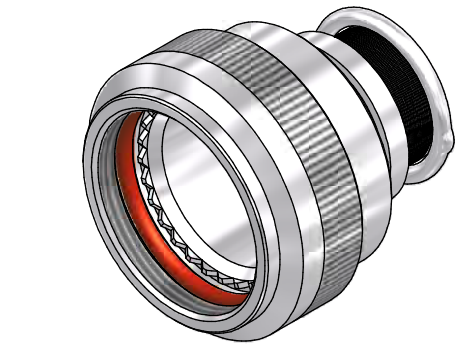
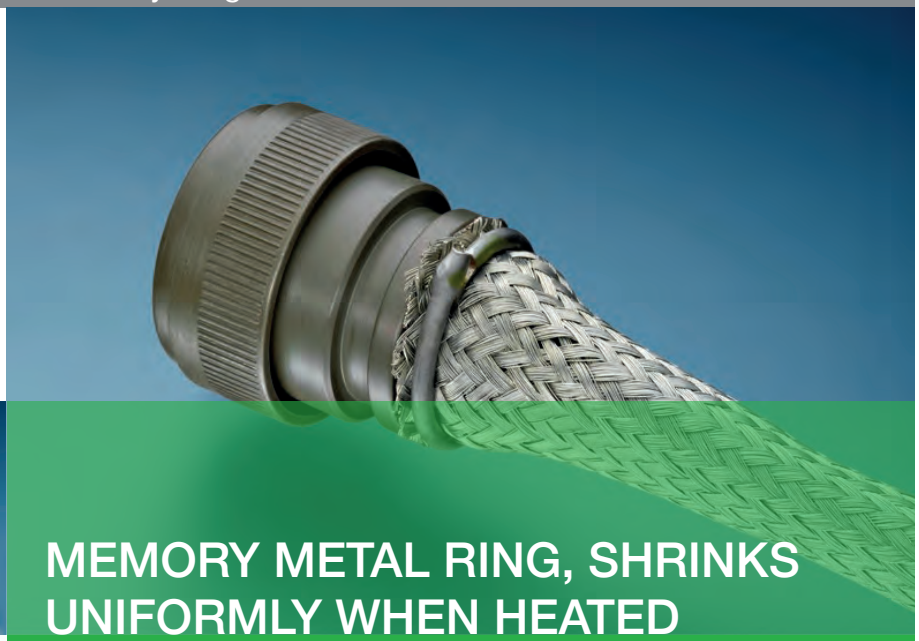
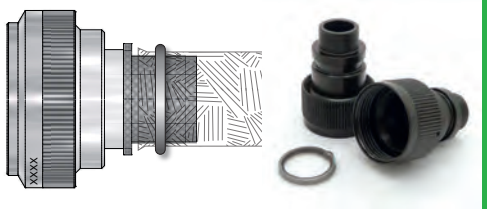
TXR Tinel-Lock

April 2017

Memory Ring - Screened Backshells







MEMORY METAL RING, SHRINKS UNIFORMLY WHEN HEATED

Screened Backshells Suitable for MIL-DTL 5015, MIL-DTL-26482 and MIL-DTL-38999 Series Connectors.

Low profile, buckle free termination.

memory metal rings are designed to be heated electrically, all rings are marked with thermochromic paint which changes colour when installation temperature is reached.
360° Termination

COMMON BACKSHELL FAMILY CODES

TXR18	MIL-DTL-5015D
TXR21	MIL-DTL-26482 Series I
TXR40	MIL-DTL-38999 Series III & IV
TXR41	MIL-DTL-38999 Series I & II
TXR54	MIL-DTL-26482 Series II and MIL-DTL-5015G (MS3400)
TXR76	BS 9522 (Pattern 105)

Tinel-Lock adaptors are used to terminate copper, tin or silver plated cable braid to the rear of circular connectors using a shape memory metal ring that shrinks uniformly to secure the braid when heated. The resulting 360° termination withstands severe shock, vibration, temperature cycling, corrosion and provides excellent screening continuity.

