

Metallic Liquidtight Cord and Cable Connectors

Whatever the application. Whatever the size. Thomas & Betts is your connection to tough, versatile cord and cable fittings.

Thomas & Betts offers a complete line of rugged, reliable cord and cable fittings. All fittings are produced to the highest standards, combining innovative design and precision manufacturing methods to provide the products you need for your specific applications. Combining proven performance, installation advantages and availability of ranges, T&B is also your connection to lower installed costs for the life of your cord and cable requirements.

Use this guide to help you specify the fitting you need for your cord and cable requirements.

Cord and Cable Requirements

CORD AND CABLE TYPE	T&B FITTING
S, SO, SV, ST, STD, SJ,	Ranger® 2920NM# Series, 2920# Series
SJO, SJT, SJTO, SVO	Liquidtight Strain Relief 2500# Series
S, SO, SV, ST, STD, SJ, SJO, SJT, SJTO, SVO	Wire Mesh Grips WMG-PC Series for Portable Cord

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 installation.
- A proper matching of the cable and its fitting is necessary to prevent physical damage to the cable when installed.
- NEMA Applications: Fittings used in a trade size knockout requiring a NEMA 3R, 4, 6 or 13 listing require a 5262 Series sealing ring.

Cord and Cable Descriptions

Type SJ, tradename is Junior Hard Service Cord. The outer covering is Thermoset and it is a pendant or portable cord used in damp locations for hard usage.

Type SJO, tradename is Junior Hard Service Cord. The outer covering is oil-resistant Thermoset.

Type SJT, tradename is Junior Hard Service Cord. The outer covering is Thermoplastic.

Type SJTO, tradename is Junior Hard Service Cord. The outer covering is oil-resistant Thermoplastic.

Type SO, tradename is Hard Service Cord. The outer covering is oil-resistant Thermoset and it is a pendant or portable cord used in damp locations for extra-hard usage.

Suggested Specifications for Flexible Cord and Cable Fittings

- Flexible cord or cable and associated fittings shall be suitable for conditions of use and location and approved for the purpose by a nationally recognized testing laboratory, inspection agency or product evaluation organization
- Flexible cord or cable shall be so connected to the device or fitting that tension will not be transmitted to joints or terminal screws. Sufficient slack shall be provided to avoid sharp flexing and straining. Cord or cable shall be installed in such a manner that liquid will tend to run off the surface instead of draining towards the fitting
- Where flexible cord or cable exposed to intermittent or constant moisture and subjected to mechanical strain is terminated into a threaded or threadless opening, terminating fittings shall be of watertight strain relief type such as Thomas & Betts series 2920, 2920AL, 2920NM, 2520, 2631 or 2672. Fittings shall be equipped with a beveled moisture-resistant/oil-resistant synthetic rubber bushing
- Where space is limited inside the enclosure, a female hub type fitting such as Thomas & Betts series 2631 shall be furnished. A captivated resilient sealing O-Ring shall be included to positively protect against damage from overtorquing



Conduit & Fittings — T&B® Cord & Cable Fittings



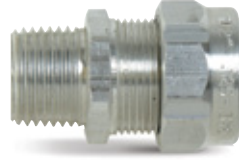
Metallic Liquidtight Cord and Cable Connectors



2920 Ranger® Series



2920SST Ranger® Series



2920AL Ranger® Series



2516 Series

Ranger® Series of Liquidtight Flexible Cord and Cable Connectors

Application

- A liquidtight connector to connect flexible cord or cable to an enclosure and provide adequate strain relief

Features

- Liquidtight connection with enclosure is ensured by:
 - Taper threaded hub on 2520 series for female hub application
 - Using sealing ring series 5262 with 2520 series for knockout application
 - Captivated sealing O-Ring on 2631 series
 - Neoprene bushing makes liquidtight installation; applies pressure against cable the full length of bushing
 - Thermoplastic or stainless steel retaining ring
 - Will not abrade cord/cable jacket
 - Reduces installing torque effort
- UL Listed liquidtight, strain relief and as an outlet bushing; CSA certified watertight

Standard Material

Gland, Body.....Steel/Malleable Iron/Zinc Die Cast
 Retaining RingThermoplastic/Stainless Steel
 Bushing.....Neoprene
 O-RingBuna N

Standard Finish

Electro Zinc Plated & Chromate Coated

Range

2520 Series, straight 0.125" outside diameter to 3.200" outside diameter Cord or Cable
 2200 Series, 45° 0.125" outside diameter to 1.485" outside diameter Cord or Cable

2267 Series, 90° 0.125" outside diameter to 1.875" outside diameter Cord or Cable
 2900 and 4900 Ranger® Series 0.250" cable range
 Cord/Cable Type S, SO, SV, ST, STO, SJ, SJO, SJT, SJTO, SVO & SVT

Listings/Compliances

UL File No. E-13938
 CSA LR-589, LR-4484
 UL 514
 CSA. 22.2 No. 18
 ANSI C33.84, NFPA 70-1978 (ANSI)

