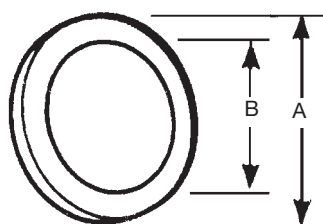


Rigid and Intermediate Metal Conduit Fittings

Sealing Rings with Stainless Steel Retainer



Sealing Ring-Santoprene
Thermoplastic Rubber

These sealing rings provide a liquid tight, dust tight, seal of fitting at enclosures

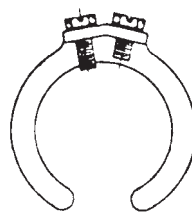
Cat. No.	Conduit Size (in.)	Dimensions (in.)	
		A	B±1/64
5302	1/2	1-11/64	3/4
5303	3/4	1-1/2	15/16
5304	1	1-3/4	1-11/64
5305	1-1/4	2-9/64	1-1/2
5306	1-1/2	2-27/64	1-3/4
5307	2	2-59/64	2-15/64
5308	2-1/2	3-7/16	2-43/64
5309	3	4-5/64	3-19/64
5311	4	5-9/32	4-19/64

NEMA 3R, 4, 6 and 13

Bonding and Grounding Wedges



Series 3650



Series 3651

Application

To effectively bond terminating fitting or conduit to a box or enclosure

Features

- Sizes 3/4 in. thru 6 in. equipped with an additional bonding screw to install bonding jumper where required
- Can be added to an existing installation without disconnecting conductors

Standard Material/Finish

1/2 in. size Steel/Electro-zinc Plated
3/4 in. thru 6 in. size Bronze/Tin-Plated

Range

1/2 in. thru 6 in. conduit

Conformity

UL 467
C.S.A. C22.2 No. 41
NFPA70-2008 (ANSI)
Federal Specification A-A-50552

Bonding and Grounding Wedges



Especially suited for grounding old work, but equally convenient for new, grounding wedges provide grounding without a jumper except in concentric knockouts. When a jumper is required, it fits under a set screw in the grounding wedge.

Update existing installations to meet code requirements for bonding (CEC Section 10-806) without disconnecting wiring. Use on new wiring also.

1. Loosen bushing and position wedge
2. Tighten bushing and bonding screw

Cat. No.	Size (in.)
3650	1/2
3651	3/4
3652	1
3653	1-1/4
3654	1-1/2
3655	2
3656	2-1/2
3657	3
3658	3-1/2
3659	4
3661	5
3662	6

Rigid and Intermediate Metal Conduit Fittings

Blackjack® – Conduit Grounding Bushings



Innovative design makes installation quicker, easier.

The Blackjack® Grounding Bushing never has to be threaded onto a conduit. It is simply placed in position on either a threaded or non-threaded rigid or IMC conduit, with the grounding lug in perfect position to accept the grounding wire. Even in tight installations, it's as simple as one, two, three. Compare the installation with conventional bushings that must be threaded onto the conduit. In tight areas, you may have to remove the grounding lug, keep up with the loose parts, and then reattach the lug. Then you still have to twist and turn the bushing to get the lug in position to accept the grounding wire. The Blackjack® bushing does away with these needless delays for good, making it the ideal grounding bushing and the only logical choice for small spaces, corners, and multiple conduit runs. And, because the grounding lug is an integral part of the bushing, it is designed not to fall off or get lost.



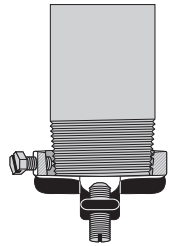
Innovative design improves performance.

The Blackjack® bushing provides superior ground continuity.

The design of the Blackjack® bushing has an integral, cast-on grounding lug for better ground continuity. This means that the Blackjack® bushing stands up to intense loads.

Secure grip forms lasting bond.

The Blackjack® bushing's cone-point mounting screw bites securely into both **threaded and non-threaded** rigid conduits. And the Blackjack® bushing's nylon locking patch is designed to prevent the screw from loosening due to vibration.



Reduce inventory.

Because the Blackjack® Grounding Bushing is designed for threaded and non-threaded conduits, and the ground lugs are designed to handle an extended range, the number of parts in inventory is reduced by up to two-thirds without losing any application coverage.

Blackjack® – Conduit Grounding Bushing



Lug Screw:

- 14-4: Slotted
- 14-2/0: Slotted
- 6-4/0: Internal Hex Drive

Standard Material/Finish

Body: Malleable Iron or Aluminum
Mounting Screw: (1/2 in.-2 in.) Stainless Steel,
 (2-1/2 in.-6 in.) Brass

Lug Screw: Stainless Steel

Finish: Zinc Plated or Mechanical Galvanized

Range

Conduit: 1/2 in. thru 6 in. threaded or threadless rigid/IMC

Wire Range: #14 AWG to 4/0 AWG CU/AL

Conformity

UL 514B & UL 467

CSA C22.2 No. 18.3 & CSA C22.2 No. 41

Rigid and Intermediate Metal Conduit Fittings

Blackjack® – Conduit Grounding Bushings



Cat. No.		Conduit Size (in.)	Dim.				E Max.	Wire Range	
Zinc Plated Malleable Iron	Aluminum		ØA Max.	ØB Max.	ØC Max.	ØD Max.			
BG050-14-20	BGA050-14-20	1/2	1.251	0.569	1.181	2.134	0.696	14-2/0	
BG050-14-4	BGA050-14-4		1.251	0.569	1.027	1.940		14-4	
BG075-14-20	BGA075-14-20	3/4	1.533	0.772	1.221	2.414		14-2/0	
BG075-14-4	BGA075-14-4		1.533	0.772	1.030	2.168		14-4	
BG100-14-20	BGA100-14-20	1	1.783	0.993	1.181	2.581		14-2/0	
BG100-14-4	BGA100-14-4		1.783	0.993	1.027	2.368		14-4	
BG125-14-20	BGA125-14-20	1-1/4	2.220	1.319	1.181	2.987		0.759	14-2/0
BG150-14-20	BGA150-14-20	1-1/2	2.470	1.553	1.181	3.236		0.696	14-2/0
BG200-14-20	BGA200-14-20	2	2.830	2.010	1.181	3.766			14-2/0
BG250-14-20	BGA250-14-20	2-1/2	3.148	2.412	1.181	4.341		14-2/0	
BG250-6-40	BGA250-6-40		3.148	2.412	1.524	4.526	6-4/0		
BG300-14-20	BGA300-14-20	3	4.042	3.022	1.181	4.966	14-2/0		
BG300-6-40	BGA300-6-40		4.042	3.022	1.524	5.139	6-4/0		
BG350-14-20	BGA350-14-20	3-1/2	4.542	3.491	1.181	5.467	14-2/0		
BG350-6-40	BGA350-6-40		4.542	3.491	1.524	5.639	6-4/0		
BG400-14-20	BGA400-14-20	4	5.042	3.975	1.181	5.966	14-2/0		
BG400-6-40	BGA400-6-40		5.042	3.975	1.524	6.139	6-4/0		
BG500-14-20	BGA500-14-20	5	6.136	4.991	1.181	7.045	14-2/0		
BG500-6-40	BGA500-6-40		6.136	4.991	1.524	7.207	6-4/0		
BG600-14-20	BGA600-14-20	6	7.199	6.009	1.181	8.087	14-2/0		
BG600-6-40	BGA600-6-40		7.199	6.009	1.524	8.409	6-4/0		

Suggested Specifications

Insulated grounding and bonding bushing
(Series BG050-BG600)

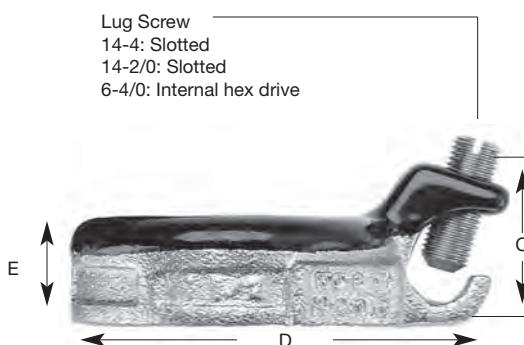
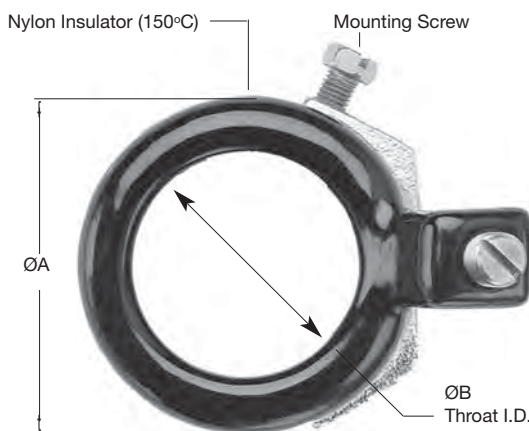
Where code requires bonding and grounding of single or multiple metal conduits, or positive bonding and grounding of metal conduit to the box, enclosure or auxiliary gutter, the end of the conduit shall be equipped with an insulated metallic grounding and bonding bushing Series BG050-14-20 as manufactured by Thomas & Betts.

Grounding and bonding bushings used shall be approved for the purpose and

(i) Shall be of malleable iron/steel/aluminum construction adequately protected against corrosion.

(ii) Bushing insulator shall be listed or certified for 150°C/302°F application with a flammability rating of 94V-0. Insulator must be positively locked in place.

* Mechanical galvanization is available in the 3870 Series; add suffix **MG** to Cat. No.



For Threaded & Threadless Rigid & IMC Conduit

Rigid and Intermediate Metal Conduit Fittings

Threaded Insulated Grounding Bushing



Application

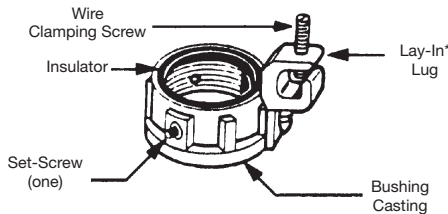
- For quick installation of bonding jumper to multiple metal conduits (Rigid and IMC)
- Designed to bush conductors and prevent insulation damage

Standard Material / Finish

Body: Electro-zinc plated
Lay-in lug: Aluminum/tin-plated
Insulator: Thermoplastic
 150°C/302°F
 Application with 94V-0 flammability

Features

- Ease of installation, lay in lug design
- Cast malleable iron body designed to lock insulator in place within body, reducing common assembly problem resulting in dislodging of insulator
- Insulator rated for 150°C/302°F application



Cat. No.	Conduit Size (in.)	Bushing Dia. (in.)	Throat Dia. (in.)	Lug Length (in.)	Swing Radius (in.)	Bushing Height (in.)	Wire Range AWG CU/AL
3870-TB	1/2	1.125	0.560	1.310	1.212	0.657	14-4
3861		1.125	0.560	1.675	1.402		8-2/0
3871-TB	3/4	1.420	0.742	1.310	1.360	0.660	14-4
3862		1.420	0.742	1.675	1.550		8-2/0
3872	1	1.770	0.944	1.310	1.535	0.735	14-4
3882		1.770	0.944	1.675	1.725		8-2/0
3873	1-1/4	2.190	1.242	1.310	1.745	0.770	14-4
3883		2.190	1.242	1.675	1.935		8-2/0
3874	1-1/2	2.468	1.449	1.310	1.884	0.770	14-4
3884		2.468	1.449	1.675	2.074		8-2/0
3875	2	3.031	1.860	1.310	2.165	0.940	14-4
3889		3.031	1.860	1.675	2.355		8-2/0
3876	2-1/2	3.516	2.222	1.310	2.408	0.940	14-4
3886		3.516	2.222	1.675	2.598		8-2/0
3993	3	3.516	2.222	2.230	2.928	0.975	6-4/0
3877		4.234	2.761	1.310	2.767		14-4
3887	3	4.234	2.761	1.675	2.957	0.975	8-2/0
3994		4.234	2.761	2.230	3.287		6-4/0
3878	3-1/2	4.781	3.193	1.310	3.040	0.980	14-4
3863		4.781	3.193	1.675	3.230		8-2/0
3995	4	4.781	3.193	2.230	3.560	0.980	6-4/0
3879		5.328	3.623	1.310	3.314		14-4
3864	4	5.328	3.623	1.675	3.504	0.980	8-2/0
3996		5.328	3.623	2.230	3.834		6-4/0
3880	5	6.328	4.542	1.310	3.814	0.985	14-4
3865		6.328	4.542	1.675	4.000		8-2/0
3998	6	6.328	4.542	2.230	4.334	1.200	6-4/0
3881		7.406	5.458	1.310	4.353		14-4
3866	6	7.406	5.458	1.675	4.543	1.200	8-2/0
3999		7.406	5.458	2.230	4.875		6-4/0

Temperature rating 150°C

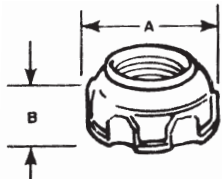
Meets Coast Guard Regulation CG293

For Dura-Plate® finish, add prefix 040- to Cat. No. Consult your Regional Sales Office for details

*Contact your Regional Sales Office for copper lay in lug

Rigid and Intermediate Metal Conduit Fittings

Insulated Throat Fittings



Nylon insulated metallic bushings

Steel or malleable iron (Steel thru 1-1/2 in.)

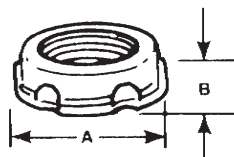
The Canadian Electric Code 10-906 (2) calls for protection of ungrounded conductors by means of smoothly rounded insulating surfaces at the entrance to raceways, pull boxes, junction boxes, etc. T&B insulated throat fittings, recognizable by the distinctive trademarked blue insulating liner in the throat, meet and surpass this Code requirement. In addition, T&B insulated fittings also reduce wire pulling effort by as much as 50%. Temperature rating 105°C.

Cat. No. Steel or M.I.	Cat. No. Aluminum	Size (in.)	Dimensions (in.)	
			A	B
1222	1222AL	1/2	1-1/32	29/64
1223	1223AL	3/4	1-9/32	31/64
1224	1224AL	1	1-19/32	19/32
1225	1225AL	1-1/4	1-15/16	21/32
1226	1226AL	1-1/2	2-3/16	23/32
1227	1227AL	2	2-11/16	7/8
1228	1228AL	2-1/2	3-3/16	31/32
1229	1229AL	3	3-27/32	15/16
1230	1230AL	3-1/2	4-7/16	1-1/16
1231	1231AL	4	4-7/8	1-3/32
1232†	1232AL†	4-1/2	5-7/16	1-15/64
586	586AL	5	5-31/32	1-9/32
587	587AL	6	7-3/16	1-11/32

† Not CSA Certified

The aluminum series are not CSA certified

Metallic Bushings



Aluminum, steel or malleable iron
(steel thru 1-1/2 in.)