Other backshell assembly variants are available, including MIL-DTL-83723, AS81703 Series III and MS-DTL-5015 MS 'V'.

Self locking coupling nut modifications are also available, please contact us for details and additional information.

Official Distributors for:

TE connectivity

iS Rayfast

TXR Series

Introduction and Part Numbering

Tinel-Lock adaptors are used to terminate copper, tin or silver plated cable braid to the rear of circular connectors using a shape memory metal ring that shrinks uniformly to secure the braid when heated. The resulting 360° termination withstands severe shock, vibration, temperature cycling, corrosion and provides excellent screening continuity.

BACKSHELL FAMILY CODES

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Further explanation of part numbering system below, or contact us for more details.

TXR40 A Z 00 - 16 10 AI

Part Numbering example

Ring Designation Ref
AI, BI or CI See selection table opposite.

Entry Size
See appropriate selection table on following pages

Shell Size
See appropriate selection table on following pages

Angle Configuration
00 Straight
45 45° angle
90 Right angle

Plating Code
See plating code selection table, opposite

Material Code
See material code selection table, opposite

Family Type
TXR18 MIL-DTL-5015D
TXR21 MIL-DTL-26482 Series I
TXR40 MIL-DTL-38999 Series III & IV
TXR41 MIL-DTL-38999 Series I & II
TXR54 MIL-DTL-26482 Series II and MIL-DTL-5015G (MS3400)
TXR76 BS 9522 (Pattern 105)

The above backshell family designations are for the most common applications, for TXR76 and others not listed here please contact us for more information.

TXR Series

Introduction and Part Numbering

Part Selection Process

1. From the connector code select the Adaptor family type identification - TXR**
2. The material code and the finish code would normally be the same as the connector.
3. Select your required angle for the cable entering the rear of the connector.
4. Select shell size from the appropriate selection tables on following pages.
5. Maximum entry sizes are shown in tables on following pages. Entry sizes that are smaller are also available, please contact us for availability.
6. Tinel-Ring size is specified according to the cable braid construction, please see 'Ring Designator Selection' table on this page.
7. Optional screening braid offering up to 99% optical coverage is also available, please see table below for part reference.

Material Codes

Standard Material Options	Code
Aluminium alloy 6262 / 6082	A
Nickel Aluminium Bronze DGS 1043 / NES 833 (Marine)	B
Stainless Steel 303 S31 / 304	S

Please contact sales office for materials not listed above

Plating Codes

Standard Plating Options	Colour	RoHS	Code
Cadmium, per SAE AMS-QQ-P-416, Type II, Class 3. Over electroless nickel	Olive Drab	No	B
Electroless nickel, per SAE AMS-C-26074, Class 4, Grade B.	Bright Silver	Yes	C
Anodised hard per MIL-A-8625, Type III, Class 2	Black	Yes	G
Passivated, per SAE AMS-QQ-P-35 or MIL-S-5002 (stainless steel only).	-	Yes	J
Zinc Cobalt over Electroless Nickel	Olive Drab	Yes	U
Unplated Shot Blast (glass bead), for non reflective finish	-	Yes	W
Zinc Nickel passivate over electroless Nickel, ASTM B841 class 1	Black	Yes	Z

Please contact sales office for plating materials not listed above

Ring Designator Selection Table

Description	Part Ref.
Single Layer	
36 AWG braid	**AI**
34 AWG braid	**AI**
32 AWG braid	**BI**
30 AWG braid	**BI**
Double Layer	
36 AWG braid	**BI**
34 AWG braid	**BI**
32 AWG braid	**CI**

The outside surface of the ring is marked with a dot of thermo-chromic paint which changes colour when appropriate installation temperature is reached.

'AI' Rings are identified by the absence of coloured a dot, whilst 'BI' rings are marked with a **RED** dot and 'CI' rings are marked with a **BLUE** dot.

Also available for repair and retro-fit applications is a split version (Side Entry) of the standard Tinel-Lock ring, SETR please contact us for more information.

The Tinel-Lock assembly can be complimented by the addition of a heat-shrinkable moulded part with adhesive, that environmentally seals and gives strain relief between the connector and the cable jacket, leaving the wires free from any stress and strain.