CAT. NO	SIZE	MIN.	MAX.	SVO, SV, SVT				SJ, SJO, SJT, SJTO				S, SO, ST, STO											
				#18	#16	#14	#12	#18	#16	#14	#12	#10	#8	#6									
2 Conductor																							
2920	1/2"	.125	.375	X				X															
2921	1/2"	.310	.560					X	X	X													
2922	1/2"	.500	.750					X	X	X	X	X											
2930	3/4"	.125	.375	X				X															
2931	3/4"	.310	.560		X			X	X	X													
2932	3/4"	.500	.750					X	X	X	X	X											
2940	1"	.310	.560					X	X	X	X												
2941	1"	.500	.750					X	X	X	X	X											
2942	1"	.700	.950					X										X	X				
3 Conductor																							
2920	1/2"	.125	.375	X				X															
2921	1/2"	.310	.560					X	X	X													
2922	1/2"	.500	.750					X	X	X	X	X											
2930	3/4"	.125	.375	X				X															
2931	3/4"	.310	.560		X			X	X	X													
2932	3/4"	.500	.750					X	X	X	X	X											
2940	1"	.310	.560					X	X	X	X												
2941	1"	.500	.750					X															
2942	1"	.700	.950					X										X	X				
4 Conductor																							
2920	1/2"	.125	.375	X				X															
2921	1/2"	.310	.560					X	X	X													
2922	1/2"	.500	.750					X	X	X	X	X											
2930	3/4"	.125	.375	X				X															
2931	3/4"	.310	.560		X			X	X	X													
2932	3/4"	.500	.750					X	X	X	X	X											
2940	1"	.310	.560					X	X	X	X												
2941	1"	.500	.750					X															
2942	1"	.700	.950					X										X	X				

Metallic Liquidtight Cord and Cable Connectors

The Ranger® Series of Steel Liquidtight Cord Connectors

The Ranger® Series Steel Liquidtight Connector takes twice the cable range of most ordinary strain-relief connectors. T&B's Ranger Connectors enable you to reduce your inventory and save time with one connector that can do the work of two.



Features

- Extended range with superior strain relief
- Reduced overall size, fits into tighter spaces
- Gland nut designed to restrict cable bending

Materials

Body: Steel — 2920 series,
Malleable Iron — 4920 & 4960 series

Gland Nut, Grip: Steel — all series
Bushing: Rubber

Environment Classification

- Ordinary locations
- Wet or dry locations
- Fittings used in a trade size knockout requiring a NEMA 3R, 4, 6 or 13 listing require a 5262 Series sealing ring

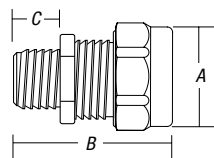
Application

- Provide means for passing a cord cable into an enclosure, through a bulkhead or into a rigid conduit
- Form a mechanical grip and water- and/or oil-resistant seal for cord
- Form a non-slip connection or termination for flexible cord

Cord & Cable Type

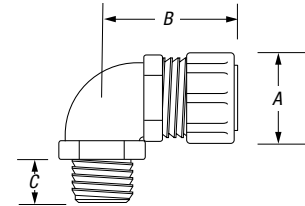
- S, SO, SV, ST, STD, SJ, SJO, SJT, SJTO, SVD

Steel Liquidtight Strain Relief Connectors — Straight



CAT. NO.	HUB SIZE	THROAT DIA.	CORD RANGE	DIMENSIONS (IN.)		
				A	B	C
2920	1/2"	47/64"	.125-.375	1 1/8	1 3/4	5/8
2921	1/2"	47/64"	.310-.560	1 1/8	1 3/4	5/8
2922	1/2"	47/64"	.500-.750	1 1/8	1 3/4	5/8
2930	3/4"	13/16"	.125-.375	1 1/8	1 25/32	5/8
2931	3/4"	13/16"	.310-.560	1 1/8	1 25/32	5/8
2932	3/4"	13/16"	.500-.750	1 1/8	1 25/32	5/8
2940	1"	1 1/16"	.310-.560	1 1/8	1 3/4	3/4
2941	1"	1 1/16"	.500-.750	1 1/8	1 3/4	3/4
2942	1"	3 1/32"	.700-.950	1 1/8	1 7/8	3 1/32

Steel Liquidtight Strain Relief Connectors — 90° Angle



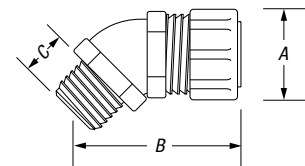
CAT. NO.	HUB SIZE	THROAT DIA.	CORD RANGE	DIMENSIONS (IN.)		
				A	B	C
4960	1/2"	1 1/32"	.125-.375	1 1/8	1 3/4	5/8
4961	1/2"	1 1/32"	.310-.560	1 1/8	1 3/4	5/8
4962	1/2"	1 1/32"	.500-.750	1 1/8	1 23/64	5/8
4970	3/4"	25/32"	.125-.375	1 1/8	1 25/32	1 1/16
4971	3/4"	25/32"	.310-.560	1 1/8	1 25/32	1 1/16
4972	3/4"	25/32"	.500-.750	1 1/8	1 25/32	1 1/16
4980	1"	1	.310-.560	1 1/8	2 1/32	1 1/16

All items shown on this page are suitable for use in hazardous locations where general-purpose equipment is specifically permitted by the NEC®. NEC 501-4(b).

UL File No. E-13938

CSA File No. 52391

Steel Liquidtight Strain Relief Connectors — 45° Angle



CAT. NO.	HUB SIZE	THROAT DIA.	CORD RANGE	DIMENSIONS (IN.)		
				A	B	C
4920	1/2"	37/64"	.125-.375	1 1/8	1 1/16	47/64
4921	1/2"	37/64"	.310-.560	1 1/8	1 1/16	47/64
4922	1/2"	37/64"	.500-.750	1 1/8	1 1/16	47/64
4930	3/4"	25/32"	.125-.375	1 1/8	1 1/16	5/8
4931	3/4"	25/32"	.310-.560	1 1/8	1 1/16	5/8
4932	3/4"	25/32"	.500-.750	1 1/8	1 1/16	5/8

For wire mesh grips, refer to page E-142.