

Table of Contents

For high-performance sealing and strain relief, the perfect mate for a TE Connectivity molded part in a wiring application is a Raychem brand adapter.

TE offers a variety of adapters for applications in many industries, including aerospace, marine, and mass transit.

These adapters are:

- Available in many configurations to match applications
- Easy to install
- Ideal for high-reliability applications
- Kitted for customer convenience.

In this section we present Raychem brand spin-coupling adapters and Tinel-Lock adapters.

The Tinel-Lock adapter utilizes Raychem brand Tinel rings to terminate the overall shield to the adapter. The Tinel ring is a low-profile, high-strength, shape-memory-alloy shield-termination device available in many sizes to accommodate various entry sizes and shield configurations.

Tinel-Lock adapters are ideal for lightweight aerospace applications requiring repeated high-to-low temperature cycles.

Note: Users should independently evaluate the suitability of the product for their application. Before ordering, check with TE for most current data.

Adapter Fundamentals

Definitions	6-2
Types of Adapters	6-3, 6-4
Adapter Selection Process	6-5

Adapter Selection

Adapter Code	6-6 to 6-15
Adapter Family	6-16
Part Number	6-17, 6-18
Material and Finish	6-19
Entry Size	6-20 to 6-25
Tinel-Lock Ring	6-26
CRES-Lock Bands/BND Adapters	6-27

Adapter Products

<u>Code 18 MIL-C-5015 (MS3100)</u>	
Braided Adapters	6-28, 6-29
Solid Adapters	6-30, 6-31
Spin-Coupling Adapters	6-32, 6-33
Tinel-Lock Adapters	6-34 to 6-36
<u>Code 21 MIL-C-26482 Series 1</u>	
Braided Adapters	6-37
Solid Adapters	6-38
Spin-Coupling Adapters	6-39
Tinel-Lock Adapters	6-40, 6-41
CRES-Lock Adapters/BND Adapters	6-42, 6-43
<u>Code 32 MIL-C-22992</u>	
Braided Adapters	6-44, 6-45
Spin-Coupling Adapters	6-46
Tinel-Lock Adapters	6-47
CRES-Lock Adapters/BND Adapters	6-48, 6-49
<u>Code 40 MIL-C-38999 Series III and IV</u>	
Braided Adapters	6-50, 6-51
Solid Adapters	6-52
Spin-Coupling Adapters	6-53
Tinel-Lock Adapters	6-54, 6-55
CRES-Lock Adapters/BND Adapters	6-56, 6-57
<u>Code 41 MIL-C-38999 Series I and II</u>	
Braided Adapters	6-58, 6-59
Solid Adapters	6-60
Spin-Coupling Adapters	6-61
Tinel-Lock Adapters	6-62, 6-63
CRES-Lock Adapters/BND Adapters	6-64, 6-65
<u>Code 54 MIL-C-5015 (MS3400), MIL-C-26482 Series 2, MIL-C-83723 Series I and III, MIL C-81703 Series III</u>	
Braided Adapters	6-66, 6-67
Solid Adapters	6-68
Spin-Coupling Adapters	6-69
Tinel-Lock Adapters	6-70, 6-71
CRES-Lock Adapters/BND Adapters	6-72, 6-73
<u>Code 76 BS 9522 F0017 (Pattern 105)</u>	
Spin-Coupling Adapters	6-74
Tinel-Lock Adapters	6-75, 6-76
Raychem FlexiScreen Backshells	6-77, 6-78
HexaShield High-Performance EMC/EMI Adapters	6-79 to 6-84
Raychem Spin Lock Variable Angle Backshell	6-85, 6-86

Definitions

Introduction

For high-performance sealing and strain relief, the perfect mate for a TE molded part in a wiring application is a Raychem brand adapter.

TE offers a variety of Raychem brand adapters for applications in many industries, including aerospace, marine, and mass transit.

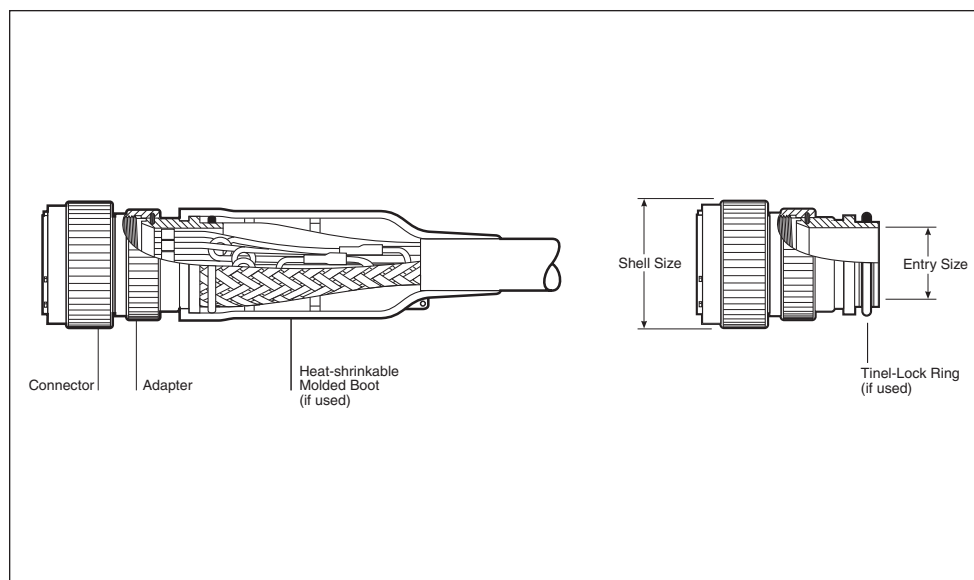
These adapters are:

- Available in many configurations to match applications
- Easy to install
- Ideal for high-reliability applications
- Kitted for customer convenience.

In this section we present Raychem brand spin-coupling adapters and Tinel-Lock adapters.

The Tinel-Lock adapter utilizes TE Tinel ring to terminate the overall shield to the adapter. The Tinel ring is a low-profile, high-strength, shape-memory-alloy shield-termination device available in many sizes to accommodate various entry sizes and shield configurations.

Tinel-Lock adapters are ideal for lightweight aerospace applications requiring repeated high-to-low temperature cycles.



Adapter Type

TE offers four adapter types: solid (sometimes called "fixed"), spin-coupling, braided, and Tinel-Lock. Each is designed to offer a suitable interface between a connector and a heat-shrinkable molded part.

Adapter Code

A numerical code is used to identify connectors with similar adapter interfaces. This code is used to determine the adapter family and part number.

Adapter Part Number

The part number is the sequence of numbers and letters that describes the adapter family (or series), size, material, finish, and modifications. The part numbering system is explained on pages 6-17 and 6-18.

Adapter Family

TE offers several families (or series) of Raychem adapter products. Each Raychem adapter part number begins with an alphanumeric prefix denoting the Raychem product family.

Entry Size

Entry size is the diameter of the hole through which the cable enters into the adapter. For example, the 08 entry is 12.7 [0.5]. Entry sizes are specified on braided and Tinel-Lock adapters only.

Ring Designator

This is a two-letter code that is part of each Tinel-Lock adapter part number. It specifies the size of the Tinel-Lock ring suited to specific types of cable braid.

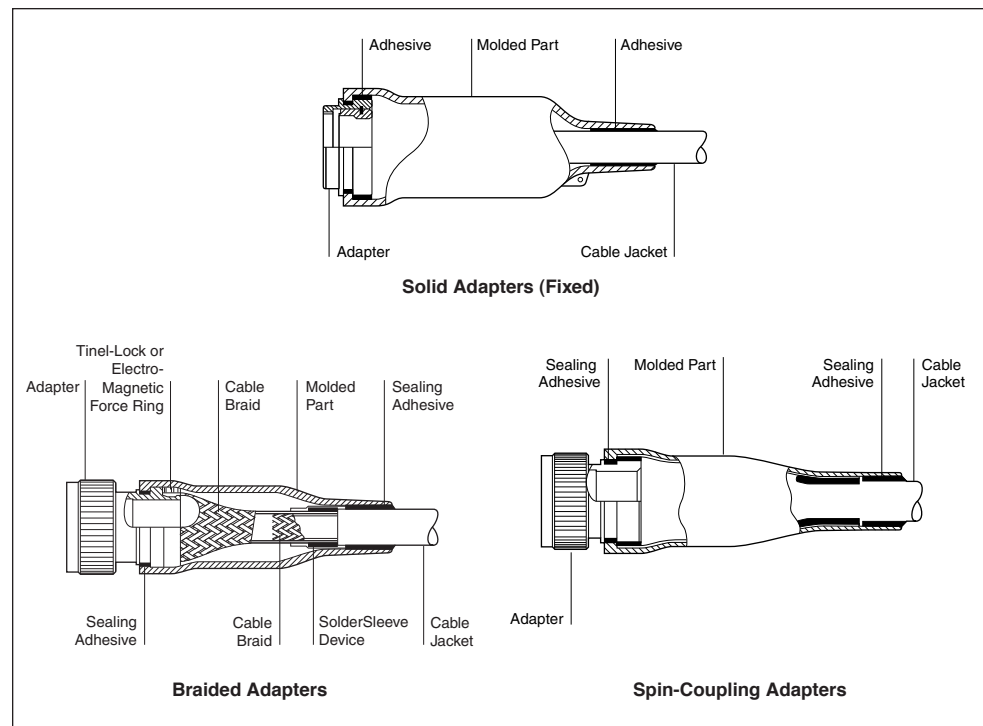
Shell Size

This is the size of a connector as specified by the connector manufacturer. It is normally a two-digit number between 08 and 24, although certain connectors are obtainable in either larger or smaller sizes and some use letter codes.

Order Number

This is a two-digit number that specifies the size of the adapter that will mate to the corresponding shell size of a connector. The order number is frequently the same as the connector shell size, but should be checked by reference to the appropriate product page(s) in this catalog.

Types of Adapters



Adapter Types

TE offers several types of Raychem brand adapters for unscreened and screened termination systems. The choice is largely dependent upon the screening level required and the braid termination method.

The four principal adapter types are:

- Solid (fixed)
- Spin-Coupling
- Braided
- Tinel-Lock

Solid Adapters (Fixed)

Solid adapters are designed for use where no access is required; for example, when potting is necessary or a lower space profile is needed.

These adapters have a boot groove to accommodate a lipped heat-shrinkable boot. Repair cannot be made without removing the boot.

Spin-Coupling Adapters

Spin-coupling adapters are two-part components that have a rotatable coupling nut and a grooved body designed to accommodate lipped-type heat-shrinkable boots.

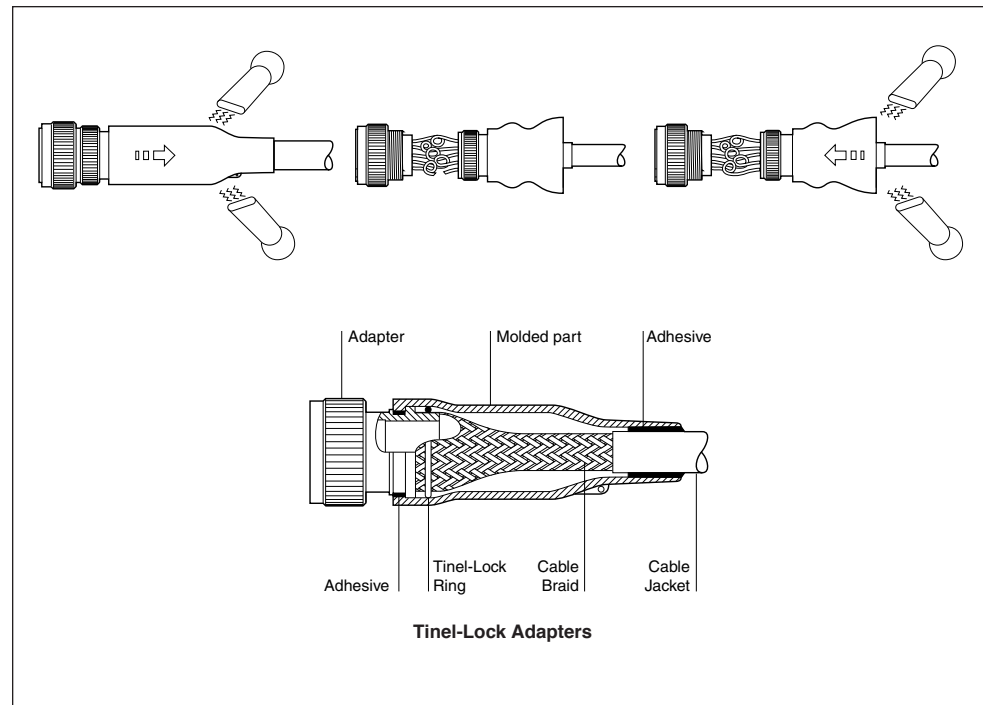
Spin-couplings with an appropriate molded part are used for environmental protection and strain relief of unscreened cable terminations. Cable repairs can be made without damaging the boot.

Braided Adapters

These are spin-coupling adapters that have a short length of tubular braided shield attached to the rear of the adapter. The braid is constructed from tinned copper wire and has a handling characteristic that enables it to be pulled down onto a wide range of cable diameters. This allows a standard entry size to be used with most cable sizes.

The shield is terminated to the cable braid using a Solder Sleeve device, which provides screen continuity through to the connector. Straight, 45°, and 90° configurations are available.

Types of Adapters (Continued)



Tinel-Lock Adapters

This termination system consists of a modified spin-coupling adapter with a Tinel-Lock ring. The Tinel-Lock ring is made from a special shape memory metal that shrinks uniformly when heated (see Application Tooling, section 10).

The Tinel-Lock ring is used to terminate copper cable braid directly onto the rear of the adapter. The adapter entry size and ring designator must be selected to suit the cable diameter and braid type.

The resulting 360° termination withstands severe shock, vibration, temperature cycling, and corrosion. Straight, 45°, and 90° configurations are available.

Roll-back Repair with Adapters

More than 85 percent of cable repairs are made within 75 mm [3.0] of the connectors—usually because of a broken pin or wire. By reheating the heat-shrinkable boot and unscrewing the adapter coupling nut, the boot can be “rolled back,” providing access to the rear of the connector for repair. This technique is applicable to spin-coupling, shielded, and Tinel-Lock adapters.

Adapter Selection Process

Step-by-Step Selection Process

Selecting an adapter for your application involves a five-step process:

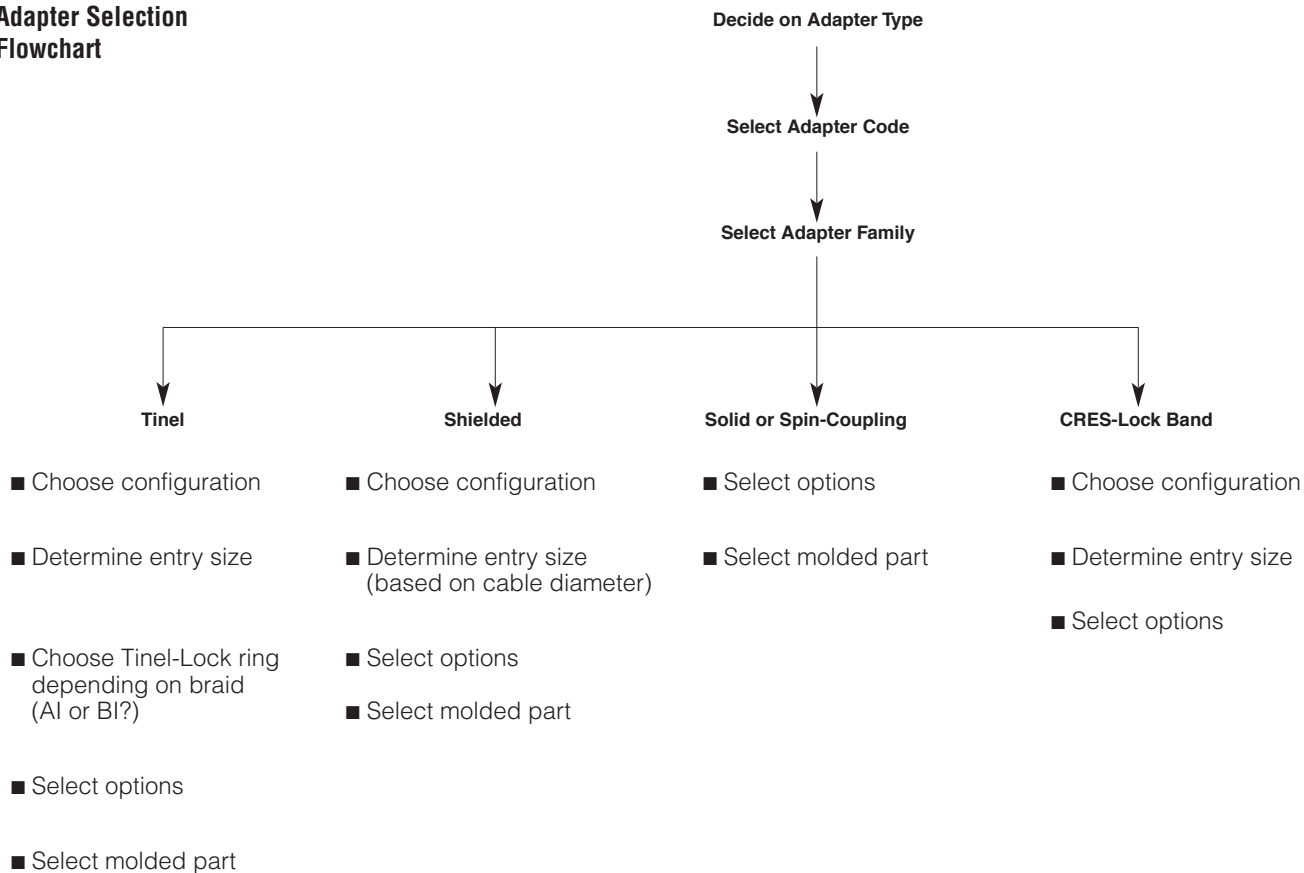
1. From the connector number, determine:
 - Order number (shell size)
 - Material
 - Plating
2. Decide what adapter type you need for the connector.
3. Determine the connector code for that adapter type. (Use Table A, B, or C on pages 6-6 to 6-15).

4. Determine the adapter family for that connector code. (Use Table D on page 6-16).

5. Build the adapter part number. (See page 6-17).

The chart below will lead you through these steps.

Adapter Selection Flowchart



Adapter Code

Table A. Adapter Code by Military Part Number

Selecting the Adapter Code

Tables A, B, and C that follow provide adapter codes for typical connectors.

If you know the military part number for the connector, you can obtain the adapter code from Table A that begins on this page.

If you know the manufacturer's prefix for the connector, you can obtain the adapter code from Table B that begins on page 6-10.

If you know the connector specification, you can obtain the adapter code from Table C on page 6-15

Military Part No.	Connector Specification	Series/Class	Adapter Code
D38999/20	MIL-C-38999	Series III: Class C, F, K, W	40
D38999/24	MIL-C-38999	Series III: Class C, F, K, W	40
D38999/26	MIL-C-38999	Series III: Class C, F, K, W	40
D38999/40	MIL-C-38999	Series IV: Class C, F, W	40
D38999/42	MIL-C-38999	Series IV: Class C, F, W	40
D38999/44	MIL-C-38999	Series IV: Class C, F, W	Contact TE
D38999/46	MIL-C-38999	Series IV: Class F, W	40
D38999/47	MIL-C-38999	Series IV: Class C, W	40
M28840/10	MIL-C-28840	Class D, DS	30
M28840/11	MIL-C-28840	Class D, DS	30
M28840/14	MIL-C-28840	Class D, DS	30
M28840/16	MIL-C-28840	Class D, DS	30
M81511/01	MIL-C-81511	Series 2: Class A, E, F	61
M81511/03	MIL-C-81511	Series 2: Class A, E, F	61
M81511/05	MIL-C-81511	Series 2: Class A, E, F	61
M81511/06	MIL-C-81511	Series 2: Class A, E, F	61
M81511/21	MIL-C-81511	Series 1: Class A, E, F	61
M81511/23	MIL-C-81511	Series 1: Class A, E, F	61
M81511/25	MIL-C-81511	Series 1: Class A, E, F	61
M81511/26	MIL-C-81511	Series 1: Class A, E, F	61
M81511/31	MIL-C-81511	Series 2: Class C, P, T	61
M81511/32	MIL-C-81511	Series 2: Class C, P, T	61
M81511/33	MIL-C-81511	Series 2: Class C, P, T	61
M81511/34	MIL-C-81511	Series 2: Class C, P, T	61
M81511/35	MIL-C-81511	Series 1: Class C, P, T	61
M81511/36	MIL-C-81511	Series 1: Class C, P, T	61
M81511/37	MIL-C-81511	Series 1: Class C, P, T	61
M81511/38	MIL-C-81511	Series 1: Class C, P, T	61
M81511/41	MIL-C-81511	Series 3: Class A, E, F	61
M81511/45	MIL-C-81511	Series 3: Class A, E, F	61
M81511/46	MIL-C-81511	Series 3: Class A, E, F	61
M81511/49	MIL-C-81511	Series 3: Class A, E, F	61
M81511/51	MIL-C-81511	Series 4: Class A, E, F	61
M81511/53	MIL-C-81511	Series 4: Class A, E, F	61
M81511/55	MIL-C-81511	Series 4: Class A, E, F	61
M81511/56	MIL-C-81511	Series 4: Class A, E, F	61
M83723/01	MIL-C-83723	Series I: Class A, G, R	54
M83723/02	MIL-C-83723	Series I: Class A, G, R	54
M83723/03	MIL-C-83723	Series I: Class A, G, R	54
M83723/04	MIL-C-83723	Series I: Class A, G, R	54
M83723/05	MIL-C-83723	Series I: Class A, G, R	54
M83723/06	MIL-C-83723	Series I: Class A, G, R	54
M83723/07	MIL-C-83723	Series I: Class A, G, R	54
M83723/08	MIL-C-83723	Series I: Class A, G, R	54
M83723/13	MIL-C-83723	Series I: Class A, G, R	54
M83723/14	MIL-C-83723	Series I: Class A, G, R	54
M83723/17	MIL-C-83723	Series II: Class A, G, R	19
M83723/18	MIL-C-83723	Series II: Class A, G, R	19
M83723/19	MIL-C-83723	Series II: Class A, G, R	19
M83723/20	MIL-C-83723	Series II: Class A, G, R	19
M83723/23	MIL-C-83723	Series II: Class A, G, R	19
M83723/24	MIL-C-83723	Series II: Class A, G, R	19
M83723/27	MIL-C-83723	Series II: Class A, G, R	19
M83723/36	MIL-C-83723	Series I: Class A, G, R	54
M83723/37	MIL-C-83723	Series I: Class A, G, R	54
M83723/38	MIL-C-83723	Series I: Class A, G, R	54
M83723/39	MIL-C-83723	Series I: Class A, G, R	54
M83723/40	MIL-C-83723	Series I: Class A, G, R	54
M83723/41	MIL-C-83723	Series I: Class A, G, R	54
M83723/42	MIL-C-83723	Series I: Class G, R	54
M83723/43	MIL-C-83723	Series I: Class G, R	54

Adapter Code (Continued)

Table A. Adapter Code by Military Part Number

(Continued)

Military Part No.	Connector Specification	Series/Class	Adapter Code
M83723/48	MIL-C-83723	Series I: Class G, R	54
M83723/49	MIL-C-83723	Series I: Class G, R	54
M83723/52	MIL-C-83723	Series II: Class K	19
M83723/53	MIL-C-83723	Series II: Class K	19
M83723/65	MIL-C-83723	Series III: Class H	54
M83723/66	MIL-C-83723	Series III: Class A, G, R	54
M83723/67	MIL-C-83723	Series III: Class A, G, R	54
M83723/68	MIL-C-83723	Series III: Class A, G, R	54
M83723/69	MIL-C-83723	Series III: Class A, G, R	54
M83723/71	MIL-C-83723	Series III: Class A, G, R	54
M83723/72	MIL-C-83723	Series III: Class A, G, R	54
M83723/73	MIL-C-83723	Series III: Class A, G, R	54
M83723/74	MIL-C-83723	Series III: Class A, G, R	54
M83723/75	MIL-C-83723	Series III: Class A, G, R	54
M83723/76	MIL-C-83723	Series III: Class A, G, R	54
M83723/77	MIL-C-83723	Series III: Class G, R	54
M83723/78	MIL-C-83723	Series III: Class G, R	54
M83723/82	MIL-C-83723	Series III: Class A, G, K, R, S	54
M83723/83	MIL-C-83723	Series III: Class A, G, K, R, S	54
M83723/84	MIL-C-83723	Series III: Class A, G, K, R, S	54
M83723/85	MIL-C-83723	Series III: Class A, G, K, R, S	54
M83723/86	MIL-C-83723	Series III: Class A, G, K, R	54
M83723/87	MIL-C-83723	Series III: Class A, G, K, R	54
M83723/91	MIL-C-83723	Series III: Class G, R, W	54
M83723/92	MIL-C-83723	Series III: Class G, R, W	54
M83723/95	MIL-C-83723	Series III: Class A, G, K, R	54
M83723/96	MIL-C-83723	Series III: Class A, G, K, R	54
M83723/97	MIL-C-83723	Series III: Class S	54
M83723/98	MIL-C-83723	Series III: Class S	54
MS17343	MIL-C-22992	Class C, J, R	32
MS17344	MIL-C-22992	Class C, J, R	32
MS17345	MIL-C-22992	Class C, J, R	32
MS17346	MIL-C-22992	Class C, R	32
MS17347	MIL-C-22992	Class C, J, R	32
MS17348	MIL-C-22992	Class C, R	32
MS24264	MIL-C-26500 (AL)	Class F, G, R Type B&T aluminum shell	51
MS24264	MIL-C-26500 (SST)	Class E Type B&T stainless steel shell	52
MS24265	MIL-C-26500 (AL)	Class F, G, R Type B&T aluminum shell	51
MS24265	MIL-C-26500 (SST)	Class E Type B&T stainless steel shell	52
MS24266	MIL-C-26500 (SST)	Class E Type B&T stainless steel shell	52
MS24266	MIL-C-26500 (AL)	Class F, G, R Type B&T aluminum shell	51
MS27466	MIL-C-38999	Series I: Class E, P, T	41
MS27467	MIL-C-38999	Series I: Class E, P, T	41
MS27468	MIL-C-38999	Series I: Class E, P, T	41
MS27469	MIL-C-38999	Series I: Class Y	Contact TE
MS27472	MIL-C-38999	Series II: Class T	41
MS27473	MIL-C-38999	Series II: Class E, P, T	41
MS27474	MIL-C-38999	Series II: Class T	41
MS27475	MIL-C-38999	Series II: Class Y	Contact TE
MS27479	MIL-C-38999	Series II: Class T	41
MS27480	MIL-C-38999	Series II: Class E, T	41
MS27481	MIL-C-38999	Series II: Class T	41
MS27482	MIL-C-38999	Series II: Class Y	Contact TE
MS27484	MIL-C-38999	Series II: Class E, T	41
MS27497	MIL-C-38999	Series II: Class T	41

Adapter Code (Continued)

Table A. Adapter Code by Military Part Number

(Continued)

Military Part No.	Connector Specification	Series/Class	Adapter Code
MS27515	MIL-C-38999	Series I: Class E	Contact TE
MS27613	MIL-C-26500 (SST)	Class K Type B&T stainless steel shell	52
MS27614	MIL-C-26500 (SST)	Class K Type B&T stainless steel shell	52
MS27615	MIL-C-26500 (SST)	Class K Type B&T stainless steel shell	52
MS27652	MIL-C-38999	Series I: Class E, T	41
MS27653	MIL-C-38999	Series I: Class E, T	41
MS27654	MIL-C-38999	Series I: Class E, T	Contact TE
MS27656	MIL-C-38999	Series I: Class E, T	41
MS27661	MIL-C-38999	Series I	41
MS27665	MIL-C-38999	Series I	41
MS3100	MIL-C-5015	Class A, E, F, R less endbell; solder contact	18
MS3101	MIL-C-5015	Class A, E, F, R less endbell; solder contact	18
MS3106	MIL-C-5015	Class A, E, F, R less endbell; solder contact	18
MS3107	MIL-C-5015	Class A, E, F, R less endbell; solder contact	18
MS3108	MIL-C-5015	Solder contact with endbell	15
MS3110	MIL-C-26482	Series 1: Class E, F, J, P	21
MS3111	MIL-C-26482	Series 1: Class E, F, J, P	21
MS3114	MIL-C-26482	Series 1: Class E, F, P	24 ¹
MS3116	MIL-C-26482	Series 1: Class E, F, J, P	21
MS3120	MIL-C-26482	Series 1: Class E, F, J, P	21
MS3121	MIL-C-26482	Series 1: Class E, F, J, P	21
MS3124	MIL-C-26482	Series 1: Class E, F, P	24 ¹
MS3126	MIL-C-26482	Series 1: Class E, F, J, P	21
MS3128	MIL-C-26482	Series 1: Class E, F, J, P	21
MS3130	MIL-C-81703	Series 1: Class E, P, J	71
MS3132	MIL-C-81703	Series 1: Class E	71
MS3134	MIL-C-81703	Series 1: Class E, P, J	71
MS3137	MIL-C-81703	Series 1: Class E, P, J	71
MS3138	MIL-C-81703	Series 1: Class E, P, J	71
MS3140	MIL-C-81703	Series 1: Class E, J	71
MS3144	MIL-C-81703	Series 1: Class E, J	71
MS3147	MIL-C-81703	Series 1: Class E, J	71
MS3148	MIL-C-81703	Series 1: Class E, J	71
MS3400	MIL-C-5015	Class D, L, U, W crimp contact	54
MS3401	MIL-C-5015	Class D, L, U, W crimp contact	54
MS3404	MIL-C-5015	Class D, L, U, W crimp contact	54
MS3406	MIL-C-5015	Class D, L, U, W crimp contact	54
MS3408	MIL-C-5015	Class D, L, U, W crimp contact	54
MS3409	MIL-C-5015	Crimp contact	54
MS3412	MIL-C-5015	Class D, L, U, W crimp contact less endbell	54
MS3424	MIL-C-81703	Series 3: Class E, L	54
MS3445	MIL-C-81703	Series 2: Class E	71
MS3446	MIL-C-81703	Series 3: Class E, L	54
MS3450	MIL-C-5015	Class D, L, U, W crimp contact	54
MS3451	MIL-C-5015	Class D, L, U, W crimp contact	54
MS3454	MIL-C-5015	Class D, L, U, W crimp contact	54
MS3456	MIL-C-5015	Class D, L, U, W crimp contact	54
MS3459	MIL-C-5015	Class L, W crimp contact	54
MS3464	MIL-C-81703	Series 3: Class E, L	54
MS3467	MIL-C-81703	Series 3: Class E, L	54
MS3468	MIL-C-81703	Series 3: Class E, L	54
MS3470	MIL-C-26482	Series 2: Class A, L	54
MS3471	MIL-C-26482	Series 2: Class A, L	54
MS3472	MIL-C-26482	Series 2: Class A, L	54
MS3474	MIL-C-26482	Series 2: Class A, L	54
MS3475	MIL-C-26482	Series 2: Class A, L	54
MS3476	MIL-C-26482	Series 2: Class A, L	54
NAS1599	MIL-C-81703	Series 3:	54
NAS1641	MIL-C-81703	Series 3:	54
NAS1642	MIL-C-81703	Series 3:	54

¹Code 24 connectors have an internal accessory thread.

Adapter Code (Continued)

Table A. Adapter Code by Military Part Number

(Continued)

Military Part No.	Connector Specification	Series/Class	Adapter Code
NAS1643	MIL-C-81703	Series 3:	54
NAS1650	MIL-C-81703	Series 3:	54
NAS1651	MIL-C-81703	Series 3:	54
NAS1652	MIL-C-81703	Series 3:	54
NAS1653	MIL-C-81703	Series 3:	54
NAS1692	MIL-C-81703	Series 3:	54
NAS1693	MIL-C-81703	Series 3:	54
NAS1694	MIL-C-81703	Series 3:	54
NAS1699	MIL-C-81703	Series 3:	54
NAS1700	MIL-C-81703	Series 3:	54
NAS1701	MIL-C-81703	Series 3:	54
NAS1702	MIL-C-81703	Series 3:	54

Adapter Code (Continued)

Table B. Adapter Code by Manufacturer's Prefix

Manufacturer's Prefix	Manufacturer ⁶	Connector Specification	Series/Class	Adapter Code
10-214	Bendix	MIL-C-5015	MS3100 Class A, E, R	18
10-475	Bendix	40M38277	—	41
10-720	Bendix	MIL-C-5015	MS3100 Class A, E, R	18
118	Amphenol	MIL-C-26482	Series 2	54
149	Deutsch	MIL-C-81703	Series 1	71
162GB	Amphenol	MIL-C-26482	Series 1	76, 77 ⁴
164GB	Amphenol	BS9522 F0023	—	Contact TE
165	Amphenol	None	—	Contact TE
172	Amphenol	MIL-C-5015	—	Contact TE
179	Amphenol	MIL-C-5015	—	Contact TE
182	Amphenol	None	—	Contact TE
246	Amphenol	MIL-C-5015	MS3100 Class E, F, R	18
251	Cannon	MIL-C-26482	Series 1	21
2PPN	Plessey	MIL-C-26482	Series 1	21
2PPN-07	Plessey	MIL-C-26482	Series 1	24 ³
2PSN	Plessey	BS9522 F0017	Patt 105	76, 77 ⁴
2PSN-07	Plessey	MIL-C-26482	Series 1	24 ³
348	Amphenol	MIL-C-81511	Series 1 and 2	61
381	Deutsch	40M39569	—	54
418	Amphenol	MIL-C-38999	Series I and II	41
45/PT	Socapex	MIL-C-26482	Series 1	21
450	Deutsch	MIL-C-26482	Series 1	21
451	Socapex	PRL 54125	—	21 or 24 ³
460	Deutsch	MIL-C-26482	Series 1	21
48	Amphenol	MIL-C-26500	Alum Class F, G, R	51
486	Amphenol	MIL-C-26482	Series 2	54
518	Amphenol	MIL-C-83723	Series III	54
5MS	FKI ²	Def. Stan. 59-35	Patt 121A	75
602	Amphenol	Def. Stan. 59-56	Patt 602	54
602GB	Amphenol	Def. Stan. 59-56	Patt 602	54
62AB-14	Amphenol	MIL-C-26482	Series 1	Contact TE
62GB	Amphenol	Def. Stan. 59-35	Patt 105	76, 77 ⁴
650	Schaltbau	VG 95329	—	61
652	Amphenol	LN 29504	—	54
652	UMD	PRL 54125	—	21 or 24 ³
674	Schaltbau	VG 95328	—	Contact TE
675	Schaltbau	VG 95328	—	Contact TE
679	Schaltbau	VG 95329	—	61
69	Amphenol	MIL-C-5015	MS3100 Class E, F, R	18
71	Bendix	MIL-C-5015	MS3100 Class A, E, R	18
711	Amphenol	BS9522 F0042	—	54
801	Amphenol	None	—	54
837	Deutsch	MIL-C-83723	Series III	54
83723	Souriau	MIL-C-83723	Series III	54
83730	Deutsch	MIL-C-83723	Series III	54
845	Souriau	NFL 54120	—	Contact TE
847	Souriau	NFL 54120	—	Contact TE
850	Souriau	MIL-C-26482	Series 1	21
851	Souriau	MIL-C-26482	Series 1	21
8520	Souriau	MIL-C-26482	Series 2	54
8525	Souriau	NAS 1599	—	54
8526	Souriau	PAN 6432-1	—	54
853	Souriau	MIL-C-83723	Series III	54
857	Souriau	LN 29728	—	54
89	Souriau	NFL 54140	—	54

²FKI was previously Thorn.

