not exceed those of standard EYS seals; permits close nesting of seals
- Pipe plugs permit the installation of a standard ECD 15 drain fitting (order separately) for use in vertical conduit runs to drain any water that might accumulate in the conduit system
- Steel set screws provide grounding continuity
- Suitable for vertical and horizontal installations for indoor and outdoor applications
- Available in 3/4" to 4" NPT sizes.

Standard Materials:

- Body – Feraloy® iron alloy
- Pipe plugs, bolts and set screws – steel
- Gasket – neoprene

Standard Finishes:

- Feraloy iron alloy – electrogalvanized and aluminum acrylic paint
- Steel – electrogalvanized
- Gasket – natural

Options:

- Copper-free aluminum – add suffix -SA to Cat. No.

Size Ranges:

- 3/4" - 4"

**Certifications and
Compliances:**

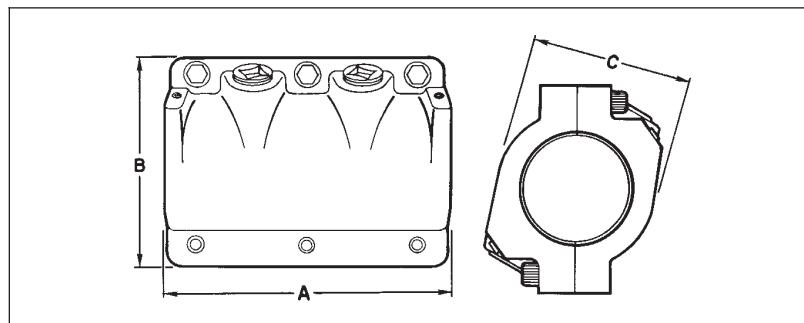
- NEC: Class I, Division 2, Groups C,D
Class II, Division 2, Groups E,F,G
- UL Standard: 886, 1203
- CEC: Class I, Division 1, Groups C,D
Class II, Division 1, Groups E,F,G
- CSA Standard: C22.2 No. 30

NOTE: EYSR sealing fittings are approved for use in hazardous locations only when Chico® A sealing compound and Chico X fiber are used to make the seal.



Hub Size	Cat. No.	Approximate Internal Volume in Cubic Inches*		Approximate Amount (oz.) of Fiber per Hub	
		Vert.	Horiz.	Vert.	Horiz.
3/4	EYSR2	3 1/2	5 3/4	1/16	1/8
1	EYSR3	4 3/4	9 1/2	1/8	1/4
1 1/4	EYSR4	7	13 1/2	1/4	1/2
1 1/2	EYSR5	12 1/4	24 1/4	1/2	1
2	EYSR6	25 3/4	40 1/2	1	2
2 1/2	EYSR7	48	75 1/2	1 1/2	3
3	EYSR8	86 1/2	126	2	4
3 1/2	EYSR9	147	210	4 1/2	9
4	EYSR10	186	252	4 1/2	9

* Use the approximate internal volume in cubic inches to determine how much Chico A sealing compound is required.

Dimensions

Cat. No.	A	B	C	Cat. No.	A	B	C
EYSR2	3 11/16	2 1/2	1 1/2	EYSR7	7 1/2	5	3 7/8
EYSR3	4 3/8	3 1/8	3 1/8	EYSR8	8 1/2	5 1/2	4 1/4
EYSR4	5	3 3/8	3	EYSR9	9 13/64	6 1/16	4 3/4
EYSR5	5 1/4	3 5/8	3	EYSR10	9 3/4	6 5/8	5 1/4
EYSR6	6 1/4	4	3				

ES Sealing Hubs

Chico Sealing Compound and Fiber Page 193

Cl. I, Div. 1 & 2, Groups C,D
Explosionproof
Watertight

8F

8F
Seals, Breathers
& Drains

Application:

ES sealing hubs are used to:

- seal vertical conduit risers at switchgear and motor control centers, sheet metal structures or cast boxes and enclosures
- Seal horizontal conduit runs at enclosures when used with TSC sealing compound.