Installation Tool

The AD-5000-Tinel-Assy is a manually operated resistance heating tool designed specifically to install the Tinel-Lock® ring.

TXR Series

Additional Information

Determining the Entry Size

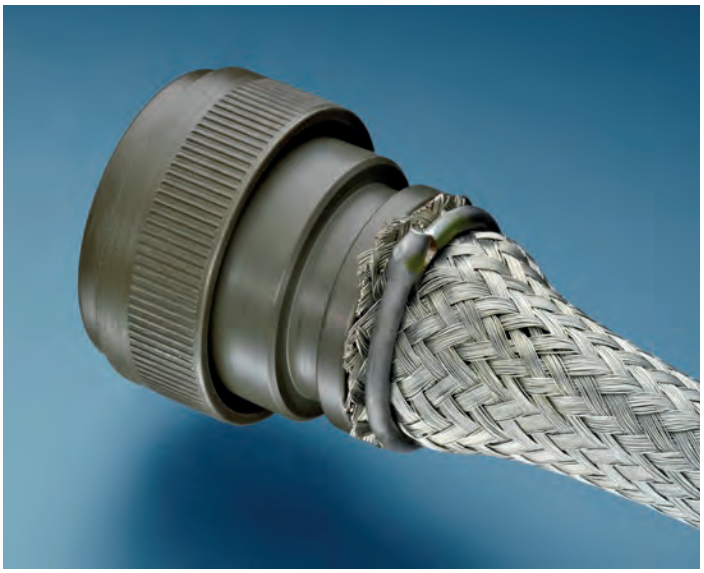
Once you have the wire bundle size, use the chart below to select entry size. Chart shows the minimum entry sizes for cables from 3 to 38 mm in diameter. In other words, the white spaces on the chart represent all of the cable outside diameters each entry size will fit.

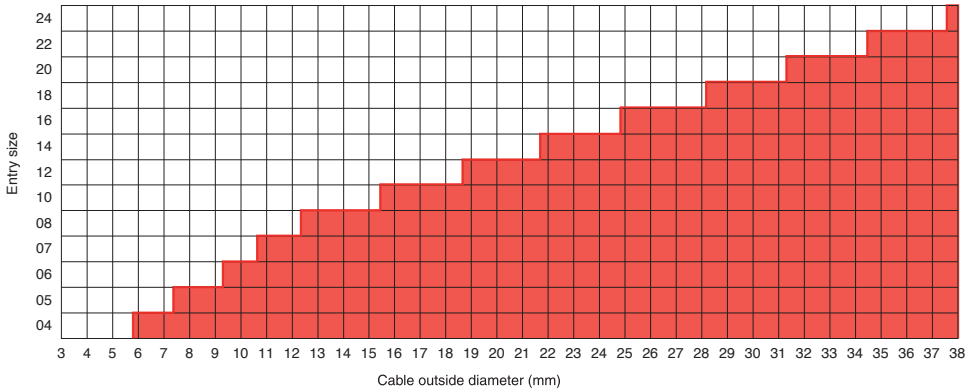
Follow these steps:

- Find the cable diameter on the chart.
- Please note the lowest entry size that will fit the cable diameter.

If the adaptor is shielded or has a Tinel-Lock ring, there are additional considerations, which are noted below.

For further information or assistance on selecting the correct entry size or constructing your required adaptor part number, please contact us.





Memory Ring Backshells

The cable braid must be opened up to fit onto the outside diameter of the adaptor 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 above 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 adaptor. Ensure the braid will open sufficiently to fit the entry size selected and to ensure that the braid and boot can be rolled back.

TXR Series
Additional Information

Description of Material Options

Aluminium (A) - Effective for most applications, as satisfies the majority of environmental and interconnect requirements. Aluminium is strong, lightweight, corrosion resistant and cost effective, with a variety of surface finishes.

Nickel Aluminum Bronze (B) - Ideal for marine applications where traditional plating finishes can quickly be eroded revealing weaker base materials, Nickel Aluminium Bronze will remain robust in the harshest of environments.