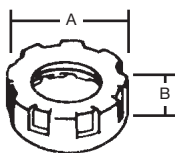
Smoothly rounded shoulder end of conduit; broad flange covers knockout hole. High ribs make tightening easy with fingers or with wrench. 1/2 in.-1-1/2 in. sizes, formed in steel, have extra smooth shoulders. Locknut-type base gives improved bonding and resists loosening under conditions of vibration.

Cat. No. Stl. or M.I.	Cat. No. Alum.	Size (in.)	Dimensions (in.)	
			A	B
122	122AL	1/2	1-1/32	13/32
123	123AL*	3/4	1-9/32	13/32
124	124AL	1	1-19/32	1/2
125-TB	125AL	1-1/4	1-15/16	9/16
126	126AL	1-1/2	2-3/16	9/16
127	127AL	2	2-11/16	19/32
128	128AL	2-1/2	3-3/16	13/16
129	129AL	3	3-27/32	13/16
130-TB	130AL	3-1/2	4-7/16	15/16
131-TB	131AL	4	4-7/8	1
132-TB	—	4-1/2	5-7/16	1-5/64
133-TB	133AL	5	6-1/16	1-1/16
134-TB	134AL	6	7-3/16	1-1/16

* Not UL Listed or CSA Certified

For Dura-Plate® finish, add prefix 040- to Cat. No. Consult your Regional Sales Office for details

Plastic Insulating Bushings



All Plastic Insulating Bushings

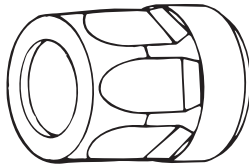
Impact-resistant plastic insulation. These bushings have ribs for gripping when installing. Perfect threads for easy thread on. UL Listed 105°C. NPT threaded.

Cat. No.	Size (in.)	Dimensions (in.)	
		A	B
222-TB	1/2	1-1/16	3/8
223-TB	3/4	1-9/32	13/32
224	1	1-37/64	9/16
225-TB	1-1/4	2-1/32	9/16
226	1-1/2	2-15/64	9/16
227	2	2-25/32	5/8
228-TB	2-1/2	3-13/32	3/4
229-TB	3	4-3/32	3/4
230-TB	3-1/2	4-5/8	7/8
231	4	5-3/16	7/8
232	4-1/2	5-5/8	7/8
233	5	6-3/8	1
234	6	7-7/16	1

Flame retardant. UL Rated 94V-1

Rigid and Intermediate Metal Conduit Fittings

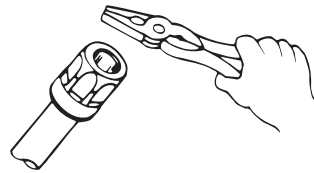
Insulating Bushing for Threadless Rigid Conduit and Intermediate Metal Conduit



TRIB50 Series



1. Cut conduit end squarely. Remove sharp edges and burrs on inside and outside diameters by reaming or filing.
2. Slip the pop-on bushing over the end of the conduit.



3. Using the flat surface of any standard utility tool such as an electrician's pliers (or a hammer with a block of wood, for the larger sizes), strike the bushing on its top surface using a Series of light blows until the end of the conduit rests against the bushing throat and conduit stop.



Application

- When assembled to the end of a threadless conduit, provides a well rounded insulating surface over which conductors may be pulled or on which conductors may bear while in service

Features

- Designed to be popped onto, and bush, conduit end
- Fast easy installation without screws
- High impact thermoplastic construction

Standard Material

High impact thermoplastic listed for 105°C (221°F) application
Flammability Classification 94V-1

Standard Finish

As molded

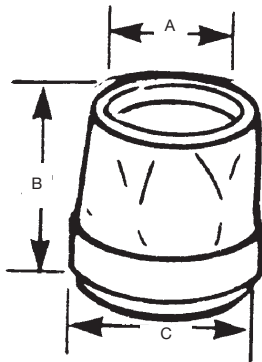
Range

1/2 in. through 4 in. conduit

Conformity

UL 514B
ANSI C80.4
NFPA 70-2008 (ANSI)

Insulated Metallic Bushing



Cat. No.	Size (in.)	Dimensions (in.)		
		A	B	C
TRIB-50	1/2	19/32	1-9/32	1-1/16
TRIB-75	3/4	25/32	1-25/64	1-1/4
TRIB-100	1	1	1-1/2	1-9/16
TRIB-125	1-1/4	1-5/16	1-5/8	1-59/64
TRIB-150	1-1/2	1-17/32	1-21/32	2-11/64
TRIB-200	2	1-31/32	1-13/16	2-11/16
TRIB-250	2-1/2	2-23/64	2	3-1/4
TRIB-300	3	2-59/64	2-7/32	3-29/32
TRIB-350	3-1/2	3-3/8	2-5/16	4-29/64
TRIB-400	4	3-27/32	2-13/32	5

I.M.C. sizes 1/2 in. thru 4 in.

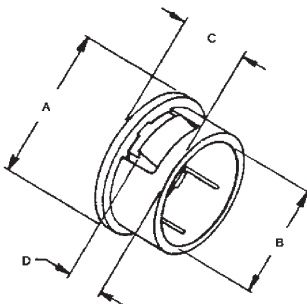
UL Rated flame retardant 94V-1

Rigid and Intermediate Metal Conduit Fittings

Knockout Bushings



3210 Series



One-piece knockout bushing quickly snaps into outlet box, switch box, or other enclosure left vacant by wiring modifications or maintenance changes. Provides smooth, rounded insulation surface for easy wire pulling. Easily installed by hand, they are available to fit 1/2 in. through 2 in. knockouts. UL Listed 105°C. High impact thermoplastic.

Application

- To bush knockout openings in metal boxes or enclosures

Features

- One piece construction designed to snap in place
- High impact strength self-extinguishing, non-dripping (per UL 94) thermoplastic construction

Range

- 0.875 in. through 2.469 in. nominal diameter knockout opening (1/2 in. through 2 in. trade size knockouts)
- Wall thickness of box or enclosure 0.095 in. max. up to 1 in. trade size. 0.140 in. max. 1-1/4 in. through 2 in. trade size

Standard Material

Thermoplastic rated for 105°C (221°F) application

Conformity

UL 514B
CSA C22.2 No. 18.3
NFPA 70-2008 (ANSI)

Standard Finish

As molded

KNOCKOUT BUSHING



Cat. No.	Trade Size (in.)	For use in KO* +0.032/-0.16 (in.)	A (in.)	B (in.)	Wall Thickness of Elec. Box (in.)	C (in.)	D (in.)
3210	1/2	0.875	1.000	0.725	0.095 MAX	0.360	0.180
3211	3/4	1.109	1.215	0.940			
3212	1	1.375	1.500	1.200			
3213	1-1/4	1.734	1.865	1.550	0.140 MAX	0.400	0.210
3214	1-1/2	1.984	2.240	1.760			
3215	2	2.469	2.740	2.245			

* Per UL and NEMA standards

Material: Thermoplastic

Flammability classification of 94V-1 Per UL 94

Service temperature: -40°C to 105°C

INSULINER® Sleeves



Slip over wires—insert into bushing—snaps into place

High dielectric nylon, 105°C.

An Insuliner® sleeve snapped into a regular bushing makes a CSA Listed insulated bushing. For standard rigid conduit, EMT (thinwall conduit) or any standard bushed outlet. Especially suitable for use with flexible metallic conduit.

Converts ordinary bushing to code approved insulated bushing without disturbing wiring.



Cat. No.	Size (in.)	Dimensions (in.)	
		A	B
422	1/2	5/8	0.022
423	3/4	11/16	0.025
424	1	7/8	0.040
425	1-1/4	1	
426-TB	1-1/2	1	0.050
427-TB	2	1-1/8	
428-TB	2-1/2	1-1/4	
429	3	1-1/2	0.035
430-TB	3-1/2	1-25/32	
431	4	2-1/32	
433	5	2-1/2	
434	6	2-1/2	

Oxygen index >28°

Rigid and Intermediate Metal Conduit Fittings

Knockout Plugs

Application

- To bush knockout openings in metal boxes or enclosures

Features

- One piece construction designed to snap in place
- High impact strength self extinguishing non-dripping (per UL 94) thermoplastic construction

Standard Material

Thermoplastic rated for 105°C (221°F) application

Standard Finish

As molded

Range

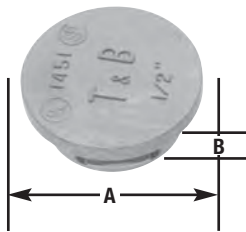
- 0.875 in. through 2.469 in. nominal diameter knockout opening (1/2 in. through 2 in. trade size knockouts)
- Wall thickness of box or enclosure
0.095 in. max. up to 1 in. trade size
0.140 in. max. 1-1/4 in. through 2 in. trade size

Conformity

UL 514B

CSA C22.2 No. 18.3

NFPA 70-2008 (ANSI)



105°C rated by UL Made from flame retardant, non-dripping thermoplastic.

Cat. No.	Size (in.)	Dimensions (in.)	
		A	B
1451	1/2	1.060	0.400
1452	3/4	1.300	
1453	1	1.590	0.450
1454	1-1/4	1.860	
1455	1-1/2	2.240	0.570
1456	2	2.740	

Wall thickness of electrical box 0.095 max.

Meets Coast Guard Regulation CB293

Pennies—Steel



A penny under a bushing will seal the end of the conduit during construction. Made to fit any bushing. Completely salvageable.

Cat. No.	Size (in.)
815-TB	1/2
816	3/4
817	1
818	1-1/4
819	1-1/2
820	2
821	2-1/2
822	3
824	3-1/2
823	4

UL not applicable

Rigid and Intermediate Metal Conduit Fittings Plug, Conduit, Connectors (Push-Penny® Plugs)

Application

- To plug open end of conduit or fitting in order to prevent ingress of trash, dirt or moisture during construction and remodeling

Features

- Wide range of application; can be used with rigid metal conduit, intermediate metal conduit, electrical metallic tubing, all connectors and all bushings
- Designed to stand up to normal handling and is functionally unaffected by moisture

Standard Material

Polyethylene

Standard Finish

As molded

Conformity

CSA C22.2 No. 18

ANSI C80.4

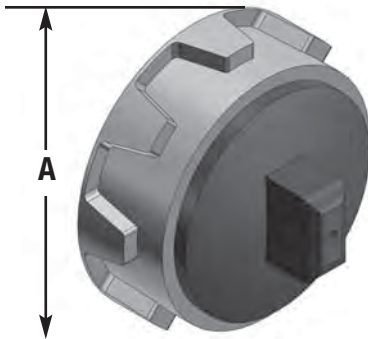
NFPA 70-2008 (ANSI)

NEMA FB-1

CEC Rule: 12-3024

“Unused openings in boxes, cabinets and fittings shall be effectively closed by plugs or plates affording protection substantially equivalent to that of the wall of the box, cabinet or fittings.”

Bushings and Push-Penny® Plugs



Cat. No.	Size (in.)	A (in.)	Assembly consist of	
			Bushing	Push-Penny
1460	1/2	1-1/32	122	1470-TB
1461	3/4	1-9/32	123	1471
1462	1	1-19/32	124	1472
1463	1-1/4	1-15/16	125	1473
1464	1-1/2	2-3/16	126	1474
1465*	2	2-21/32	127	1475

* Maleable Iron

Available in Aluminum

Add suffix AL to Cat. No.

Push-Penny® Plugs



Cat. No.	Size (in.)
1470-TB	1/2
1471	3/4
1472	1
1473	1-1/4
1474	1-1/2
1475	2
1476*	2-1/2
1477*	3
1478*	3-1/2
1479*	4

*Not CSA Certified

UL not applicable

Rigid and Intermediate Metal Conduit Fittings

CHASE® Nipple

Application

- To effectively bush factory or field-punched, cut, or drilled holes in metal boxes or enclosures
- To couple boxes back-to-back

Features

- Rugged construction
- Insulator curled over to: Bush conductors entering/leaving at any angle. Reduce wire pull effort. Protect threads against damage in handling

Standard Material

1942 Series

Body 1/2 in.-Steel
3/8 in., 3/4 in. through 6 in. - Malleable Iron

Insulator Nylon

842AL Series

All Copper-free Aluminum (less than 0.4% copper)

Standard Finish

1942 Series Electro-zinc Plated & Chromate Coated

842AL Series Degreased

Range 1942 & 842AL Series

1/2 in. through 6 in.

All hub threads straight pipe (NPS)

Conformity

UL 514B

CSA C22.2 No. 18.3

Federal Specification W-F-408

ANSI C80.4

NFPA 70-2008 (ANSI)

NEMA FB-1

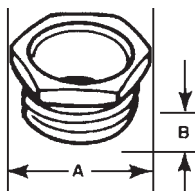
Federal Standard H-28 (Threads)



1942 Series
842AL Series
(Non Insulated)



Steel, malleable iron or aluminum



CHASE® Nipples



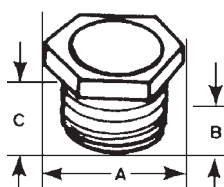
Cat. No.	Stl. or M.I.	Alum.	Size (in.)	Dimensions (in.)	
				A	B
841TB	—	—	3/8	13/16	7/16
842TB	—	842ALTB†	1/2	15/16	11/32
843TB	—	843ALTB	3/4	1-3/16	11/32
844	—	844AL†	1	1-7/16	21/32
845	—	845AL†	1-1/4	1-3/4	3/4
846	—	846AL	1-1/2	2-1/16	13/16
847	—	847AL	2	2-1/2	31/32
848	—	848AL	2-1/2	3-1/16	1-1/16
849	—	849AL	3	3-13/16	1-3/16
850	—	850AL	3-1/2	4-3/8	1-5/16
851	—	851AL	4	4-3/4	1-5/16
853	—	853AL	5	5-7/8	1-5/16
854	—	854AL	6	6-15/16	1-3/8

† Not UL Listed

For Dura-Plate® finish, add prefix 040- to Cat. No. Consult your Regional Sales Office for details



Steel or malleable iron



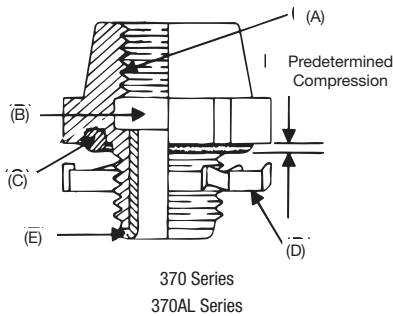
CHASE® Nipples—Nylon Insulated



Cat. No.	Size (in.)	Dimensions (in.)		
		A	B	C
1942	1/2	15/16	1/2	19/32
1943	3/4	1-3/16	17/32	23/32
1944	1	1-7/16	21/32	7/8
1945	1-1/4	1-3/4	25/32	1-1/32
1946	1-1/2	2-1/16	13/16	1-3/32
1947	2	2-9/16	31/32	1-11/32
1948	2-1/2	3-1/16	1-1/16	1-7/16
1949	3	3-13/16	1-3/16	1-19/32
1950	3-1/2	4-3/8	1-5/16	1-25/32
1951	4	4-5/8	1-5/16	1-13/16
1953	5	5-29/32	1-5/16	1-13/16
1954	6	6-13/16	1-3/8	1-7/8