³Code 24 connectors have an internal accessory thread.

⁴Code 77 braided version.

Table B. Adapter Code by Manufacturer's Prefix

(Continued)

Adapter Code (Continued)

Manufacturer's Prefix	Manufacturer ⁶	Connector Specification	Series/Class	Adapter Code
891	Souriau	MIL-C-5015	Class K	Contact TE
892	Souriau	MIL-C-5015	Class K	Contact TE
8LT	Souriau	MIL-C-38999	Series I	41
8ST	Souriau	VG 96912	Series 1	47
8T	Souriau	MIL-C-38999	Series II	41
9-815	Deutsch	MIL-C-81511	Series 3 and 4	61
91-483	Bendix	MIL-C-26482	Series 2	54
944	Matrix	MIL-C-5015	MS3400 Class L, U, W	54
951	Deutsch	LN 29500	—	Contact TE
97	Amphenol	MIL-C-5015	MS3100 Class A	18
981	Matrix	MIL-C-5015	MS3400	54
A815	Deutsch	MIL-C-81511	Series 3	61
AA70	Deutsch	Not known	—	71
AB05	AB Elec	Def. Stan. 59-35	Patt 105	76, 77 ^a
AB06	AB Elec	Def. Stan. 59-35	Patt 105	76, 77 ^a
ABB	AB Elec	BS9522 F0032	—	78
ABJ	AB Elec	MIL-C-38999	Series I and II	41
ADS	Deutsch	MIL-C-81703	—	71
AFD	Deutsch	MIL-C-83723	Series I	54
AFD5	Deutsch	MIL-C-26482	Series 2	54
B815	Deutsch	MIL-C-81511	Series 4	61
BE	Pyle	MIL-C-83723	Series III	54
BG	Bendix	MIL-C-26482	Series I	21
BL	G&H Tech	MIL-C-38999	Series IV	40
BL	TRW	MIL-C-38999	Series IV	40
BT	Burndy	MIL-C-26482	Series 1	21
BT	Pyle	MIL-C-83723	Series III	54
BTK	Deutsch	MIL-C-26482	Series 1	21
BY1	Pyle	MIL-C-83723	Series III	54
C48	TRW	MIL-C-26500	Aluminum	51
CA (Bayonet)	Cannon	VG 95234	—	58
CA3101	Cannon	MIL-C-5015	MS3100 class E, F, R	18
CA3101	Cannon	MIL-C-5015	MS3100 Class A	18
CA3101KE	Cannon	MIL-C-5015	Class K	Contact TE
CA3106	Cannon	MS3106A	—	58
CIR	VEAM	VG 95234	—	64***, 66**, 78*
CN0930	TRW	MIL-C-83723	Series III	54
CT	Burndy	MIL-C-38999	Series II	41
CT	Plessey	MIL-C-38999	Series II	41
CV-R	Cannon	MIL-C-83723	Series II	19
CV34	Cannon	MIL-C-5015	MS3400 Class L, U, W	54
CVA	Cannon	MIL-C-83723	Series II	19
CWL	Cannon	None	—	31
CWLD	Cannon	MIL-C-22992	Class C, J, R	32
D817	Deutsch	MIL-C-81703	Series 3	54
DA	Deutsch	None	—	71
DBAD	Deutsch	MIL-C-81703	—	Contact TE
DBAS	Deutsch	MIL-C-81703	Series 3	54
DD	Deutsch	MIL-C-81703	Series 2	71
DFE	Deutsch	MIL-C-26482	Series 2	54
DKM	Deutsch	VG 95328	—	Contact TE
DL	Deutsch	MIL-C-83723	Series III	54
DM	Deutsch	MIL-C-81703	Series 1	71
DPX	Cannon	—	—	Contact TE
DS	Deutsch	None	—	71
DTS	Deutsch	MIL-C-38999	Series III	40

^a AB connectors only

^{**} VEAM standard

^{***} VEAM panel mount

⁴ Code 77 braided version.

Adapter Code (Continued)

Table B. Adapter Code by Manufacturer's Prefix

(Continued)

Manufacturer's Prefix	Manufacturer ⁶	Connector Specification	Series/Class	Adapter Code
EA	Pyle	None	—	54
EB	Pyle	NAS 1599	—	54
EEG	Pyle	MIL-C-83723	Series I	54
ES	Pyle	None	—	54
ESC004	Various	MIL-C-5015	Class K	Contact TE
ET	Pyle	NAS 1599	—	54
FC	Flight	MIL-C-5015	Rev E only	Contact TE
FDBA	Deutsch	LN 29504	—	54
FF	Flight	MIL-C-5015	MS3400 Class D, L, U, W	54
FH	Flight	MIL-C-83723	Series III	54
FPK	Pyle	MIL-C-26500	Class K	52
FP5K	Pyle	MIL-C-26500	Class K	Contact TE
FYL	Pyle	MIL-C-26500	Class K	52
G	Burndy	None	—	21
GC-E	General	MIL-C-26482	Series 1	21
GTA	Hughes	MIL-C-28840	—	30
GTC06	Amphenol	—	—	64
HAN	Deutsch	MIL-C-5015	MS3100 Class E, KE	Contact TE
HD	SAE	MIL-C-28840	—	30
HTMAS	Cannon	MIL-C-5015	Class K	Contact TE
HTMF	Cannon	MIL-C-83723	Series III: Class K	54
HTMS	AB Elec	MVEE 695	—	75
JT	Amphenol	MIL-C-38999	Series II	41
JT	Bendix/FKI	MIL-C-38999	Series II	41
JT	Socapex	MIL-C-38999	Series II	41
JT-R	FKI ²	PAN 6433-1	—	41
JT-R	Teldix	PAN 6433-1	—	41
KFS	Cannon	MIL-C-28840	—	30
KJ	Cannon	MIL-C-38999	Series II	41
KJA	Cannon	MIL-C-38999	Series III	40
KJJ	Cannon	MIL-C-38999	Series II	Contact TE
KJL	Cannon	MIL-C-38999	Series I	Contact TE
KJL	Cannon	MIL-C-38999	Series I	41
KPSE	Cannon	MIL-C-26482	Series 1	21
KPT	Cannon	MIL-C-26482	Series 1	21
KV-R	Cannon	NAS 1599	—	54
L	Burndy	MIL-C-26482	Series 1	21
LJT	Bendix	MIL-C-38999	Series I	41
LJT	Socapex	MIL-C-38999	Series I	41
LL3	Deutsch	MIL-C-81511	—	61
LL5/6	Deutsch	BS9540 F0001	Patt 602	Contact TE
LMB	Litton-Veam	Def. Stan. 59-35	Patt 121A	75
LPT	Deutsch	MIL-C-26482	Series 1	21
LS	Pyle	None	—	54
LTT	FKI ²	BS9522 F0029	Patt 616	41
M-T	Burndy	MIL-C-26482	Series 1	21
M723	Matrix	MIL-C-83723	Series II	19
MB1	Matrix	MIL-C-26482	Series 2	54
MB3	Matrix	MIL-C-83723	Series III	54
MB9	Matrix	MIL-C-38999	Series I and II	41
MD	Matrix	MIL-C-26482	Series 2	54
MDR	Deutsch	None	—	71
MF	Cannon	MIL-C-83723	Series III	54
MK12	Plessey	Def. Stan. 59-35	Patt 603	76, 77 ⁴
MK18	Plessey	Def. Stan. 59-35	Patt 608	79 ⁵
MK38	Plessey	MIL-C-38999	Series I	41

²FKI was previously Thorn.

⁴Code 77 braided version.

⁵Free connectors only.

Table B. Adapter Code by Manufacturer's Prefix

(Continued)

Adapter Code (Continued)

Manufacturer's Prefix	Manufacturer ⁶	Connector Specification	Series/Class	Adapter Code
MK25	Plessey	MIL-C-38999	Series II	41
MK7	Plessey	DEF 5325-2	Patt 104	Contact TE
MK8	Plessey	Def. Stan. 59-35	Patt 105	76, 77 ⁴
ML94	Matrix	MIL-C-38999	Series IV	40
MQ3	Matrix	MIL-C-83723	Series III	54
MT3	Matrix	MIL-C-83723	Series III	54
MT93	Matrix	MIL-C-38999	Series III	40
P5	Plessey	NFL 54 125	—	76 or 24 ³ , 77 ⁴
PAT104D	AB Elec	Def. Stan. 59-35	Patt 104	Contact TE
PT	Socapex	MIL-C-26482	Series 1	76, 77 ⁴
PT	Teldix	MIL-C-26482	Series 1	76, 77 ⁴
PT-CE	Bendix	None	—	22
PT-G	Teldix	VG 95328	—	Contact TE
PT-SE	Socapex	MIL-C-26482	Series 1	76, 77 ⁴
PT-SE	Teldix	MIL-C-26482	Series 1	76, 77 ⁴
PT07	Bendix	MIL-C-26482	Series 1	24 ³
PT07SE	FKI ²	MIL-C-26482	Series 1	24 ³
PT33	FKI ²	BS9522 F0017	Patt 105	76, 77 ⁴
PT33SE	FKI ²	BS9522 N0001	Patt 603	76, 77 ⁴
PT44	FKI ²	BS9522 F0017	Patt 105	76, 77 ⁴
PT44SE	FKI ²	BS9522 N0001	Patt 603	76, 77 ⁴
PT55	FKI ²	BS9522 F0017	Patt 105	76, 77 ⁴
PT55SE	FKI ²	BS9522 N0001	Patt 603	76, 77 ⁴
PT77	FKI ²	BS9522 F0017	Patt 105	76, 77 ⁴
PT77SE	FKI ²	BS9522 N0001	Patt 603	76, 77 ⁴
PTG55	FKI ²	BS9522 F0017	Patt 105	76, 77 ⁴
PTG55SE	FKI ²	BS9522 N0001	Patt 603	76, 77 ⁴
PTS-DR	Bendix	MIL-C-26482	Series 2	54
PV7	Cannon	MIL-C-26482	Series 2	54
PVJ	Cannon	MIL-C-26482	Series 2	54
PVW	Cannon	—	—	54
PVX	Cannon	Def. Stan. 59-56	Patt 602	54
QDP	Bendix	None	—	32
QRP	AB Elec	—	—	78
QWL	Bendix	None	—	31
QWLD	Bendix	MIL-C-22992	Class C, J, R	32
RD1	Raychem	MIS-20065	—	54
RR	Deutsch	Def. Stan. 59-56	Patt 602	54
RR20	Deutsch	PAN 6432-2	—	54
RR50	Deutsch	PAN 6432-1	—	54
RR70	Deutsch	PAN 6432-2	—	54
RSM	Deutsch	None	—	71
RTK	Deutsch	None	—	71
SA	SAE	MIL-C-5015	MS3400	54
SB	Bendix	MIL-C-5015	Class E	18
SB-104	AB Elec	Def. Stan. 59-35	Patt 104	Contact TE
SB-M4	AB Elec	Def. Stan. 59-35	Patt 104	Contact TE
SB-MS	AB	BS9522 F0030	—	75
SC	Bendix	MIL-C-5015	MS3100 Class A	18
SCB	SICEM	VG 95234	—	Contact TE
SF	Bendix	MIL-C-5015	MS3100 Class E	18
SG	Bendix	MIL-C-5015	MS3100 Class E	18
SJT	Various	PAN 6433-2	—	47
SJT07	Various	PAN 6433-2	—	Contact TE
SLPT	Deutsch	MIL-C-26482	Series 1	76, 77 ⁴

²FKI was previously Thorn.

³Code 24 connectors have an internal accessory thread.

⁴Code 77 braided version.

Adapter Code (Continued)

Table B. Adapter Code by Manufacturer's Prefix

(Continued)

Manufacturer's Prefix	Manufacturer ⁶	Connector Specification	Series/Class	Adapter Code
SM	Bendix	MIL-C-5015	MS3100 Class A, E, R	18
SPT	Bendix	MIL-C-26482	Series 1	76, 77 ⁴
SPT	Socapex	MIL-C-26482	Series 1	76, 77 ⁴
SPT07	Various	MIL-C-26482	Series 1	24 ³
STK	Deutsch	None	—	71
STT	FKI ²	BS9522 F0012	Patt 615	47
STT07	FKI ²	BS9522 F0012	Patt 615	Contact TE
T3 ¹	Pyle	MIL-C-38999	Series III	40
TRIM TRIO	Burndy	None	—	Contact TE
TT	FKI ²	BS9522 N0003	Patt 614	41
TV	FKI ² /Bendix	MIL-C-38999	Series III	40
TV-O-R	Bendix	MIL-C-38999	Series III and IV	40
TVP	FKI ² /Bendix	MIL-C-38999	Series III	40
TVPS	FKI ² /Bendix	MIL-C-38999	Series III	Contact TE
TVS	FKI ² /Bendix	MIL-C-38999	Series III	Contact TE
Tri-Start	Bendix	MIL-C-38999	Series III and IV	40
VPT	VEAM	MIL-C-26482	Series 1	21
VTT	FKI ²	MIL-C-38999	Series III	40
ZZY/ZZW	Pyle	MIL-C-26500	Class R, G (AL)	51
ZZY/ZZW	Pyle	MIL-C-26500	Class E (SST)	52

¹May be a number or letter depending upon connector style.

²FKI was previously Thorn.

³Code 24 connectors have an internal accessory thread.

⁴Code 77 braided version.

⁵Free connectors only.

⁶Some of the connector manufacturers names may have changed and may not exist. They are listed here to assist users who know them as listed names.

Table C. Adapter Code by Connector Specification
Adapter Code (Continued)

Connector Specification	Series/Class	Adapter Code
40M38277	—	41
40M39569	—	54
BS9520	G0001	41
BS9520	G0002	41
BS9520	G0003	40
BS9522 F0012	Patt 615	47
BS9522 F0014	Patt 104	Contact TE
BS9522 F0017	Patt 105	76
BS9522 F0020	Patt 608	79 ²
BS9522 F0023	—	Contact TE
BS9522 F0029	Patt 616	41
BS9522 F0030	Patt 121A	75
BS9522 F0032	Patt 121B	78
BS9522 F0042	—	54
BS9522 N0001	Patt 603	76
BS9522 N0003	Patt 614	41
BS9540 F0001	Patt 602	54
LN 29500	—	21
LN 29504	—	54
LN 29728	—	54
LN 29729	—	47
MIL-C-22992	Class C, J, R	32
MIL-C-26482	Series 1	21, 24 ¹
MIL-C-26482	Series 2	54
MIL-C-26500	Aluminum, Class F, G, R	51
MIL-C-26500	Stainless steel, Class E, K	52
MIL-C-28840	Class D	30
MIL-C-38999	Series I and II	41
MIL-C-38999	Series III and IV	40
MIL-C-5015	MS3400	54
MIL-C-5015	MS3100	18, 15 (with endbell)
MIL-C-5015	5MS	75
MIL-C-81511	Series 1, 2, 3, and 4	61
MIL-C-81703	Series 1, 2	71
MIL-C-81703	Series 3	54
MIL-C-83723	Series II	19
MIL-C-83723	Series I and III	54
MIL-C-85049/59	—	32
MIL-C-85049/60	—	54
MIL-C-85049/62	—	41
MIL-C-85049/69	—	40
MIS-20065	—	54
MVEE	5MS	75
NAS 1599	—	54
NFL 54120	—	Contact TE
NFL 54140	—	54
PAN 6432-1	—	54
PAN 6432-2	—	54
PAN 6433-1	—	41
PAN 6433-2	—	47
PRL 54125	—	21, 24 ¹
VG 95234	—	64 ^{***} , 66 ^{**} , 78 [*]
VG 95328	—	Contact TE
VG 95329	—	61
VG 96912	Series 2	41
VG 96912	Series 1	47

¹Code 24 connectors have an internal accessory thread.

²Free connectors only.

^{*} AB connectors only

^{**} VEAM standard

^{***}VEAM panel mount

Adapter Family

Selecting the Adapter Family

Using Table D below and the adapter code you selected in Table A, B, or C, select the adapter family for the adapter type you chose (spin-coupling or Tinel-Lock).

With the alphanumeric prefix for that family you can then build the part number for your TE adapter.

Table D. Identification of Adapter Family Prefix by Adapter Code

TE Connector Code	Boot Adapter		Shielded Adapter			Tinel-Lock Adapter Straight, 45°, and 90°	CRES-Lock Band Strap Adapter
	Solid (Fixed)	Spin-Coupling	Straight	45°	90°		
15	210M5	202M5	219M0	219M1	219M2	TXR 15	—
18	218M5	218M6	218M7	218M8	218M9	TXR 18	BND 18
19	201M7	201M4	—	—	—	—	—
21	203M6	203M9	206M0	206M1	206M2zx	TXR 21	BND 21
24	208M5	208M6	216M0	216M1	206M5	—	—
30	211M8	211M9	211M5	211M6	211M7	TXR 30	—
32	—	204M3	207M3	212M4	212M5	TXR 32	BND 32
40	209M3	209M4	208M7	208M8	208M9	TXR 40	BND 40
41	202M1	202M2	204M0	204M1	204M2	TXR 41	BND 41
47	202M8	202M7	210M0	210M1	210M2	TXR 47	BND 47
51	207M4	205M5	207M0	207M1	207M2	TXR 51	—
52	208M3	209M6	208M0	208M1	208M2	TXR 52	—
54	201M9	201M1	203M0	203M1	203M2	TXR 54	BND 54
61	202M3	202M4	205M0	205M1	205M2	TXR 61	—
71	203M5	202M9	217M0	217M1	217M2	TXR 71	—
75	228M5	228M7	227M0	227M1	227M2	TXR 75	—
76	225M6	225M5	—	—	—	TXR 76	—
77	228M6	228M8	228M0	228M1	228M2	—	—
78	225M4	225M3	225M0	225M1	225M2	TXR 78	—
79	—	229M3	229M1	229M2	229M0	TXR 79	—
80	215M4	213M5	213M6	213M7	213M8	TXR 80	—
81	214M3	214M4	214M5	214M6	214M7	TXR 81	—

Part Number

Having Selected the Right Adapter Type and Adapter Family, You Can Now Construct a Part Number for the Adapter.

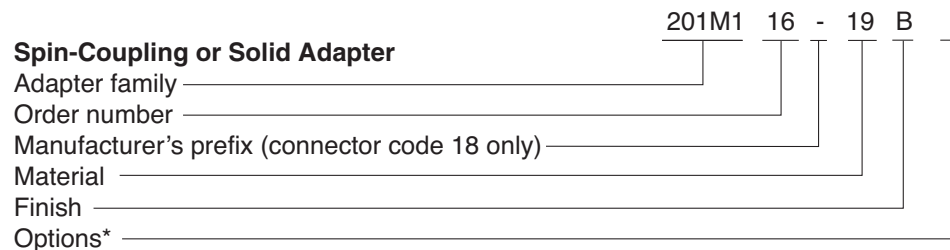
1. Start with the alphanumeric prefix you selected in Table D. This will be the basis of your part number.
2. Add to the prefix the codes and designators required for your adapter type and application. These may include several or all of the following:

- Order number
- Manufacturer's prefix
- Material
- Finish
- Entry size
- Ring designator
- Option codes

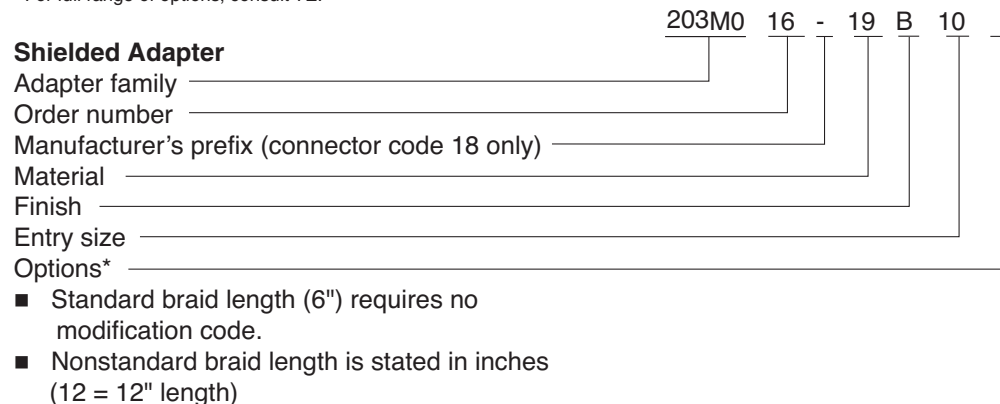
Using the right codes and designators helps ensure that the adapter you select will meet the application requirements.

To determine which codes and designators you will need, use the Part numbering system shown below. To select the right codes and designators, turn to the pages that follow.

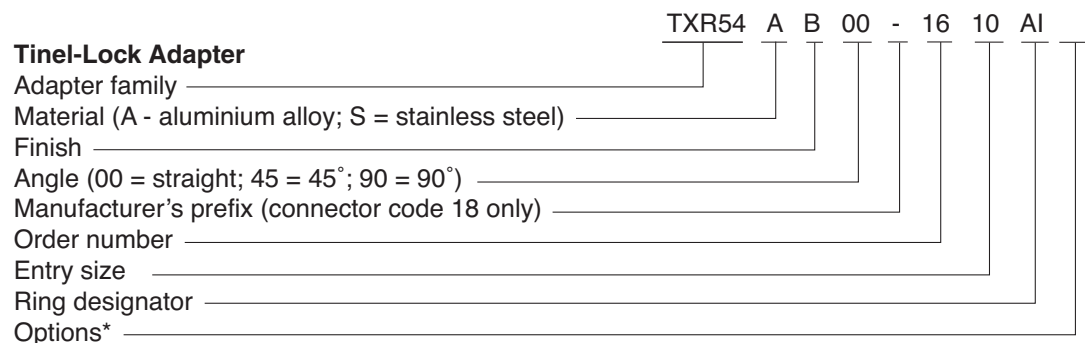
Part Numbering System



*For full range of options, consult TE.



*For full range of options, consult TE.



*For full range of options, consult TE.

Part Number (Continued)

CRES-Lock Band Strap Adapters Part Numbering System

The diagram illustrates the structure of a BND part number, showing how each component maps to a specific segment of the number. The components and their corresponding segments are:

- Product Designator**: Maps to the first two segments (BND).
- Adapter Code**: Maps to the third segment (54).
- Material**: Maps to the fourth segment (A).
- Finish**: Maps to the fifth segment (B).
- Configuration**: Maps to the sixth segment (00).
- Order Number**: Maps to the seventh segment (-).
- Entry Size**: Maps to the eighth segment (12).
- Band Termination Device Code**: Maps to the ninth segment (06).

Below the diagram, the meaning of each segment is defined:

- Product Designator**:
 - BND — Adapter and Band
 - BNX — Adapter only
- Adapter Code**: (No specific definitions provided in the diagram)
- Material**²:
 - A — Aluminum alloy per QQ-A-225
 - B — Nickel aluminum bronze per ASTM B150
 - S — Stainless steel per QQ-S-763
- Finish** (See S-CH00-0157-002): (No specific definitions provided in the diagram)
- Configuration**:
 - 00 = Straight
 - 45 = 45°
 - 90 = 90°
 - 4W = 45°
 - 9W = 90°
- For BND 18, dash may be replaced by a letter**: (No specific definitions provided in the diagram)
- Order Number**: (No specific definitions provided in the diagram)
- Entry Size**³: (No specific definitions provided in the diagram)
- Band Termination Device Code**¹:
 - A — BND-1225S (Standard Supply for Americas and Asia)
CRES-Lock Banding Strap
 - B — BND-1425S (Standard Supply European Countries)

Notes:

1. See Drawings BND-1225S or BND-XX25S for information on bands. Adapter dimensions for "A" designation may be different than those listed in this catalog. Contact Tyco Electronics for Specification Control Drawing (SCD) for these adapters.
2. Alternative equivalent material specifications to those shown may be supplied at Tyco Electronics' discretion.
3. For standard entry sizes see relevant specification control drawing. For entry sizes larger than standard (Type II Adapters), see sheets 3 and 4.

**Band Strap Adapter
Modification Option Field
(Omit if not required)**

BND54AB00-1206A D F H J L N P S

D — Drain holes modification _____

F — Internal abrasion resistant coating _____

H — Helical conduit thread _____

J — Chain attachment assembly _____

L — Lock wire holes manufacturer's option _____
Include mod if required
Standard on codes 40 and 54

Optional O-Ring material _____
Omit for standard silicone (ZZ-R-765, grade 70: S59)
C — Neoprene per AMS3209
U — Fluorosilicone per MIL-R-25988, class 1
N — Nitrile (Buna N) per AMS3215
V — Fluorocarbon per MIL-R-83248, class 1

P — Pre-coiled bandstrap option _____
(See drawings BND-1225P or BND-XX25P)

S — Self-locking spin nut _____

Selecting the Material and Finish

To ensure optimum compatibility, select the adapter material and finish to match those of the connector.

Most circular connectors are manufactured from aluminum with a cadmium finish.

Material Codes

Material* Description	Material Code Solid, Spin-Coupling, and Shielded Adapters	Tinel-Lock Adapters	Typical Applications
Aluminum alloy	19	A	Standard material for normal applications
Stainless steel	62	S	Corrosion-resistant and high-temperature (firewall) applications
Nickel aluminum bronze	01	B	Exposed marine environments

*Other materials available upon request.

Finish Codes

Finish* Description	Color	Finish Code	Typical Applications
Cadmium, per QQ-P-416, Type II, Class 3 over electroless nickel (500-hour salt-spray-resistant finish)	Olive drab	B	Corrosion resistance for exposed environments
Electroless nickel, per AMS-C-26074, Class 4, Grade B	Bright Silver	C	High conductivity for optimum screening performance
Anodized, hard, per MIL-A-8625, Type III, Class 2	Black	G	Nonconductive finish for aluminum adapters
Passivated, per QQ-P-35 or MIL-S-5002	—	J	Surface treatment for corrosion-resistant steel
Unplated, shotblast	—	W	Nonreflective finish for nickel aluminum bronze adapters
Zinc Nickel	Black	Z	Cadmium free plating

*Other finishes available upon request.

Entry Size

Determining the Wire Bundle Size

The entry size of an adapter is based on the size of the wire bundle. If you don't know the size of the wire bundle, measure a prototype or calculate the size.

Calculation of the wire bundle size is based on three values:

- Cable outside diameter (COD)
- Cable jacket thickness
- Jacketed cable diameter

Instructions for calculating these values follow.

COD Calculation

To calculate the cable outside diameter, first determine whether the wires in the bundle are of the same size or of different sizes.

COD Calculation for Wires of the Same Size

For bundles with wires that are all of the same size, follow these steps:

1. Determine the number of wires in the wire bundle.
2. Find the multiplication factor for that number in Table E shown on the next page.
3. Find the wire diameter in the Wire and Cable section (Section 9) of this catalog.
4. Multiply the wire diameter (from Step 3) by the multiplication factor (from Step 2) as shown below.

Formula: $D = Fd$

Where:

D = Bundle diameter

F = Multiplication factor

d = Wire diameter

Example: A bundle of wires containing 27 x 44A0111-22

$F = 6.00$ (the multiplication factor for 27 wires from Table E)

$d = 1.19 \text{ mm } (.049 \text{ in})^*$

$D = 6 \times 1.19 \text{ mm } (6 \times .049 \text{ in})$

$D = 7.14 \text{ mm } (.294 \text{ in})$

*Diameter of 44A0111-22 wire obtained from the Wire and Cable Section 9 of this catalog.

COD Calculation for Wires of Different Sizes

To determine the wire bundle diameter when using wires of different sizes, follow these steps:

1. Determine the number of wires in the wire bundle.
2. Find the diameter of the wires in the Wire and Cable section of this catalog.
3. Calculate the cable outside diameter by using this formula:

$$D = 1.2\sqrt{N_1d_1^2 + N_2d_2^2 + N_3d_3^2}$$

Where:

D = Bundle diameter

N = Number of wires

d = Diameter of wires

Example: A bundle of wires containing

3 x 44A0111-221* (1.192-mm dia.)

5 x 44A0111-201* (1.42-mm dia.)

1 x 44A0111-181* (1.65-mm dia.)

$$D = 1.2\sqrt{3 \times 1.192^2 + 5 \times 1.42^2 + 1 \times 1.65^2}$$

$$D = 1.2\sqrt{3 \times 1.4 + 5 \times 2.02 + 1 \times 2.7}$$

$$D = 1.2\sqrt{4.2 + 10.1 + 2.7}$$

$$D = 1.2\sqrt{17}$$

$$D = 1.2 \times 4.12$$

$$D = 4.95 \text{ mm}$$

*For wire information see the Wire and Cable Section 9 of this catalog.

Entry Size (Continued)

Table E. Multiplication Factors for Wire Bundles with Equal Size Wires

This table provides multiplication factors for wire bundles of 1 to 61 wires.

To determine the approximate diameter of a wire bundle when the wires are all the same size, find the factor for the number of wires in the bundle and multiply the wire diameter by that factor.

Number of Wires	Multiplication Factor	Number of Wires	Multiplication Factor
1	1.00	32	6.70
2	1.60	33	6.70
3	2.00	34	7.00
4	2.41	35	7.00
5	2.70	36	7.00
6	3.00	37	7.00
7	3.00	38	7.31
8	3.60	39	7.31
9	4.00	40	7.31
10	4.00	41	7.61
11	4.00	42	7.61
12	4.00	43	7.61
13	4.41	44	7.61
14	4.41	45	8.00
15	4.70	46	8.00
16	4.70	47	8.00
17	5.00	48	8.00
18	5.00	49	8.41
19	5.00	50	8.41
20	5.31	51	8.41
21	5.31	52	8.41
22	5.61	53	8.70
23	5.61	54	8.70
24	5.61	55	8.70
25	6.00	56	8.70
26	6.00	57	9.00
27	6.00	58	9.00
28	6.41	59	9.00
29	6.41	60	9.00
30	6.41	61	9.00
31	6.70	—	—

Entry Size (Continued)

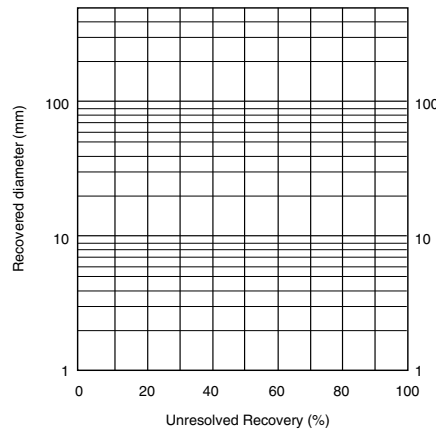


Figure 1.

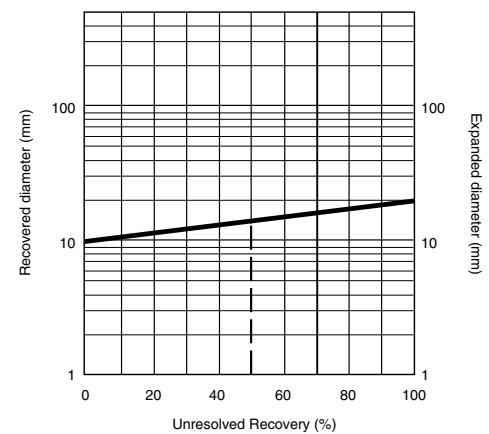


Figure 2.

Cable Jacket Thickness Calculation

To determine the wall thickness of a jacket over a wire bundle:

1. Use the chart in Figure 1 to determine the unresolved recovery of the tubing jacket
2. Use the chart in Figure 3 to determine the wall thickness reduction factor.
3. Calculate the jacket wall thickness by multiplying the fully shrunk wall thickness (as detailed in the Tubing section — Section 3 — of this catalog) by the wall thickness reduction factor.

Step 1. Determine the Unresolved Recovery of the Tubing Jacket.

1. Locate the recovered and expanded diameters of the chosen tubing size on the chart in Figure 1.
2. Lay a straight edge between the two values and pencil in a straight line connecting them.
3. Find the wire bundle diameter on the Expanded Diameter scale of the chart in Figure 1.
4. From the wire bundle diameter value, draw a straight horizontal line across the chart.
5. From the intersection of the line from step 3 and the line from step 2, read down vertically to the "Unresolved Recovery" for this combination.

Example (see Figure 2):

Recovered tubing diameter = 10 mm

Expanded tubing diameter = 20 mm

Wire bundle diameter = 13 mm

Unresolved recovery = 50%

Entry Size (Continued)

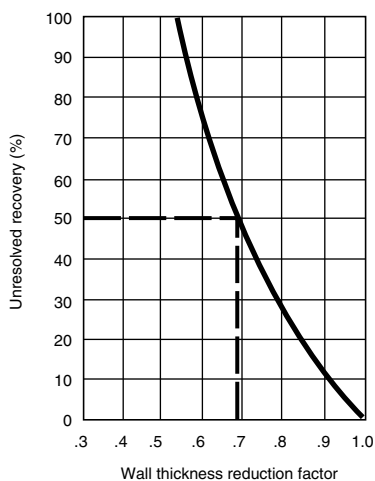


Figure 3.

Step 2. Find the Wall Thickness Reduction Factor.