Standard Materials:

- Feraloy® iron alloy

Standard Finishes:

- Electrogalvanized and aluminum acrylic paint

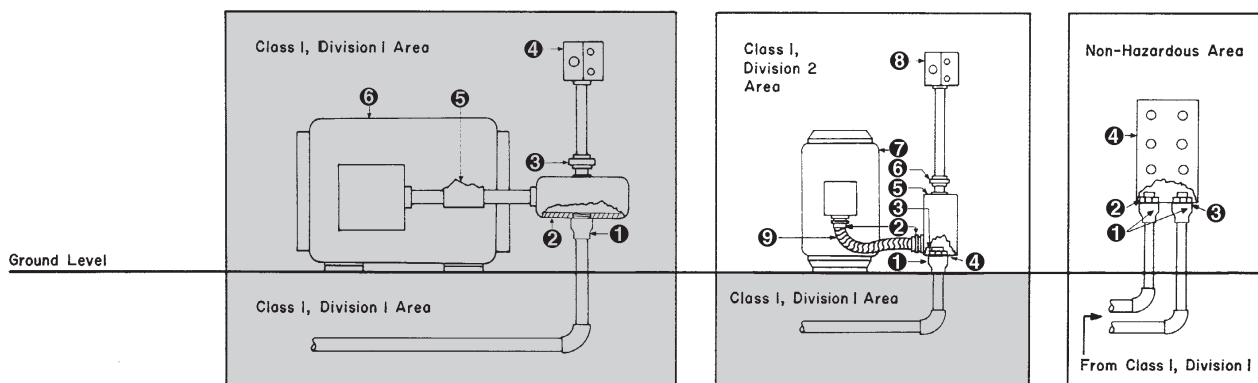
Options:

- ES sealing hubs, when used with SG armored gaskets and locknuts, provide a water and oiltight connection
- Sealing gaskets and locknuts – add suffix SG to Cat. No.

Certifications and Compliances:

- Class I, Division 1 & 2, Groups C & D
- UL Standard: 886
- CSA Standard: C22.2 No. 30

Typical Installations

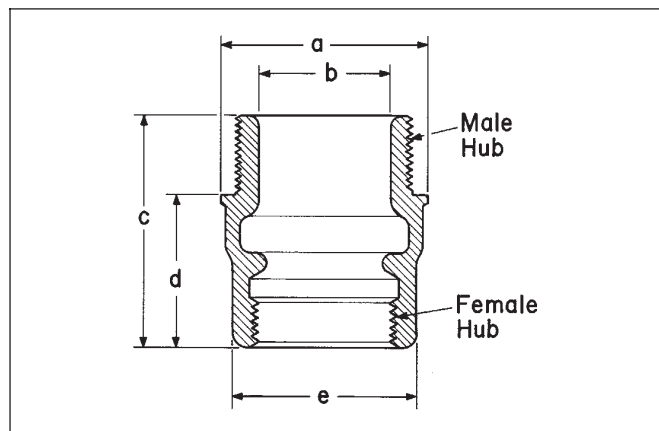


1. ES Sealing Hub 2. EJB Junction Box 3. UNY Union
4. EDS Factory Sealed Control Station 5. EYS Horizontal Seal 6. Explosion-Proof Motor

1. ES Sealing Hub 2. LT Connector 3. Locknut 4. Sealing Gasket 5. Junction Box 6. UNY Union 7. Synchronous Motor 8. EDS Factory Sealed Control Station 9. LT Conduit

1. ES Sealing Hub 2. Locknut 3. Sealing Gasket 4. Sheet Metal Structure, Motor Control Center, Panelboard, Unit Substation, Etc.

Dimensions



Cat. #	a	b	c	d	e
ES31	1 1/16	7/8	2	2 5/32	1 1/4
ES32	1 13/16	7/8	2	2 5/32	1 1/2
ES53	2 1/4	1 3/8	2 3/4	1 15/16	1 3/4
ES64	2 3/4	1 3/4	2 3/4	1 15/16	2 3/16
ES65	2 3/4	1 5/8	3 1/16	2	2 1/16
ES76	3 1/2	2 1/16	3 3/16	2	3
ES108	5 1/4	3 3/8	4 3/4	2 31/32	4 1/4
ES01210	6 5/8	4 5/8	6 3/4	4 27/32	5 1/4
ES014012	7 1/4	5 29/32	7 1/4	5 11/32	6 1/2

NOTE: Sealing hubs are approved for use in hazardous locations when *Chico*® X fiber and *Chico* A sealing compound are used to make the seal. Sealing hubs are approved for horizontal conduit runs for use in hazardous locations when used with TSC sealing compound, order 1 oz. tube as TSC1.