Rigid and Intermediate Metal Conduit Fittings

Threaded Hubs (Bullet® Hubs) for Threaded Rigid Metal Conduit/IMC/PVC Coated Rigid Metal Conduit



Application

- To connect threaded metal conduit (ferrous rigid/nonferrous rigid/PVC coated/or intermediate metal) to a threadless opening in a box or enclosure in outdoor or indoor location exposed to continuous or intermittent moisture
- To positively bond conduit to box or enclosure

Features

- Rugged steel/malleable iron/copper-free aluminum construction.
- Tapered internal threads for watertight/dust tight union (A)
- Threads relieved to prevent bottoming of conduit ensuring sound assembly (B)
- Recessed sealing ring at box end. Captive sealing ring (C)
- Hardened steel/malleable iron/copper-free aluminum locknuts designed to provide high quality ground continuity; extended reach of locknut permits clamping on thin boxes and enclosures (D)
- Insulated throat protects conductors, prevents abrasion and thinning of conductor insulation, reduces wire pull effort (E)

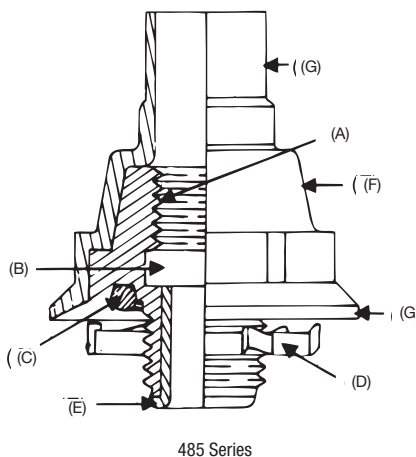
- Suitable for hazardous location use per following:
 - (1) Class II, Division 1 Groups E, F, G, CEC Rule 18-202
Class II, Division 2 Groups E, F, G, CEC Rule 18-252
Class III, Division 1 Rule 18-302
Class III, Division 2 Rule 18-352
 - PVC coated 485 Series
 - (1) Protects fitting from extremely corrosive surroundings without affecting integrity of electrical grounding path (F)
 - (2) Provided with overlapping sleeve for additional seal (G)

Canadian Electric Code Rule 10-602 states that, "Where dissimilar metals cannot be avoided at bonding connections as indicated in Rule 2-112 (2). Connections shall be made using methods or material that will minimize deterioration from galvanic action".

Joint Industrial Council (JIC) Electrical Standards also forbid dissimilar metals in contact for the same reason and require that the fittings for metal conduit be of malleable iron or ductile iron and have impact strength comparable to that of the conduit.

"Copper-free Aluminum"

- Copper-free aluminum castings for fittings have a maximum of 0.4% copper. The most detrimental effect of higher percentage of copper on aluminum base alloy is its decrease in corrosion resistance.



Rigid and Intermediate Metal Conduit Fittings

Threaded Hubs (Bullet® Hubs) for Threaded Rigid Metal Conduit/IMC/PVC Coated Rigid Metal Conduit (cont'd)

Standard Material

	370-485 Series	370AL Series
Body	1/2 in. thru 1 in. Steel 1-1/4 in. thru 6 in. Malleable Iron	All Copper-Free Aluminum
Locknut	1/2 in. thru 2 in. Steel (hardened) 2-1/2 in. thru 6 in. Malleable Iron	1/2 in. thru 2 in. Steel (hardened) 2-1/2 in. thru 4 in. Copper-free Aluminum
Screws	Steel (hardened)	
'O' Ring	Buna N	
Insulator	Nylon	
Coating	PVC	

Standard Finish

	370 Series	370AL Series	485 Series
Hub	Electro-zinc Plated	As Cast Chromate Coated	PVC—Outside Electro-zinc Plated Chromate Coated-Inside
Locknuts	All Ferrous locknuts Electro-Zinc Plated and Chromate Coated		
Screws	All Electro-Zinc Plated & Chromate Coated		

Range

370 Series	1/2 in. thru 6 in. Conduit
370AL & 485 Series	1/2 in. thru 4 in. Conduit All hub threads—straight pipe All female threads—taper pipe (NPT)

Conformity

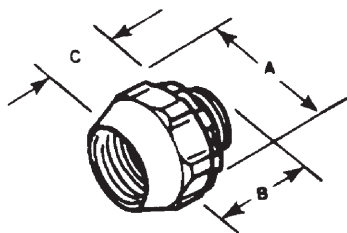
UL 514B
 CSA 22.2 No. 18.3
 ANSI C80.4
 NFPA 70-2008 (ANSI)
 NEMA FB-1
 JIC EGP1; JIC EMP 1
 Federal Specification W-F-408
 Federal Standard H-28 (Threads)

Rigid and Intermediate Metal Conduit Fittings



Nylon insulated

Aluminum, steel, or malleable iron (steel through 1 in.). With Neoprene "O" Ring provides a watertight threaded hub on enclosures. UL Listed 105°C.



Steel/Malleable Iron and Aluminum Hub Fittings†

Cat. No.		Size (in.)	Dimensions (in.)			Wall Thk. Max. (in.)
Stl. or M.I.	Alum.**		A	B	C	
370	370AL	1/2	1-3/8	1-5/16	3/4	5/16
371	371AL	3/4	1-5/8	1-3/8	7/8	
372	372AL	1	2-3/32	1-23/32	1-7/32	
373	373AL	1-1/4	2-9/16	2	1-11/32	
374	374AL	1-1/2	3-3/32	2	1-11/32	
375	375AL	2	3-5/8	1-31/32	1-11/32	
376	—	2-1/2	4-1/8	2-21/32	1-15/16	
377	—	3	5	2-31/32	2	1/2
378	—	3-1/2	5-9/16	3-1/8	2-1/8	
379-TB	—	4	6-9/16	3-1/8	2-1/8	
381-TB	—	5	8	4	2-3/16	
382-TB	—	6	9-3/16	4	2-3/16	

** Aluminum not available with insulated throat

† UL Listed raintight and CSA Certified watertight and dust tight

For Dura-Plate® finish, add prefix 040- to Cat. No. Consult your Regional Sales Office for details

Bullet® Hub Fittings with Bonding Locknut — Nylon Insulated



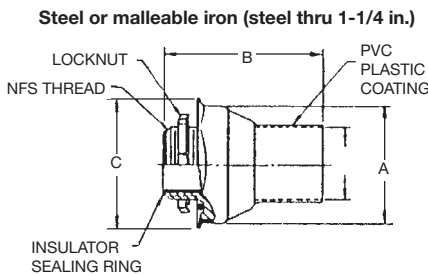
Cat. No.	Size (in.)	Description
401	1/2	
402	3/4	
403-TB	1	Available in steel or malleable iron
407	2-1/2	Supplied with 106 Series bonding nut.
408	3	Temperature rating: 105°C.
409	3-1/2	
410-TB	4	

CSA certified watertight and dust tight

Rigid and Intermediate Metal Conduit Fittings



PVC Coated Hub for Rigid Conduit



Cat. No.	Size (in.)	Dimensions (in.)		
		A	B	C
485	1/2	1-21/64	2-1/8	1-7/8
486	3/4	1-19/32	2-3/8	2-1/8
487	1	1-27/32	2-3/4	2-3/8
488	1-1/4	2-15/32	3-3/8	3-1/8
489	1-1/2	2-29/32	3-5/8	3-1/2
490	2	3-3/8	3-3/4	4
491	2-1/2	3-27/32	4	4-1/2
492	3	4-21/32	4-5/8	5-3/8
493	3-1/2	5-9/64	4-13/16	5-7/8
494	4	5-3/4	4-9/16	6-7/16

*485 Series are CSA Certified Watertight and Dusttight for Ordinary Locations

Spacing Chart for Bullet® Hubs



	Center to Center Spacing Conduit Sizes (in.)										Min. Space from Center of Bullet® Hub to Wall of Box (in.)	KO Diameter Min. (in.)
	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	3-1/2	4		
1/2	1-7/16	1-5/8	1-3/4	2-1/8	2-3/8	2-5/8	2-7/8	3-5/16	3-1/2	3-7/8	3/4	7/8
3/4	—	1-3/4	1-7/8	2-1/4	2-1/2	2-3/4	3	3-1/2	3-3/4	4-1/8	7/8	1-1/8
1	—	—	2	2-3/8	2-5/8	2-7/8	3-1/8	3-5/8	3-7/8	4-1/4	1-1/8	1-3/8
1-1/4	—	—	—	2-11/16	2-15/16	3-1/4	3-1/2	4	4-1/4	4-1/2	1-3/8	1-3/4
1-1/2	—	—	—	—	3-1/8	3-1/2	3-3/4	4-1/8	4-3/8	4-3/4	1-5/8	2
2	—	—	—	—	—	3-3/4	4	4-1/2	4-3/4	5	1-7/8	2-1/2
2-1/2	—	—	—	—	—	—	4-1/4	4-3/4	5	5-3/8	2-1/8	3
3	—	—	—	—	—	—	—	5-1/8	5-3/8	5-3/4	2-5/8	3-5/8
3-1/2	—	—	—	—	—	—	—	—	5-5/8	6	2-7/8	4-1/8
4	—	—	—	—	—	—	—	—	—	6-1/4	3-1/4	4-5/8

T&B® Hub Centerline Spacing Chart



Conduit Trade Size (in.)	1/2 (in.)	3/4 (in.)	1 (in.)	1-1/4 (in.)	1-1/2 (in.)	2 (in.)	2-1/2 (in.)	3 (in.)	3-1/2 (in.)	4 (in.)	5 (in.)	6 (in.)
1/2	1-9/16											
3/4	1-43/64	1-25/32										
1	1-27/32	1-61/64	2-1/8									
1-1/4	2-1/32	2-9/64	2-5/16	2-1/2								
1-1/2	2-7/32	2-21/64	2-1/2	2-11/16	2-7/8							
2	2-15/32	2-37/64	2-3/4	2-15/16	3-1/8	3-3/8						
2-1/2	2-23/32	2-53/64	3	3-3/16	3-3/8	3-5/8	3-7/8					
3	3-1/32	3-9/64	3-5/16	3-1/2	3-11/16	3-15/16	4-3/16	4-1/2				
3-1/2	3-11/32	3-21/64	3-5/8	3-13/16	4	4-1/4	4-1/2	4-13/16	5-1/8			
4	3-19/32	3	3-7/8	4-1/16	4-1/4	4-1/2	4-3/4	5-1/16	5-3/8	5-5/8		
5	4-9/32	3-25/64	4-9/16	4-3/4	4-15/16	5-3/16	5-7/16	5-3/4	6-1/16	6-5/16	7	
6	4-11/16	4-51/64	4-31/32	5-5/32	5-11/32	5-19/32	5-27/32	6-5/32	6-15/32	6-23/32	7-13/32	7-13/16
Nearest obstruction to center of hub												
	27/32	61/64	1-1/8	1-5/16	1-1/2	1-3/4	2	2-5/16	2-5/8	2-7/8	2-9/16	3-31/32

Rigid and Intermediate Metal Conduit Fittings

The T&B® Hub

Never before has a single hub fit like this one. Designed for unequalled performance. The innovative engineering of the T&B® Hub will, quite simply, raise your performance expectations for threaded hubs. The revolution in hub design is here, and the fate of our competition is sealed.

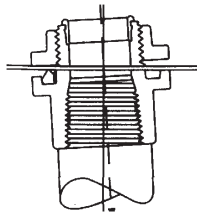
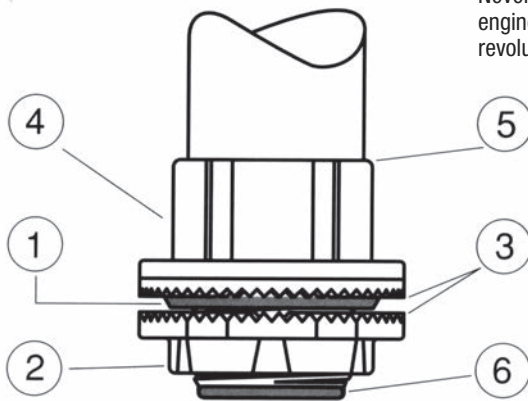


Figure 1

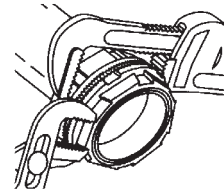


Figure 2

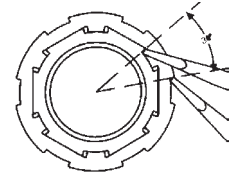
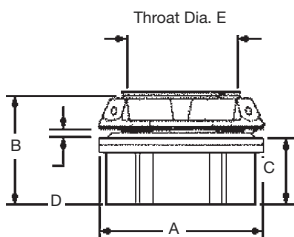


Figure 3

- 1. Sealing ring and groove** with innovative profile outperforms standard 'O' ring design. Sealing ring is captive before installation and resists buckling or slipping during installation. The seal groove is designed for optimum compression of the sealing ring. The sealing ring is designed to provide a complete 360° seal, even when the conduit is not perpendicular with the enclosure. (See Figure 1)
- 2. Locknut design** with peripheral slots and a hexagonal/angled spline spaced every 30° enables easy application of torque with wrench or hammer and screwdriver. (See Figures 2 & 3)
- 3. Sharper and deeper teeth** on locknut and body designed for a more penetrating bite for improved bonding to the enclosure.
- 4. Hexagonal / splined body design** for fast, easy installation with wrench or hammer and screwdriver.
- 5. Precision machined tapered threads** designed to create watertight union.
- 6. Insulated throat** molded from 105°C rated thermoplastic with a flammability rating of 94V-0.

T&B® Hub



Cat. No. Zinc	Cat. No. Aluminum	Trade Size (in.)	Dia. A (in.)	B (in.)	C (in.)	Max. Panel Thickness D (in.)	Throat Dia. E (in.)
H050-TB	H050A	1/2	1-7/16	1-9/16	7/8	3/16	19/32
H075-TB	H075A	3/4	1-21/32	1-19/32	29/32		25/32
H100-TB	H100A	1	2	1-13/16	1-1/16	1/4	1
H125-TB	H125A	1-1/4	2-3/8	1-7/8	1-1/16		1-5/16
H150-TB	H150A	1-1/2	2-3/4	1-7/8	1-1/16		1-17/32
H200-TB	H200A	2	3-1/4	1-15/16	1-5/32		1-31/32
H250-TB	H250A	2-1/2	3-3/4	2-9/16	1-9/16		2-13/32
H300-TB	H300A	3	4-3/8	2-21/32	1-19/32		2-31/32
H350-TB	H350A	3-1/2	5	2-23/32	1-5/8		3-13/32
H400-TB	H400A	4	5-1/2	2-23/32	1-5/8		3-7/8
H500-TB	H500A	5	6-7/8	3-1/32	1-15/16		4-15/16
H600-TB	H600A	6	7-11/16	3-5/32	2		6

Material – Hub and Locknut: zinc or copper free aluminum
 Insulating Throat: thermoplastic temp. rating 105°C, Flammability Rating: 94V-0
 Sealing Ring: Nitrile (BUNA "N")

For Chrome Plated Hubs add suffix CP (i.e. H050CP).