Stainless Steel (S) - Corrosion resistant steel (CRES) available in 303, 304 and 316 grades, offers excellent corrosion and chemical resistance, plus it is stronger than aluminium and needs no additional plating.

Description of Plating Options

Cadmium (B) - The historical standard finish for military and industrial connectors and backshells, offering excellent salt spray corrosion resistance.

Electroless Nickel (C) - Commonly used on industrial and high temperature applications, where a non-reflective finish and high corrosion resistance is not essential.

Hard Anodised (G) - Used where the need for surface hardness and abrasion resistance is the main criteria. The build up for hard coat anodising is much thicker than your standard anodising.

Passivated (J) - Removes surface contaminants and produces a surface condition which is resistant to corrosive action. Provides a higher degree of corrosion resistance with finished parts retaining the dimension they had prior to treatment.

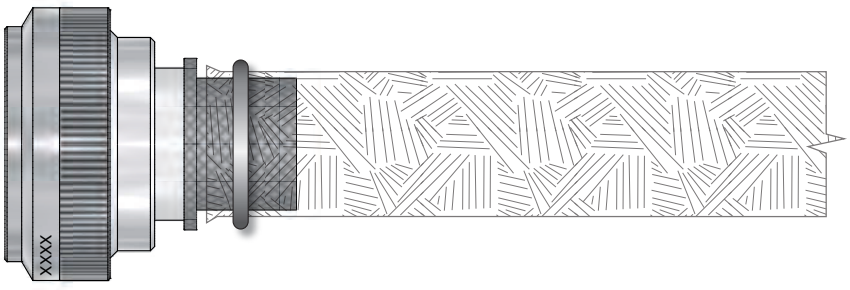
Zinc Cobalt (U) - Offers enhanced corrosion resistance compared to traditional zinc plating of the same thickness. By electroplating zinc and cobalt to the particular metal, the end result is a uniform ductility that will withstand up to six times the corrosion resistance of conventional zinc plating.

Shot Blast (W) - For a non reflective finish.

Black Zinc Nickel (Z) - The latest RoHS compliant solution to environmental plating of connectors and backshells, offering high levels of compatibility with other plating materials.

Screening Braid

Should the user require the application of additional screening braid to help complete the assembly, we can offer a screening braid with up to 99% optical coverage (minimum of 93%), see table below.



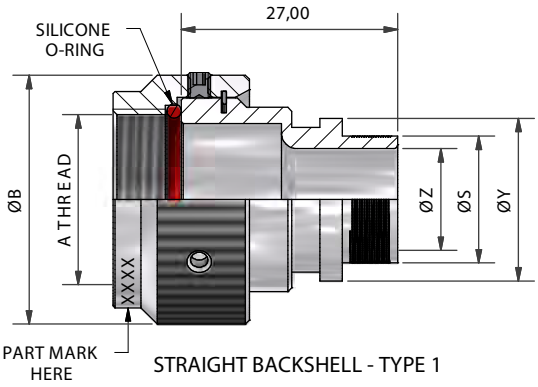
Selection of Screening Braid for use with Tinel-Lock Adaptor - up to 99% optical coverage

Cable Bundle Ø		Carrier		Strand Size	Tinel-Lock Entry Size	Braid Part Number
Min.	Max.	No.	Ends	AWG/mm	Single Layer Braid	
3.5	7.5	24	7	36/0.13	04*	RAY-101-4.0
4.5	9.5	24	9	36/0.13	04	RAY-101-6.0
7.0	14.0	24	14	36/0.13	04, 05, 06, 07*	RAY-101-7.5
8.0	22.0	36	12	36/0.13	06, 07, 08, 10, 12*	RAY-101-10.0
11.0	24.0	36	15	36/0.13	08, 10, 12	RAY-101-12.5
16.0	38.0	48	16	36/0.13	12, 14, 16, 18, 20, 22	RAY-101-20.0

* Combination is not preferred; use only if absolutely necessary | Dimensions in millimetres unless otherwise stated.