TSC Epoxy Sealing Compound

A two part epoxy sealing compound may be used to seal ES sealing hubs. It is quick and easy to measure, mix and install. The compound is kneaded until a uniform color is obtained. It is then packed around the conductors to effectively seal the cable.

Std. Ctn. Qty.	Tube Size	Cat. # **
10	0.5 oz	TSC05
10	1.0 oz	TSC1
5	4.0 oz	TSC4

** Order quantity of one (1) TSC05 or TSC1 equals 10 tubes; one (1) TSC4 equals 5 4.0 oz tubes.



Cooper Crouse-Hinds Secondary Process Sealing Fittings are designed to prevent the passage of gases under pressure through conduits, cables and conductors. They are ideal where volatile liquids or gases are stored, processed or transported under pressure. If the primary seal on an instrument should fail, the Cooper Crouse-Hinds Secondary Process Seal will prevent gases from migrating into the nonclassified location through the electrical system. This patent pending design is the first seal which is tested and certified for pressure applications.

Features & Benefits

- Exclusive, patent-pending design — the first third-party approved secondary process seal
 - Standard pressure applications up to 40 psi (2.8 bar)
 - High-pressure applications up to 500 psi (35 bar)
- Kit contains everything required for complete installation
 - EABX26-SA body with 3/4" tapered threaded hubs to provide ground continuity
 - GUA062-GB sealing cover
 - GUAC26-SA body and cover
 - Process seal vent
 - Pressure relief tube
 - ECD16 Breather
 - Chico SS2 SpeedSeal (2) 2 oz Cartridges
 - Chico X fiber packet
 - PLG2-SA 3/4" plug
 - RE21-SA 3/4" to 1/2" reducer
 - Solder Sleeve connectors (4)
 - High-pressure fitting for PSHP (high-pressure) version only
 - UNF205 Explosionproof union for PSHP (high-pressure) version only

Standard Materials & Finishes

- EAB Body — copper-free aluminum
- GUA Body and Cover — copper free aluminum
- High-pressure sealing fitting — Stainless steel with viton seal
- ECD16 breather — Stainless steel
- UNF205 Union — copper-free aluminum
- Reducers and Plugs — copper-free aluminum
- Process seal vent — silicon rubber
- Pressure relief tube — polyethylene

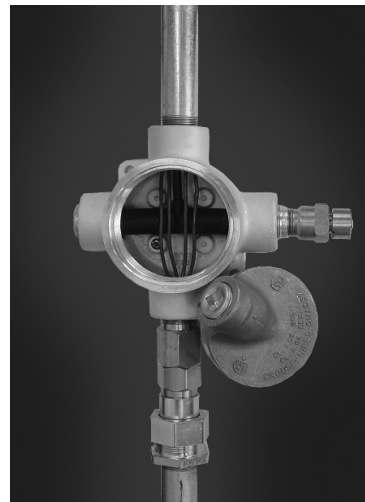
Ordering Information

Secondary Process Sealing Fitting Kit for Standard pressure up to 40 psi (2.8 bar)

Trade Size	Conductor Size	Catalog Number
3/4"	10-14 AWG	EABX26-SA-PS

High-Pressure Secondary Process Sealing Fitting Kit for pressure up to 500 psi (35 bar)

Trade Size	Conductor Size	Catalog Number
3/4"	10 AWG	EABX26-SA-PSHP10
3/4"	12 AWG	EABX26-SA-PSHP12
3/4"	14 AWG	EABX26-SA-PSHP14



Certifications & Compliances

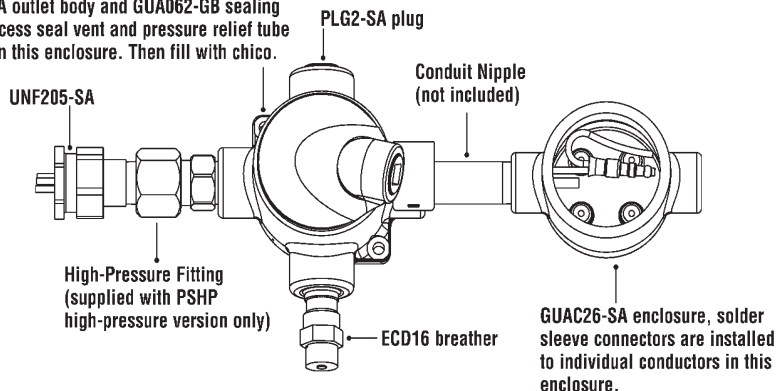
- Class I, Division 1 & 2, Groups C,D
- CSA LTR Number HazLoc 031120

Ratings

- Pressure ratings
 - Standard version — pressure up to 40 psi (2.8 bar)
 - High-pressure version — pressure up to 500 PSI (35 bar)
- Temperature range -25°C to +55°C

Typical Installation

EABX26-SA outlet body and GUA062-GB sealing cover. Process seal vent and pressure relief tube installed in this enclosure. Then fill with chiko.