1. On the Unresolved Recovery scale of the chart in Figure 3 above, find the unresolved recovery value determined in Step 1.
2. From the unresolved recovery value, draw a straight line across the chart to the curved line.
3. At the point where that line intersects the chart's curved line, read vertically down to the wall thickness reduction factor.

Example shown:

Unresolved recovery = 50%

Reduction factor = 0.68

Step 3. Calculate the Jacket Wall Thickness.

Multiply the fully shrunk wall thickness of the tubing by the reduction factor.

Example:

Fully shrunk wall thickness of tubing = 1.45 mm

Wall thickness reduction factor (from Figure 3) = 0.68

Jacket wall thickness = 1.4×0.68
= 0.99 mm

Note:

If the cable is to be shielded (screened), an addition must be made to the wire bundle diameter for the braid. In the example, 0.8 mm would be added to the wire bundle diameter for a single layer of RAY 101 (36 AWG) braid to make a total wire bundle diameter of 13.8 mm.

Entry Size (Continued)

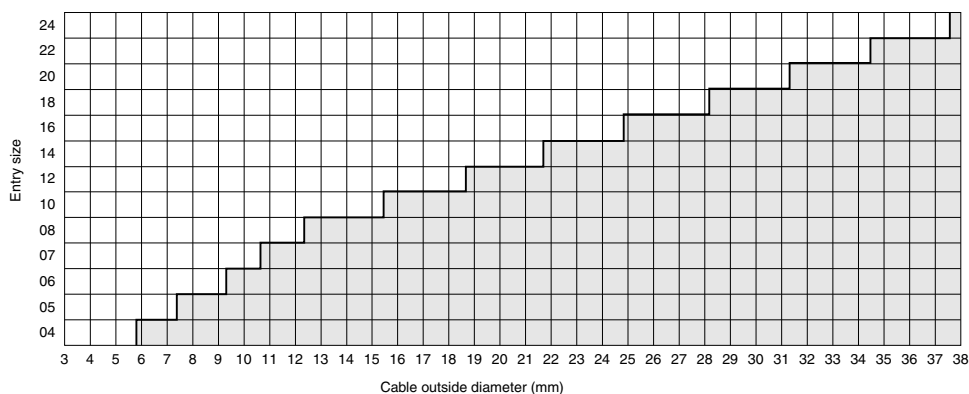


Figure 4. Entry Size by Cable Outside Diameter (in millimeters)

Determining the Entry Size

Once you have the wire bundle size, you can use the chart in Figure 4 to select the entry size. This chart shows the minimum entry sizes for cables from 3 to 38 mm [.118 to 1.496 in] in diameter. In other words, the white spaces on the chart represent all of the cable outside diameters each entry size will fit.

Follow these steps:

1. Find the cable diameter on the chart.
2. Note the lowest entry size that will fit the cable diameter

Braided Adapters

The extreme flexibility of the braid on these adapters accommodates a large range of cable diameters. It is therefore recommended that the standard entry size for any given adapter part number be specified as indicated on the relevant data sheet. Nonstandard entry sizes are available on special order.

Use the selection chart in Figure 4 to ensure that the standard entry size will pass over the jacketed cable diameter.

Tinel-Lock Adapters

With Tinel-Lock adapters, the cable braid must be opened up to fit onto the outside diameter of the adapter entry. For optimum performance, select the smallest entry size that will pass over the jacketed cable diameter. Repair of the connector will be easier using the boot and shield rollback if a slightly larger than minimum entry size is used.

The selection chart in Figure 4 shows the minimum entry sizes for cable diameters in the range of 3 mm to 38 mm. This will ensure that the jacketed cable passes through the adapter for easy assembly.

It should be checked to be sure the braid will open sufficiently to fit the entry size selected and to ensure that the braid and boot can be rolled back.

Entry Size (Continued)

Ray 101 Tinned-Copper Braid

TE manufactures a range of Raychem tubular braided shields (sometimes called "screens") that are used for shielding hand-built harnesses.

These braids are specially designed to have:

- Good surface transfer impedance
- Large opening ratio
- Good handling characteristics
- Compatibility with Tinel-Lock adapters

Sizes are available to cover wire bundle diameters from 2.5 to 38 [.10 to 1.50]. The table below shows the wire bundle diameter range for each braid size and also shows which adapter entry sizes are compatible with each of these braids and bundle diameters.

The entry sizes do not allow for the additional thickness of the braid and the heat-shrunk cable jacket.

Ray 101 Data

Part No.	Number of Carriers	Number of Ends/Carrier	Individual Strand Size (mm/AWG)	Wire Bundle Diameter Range			Tinel Adapter Entry Size (Single-Layer Braid)
				Min.	Max.	Wall Thickness (Nom.)	
RAY 101-3.0	16	10	0.1 [38]	2.5 [.10]	5.0 [.20]	N/A	N/A
RAY 101-4.0	24	7	0.13 [36]	3.5 [.14]	7.5 [.30]	0.4 [.02]	04*
RAY 101-6.0	24	9	0.13 [36]	4.0 [.16]	9.5 [.37]	0.4 [.02]	04, 05, 06*, 07
RAY 101-7.5	24	14	0.13 [36]	6.0 [.24]	14.0 [.55]	0.4 [.02]	05, 06, 07, 10*
RAY 101-10.0	36	12	0.13 [36]	8.0 [.31]	22.0 [.87]	0.4 [.02]	07, 08, 10 12*
RAY 101-12.5	36	15	0.13 [36]	10.0 [.39]	24.0 [.94]	0.4 [.02]	08, 10, 12, 14, 16*
RAY 101-20.0	48	16	0.13 [36]	16.0 [.63]	38.0 [1.50]	0.4 [.02]	12, 14, 16, 18, 20, 22

*Combination is not preferred; use only if absolutely necessary.

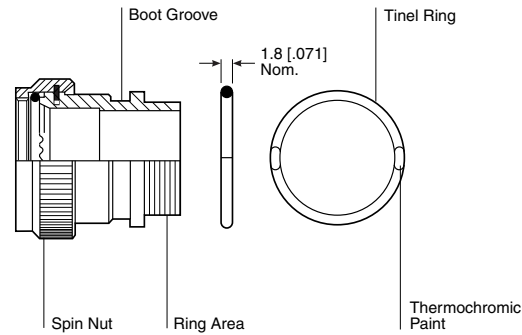
Tinel-Lock Ring

Tinel-Lock Ring and Braid

The Tinel-Lock ring designator must be specified according to the type of cable braid used, and is added to the part number after the adapter entry size. There are two types of ring, AI and BI, for each entry size.

Tinel rings are marked with thermochromic paint, which changes color when the correct installation temperature is reached. BI-type rings are identified with a red spot.

Braid type, material, and construction are variable. Refer to drawing CH00-0250-008 for Tinel-Lock adapters.



Braid Type	Ring Designator
Single layer 36 AWG	AI
Single layer 34 AWG	AI
Single layer 32 AWG	BI
Single layer 30 AWG	BI
Double layer 36 AWG	BI
Double layer 34 AWG	BI

A or B = Size of Braid I = Insulating Layer

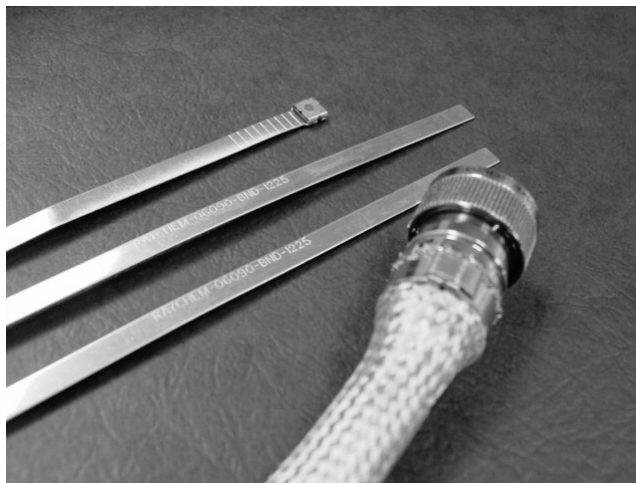
Table F.
Wire Gauge (AWG) to
Diameter Cross-Reference
Use this table to establish wire gauge if not known.

Wire Gauge (AWG)	Diameter
40	0.079 [0.0031]
39	0.089 [0.0035]
38	0.102 [0.0040]
37	0.114 [0.0045]
36	0.127 [0.0050]
35	0.142 [0.0056]
34	0.160 [0.0063]
33	0.180 [0.0071]
32	0.203 [0.0080]
31	0.226 [0.0089]
30	0.254 [0.0100]
29	0.287 [0.0113]
28	0.320 [0.0126]

*Note: It may be necessary to use an 'A' rather than a 'B' ring on entry sizes 04-07 when terminating a multicore cable with double layer machined braid. Braid applied by machine provides less size flexibility than pull-on braid at the smaller entry sizes. If disturbance during assembly causes loss of braid lay, grip of the tinel ring may be affected. Evaluation is recommended. Contact TE for more information.

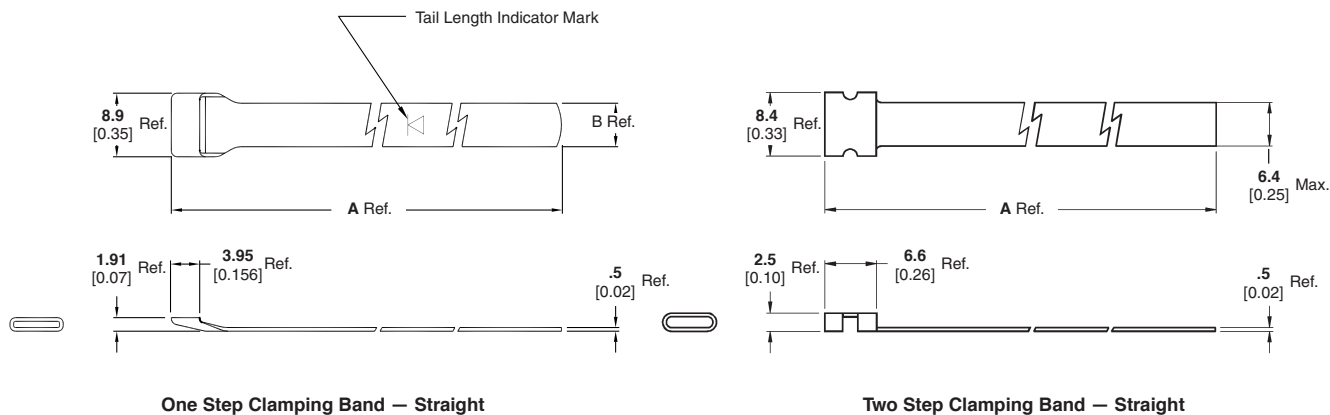
Available in:	Americas	Europe	Asia Pacific
	■	■	■

CRES-Lock Bands



The CRES-Lock band strap designator must be specified when using a band adapter. There are two forms of band that are available — precoiled and straight. Straight is a standard configuration and does not require any notation. If precoiled bands

are required, an option P must be used. Refer to CH00-0250-016 drawing for more detailed information. CRES-Lock band strap comes in 12 inch length. These fit all entry sizes for both the CRES-Lock adapter.

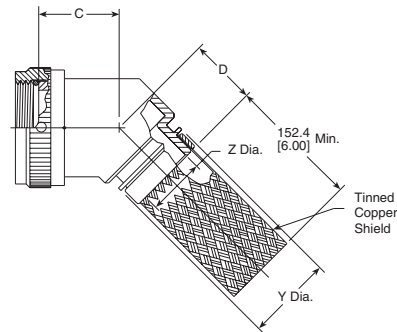


Part Number	Entry Sizes	A Ref. ± 1.5 [± 0.06]
BND-1225S	03 to 24	305.0 12.00
BND-0812S	04 to 14	304.8 12.00

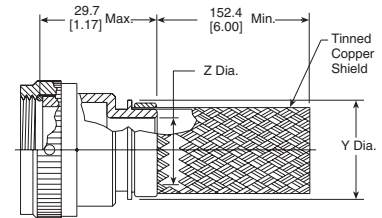
Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 18 MIL-C-5015 (MS3100)

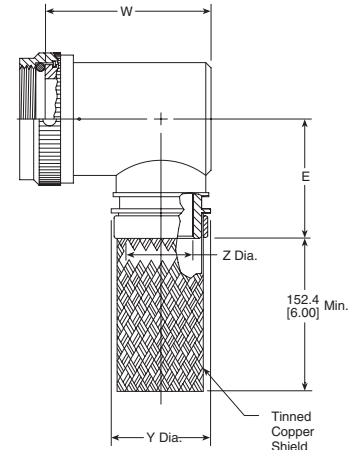
Braided Adapters



218M8XX-XXXXX



218M7XX-XXXXX



218M9XX-XXXXX

Manufacturer Code	Connector Manufacturer MS3100/3101/3106
A	Amphenol-Class A
B	Bendix-Class A/E/R
C	Cannon-Class A/E/R
D*	Unknown-Class A/E/R
R	Amphenol-Class R
—	Manufacturer code not required

*Additional pieces supplied when manufacturer is unknown.
All thread sizes for order number apply.

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 18 MIL-C-5015 (MS3100) (Continued)

Braided Adapters

(continued)

Table of Dimensions

Order No.	Shell Size	Manufacturer Code	Max. Entry Size, Type 1**	Thread	Dimensions		
					C Max.	D Max.	E Max.
08	8S	B	04	.375-32 UNEF	20.3 [0.80]	23.4 [0.92]	31.2 [1.23]
08	8S	C	04	.438-28 UNEF	20.3 [0.80]	23.4 [0.92]	31.2 [1.23]
08	8S	A, R	04	.438-27 UNS	20.3 [0.80]	23.4 [0.92]	31.2 [1.23]
08	8S	D	04	See * above.	20.3 [0.80]	23.4 [0.92]	31.2 [1.23]
10	10S	—	06	.500-28 UNEF	21.1 [0.83]	24.1 [0.95]	31.2 [1.23]
11	10SL	C	07	.562-24 UNEF	21.1 [0.83]	24.1 [0.83]	31.2 [1.23]
11	10SL	A, B, R	07	.625-24 UNEF	21.1 [0.83]	24.1 [0.95]	31.2 [1.23]
11	10SL	D	07	See * above.	21.1 [0.83]	24.1 [0.95]	31.2 [1.23]
12	12 & 12S	B, C	08	.625-24 UNEF	21.1 [0.83]	24.1 [0.95]	31.2 [1.23]
12	12 & 12S	A, R	08	.688-24 UNEF	21.8 [0.86]	24.9 [0.98]	33.0 [1.30]
12	12 & 12S	D	08	See * above.	21.8 [0.86]	24.9 [0.98]	33.0 [1.30]
14	14 & 14S	—	10	.750-20 UNEF	21.8 [0.86]	24.9 [0.98]	33.0 [1.30]
16	16 & 16S	—	12	.875-20 UNEF	22.6 [0.89]	25.9 [1.02]	36.1 [1.42]
18	18	—	12	1.000-20 UNEF	23.4 [0.92]	26.7 [1.05]	37.6 [1.48]
20	20	A, B, C	16	1.125-18 UNEF	24.1 [0.95]	27.4 [1.08]	39.4 [1.55]
20	20	R	16	1.125-24 UNS	24.1 [0.95]	27.4 [1.08]	39.4 [1.55]
20	20	D	16	See * above.	24.1 [0.95]	27.4 [1.08]	39.4 [1.55]
22	22	—	18	1.250-18 UNEF	24.9 [0.98]	28.2 [1.11]	40.9 [1.61]
24	24	—	20	1.375-18 UNEF	24.9 [0.98]	28.2 [1.11]	42.4 [1.67]
28	28	—	24	1.625-18 UNEF	27.4 [1.08]	29.7 [1.17]	47.2 [1.86]
32	32	B, C	24	1.875-16 UN	28.2 [1.11]	31.2 [1.23]	48.8 [1.92]
32	32	A, R	24	1.906-18 UN	28.2 [1.11]	31.2 [1.23]	48.8 [1.92]
32	32	D	24	See * above.	28.2 [1.11]	31.2 [1.23]	48.8 [1.92]
36	36	B	24	2.062-16 UNS	31.2 [1.23]	32.3 [1.27]	52.1 [2.05]
36	36	R	24	2.062-20 UNS	31.2 [1.23]	32.3 [1.27]	52.1 [2.05]
36	36	C	24	2.125-16 UN	31.2 [1.23]	32.3 [1.27]	52.1 [2.05]
36	36	A	24	2.125-18 UNS	31.2 [1.23]	32.3 [1.27]	52.1 [2.05]
36	36	D	24	See * above.	31.2 [1.23]	32.3 [1.27]	52.1 [2.05]
40	40	B	24	2.312-16 UNS	32.3 [1.27]	33.0 [1.30]	55.1 [2.17]
40	40	A, C, R	24	2.375-16 UN	32.3 [1.27]	33.0 [1.30]	55.1 [2.17]
40	40	D	24	See * above.	32.3 [1.27]	33.0 [1.30]	55.1 [2.17]
44	44	—	24	2.625-16 UN	34.0 [1.34]	34.5 [1.36]	61.5 [2.42]
48	48	C	24	2.812-18 UNS	34.0 [1.34]	34.5 [1.36]	61.5 [2.42]
48	48	A, R	24	2.875-16 UN	34.0 [1.34]	34.5 [1.36]	61.5 [2.42]
48	48	D	24	See * above.	34.0 [1.34]	34.5 [1.36]	61.5 [2.42]

**For larger than maximum type 1 entry sizes, a two-piece adapter will be supplied. Contact TE for information.

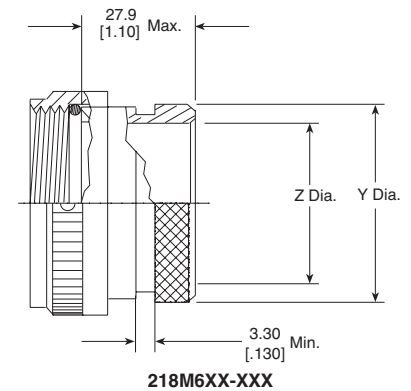
Entry Size Dimensions

Entry Size	Dimensions		
	Z Dia. +0.25–0.5	Y Dia. ±0.38	W Max.
04	6.35 [0.250]	11.58 [0.456]	31.2 [1.23]
05	7.92 [0.312]	13.08 [0.515]	32.8 [1.29]
06	9.53 [0.375]	14.76 [0.581]	34.3 [1.35]
07	11.13 [0.438]	16.33 [0.643]	36.1 [1.42]
08	12.70 [0.500]	17.91 [0.705]	37.6 [1.48]
10	15.88 [0.625]	21.11 [0.831]	40.6 [1.60]
12	19.05 [0.750]	24.21 [0.953]	43.9 [1.73]
14	22.23 [0.875]	27.46 [1.081]	47.0 [1.85]
16	25.40 [1.000]	30.61 [1.205]	50.8 [2.00]
18	28.58 [1.125]	35.08 [1.381]	54.1 [2.13]
20	31.75 [1.250]	38.25 [1.506]	57.2 [2.25]
22	34.93 [1.375]	41.43 [1.631]	—
24	38.10 [1.500]	44.60 [1.756]	—

Code 18 MIL-C-5015 (MS3100) (Continued)
Solid Adapters

Manufacturer Code	Connector Manufacturer MS3100/3101/3106
A	Amphenol-Class A
B	Bendix-Class A/E/R
C	Cannon-Class A/E/R
D*	Unknown-Class A/E/R
R	Amphenol-Class R
—	Manufacturer code not required

*Additional pieces supplied when manufacturer is unknown.
All thread sizes for order number apply.


Table of Dimensions

Order No.	Shell Size	Manufacturer Code	Thread	Dimensions	
				Y ±0.5	Z Min.
08	8S	B	.375–32 UNEF	13.2 [0.52]	6.22 [0.24]
08	8S	C	.438–28 UNEF	13.2 [0.52]	7.80 [0.31]
08	8S	A, R	.438–27 UNS	13.2 [0.52]	7.80 [0.31]
08	8S	D	See * above.	13.2 [0.52]	7.80 [0.31]
10	10S	—	.500–28 UNEF	15.0 [0.59]	9.40 [0.37]
11	10SL	C	.562–24 UNEF	15.0 [0.59]	11.00 [0.43]
11	10SL	A, B, R	.625–24 UNEF	19.3 [0.76]	12.57 [0.49]
11	10SL	D	See * above.	19.3 [0.76]	11.00 [0.43]
12	12 & 12S	B, C	.625–24 UNEF	19.3 [0.76]	12.57 [0.49]
12	12 & 12S	A, R	.688–24 UNEF	19.3 [0.76]	14.15 [0.56]
12	12 & 12S	D	See * above.	19.3 [0.76]	12.57 [0.49]
14	14 & 14S	—	.750–20 UNEF	20.9 [0.82]	15.75 [0.62]
16	16 & 16S	—	.875–20 UNEF	24.1 [0.95]	18.92 [0.74]
18	18	—	1.000–20 UNEF	26.1 [1.03]	20.50 [0.81]
20	20	A, B, C	1.125–18 UNEF	34.0 [1.34]	25.27 [0.99]
20	20	R	1.125–24 UNS	34.0 [1.34]	25.27 [0.99]
20	20	D	See * above.	34.0 [1.34]	25.27 [0.99]
22	22	—	1.250–18 UNEF	36.3 [1.43]	28.45 [1.12]
24	24	—	1.375–18 UNEF	40.5 [1.59]	31.62 [1.24]
28	28	—	1.625–18 UNEF	43.0 [1.69]	34.80 [1.37]
32	32	B, C	1.875–16 UN	48.4 [1.91]	41.15 [1.62]
32	32	A, R	1.906–18 UN	48.4 [1.91]	41.15 [1.62]
32	32	D	See * above.	48.4 [1.91]	41.15 [1.62]
36	36	B	2.062–16 UNS	54.7 [2.15]	47.50 [1.87]
36	36	R	2.062–20 UNS	54.7 [2.15]	47.50 [1.87]
36	36	C	2.125–16 UN	54.7 [2.15]	47.50 [1.87]
36	36	A	2.125–18 UNS	54.7 [2.15]	47.50 [1.87]
36	36	D	See * above.	54.7 [2.15]	47.50 [1.87]
40	40	B	2.312–16 UNS	60.6 [2.39]	53.85 [2.12]
40	40	A, C, R	2.375–16 UN	60.6 [2.39]	53.85 [2.12]
40	40	D	See * above.	60.6 [2.39]	53.85 [2.12]
44	44	—	2.625–16 UN	67.1 [2.64]	60.20 [2.37]
48	48	C	2.812–18 UNS	73.5 [2.89]	66.55 [2.62]
48	48	A, R	2.875–16 UN	73.5 [2.89]	66.55 [2.62]
48	48	D	See * above.	73.5 [2.89]	66.55 [2.62]

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 18 MIL-C-5015 (MS3100) (Continued)

Solid Adapters

(continued)

**Molded Part Selection Guide
(Solid)**

Y Diameter	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
13.2 [0.52]	202W232	—	4.3 [0.19]	—	—	—
13.2 [0.52]	202K121	222K121	5.6 [0.22]	202D211	222D211	6.4 [0.25]
15.0 [0.59]	202K132	222K132	5.9 [0.23]	202D221	222D221	7.4 [0.29]
19.2 [0.76]	202K142	222K142	7.1 [0.28]	202D232	222D232	8.4 [0.33]
20.9 [0.82]	202K142	222K142	7.1 [0.28]	202D232	222D232	8.4 [0.33]
24.1 [0.95]	202K153	222K152	8.4 [0.33]	202D242	222D242	9.7 [0.38]
26.1 [1.03]	202K153	222K152	8.4 [0.33]	202D242	222D242	9.7 [0.38]
34.0 [1.34]	202K163	222K163	9.9 [0.33]	202D253	222D253	10.4 [0.41]
36.2 [1.43]	202K174	222K174	15.7 [0.62]	202D263	222D263	12.2 [0.48]
40.5 [1.59]	202K174	222K174	15.7 [0.62]	202D263	222D263	12.2 [0.48]
43.0 [1.69]	202K174	222K174	15.7 [0.62]	202D263	222D263	12.2 [0.48]
48.4 [1.91]	202K185	222K185	16.8 [0.66]	202D274	222D274	14.3 [0.56]
54.7 [2.15]	202K185	222K185	16.8 [0.66]	202D274	222D274	14.3 [0.56]
60.6 [2.39]	—	—	—	202D285	222D285	17.5 [0.68]
67.1 [2.64]	—	—	—	202D296	222D296	19.6 [0.76]
73.5 [2.89]	—	—	—	202D299	222D299	22.9 [0.89]

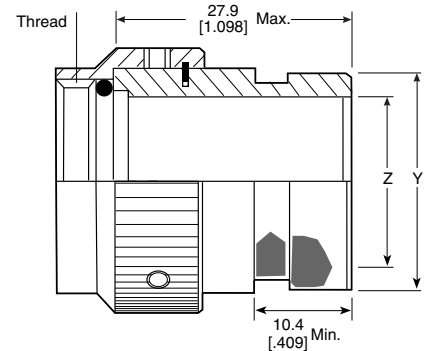
Uniboot Parts

Y Diameter	Part No.	Cable OD (Min.)
13.2 [0.52]	202C611	4.8 [0.19]
15.0 [0.59]	202C621	8.1 [0.32]
19.3 [0.76]	202C621	8.1 [0.32]
20.9 [0.82]	202C632	12.7 [0.50]
24.1 [0.95]	202C632	12.7 [0.50]
26.1 [1.03]	202C642	17.5 [0.69]
34.0 [1.34]	202C653	22.4 [0.88]
36.3 [1.43]	202C653	22.4 [0.88]
40.5 [1.59]	202C653	22.4 [0.88]
43.0 [1.69]	202C663	22.9 [0.90]
48.4 [1.91]	202C663	22.9 [0.90]
54.7 [2.15]	202C663	22.9 [0.90]
60.6 [2.39]	202C663	22.9 [0.90]
67.1 [2.64]	202C663	22.9 [0.90]
73.5 [2.89]	202C663	22.9 [0.90]

Code 18 MIL-C-5015 (MS3100) (Continued)
Spin-Coupling Adapters

Manufacturer Code	Connector Manufacturer MS3100/3101/3106
A	Amphenol-Class A
B	Bendix-Class A/E/R
C	Cannon-Class A/E/R
D*	Unknown-Class A/E/R
R	Amphenol-Class R
—	Manufacturer code not required

*Additional pieces supplied when manufacturer is unknown.
All thread sizes for order number apply.


218M6XX-XXX
Table of Dimensions

Order No.	Shell Size	Manufacturer Code	Thread	Dimensions	
				Y ±0.5	Z Min.
08	8S	B	.375–32 UNEF	13.2 [0.52]	6.22 [0.24]
08	8S	C	.438–28 UNEF	13.2 [0.52]	7.80 [0.31]
08	8S	A, R	.438–27 UNS	13.2 [0.52]	7.80 [0.31]
08	8S	D	See * above.	13.2 [0.52]	7.80 [0.31]
10	10S	—	.500–28 UNEF	15.0 [0.59]	9.40 [0.37]
11	10SL	C	.562–24 UNEF	15.0 [0.59]	11.00 [0.43]
11	10SL	A, B, R	.625–24 UNEF	19.3 [0.76]	12.57 [0.49]
11	10SL	D	See * above.	19.3 [0.76]	11.00 [0.43]
12	12 & 12S	B, C	.625–24 UNEF	19.3 [0.76]	12.57 [0.49]
12	12 & 12S	A, R	.688–24 UNEF	19.3 [0.76]	14.15 [0.56]
12	12 & 12S	D	See * above.	19.3 [0.76]	12.57 [0.49]
14	14 & 14S	—	.750–20 UNEF	20.9 [0.82]	15.75 [0.62]
16	16 & 16S	—	.875–20 UNEF	24.1 [0.95]	18.92 [0.74]
18	18	—	1.000–20 UNEF	26.1 [1.03]	20.50 [0.81]
20	20	A, B, C	1.125–18 UNEF	34.0 [1.34]	25.27 [0.99]
20	20	R	1.125–24 UNS	34.0 [1.34]	25.27 [0.99]
20	20	D	See * above.	34.0 [1.34]	25.27 [0.99]
22	22	—	1.250–18 UNEF	36.3 [1.43]	28.45 [1.12]
24	24	—	1.375–18 UNEF	40.5 [1.59]	31.62 [1.24]
28	28	—	1.625–18 UNEF	43.0 [1.69]	34.80 [1.37]
32	32	B, C	1.875–16 UN	48.4 [1.91]	41.15 [1.62]
32	32	A, R	1.906–18 UN	48.4 [1.91]	41.15 [1.62]
32	32	D	See * above.	48.4 [1.91]	41.15 [1.62]
36	36	B	2.062–16 UNS	54.7 [2.15]	47.50 [1.87]
36	36	R	2.062–20 UNS	54.7 [2.15]	47.50 [1.87]
36	36	C	2.125–16 UN	54.7 [2.15]	47.50 [1.87]
36	36	A	2.125–18 UNS	54.7 [2.15]	47.50 [1.87]
36	36	D	See * above.	54.7 [2.15]	47.50 [1.87]
40	40	B	2.312–16 UNS	60.6 [2.39]	53.85 [2.12]
40	40	A, C, R	2.375–16 UN	60.6 [2.39]	53.85 [2.12]
40	40	D	See * above	60.6 [2.39]	53.85 [2.12]
44	44	—	2.625–16 UN	67.1 [2.64]	60.20 [2.37]
48	48	C	2.812–18 UNS	73.5 [2.89]	66.55 [2.62]
48	48	A, R	2.875–16 UN	73.5 [2.89]	66.55 [2.62]
48	48	D	See * above	73.5 [2.89]	66.55 [2.62]

Available in:	Americas	Europe	Asia Pacific
	■	■	■

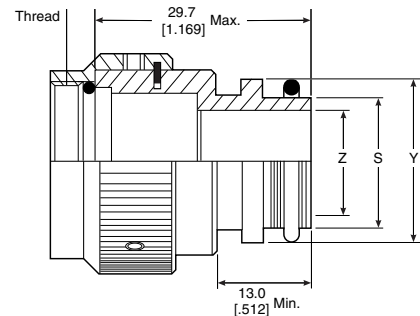
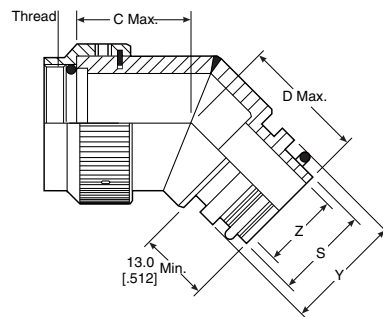
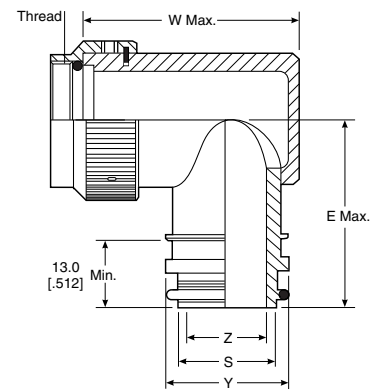
Code 18 MIL-C-5015 (MS3100) (Continued)

**Molded Part Selection Guide
(Spin-Coupling)**

Y Diameter	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
13.2 [0.52]		202W232	4.3 [0.19]			
13.2 [0.52]	202K121	222K121	5.6 [0.22]	202D211	222D211	6.4 [0.25]
15.0 [0.59]	202K132	222K132	5.9 [0.23]	202D221	222D221	7.4 [0.29]
19.2 [0.76]	202K142	222K142	7.1 [0.28]	202D232	222D232	8.4 [0.33]
20.9 [0.82]	202K142	222K142	7.1 [0.28]	202D232	222D232	8.4 [0.33]
24.1 [0.95]	202K153	222K152	8.4 [0.33]	202D242	222D242	9.7 [0.38]
26.1 [1.03]	202K153	222K152	8.4 [0.33]	202D242	222D242	9.7 [0.38]
34.0 [1.34]	202K163	222K163	9.9 [0.33]	202D253	222D253	10.4 [0.41]
36.2 [1.43]	202K174	222K174	15.7 [0.62]	202D263	222D263	12.2 [0.48]
40.5 [1.59]	202K174	222K174	15.7 [0.62]	202D263	222D263	12.2 [0.48]
43.0 [1.69]	202K174	222K174	15.7 [0.62]	202D263	222D263	12.2 [0.48]
48.4 [1.91]	202K185	222K185	16.8 [0.66]	202D274	222D274	14.3 [0.56]
54.7 [2.15]	202K185	222K185	16.8 [0.66]	202D274	222D274	14.3 [0.56]

Uniboot Parts

Y Diameter	Part No.	Cable OD (Min.)
13.2 [0.52]	202C611	4.8 [0.19]
15.0 [0.59]	202C621	8.1 [0.32]
19.3 [0.76]	202C621	8.1 [0.32]
20.9 [0.82]	202C632	12.7 [0.50]
24.1 [0.95]	202C632	12.7 [0.50]
26.1 [1.03]	202C642	17.5 [0.69]
34.0 [1.34]	202C653	22.4 [0.88]
36.3 [1.43]	202C653	22.4 [0.88]
40.5 [1.59]	202C653	22.4 [0.88]
43.0 [1.69]	202C663	22.9 [0.90]
48.4 [1.91]	202C663	22.9 [0.90]
54.7 [2.15]	202C663	22.9 [0.90]

Code 18 MIL-C-5015 (MS3100) (Continued)
Tinel-Lock Adapters

TXR18XX00-XXXXXX

TXR18XX45-XXXXXX

TXR18XX90-XXXXXX

Manufacturer Code	Connector Manufacturer MS3100/3101/3106
A	Amphenol-Class A
B	Bendix-Class A/E/R
C	Cannon-Class A/E/R
D*	Unknown-Class A/E/R
R	Amphenol-Class R
—	Manufacturer code not required

*Additional pieces supplied when manufacturer is unknown.
All thread sizes for order number apply.