Meets NEMA sealing requirements for NEMA 3R, 4 & 13 enclosures.

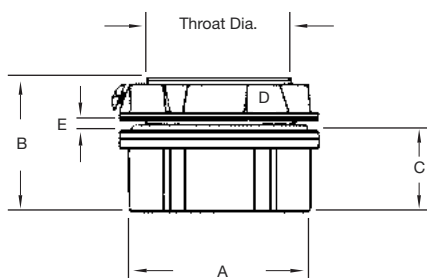
U.L. Listed and CSA Certified. CSA Certified use in hazardous locations Class I, Division 2, Class II, Groups E, F and G, Class III, Division 1, 2 and Type 4.

Chrome Plated Hubs (suffix-"CP") are rated NEMA 4X.

For Aluminum Hubs add suffix A (i.e. H050A).

Rigid and Intermediate Metal Conduit Fittings

T&B Grounding Hub



Cat. No. Zinc	Cat. No. Aluminum	Trade Size (in.)	Dimensions (in.)				
			A Dia.	B	C	D Max. Panel Thickness	E Throat Dia.
H050GR-C	H050GRA-C	1/2	17/16	19/16	7/8	3/16	19/32
H075GR-C	H075GRA-C	3/4	12-1/32	1-19/32	29/32	3/16	25/32
H100GR-C	H100GRA-C	1	2	1-13/16	1-1/16	1/4	1
H125GR-C	H125GRA-C	1-1/4	2-3/8	1-7/8	1-1/16	1/4	1-5/16
H150GR-C	H150GRA-C	1-1/2	2-3/4	1-7/8	1-1/16	1/4	1-17/32
H200GR-C	H200GRA-C	2	3-1/4	1-15/16	1-15/32	1/4	1-31/32
H250GR-C	H250GRA-C	2-1/2	3-3/4	2-9/16	1-9/16	1/4	2-13/32
H300GR-C	H300GRA-C	3	4-3/8	2-21/32	1-19/32	1/4	2-31/32
H350GR-C	H350GRA-C	3-1/2	5	2-23/32	1-5/8	1/4	3-13/32
H400GR-C	H400GRA-C	4	5-1/2	2-23/32	1-5/8	1/4	3-7/8
H500GR-C	H500GRA-C	5	6-7/8	3-1/32	1-15/16	1/4	4-15/16
H600GR-C	H600GRA-C	6	7-11/16	3-5/32	2	5/16	6

Material—Hub and Locknut: zinc or copper-free aluminum
 Insulating Throat: thermoplastic temp. rating 105°C;
 flammability rating: 94V-0
 Sealing Ring: Nitrile (BUNA "N")

For Chrome Plated Hubs add suffix **CP** (i.e. H050GRCP)

For 316 Stainless Steel Hubs add suffix **SST** (i.e. H050GRSST)

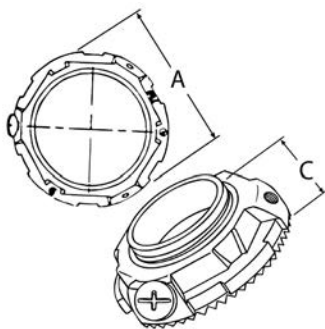
For PVC coating add suffix **PVC** (i.e. H050GRPVC-C)

Meets NEMA sealing requirements for NEMA 3R, 4 & 13 enclosures

UL Listed and CSA Certified

CSA approved for use in hazardous locations: Class I, Division 2, Class II, Divisions 1 & 2, Groups E, F & G, Class III, Division 1, 2 and Type 4.

T&B Grounding and Bonding Locknut



Grounding Locknut for Hubs

Cat. No. with Lay-In Lug	Cat. No. without Lay-In Lug	Trade Size (in.)	A Dia. (in.)	B Height (in.)	Ground Screw (in.)	Max. Conductor Size
L050GRL	L050GR-C	1/2	1-1/2	13/32	#10-32 x 1/4	#10
L075GRL	L075GR-C	3/4	1-11/16	13/32	#10-32 x 1/4	#10
L100GRL	L100GR-C	1	2	13/32	#10-32 x 1/4	#10
L125GRL	L125GR-C	1-1/4	2-3/8	15/32	1/4-20 x 1/4	#10
L150GRL	L150GR-C	1-1/2	2-3/4	15/32	1/4-20 x 5/16	#8
L200GRL	L200GR-C	2	3-1/4	15/32	1/4-20 x 5/16	#8
L250GRL	L250GR-C	2-1/2	3-3/4	11/16	1/4-20 x 5/16	#6
L300GRL	L300GR-C	3	4-3/8	23/32	1/4-20 x 5/16	#6
L350GRL	L350GR-C	3-1/2	5	23/32	1/4-20 x 5/16	#6
L400GRL	L400GR-C	4	5-1/2	23/32	1/4-20 x 5/16	#4
L500GRL	L500GR-C	5	6-5/8	23/32	3/8-16 x 3/8	#2

Material—Locknut: zinc or copper-free aluminum

For Aluminum Locknuts add suffix **A**. (i.e. L050GRA-C)

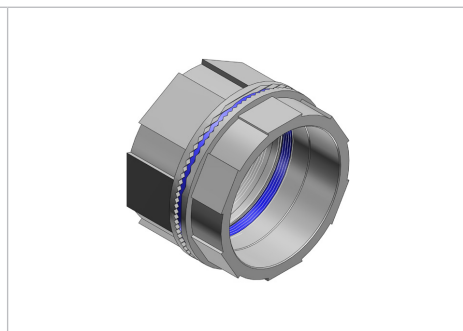
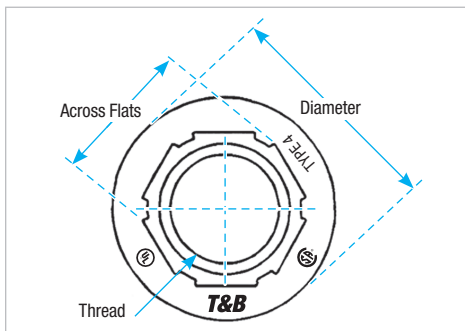
For Chrome Plated Locknuts add suffix **CP**. (i.e. L050GR-CP)

For 316 Stainless Steel Locknuts add suffix **SST**. (i.e. L050GRSST).

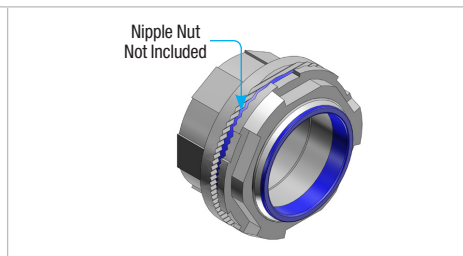
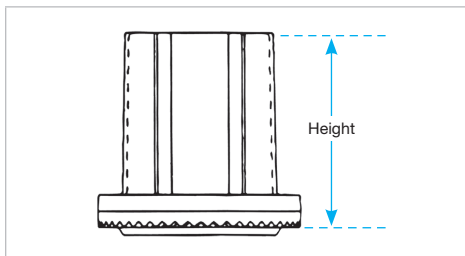


Rigid and Intermediate Metal Conduit Fittings

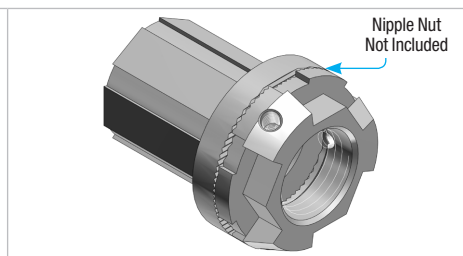
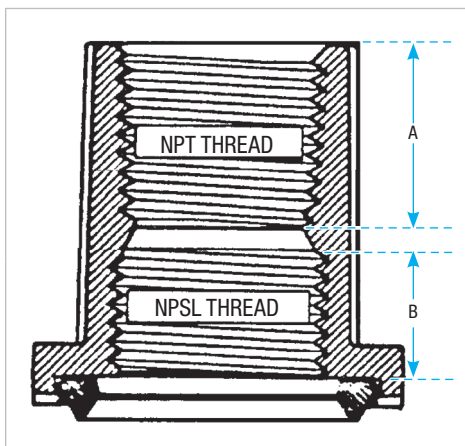
T&B Bulkhead Fittings



Bulkhead Fitting		
Cat. No. Zinc	Cat. No. Aluminum	Trade Size (in.)
H050BHD	H050BHDA	1/2
H075BHD	H075BHDA	3/4
H100BHD	H100BHDA	1
H125BHD	H125BHDA	1-1/4
H150BHD	H150BHDA	1-1/2
H200BHD	H200BHDA	2
H250BHD	H250BHDA	2-1/2
H300BHD	H300BHDA	3
H350BHD	H350BHDA	3-1/2
H400BHD	H400BHDA	4
H500BHD	H500BHDA	5
H600BHD	H600BHDA	6



Thru Bulkhead Fitting		
Cat. No. Zinc	Cat. No. Aluminum	Size (in.)
H050TBF	H050TBFA	1/2
H075TBF	H075TBFA	3/4
H100TBF	H100TBFA	1
H125TBF	H125TBFA	1-1/4
H150TBF	H150TBFA	1-1/2
H200TBF	H200TBFA	2

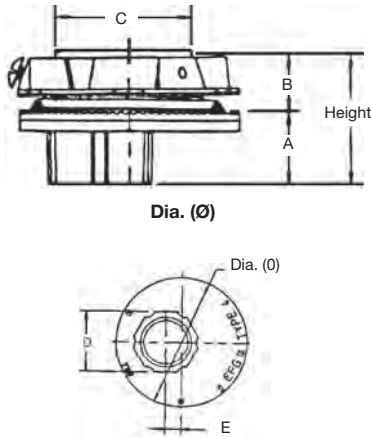


Thru Bulkhead Hub		
Cat. No. Zinc	Cat. No. Aluminum	Size (in.)
H050TBH	H050TBHA	1/2
H075TBH	H075TBHA	3/4
H100TBH	H100TBHA	1
H125TBH	H125TBHA	1-1/4
H150TBH	H150TBHA	1-1/2
H200TBH	H200TBHA	2

Trade Size (in.)	Thread (in.)	Height (in.)	Diameter (in.)	Across Flats (in.)	A (in.)	B (in.)
1/2	1/2-14	1-13/32	1-7/16	1	3/4	1/2
3/4	3/4-14	1-15/32	1-11/16	1-1/4	25/32	17/32
1	1-11-1/2	1-11/16	2	1-17/32	29/32	19/32
1/4	1-1/4-11-1/2	1-25/32	2-3/8	1-27/32	29/32	21/32
1-1/2	1-1/2-11-1/2	1-13/16	2-3/4	1-1/8	29/32	21/32
2	2-1-1/2	1-27/32	3-1/4	2-5/8	15/16	21/32
2-1/2	2-1/2-8	29/32	3-3/4	3-1/8	17/32	7/8
3	3-8	2-9/16	4-3/8	3-25/32	15/16	29/32
3-1/2	3-1/2-8	2-9/16	5	4-9/32	1-3/8	7/8
4	4-8	2-9/16	5-1/2	4-27/32	1-3/8	7/8
5	5-8	2-23/32	6-5/8	5-29/32	1-15/32	7/8
6	6-8	3	7-11/16	7-1/32	1-1/2	31/32

Material— Hub, Body and Locknut: zinc or copper-free aluminum
 Insulating Throat: thermoplastic temp. rating 105°C; Flammability rating: 94V-0
 Sealing Ring: Nitrile (BUNA "N")
 For Chrome Plated Bulkhead add suffix CP

Rigid and Intermediate Metal Conduit Fittings



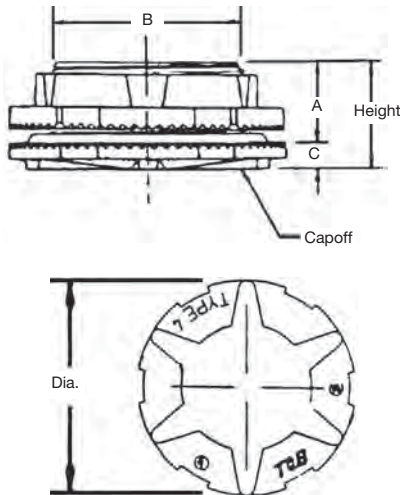
Offset Reducers



Cat. No. Zinc	Cat. No. Aluminum	Trade Size (in.)	Height (in.)	Diameter (in.)	Dimensions (in.)				
					A	B	C	D	E
H150-075ORGR-TB	H150-075ORGRA-TB	1-1/2-3/4	1-21/32	2-3/4	15/16	23/32	1-29/32	1-9/32	11/32
H150-100ORGR-TB	H150-100ORGRA-TB	1-1/2-1	1-25/32	2-3/4	1-1/16	23/32	1-29/32	1-9/16	7/32
H150-125ORGR-TB	H150-125ORGRA-TB	1-1/2-1-1/4	1-25/32	2-3/4	1-1/16	23/32	1-29/32	1-7/8	1/32
H250-200ORGR-TB	H250-200ORGRA-TB	2-1/2-2	2-1/8	3-3/4	1-3/16	15/16	2-29/32	2-21/32	3/32

Material— Offset Reducer and Locknut: zinc or copper-free aluminum
 Insulating Throat: thermoplastic temp. rating 105°C; Flammability rating 94V-0
 Sealing Ring: Nitrile (BUNA "N")
 For Chrome Plated Offset Reducer add suffix **CP**. (i.e. H150-125ORGRCP-TB)

Capoffs



Cat. No. Zinc	Cat. No. Aluminum	Trade Size (in.)	Height (in.)	Diameter (in.)	Dimensions (in.)		
					A	B	C
H050CAP	H050CAPA	1/2	1-13/32	1-7/16	19/32	27/32	3/16
H075CAP	H075CAPA	3/4	1-15/32	1-11/16	19/32	1-1/16	3/16
H100CAP	H100CAPA	1	1-11/16	2	11/16	1-5/16	1/4
H125CAP	H125CAPA	1-1/4	1-25/32	2-3/8	23/32	1-21/32	1/4
H150CAP	H150CAPA	1-1/2	1-13/16	2-3/4	23/32	1-29/32	1/4
H200CAP	H200CAPA	2	1-27/32	3-1/4	23/32	2-3/8	1/4
H250CAP	H250CAPA	2-1/2	2-9/32	3-3/4	7/8	2-29/32	1/4
H300CAP	H300CAPA	3	2-9/16	4-3/8	7/8	3-1/32	11/32
H350CAP	H350CAPA	3-1/2	2-9/16	5	29/32	4-1/32	11/32
H400CAP	H400CAPA	4	2-9/16	5-1/2	29/32	4-1/2	11/32
H500CAP	H500CAPA	5	2-23/32	6-5/8	29/32	5-9/16	11/32
H600CAP	H600CAPA	6	3	7-5/8	31/32	6-5/8	11/32