TXR18 Series

MIL-DTL-5015D



STRAIGHT BACKSHELL - TYPE 1

TXR18AB00*-1608AI

Part Number Example

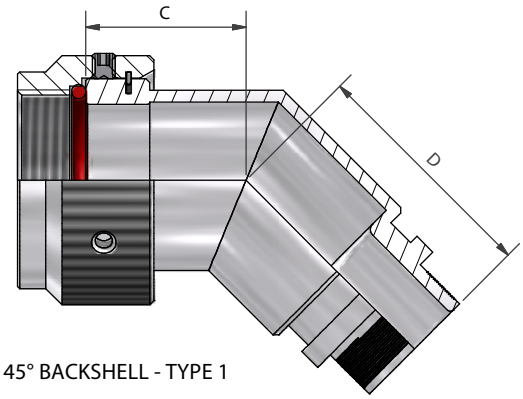
Tinel-Lock backshell suitable for MIL-DTL-5015D, class A, E and R, MS3100, MS3101 and MS3106 connectors, material aluminium alloy, plating cadmium, angle straight, shell size 16, entry size 08, with single braid ring option.

* Denotes manufacturer code, if applicable.

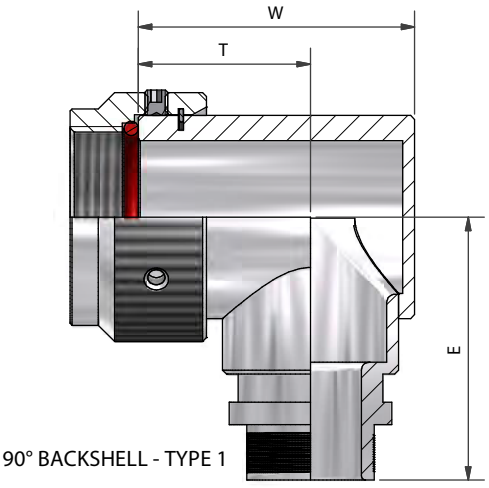
Manufacturer (MFR) Code

A	Amphenol - Class A
B	Bendix - Class A, E and R
C	Cannon - Class A, E and R
R	Amphenol - Class R
-	MFR code not required

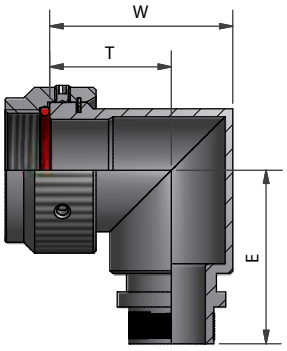
Should your manufacturer or type not be known MFR code ‘D’ is used for classes A, E and R. Additional piece(s) supplied when connector manufacturer is unknown.



45° BACKSHELL - TYPE 1



90° BACKSHELL - TYPE 1



90° BACKSHELL - TYPE 1
STAINLESS STEEL AND
NICKEL ALUMINIUM BRONZE

TXR18 Series

MIL-DTL-26482 Series I

Tinel-Lock Backshell Dimension Table - Shell Size

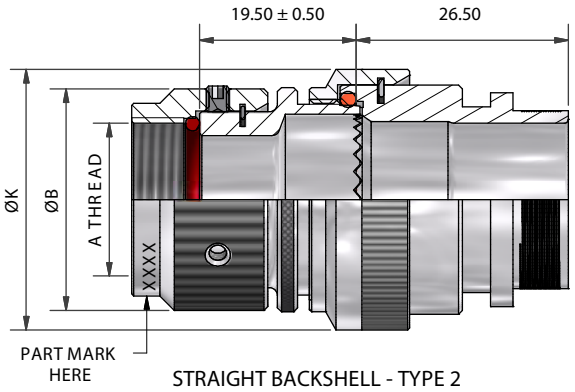
These dimensions apply if backshell is stainless steel or nickel aluminium bronze.