Chico® A and Chico® A-P Sealing Compound

Chico® X Fiber

Chico® SpeedSeal™

For Sealing Fittings and Hubs

Application:

Chico X fiber:

- forms a dam between the integral bushing of the sealing fitting and the end of the conduit and around the electrical conductors entering the hub

Chico A sealing compound:

- forms a seal around each electrical conductor and between them and inside of the sealing fitting to restrict the passage of gases, vapors or flames through the sealing fitting at atmospheric pressure and at normal ambient temperatures

Chico® SpeedSeal™ Compound:

- designed to separate and form an explosionproof seal around each electrical conductor in Crouse-Hinds EYS and EYD sealing fittings.
- restricts the passage of gasses, vapors or flames through the sealing fitting.
- creates a seal for Class I, Division 1, Groups C & D and Class II, Division 1, Groups E, F & G hazardous areas.

Features:

- Chico X fiber is a mineral wool that packs easily, forming around each conductor
- Chico A sealing compound is a water soluble powder, that can be easily mixed and poured. The compound, unusually dense, expands slightly when hardening and bonds to inner walls of sealing fittings. Compound hardens in 60-70 minutes
- Chico A cure time is 8 hours for class I, Group C and D applications and 72 hours for class I, Group A and B applications.
- Chico A has a 1 year shelf life from date of manufacture.
- Chico A ambient temperature range (after curing) is -40°F to +165°F.
- Chico A-P Intrapak®:

Packaged in two-compartment plastic pouch with precise amount of water for mixing. No mixing or measuring implements required.

A hard squeeze of the water compartment forces the water into the compartment containing the Chico compound. Mixing is completed by kneading the pouch for one minute.

The mixed sealing compound is poured directly into the sealing fitting – no funnel required. The package label indicates the size and quantity of sealing fittings each pouch will properly fill. Compound hardens in 60-70 minutes.

Chico® SpeedSeal™ Compound is a revolutionary material:

- installs a reliable seal in five minutes - every time
- hardens to a dense, strong mass that is suitable for Class I, Division 1, Groups C & D and Class II, Division 1, Groups E, F & G hazardous applications.
- UL and cUL Listed for use with 1/2" to 2" Copper Crouse-Hinds sealing fittings only.
- packaged in a 2 oz. or 6 oz. pre-measured cartridge, eliminating the need for measuring before mixing.
- packaged with a screw-on nozzle for accurate dispensing.
- expands four times its original size in the sealing fitting, eliminating the need to separate the individual conductors with Chico X fiber.
- Chico X fiber dams are not required in horizontal applications, reducing installation times.
- completely hardens in 20 minutes, simplifying use for OEMs.
- suitable for cold temperature environments without the costly need to build a temporary shelter around sealing fittings. All ice crystals must be removed from inside the conduit seal before dispensing Chico SpeedSeal compound. The Chico SpeedSeal compound should be kept above 10°C (50°F) prior to mixing. The sealing fitting must be kept at or above 4°C (40°F) during the 4 to 10 minute expansion/gel time of the compound.
- one year shelf-life.
- patent pending

Size Ranges:

- Chico A compound – 1 lb. to 5 lbs. (provides 23-115 cubic inches of compound)
- Chico X fiber – 2 oz. to 1 lb.
- Chico A-P (5 pouches per carton) – provides 25 and 55 cubic inches of compound.
- Chico SpeedSeal - 2 oz. or 6 oz. cartridge

NOTE: Cooper Crouse-Hinds sealing fitting are approved for use in hazardous locations only when Chico X fiber and Chico A Sealing Compound or Chico SpeedSeal are used to make the seal.

* A sixth pouch, containing an appropriate quantity of Chico X fiber, is included in these cartons.

† Number of cubic inches this amount will fill when set. See internal volume requirements for EYS, EZS, EYD, EZD and EYSR sealing fittings and ES sealing hubs (pages 184 to 191).