Material— Capoff and Locknut: zinc or copper-free aluminum
 Insulating Throat: thermoplastic temp. rating 105°C; flammability rating 94V-0
 Sealing Ring: Nitrile (BUNA "N")
 For Chrome Plated Capoff add suffix **CP**. (i.e. H050CAPCP)

Rigid and Intermediate Metal Conduit Fittings

Threadless Fittings/Couplings for Threadless Rigid Metal Conduit and Intermediate Metal Conduit



8123 Series



8130 Series



8120 Series

Application

- To connect and effectively bond threadless rigid metal conduit/intermediate metal conduit to a box or enclosure, or to couple ends of threadless conduit

Features

- Steel/Malleable Iron Construction
- Case hardened ring bites into conduit for high quality continuity and grip
- Nylon insulator firmly secured in place protects conductors and reduces wire pulling effort by as much as 50%; prevents thread damage in handling
- Case hardened steel locknut or malleable iron locknut designed to provide a positive bond
- Suitable for concrete tight application
- Raintight application
- Capable of carrying ground fault currents up to 10,000 amps RMS (1/2 in. through 1-1/2 in. size) and 20,000 amps RMS (2 in. and above sizes) duration of current 3 cycles

Standard Material

- Nut, Gland** 1/2 in. to 1 in. Steel
1-1/4 in. to 4 in. Malleable Iron
- Body** All Malleable Iron
- Ring** Steel (case hardened)
- Insulator** Nylon
- Locknut** 1/2 in. thru 2 in. Steel (hardened) 2 in. thru 4 in. Malleable Iron

Standard Finish

Electro Zinc Plated & Chromate Coated

Range

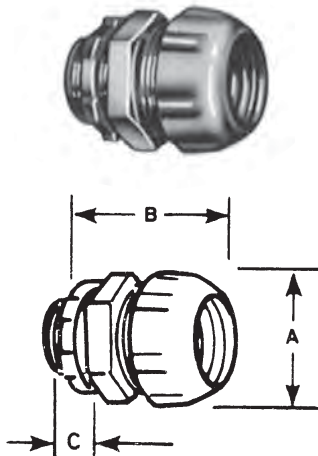
- 8123 & 8120 Series** 1/2 in. through 4 in. Size Conduit
- 8130 Series** 1/2 in. and 3/4 in. Size Conduit
- All hub threads** Straight Pipe (NPS)

Conformity

- UL 514B
- CSA C22.2 No. 18.3
- ANSI C80.4
- NFPA 70-2008 (ANSI)
- NEMA FB-1
- Federal Specification W-F-408
- Federal Standard H-28 (Threads)

Rigid and Intermediate Metal Conduit Fittings

Nylon Insulated Threadless Fittings



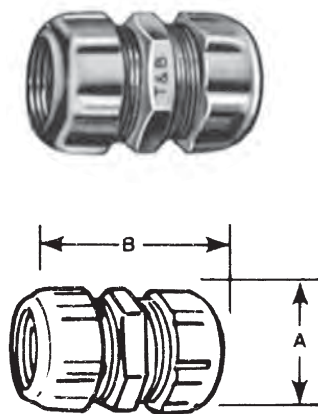
A split steel ring with diagonal serrations grips the conduit and bites into it for positive ground. Makes a permanent connection and eliminates the need for cutting a thread on the conduit. Insulation helps to guarantee continuity of service with protection of the conductor at the critical point—the fitting bushing. Malleable iron construction.



Cat. No.		Conduit Size (in.)	Dimensions (in.)		
Nylon Insul.	Non-Insul.		A	B	C
8123	8121	1/2	1-11/32	1-15/16	3/4
8223	8221	3/4	1-5/8	2	3/4
8323	8321	1	1-7/8	2-7/16	7/8
8423	8421	1-1/4	2-3/8	2-9/16	11/16
8523	8521	1-1/2	2-5/8	2-3/4	3/4
8623	8621	2	3-1/4	2-15/16	27/32
8723-TB	8721	2-1/2	3-15/16	3-15/16	1-1/8
8823-TB	8821	3	4-11/16	4-1/8	1-7/32
8853	8851	3-1/2	5-3/16	4-1/4	1-1/8
8973	8971	4	5-11/16	5	1-1/8

For Dura-Plate® finish, add prefix 040- to Cat. No. Consult your Regional Sales Office for details

Threadless Couplings



Eliminate conduit threading. When tightened with a wrench they make a UL Listed and CSA Certified concrete-tight connection

Malleable iron



Cat. No.	Size (in.)	Dimensions (in.)	
		A	B
8120	1/2	1-9/32	2
8220	3/4	1-19/32	2-5/16
8320	1	1-7/8	2-11/16
8420	1-1/4	2-3/8	2-13/16
8520	1-1/2	2-5/8	3-5/8
8620	2	3-1/4	3-13/16
8720	2-1/2	3-15/16	5-3/8
8820	3	4-11/16	5-1/2
8850	3-1/2	5-3/16	5-1/2
8970	4	5-11/16	5-1/2

For Dura-Plate® finish, add prefix 040- to Cat. No. Consult your Regional Sales Office for details

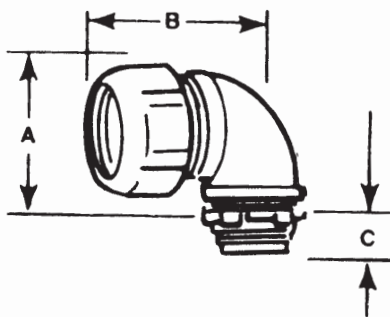
Rigid and Intermediate Metal Conduit Fittings

Threadless Short Elbows—Nylon Insulated



Cat. No.	Size (in.)	Dimensions (in.)		
		A	B	C
8130	1/2	1-11/32	1-1/2	1/2
8131	3/4	1-5/8	1-3/4	9/16
8132	1	1-7/8	1-15/16	11/16
8134	1-1/2	2-23/32	3-1/8	13/16

For Dura-Plate® finish, add prefix 040- to Cat. No. Consult your Regional Sales Office for details



Ideal for entering enclosure or conduit body at right angles. Eliminates need to thread conduit. As with straight couplings, this fitting makes a concrete-tight connection. Malleable iron.

Rigid and Intermediate Metal Conduit Fittings

Specifications – Set-Screw Fitting/Coupling for Threadless Rigid Metal Conduit and Intermediate Metal Conduit



8125 Series



8124 Series

Application

- To connect and effectively bond threadless rigid metal conduit or intermediate metal conduit to a box or enclosure or to couple ends of threadless conduit

Features

- Thickwall steel or malleable iron body
- Hardened hex head cup point screw to provide high quality bond
- Captive screw, will not vibrate loose
- Nylon insulated throat meets and exceeds all codes requirements for bushing:
 - (1) Prevents thinning of insulation
 - (2) Reduces installation effort
 - (3) Prevents first thread damage
- Coupling provided with positive center stop
- Suitable for concrete-tight application
- Capable of carrying ground fault currents up to 10,000 amps RMS (1/2 through 1-1/2 in. size) and 20,000 amps RMS (2 in. and above sizes)

Standard Material

Body	1/2 in. thru 2 in. Steel 2-1/2 in. thru 4 in. Malleable Iron
Locknut	1/2 in. thru 2 in. Steel (hardened) 2-1/2 in. thru 4 in. Malleable Iron
Screw	Steel (hardened)
Insulator	Nylon

Standard Finish

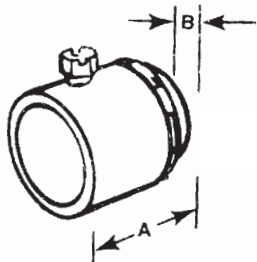
Electro Zinc Plated & Chromate Coated

Conformity

UL 514B
 CSA C22.2 No. 18.3
 ANSI C80.4
 NFPA 70-2008 (ANSI)
 NEMA FB-1
 Federal Specification W-F-408
 Federal Standard H-28 (Threads)

Rigid and Intermediate Metal Conduit Fittings

Insulated Set-Screw Fitting

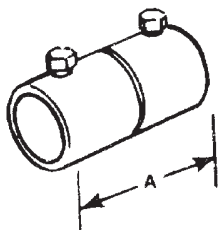


Eliminate conduit threading with these set screw fittings. Captive hex head screws tighten down onto conduit for positive holding strength and ground. The fittings are furnished with insulated throats reducing wire pulling effort by as much as 50%. Approved concrete-tight.

Cat. No.	Conduit Size (in.)	Dimensions (in.)	
		A	B
8125	1/2	1-3/8	13/32
8225	3/4	1-1/2	7/16
8325	1	1-13/16	35/65
8425	1-1/4	2	5/8
8525-TB	1-1/2	2-5/16	5/8
8625	2	2-7/16	11/16
8725-TB	2-1/2	3-3/8	1
8825	3	3-7/16	1
8855	3-1/2	3-7/8	1-1/16
8975	4	4-3/16	1-1/8

Sizes 1/2 in.-2 in. made of steel. Sizes 2-1/2 in.-4 in. are malleable iron
For Dura-Plate® finish, add prefix 040- to Cat. No. Consult your Regional Sales Office for details

Set Screw Coupling



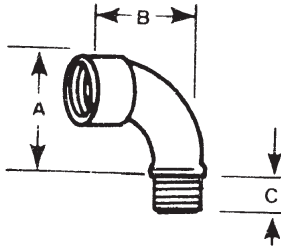
Eliminate the need for threading conduit ends when joining rigid conduit with these set screw couplings. Captive hex head screws provide positive holding strength and ground continuity. Approved concrete-tight.

Cat. No.	Conduit Size (in.)	Dimensions (in.)
		A
8124	1/2	2-1/2
8224-TB	3/4	2-11/16
8324-TB	1	2-27/32
8424	1-1/4	3
8524	1-1/2	3-3/8
8624	2	3-5/8
8724-TB	2-1/2	3-7/8
8824-TB	3	4-1/4
8974	4	5-3/8

Sizes 1/2 in.-2 in. made of steel; sizes 2-1/2 in.-4 in. are malleable iron
For Dura-Plate® finish, add prefix 040- to Cat. No. Consult your Regional Sales Office for details.

Rigid and Intermediate Metal Conduit Fittings

Bushed Elbows



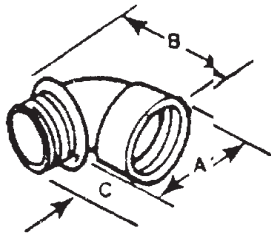
Cat. No.	Size (in.)	Dimensions (in.)		
		A	B	C
460TB	1/2	1-13/16	1-1/8	5/8
461TB	3/4	2-1/4	1-1/2	9/16
462	1	2-23/32	1-23/32	11/16
463	1-1/4	3-1/8	2-1/16	25/32

For Dura-Plate® finish, add prefix 040- to Cat. No. Consult your Regional Sales Office for details

The noninsulated elbow has smoothly rounded shoulders to protect conductor insulation

Malleable iron

Short Elbows—Nylon Insulated



Cat. No.	Size (in.)	Dimensions (in.)		
		A	B	C
4290	1/2	1-7/32	1-1/4	1/2
4291	3/4	1-7/16	1-5/16	9/16
4292	1	1-23/32	1-9/16	11/16
4293	1-1/4	2-7/32	2-1/16	13/16
4294	1-1/2	2-15/32	2-3/16	13/16
4295	2	3	2-9/16	13/16

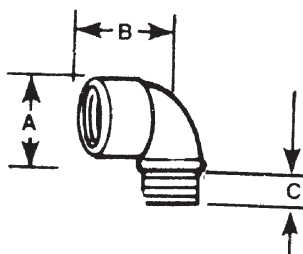
For Dura-Plate® finish, add prefix 040- to Cat. No. Consult your Regional Sales Office for details

Not UL Listed

The integral insulation of the insulated elbow is a guarantee that the bushing of every fitting will be smooth

Malleable iron

Short Elbows



Cat. No.	Size (in.)	Dimensions (in.)		
		A	B	C
4250	1/2	1-5/16	1-1/4	7/16
4251	3/4	1-17/32	1-5/16	1/2
4252	1	1-13/16	1-9/16	5/8
4253	1-1/4	2-9/32	2-1/16	11/16
4254	1-1/2	2-9/16	2-3/16	11/16
4255	2	3-3/32	2-9/16	11/16

For Dura-Plate® finish, add prefix 040- to Cat. No. Consult your Regional Sales Office for details

When an insulated elbow is not desired, the non-insulated short elbow should be used

Malleable iron

Rigid and Intermediate Metal Conduit Fittings

Threaded Couplings (ERICKSON®) Couplings for Threaded Rigid Metal Conduit and Intermediate Metal Conduit



674 Series
675AL Series

Application

- To couple and effectively bond threaded ends of rigid metal conduit/intermediate metal conduit where neither length of conduit can be rotated

Features

- Malleable Iron/Steel/Copper-free Aluminum Construction
- Free fitting threads ensure easy assembly.
- Permits conduit coupling without rotating either conduit
- Provides rigid in-line coupling with high quality grounding; will not loosen under vibration
- Suitable for concrete-tight application.
- Capable of carrying ground fault currents up to 10,000 amps RMS (1/2 in. through 1-1/2 in. size) and up to 20,000 amps RMS (2 in. and above) (duration of fault current 3 cycles) (674 Series tested)

Standard Material

674 Series

Bushing and Body	Malleable Iron
Ring	Steel up to 2 in. or Malleable Iron

675AL Series

Bushing and Body	Aluminum
Ring	Aluminum

Standard Finish

674 Series: Electro Zinc Plated & Chromate Coated

675AL Series: Degreased

Range

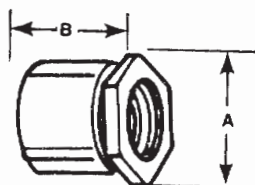
- 674 Series: 3/8 in. thru 6 in. Conduit
- 675AL Series: 1/2 in. thru 6 in. Conduit
- All straight pipe threads (NPS)

Conformity

UL 514B
CSA C22.2 No. 18.3
NEMA FB1
ANSI C80.4
NFPA 70-2008 (ANSI)
Federal Specification W-F-408
Federal Standard H-28 (Threads)



ERICKSON® Couplings



With an Erickson® coupling, a conduit run may be completed when neither conduit can be turned. A conduit run may also be broken without taking down the whole run. Conduit joined with Erickson® Couplings is rigid and in line and vibration will not loosen the connections.