Shell Size	MFR Code	'A' Thread	Ø B Max	Max Entry	C ±0.5	D ±0.5	W ±0.5	T ±0.5	E ±0.5	W ±0.5	T ±0.5	E ±0.5
08	B	3/8-32 UNEF	18.5	04	15.0	20.1	21.7	15.2	26.0	21.7	15.2	29.0
	C	7/16-28 UNEF	18.1									
	A,R	7/16-27 UNS	18.5									
10	-	1/2-28 UNEF	19.8	06	15.4	21.6	23.2	15.7	27.7	23.2	15.7	31.2
11	C	9/16-24 UNEF	21.6	07	18.4	21.6	25.0	16.5	27.7	27.2	17.5	33.0
	A, B, R	5/8-24 UNEF	23.2				27.2	17.5				
12	B, C	5/8-24 UNEF	23.0	08	18.4	21.6	27.2	17.5	27.7	27.2	17.5	33.0
	A, R	11/16-24 UNEF	24.9									
14	-	3/4-20 UNEF	27.7	10	19.3	22.2	30.7	19.5	30.7	30.7	19.5	34.9
16	-	7/8-20 UNEF	31.1	12	20.0	23.6	34.2	21.5	32.4	34.2	21.5	35.5
18	-	1-20 UNEF	34.4	12	20.6	23.7	37.2	23.0	34.0	37.2	23.0	37.2
20	A, B, C	1 1/8-18 UNEF	37.6	16	21.3	24.6	40.7	24.5	35.6	40.7	24.5	38.7
	R	1 1/8-24 UNS										
22	-	1 1/4-18 UNEF	40.6	18	21.9	25.0	43.7	26.0	37.1	43.7	26.0	40.2
24	-	1 3/8-18 UNEF	43.6	20	22.5	25.4	46.7	27.5	38.6	46.7	27.5	44.9

Tinel-Lock Backshell Dimension Table - Entry Size

Entry Size	Ø S Max	Ø Z Min	Ø Y ±0.3
04	9.49 ±0.04	6.35	14.00
05	11.06 ±0.04	7.92	15.50
06	12.66 ±0.04	9.53	17.10
07	14.21 ±0.07	11.10	18.70
08	15.81 ±0.07	12.70	20.30
10	18.96 ±0.08	15.88	23.50
12	22.14 ±0.08	19.05	26.70
14	25.30 ±0.08	22.23	29.80
16	28.48 ±0.08	25.40	33.00
18	31.65 ±0.08	28.58	36.20
20	34.83 ±0.08	31.75	39.40
22	37.98 ±0.08	34.93	42.50
24	41.15 ±0.08	38.10	45.70

Please note that if the entry size required exceeds that listed in table above, the backshell will supplied as the larger Type 2 design, for details on this design modification please contact us for more information



STRAIGHT BACKSHELL - TYPE 2

Moulded Part Selection

Tinel-Lock Entry Size	Straight Part No.	90° Part No.	Cable OD (Min)
04	202K232	-	3.3
04	202W232	-	4.3
04	202K121	222K121	5.6
05, 06	202K132	222K132	5.9
07, 08	202K142	222K142	7.1
10, 12	202K153	222K152	8.4
14, 16	202K163	222K163	9.9
18, 20, 22	202K174	222K174	15.7
24	202K185	222K185	16.8