‡ Includes 1 oz. Chico X fiber.



Chico A Sealing Compound

Net Weight	Vol. Cu. In.†	Cat. #
1 lb.	23	Chico A3
1 lb.‡	23	Chico A4
5 lb.	115	Chico A05



Chico A-P Intrapak® (provided with Chico X fiber)

Sealing Compound and Water in Plastic Mixing Pouch

Cu. In. Fill per Pouch†	No. of Pouches per Carton	Carton Cat. #
5	5	Chico A19-PX*
11	5	Chico A39-PX*



Chico X Fiber

Net Weight	Cat. #
2 oz.	Chico X4
8 oz.	Chico X6
1 lb.	Chico X7

Chart for Approximate Amount of Fiber Per Hub

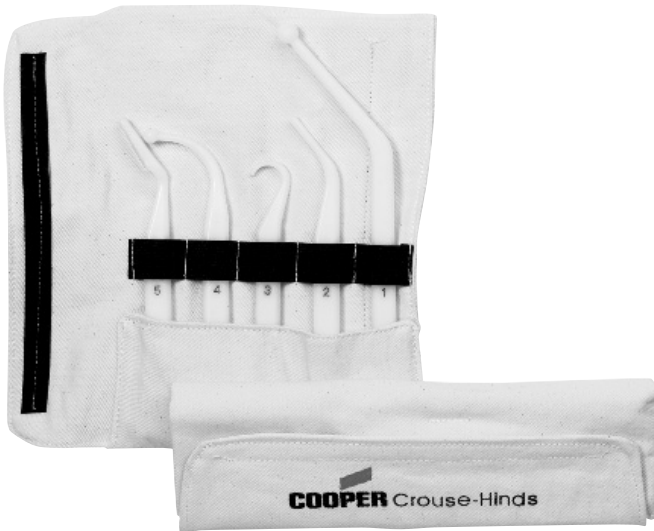
Hub Size	Ozs. Required
1/2	1/32
3/4	1/16
1	1/8
1-1/4	1/4
1-1/2	1/2
2	1
2 1/2	1 1/2
3	2
3 1/2	3
4	4 1/2
5	7
6	10



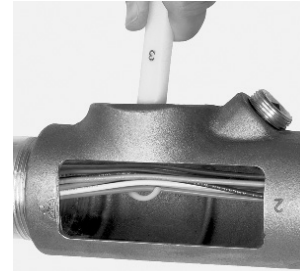
Chico SpeedSeal Ordering Information:

Sealing Fitting Catalog Number	Amount of SpeedSeal Material needed per fitting (in ounces)	SpeedSeal Catalog Number
EYS1, EYS16; EYS11, EYS116 EYD1, EYD16, EYD11, EYD116 EYS2, EYS26, EYS21, EYS216 EYD2, EYD26, EYD21, EYD216 EYSX11, EYDX11	1	CHICO SS2 (2 oz. Cartridge)
EYS3, EYS36, EYS31, EYS316 EYD3, EYD36, EYD31, EYD316 EYSX21, EYDX21	2	CHICO SS2 (2 oz. Cartridge)
EYS41, EYS416, EYS4, EYS46 EYD4, EYD46, EYD41, EYD416 EYS51, EYS516, EYS5, EYS56 EYD5, EYD56, EYD51, EYD516 EYSX31, EYDX31 EYSX41, EYDX41	3	CHICO SS6 (6 oz. Cartridge)
EYS61, EYS616, EYS6, EYS66 EYD6, EYD66, EYD61, EYD616 EYSX51, EYDX51	6	CHICO SS6 (6 oz. Cartridge)

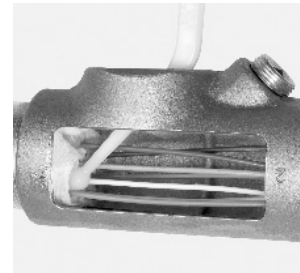
MSDS sheets are available at www.crouse-hinds.com



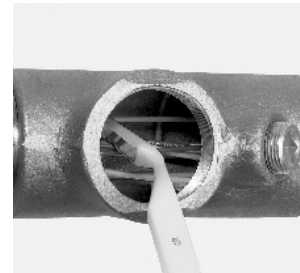
The Cooper Crouse-Hinds EYS Tool Kit lets you safely and reliably pack the fiber dam in explosionproof sealing fittings. Consisting of five patented, two-sided tools in a handy canvas bag, the EYS Tool Kit makes the critical steps of separating electrical conductors and packing fiber dams quick and easy.