Cat. No.	Mal. Iron		Size (in.)	Dimensions (in.)	
		Alum.*		A	B
674		—	3/8	1-1/8	1-1/8
675		675AL	1/2	1-15/32	1-1/4
676		676AL	3/4	1-9/16	1-13/32
677		677AL	1	1-29/32	1-5/8
678		678AL	1-1/4	2-3/8	1-13/16
679		679AL	1-1/2	2-5/8	1-31/32
680-TB		680AL	2	3-7/32	2-7/32
681		681AL	2-1/2	3-3/32	2-11/16
682		682AL	3	4-7/16	2-29/32
683		683AL	3-1/2	5	3
684		684AL	4	5-1/2	3-3/16
685		685AL†	4-1/2	6-1/4	3-15/32
686		686AL	5	6-25/32	3-3/4
687		687AL	6	8	4-1/32

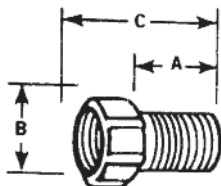
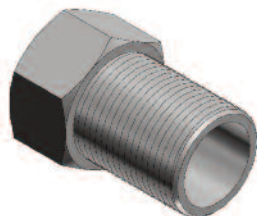
* Copper-free Aluminum (less than 0.4% Copper)

UL Listed and CSA Certified concrete-tight

† Not CSA Certified

Rigid and Intermediate Metal Conduit Fittings

Panel Fitting Extensions

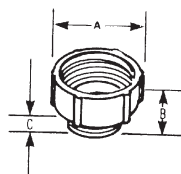
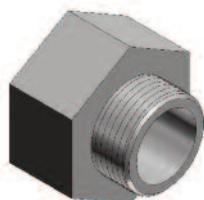


Ideal when longer thread length is needed. Will combine with any fitting having a male thread. Male thread of panel fitting extension is 1 in. long.

Malleable iron

Cat. No.	Size (in.)	Dimensions (in.)		
		A	B	C
1440	1/2	1-1/4	1-3/16	1-7/8
1441	3/4	1-1/4	1-13/32	1-15/16
1442	1	1-3/16	1-21/32	1-15/16
1443	1-1/4	1-1/4	2-1/8	2

Male Enlargers

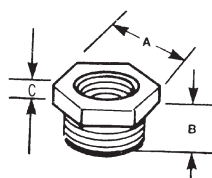
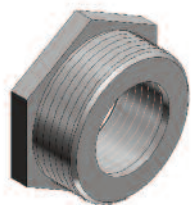


Adapt an outlet hole to the next larger size of conduit. Rough ends of conduit carefully covered by built-in bushing.

Malleable iron

Cat. No.	Size (in.)	Dimensions (in.)		
		A	B	C
1245	1/2 to 3/4	1-1/4	1-5/32	1/2
1246	3/4 to 1	1-17/32	1-9/32	15/32
1244	1 to 1-1/4	1-7/8	1-7/16	17/32
1247	1-1/4 to 1-1/2	2-3/16	1-15/32	19/32

Female Reducers



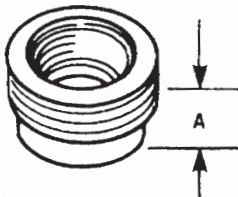
Adapt any outlet to the next smaller size of conduit. Hex shoulder makes wrench tightening convenient.

Malleable iron

Cat. No.	Size (in.)	Dimensions (in.)		
		A	B	C
1250-TB	3/4 to 1/2	1-1/8	5/8	3/16
1261	1 to 1/2	1-7/16	1-7/16	3/16
1251	1 to 3/4	1-3/8	11/16	3/16
1262	1-1/4 to 1/2	1-13/16	21/32	3/16
1263	1-1/4 to 3/4	1-13/16	23/32	3/16
1252	1-1/4 to 1	1-3/4	25/32	7/32
1253	1-1/2 to 1-1/4	2	13/16	1/4
1254	2 to 1-1/2	2-3/8	1-3/16	9/32
1255	2-1/2 to 2	3	1-1/4	3/8
1256	3 to 2-1/2	3-5/8	1-1/2	1/2
1257	3-1/2 to 3	4-1/8	1-9/16	1/2
1258	4 to 3-1/2	4-5/8	1-3/16	1/2

Rigid and Intermediate Metal Conduit Fittings

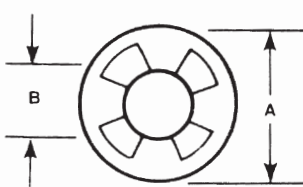
Threaded Reducers



For reducing the threaded opening in conduit bodies or any female threaded fitting. Smooth, built-in bushing completely covers rough ends of conduit. Iron or steel construction. Steel from 600-TB thru 606-TB, also 614 & 615.

Cat. No.		Size (in)	Dimensions (in.)	
Stl. or M.I.	Alum.		A	B
600-TB	600AL-TB	1/2 to 3/8	5/8	
601-TB	601AL-TB	3/4 to 1/2	19/32	
602-TB	602AL-TB	1 to 1/2	19/32	
603-TB	603AL-TB	1 to 3/4	19/32	
604-TB	604AL-TB	1-1/4 to 1/2	19/32	
605-TB	605AL	1-1/4 to 3/4	19/32	
606-TB	606AL	1-1/4 to 1	11/16	
607	607AL	1-1/2 to 1/2	15/16	
608	608AL	1-1/2 to 3/4	15/16	
609	609AL	1-1/2 to 1	1-3/32	
610	610AL	1-1/2 to 1-1/4	27/32	
611-TB	611AL	2 to 1/2	23/32	
612	612AL	2 to 3/4	1-1/16	
613	613AL	2 to 1	1-1/16	
614-TB	614AL	2 to 1-1/4	1-1/16	
615-TB	615AL	2 to 1-1/2	27/32	

Reducing Washers



Washers reduce knockout hole in outlet box. Newly designed of galvanized steel. These washers, used in pairs, interlock and form a rib which centers the washers and conduit in the knockout.

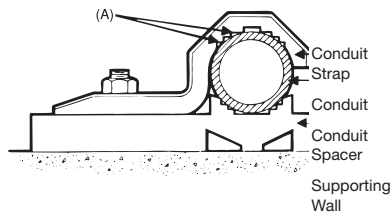
Cat. No.	Size (in.)	Dimensions (in.)	
		A	B
3700	3/4 to 3/8	1-3/8	45/64
3701	3/4 to 1/2		7/8
3702	1 to 3/8	1-5/8	45/64
3703	1 to 1/2		7/8
3704	1 to 3/4	1-3/32	
3705-TB	1-1/4 to 3/8	2	45/64
3706	1-1/4 to 1/2		7/8
3707	1-1/4 to 3/4	1-3/32	
3708	1-1/4 to 1	1-23/64	
3709	1-1/2 to 3/8	2-1/4	45/64
3710	1-1/2 to 1/2		7/8
3711	1-1/2 to 3/4	1-3/32	
3712	1-1/2 to 1	1-23/64	
3713	1-1/2 to 1-1/4	1-23/32	
3714	2 to 1/2	2-3/4	7/8
3715-TB	2 to 3/4		1-3/32
3716	2 to 1	1-23/64	
3717	2 to 1-1/4	1-23/32	
3718	2 to 1-1/2	1-31/32	

Rigid and Intermediate Metal Conduit Fittings

Conduit Straps for Threaded Rigid Metal Conduit and Intermediate Metal Conduit



1275 Series
1276AL Series



Application

- To support and securely fasten rigid metal conduit and intermediate metal to the supporting surface

Features

- Rugged malleable iron/copper-free aluminum construction—snugly fits on the conduit
- Designed to prevent accumulation of moisture and start of corrosion on vertical run of conduit (A)

Standard Material

1275 Series

Malleable Iron

1976AL Series

All copper-free aluminum

Standard Finish

1275 Series

Hot Dipped Galvanized

1276AL Series

As Cast

Range

- 1275 Series
3/8 in. through 6 in. conduit
- 1276AL Series
1/2 in. through 6 in. conduit

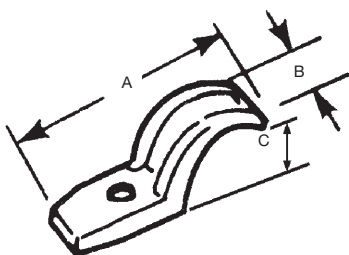
Conformity

CSA C22.2 No. 18.3

ANSI C80.4

NFPA 70-2008 (ANSI)

Pipe Straps—Malleable Iron or Aluminum



Designed to fit each size of conduit snugly. High reinforcing ribs on each side increase strength, reduce weight. Hot-dipped galvanized finish.

Cat. No.		Size (in.)	Dimensions (in.)			Screw Size (in.)
Mal. Iron	Alum.		A	B	C	
1275†	1275AL	3/8	1-15/16	19/32	1/4	1/4
1276†	1276AL†	1/2	2-11/32	23/32	1/2	
1277†	1277AL†	3/4	2-11/16	21/32	5/8	
1278†	1278AL†	1	3-3/32	11/16	13/16	
1279†	1279AL†	1-1/4	4-1/8	13/16	29/32	5/16
1280†	1280AL	1-1/2	4-1/2	15/16	1-17/32	3/8
1281	1281AL	2	5-3/16	1-1/8	1-1/4	7/16
1282*	1282AL	2-1/2	5-15/16	1-1/2	1-3/4	1/2
1283*	1283AL	3	6-11/16	1-5/8	2-3/16	
1284	1284AL	3-1/2	7-19/32	1-3/4	2-3/4	5/8
1285*	1285AL	4	8-5/16	1-7/8	2-13/16	
1286**	1286AL**	4-1/2	9-3/16	1-15/16	2-15/16	
1287	1287AL	5	9-15/16	2	3-1/4	
1288	1288AL	6	11-1/2	2-7/16	4-1/8	

* May be used with EMT of same size

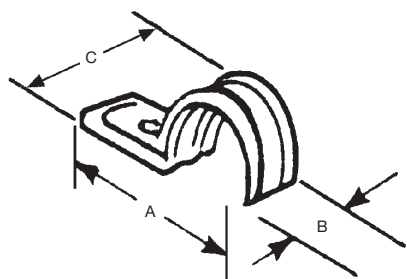
† Not snap on type

UL not applicable

** Not CSA Certified

Rigid and Intermediate Metal Conduit Fittings

Pipe Straps—Steel



Elongated bolt hole makes alignment easy, even when holes in mounting surface are off center. Snap on features. Steel. Zinc plated.

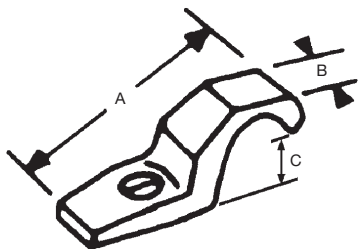
Cat. No.	Conduit Size (in.)	Dimensions (in.)			Screw Size (in.)
		A	B	C	
1210C†	3/8	1-15/32	3/4	11/16	1/4
1211C	1/2	2	3/4	15/16	
1212C	3/4	2-5/16	3/4	1"	
1213C	1	3-13/16	3/4	1-17/64	
1214TB*	1-1/4	2-31/32	1-9/16	1-9/16	3/8
1215TB*	1-1/2	3-23/32	1-13/16	1-13/16	
1216TB*	2	4-7/16	2-5/16	2-5/16	

† Not snap on type

UL not applicable

* Not CSA Certified

Corrosion Resistant PVC Coated Rigid Conduit Straps



Malleable iron. Designed to fit each size of conduit snugly. High reinforcing ribs on each side increase strength, reduce weight.

Cat. No.	Size (in.)	Bolt Size (in.)	Dimensions (in.)		
			A	B	C
1275CR	3/8	1/4	2	21/32	1/4
1276CR	1/2		2-13/32	25/32	1/2
1277CR	3/4		2-3/4	23/32	5/8
1278CR	1		3-5/32	3/4	13/16
1279CR	1-1/4	3/8	4-5/32	25/32	7/8
1280CR	1-1/2		4-9/16	1	1-7/32
1281CR	2		5-1/4	1-3/16	1-1/4

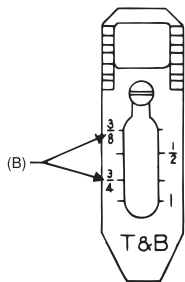
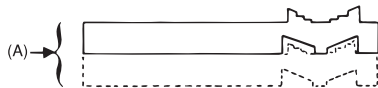
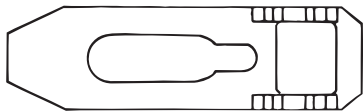
UL not applicable

Rigid and Intermediate Metal Conduit Fittings

Conduit Spacers for Rigid Metal Conduit, Intermediate Metal Conduit and Electrical Metal Tubing



1350 Series
1350AL Series



Application

- Provides mounting surface for conduit where installation requires air space between conduit and supporting surface

Features

- Prevents conduit rusting from wall condensation
- Spacers can be stacked one atop the other facilitating installation and eliminating expensive conduit off setting (A)
- Designed to cover wide range; marked with accurate size marking for proper positioning (B)

Standard Material

1350 Series

Malleable Iron

1350AL Series

Copper-free aluminum

Standard Finish

1350 Series

Hot Dipped Galvanized

1350AL Series

As Cast

Range

1/2 in. through 6 in. conduit

Conformity

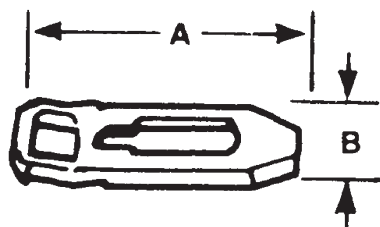
CSA C22.2 No. 18.3

ANSI C80.4

NFPA 70-2008 (ANSI)

Rigid and Intermediate Metal Conduit Fittings

Pipe Spacers



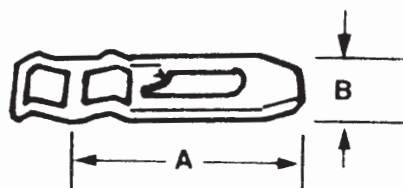
Used with T&B conduit straps to permit space between conduit and mounting surface. Eliminates need for costly offset-bending conduit and possible corrosive moisture traps when conduit is mounted directly to a surface. Hot-dipped galvanized finish, premountable and stackable to eliminate offsetting.

Cat. No.		Size (in.)	Screw Size	Dimensions (in.)	
Mal. Iron	Alum.			A	B
1350	1350AL	3/8, 1/2, 3/4, 1	#7	3	7/8
1351	1351AL	1-1/4-1-1/2-2	#12	5	1-3/16
1352	1352AL	2-1/2-3	#12	9-9/16	1-3/4
1353	1353AL	3-1/2-4	#14	7-9/16	2
1354	1354AL	4-1/2-5-6	#16	10-9/16	2-9/16

Conforms to CEC Rule 12-012 (5)

UL not applicable

Pipe Spacers—PVC Coated



Corrosion resistant PVC coated malleable iron. Pre-mountable, stackable to eliminate offsetting.