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 18 MIL-C-5015 (MS3100) (Continued)

Tinel-Lock Adapters

(continued)

Table of Dimensions

Order No.	Shell Size	Manufacturer Code	Max. Entry Size, Type 1**	Thread	Dimensions		
					C Max.	D Max.	E Max.
08	8S	B	04	.375-32 UNEF	20.3 [0.80]	23.4 [0.92]	31.2 [1.23]
08	8S	C	04	.438-28 UNEF	20.3 [0.80]	23.4 [0.92]	31.2 [1.23]
08	8S	A, R	04	.438-27 UNS	20.3 [0.80]	23.4 [0.92]	31.2 [1.23]
08	8S	D	04	*	20.3 [0.80]	23.4 [0.92]	31.2 [1.23]
10	10S	—	06	.500-28 UNEF	21.1 [0.83]	24.1 [0.95]	31.2 [1.23]
11	10SL	C	07	.562-24 UNEF	21.1 [0.83]	24.1 [0.83]	31.2 [1.23]
11	10SL	A, B, R	07	.625-24 UNEF	21.1 [0.83]	24.1 [0.95]	31.2 [1.23]
11	10SL	D	07	*	21.1 [0.83]	24.1 [0.95]	31.2 [1.23]
12	12 & 12S	B, C	08	.625-24 UNEF	21.1 [0.83]	24.1 [0.95]	31.2 [1.23]
12	12 & 12S	A, R	08	.688-24 UNEF	21.8 [0.86]	24.9 [0.98]	33.0 [1.30]
12	12 & 12S	D	08	*	21.8 [0.86]	24.9 [0.98]	33.0 [1.30]
14	14 & 14S	—	10	.750-20 UNEF	21.8 [0.86]	24.9 [0.98]	33.0 [1.30]
16	16 & 16S	—	12	.875-20 UNEF	22.6 [0.89]	25.9 [1.02]	36.1 [1.42]
18	18	—	12	1.000-20 UNEF	23.4 [0.92]	26.7 [1.05]	37.6 [1.48]
20	20	A, B, C	16	1.125-18 UNEF	24.1 [0.95]	27.4 [1.08]	39.4 [1.55]
20	20	R	16	1.125-24 UNS	24.1 [0.95]	27.4 [1.08]	39.4 [1.55]
20	20	D	16	*	24.1 [0.95]	27.4 [1.08]	39.4 [1.55]
22	22	—	18	1.250-18 UNEF	24.9 [0.98]	28.2 [1.11]	40.9 [1.61]
24	24	—	20	1.375-18 UNEF	24.9 [0.98]	28.2 [1.11]	42.4 [1.67]
28	28	—	22	1.625-18 UNEF	27.4 [1.08]	29.7 [1.17]	47.2 [1.86]
32	32	B, C	24	1.875-16 UN	28.2 [1.11]	31.2 [1.23]	48.8 [1.92]
32	32	A, R	24	1.906-18 UN	28.2 [1.11]	31.2 [1.23]	48.8 [1.92]
32	32	D	24	*	28.2 [1.11]	31.2 [1.23]	48.8 [1.92]
36	36	B	24	2.062-16 UNS	31.2 [1.23]	32.3 [1.27]	52.1 [2.05]
36	36	R	24	2.062-20 UNS	31.2 [1.23]	32.3 [1.27]	52.1 [2.05]
36	36	C	24	2.125-16 UN	31.2 [1.23]	32.3 [1.27]	52.1 [2.05]
36	36	A	24	2.125-18 UNS	31.2 [1.23]	32.3 [1.27]	52.1 [2.05]
36	36	D	24	*	31.2 [1.23]	32.3 [1.27]	52.1 [2.05]
40	40	B	24	2.312-16 UNS	32.3 [1.27]	33.0 [1.30]	55.1 [2.17]
40	40	A, C, R	24	2.375-16 UN	32.3 [1.27]	33.0 [1.30]	55.1 [2.17]
40	40	D	24	*	32.3 [1.27]	33.0 [1.30]	55.1 [2.17]
44	44	—	24	2.625-16 UN	34.0 [1.34]	34.5 [1.36]	61.5 [2.42]
48	48	C	24	2.812-18 UNS	34.0 [1.34]	34.5 [1.36]	61.5 [2.42]
48	48	A, R	24	2.875-16 UN	34.0 [1.34]	34.5 [1.36]	61.5 [2.42]
48	48	D	24	*	34.0 [1.34]	34.5 [1.36]	61.5 [2.42]

* Additional pieces, etc. (from page 6-36)

**For larger than maximum type 1 entry sizes, a two-piece adapter will be supplied.
Contact TE for information.

Code 18 MIL-C-5015 (MS3100) (Continued)

Tinel-Lock Adapters

(continued)

Entry Size Dimensions

Entry Size	Dimensions			
	Z Dia. +0.25–0.5	S Diameter (min.–max.)	Y Dia. ±0.38	W Max.
04	6.35 [0.25]	9.39–9.56 [0.37–0.38]	13.97 [0.55]	31.50 [1.24]
05	7.92 [0.31]	10.97–11.13 [0.43–0.44]	15.54 [0.61]	34.30 [1.35]
06	9.52 [0.37]	12.57–12.73 [0.49–0.50]	17.14 [0.67]	35.80 [1.41]
07	11.09 [0.44]	14.12–14.31 [0.55–0.56]	18.71 [0.74]	37.30 [1.47]
08	12.70 [0.50]	15.72–15.91 [0.62–0.63]	20.32 [0.80]	39.10 [1.54]
10	15.87 [0.62]	18.84–19.11 [0.74–0.75]	23.49 [0.92]	41.40 [1.63]
12	19.05 [0.75]	22.02–22.28 [0.87–0.88]	26.67 [1.05]	45.50 [1.79]
14	22.23 [0.88]	25.17–25.46 [0.99–1.00]	29.84 [1.17]	48.80 [1.92]
16	25.40 [1.00]	28.34–28.63 [1.12–1.13]	33.02 [1.30]	51.80 [2.04]
18	28.57 [1.12]	31.52–31.81 [1.24–1.25]	36.19 [1.42]	54.90 [2.16]
20	31.75 [1.25]	34.69–34.98 [1.37–1.38]	39.37 [1.55]	58.20 [2.29]
22	34.93 [1.38]	37.79–38.15 [1.49–1.50]	42.55 [1.68]	66.80 [2.63]
24	38.10 [1.50]	40.97–41.33 [1.61–1.63]	45.72 [1.80]	70.10 [2.76]

Molded Part Selection Guide
(Tinel)

Tinel-Lock Entry Size	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
04	202K232	—	3.30 [0.13]	—	—	—
04	202W232	—	4.30 [0.19]	—	—	—
04	202K121	222K121	5.60 [0.22]	202D211	222D211	6.40 [0.25]
05, 06	202K132	222K132	5.90 [0.23]	202D221	222D221	7.40 [0.29]
07, 08	202K142	222K142	7.10 [0.28]	202D232	222D232	8.40 [0.33]
10, 12	202K153	222K152	8.40 [0.33]	202D242	222D242	9.70 [0.38]
14, 16	202K163	222K163	9.90 [0.39]	202D253	222D253	10.50 [0.41]
18, 20, 22	202K174	222K174	15.70 [0.62]	202D263	222D263	12.20 [0.48]
24	202K185	222K185	16.80 [0.66]	—	—	—

Uniboot Parts

Tinel-Lock Entry Size	Part No.	Cable OD (min.)
04	202C611	4.8 [0.19]
05, 06, 07	202C621	8.1 [0.32]
08, 10, 12	202C632	12.7 [0.50]
12, 14, 16	202C642	17.5 [0.69]
16, 18, 20, 22	202C653	22.4 [0.88]

Code 21 MIL-C-26482 Series 1

Braided Adapters

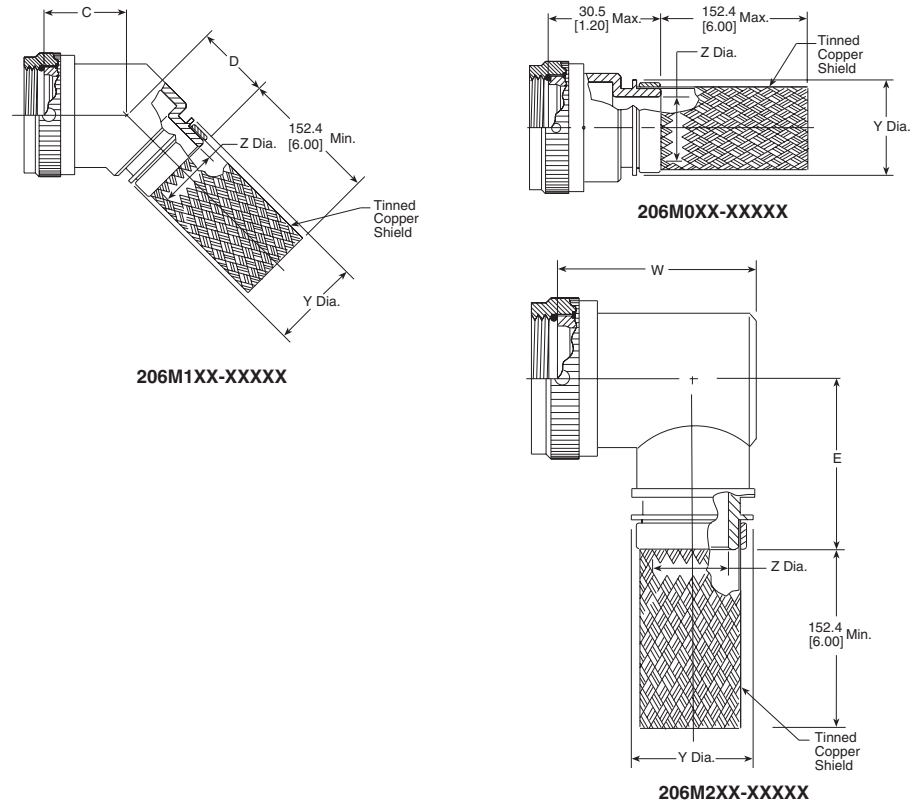


Table of Dimensions

Order No.	Shell Size	Max. Entry Size, Type 1*	Thread	Dimensions		
				C Max.	D Max.	E Max.
08	8	04	.438-28 UNEF	21.6 [0.85]	23.1 [0.91]	29.0 [1.14]
10	10	06	.562-24 UNEF	22.4 [0.88]	23.9 [0.94]	30.5 [1.20]
12	12	08	.688-24 UNEF	23.1 [0.91]	24.6 [0.97]	32.3 [1.27]
14	14	10	.812-20 UNEF	23.4 [0.92]	24.9 [0.98]	33.5 [1.32]
16	16	12	.938-20 UNEF	24.1 [0.95]	25.7 [1.01]	34.8 [1.37]
18	18	12	1.062-18 UNEF	24.4 [0.96]	25.9 [1.02]	36.3 [1.43]
20	20	14	1.188-18 UNEF	25.1 [0.99]	26.7 [1.05]	38.1 [1.50]
22	22	16	1.312-18 UNEF	25.7 [1.01]	27.4 [1.08]	39.6 [1.56]
24	24	18	1.438-18 UNEF	26.2 [1.03]	27.7 [1.09]	40.9 [1.61]

*For larger than maximum type 1 entry sizes, a two-piece adapter will be supplied. Contact TE for information.

Entry Size Dimensions

Entry Size	Dimensions		
	Z +0.25-0.5	Y Dia.	W Max.
04	6.35 [0.25]	13.97 [0.55]	31.0 [1.22]
05	7.92 [0.31]	15.54 [0.61]	32.8 [1.29]
06	9.52 [0.37]	17.14 [0.67]	34.3 [1.35]
07	11.09 [0.44]	18.71 [0.74]	35.8 [1.41]
08	12.70 [0.50]	20.32 [0.80]	37.3 [1.47]
10	15.87 [0.62]	23.49 [0.92]	40.6 [1.60]
12	19.05 [0.75]	26.67 [1.05]	43.7 [1.72]
14	22.23 [0.88]	29.84 [1.17]	47.0 [1.85]
16	25.40 [1.00]	33.02 [1.30]	50.0 [1.97]
18	28.57 [1.12]	36.19 [1.42]	53.3 [2.10]

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 21 MIL-C-26482 Series 1 (Continued)

Solid Adapters

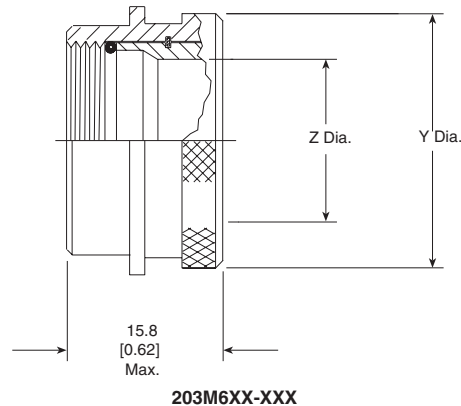


Table of Dimensions

Order Number	Shell Size	Thread	Dimensions	
			Y +0.000-0.030 (+0.00) (-0.76) Dia.	Z Min.
08	8	.438-28 UNEF	17.88 [0.704]	6.63 [0.26]
10	10	.562-24 UNEF	21.06 [0.829]	9.27 [0.36]
12	12	.688-24 UNEF	24.23 [0.954]	12.98 [0.51]
14	14	.812-20 UNEF	27.41 [1.079]	15.37 [0.61]
16	16	.938-20 UNEF	31.85 [1.254]	18.54 [0.73]
18	18	1.062-18 UNEF	33.03 [1.316]	20.90 [0.82]
20	20	1.188-18 UNEF	36.63 [1.442]	24.10 [0.95]
22	22	1.312-18 UNEF	39.78 [1.566]	27.28 [1.07]
24	24	1.438-18 UNEF	42.98 [1.692]	29.67 [1.17]

Molded Part Selection Guide (Solid)

Order No.	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
08	202K132	222K132	5.9 [0.23]	202D221	222D221	7.4 [0.29]
10	202K142	222K142	7.1 [0.28]	202D232	222D232	8.4 [0.33]
12, 14	202K153	222K152	8.4 [0.33]	202D242	222D242	9.7 [0.38]
16, 18	202K163	222K163	9.9 [0.39]	202D253	222D253	10.5 [0.41]
20, 22, 24	202K174	222K174	15.7 [0.62]	202D263	222D263	12.2 [0.48]

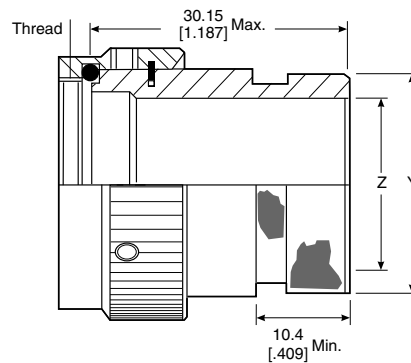
Uniboot Parts

Order No.	Part No.	Cable OD (Min.)
08	202C621	8.1 [0.32]
10	202C632	12.7 [0.50]
12, 14	202C642	17.5 [0.69]
16, 18, 20, 22, 24	202C653	22.4 [0.88]

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 21 MIL-C-26482 Series 1 (Continued)

Spin-Coupling Adapters



203M9XX-XXX

Table of Dimensions

Order No.	Shell Size	Thread	Dimensions	
			Y +0.00–0.76 Dia.	Z Min.
08	8	.438-28 UNEF	13.54 [0.53]	6.63 [0.26]
10	10	.562-24 UNEF	15.37 [0.61]	9.27 [0.36]
12	12	.688-24 UNEF	19.66 [0.77]	12.98 [0.51]
14	14	.812-20 UNEF	21.29 [0.84]	15.37 [0.61]
16	16	.938-20 UNEF	24.46 [0.96]	18.54 [0.73]
18	18	1.062-18 UNEF	26.47 [1.04]	20.90 [0.82]
20	20	1.188-18 UNEF	30.91 [1.22]	24.10 [0.95]
22	22	1.312-18 UNEF	34.42 [1.36]	27.28 [1.07]
24	24	1.438-18 UNEF	36.65 [1.44]	29.67 [1.17]

Molded Part Selection Guide (Spin-Coupling)

Order No.	Standard K Parts			Low-profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
08	202W232	—	4.3 [0.19]	—	—	—
08	202K121	222K121	5.6 [0.22]	202D211	222D211	6.4 [0.25]
10	202K132	222K132	5.9 [0.23]	202D221	222D221	7.4 [0.29]
12, 14	202K142	222K142	7.1 [0.28]	202D232	222D232	8.4 [0.33]
16, 18	202K153	222K152	8.4 [0.33]	202D242	222D242	9.7 [0.38]
20, 22	202K163	222K163	9.9 [0.39]	202D253	222D253	10.5 [0.41]
24	202K174	222K174	15.7 [0.62]	202D263	222D263	12.2 [0.48]

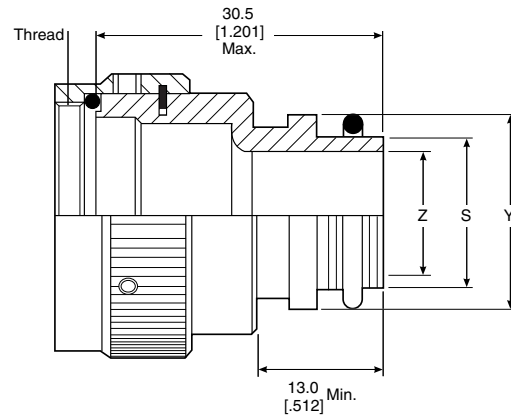
Uniboot Parts

Order No.	Part No.	Cable OD (Min.)
08	202C611	4.8 [0.19]
10, 12	202C621	8.1 [0.32]
14, 16	202C632	12.7 [0.50]
18, 20	202C642	17.5 [0.69]
22, 24	202C653	22.4 [0.88]

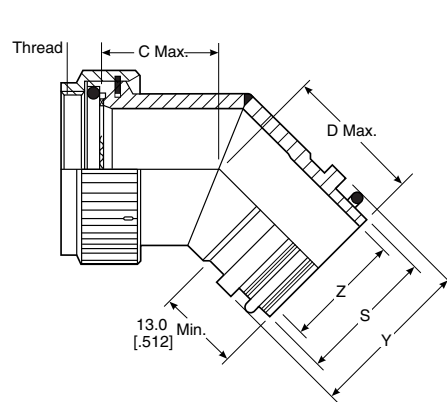
Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 21 MIL-C-26482 Series 1 (Continued)

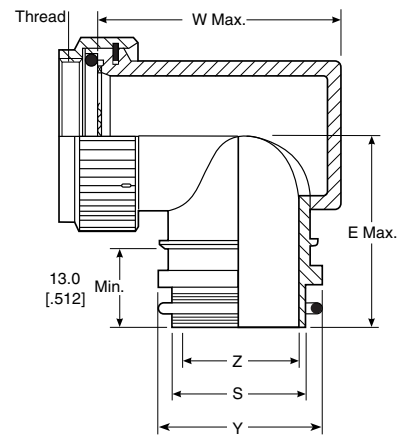
Tinel-Lock Adapters



TXR21XX00-XXXX XX



TXR21XX45-XXXXXX



TXR21XX90-XXXXXX

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 21 MIL-C-26482 Series 1 (Continued)

Tinel-Lock Adapters

(continued)

Table of Dimensions

Order No.	Shell Size	Max. Entry Size, Type 1*	Thread	Dimensions		
				C Max.	D Max.	E Max.
08	8	04	.438-28 UNEF	21.6 [0.85]	23.1 [0.91]	29.0 [1.14]
10	10	06	.562-24 UNEF	22.4 [0.88]	23.9 [0.94]	30.5 [1.20]
12	12	08	.688-24 UNEF	23.1 [0.91]	24.6 [0.97]	32.3 [1.27]
14	14	10	.812-20 UNEF	23.4 [0.92]	24.9 [0.98]	33.5 [1.32]
16	16	12	.938-20 UNEF	24.1 [0.95]	25.7 [1.01]	34.8 [1.37]
18	18	12	1.062-18 UNEF	24.4 [0.96]	25.9 [1.02]	36.3 [1.43]
20	20	14	1.188-18 UNEF	25.1 [0.99]	26.7 [1.05]	38.1 [1.50]
22	22	16	1.312-18 UNEF	25.7 [1.01]	27.4 [1.08]	39.6 [1.56]
24	24	18	1.438-18 UNEF	26.2 [1.03]	27.7 [1.09]	40.9 [1.61]

*For larger than maximum type 1 entry sizes, a two-piece adapter will be supplied. Contact TE for information.

Entry Size Dimensions

Entry Size	Dimensions			
	Z +0.25–0.5	S Diameter (Min.–Max.)	Y Dia.	W Max.
04	6.35 [0.25]	9.39–9.56 [0.37–0.38]	13.97 [0.55]	31.0 [1.22]
05	7.92 [0.31]	10.97–11.13 [0.43–0.44]	15.54 [0.61]	32.8 [1.29]
06	9.52 [0.37]	12.57–12.73 [0.49–0.50]	17.14 [0.67]	34.3 [1.35]
07	11.09 [0.44]	14.12–14.31 [0.55–0.56]	18.71 [0.74]	35.8 [1.41]
08	12.7 [0.50]	15.72–15.91 [0.62–0.63]	20.32 [0.80]	37.3 [1.47]
10	15.87 [0.62]	18.84–19.11 [0.74–0.75]	23.49 [0.92]	40.6 [1.60]
12	19.05 [0.75]	22.02–22.28 [0.87–0.88]	26.67 [1.05]	43.7 [1.72]
14	22.23 [0.88]	25.17–25.46 [0.99–1.00]	29.84 [1.17]	47.0 [1.85]
16	25.4 [1.00]	28.34–28.63 [1.12–1.13]	33.02 [1.30]	50.0 [1.97]
18	28.57 [1.12]	31.52–31.81 [1.24–1.25]	36.19 [1.42]	53.3 [2.10]

Molded Part Selection Guide (Tinel)

Tinel-Lock Entry Size	Standard K Parts			Low-profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
04	202K232	—	3.3 [0.1]	—	—	—
04	202W232	—	4.3 [0.2]	—	—	—
04	202K121	222K121	5.6 [0.2]	202D211	222D211	6.4 [0.3]
05, 06	202K132	222K132	5.9 [0.2]	202D221	222D221	7.4 [0.3]
07, 08	202K142	222K142	7.1 [0.3]	202D232	222D232	8.4 [0.3]
10, 12	202K153	222K152	8.4 [0.3]	202D242	222D242	9.7 [0.4]
14, 16	202K163	222K163	9.9 [0.4]	202D253	222D253	10.5 [0.4]
18, 20, 22	202K174	222K174	15.7 [0.6]	202D263	222D263	12.2 [0.5]
24	202K185	222K185	16.8 [0.7]	—	—	—

Uniboot Parts

Tinel-Lock Entry Size	Part No.	Cable OD (Min.)
04	202C611	4.8 [0.19]
05, 06, 07	202C621	8.1 [0.32]
08, 10, 12	202C632	12.7 [0.50]
12, 14, 16	202C642	17.5 [0.69]
16, 18, 20, 22	202C653	22.4 [0.88]
24	202C663	22.9 [0.90]

Code 21 MIL-C-26482 Series 1 (Continued)

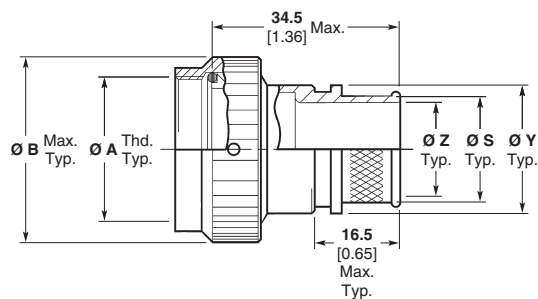
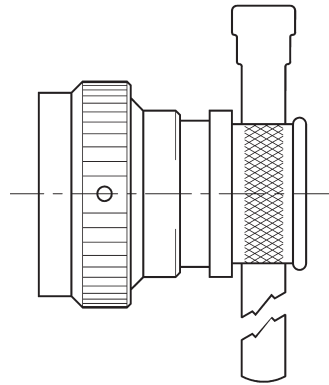
CRES-Lock Adapters (USA) BND Adapters (Europe)

Code 21 Band Strap Adapter

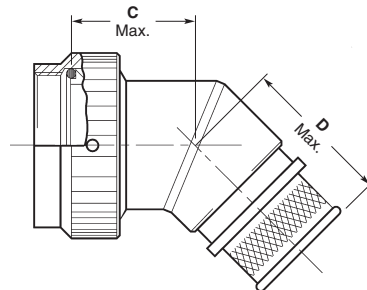
Notes:

1. This product is designed to terminate a braided cable shield by means of a band strap and a heat shrinkable lipped boot to a connector.
2. See CH00-0250-016 for ordering information, modifications and additional dimensions.
3. See drawing BND-XX25S for band strap dimensions and information.
4. Adapter to be permanently marked with code identification number and full part number (e.g. 06090-BND21AB00-1812). Band strap shall bear no part marking.
5. All entry sizes are shown in Table II. Maximum entry sizes are as shown in Table I. For larger entry sizes than the maximum, a Type II adapter may be supplied. See CH00-0250-016 for further details.
6. Adapter mates to: MIL-C-26482 Series I, MS3110, MS3116, MS3120 and MS3126 Class E and F Connectors.
7. Anti-rotational set screw, 3 threaded holes $120^\circ \pm 5^\circ$ apart, single mating set screw supplied: AN565DC4H2. Not required for Type II adapters.

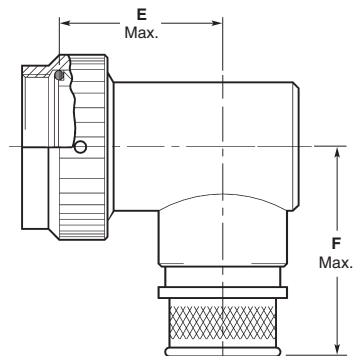
For additional codes available, contact TE.



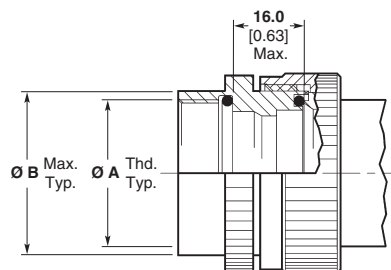
**Straight Adapter
Code 00**



**45° Adapter
Code 45**



**90° Adapter
Code 90**



**Type II Modification
(See Note 5)**

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 21 MIL-C-26482 Series 1 (Continued)
**CRES-Lock Adapters (USA)
BND Adapters (Europe)**
(continued)

**Code 21 Band Strap
Adapter (Continued)**
Table I

Order Number	Shell Size ²	Entry Size Max. Type I ¹	Ø A Unified Thread UNEF Class 2B	Ø B Max.	C Max.	D Max.	F Max.
08	08	04	0.4375–28	18.3 0.72	21.6 0.85	27.2 1.07	33.0 1.30
10	10	06	0.5625–24	21.6 0.85	22.4 0.88	27.9 1.10	34.5 1.36
12	12	08	0.6875–24	24.9 0.98	23.1 0.91	28.7 1.13	36.3 1.43
14	14	10	0.8125–20	28.2 1.11	23.4 0.92	29.0 1.14	37.6 1.48
16	16	12	0.9375–20	31.2 1.23	24.1 0.95	29.7 1.17	38.9 1.53
18	18	13	1.0625–18	34.5 1.36	24.4 0.96	30.0 1.18	40.4 1.59
20	20	15	1.1875–18	37.6 1.48	25.1 0.99	30.7 1.21	42.2 1.66
22	22	16	1.3125–18	40.6 1.60	25.7 1.01	31.5 1.24	43.7 1.72
24	24	18	1.4375–18	43.2 1.70	26.2 1.03	31.8 1.25	45.0 1.77

1. All entry sizes are shown in Table II. Maximum entry sizes are as shown in Table I. For larger entry sizes than the maximum, a Type II adapter may be supplied. See CH00-0250-016 for further details.
2. Adapter mates to: MIL-C-26482 Series I, MS3110, MS3116, MS3120 and MS3126 Class E and F Connectors.

Table II

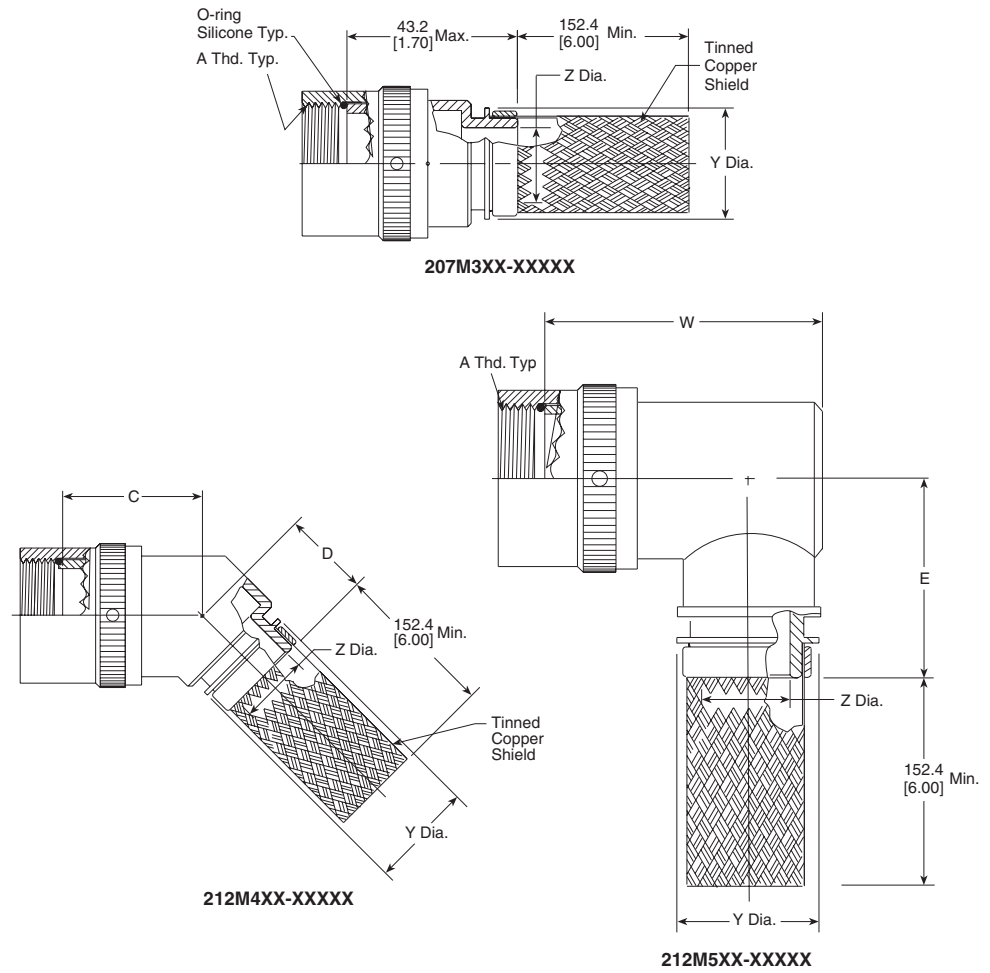
Entry Size	Ø Z +0.25/-0.50 [+0.010/-0.020]	Ø S ±0.51 [±0.020]	Ø Y ±0.38 [±0.015]	E Max.
03	4.75 0.188	7.92 0.312	11.10 0.438	19.0 0.75
04	6.35 0.250	9.52 0.375	12.70 0.500	19.8 0.78
05	7.92 0.312	11.12 0.438	14.30 0.563	20.1 0.79
06	9.52 0.375	12.70 0.500	15.88 0.625	21.1 0.83
07	11.12 0.438	14.30 0.562	17.50 0.689	21.6 0.85
08	12.70 0.500	15.88 0.625	19.05 0.750	22.6 0.89
09	14.30 0.562	17.50 0.688	20.65 0.813	23.6 0.93
10	15.88 0.625	19.05 0.750	22.23 0.875	24.4 0.96
11	17.50 0.688	20.65 0.812	23.80 0.938	24.9 0.98
12	19.05 0.750	22.23 0.875	25.40 1.000	25.9 1.02
13	20.65 0.812	23.83 0.938	27.00 1.063	26.7 1.05
14	22.23 0.875	25.40 1.000	30.16 1.189	27.4 1.08

Table II (Continued)

Entry Size	Ø Z +0.25/-0.50 [+0.010/-0.020]	Ø S ±0.51 [±0.020]	Ø Y ±0.38 [±0.015]	E Max.
15	23.83 0.938	27.00 1.062	31.75 1.250	28.2 1.11
16	25.40 1.000	28.58 1.125	33.34 1.313	29.0 1.14
18	28.58 1.125	31.75 1.250	36.51 1.438	30.5 1.20
20	31.75 1.250	34.90 1.375	39.69 1.563	N/A
22	34.90 1.375	38.10 1.500	42.86 1.688	N/A
24	38.10 1.500	41.28 1.625	46.83 1.844	N/A
26	41.28 1.625	44.45 1.750	49.61 1.953	N/A
28	44.45 1.750	47.63 1.875	52.78 2.078	N/A
30	47.65 1.875	50.80 2.000	56.36 2.219	N/A
32	50.80 2.000	54.00 2.125	59.53 2.344	N/A
34	54.00 2.125	57.15 2.250	62.71 2.469	N/A

Code 32 MIL-C-22992

Braided Adapters



Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 32 MIL-C-22992 (Continued)

Braided Adapters

(continued)

Table of Dimensions

Order No.	Shell Size	Max. Entry Size, Type 1*	A Left Hand Thd. Class 2B	Dimensions		
				C Max.	D Max.	E Max
12	12	08	.750-20 UNEF	29.0 [1.14]	25.4 [1.00]	33.5 [1.32]
14	14	10	.875-20 UNEF	29.7 [1.17]	25.9 [1.02]	35.3 [1.39]
16	16	12	1.000-20 UNEF	30.0 [1.18]	26.2 [1.03]	37.1 [1.46]
18	18	14	1.125-18 UNEF	30.7 [1.21]	26.9 [1.06]	38.6 [1.52]
20	20	16	1.250-18 UNEF	31.2 [1.23]	27.7 [1.09]	40.1 [1.58]
22	22	18	1.375-18 UNEF	32.0 [1.26]	28.2 [1.11]	41.7 [1.64]
24	24	22	1.625-18 UNEF	33.5 [1.32]	30.0 [1.18]	46.5 [1.83]
28	28	24	1.875-16 UN	34.8 [1.37]	31.2 [1.23]	49.8 [1.96]
32	32	28	2.062-16 UNS	36.3 [1.43]	32.5 [1.28]	52.8 [2.08]
36	36	28	2.312-16 UNS	37.6 [1.48]	33.8 [1.33]	56.1 [2.21]
40	40	28	2.625-16 UN	38.9 [1.53]	35.3 [1.39]	58.9 [2.32]

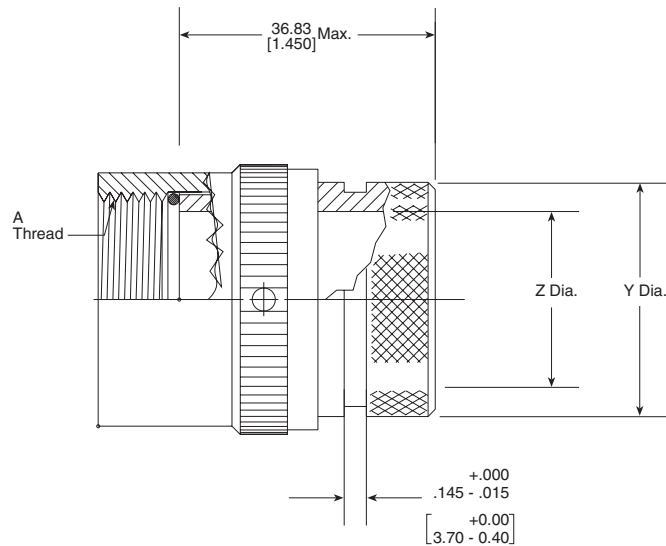
*For larger than maximum type 1 entry sizes, a two-piece adapter will be supplied. Contact TE for information.