The large hook on Tool #3 quickly lifts all the conductors.



With one of the packing tools, packing fiber in between and around electrical conductors is effortless.



The mirrored tool allows for proper inspection of the fiber dam in difficult to see areas.

Features and Benefits:

- The EYS Tool Kit consists of five tools and a canvas tool bag. Four tools have two unique ends for a total of 9 different tools.
- Each tool is numbered for easy identification.
- Tools are constructed of durable plastic with smooth and rounded surfaces that will not abrade the electrical insulation.
- The Hook tool (#3) with a large hook on one end and a small hook on the other end is designed to lift and separate individual wires.
- The Packing tools (#1, #2 & #4) have rounded ends designed for packing fiber in between and around electrical conductors.
- The Wedge tools (#2 & #5) are designed for hands-free separation of conductors while packing fiber.
- The Mirrored tool (#5) allows for easy inspection of the sealing fittings.
- All tools are sized and precisely angled to accommodate various sizes of fittings.
- The Canvas tool bag is designed to neatly store and protect tools while not in use.

Ordering Information:

Catalog Number

EYS-TOOL-KIT

Application:

- ECD drains and breathers are installed in enclosures or conduit systems to:
 - provide ventilation to minimize condensation
 - drain accumulated condensate
- At least one breather should be used with each drain
- A breather is installed in top of enclosure or upper section of conduit system
- A “standard” drain is installed in bottom of enclosure or in lower section of conduit system
- “Universal” breather or drain functions as a breather when mounted at the top of an enclosure, or as a drain when mounted in the bottom of an enclosure
- “Combination” breather and drain is used in those applications where the use of a top mounted breather is not practical due to limited space; or in offshore and marine installations where moisture may enter the enclosure through the breather located on top of enclosure
- Drains and breathers are installed in hubs or drilled and tapped openings

Features:

- ECD284, ECD384, ECD385 and ECD15 “Universal” drains and breathers have:
- patented labyrinth design, suitable for use in Class I, Division 1 & 2, Groups C,D and Class II, Division 1 & 2, Groups F,G areas
 - capability to pass 50 cc of water per minute and 0.2 cubic feet of air per minute at atmospheric pressure
 - ECD15 and ECD385 each have a well inside the inner, threaded end to provide for accumulation of sediment without clogging when used as a drain.
- “Standard” ECD drains and breathers have:
- thread-in-thread design, suitable for use in Class I, Division 1 & 2, Groups C,D; Class II, Division 1, Groups E,F,G; Class II, Division 2, Groups F,G and Class III areas
 - ECD 11, 13 have capability to pass 25 cc of water per minute and .05 cubic feet of air per minute at atmospheric pressure
 - ECD387 and ECD16 are a unique thread-in-shaft design for use in Class I, Division 1 & 2, Groups B,C,D; Class II, Division 1, Groups E,F,G; Class II, Division 2, Groups F,G; Class III areas. The ECD387 and ECD16 can pass 15cc of water per minute. The ECD16 can pass .01 cubic feet of air per minute.
- “Combination” ECD breather and drain:
- provides ventilation to minimize condensation and drains accumulated condensate – two functions performed by a single device installed in the bottom of an enclosure or conduit system
 - Have the capability to pass 25 cc of water per minute and .10 cubic feet of air per minute at atmospheric pressure
 - Thread-in-thread and labyrinth design, suitable for use in Class I, Division 1 & 2, Groups C and D; Class II, Division 1 & 2, Groups F and G; and Class III areas

Size Ranges

- 1/4" to 1/2"

ECD “Type 4X” Drain and Breather

Size	Drain Cat. #	Breather Cat. #
3/8	ECD38-N4D	ECD38-N4B
1/2	ECD1-N4D	ECD1-N4B

ECD “Standard” Drain and Breather

Size	Drain Cat. #	Breather Cat. #
1/4	ECD281	
3/8	ECD387	
1/2	ECD11	ECD13

ECD “Universal” Drain or Breather

Size	Cat. #
1/4	ECD284†
3/8	ECD384†
3/8	ECD385
1/2	ECD15
1/2	ECD16

ECD

“Combination” Drain and Breather

Size	Cat. #
1/2	ECD18

Standard Materials:

- ECD11, ECD15, ECD281, ECD284, ECD384, ECD385 – stainless steel
- ECD13 – stainless steel with aluminum cap
- ECD16, ECD-N4D, ECD-N4B – stainless steel
- ECD387 – stainless steel
- ECD18 – Stainless steel with neoprene tube

Certifications and Complies:

- NEC/CEC:
 - ECD 16, ECD387, ECD-N4D, ECD-N4B** – Class I, Division 1 & 2, Groups B,C,D
Class II, Division 1, Groups E,F,G
Class II, Division 2, Groups F,G
Class III
 - ECD11, ECD13, ECD281** – Class I, Division 1 & 2, Groups C,D
Class II, Division 1, Groups E,F,G
Class II, Division 2, Groups F,G
Class III
 - ECD18, ECD384, ECD15, ECD385** – Class I, Division 1 & 2, Groups C,D
Class II, Division 1, Groups F,G
Class II, Division 2, Groups F,G
Class III
 - ECD284** – Class I, Division 1 & 2, Group C,D
Class II, Division 1, Groups F,G
Class II, Division 2, Groups F,G
- UL: Standard 886
- CSA Standard: C22.2 No. 30
- Type 4X: ECD-N4D and ECD-N4B

† Shorter overall length than ECD15 and ECD385. For use in confined spaces such as panelboard assemblies.



ECD11



ECD13



ECD15



ECD16



ECD18



Typical installation of drain and breather in a combination motor starter

- NOTES:** 1. At least 5 full threads of drain or breather must be engaged in matching female thread, taper-tapped in accordance with NEMA/EEMAC Standard FB-1, Type NTC or National Bureau of Standards Handbook H28, Part II, Table 7.6.
2. These breathers and drains can be factory installed on various explosion-proof equipment. See options on applicable equipment pages for suffixes to be used.

8F CD Series Ordinary Location Drain

Straight Body • Male Thread

Seals, Breathers
& Drains

Application:

CD Series drains are for use in conduit systems to:

- Drain accumulated condensate.
- Provide ventilation to minimize condensation.

Drains are installed in hubs or drilled and tapped openings.

Standard Materials:

- CD bodies and nuts – steel or aluminum
- CD screen – stainless steel

Standard Finishes:

- Steel – electrogalvanized with chromate treatment.

Certifications and Compliances:

- UL Standard 514B

Options:

- Copper-free aluminum construction – add suffix -SA

Ordering Information:

Size	Cat. #
1/2	CD1
3/4	CD2



NEMA 4X BREATHER/DRAIN

ATEX and CENELEC Range

I M2 II 2GD, E Exe I & II
(Stainless Steel & Brass only)
II 2GD, E Exe II (Nylon version)
CSA Class I, Division 2, Groups
A, B, C & D, Exe II

Enclosure Type 4X
IP66



Certifications and Compliances

- SIRA 99 ATEX 3050U
- I M2 II 2GD, E Exe I & II (Stainless Steel & Brass only)
- II 2GD, E Exe II (Nylon only)
- CSA Class I, Division 2, Groups A, B, C & D, Exe II
- Enclosure Type 4X
- IP66

Operating Temperature

- -50°C to +85°C

Application

For use in enclosures to provide a method to effectively drain moisture while allowing the enclosure to breathe.

Features

All NEMA 4X breather/drains offer:

- Castellated locknuts that allow moisture to pass between the enclosure and the locknut to the drain holes in the fitting.
- Available in brass, stainless steel (Type 316) or 30% glass filled nylon.
- Captive "O" ring on recess of the face of the breather/drain to optimize ingress protection.
- ATEX and CSA Certified for worldwide market acceptance.
- Available with metric or NPT threads.

Ordering Information

NEMA 4X Breather/Drain

Entry Method	Material	Catalog Number
M20	Brass	ACDPEB/M20/15
M20	Stainless Steel	ACDPES/M20/15
M20	Nylon	ACDPEBN/M20/15
M25	Brass	ACDPEB/M25/15
M25	Stainless Steel	ACDPES/M25/15
M25	Nylon	ACDPEBN/M25/15
1/2"	Brass	ACDPEB/050NPT/15
1/2"	Stainless Steel	ACDPES/050NPT/15
3/4"	Brass	ACDPEB/075NPT/15
3/4"	Stainless Steel	ACDPES/075NPT/15