Spacers can be stacked for offsets on wall or into outlet box. Prevents conduit rusting from wall condensation. Eliminates offsetting of conduit.

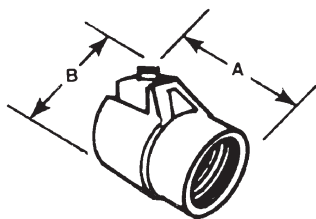
Cat. No.	Conduit Size (in.)	Screw Size	Dimensions (in.)	
			A	B
1350CR	1/2-3/4-1	#7	3	7/8
1351CR	1-1/4-1-1/2-2	#12	5	3/8
1352CR	2-1/2-3	#12	6-9/16	1-3/4
1353CR	3-1/2-4	#14	7-9/16	2
1354CR	4-1/2-5-6	#16	10-9/16	2-9/16

Conforms to CEC Rule 12-012 (5)

UL not applicable

Rigid and Intermediate Metal Conduit Fittings

Tite-Bite® Combination Couplings Armoured Cable for Threaded Rigid



Cat. No.	Size (in.)	Dimensions (in.)	
		A	B
440-C	1/2	1-5/8	1-27/32
441	3/4	1-3/4	2-1/8
442	1	2	2-17/32

A one-piece fitting that couples armoured cable or flexible conduit to threaded rigid conduit. Tite-Bite® wedge holds conduit securely with a double grip. With a Chase® nipple, this fitting will connect flexible conduit to outlet boxes, allowing more wiring space in the box than the usual fitting. Malleable iron.

Beam Clamps Adjustable



Includes bolts
Steel

Cat. No.	Description
700TB	Fits Flange 2-3/4 in. - 7-3/8 in.
703*	Special Bolt and 3 Nuts

* Not CSA Certified

Conduit Supports

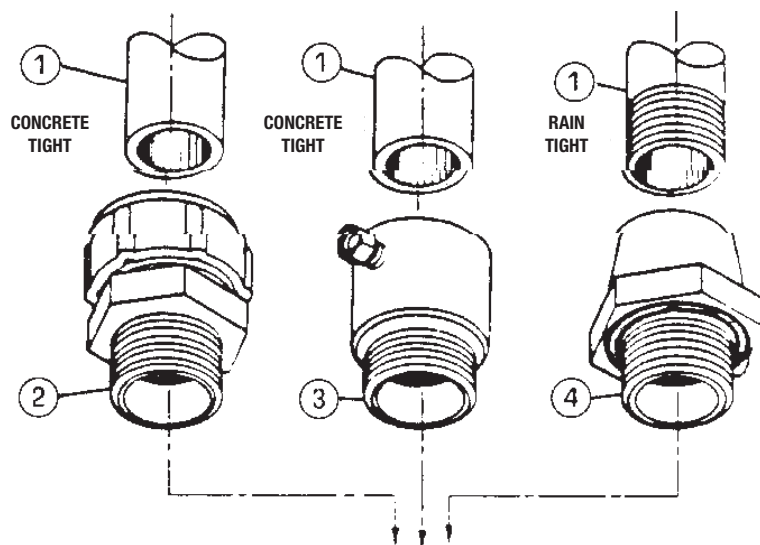


Cat. No.	Size (in.)
690TB	1/2
691TB	3/4
692TB	1
693TB	1-1/4

These supports will fit any flange, tapered or straight up to 5/8 in. thick. The broad hook holds the conduit at any desired angle. Holds standard rigid conduit, EMT, or I.M.C. Malleable iron.

Rigid and Intermediate Metal Conduit Fittings

Methods of Bonding and Grounding



Case 1: Where threaded or threadless conduit terminates into a threadless opening in a sheet metal box or enclosure with or without concentric or eccentric knockouts.

Threadless opening in a sheet metal box or enclosure

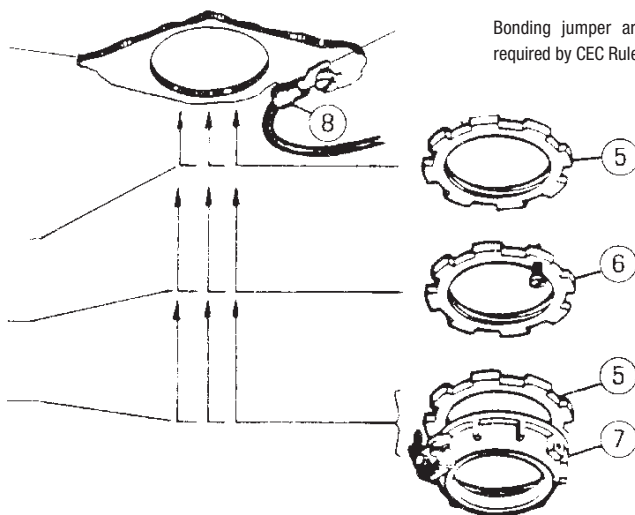
Bonding jumper around concentric or eccentric rings required by CEC Rule 10-614

Method of Bonding

For 120/208 volts or 120/240 volts circuits provided no unpunched rings remain around the knockout

For under or over 250 volts circuits, service equipment and hazardous locations (where applicable) provided no unpunched rings remain around the knockout

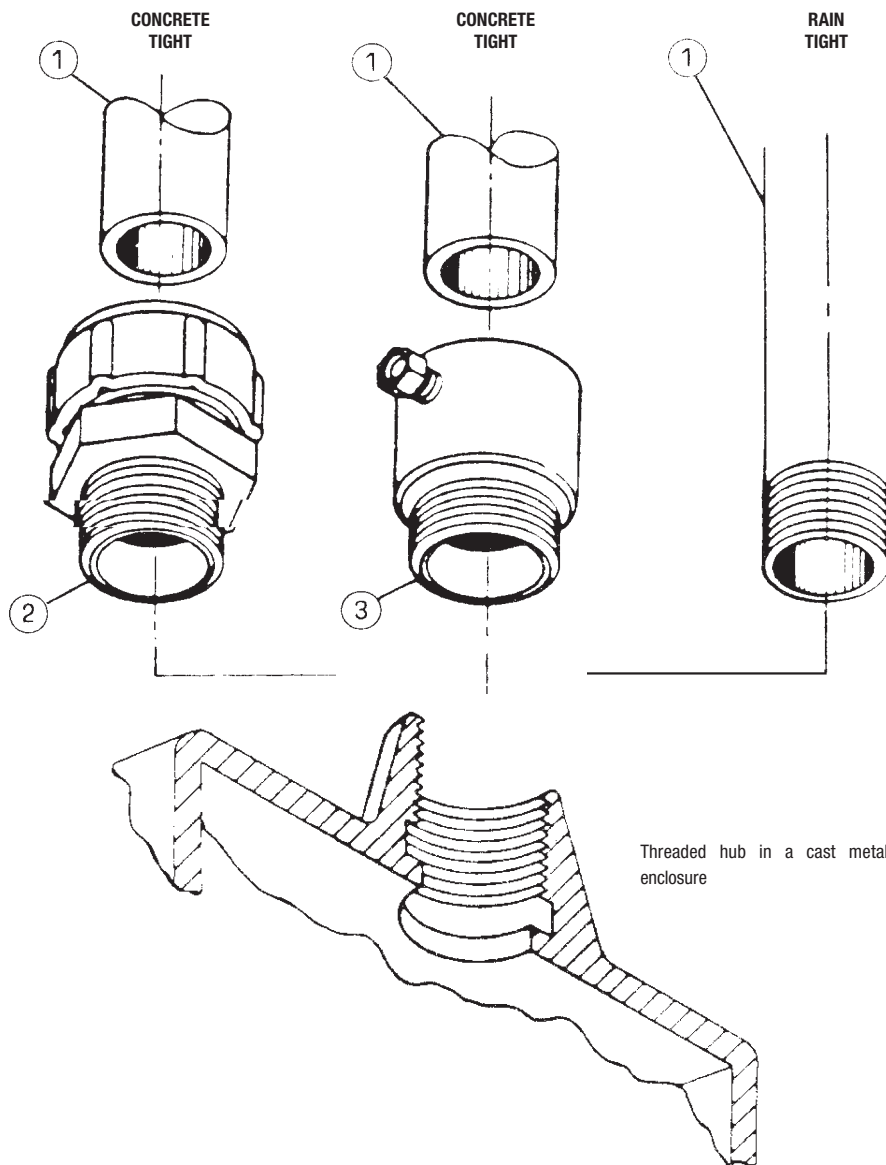
For under or over 250 volts circuits, service equipment and hazardous locations (where applicable) with or without unpunched rings around the knockout



- (1) Threaded or threadless rigid metal conduit or intermediate metal conduit
- (2) T&B Series 8123 or 8124 Threadless Fittings
- (3) T&B Series 8125 Set Screw Fitting
- (4) T&B Series 370 or H050-TB Sealing Hub (Bullet® Hubs)
- (5) T&B Series 140 Locknuts
- (6) T&B Series 106 Bonding Locknut
- (7) T&B Series 3870 Bonding & Grounding Bushing
- (8) T&B Sta-Kon® or Colour-Keyed® lug

Rigid and Intermediate Metal Conduit Fittings

Methods of Bonding and Grounding (cont'd)



Case 2: Where threaded or threadless conduit terminates into a threaded hub in a cast metal enclosure.

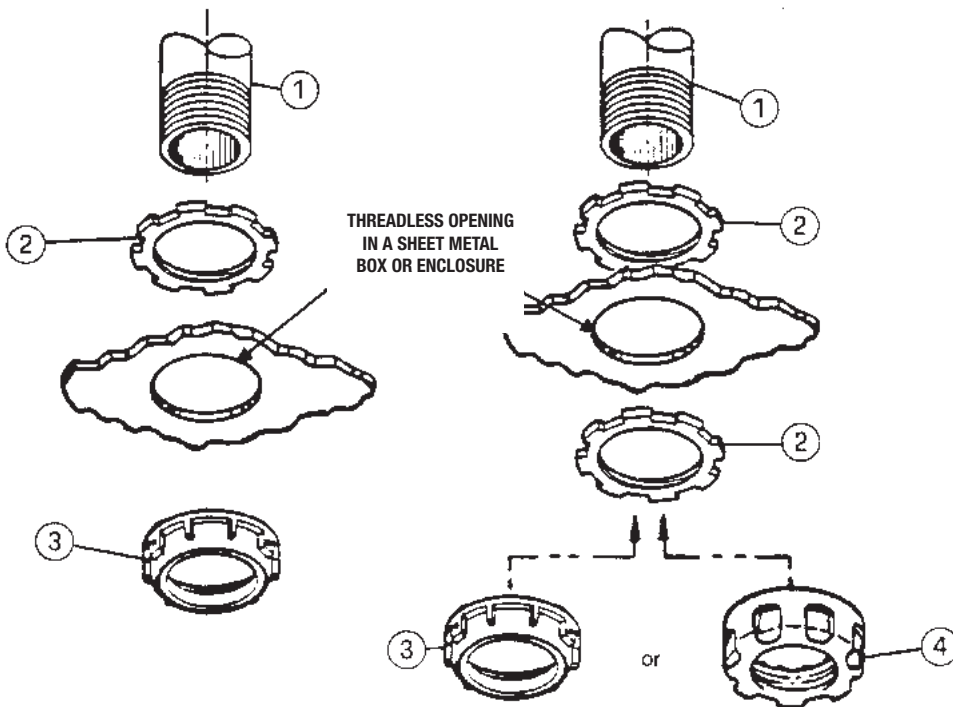
Methods of Bonding

For (1) 120/208 or 120/240 volts circuits (CEC 10-610)
 (2) Over 250 volts circuits (CEC 10-610)
 (3) Service equipment (CEC 10-604)
 (4) Hazardous Locations 18-074 (where applicable)
 18-124 (Class I, Zone 1)
 18-160 (Class I, Zone 2)
 18-218 (Class II, Division 1)
 18-268 (Class II, Division 2)
 18-316 (Class III, Division 1)
 18-366 (Class III, Division 2)

- (1) Threaded or threadless rigid metal conduit or intermediate metal conduit
- (2) T&B Series 8123 Threadless Fitting
- (3) T&B Series 8125 Set Screw Fitting

Rigid and Intermediate Metal Conduit Fittings

Methods of Bonding and Grounding (cont'd)



Case 3: Where threaded conduit terminates into a threadless opening in a sheet metal box or enclosure with no concentric or eccentric rings remaining around knockout.

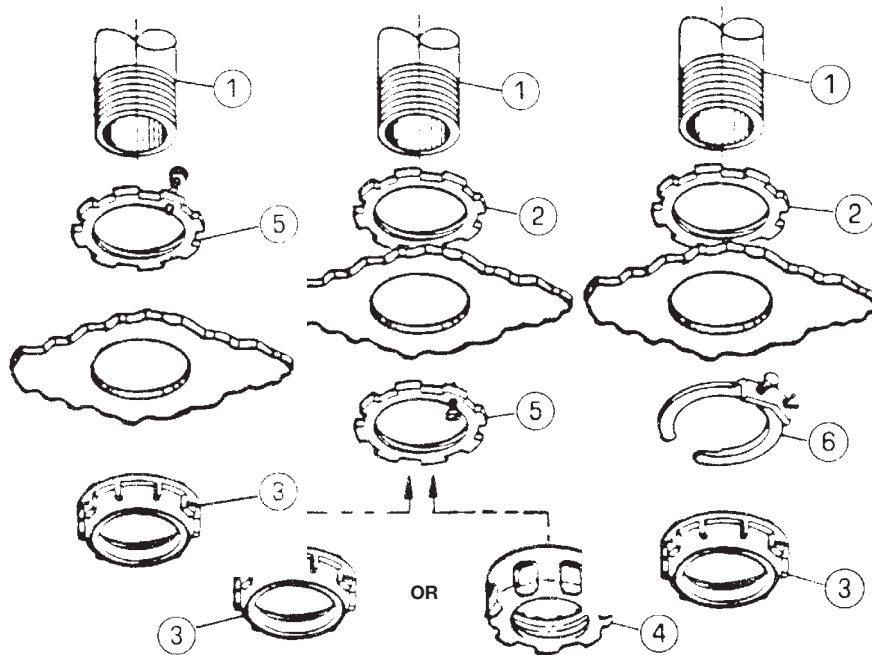
Method of bonding for 120/208 volt or 120/240 volts circuits (other than service equipment).

Method of bonding for over 250 volts circuits e.g. 600/347 volt systems and those operating over 600 volts (other than service equipment).