Entry Size Dimensions

Entry Size	Dimensions		
	Z ± 0.20 (± 0.51)	Y Dia. Min.	W Max.
03	4.75 [.187]	9.98 [.393]	39.6 [1.56]
04	6.35 [.250]	11.58 [.456]	39.6 [1.56]
05	7.92 [.312]	13.08 [.515]	42.9 [1.69]
06	9.53 [.375]	14.76 [.581]	42.9 [1.69]
07	11.13 [.438]	16.33 [.643]	46.0 [1.81]
08	12.70 [.500]	17.91 [.705]	—
09	14.27 [.562]	17.91 [.705]	49.3 [1.94]
10	15.88 [.625]	21.11 [.831]	49.3 [1.94]
11	17.48 [.688]	22.68 [.893]	52.3 [2.06]
12	19.05 [.750]	24.21 [.953]	52.3 [2.06]
13	20.62 [.812]	24.21 [.953]	55.6 [2.19]
14	22.23 [.875]	27.46 [1.081]	55.6 [2.19]
15	23.83 [.938]	29.03 [1.143]	59.9 [2.36]
16	25.40 [1.000]	30.61 [1.205]	59.9 [2.36]
18	28.58 [1.125]	35.08 [1.381]	69.6 [2.74]
20	31.75 [1.250]	38.25 [1.506]	72.6 [2.86]
22	34.93 [1.375]	41.43 [1.631]	75.9 [2.99]
24	38.10 [1.500]	44.60 [1.756]	79.0 [3.11]
28	44.45 [1.750]	50.90 [2.004]	85.3 [3.36]

Code 32 MIL-C-22992 (Continued)

Spin-Coupling Adapters



204M3XX-XXX

Table of Dimensions

Base Part Number	Shell Size	A L.H. Thread Class 2B	Dimensions	
			Y ± .020 (±0.51)	Z Min.
12	12	.750-20 UNEF	20.24 [.797]	12.47 [.491]
14	14	.875-20 UNEF	23.44 [.923]	14.35 [.565]
16	16	1.000-20 UNEF	26.42 [1.040]	17.53 [.690]
18	18	1.125-18 UNEF	31.17 [1.227]	18.19 [.716]
20	20	1.250-18 UNEF	34.49 [1.358]	21.72 [.855]
22	22	1.375-18 UNEF	37.21 [1.465]	25.02 [.985]
24	24	1.625-18 UNEF	42.82 [1.686]	30.48 [1.200]
28	28	1.875-16 UN	50.06 [1.971]	36.58 [1.440]
32	32	2.062-16 UNS	55.35 [2.179]	40.77 [1.605]
36	36	2.312-16 UNEF	61.01 [2.402]	52.96 [2.085]
40	40	2.625-16 UNS	67.46 [2.656]	57.15 [2.250]
44	44	2.875-16 UNS	70.66 [2.782]	62.46 [2.549]

*For larger than maximum type 1 entry sizes, a two-piece adapter will be supplied.
Contact TE for information.

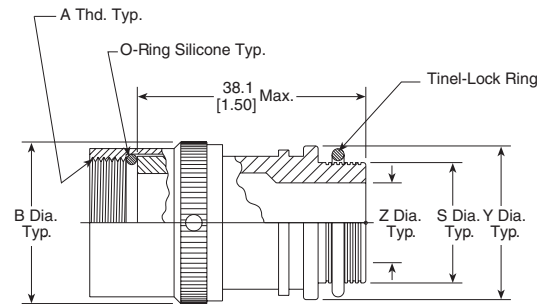
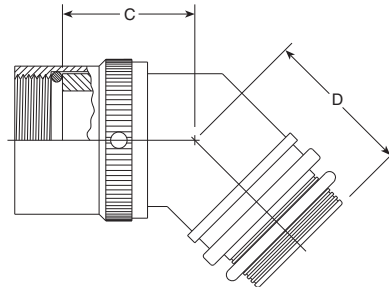
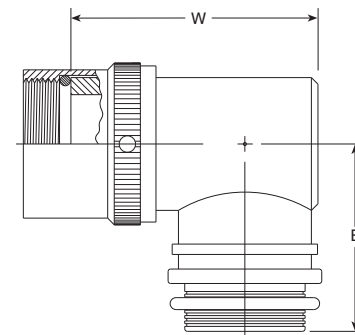
Molded Part Size Selection Guide (Spin-Coupling)

Order No.	Standard K Parts			Low-profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
12	202K142	222K142	7.1 [0.28]	202D232	222D232	8.4 [0.33]
14, 16	202K153	222K152	8.4 [0.33]	202D242	222D242	9.7 [0.38]
18, 20	202K163	222K163	9.9 [0.39]	202D253	222D253	10.5 [0.41]
22, 24	202K174	222K174	15.7 [0.62]	202D263	222D263	12.2 [0.48]
26, 32, 36	202K185	222K185	16.8 [0.66]	—	—	—

Uniboot Parts

Order No.	Part No.	Cable OD (Min.)
12	202C632	12.7 [0.50]
14, 16	202C642	17.5 [0.69]
18, 20, 22, 24	202C653	22.4 [0.88]

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 32 MIL-C-22992 (Continued)
Tinel-Lock Adapters

TXR32XX00-XXXXXX

TXR32XX45-XXXXXX

TXR32XX90-XXXXXX

Order No.	Shell Size	Max. Entry Size Type I	Dimensions							
			A Left Hand Thd Class 2B	C Max.	D Max.	E Max.	Z +.010 - .020	S Dia.	Y ±.015 (± 0.38)	W Max.
12	12	08	.750-20 UNEF	29.0 [1.14]	25.4 [1.00]	33.5 [1.32]	19.05 [.750]	<u>22.28 [.877]</u> 22.02 [.867]	26.67 [1.050]	52.3 [2.06]
14	14	10	.875-20 UNEF	29.7 [1.17]	25.9 [1.02]	35.3 [1.39]	22.23 [.875]	<u>25.46 [1.002]</u> 25.17 [.991]	29.84 [1.175]	55.6 [2.19]
16	16	12	1.000-20 UNEF	30.0 [1.18]	26.2 [1.03]	37.1 [1.46]	25.40 [1.000]	<u>28.63 [1.127]</u> 28.34 [1.116]	33.02 [1.300]	59.01 [2.36]
18	18	14	1.125-18 UNEF	30.7 [1.21]	26.9 [1.06]	38.6 [1.52]	28.57 [1.125]	<u>31.81 [1.252]</u> 31.52 [1.241]	36.19 [1.425]	69.6 [2.74]
20	20	16	1.250-18 UNEF	31.2 [1.23]	27.7 [1.09]	40.1 [1.58]	31.75 [1.250]	<u>34.98 [1.377]</u> 34.69 [1.366]	39.37 [1.550]	72.6 [2.86]
22	22	18	1.375-18 UNEF	32.0 [1.26]	28.2 [1.11]	41.7 [1.64]	34.93 [1.375]	<u>38.15 [1.502]</u> 37.79 [1.488]	42.55 [1.675]	75.9 [2.99]
24	24	22	1.625-18 UNEF	33.5 [1.32]	30.0 [1.18]	46.5 [1.83]	38.10 [1.500]	<u>41.33 [1.627]</u> 40.97 [1.613]	45.72 [1.800]	79.0 [3.11]
28	28	24	1.875-16 UN	34.8 [1.37]	31.2 [1.23]	49.8 [1.96]	—	—	—	—
32	32	24	2.062-16 UNS	36.3 [1.43]	32.5 [1.28]	52.8 [2.08]	—	—	—	—
36	36	24	2.312-16 UNS	37.6 [1.48]	33.8 [1.33]	56.1 [2.21]	—	—	—	—
40	40	24	2.625-16 UN	38.9 [1.53]	35.3 [1.39]	58.9 [2.32]	—	—	—	—

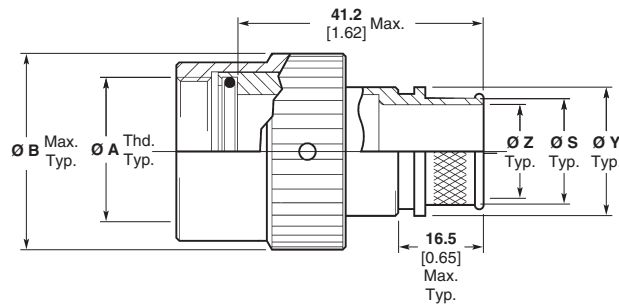
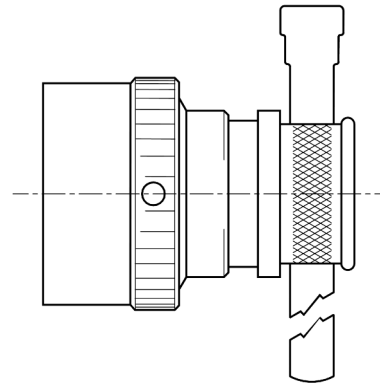
**For larger than maximum type 1 entry sizes, a two-piece adapter will be supplied. Contact TE for information.

Available in:	Americas	Europe	Asia Pacific
	■	■	■

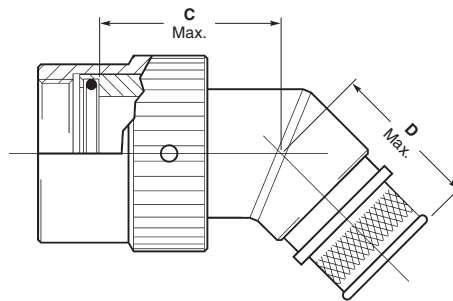
Code 32 MIL-C-22992 (Continued)
**CRES-Lock Adapters (USA)
BND Adapters (Europe)**
**Code 32 Band Strap
Adapter**
Notes:

1. This product is designed to terminate a braided cable shield by means of a band strap and a heat shrinkable lipped boot to a connector.
2. See CH00-0250-016 for ordering information, modifications and additional dimensions.
3. See drawing BND-XX25S for band strap dimensions and information.
4. Adapter to be permanently marked with code identification number and full part number (e.g. 06090-BND32AB00-1812). Band strap shall bear no part marking.
5. All entry sizes are shown in Table II. Maximum entry sizes are as shown in Table I. For larger entry sizes than the maximum, a Type II adapter may be supplied. See CH00-0250-016 for further details.
6. Adapter mates to: MIL-C-22992, Class C and R, MS17343, 44, 45 and 47 Connectors.
7. Anti-rotational set screw, 3 threaded holes $120^\circ \pm 5^\circ$ apart, single mating set screw supplied: AN565DC4H2. Not required for Type II adapters.

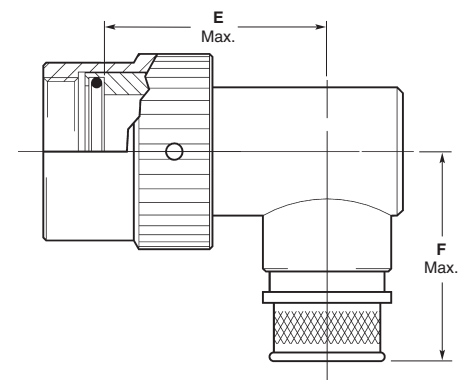
For additional codes available, contact TE.



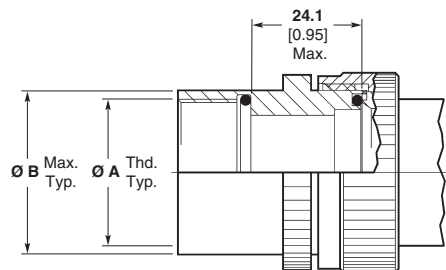
**Straight Adapter
Code 00**



**45° Adapter
Code 45**



**90° Adapter
Code 90**



**Type II Modification
(See Note 5)**

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 32 MIL-C-22992 (Continued)
**CRES-Lock Adapters (USA)
BND Adapters (Europe)**
(continued)

**Code 32 Band Strap
Adapter (Continued)**
Table I

Order Number	Shell Size ²	Entry Size Max. Type I ¹	Ø A Unified Thread Class 2B	Ø B Max.	C Max.	D Max.	F Max.
12	12	08	0.7500–20 UNEF	27.2 1.07	29.0 1.14	28.4 1.12	36.6 1.44
14	14	10	0.8750–20 UNEF	30.2 1.19	29.7 1.17	28.9 1.14	38.4 1.51
16	16	12	1.0000–20 UNEF	33.5 1.32	30.0 1.18	29.2 1.15	40.1 1.58
18	18	14	1.1250–18 UNEF	36.6 1.44	30.7 1.21	30.0 1.18	41.7 1.64
20	20	16	1.2500–18 UNEF	39.9 1.57	31.2 1.23	30.7 1.21	43.2 1.70
22	22	18	1.3750–18 UNEF	42.9 1.69	32.0 1.26	31.2 1.23	44.7 1.76
24	24	22	1.6250–18 UNEF	52.6 2.07	33.5 1.32	33.0 1.30	49.5 1.95
28	28	26	1.8750–16 UN	58.9 2.32	34.8 1.37	34.3 1.35	52.8 2.08
32	32	30	2.0625–16 UNS	65.3 2.57	36.3 1.43	35.6 1.40	55.9 2.20
36	36	34	2.3125–16 UNS	71.6 2.82	37.6 1.48	36.8 1.45	59.2 2.33
40	40	34	2.6250–16 UN	78.0 3.07	38.9 1.53	38.4 1.51	62.0 2.44

1. All entry sizes are shown in Table II. Maximum entry sizes are as shown in Table I. For larger entry sizes than the maximum, a Type II adapter may be supplied. See CH00-0250-016 for further details.

2. Adapter mates to: MIL-C-22992, Class C and R, MS17343, 44, 45 and 47 Connectors.

Table II

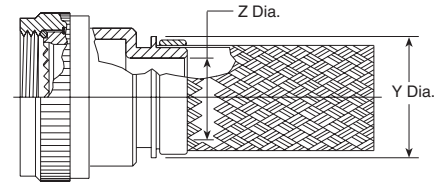
Entry Size	Ø Z +0.25/-0.50 [+0.010/-0.020]	Ø S ±0.51 [±0.020]	Ø Y ±0.38 [±0.015]	E Max.
03	4.75 0.188	7.92 0.312	11.10 0.438	28.3 1.12
04	6.35 0.250	9.52 0.375	12.70 0.500	29.3 1.15
05	7.92 0.312	11.12 0.438	14.30 0.563	30.0 1.18
06	9.52 0.375	12.70 0.500	15.88 0.625	30.8 1.21
07	11.12 0.438	14.30 0.562	17.50 0.689	31.5 1.24
08	12.70 0.500	15.88 0.625	19.05 0.750	32.3 1.27
09	14.30 0.562	17.50 0.688	20.65 0.813	33.3 1.31
10	15.88 0.625	19.05 0.750	22.23 0.875	34.0 1.34
11	17.50 0.688	20.65 0.812	23.80 0.938	35.0 1.38
12	19.05 0.750	22.23 0.875	25.40 1.000	35.8 1.41
13	20.65 0.812	23.83 0.938	27.00 1.063	36.0 1.42
14	22.23 0.875	25.40 1.000	30.16 1.189	37.5 1.48

Table II (Continued)

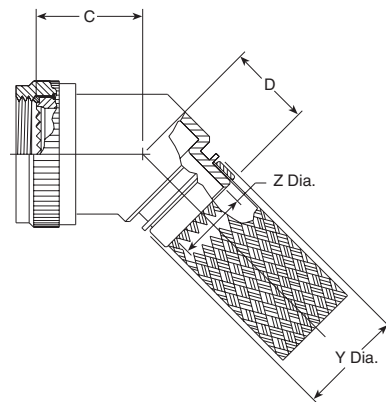
Entry Size	Ø Z +0.25/-0.50 [+0.010/-0.020]	Ø S ±0.51 [±0.020]	Ø Y ±0.38 [±0.015]	E Max.
15	23.83 0.938	27.00 1.062	31.75 1.250	37.8 1.49
16	25.40 1.000	28.58 1.125	33.34 1.313	38.3 1.51
18	28.58 1.125	31.75 1.250	36.51 1.438	39.8 1.57
20	31.75 1.250	34.90 1.375	39.69 1.563	41.3 1.63
22	34.90 1.375	38.10 1.500	42.86 1.688	43.0 1.69
24	38.10 1.500	41.28 1.625	46.83 1.844	44.5 1.75
26	41.28 1.625	44.45 1.750	49.61 1.953	46.3 1.82
28	44.45 1.750	47.63 1.875	52.78 2.078	48.3 1.90
30	47.65 1.875	50.80 2.000	56.36 2.219	50.0 1.97
32	50.80 2.000	54.00 2.125	59.53 2.344	51.5 2.03
34	54.00 2.125	57.15 2.250	62.71 2.469	53.3 2.10

Code 40 MIL-C-38999 Series III and IV

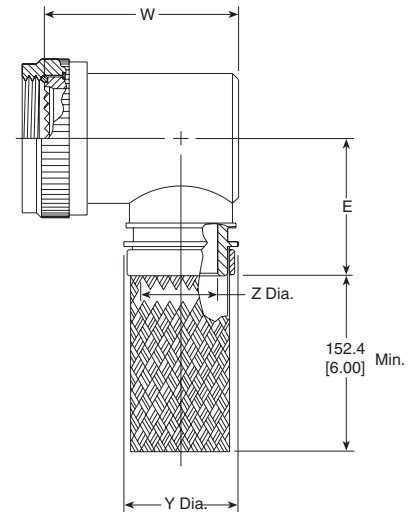
Braided Adapters



208M7XX-XXXXX



208M8XX-XXXXX



208M9XX-XXXXX

Table of Dimensions

Order No.	Shell Size Commercial	Military	Max. Entry* Size Type 1	Thread	Dimensions		
					C Max.	D Max.	E Max.
08	9	A	04	M12 x 1.0	20.8 [0.82]	22.6 [0.89]	29.2 [1.15]
10	11	B	07	M15 x 1.0	21.3 [0.84]	23.4 [0.92]	30.7 [1.21]
12	13	C	09	M18 x 1.0	22.1 [0.87]	24.1 [0.95]	32.5 [1.28]
14	15	D	10	M2 x 1.0	22.6 [0.89]	24.1 [0.95]	34.0 [1.34]
16	17	E	12	M25 x 1.0	23.4 [0.92]	24.9 [0.98]	35.6 [1.40]
18	19	F	14	M28 x 1.0	24.1 [0.95]	25.7 [1.01]	37.1 [1.46]
20	21	G	16	M31 x 1.0	24.6 [0.97]	26.4 [1.04]	38.9 [1.53]
22	23	H	18	M34 x 1.0	25.4 [1.00]	27.2 [1.07]	40.4 [1.59]
24	25	J	20	M37 x 1.0	25.9 [1.02]	27.2 [1.07]	42.4 [1.67]

*For larger than maximum type 1 entry sizes, a two-piece adapter will be supplied. Contact TE for information.

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 40 MIL-C-38999 Series III and IV (Continued)
Braided Adapters

(continued)

Entry Size Dimensions

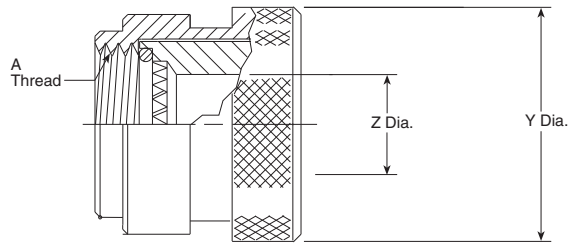
Entry Size	Dimensions		
	Z +0.25–0.5	Y Dia.	W Max.
04	6.35 [0.25]	13.97 [0.55]	31.2 [1.23]
05	7.92 [0.31]	15.54 [0.61]	32.8 [1.29]
06	9.52 [0.37]	17.14 [0.67]	34.3 [1.35]
07	11.09 [0.44]	18.71 [0.74]	36.1 [1.42]
08	12.7 [0.50]	20.32 [0.80]	37.6 [1.48]
10	15.87 [0.62]	23.49 [0.92]	40.6 [1.60]
12	19.05 [0.75]	26.67 [1.05]	43.9 [1.73]
14	22.23 [0.88]	29.84 [1.17]	47.0 [1.85]
16	25.4 [1.00]	33.02 [1.30]	50.8 [2.00]
18	28.57 [1.12]	36.19 [1.42]	54.1 [2.13]
20	31.75 [1.25]	39.37 [1.55]	57.21 [2.25]

Molded Part Selection Guide (Braided)

Tinel-Lock Entry Size	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
04	202K232	—	3.3 [0.1]	—	—	—
04	202W232	—	4.3 [0.2]	—	—	—
04	202K121	222K121	5.6 [0.2]	202D211	222D211	6.4 [0.3]
05, 06	202K132	222K132	5.9 [0.2]	202D221	222D221	7.4 [0.3]
07, 08	202K142	222K142	7.1 [0.3]	202D232	222D232	8.4 [0.3]
10, 12	202K153	222K152	8.4 [0.3]	202D242	222D242	9.7 [0.4]
14, 16	202K163	222K163	9.9 [0.4]	202D253	222D253	10.5 [0.4]
18, 20, 22	202K174	222K174	15.7 [0.6]	202D263	222D263	12.2 [0.5]
24	202K185	222K185	16.8 [0.7]	—	—	—

Uniboot Parts

Tinel- Lock Entry Size	Part No.	Cable OD (Min.)
04	202C611	4.8 [0.19]
05, 06, 07	202C621	8.1 [0.32]
08, 10, 12	202C632	12.7 [0.50]
12, 14, 16	202C642	17.5 [0.69]
16, 18, 20, 22	202C653	22.4 [0.88]
24	202C663	22.9 [0.90]

Code 40 MIL-C-38999 Series III and IV (Continued)
Solid Adapters

209M3XX-XXX
Table of Dimensions

Order No.	Shell Size Commercial	Military	A Thread	Dimensions	
				Y +.000- .030 (+0.00) (-0.76)	Z Dia. Min.
08	9	A	M12 x 1.0	18.26 [.719]	6.35 [.250]
10	11	B	M15 x 1.0	21.44 [.844]	9.52 [.375]
12	13	C	M18 x 1.0	24.61 [.969]	12.70 [.500]
14	15	D	M22 x 1.0	30.91 [1.217]	15.88 [.625]
16	17	E	M25 x 1.0	34.40 [1.354]	19.05 [.750]
18	19	F	M28 x 1.0	37.50 [1.476]	20.62 [.812]
20	21	G	M31 x 1.0	38.89 [1.531]	23.80 [.937]
22	23	H	M34 x 1.0	42.06 [1.656]	26.97 [1.062]
24	25	J	M37 x 1.0	45.24 [1.781]	30.18 [1.188]

Molded Part Selection Guide (Solid)

Order No.	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
08	202K132	222K132	5.9 [0.23]	202D221	222D221	7.4 [0.29]
10	202K142	222K142	7.1 [0.28]	202D232	222D232	8.4 [0.33]
12, 14	202K153	222K152	8.4 [0.33]	202D242	222D242	9.7 [0.38]
16, 18	202K163	222K163	9.9 [0.39]	202D253	222D253	10.5 [0.41]
20, 22, 24	202K174	222K174	15.7 [0.62]	202D263	222D263	12.2 [0.48]

Uniboot Parts

Order No.	Part No.	Cable OD (Min.)
08	202C621	8.1 [0.32]
10	202C632	12.7 [0.50]
12, 14	202C642	17.5 [0.69]
16, 18, 20, 22	202C653	22.4 [0.88]

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 40 MIL-C-38999 Series III and IV (Continued)

Spin-Coupling Adapters

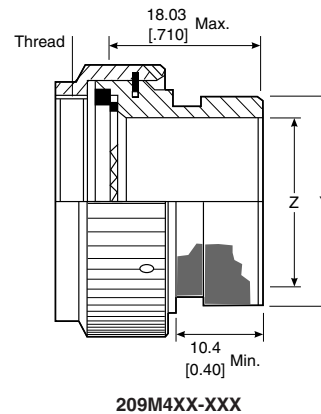


Table of Dimensions

Order No.	Shell Size Commercial	Military	Thread	Dimensions	
				Y Dia. Max.	Z Dia. Max.
08	9	A	M12 x 1.0	13.54 [0.53]	6.35 [0.25]
10	11	B	M15 x 1.0	15.37 [0.61]	9.52 [0.37]
12	13	C	M18 x 1.0	19.66 [0.77]	12.7 [0.50]
14	15	D	M22 x 1.0	21.29 [0.84]	15.75 [0.62]
16	17	E	M25 x 1.0	24.46 [0.96]	18.92 [0.74]
18	19	F	M28 x 1.0	26.47 [1.04]	20.62 [0.81]
20	21	G	M31 x 1.0	30.91 [1.22]	23.8 [0.94]
22	23	H	M34 x 1.0	34.42 [1.36]	26.97 [1.06]
24	25	J	M37 x 1.0	36.65 [1.44]	29.85 [1.18]

Molded Part Selection Guide (Spin-Coupling)

Order No.	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
03, 08	202W232	—	4.3 [0.19]	—	—	—
03, 08	202K121	222K121	5.6 [0.22]	202D211	222D211	6.4 [0.25]
10, 11	202K132	222K132	5.9 [0.23]	202D221	222D221	7.4 [0.29]
12, 14	202K142	222K142	7.1 [0.28]	202D232	222D232	8.4 [0.33]
16, 18	202K153	222K152	8.4 [0.33]	202D242	222D242	9.7 [0.38]
20, 22	202K163	222K163	9.9 [0.39]	202D253	222D253	10.5 [0.41]
24, 28	202K174	222K174	15.7 [0.62]	202D263	222D263	12.2 [0.48]
32, 36	202K185	222K185	16.8 [0.66]	—	—	—

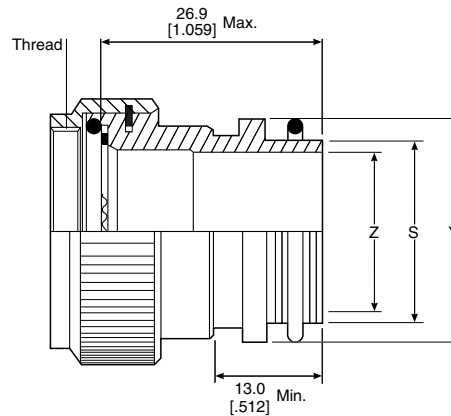
Uniboot Parts

Order No.	Part No.	Cable OD (Min.)
03, 08	202C611	4.8 [0.19]
10, 11, 12	202C621	8.1 [0.32]
14, 16	202C632	12.7 [0.50]
18, 20	202C642	17.5 [0.69]
22, 24	202C653	22.4 [0.88]

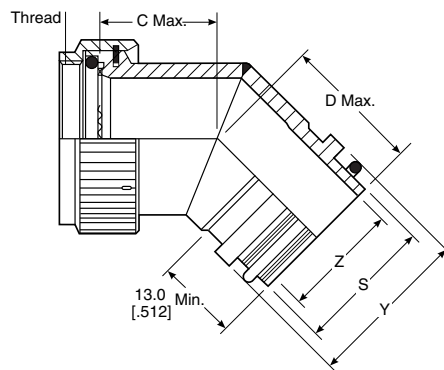
Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 40 MIL-C-38999 Series III and IV (Continued)

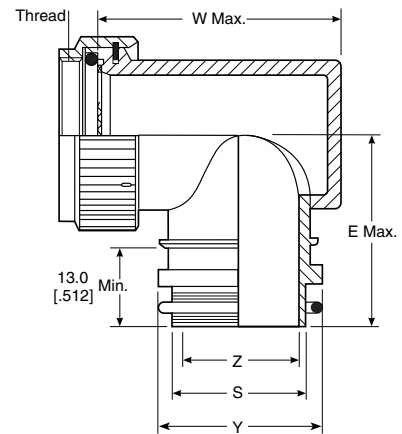
Tinel-Lock Adapters



TXR40XX00-XXXXXX



TXR40XX45-XXXXXX



TXR40XX90-XXXXXX

Table of Dimensions

Order No.	Shell Size Commercial	Military	Max. Entry* Size Type 1	Thread	Dimensions		
					C Max.	D Max.	E Max.
08	9	A	04	M12 x 1.0	20.8 [0.82]	22.6 [0.89]	27.9 [1.10]
10	11	B	07	M15 x 1.0	21.3 [0.84]	23.4 [0.92]	30.5 [1.20]
12	13	C	08	M18 x 1.0	22.1 [0.87]	24.1 [0.95]	32.0 [1.26]
14	15	D	10	M2 x 1.0	22.6 [0.89]	24.1 [0.95]	34.0 [1.34]
16	17	E	12	M25 x 1.0	23.4 [0.92]	24.9 [0.98]	35.6 [1.40]
18	19	F	14	M28 x 1.0	24.1 [0.95]	25.7 [1.01]	36.8 [1.45]
20	21	G	16	M31 x 1.0	24.6 [0.97]	26.4 [1.04]	38.4 [1.51]
22	23	H	18	M34 x 1.0	25.4 [1.00]	27.2 [1.07]	39.9 [1.57]
24	25	J	20	M37 x 1.0	25.9 [1.02]	27.2 [1.07]	42.4 [1.67]

*For larger than maximum type 1 entry sizes, a two-piece adapter will be supplied. Contact TE for information.

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 40 MIL-C-38999 Series III and IV (Continued)

Tinel-Lock Adapters

(continued)

Entry Size Dimensions

Entry Size	Dimensions			
	Z +0.25–0.5	S Diameter (Min.–Max.)	Y Dia.	W Max.
04	6.35 [0.25]	9.39–9.56 [0.37–0.38]	13.97 [0.55]	31.2 [1.23]
05	7.92 [0.31]	10.97–11.13 [0.43–0.44]	15.54 [0.61]	32.8 [1.29]
06	9.52 [0.37]	12.57–12.73 [0.49–0.50]	17.14 [0.67]	34.3 [1.35]
07	11.09 [0.44]	14.12–14.31 [0.55–0.56]	18.71 [0.74]	36.1 [1.42]
08	12.7 [0.50]	15.72–15.91 [0.62–0.63]	20.32 [0.80]	37.6 [1.48]
10	15.87 [0.62]	18.84–19.11 [0.74–0.75]	23.49 [0.92]	40.6 [1.60]
12	19.05 [0.75]	22.02–22.28 [0.87–0.88]	26.67 [1.05]	43.9 [1.73]
14	22.23 [0.88]	25.17–25.46 [0.99–1.00]	29.84 [1.17]	47.0 [1.85]
16	25.4 [1.00]	28.34–28.63 [1.12–1.13]	33.02 [1.30]	50.8 [2.00]
18	28.57 [1.12]	31.52–31.81 [1.24–1.25]	36.19 [1.42]	54.1 [2.13]
20	31.75 [1.25]	34.69–34.98 [1.37–1.38]	39.37 [1.55]	57.21 [2.25]

Molded Part Selection Guide (Tinel)

Tinel-Lock Entry Size	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
04	202K232	—	3.3 [0.1]	—	—	—
04	202W232	—	4.3 [0.2]	—	—	—
04	202K121	222K121	5.6 [0.2]	202D211	222D211	6.4 [0.3]
05, 06	202K132	222K132	5.9 [0.2]	202D221	222D221	7.4 [0.3]
07, 08	202K142	222K142	7.1 [0.3]	202D232	222D232	8.4 [0.3]
10, 12	202K153	222K152	8.4 [0.3]	202D242	222D242	9.7 [0.4]
14, 16	202K163	222K163	9.9 [0.4]	202D253	222D253	10.5 [0.4]
18, 20, 22	202K174	222K174	15.7 [0.6]	202D263	222D263	12.2 [0.5]
24	202K185	222K185	16.8 [0.7]	—	—	—

Uniboot Parts

Tinel-Lock Entry Size	Part No.	Cable OD (Min.)
04	202C611	4.8 [0.19]
05, 06, 07	202C621	8.1 [0.32]
08, 10, 12	202C632	12.7 [0.50]
12, 14, 16	202C642	17.5 [0.69]
16, 18, 20, 22	202C653	22.4 [0.88]
24	202C663	22.9 [0.90]

Code 40 MIL-C-38999 Series III and IV (Continued)

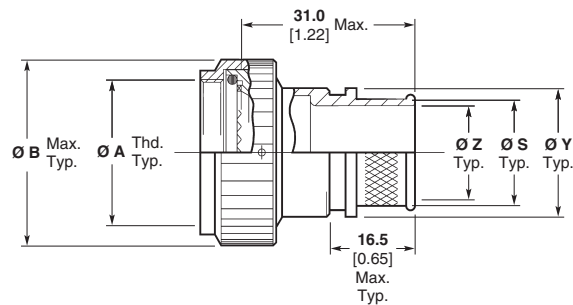
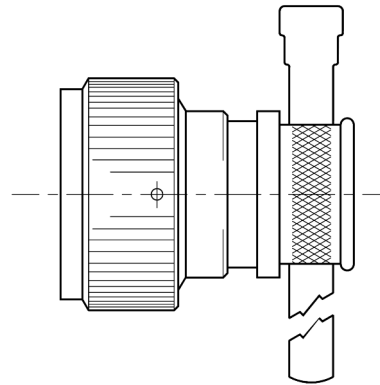
CRES-Lock Adapters (USA) BND Adapters (Europe)

Code 40 Band Strap Adapter

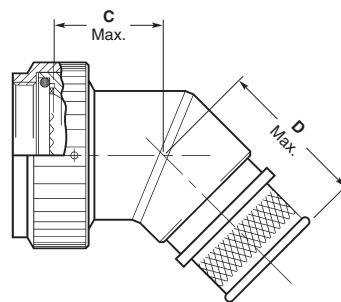
Notes:

1. This product is designed to terminate a braided cable shield by means of a band strap and a heat shrinkable lipped boot to a connector.
2. See CH00-0250-016 for ordering information, modifications and additional dimensions.
3. See drawing BND-XX25S for band strap dimensions and information.
4. Adapter to be permanently marked with code identification number and full part number (e.g. 06090-BND40AB00-1814). Band strap shall bear no part marking.
5. All entry sizes are shown in Table II. Maximum entry sizes are as shown in Table I. For larger entry sizes than the maximum, a Type II adapter may be supplied. See CH00-0250-016 for further details.
6. Adapter mates to: MIL-C-38999 Series III and IV, Class C, F, K and W, D38999/20, /24, /26, /40, /46 and /47 Connectors. When so mated it shall provide a water-tight seal meeting the requirements of MIL-C-85049, paragraph 3.5.7.
7. Coupling nut shall have 3 lock wire holes 120° apart.

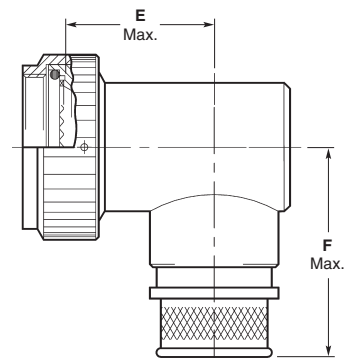
For additional codes available, contact TE.



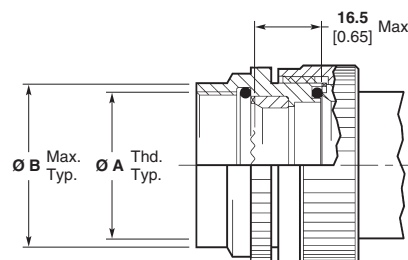
**Straight Adapter
Code 00**



**45° Adapter
Code 45**



**90° Adapter
Code 90**



**Type II Modification
(See Note 5)**

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 40 MIL-C-38999 Series III and IV (Continued)
**CRES-Lock Adapters (USA)
BND Adapters (Europe)**
(continued)

**Code 40 Band Strap
Adapter (Continued)**
Table I

Order Number	Shell Size ²		Entry Size Max. Type I ¹	Ø A Metric Thread Class 2B	Ø B Max.	Ø B Max. ³	C Max.	D Max.	F Max.
	Com.	MIL							
8	9	A	04	M12 x 1.0	19.1 0.75	24.6 0.97	20.8 0.82	26.7 1.05	32.0 1.26
10	11	B	07	M15 x 1.0	21.6 0.85	27.0 1.06	21.3 0.84	27.4 1.08	34.5 1.36
12	13	C	09	M18 x 1.0	25.4 1.00	31.0 1.22	22.1 0.87	28.2 1.11	36.1 1.42
14	15	D	10	M22 x 1.0	29.2 1.15	35.8 1.41	22.6 0.89	28.2 1.11	38.1 1.50
16	17	E	12	M25 x 1.0	31.8 1.25	37.3 1.47	23.4 0.92	29.0 1.14	39.6 1.56
18	19	F	14	M28 x 1.0	35.6 1.40	40.6 1.60	24.1 0.95	29.7 1.17	40.9 1.61
20	21	G	16	M31 x 1.0	38.1 1.50	44.5 1.75	24.6 0.97	30.5 1.20	42.4 1.67
22	23	H	18	M34 x 1.0	41.9 1.65	47.0 1.85	25.4 1.00	31.3 1.23	43.9 1.73
24	25	J	20	M37 x 1.0	44.5 1.75	51.6 2.03	25.9 1.02	31.3 1.23	46.5 1.83

1. All entry sizes are shown in Table II. Maximum entry sizes are as shown in Table I. For larger entry sizes than the maximum, a Type II adapter may be supplied. See CH00-0250-016 for further details.
2. Adapter mates to: MIL-C-38999 Series III and IV, Class C, F, K and W, D38999/20, /24, /26, /40, /46 and /47 Connectors. When so mated it shall provide a water-tight seal meeting the requirements of MIL-C-85049, paragraph 3.5.7.
3. These dimensions apply if a self-locking coupling nut is used, modification code "S".

Table II

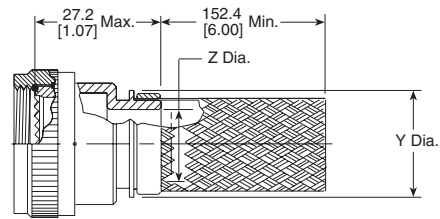
Entry Size	Ø Z +0.25/-0.50 [+0.010/-0.020]	Ø S ±0.51 [±0.020]	Ø Y ±0.38 [±0.015]	E Max.
03	4.75 0.188	7.92 0.312	11.10 0.438	15.8 0.62
04	6.35 0.250	9.52 0.375	12.70 0.500	16.3 0.64
05	7.92 0.312	11.12 0.438	14.30 0.563	16.8 0.66
06	9.52 0.375	12.70 0.500	15.88 0.625	17.8 0.70
07	11.12 0.438	14.30 0.562	17.50 0.689	18.3 0.72
08	12.70 0.500	15.88 0.625	19.05 0.750	19.8 0.78
09	14.30 0.562	17.50 0.688	20.65 0.813	21.3 0.84
10	15.88 0.625	19.05 0.750	22.23 0.875	22.4 0.88
11	17.50 0.688	20.65 0.812	23.80 0.938	22.9 0.90
12	19.05 0.750	22.23 0.875	25.40 1.000	23.4 0.92
13	20.65 0.812	23.83 0.938	27.00 1.063	24.4 0.96
14	22.23 0.875	25.40 1.000	30.16 1.189	25.4 1.00

Table II (Continued)

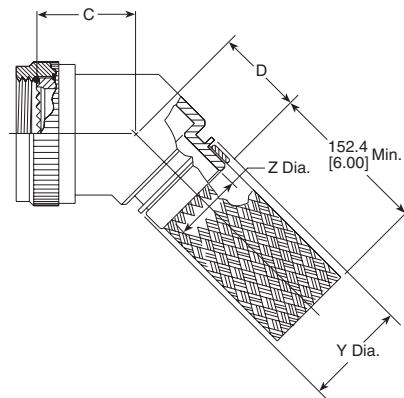
Entry Size	Ø Z +0.25/-0.50 [+0.010/-0.020]	Ø S ±0.51 [±0.020]	Ø Y ±0.38 [±0.015]	E Max.
15	23.83 0.938	27.00 1.062	31.75 1.250	25.4 1.00
16	25.40 1.000	28.58 1.125	33.34 1.313	26.4 1.04
18	28.58 1.125	31.75 1.250	36.51 1.438	27.7 1.09
20	31.75 1.250	34.90 1.375	39.69 1.563	29.2 1.15
22	34.90 1.375	38.10 1.500	42.86 1.688	N/A
24	38.10 1.500	41.28 1.625	46.83 1.844	N/A
26	41.28 1.625	44.45 1.750	49.61 1.953	N/A
28	44.45 1.750	47.63 1.875	52.78 2.078	N/A
30	47.65 1.875	50.80 2.000	56.36 2.219	N/A
32	50.80 2.000	54.00 2.125	59.53 2.344	N/A
34	54.00 2.125	57.15 2.250	62.71 2.469	N/A

Code 41 MIL-C-38999 Series I and II

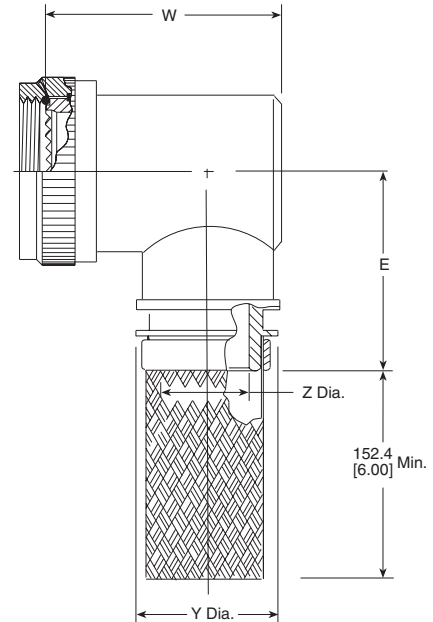
Braided Adapters



204M0XX-XXXXX



204M1XX-XXXXX



204M2XX-XXXXX

Table of Dimensions

Order No.	Shell Size		Max. Entry* Size Type 1	A Unified Thread Class 2B	Dimensions		
	Series I	Series II			C Max.	D Max.	E Max.
08	9	8	04	.438-28 UNEF	19.8 [0.78]	23.1 [0.91]	29.2 [1.15]
10	11	10	06	.562-24 UNEF	20.3 [0.80]	23.6 [0.93]	30.7 [1.21]
12	13	12	08	.688-24 UNEF	21.1 [0.83]	24.4 [0.96]	32.5 [1.28]
14	15	14	10	.812-20 UNEF	21.6 [0.85]	24.9 [0.98]	34.0 [1.34]
16	17	16	12	.938-20 UNEF	22.4 [0.88]	25.4 [1.00]	35.6 [1.40]
18	19	18	13	1.062-18 UNEF	22.9 [0.90]	26.2 [1.03]	37.1 [1.46]
20	21	20	15	1.188-18 UNEF	23.6 [0.93]	26.9 [1.06]	38.9 [1.53]
22	23	22	16	1.312-18 UNEF	24.4 [0.96]	27.4 [1.08]	40.4 [1.59]
24	25	24	18	1.438-18 UNEF	24.9 [0.98]	28.2 [1.11]	41.9 [1.65]

*For larger than maximum type 1 entry sizes, a two-piece adapter will be supplied.
Contact TE for information.

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 41 MIL-C-38999 Series I and II (Continued)

Braided Adapters

(continued)

Entry Size Dimensions

Entry Size	Dimensions		
	Z ± 0.020 (± 0.51)	Y Dia. Min.	W Max.
03	4.75 [.187]	9.98 [.393]	27.2 [1.07]
04	6.35 [.250]	11.58 [.456]	27.2 [1.07]
05	7.92 [.312]	13.08 [.515]	28.7 [1.13]
06	9.53 [.375]	14.76 [.581]	30.2 [1.19]
07	11.13 [.438]	16.33 [.643]	31.8 [1.25]
08	12.70 [.500]	17.91 [.705]	33.5 [1.32]
09	14.27 [.562]	17.91 [.705]	36.6 [1.44]
10	15.88 [.625]	21.11 [.831]	36.6 [1.44]
11	17.48 [.688]	22.68 [.893]	39.9 [1.57]
12	19.05 [.750]	24.21 [.953]	39.9 [1.57]
13	20.62 [.812]	24.21 [.953]	42.9 [1.69]
14	22.23 [.875]	27.46 [1.081]	42.9 [1.69]
15	23.83 [.938]	29.03 [1.143]	46.2 [1.82]
16	25.40 [1.000]	30.61 [1.205]	46.2 [1.82]
18	28.58 [1.125]	35.08 [1.381]	49.3 [1.94]
20	31.75 [1.250]	38.25 [1.506]	—
22	34.93 [1.375]	41.43 [1.631]	—
24	38.10 [1.500]	44.60 [1.756]	—
28	44.45 [1.750]	50.90 [2.004]	—

Molded Part Selection Guide (Braided)

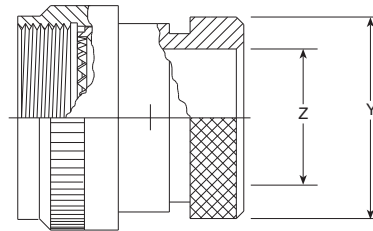
Tinel-Lock Entry Size	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
04	202K232	—	3.3 [0.1]	—	—	—
04	202W232	—	4.3 [0.2]	—	—	—
04	202K121	222K121	5.6 [0.2]	202D211	222D211	6.4 [0.3]
05, 06	202K132	222K132	5.9 [0.2]	202D221	222D221	7.4 [0.3]
07, 08	202K142	222K142	7.1 [0.3]	202D232	222D232	8.4 [0.3]
10, 12	202K153	222K152	8.4 [0.3]	202D242	222D242	9.7 [0.4]
14, 16	202K163	222K163	9.9 [0.4]	202D253	222D253	10.5 [0.4]
18, 20, 22	202K174	222K174	15.7 [0.6]	202D263	222D263	12.2 [0.5]
24	202K185	222K185	16.8 [0.7]	—	—	—

Uniboot Parts

Order No.	Part No.	Cable OD (Min.)
04	202C611	4.8 [0.19]
05, 06, 07	202C621	8.1 [0.32]
08, 10, 12	202C632	12.7 [0.50]
12, 14, 16	202C642	17.5 [0.69]
16, 18, 20, 22	202C653	22.4 [0.88]
24	202C663	22.9 [0.90]

Code 41 MIL-C-38999 Series I and II (Continued)

Solid Adapters



202M1XX-XXX

Table of Dimensions

Order No.	Shell Size Series I	Series II	Thread	Dimensions	
				Y +0.00-0.30 (+0.00) (-0.76) dia.	Z min.
08	9	8	.438-28 UNEF	18.26 [.719]	6.71 [.264]
10	11	10	.562-24 UNEF	21.44 [.844]	9.96 [.392]
12	13	12	.688-24 UNEF	24.61 [.969]	12.85 [.506]
14	15	14	.812-20 UNEF	27.79 [1.094]	16.03 [.631]
16	17	16	.938-20 UNEF	32.54 [1.281]	19.20 [.756]
18	19	18	1.062-18 UNEF	35.71 [1.406]	21.44 [.844]
20	21	20	1.188-18 UNEF	38.89 [1.531]	24.64 [.970]
22	23	22	1.312-18 UNEF	42.06 [1.656]	27.79 [1.094]
24	25	24	1.438-18 UNEF	45.24 [1.781]	30.71 [1.209]

Molded Part Selection Guide (Solid)

Order No.	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
08	202K132	222K132	5.9 [0.23]	202D221	222D221	7.4 [0.29]
10	202K142	222K142	7.1 [0.28]	202D232	222D232	8.4 [0.33]
12, 14	202K153	222K152	8.4 [0.33]	202D242	222D242	9.7 [0.38]
16, 18	202K163	222K163	9.9 [0.39]	202D253	222D253	10.5 [0.41]
20, 22, 24	202K174	222K174	15.7 [0.62]	202D263	222D263	12.2 [0.48]

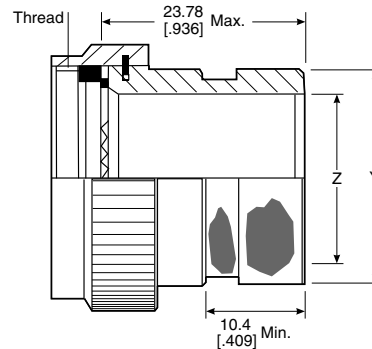
Uniboot Parts

Order No.	Part No.	Cable OD (Min.)
08	202C621	8.1 [0.32]
10	202C632	12.7 [0.50]
12, 14	202C642	17.5 [0.69]
16, 18, 20, 22	202C653	22.4 [0.88]

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 41 MIL-C-38999 Series I and II (Continued)

Spin-Coupling Adapters



202M2XX-XXX

Table of Dimensions

Order No.	Shell Size Series I	Series II	Thread	Dimensions	
				Y +0.00-0.76 Dia.	Z Min.
08	9	8	.438-28 UNEF	13.54 [0.53]	6.35 [0.25]
10	11	10	.562-24 UNEF	15.37 [0.61]	9.53 [0.38]
12	13	12	.688-24 UNEF	19.66 [0.77]	12.70 [0.50]
14	15	14	.812-20 UNEF	21.29 [0.84]	15.88 [0.63]
16	17	16	.938-20 UNEF	24.46 [0.96]	19.05 [0.75]
18	19	18	1.062-18 UNEF	26.47 [1.04]	20.62 [0.81]
20	21	20	1.188-18 UNEF	30.91 [1.22]	23.80 [0.94]
22	23	22	1.312-18 UNEF	34.42 [1.36]	26.97 [1.06]
24	25	24	1.438-18 UNEF	36.65 [1.44]	30.18 [1.19]

Molded Part Selection Guide (Spin-Coupling)

Order No.	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
08	202W232	—	4.3 [0.19]	—	—	—
08	202K121	222K121	5.6 [0.22]	202D211	222D211	6.4 [0.25]
10	202K132	222K132	5.9 [0.23]	202D221	222D221	7.4 [0.29]
12, 14	202K142	222K142	7.1 [0.28]	202D232	222D232	8.4 [0.33]
16, 18	202K153	222K152	8.4 [0.33]	202D242	222D242	9.7 [0.38]
20, 22	202K163	222K163	9.9 [0.39]	202D253	222D253	10.5 [0.41]
24, 28	202K174	222K174	15.7 [0.62]	202D263	222D263	12.2 [0.48]

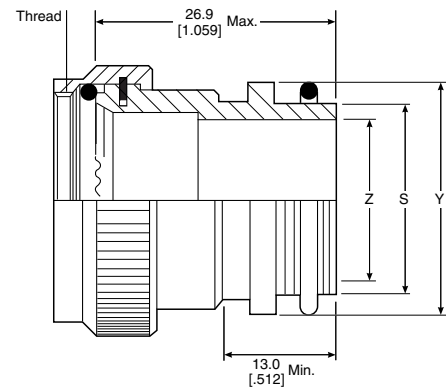
Uniboot Parts

Order No.	Part No.	Cable OD (Min.)
08	202C611	4.8 [0.19]
10, 12	202C621	8.1 [0.32]
14, 16	202C632	12.7 [0.50]
18, 20	202C642	17.5 [0.69]
22, 24	202C653	22.4 [0.88]

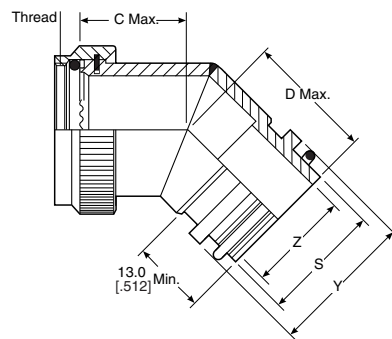
Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 41 MIL-C-38999 Series I and II (Continued)

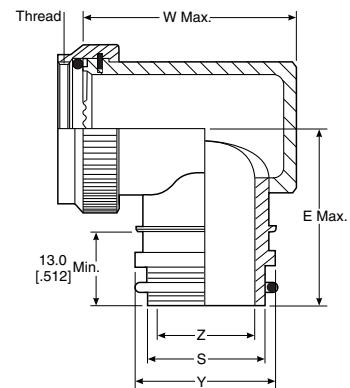
Tinel-Lock Adapters



TXR41XX00-XXXXXX



TXR41XX45-XXXXXX



TXR41XX90-XXXXXX

Table of Dimensions

Order No.	Shell Size Series I	Series II	Max. Entry* Size Type 1	A Unified Thread Class 2B	Dimensions		
					C Max.	D Max.	E Max.
08	9	8	—	.438-28 UNEF	17.5 [0.69]	23.1 [0.91]	29.2 [1.15]
10	11	10	—	.562-24 UNEF	18.3 [0.72]	23.6 [0.93]	30.7 [1.21]
12	13	12	08	.688-24 UNEF	18.8 [0.74]	24.4 [0.96]	32.5 [1.28]
14	15	14	10	.812-20 UNEF	19.3 [0.76]	24.9 [0.98]	34.0 [1.34]
16	17	16	12	.938-20 UNEF	20.1 [0.79]	25.4 [1.00]	35.6 [1.40]
18	19	18	13	1.062-18 UNEF	20.6 [0.81]	26.2 [1.03]	37.1 [1.46]
20	21	20	15	1.188-18 UNEF	21.3 [0.84]	26.9 [1.06]	38.9 [1.53]
22	23	22	16	1.312-18 UNEF	22.1 [0.87]	27.4 [1.08]	40.4 [1.59]
24	25	24	18	1.438-18 UNEF	22.6 [0.89]	28.2 [1.11]	41.9 [1.65]

*For larger than maximum type 1 entry sizes, a two-piece adapter will be supplied. Contact TE for information.

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 41 MIL-C-38999 Series I and II (Continued)

Tinel-Lock Adapters

(continued)

Entry Size Dimensions

Entry Size	Dimensions			
	Z +0.25–0.5	S Diameter (Min.–Max.)	Y ±0.38	W Max.
04	6.35 [0.25]	9.39–9.56 [0.37–0.38]	13.97 [0.55]	27.2 [1.07]
05	7.92 [0.31]	10.97–11.13 [0.43–0.44]	15.54 [0.61]	28.7 [1.13]
06	9.52 [0.37]	12.57–12.73 [0.49–0.50]	17.14 [0.67]	30.2 [1.19]
07	11.09 [0.44]	14.12–14.31 [0.55–0.56]	18.71 [0.74]	31.8 [1.25]
08	12.70 [0.50]	15.72–15.91 [0.62–0.63]	20.32 [0.80]	33.5 [1.32]
10	15.87 [0.62]	18.84–19.11 [0.74–0.75]	23.49 [0.92]	36.6 [1.44]
12	19.05 [0.75]	22.02–22.28 [0.87–0.88]	26.67 [1.05]	39.9 [1.57]
14	22.23 [0.88]	25.17–25.46 [0.99–1.00]	29.84 [1.17]	42.9 [1.69]
16	25.4 [1.00]	28.34–28.63 [1.12–1.13]	33.02 [1.30]	46.2 [1.82]
18	28.57 [1.12]	31.52–31.81 [1.24–1.25]	36.19 [1.42]	49.3 [1.94]

Molded Part Selection Guide (Tinel)

Order No.	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
04	202K232	—	3.3 [0.1]	—	—	—
04	202W232	—	4.3 [0.2]	—	—	—
04	202K121	222K121	5.6 [0.2]	202D211	222D211	6.4 [0.3]
05, 06	202K132	222K132	5.9 [0.2]	202D221	222D221	7.4 [0.3]
07, 08	202K142	222K142	7.1 [0.3]	202D232	222D232	8.4 [0.3]
10, 12	202K153	222K152	8.4 [0.3]	202D242	222D242	9.7 [0.4]
14, 16	202K163	222K163	9.9 [0.4]	202D253	222D253	10.5 [0.4]
18, 20, 22	202K174	222K174	15.7 [0.6]	202D263	222D263	12.2 [0.5]
24	202K185	222K185	16.8 [0.7]	—	—	—

Uniboot Parts

Order No.	Part No.	Cable OD (Min.)
04	202C611	4.8 [0.19]
05, 06, 07	202C621	8.1 [0.32]
08, 10, 12	202C632	12.7 [0.50]
12, 14, 16	202C642	17.5 [0.69]
16, 18, 20, 22	202C653	22.4 [0.88]
24	202C663	22.9 [0.90]

Code 41 MIL-C-38999 Series I and II (Continued)

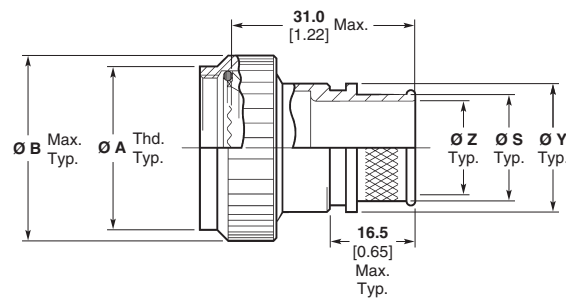
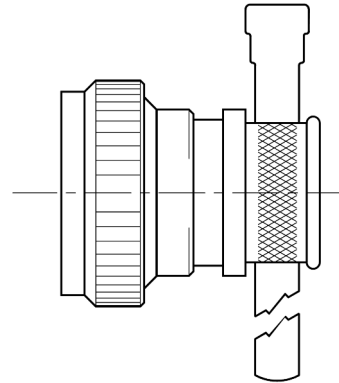
CRES-Lock Adapters (USA) BND Adapters (Europe)

Code 41 Band Strap Adapter

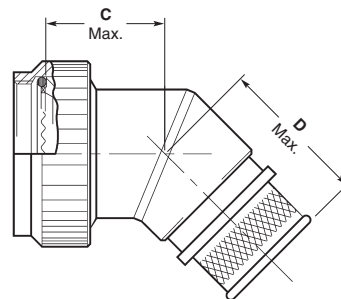
Notes:

1. This product is designed to terminate a braided cable shield by means of a band strap and a heat shrinkable lipped boot to a connector.
2. See CH00-0250-016 for ordering information, modifications and additional dimensions.
3. See drawing BND-XX25S for band strap dimensions and information.
4. Adapter to be permanently marked with code identification number and full part number (e.g. 06090-BND41AB00-1812). Band strap shall bear no part marking.
5. All entry sizes are shown in Table II. Maximum entry sizes are as shown in Table I. For larger entry sizes than the maximum, a Type II adapter may be supplied. See CH00-0250-016 for further details.
6. Adapter mates to: MIL-C-38999 Series I and II, Class E and T, MS27466, MS27467, MS27468, MS27472, MS27473, MS27474, MS27479, MS27480, MS27481, MS27484, MS27497, MS27652, MS27653 and MS27656 Connectors.

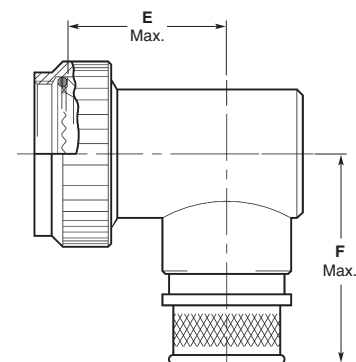
For additional codes available, contact TE.



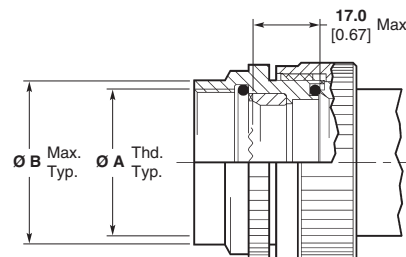
**Straight Adapter
Code 00**



**45° Adapter
Code 45**



**90° Adapter
Code 90**



**Type II Modification
(See Note 5)**

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 41 MIL-C-38999 Series I and II (Continued)
**CRES-Lock Adapters (USA)
BND Adapters (Europe)**
(continued)

**Code 41 Band Strap
Adapter (Continued)**
Table I

Order Number	Shell Size ²		Entry Size Max. Type I ¹	Ø A Unified Thread UNEF Class 2B	Ø B Max.	Ø B Max. ³	C Max.	D Max.	F Max.
	Series I	Series II							
08	9	08	04	0.4375–28	19.1 0.75	24.6 0.97	17.5 0.69	27.2 1.07	33.3 1.31
10	11	10	06	0.5625–24	20.8 0.85	27.0 1.06	18.3 0.72	27.7 1.09	34.8 1.37
12	13	12	08	0.6875–24	25.4 1.00	31.0 1.22	18.8 0.74	28.4 1.12	36.6 1.44
14	15	14	10	0.8125–20	27.2 1.10	35.8 1.41	19.3 0.76	29.0 1.14	38.1 1.50
16	17	16	12	0.9375–20	31.8 1.25	37.3 1.47	20.1 0.79	29.5 1.16	39.6 1.56
18	19	18	13	1.0625–18	35.6 1.40	40.6 1.60	20.6 0.81	30.2 1.19	41.1 1.62
20	21	20	15	1.1875–18	38.1 1.50	44.5 1.75	21.3 0.84	31.0 1.22	42.9 1.69
22	23	22	16	1.3125–18	41.9 1.65	46.8 1.84	22.1 0.87	31.5 1.24	44.5 1.75
24	25	24	18	1.4375–18	44.5 1.75	51.6 2.03	22.6 0.89	32.3 1.27	46.0 1.81

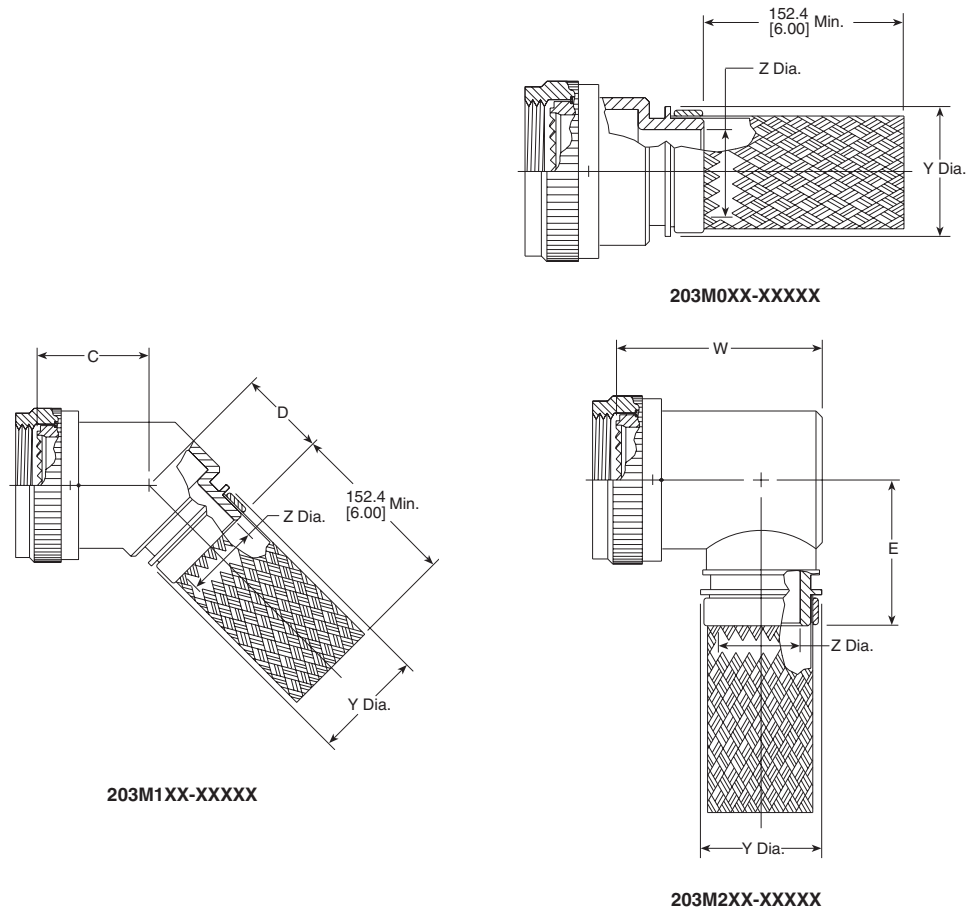
1. All entry sizes are shown in Table II. Maximum entry sizes are as shown in Table I. For larger entry sizes than the maximum, a Type II adapter may be supplied. See CH00-0250-016 for further details.
2. Adapter mates to: MIL-C-38999 Series I and II, Class E and T, MS27466, MS27467, MS27468, MS27472, MS27473, MS27474, MS27479, MS27480, MS27481, MS27484, MS27497, MS27652, MS27653 and MS27656 Connectors.
3. These dimensions apply if a self-locking coupling nut is used, modification code "S".

Table II

Entry Size	Ø Z +0.25/-0.50 [+0.010/-0.020]	Ø S ±0.51 [±0.020]	Ø Y ±0.38 [±0.015]	E Max.
03	4.75 0.188	7.92 0.312	11.10 0.438	15.3 0.60
04	6.35 0.250	9.52 0.375	12.70 0.500	16.3 0.64
05	7.92 0.312	11.12 0.438	14.30 0.563	16.8 0.66
06	9.52 0.375	12.70 0.500	15.88 0.625	17.8 0.70
07	11.12 0.438	14.30 0.562	17.50 0.689	18.8 0.74
08	12.70 0.500	15.88 0.625	19.05 0.750	19.3 0.76
09	14.30 0.562	17.50 0.688	20.65 0.813	20.3 0.80
10	15.88 0.625	19.05 0.750	22.23 0.875	21.3 0.84
11	17.50 0.688	20.65 0.812	23.80 0.938	21.8 0.86
12	19.05 0.750	22.23 0.875	25.40 1.000	22.9 0.90
13	20.65 0.812	23.83 0.938	27.00 1.063	23.8 0.94
14	22.23 0.875	25.40 1.000	30.16 1.189	24.4 0.96

Table II (Continued)

Entry Size	Ø Z +0.25/-0.50 [+0.010/-0.020]	Ø S ±0.51 [±0.020]	Ø Y ±0.38 [±0.015]	E Max.
15	23.83 0.938	27.00 1.062	31.75 1.250	25.4 1.00
16	25.40 1.000	28.58 1.125	33.34 1.313	25.9 1.02
18	28.58 1.125	31.75 1.250	36.51 1.438	27.4 1.08
20	31.75 1.250	34.90 1.375	39.69 1.563	N/A
22	34.90 1.375	38.10 1.500	42.86 1.688	N/A
24	38.10 1.500	41.28 1.625	46.83 1.844	N/A
26	41.28 1.625	44.45 1.750	49.61 1.953	N/A
28	44.45 1.750	47.63 1.875	52.78 2.078	N/A
30	47.65 1.875	50.80 2.000	56.36 2.219	N/A
32	50.80 2.000	54.00 2.125	59.53 2.344	N/A
34	54.00 2.125	57.15 2.250	62.71 2.469	N/A

**Code 54 MIL-C-5015 (MS3400), MIL-C-26482 Series 2,
MIL-C-83723 Series I and III, MIL-C-81703 Series III**
Braided Adapters

Table of Dimensions

Order No.	Shell Size		Max. Entry Size Type 1*	Thread	Dimensions		
	MIL-C-81703	MIL-C-5015			C Max.	D Max.	E Max.
03	3	—	04	.562-24 UNEF	19.10 [0.75]	23.10 [0.91]	28.70 [1.13]
08	—	8 & 8S	04	.500-20 UNF	19.10 [0.75]	23.10 [0.91]	27.90 [1.10]
10	—	10, 10S & 10 SL	06	.625-24 UNEF	19.60 [0.77]	23.60 [0.93]	29.50 [1.16]
12	7	12 & 12S	08	.750-20 UNEF	20.30 [0.80]	24.10 [0.95]	31.00 [1.22]
14	12	14 & 14S	08	.875-20 UNEF	20.80 [0.82]	24.60 [0.97]	32.50 [1.28]
16	19	16 & 16S	10	1.000-20 UNEF	21.30 [0.84]	25.40 [1.00]	34.30 [1.35]
18	27	18	12	1.062-18 UNEF	21.80 [0.86]	25.70 [1.01]	35.60 [1.40]
20	37	20	14	1.188-18 UNEF	22.40 [0.88]	26.40 [1.04]	37.10 [1.46]
22	—	22	16	1.312-18 UNEF	23.10 [0.91]	26.90 [1.06]	38.90 [1.53]
24	—	24	18	1.438-18 UNEF	23.60 [0.93]	27.70 [1.09]	40.40 [1.59]
28	—	28	22	1.750-18 UNS	24.90 [0.98]	29.20 [1.15]	45.20 [1.78]
32	—	32	24	2.000-18 UNS	26.20 [1.03]	30.50 [1.20]	48.30 [1.90]
36	—	36	24	2.250-16 UN	27.40 [1.08]	31.80 [1.25]	51.60 [2.03]
40	—	40	24	2.500-16 UN	29.00 [1.14]	33.30 [1.31]	54.60 [2.15]
44	—	44	24	2.750-16 UN	30.20 [1.19]	34.50 [1.36]	57.90 [2.28]
48	—	48	24	3.000-16 UN	31.50 [1.24]	35.10 [1.38]	61.00 [2.40]
61	61	—	18	1.500-18 UNEF	23.90 [0.94]	27.90 [1.10]	41.10 [1.62]

*For larger than maximum type 1 entry sizes, a two-piece adapter will be supplied. Contact TE for information.