Note: Any of the bonding methods described for service equipment may also be used

Rigid and Intermediate Metal Conduit Fittings

Methods of Bonding and Grounding (cont'd)



Case 3: (cont'd) Where threaded conduit terminates into a threadless opening in a sheet metal box or enclosure with no concentric or eccentric rings remaining around knockout.

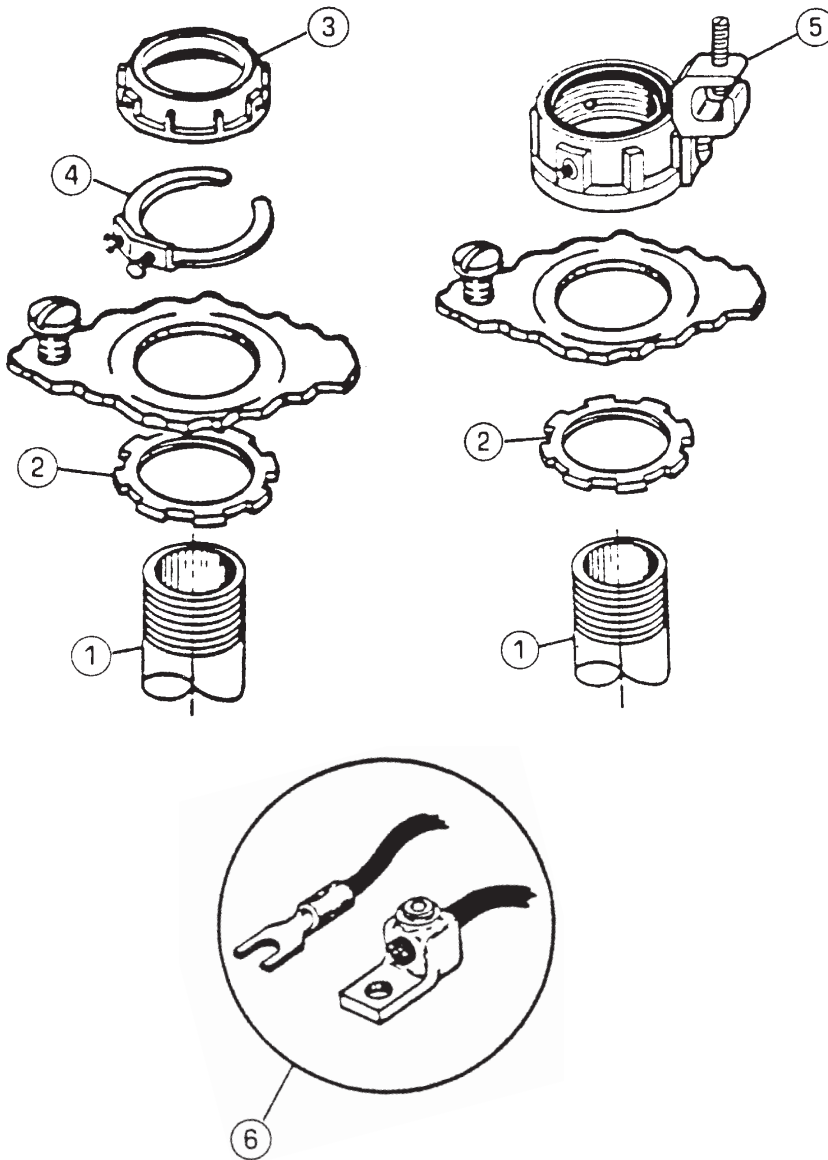
- (1) Threaded rigid metal conduit or intermediate metal conduit
- (2) T&B Series 142 Locknuts
- (3) T&B Series 122 Bushing Metallic
- (4) T&B Series 222 Bushing Plastic
- (5) T&B Series 106 Bonding Locknut
- (6) T&B Series 3650 Bonding Wedge

Method of Bonding

- For (i) Over 250-volts circuit e.g. 347/600-volts systems and those operating over 600 volts
- (ii) Service equipment
 - (iii) Hazardous locations where applicable

Rigid and Intermediate Metal Conduit Fittings

Methods of Bonding and Grounding (cont'd)



Case 4: Where threaded conduit terminates into a threadless opening in a sheet metal box or enclosure with concentric or eccentric rings remaining around knockout.

Methods of bonding for under or over 250-volts, for service equipment and for hazardous locations where applicable.

Note: Bonding jumper required by CEC Rule 10-614

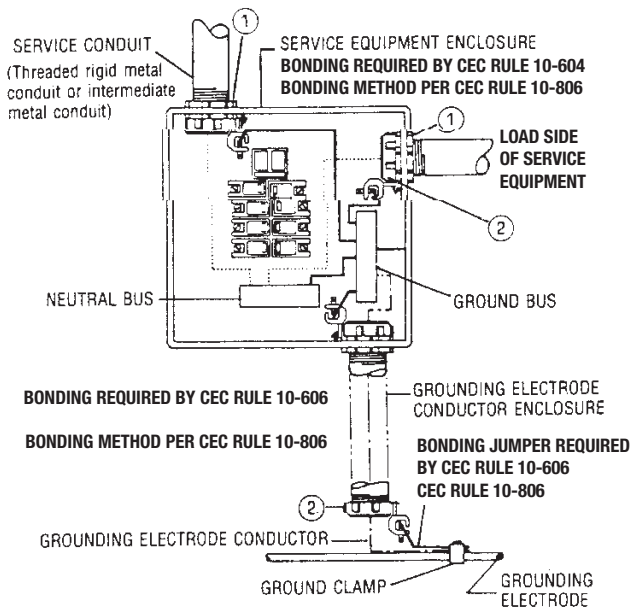
- (1) Threaded rigid metal conduit or intermediate metal conduit
- (2) T&B Series 142 Locknuts
- (3) T&B Series 122 Bushing, Metallic
- (4) T&B Series 3650 Bonding Wedge
- (5) T&B Series 3870 Bonding and Grounding Bushing
- (6) T&B Typical Mechanical or Pressure Type Fitting

Note: For raintight applications, a sealing ring, T&B Series 5302, may be used between outside of box or enclosure and the outside locknut.

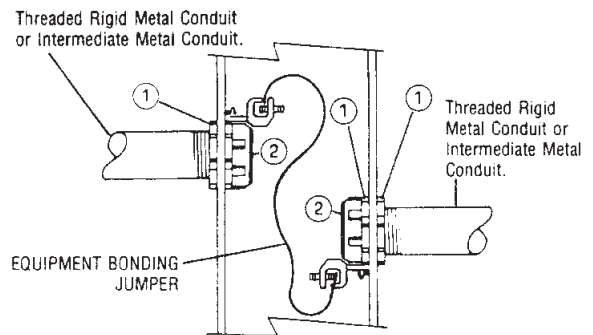
Rigid and Intermediate Metal Conduit Fittings

Methods of Bonding and Grounding (cont'd)

**Bonding Service Equipment
(CEC Rule 10-604)**

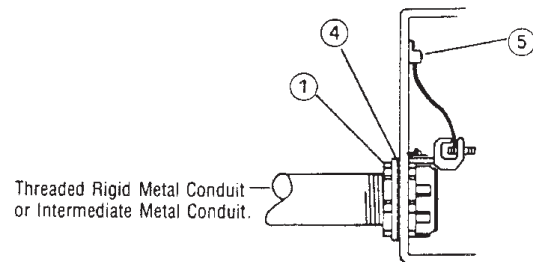
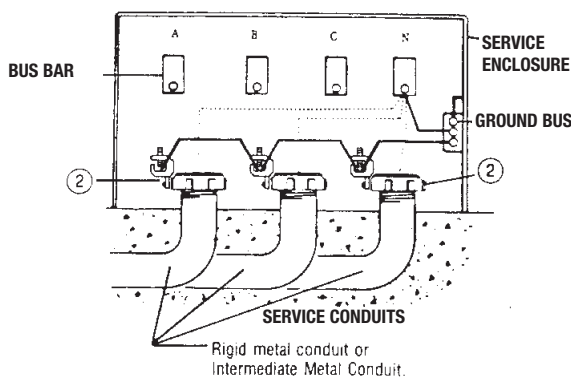


Install Bonding Jumper to Assure Electrical Continuity Between Isolated Sections of Raceways (CEC Rule 10-614)



- (i) Installing bonding jumper around unpunched concentric or eccentric knockouts in sheet metal box or enclosure [CEC Rule 10-806]
- (ii) Installing bonding jumper in hazardous locations where 'locknut bushing' or 'double locknut' type of contact is unacceptable method for bonding purposes [CEC Rule 18-074]

Multiple Bonding of Service Raceways Where Service Entrance Conductors are Paralleled in Two or More Raceways, CEC Rule 10-614



- 1 T&B Series 142 Locknut
- 2 T&B Series 3870 Bonding and Grounding Bushing (Threaded)
- 3 T&B Series 5262 Sealing "O" Ring
- 4 T&B Typical Bolted or Pressure Lug

Suggested Specifications

Insulated grounding and bonding bushing (Series 3870)

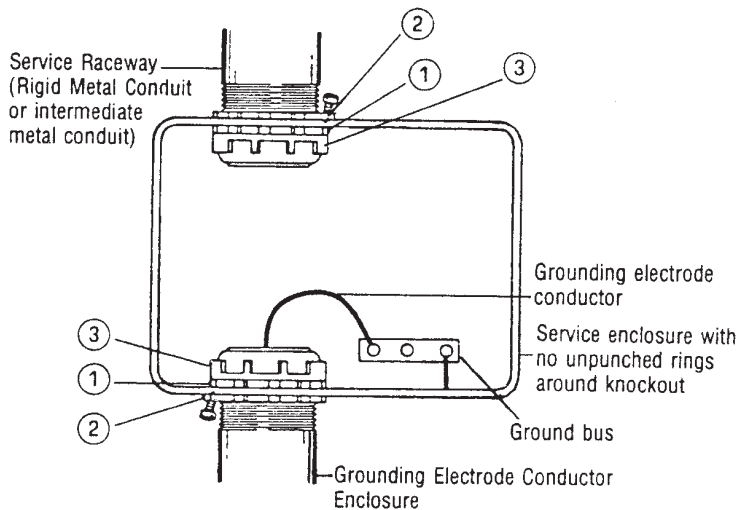
Where code requires bonding and grounding of single or multiple metal conduits, or positive bonding and grounding of metal conduit to the box, enclosure or auxiliary gutter, the end of the conduit shall be equipped with an insulated metallic grounding and bonding bushing such as Series 3870 manufactured by Thomas & Betts.

Grounding and bonding bushings used shall be approved for the purpose and

- (1) Shall be of malleable iron/steel/aluminum construction adequately protected against corrosion
- (2) Bushing insulator shall be listed or certified for 150°C/302°F application with a flammability rating of 94V-0. Insulator must be positively locked in place

Rigid and Intermediate Metal Conduit Fittings

Methods of Bonding and Grounding (cont'd)



- (1) T&B Series 142 Locknut
- (2) T&B Series 106 Bonding Locknuts
- (3) T&B Series 122 Bushing

Suitable for Bonding Raceway, EMT or Terminating Fitting to a sheet metal box or enclosure where

- (a) No unpunched concentric or eccentric rings remain around the knockout
- (b) Ordinary locknut is unacceptable for bonding purposes such as
 - (i) Service Equipment Enclosures CEC Rule 10-614
 - (ii) Bonding for circuits over 250 volts (where required) CEC Rule 10-614
 - (iii) Bonding in Hazardous Locations regardless of the voltage of the system CEC Rule 18-074

Suggested Specifications

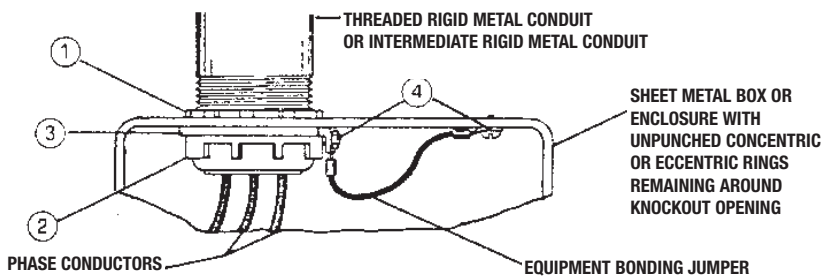
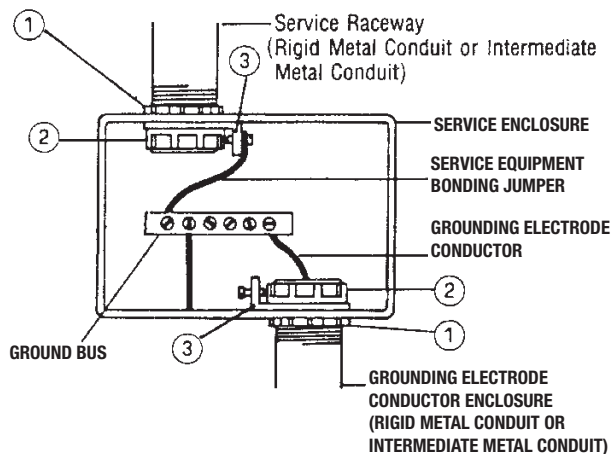
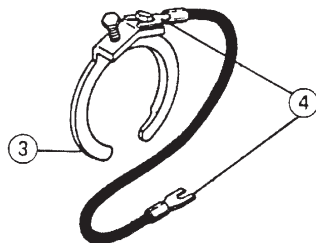
Bonding Type Locknut (Series 106)

Where drawings indicate installation of a bonding type locknut to effectively bond a terminating fitting or metal conduit to a cabinet, box, enclosure or an auxiliary gutter, the locknuts installed shall be of hardened steel/malleable iron construction, electro-zinc plated, such as Series 106 manufactured by Thomas & Betts.

Rigid and Intermediate Metal Conduit Fittings

Methods of Bonding and Grounding (cont'd)

T&B Series 3651
Bonding & Grounding Wedge



- (1) T&B Series 142 Locknut
- (2) T&B Series 122 Metallic Bushing
- (3) T&B Series 3651 Bonding & Grounding Wedge
- (4) T&B Pressure (crimp type) Terminal Lug

Acceptable Method for Bonding Following

- (i) Service Equipment
CEC Rule 10-614
- (ii) Bonding for Circuits over 250 volts
CEC Rule 10-614
- (iii) Bonding in Hazardous Locations
CEC Rule 18-074

When installed with a bonding jumper, acceptable method of bonding where unpunched rings remain around concentric or eccentric knockouts in sheet metal boxes or enclosures. [CEC Rule 10-614].

Suggested Specifications

Bonding and Grounding Wedge (Series 3650)

Bonding and Grounding Wedges installed to effectively bond terminating fitting or metal conduit to a cabinet, box, enclosure or an auxiliary gutter or to install bonding jumper around concentric or eccentric knockouts shall be of the type as manufactured by Thomas & Betts—Series 3650.

Bonding and Grounding Wedge shall be of rugged bronze/tin-plated or steel/electro-zinc plated.