Available in:	Americas	Europe	Asia Pacific
	■	■	■

**Code 54 MIL-C-5015 (MS3400), MIL-C-26482 Series 2,
MIL-C-83723 Series I and III, MIL-C-81703 Series III (Continued)**
Braided Adapters

(continued)

Entry Size Dimensions

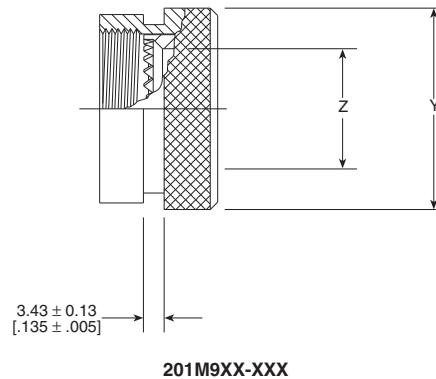
Entry Size	Dimensions			
	Z +0.25–0.5	S Diameter (Min.–Max.)	Y ±0.38	W Max.
04	6.35 [0.25]	9.39–9.56 [0.37–0.38]	13.97 [0.55]	28.4 [1.12]
05	7.92 [0.31]	10.97–11.13 [0.43–0.44]	15.54 [0.61]	30.2 [1.19]
06	9.52 [0.37]	12.57–12.73 [0.49–0.50]	17.14 [0.67]	31.8 [1.25]
07	11.09 [0.44]	14.12–14.31 [0.55–0.56]	18.71 [0.74]	33.3 [1.31]
08	12.7 [0.50]	15.72–15.91 [0.62–0.63]	20.32 [0.80]	35.1 [1.38]
10	15.87 [0.62]	18.84–19.11 [0.74–0.75]	23.49 [0.92]	38.1 [1.50]
12	19.05 [0.75]	22.02–22.28 [0.87–0.88]	26.67 [1.05]	41.1 [1.62]
14	22.23 [0.88]	25.17–25.46 [0.99–1.00]	29.84 [1.17]	44.5 [1.75]
16	25.4 [1.00]	28.34–28.63 [1.12–1.13]	33.02 [1.30]	47.8 [1.88]
18	28.57 [1.12]	31.52–31.81 [1.24–1.25]	36.19 [1.42]	50.8 [2.00]
20	31.75 [1.25]	34.69–34.98 [1.37–1.38]	39.37 [1.55]	53.8 [2.12]
22	34.93 [1.38]	37.79–38.15 [1.49–1.50]	42.55 [1.68]	57.2 [2.25]
24	38.1 [1.50]	40.97–41.33 [1.61–1.63]	45.72 [1.80]	60.5 [2.38]

**Molded Part Selection Guide
(Braided)**

Tinel-Lock Entry Size	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
04	202K232	—	3.3 [0.1]	—	—	—
04	202W232	—	4.3 [0.2]	—	—	—
04	202K121	222K121	5.6 [0.2]	202D211	222D211	6.4 [0.3]
05, 06	202K132	222K132	5.9 [0.2]	202D221	222D221	7.4 [0.3]
07, 08	202K142	222K142	7.1 [0.3]	202D232	222D232	8.4 [0.3]
10, 12	202K153	222K152	8.4 [0.3]	202D242	222D242	9.7 [0.4]
14, 16	202K163	222K163	9.9 [0.4]	202D253	222D253	10.5 [0.4]
18, 20, 22	202K174	222K174	15.7 [0.6]	202D263	222D263	12.2 [0.5]
24	202K185	222K185	16.8 [0.7]	—	—	—

Uniboot Parts

Tinel-Lock Entry Size	Part No.	Cable OD (Min.)
04	202C611	4.8 [0.19]
05, 06, 07	202C621	8.1 [0.32]
08, 10, 12	202C632	12.7 [0.50]
12, 14, 16	202C642	17.5 [0.69]
16, 18, 20, 22	202C653	22.4 [0.88]
24	202C663	22.9 [0.90]

**Code 54 MIL-C-5015 (MS3400), MIL-C-26482 Series 2,
MIL-C-83723 Series I and III, MIL-C-81703 Series III (Continued)**
Solid Adapters

Table of Dimensions

Order No.	Shell Size		Thread	Dimensions	
	MIL-C-81703	MIL-C-5015		Y +0.00-0.51 Dia.	Z Dia. Min.
03	3	—	.562-24 UNEF	13.54 [0.53]	6.35 [0.25]
08	—	8 & 8S	.500-20 UNF	13.54 [0.53]	6.35 [0.25]
10	—	10, 10S & 10SL	.625-24 UNEF	15.37 [0.61]	9.02 [0.36]
12	7	12 & 12S	.750-20 UNEF	19.66 [0.77]	12.47 [0.49]
14	12	14 & 14S	.875-20 UNEF	21.29 [0.84]	14.35 [0.56]
16	19	16 & 16S	1.000-20 UNEF	24.46 [0.96]	17.53 [0.69]
18	27	18	1.062-18 UNEF	26.47 [1.04]	19.53 [0.77]
20	37	20	1.188-18 UNEF	30.91 [1.22]	22.71 [0.89]
22	—	22	1.312-18 UNEF	34.42 [1.36]	25.88 [1.02]
24	—	24	1.438-18 UNEF	36.65 [1.44]	28.80 [1.13]
28	—	28	1.750-18 UNS	43.41 [1.71]	34.77 [1.37]
32	—	32	2.000-18 UNS	48.74 [1.92]	41.02 [1.61]
36	—	36	2.250-16 UN	55.09 [2.17]	46.48 [1.83]
40	—	40	2.500-16 UN	61.01 [2.40]	51.94 [2.04]
44	—	44	2.750-16 UN	67.49 [2.66]	58.42 [2.30]
48	—	48	3.000-16 UN	73.84 [2.91]	64.77 [2.55]
61	61	—	1.500-18 UNEF	36.65 [1.44]	29.82 [1.17]

Molded Part Selection Guide (Solid)

Order No.	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
03	202K132	222K132	5.9 [0.23]	202D221	222D221	7.4 [0.29]
10	202K142	222K142	7.1 [0.28]	202D232	222D232	8.4 [0.33]
12, 14	202K153	222K152	8.4 [0.33]	202D242	222D242	9.7 [0.38]
16, 18, 19, 27	202K163	222K163	9.9 [0.39]	202D253	222D253	10.5 [0.41]
20, 22, 24, 28, 37	202K174	222K174	15.7 [0.62]	202D263	222D263	12.2 [0.48]
28, 32	202K185	222K185	16.8 [0.66]	—	—	—

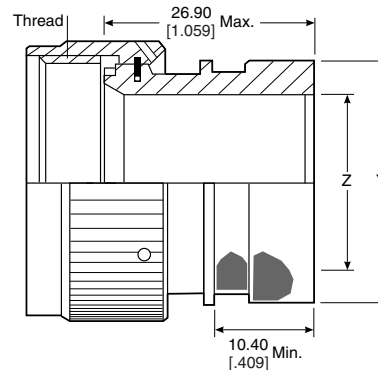
Uniboot Parts

Order No.	Part No.	Cable OD (Min.)
08	202C621	8.1 [0.32]
7, 10, 12	202C632	12.7 [0.50]
12, 14	202C642	17.5 [0.69]
24, 27, 37, 61	202C653	22.4 [0.88]

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 54 MIL-C-5015 (MS3400), MIL-C-26482 Series 2, MIL-C-83723 Series I and III, MIL-C-81703 Series III (Continued)

Spin-Coupling Adapters



201M1XX-XXX

Table of Dimensions

Order No.	Shell Size		Thread	Dimensions	
	MIL-C-81703	MIL-C-5015		Y +0.00-0.51 Dia.	Z Dia. Min.
03	3	—	.562-24 UNEF	13.54 [0.53]	6.35 [0.25]
08	—	8 & 8S	.500-20 UNF	13.54 [0.53]	6.35 [0.25]
10	—	10, 10S & 10SL	.625-24 UNEF	15.37 [0.61]	9.02 [0.36]
12	7	12 & 12S	.750-20 UNEF	19.66 [0.77]	12.47 [0.49]
14	12	14 & 14S	.875-20 UNEF	21.29 [0.84]	14.35 [0.56]
16	19	16 & 16S	1.000-20 UNEF	24.46 [0.96]	17.53 [0.69]
18	27	18	1.062-18 UNEF	26.47 [1.04]	19.53 [0.77]
20	37	20	1.188-18 UNEF	30.91 [1.22]	22.71 [0.89]
22	—	22	1.312-18 UNEF	34.42 [1.36]	25.88 [1.02]
24	—	24	1.438-18 UNEF	36.65 [1.44]	28.80 [1.13]
28	—	28	1.750-18 UNS	43.41 [1.71]	34.77 [1.37]
32	—	32	2.000-18 UNS	48.74 [1.92]	41.02 [1.61]
36	—	36	2.250-16 UN	55.09 [2.17]	46.48 [1.83]
40	—	40	2.500-16 UN	61.01 [2.40]	51.94 [2.04]
44	—	44	2.750-16 UN	67.49 [2.66]	58.42 [2.30]
48	—	48	3.000-16 UN	73.84 [2.91]	64.77 [2.55]
61	61	—	1.500-18 UNEF	36.65 [1.44]	29.82 [1.17]

Molded Part Selection Guide (Spin-coupling)

Order No.	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
03, 08	202W232	—	4.3 [0.19]	—	—	—
03, 08	202K121	222K121	5.6 [0.22]	202D211	222D211	6.4 [0.25]
10, 11	202K132	222K132	5.9 [0.23]	202D221	222D221	7.4 [0.29]
12, 14	202K142	222K142	7.1 [0.28]	202D232	222D232	8.4 [0.33]
16, 18	202K153	222K152	8.4 [0.33]	202D242	222D242	9.7 [0.38]
20, 22	202K163	222K163	9.9 [0.39]	202D253	222D253	10.5 [0.41]
24, 28, 61	202K174	222K174	15.7 [0.62]	202D263	222D263	12.2 [0.48]
32, 36	202K185	222K185	16.8 [0.66]	—	—	—

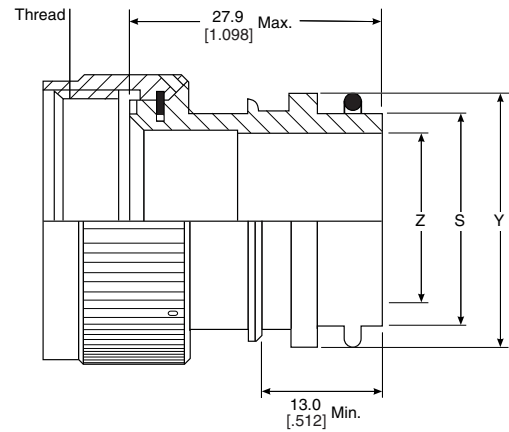
Uniboot Parts

Order No.	Part No.	Cable OD (Min.)
08	202C621	8.1 [0.32]
7, 10, 12	202C632	12.7 [0.50]
12, 14	202C642	17.5 [0.69]
24, 27, 37, 61	202C653	22.4 [0.88]

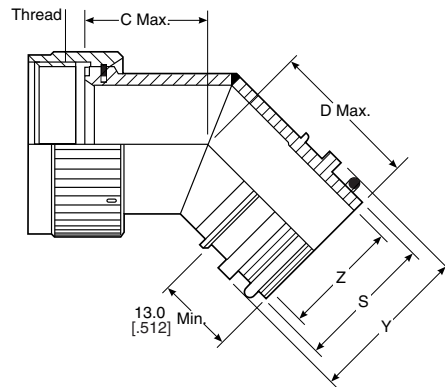
Available in:	Americas	Europe	Asia Pacific
	■	■	■

**Code 54 MIL-C-5015 (MS3400), MIL-C-26482 Series 2,
MIL-C-83723 Series I and III, MIL-C-81703 Series III (Continued)**

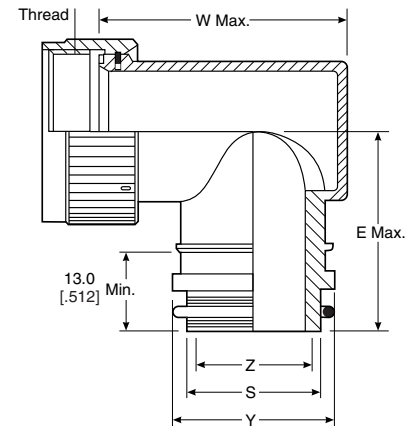
Tinel-Lock Adapters



TXR54XX00-XXXXXX



TXR54XX45-XXXXXX



TXR54XX90-XXXXXX

Available in:	Americas	Europe	Asia Pacific
	■	■	■

**Code 54 MIL-C-5015 (MS3400), MIL-C-26482 Series 2,
MIL-C-83723 Series I and III, MIL-C-81703 Series III (Continued)**
Tinel-Lock Adapters

(continued)

Table of Dimensions

Order No.	Shell Size		Max. Entry Size Type 1*	Thread	Dimensions		
	MIL-C-81703	MIL-C-5015			C Max.	D Max.	E Max.
03	3	—	04	.562-24 UNEF	19.10 [0.75]	23.10 [0.91]	28.70 [1.13]
08	—	8 & 8S	04	.500-20 UNF	19.10 [0.75]	23.10 [0.91]	27.90 [1.10]
10	—	10, 10S & 10 SL	06	.625-24 UNEF	19.60 [0.77]	23.60 [0.93]	29.50 [1.16]
12	7	12 & 12S	08	.750-20 UNEF	20.30 [0.80]	24.10 [0.95]	31.00 [1.22]
14	12	14 & 14S	08	.875-20 UNEF	20.80 [0.82]	24.60 [0.97]	32.50 [1.28]
16	19	16 & 16S	10	1.000-20 UNEF	21.30 [0.84]	25.40 [1.00]	34.30 [1.35]
18	27	18	12	1.062-18 UNEF	21.80 [0.86]	25.70 [1.01]	35.60 [1.40]
20	37	20	14	1.188-18 UNEF	22.40 [0.88]	26.40 [1.04]	37.10 [1.46]
22	—	22	16	1.312-18 UNEF	23.10 [0.91]	26.90 [1.06]	38.90 [1.53]
24	—	24	18	1.438-18 UNEF	23.60 [0.93]	27.70 [1.09]	40.40 [1.59]
28	—	28	22	1.750-18 UNS	24.90 [0.98]	29.20 [1.15]	45.20 [1.78]
32	—	32	24	2.000-18 UNS	26.20 [1.03]	30.50 [1.20]	48.30 [1.90]
36	—	36	24	2.250-16 UN	27.40 [1.08]	31.80 [1.25]	51.60 [2.03]
40	—	40	24	2.500-16 UN	29.00 [1.14]	33.30 [1.31]	54.60 [2.15]
44	—	44	24	2.750-16 UN	30.20 [1.19]	34.50 [1.36]	57.90 [2.28]
48	—	48	24	3.000-16 UN	31.50 [1.24]	35.10 [1.38]	61.00 [2.40]
61	61	—	18	1.500-18 UNEF	23.90 [0.94]	27.90 [1.10]	41.10 [1.62]

*For larger than maximum type 1 entry sizes, a two-piece adapter will be supplied. Contact TE for information.

Entry Size Dimensions

Entry Size	Dimensions			
	Z +0.25–0.5	S Diameter (Min.–Max.)	Y ±0.38	W Max.
04	6.35 [0.25]	9.39–9.56 [0.37–0.38]	13.97 [0.55]	28.4 [1.12]
05	7.92 [0.31]	10.97–11.13 [0.43–0.44]	15.54 [0.61]	30.2 [1.19]
06	9.52 [0.37]	12.57–12.73 [0.49–0.50]	17.14 [0.67]	31.8 [1.25]
07	11.09 [0.44]	14.12–14.31 [0.55–0.56]	18.71 [0.74]	33.3 [1.31]
08	12.70 [0.50]	15.72–15.91 [0.62–0.63]	20.32 [0.80]	35.1 [1.38]
10	15.87 [0.62]	18.84–19.11 [0.74–0.75]	23.49 [0.92]	38.1 [1.50]
12	19.05 [0.75]	22.02–22.28 [0.87–0.88]	26.67 [1.05]	41.1 [1.62]
14	22.23 [0.88]	25.17–25.46 [0.99–1.00]	29.84 [1.17]	44.5 [1.75]
16	25.40 [1.00]	28.34–28.63 [1.12–1.13]	33.02 [1.30]	47.8 [1.88]
18	28.57 [1.12]	31.52–31.81 [1.24–1.25]	36.19 [1.42]	50.8 [2.00]
20	31.75 [1.25]	34.69–34.98 [1.37–1.38]	39.37 [1.55]	53.8 [2.12]
22	34.93 [1.38]	37.79–38.15 [1.49–1.50]	42.55 [1.68]	57.2 [2.25]
24	38.10 [1.50]	40.97–41.33 [1.61–1.63]	45.72 [1.80]	60.5 [2.38]

**Molded Part Selection Guide
(Tinel)**

Tinel-Lock Entry Size	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
04	202K232	—	3.3 [0.1]	—	—	—
04	202W232	—	4.3 [0.2]	—	—	—
04	202K121	222K121	5.6 [0.2]	202D211	222D211	6.4 [0.3]
05, 06	202K132	222K132	5.9 [0.2]	202D221	222D221	7.4 [0.3]
07, 08	202K142	222K142	7.1 [0.3]	202D232	222D232	8.4 [0.3]
10, 12	202K153	222K152	8.4 [0.3]	202D242	222D242	9.7 [0.4]
14, 16	202K163	222K163	9.9 [0.4]	202D253	222D253	10.5 [0.4]
18, 20, 22	202K174	222K174	15.7 [0.6]	202D263	222D263	12.2 [0.5]
24	202K185	222K185	16.8 [0.7]	—	—	—

Uniboot Parts

Tinel-Lock Entry Size	Part No.	Cable OD (Min.)
04	202C611	4.8 [0.19]
05, 06, 07	202C621	8.1 [0.32]
08, 10, 12	202C632	12.7 [0.50]
12, 14, 16	202C642	17.5 [0.69]
16, 18, 20, 22	202C653	22.4 [0.88]
24	202C663	22.9 [0.90]

Code 54 MIL-C-5015 (MS3400), MIL-C-26482 Series 2, MIL-C-83723 Series I and III, MIL-C-81703 Series III (Continued)

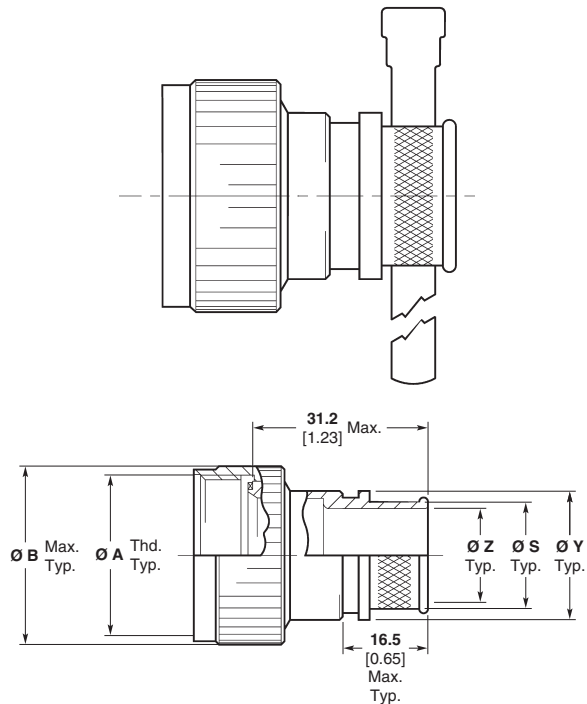
CRES-Lock Adapters (USA) BND Adapters (Europe)

Code 54 Band Strap Adapter

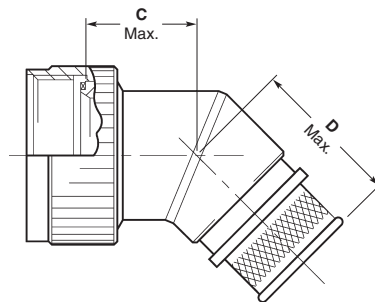
Notes:

1. This product is designed to terminate a braided cable shield by means of a band strap and a heat shrinkable lipped boot to a connector.
2. See CH00-0250-016 for ordering information, modifications and additional dimensions.
3. See drawing BND-XX25S for band strap dimensions and information.
4. Adapter to be permanently marked with code identification number and full part number (e.g. 06090-BND54AB00-1812). Band strap shall bear no part marking.
5. All entry sizes are shown in Table II. Maximum entry sizes are as shown in Table I. For larger entry sizes than the maximum, a Type II adapter may be supplied. See CH00-0250-016 for further details.

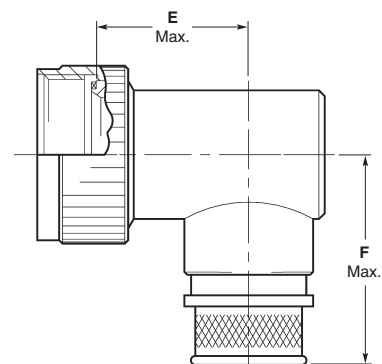
For additional codes available, contact TE.



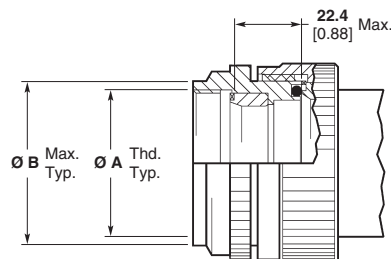
**Straight Adapter
Code 00**



**45° Adapter
Code 45**



**90° Adapter
Code 90**



**Type II Modification
(See Note 5)**

Available in:	Americas	Europe	Asia Pacific
	■	■	■

**Code 54 MIL-C-5015 (MS3400), MIL-C-26482 Series 2,
MIL-C-83723 Series I and III, MIL-C-81703 Series III (Continued)**
**CRES-Lock Adapters (USA)
BND Adapters (Europe)**
(continued)

**Code 54 Band Strap
Adapter (Continued)**
Table I

Order Number	Shell Size Series ²	Series ³	Entry Size Max. Type I ¹	Ø A Unified Thread Class 2B	Ø B Max.	Ø B Max. ⁴	C Max.	D Max.	F Max.
08	—	08	04	0.5000–20 UNF	15.7 0.67	22.6 0.89	19.0 0.75	26.2 1.03	31.0 1.22
10	—	10	06	0.6250–24 UNEF	18.5 0.73	25.7 1.01	19.6 0.77	26.7 1.05	32.5 1.28
12	7	12	08	0.7500–20 UNEF	21.8 0.86	29.0 1.14	20.3 0.80	27.2 1.07	34.3 1.35
14	12	14	09	0.8750–20 UNEF	24.9 0.98	32.0 1.26	20.9 0.82	27.7 1.09	35.6 1.40
16	19	16	11	0.9375–20 UNEF	28.2 1.11	35.3 1.39	21.3 0.84	28.4 1.12	37.1 1.46
18	27	18	12	1.0000–20 UNEF	31.0 1.22	38.4 1.51	21.8 0.86	28.7 1.13	38.9 1.53
20	37	20	14	1.1875–18 UNEF	34.3 1.35	41.7 1.64	22.4 0.88	29.5 1.16	40.4 1.59
22	—	22	16	1.3125–18 UNEF	37.3 1.47	44.7 1.76	23.1 0.91	30.0 1.18	41.9 1.65
24	—	24	18	1.4375–18 UNEF	40.5 1.59	48.0 1.89	23.6 0.93	30.7 1.21	43.4 1.71
28	—	28	22	1.7500–18 UNS	50.0 1.97	54.4 2.14	24.9 0.98	31.8 1.25	48.3 1.90
32	—	32	26	2.0000–18 UNS	56.4 2.22	61.0 2.40	26.2 1.03	33.3 1.31	51.6 2.03
36	—	36	28	2.2500–16 UN	62.7 2.47	67.1 2.64	27.4 1.08	34.3 1.35	54.6 2.15
40	—	40	32	2.5000–16 UN	69.1 2.72	73.4 2.89	28.4 1.12	35.6 1.40	57.7 2.27
44	—	44	34	2.75000–16 UN	75.4 2.97	79.8 3.14	29.7 1.17	36.8 1.45	61.0 2.40
48	—	48	34	3.0000–16 UN	81.8 3.22	86.1 3.39	31.0 1.22	38.1 1.50	64.0 2.52
61	61	—	18	1.5000–18 UNEF	41.9 1.65	47.8 1.88	23.9 0.94	30.7 1.21	44.2 1.74

- All entry sizes are shown in Table II. Maximum entry sizes are as shown in Table I. For larger entry sizes than the maximum, a Type II adapter may be supplied. See CH00-0250-016 for further details.
- Adapter mates to: MIL-C-81703 Series III, MS3424, MS3446, MS3464, MS3467, MS3468, Class E and L Connectors.
- Adapter mates to MIL-C-5015G, MS3400 Series, Class D, E, K, L, U and W: MS3400, MS3401, MS3404, MS3406, MS3450, MS3451, MS3454, MS3456, MS3470, MS3471, MS3472, MS3474, MS3475, MS3476, MIL-C-83723 Series II, Class A and L. MIL-C-83723, /14, /36, /37, /38, /39, /40, /41, /42, /43, /48, /49, /65, /66, /67, /68, /69, /70, /71, /72, /73, /74, /75, /76, /77, /78, /82, /83, /84, /85, /86, /87, /91, /92, /95, /97, and /98 Connectors, MS3155 controlled interfaces.
- These dimensions apply if a self-locking coupling nut is used, modification code "S".

Table II

Entry Size	Ø Z +0.25/-0.50 [+0.010/-0.020]	Ø S ±0.51 [±0.020]	Ø Y ±0.38 [±0.015]	E Max.
03	4.75 0.188	7.92 0.312	11.10 0.438	16.3 0.64
04	6.35 0.250	9.52 0.375	12.70 0.500	16.3 0.64
05	7.92 0.312	11.12 0.438	14.30 0.563	17.3 0.68
06	9.52 0.375	12.70 0.500	15.88 0.625	17.8 0.70
07	11.12 0.438	14.30 0.562	17.50 0.689	18.8 0.74
08	12.70 0.500	15.88 0.625	19.05 0.750	19.8 0.78
09	14.30 0.562	17.50 0.688	20.65 0.813	20.3 0.80
10	15.88 0.625	19.05 0.750	22.23 0.875	20.8 0.82
11	17.50 0.688	20.65 0.812	23.80 0.938	21.8 0.86
12	19.05 0.750	22.23 0.875	25.40 1.000	22.9 0.90
13	20.65 0.812	23.83 0.938	27.00 1.063	23.9 0.94
14	22.23 0.875	25.40 1.000	30.16 1.189	24.4 0.96

Table II (Continued)

Entry Size	Ø Z +0.25/-0.50 [+0.010/-0.020]	Ø S ±0.51 [±0.020]	Ø Y ±0.38 [±0.015]	E Max.
15	23.83 0.938	27.00 1.062	31.75 1.250	24.9 0.98
16	25.40 1.000	28.58 1.125	33.34 1.313	25.9 1.02
18	28.58 1.125	31.75 1.250	36.51 1.438	28.3 1.11
20	31.75 1.250	34.90 1.375	39.69 1.563	29.8 1.17
22	34.90 1.375	38.10 1.500	42.86 1.688	31.3 1.23
24	38.10 1.500	41.28 1.625	46.83 1.844	33.8 1.33
26	41.28 1.625	44.45 1.750	49.61 1.953	35.1 1.38
28	44.45 1.750	47.63 1.875	52.78 2.078	36.3 1.43
30	47.65 1.875	50.80 2.000	56.36 2.219	37.8 1.49
32	50.80 2.000	54.00 2.125	59.53 2.344	39.6 1.56
34	54.00 2.125	57.15 2.250	62.71 2.469	41.1 1.62

Code 76 BS 9522 F0017 (Pattern 105)

Spin-Coupling Adapters

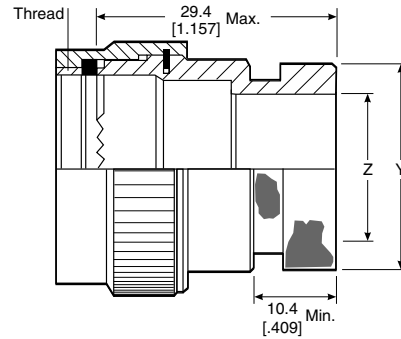


Table of Dimensions

Order No.	Shell Size	Thread	Dimensions	
			Y Max.	Z Min.
08	8	.438-28 UNEF	13.54 [0.53]	6.9 [0.27]
10	10	.562-24 UNEF	15.37 [0.61]	9.9 [0.39]
12	12	.688-24 UNEF	19.66 [0.77]	13.4 [0.53]
14	14	.812-20 UNEF	21.29 [0.84]	15.9 [0.63]
16	16	.938-20 UNEF	24.47 [0.96]	18.9 [0.74]
18	18	1.062-18 UNEF	26.47 [1.04]	21.4 [0.84]
20	20	1.188-18 UNEF	30.92 [1.22]	23.9 [0.94]
22	22	1.312-18 UNEF	34.42 [1.36]	27.4 [1.08]
24	24	1.438-18 UNEF	36.40 [1.44]	29.9 [1.18]

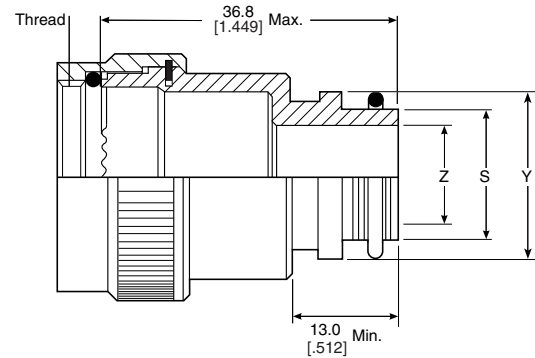
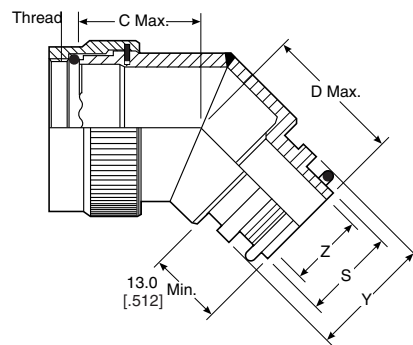
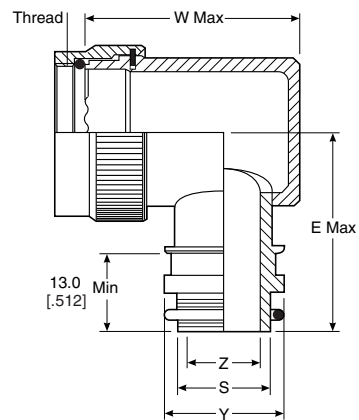
Molded Part Selection Guide (Spin-Coupling)

Order No.	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
03, 08	202W232	—	4.3 [0.19]	—	—	—
03, 08	202K121	222K121	5.6 [0.22]	202D211	222D211	6.4 [0.25]
10, 11	202K132	222K132	5.9 [0.23]	202D221	222D221	7.4 [0.29]
12, 14	202K142	222K142	7.1 [0.28]	202D232	222D232	8.4 [0.33]
16, 18	202K153	222K152	8.4 [0.33]	202D242	222D242	9.7 [0.38]
20, 22	202K163	222K163	9.9 [0.39]	202D253	222D253	10.5 [0.41]
24, 28,	202K174	222K174	15.7 [0.62]	202D263	222D263	12.2 [0.48]
32, 36	202K185	222K185	16.8 [0.66]	202D274	222D274	14.3 [0.56]

Uniboot Parts

Order No.	Part No.	Cable OD (Min.)
03, 08	202C611	4.8 [0.19]
10, 11, 12	202C621	8.1 [0.32]
14, 16	202C632	12.7 [0.50]
18, 20	202C642	17.5 [0.69]
22, 24	202C653	22.4 [0.88]

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 76 BS 9522 F0017 (Pattern 105) (Continued)
Tinel-Lock Adapters

TXR76XX00-XXXXXX

TXR76XX45-XXXXXX

TXR76XX90-XXXXXX
Table of Dimensions

Order No.	Shell Size	Max. Entry Size Type 1*	Thread	Dimensions		
				C Max.	D Max.	E Max.
08	8	04	.438-28 UNEF	18.0 [.74]	21.3 [.87]	26.7 [1.05]
10	10	07	.562-24 UNEF	18.8 [.76]	22.1 [.90]	28.2 [1.11]
12	12	08	.688-24 UNEF	19.3 [.79]	22.9 [.92]	30.2 [1.19]
14	14	10	.812-20 UNEF	20.1 [.82]	23.4 [.95]	31.8 [1.25]
16	16	12	.938-20 UNEF	20.8 [.84]	24.1 [.97]	33.5 [1.32]
18	18	12	1.062-18 UNEF	21.3 [.87]	24.6 [1.00]	35.1 [1.38]
20	20	16	1.188-18 UNEF	22.1 [.89]	25.4 [1.02]	36.6 [1.44]
22	22	18	1.312-18 UNEF	22.6 [.92]	25.9 [1.05]	38.1 [1.50]
24	24	20	1.438-18 UNEF	23.4 [.97]	26.7 [1.07]	39.4 [1.55]

*For larger than maximum type 1 entry sizes, a two-piece adapter will be supplied. Contact TE for information.

Available in:	Americas	Europe	Asia Pacific
	■	■	■

Code 76 BS 9522 F0017 (Pattern 105) (Continued)
Tinel-Lock Adapters

(continued)

Entry Size Dimensions

Entry Size	Dimensions			
	Z +0.25–0.5	S Diameter (Min.–Max.)	Y ±0.38	W Max.
04	6.35 [0.25]	9.39–9.56 [0.37–0.38]	13.97 [1.22]	31.0 [0.55]
05	7.92 [0.31]	10.97–11.13 [0.43–0.44]	15.54 [1.29]	32.8 [0.61]
06	9.52 [0.37]	12.57–12.73 [0.49–0.50]	17.14 [1.35]	34.3 [0.67]
07	11.09 [0.44]	14.12–14.31 [0.55–0.56]	18.71 [1.41]	35.8 [0.74]
08	12.7 [0.50]	15.72–15.91 [0.62–0.63]	20.32 [1.47]	37.3 [0.80]
10	15.87 [0.62]	18.84–19.11 [0.74–0.75]	23.49 [1.60]	40.6 [0.92]
12	19.05 [0.75]	22.02–22.28 [0.87–0.88]	26.67 [1.72]	43.7 [1.05]
14	22.23 [0.88]	25.17–25.46 [0.99–1.00]	29.84 [1.85]	47.0 [1.17]
16	25.4 [1.00]	28.34–28.63 [1.12–1.13]	33.02 [1.97]	50.0 [1.30]
18	28.57 [1.12]	31.52–31.81 [1.24–1.25]	36.19 [2.10]	53.3 [1.42]
20	31.75 [1.25]	34.69–34.98 [1.37–1.38]	39.37 [1.55]	53.8 [2.19]

Molded Part Selection Guide (Tinel)

Tinel-Lock Entry Size	Standard K Parts			Low-Profile D Parts		
	Straight Part No.	90° Part No.	Cable OD (Min.)	Straight Part No.	90° Part No.	Cable OD (Min.)
04	202K232	—	3.3 [0.1]	—	—	—
04	202W232	—	4.3 [0.2]	—	—	—
04	202K121	222K121	5.6 [0.2]	202D211	222D211	6.4 [0.3]
05, 06	202K132	222K132	5.9 [0.2]	202D221	222D221	7.4 [0.3]
07, 08	202K142	222K142	7.1 [0.3]	202D232	222D232	8.4 [0.3]
10, 12	202K153	222K152	8.4 [0.3]	202D242	222D242	9.7 [0.4]
14, 16	202K163	222K163	9.9 [0.4]	202D253	222D253	10.5 [0.4]
18, 20, 22	202K174	222K174	15.7 [0.6]	202D263	222D263	12.2 [0.5]
24	202K185	222K185	16.8 [0.7]	—	—	—

Uniboot Parts

Tinel-Lock Entry Size	Part No.	Cable OD (Min.)
04	202C611	4.8 [0.19]
05, 06, 07	202C621	8.1 [0.32]
08, 10, 12	202C632	12.7 [0.50]
12, 14, 16	202C642	17.5 [0.69]
16, 18, 20, 22	202C653	22.4 [0.88]
24	202C663	22.9 [0.90]

Raychem FlexiScreen Backshells

FlexiScreen Backshells

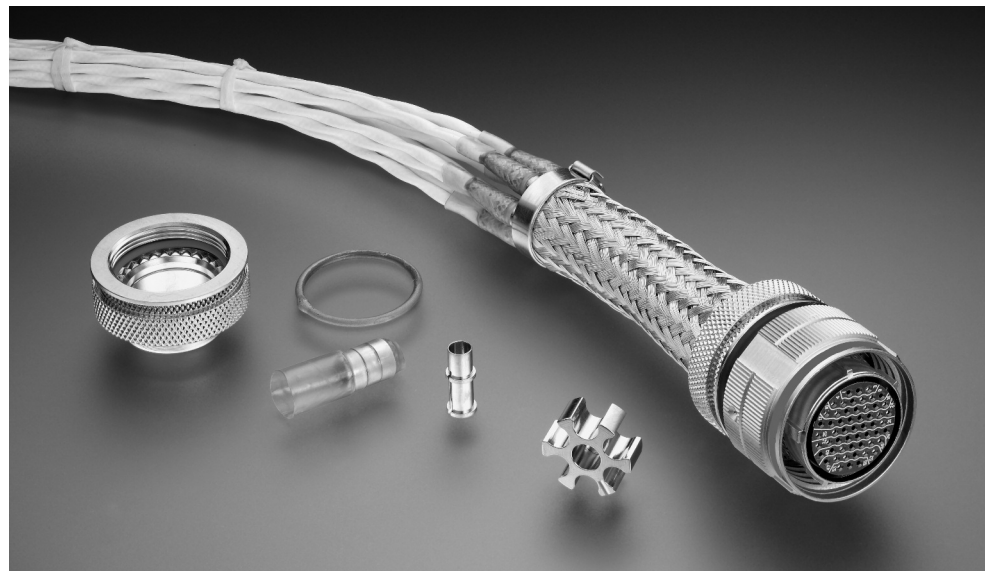
The FlexiScreen high performance backshells are designed to provide EMC protection for both commercial and military applications. FlexiScreen backshells represent a significant improvement over pig-tail termination methods by providing 360° EMC shielding on the termination area of each individual cable. FlexiScreen backshell terminations can be installed to allow the cable bundle to be installed at various angles, such as 30 & 45°, using a single backshell design.

FlexiScreen backshells can be installed to allow the cable bundle to be formed at various angles, such as 90° and 45°, using a single backshell design.

FlexiScreen backshells are a cost effective solution while maintaining low weight.

Product Facts

- **Cost effective solution**
- **Capitalizes on proven performance of HexaShield adapter components**
- **Flexible and variable bending configurations**
- **Light weight**
- **Repairable**
- **Out performs commonly used alternatives**



Applications

Designed to be mounted on MIL-DTL-38999, 83723, 26482, 5015, or commonly used connectors

Aerospace, Defense, Ground Vehicles, Control Circuits — where excellent EMI and shielding performance is required

Standards & Specs

Finish Types: SAE-AMS-PQ-P-416 cadmium olive drab, SAE-AMS-C-26074 Class 3, grade B Electroless Nickel (others available upon request)

TE Specification RB-117

RPIP-696-21 Installation Procedure for FlexiScreen backshells

Kit Contents

- 1 backshell assembly
- 1 multi-position star
- 1 band strap

Electrical

DC resistance:
<5.0 mΩ braid to backshell per SAE-AS85049
<10.0 mΩ braid to cable braids per RB-117

Shielding effectiveness:
Complies with ANSI/NEMA EC 61-2005

Lightning strike:
No damage or degradation of components. Tested per RTCA/DO-160F, Section 22

Physical or Other Properties

Vibration:
Tested per EAI-364-28, test condition VI, Letter J

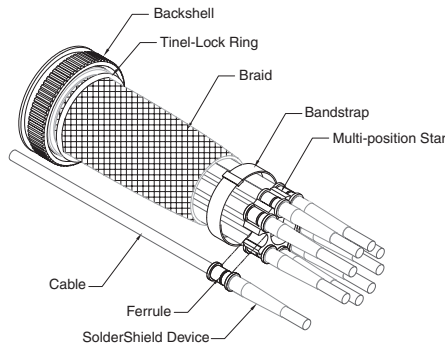
Mechanical shock:
Tested per EAI-364-27, test condition D

Cable pull-out:
Tested per MIL-STD-1344, method 2009-1, test condition A

Operating temperature:
-65° to +150°

Raychem FlexiScreen Backshells (Continued)

Part Numbering System



FLS 40 - A B 10 A - A

Star Configuration (number of ferrule positions)
A = Standard star
B = Star one size smaller
C = Star one size larger

Braid - (Braid supplied 3" (76mm) as standard length)
A = Tin-plated copper, 36 awg, single braid
B = Tin-plated copper, 36 awg, double braid
C = Nickel plated copper, 36 awg, single braid
D = Nickel plated copper, 36 awg, double braid

Order Number

Finish Type:
B = Cadmium olive drab to SAE-AMS-PQ-P-416
C = Electroless nickel to SAE-AMS-C-26074 Class 3, Grade B

Material Code:
A = Aluminum alloy
K = Stainless steel

Connector Code Number:
FLS40 = MIL-DTL-38999 Series III and IV
FLS41 = MIL-DTL-38999 Series I and II
FLS 54 = MIL-DTL-5015H (now SAE-AS50151), MIL-DTL-26482 series 2, M83723 series 1 and III, MIL-DTL-81703 (now SAE-AS81703), and all connectors with MS3155 controlled accessory interface.

Also available for other connector codes. Please consult TE for further information.

FLS40

ORDER NO.	SHELL SIZE	ENTRY SIZE	ØZ +0.10 -0.020	ØA METRIC THREAD CLASS 6H	ØB MAX	STAR CONFIGURATION (NUMBER OF FERRULE POSITIONS)
10	11	07	11.09 [0.437]	M15 X 1	21.25 [0.84]	A= 2 B= N/A C= 3
12	13	08	12.70 [0.500]	M18 X 1	24.50 [0.97]	A= 3 B= 2 C= 5
14	15	10	15.87 [0.625]	M22 X 1	29.00 [1.15]	A= 5 B= 3 C= 6
16	17	12	19.05 [0.750]	M25 X 1	33.50 [1.32]	A= 6 B= 5 C= 7
18	19	14	22.23 [0.875]	M28 X 1	37.50 [1.48]	A= 7 B= 6 C= 9
20	21	16	25.40 [1.00]	M31 X 1	39.50 [1.56]	A= 9 B= 7 C= 10
22	23	18	28.57 [1.125]	M34 X 1	42.00 [1.66]	A= 10 B= 9 C= 13
24	25	20	34.93 [1.375]	M37 X 1	45.00 [1.78]	A= 12 B= 10 C= 17

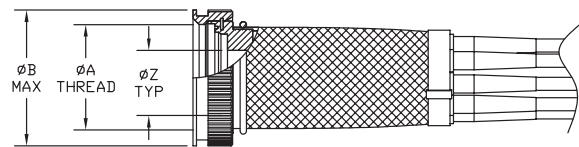
FLS41

ORDER NO.	SHELL SIZE	ENTRY SIZE	ØZ +0.10 -0.020	ØA THREAD RH CLASS 2B	ØB MAX	STAR CONFIGURATION (NUMBER OF FERRULE POSITIONS)
10	11	10	9.52 [0.375]	.562-24 UNEF	22.2 [0.875]	A= 2 B= N/A C= 3
12	13	12	12.70 [0.500]	.688-24 UNEF	25.4 [1.00]	A= 3 B= 2 C= 5
14	15	14	15.87 [0.625]	.812-20 UNEF	30.2 [1.188]	A= 5 B= 3 C= 6
16	17	16	19.05 [0.750]	.938-20 UNEF	33.3 [1.312]	A= 6 B= 5 C= 7
18	19	18	19.05 [0.750]	1.062-18 UNEF	36.5 [1.438]	A= 7 B= 6 C= 9
20	21	20	22.23 [0.875]	1.188-18 UNEF	39.6 [1.562]	A= 9 B= 7 C= 10
22	23	22	25.40 [1.00]	1.312-18 UNEF	42.9 [1.688]	A= 10 B= 9 C= 13
24	25	24	28.57 [1.125]	1.438-18 UNEF	45.2 [1.781]	A= 12 B= 10 C= 17

FLS54

ORDER NO.	SHELL SIZE	ENTRY SIZE	ØZ +0.10 -0.020	ØA THREAD CLASS 6H	ØB MAX	STAR CONFIGURATION (NUMBER OF FERRULE POSITIONS)
10	10, 10S & 10SL	06	9.52 [0.375]	.6250"-24 UNEF	20.40 [0.80]	A= 2 B= N/A C= 3
12	12 & 12S	08	12.70 [0.500]	.7500"-20 UNEF	23.80 [0.93]	A= 3 B= 2 C= 5
14	14 & 14S	08	12.70 [0.500]	.8750"-20 UNEF	27.00 [1.06]	A= 5 B= 3 C= 6
16	16 & 16S	10	18.87 [0.625]	1.0000"-20 UNEF	31.45 [1.23]	A= 6 B= 5 C= 7
18	18	12	19.05 [0.750]	1.0625"-18 UNEF	33.25 [1.30]	A= 7 B= 6 C= 9
20	20	14	22.22 [0.875]	1.1875"-18 UNEF	36.45 [1.43]	A= 9 B= 7 C= 10
22	22	16	25.40 [1.000]	1.3125"-18 UNEF	39.60 [1.55]	A= 10 B= 9 C= 13*
24	24	18	28.58 [1.125]	1.4375"-18 UNEF	42.80 [1.68]	A= 12 B= 10 C= 17*

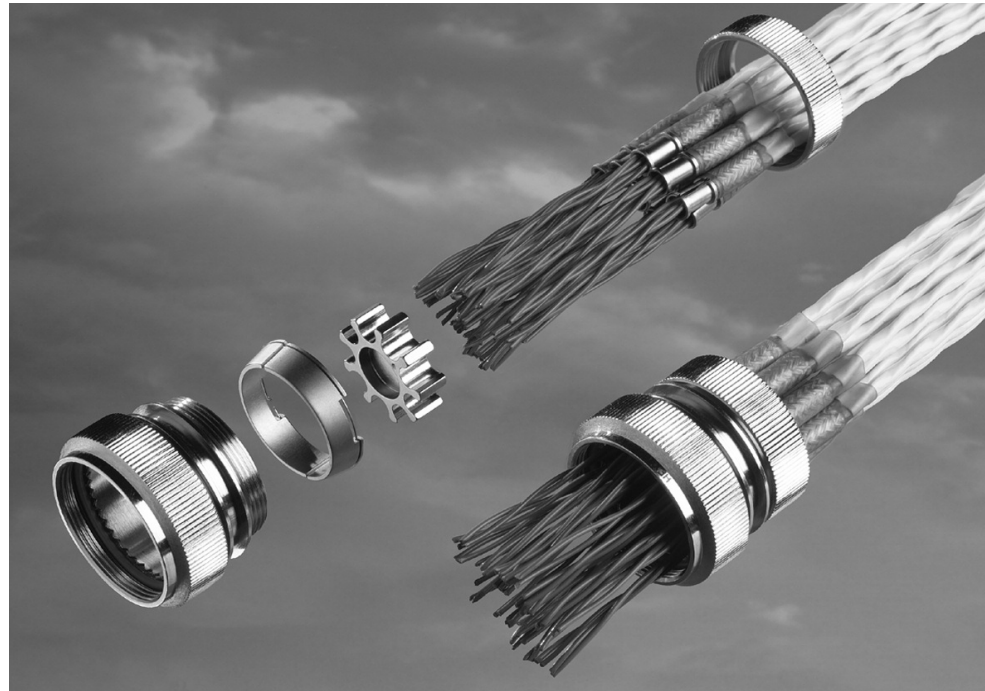
* - STAR CONFIGURATION USES 3 PIECE STAR (1 STAR, 2 HALF STARS)



Introduction

Product Facts

- Superior EMC/EMI Shielding Performance
- Simple installation
- Easy reentry
- Simplified maintenance and repair
- Excellent mechanical and environmental resistance
- Efficient strain relief
- Flexibility
- Versatility



Applications

TE, a longtime leader in harnessing technology, has written a new chapter in EMC shielding with the introduction of the Raychem brand HexaShield EMC adapter.

Designed to provide EMC protection solutions for both commercial and military applications, HexaShield adapters represent a significant improvement over pig-tail termination methods. By providing 360-degree EMC shielding on the termination area of each individual cable, HexaShield adapters provide outstanding shielding effectiveness.

HexaShield adapters are simple to install, easy to

maintain, and dependably resistant to mechanical and environmental stresses.

Principal points and features

- Easy reentry: To insert or remove ferrules from the HexaShield adapter, simply loosen the back nut.
- Superior protection: No degradation of shielding performance.
- Up to four shielded cables accommodated by each ferrule.
- Mechanical and environmental protection equal to backshells complying with MIL-C-85049 Category 3B.
- Strain relief on each individual cable.

- Weight reduction, by possibly eliminating the need for overall shielding.
- Compact size - not exceeding outer diameter of connector.
- Available in straight, 45° and 90° angles, as well as swept and long bodies.

Simple assembly and installation

1. Solder cable or wire shield to a ferrule with a heat-shrinkable SolderShield terminator.
2. Clip ferrule into one of the grounding star cavities.
3. Secure the back nut of the HexaShield adapter so that the conic ring assembly automatically compresses the ferrules.

Available in:

Americas	■
Europe	■
Asia Pacific	■

Designed to corresponding connector specifications

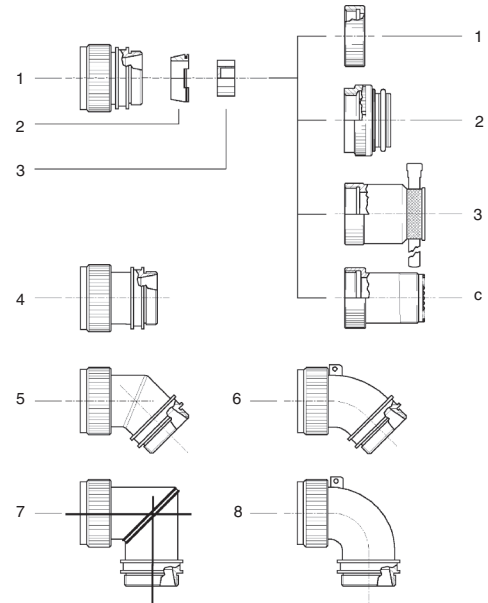
Installation Procedures

Two Platings Available		TE Product Specifications	
Electroless nickel (MIL-DTL-26074)		RB-110 and RB-114	
Olive drab cadmium (QQ-P-416 Type II Class 3)		—	
*Contact TE for additional platings.			
Installation procedure for HET-A-02X and HET-A-04X (RPIP-696-00)		Installation procedure for HET-03X (RPIP-696-03)	General procedure for cylindrical connectors, right-angle body (RPIP-696-07)
General procedure for ARINC 600 Size II connectors (RPIP-696-01)		General procedure for cylindrical connectors, straight body (RPIP-696-04)	—
General procedure for ARINC 600 Size III connectors (RPIP-696-02)		—	—
RPIP-696-13 HexaShield Filling Factors			

Kit Descriptions

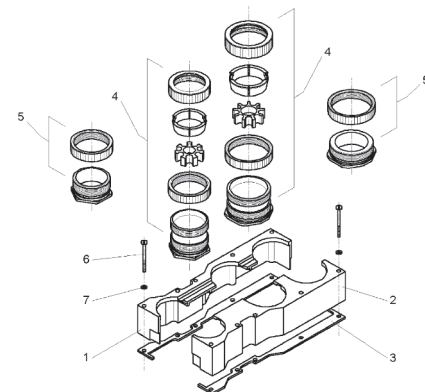
Hexashield Adapters for Circular Connectors: Straight, 45° and 90° Assemblies

Item	Description
1	Straight adapter assembly
2	Conic ring assembly
3	Star Plain (Standard) Drilled (Option) Split (Option) _
4	Straight adapter assembly - "L" version - nominally 0.5" [12.7] longer body
5	45° adapter assembly - welded
6	45° adapter assembly - swept
7	90° adapter assembly - welded
8	90° adapter assembly - swept Standard products shown. Variants available on request.
Split star assemblies are shown on relevant customer drawings where applicable.	
Item	HexaShield Version
-1	Back Nut
-2	Tinel adapter assembly Tinel-Lock ring for single braid
-3	Bandstrap adapter assembly
-C	Conduit adapter



HexaShield Adapters for ARINC 404/600 Connectors: Sizes 1, 2, 3 and 4 Assemblies

Item	Description
1	Left side support
2	Right side support
3	Retention bars
4	Body assemblies Body Holding nut Conic ring assembly Star _ Back nut
5	Cavity plug assemblies Plug Holding nut
6	Pan head screws - 4-40 UNC
7	Spring washers



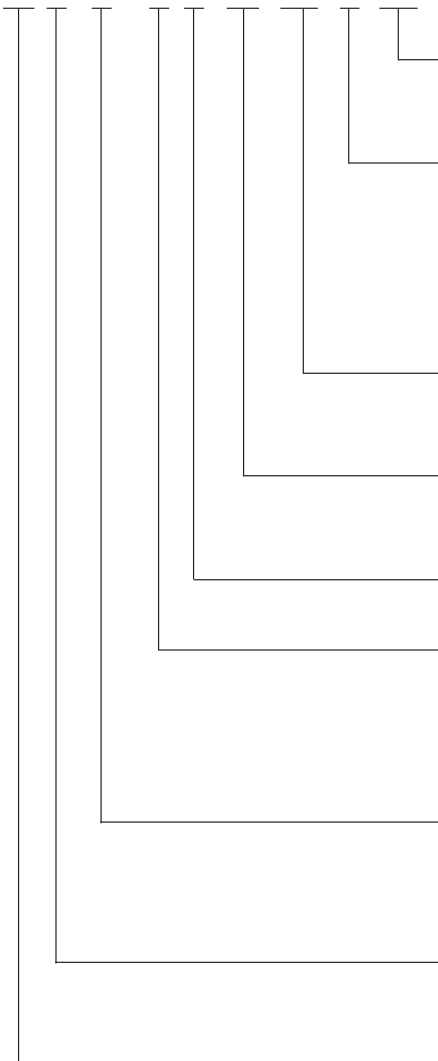
ARINC 600 Size 2 shown
Stars are available as plain, drilled or split.
See relevant customer drawings for further information

Ordering Information

Part Numbering for Standard Products

HexaShield Adapter for Circular Connectors

HEXYY L -AY -00 S -YY -AY -Y -DS



Drilled Star:

See applicable customer drawing for star options

Type of Back Nut:

1 = Standard back nut

2 = Clamping nut for tincl ring (for overbraid protection)

3 = Clamping nut with bandstrap

C = Clamping nut for conduit applicator

Max. number of ferrules that can be accommodated

See applicable customer drawing for options

Hexashield Size Code:

See applicable customer drawing for order number (shell)

S = Swept version

Configuration:

00 = Straight body

45 = 45 degree angle body

90 = 90 degree angle body

Type of Plating:

B = Cadmium plated

C = Electroless nickel

L = Long body

See applicable customer drawing for availability

Connector Code Number:

21 = MIL-C-26482 Series 1

40 = MIL-DTL-38999 Series 3 and 4

41 = MIL-DTL-38999 Series 1 and 2

54 = MIL-DTL-83723 Series 1 and 3

MIL-C-25482 Series 2

Ordering Information (Continued)

HexaShield Adapter for Collins Connectors

HEXDB-AC-00-A9-1

00 = Straight body
90 = Right-angle body

HexaShield Adapter for ARINC 600 Connectors

HEXA6-AY-00-YY-AY-Y

Clamping nut version:

1 = Clamping nut alone
2 = Clamping nut for tinell ring

Number of ferrules:

18 for ARINC 600 size II (A and B cavities)
25 for ARINC 600 size II (A, B and C cavities)
18 for ARINC 600 size III (A and B cavities)
See applicable customer drawing for options

ARINC Connector Size:

02 = ARINC 600 size II
03 = ARINC 600 size III

Configuration:

00 = Straight body
90 = Right-angle body

Plating:

B = Cadmium plated
C = Electroless nickel

Drilled Stars are standard on ARINC 600 adapters.

Part Numbering of Ferrule Kits*

HET-A-02X for small-size cable with SolderShield terminator

HET-A-03X for connection of unshielded cables
ferrules with heat-shrinkable tubing (no shield)

HET-A-04X for large-size cables with SolderShield terminator

Type of Plating:

B = Cadmium plated
C = Electroless nickel

HEX07-AX ferrule - solid blank for use when a HET-A is not needed

Type of Plating:

B = Cadmium plated
C = Electroless nickel

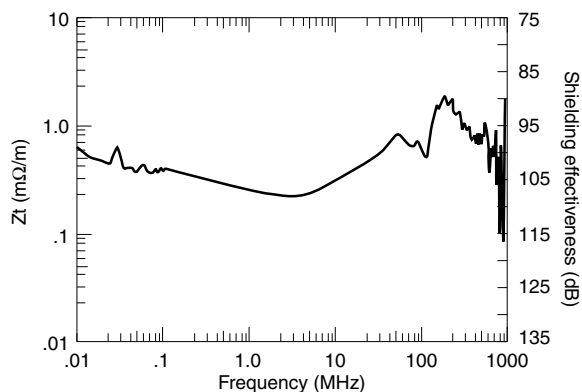
*Not all part numbers are standard; your local TE representative will assist you in selecting the appropriate standard product

EMC Performance

Product Facts

- Outperforms traditional pigtail termination, especially in HIRF performance
- Withstands 10-kA peak current lightning transients of SAE AE4L-87-3

Transfer Impedance



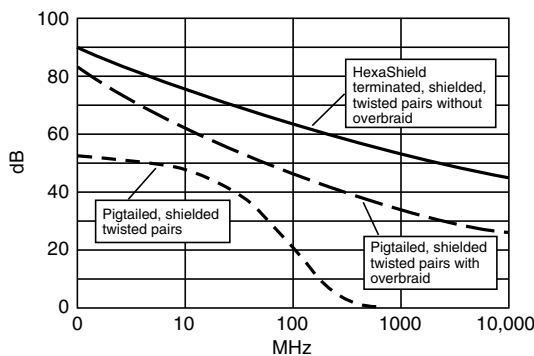
HexaShield size: 23

Cable: TE 5024H8424
(one cable installed)

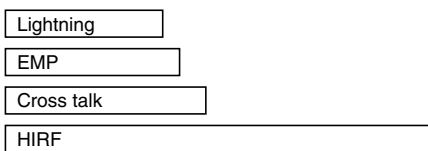
Test method: CEI 96-1

Protection Level

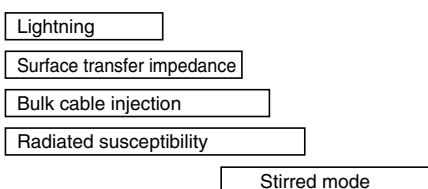
Generalized system performance (Actual system performance in any one test method may differ.)



Frequency spectrum of threats



Frequency spectrum of test methods



Typical HexaShield Applications

EMC Performance (Continued)

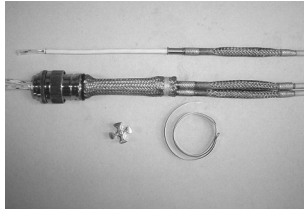
Civilian and military aircraft
Avionics
Fighter aircraft
Missiles and launch support systems
Armored and military support vehicles
Navy ships (total shipboard hardening)
Military communications
Engines (FADEC harness hardening)

HexaShield Product Range

Accommodates the following connector types*:
MIL-C-26482 Series 1
MIL-DTL-38999 Series 1, 2, 3, and 4
MIL-C-26482 Series 2
MIL-DTL-83723 Series 1 and 3
DBAD
ARINC 600
ARINC 404

*Please contact TE for other connector types and special requests.

Flexible EMI Termination System



HexaShield F

Individual cable braid terminations offering multiple connector pin repairs with zero pig-tail length for superior EMC performance, without the need for gross over-braid.

HexaShield F provides the following advantages:

- Installation ease reduces shield termination labor cost
- Ease of maintenance and repair allows performance of normal connector contact repairs, addition or change of a cable multiple times
- Small size and lightweight
- Sound mechanical performances of termination
- Provides strain relief on individual cables
- Better shielding performance of termination
- Available in various star sizes and platings (TE FLX40 series drawings. Contact TE for detailed information)

Applications

HexaShield F termination system is especially useful for high-speed quadrx cable (IEEE 1394) applications.

Product Facts

- Maintains electrical integrity while connecting controlled electrical cables to mil-spec connectors
- Flexible and versatile design fits most mil-spec connectors, shielded signal wires, and ARINC connectors
- Zero pigtail length braid termination
- Modular cable termination using ferrules, SolderSleeve devices, stars, and braid allows for repeated cable segment repairability
- Stars for ferrules with band strap (Tinel-Lock ring can be available) allows for easy re-entry for repair and replacement while providing a secure attachment
- Various ferrule count and star positions with optional plugs available to accommodate various cables and plugs

Raychem Spin Lock Variable Angle Backshell

The Raychem spin lock variable angle backshell enables straight, 45° and 90° cable terminations with the same part. The connector backshell swivelling body rotates around the axis of the cable bundle and locks in position, minimizing stress on the wire bundle and providing more robust strain relief than other termination systems.

Product Facts

- Variable angle backshell enables straight, 45° and 90° cable terminations with the same part
- High performance, low resistance shield termination provided by the proven Tinel-Lock ring system or bandstrap
- Sealed termination achieved via a standard heat-shrinkable molded shape and adhesive system
- Available in a variety of material and plating options
- Saddle clamp strain relief or heat-shrinkable molded shape provides strain relief and sealing



Application Tooling

RH-3960-1 TINEL-KIT-120V or AD-5000-TINEL-ASSY (240v)

Torque Wrench

Heat Gun (if using heat-shrinkable molded part version)

Applications

Military and Commercial Aerospace

Military Ground Systems

Military Marine

Commercial Ships and Off-Shore Marine

Materials

Aluminum with Electroless Nickel or Cadmium over Electroless Nickel or Zinc Nickel plating

Standards & Specs

Application Specification:
MIP-103-1 (Installation Procedure, Saddle Clamp Strain Relief)

MIP-103-2 (Installation Procedure, Molded Part Strain Relief)

Product Specification:
MPS-103

Additional Documents:
SLC40, SLC41, SLC54, SLM40, SLM41, SLM54, CH00-0250-019

Electrical/Mechanical

Title	Requirement	Passing Criteria
Examination of product	MPS-103 3.3.1	Meet drawing dimension
DC Resistance	MPS-103 3.3.2	DC Resistance < 2.5mΩ
Salt Spray	MPS-103 3.3.3	Exposure of basis metal: Non-critical area <0.1" Critical area <.025"
Vibration (Category 3B)	MPS-103 3.3.4	Must pass visual and DC Resistance criteria
Shock (Category 3B)	MPS-103 3.3.5	Must pass visual and DC Resistance criteria
Cable Pullout	MPS-103 3.3.6	Cable Slippage <0.125"
Braid Retention	MPS-103 3.3.7	DC Resistance < 2.5 mΩ
Coupling Thread Strength	MPS-103 3.3.8	No visible damage to threads, coupling nut or anti-rotational teeth
DC Resistance	MPS-103 3.3.2	DC Resistance < 2.5mΩ
External Bending Moment	MPS-103 3.3.9	No visible damage to adapter body, threads, coupling nut or anti-rotational teeth
Post Test Examination	MPS-103 3.3.10	Meet drawing dimensions

*MPS-103 Requirements meet or exceed SAE-AMS-85049

Raychem Spin Lock Variable Angle Backshell (Continued)



Straight

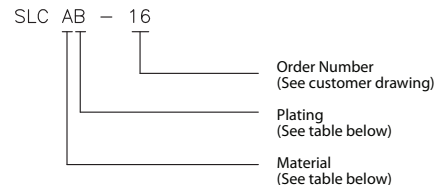


90°

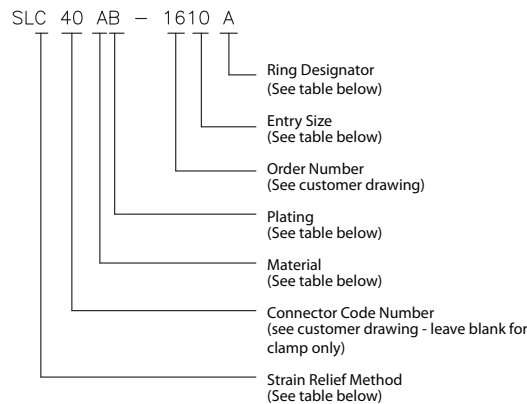


45°

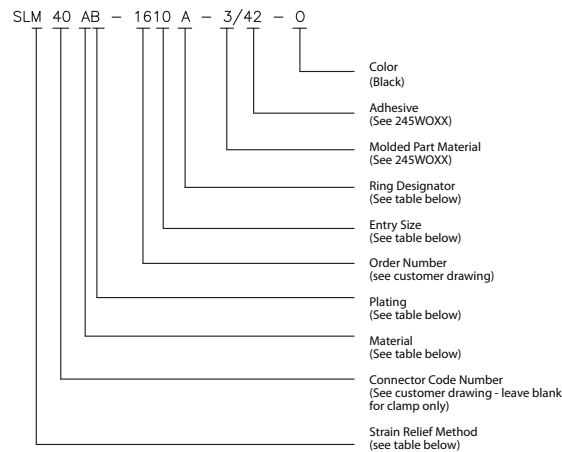
Clamp Only



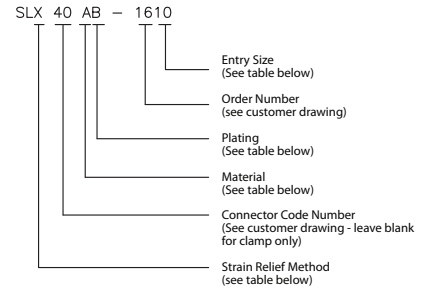
Saddle Clamp Version



Molded Boot Version



Body Only



Additional Images:



Notes:

Strain Relief Method:	M =	Molded Part
	C =	Clamp Strain Relief
	X =	Body Only
Material:	A =	Aluminum Alloy
	S =	Stainless Steel (contact TE)
Plating:	B =	Cadmium olive drab to SAE-AMS-PQ-P-146
	C =	Electroless Nickel to SAE-AMS-26074 Class 3 or 4, Grade A
	Z =	Zinc Nickel, Black to ASTM BB41 Grade 1, Type D
	J =	Passivated per SAE-AMS-QQ-P-35 or MIL-S-5002 (contact TE)
Ring Designator:	A =	AI
	B =	BI
	C =	C1
	D =	Band Strap (contact TE)
	Leave Blank for no band or Tinel-Lock Ring	