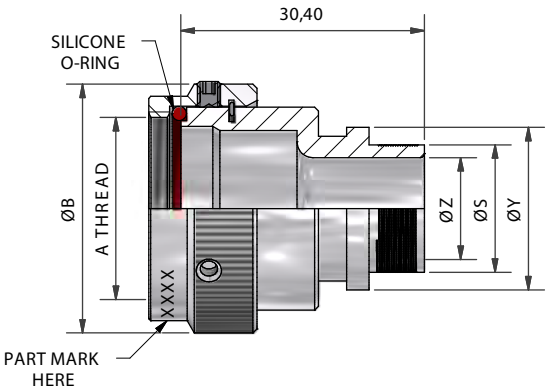
Uniboot Moulded Part Selection

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

All dimension used on tables above are in mm

TXR21 Series

MIL-DTL-26482 Series I

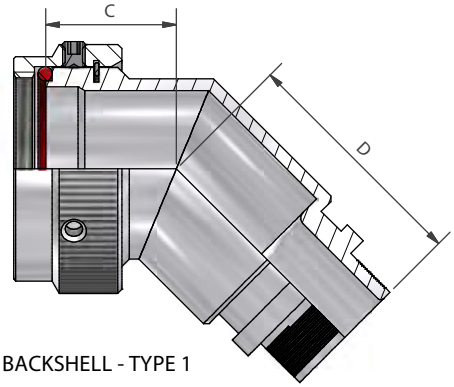


STRAIGHT BACKSHELL - TYPE 1

TXR21AZ00-1608AI

Part Number Example

Tinel-Lock backshell suitable for MIL-DTL-26482 Series I connectors, material aluminium alloy, plating zinc nickel, angle straight, shell size 16, entry size 08, with single braid ring option.



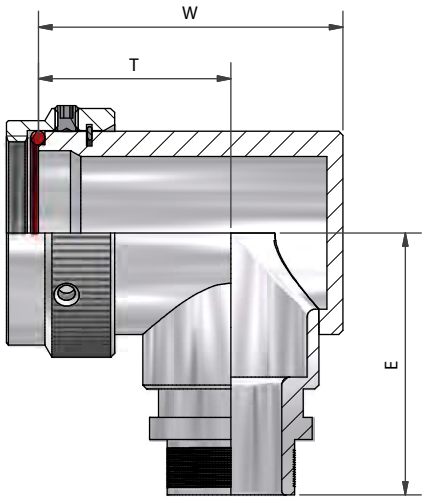
45° BACKSHELL - TYPE 1

Stock Profile

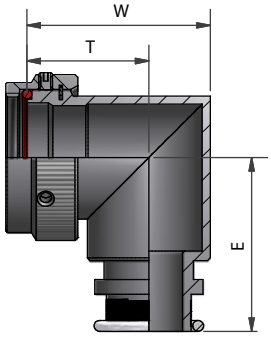
Part Number
Straight Adaptors
TXR21AB00-0804AI
TXR21AB00-0804BI
TXR21AB00-1006AI
TXR21AB00-1208AI
TXR21AB00-1208BI
TXR21AB00-1410AI
TXR21AB00-1410BI
TXR21AB00-1612AI
TXR21AB00-1612BI

The part numbers listed above represents our Stock Profile available for delivery within 24 hours.

For other sizes or angled variants, please contact us.



90° BACKSHELL - TYPE 1



90° BACKSHELL - TYPE 1
STAINLESS STEEL AND
NICKEL ALUMINIUM BRONZE

TXR21 Series

MIL-DTL-26482 Series I

Tinel-Lock Backshell Dimension Table - Shell Size

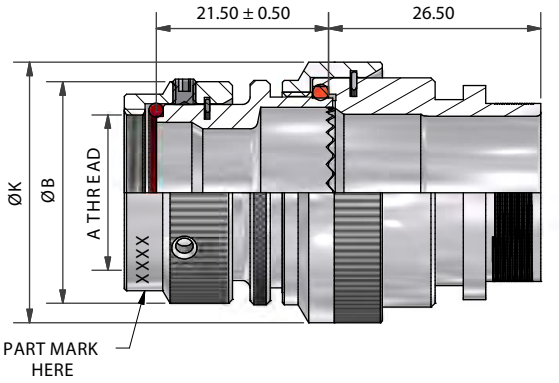
These dimensions apply if backshell is stainless steel or nickel aluminium bronze.

Shell Size	'A' Thread	Ø B Max	Max Entry	C ±0.5	D ±0.5	W ±0.5	T ±0.5	E ±0.5	W ±0.5	T ±0.5	E ±0.5
08	7/16-28 UNEF	18.05	04	13.9	26.8	25.0	17.5	26.20	22.5	17.5	26.4
10	9/16-24 UNEF	21.55	06	14.7	27.5	28.0	18.6	27.95	25.8	18.6	28.2
12	11/16-24 UNEF	24.65	08	15.1	28.0	31.5	20.5	29.45	29.5	20.5	29.7
14	13/16-20 UNEF	27.65	10	16.0	29.0	35.0	22.5	31.00	32.7	22.5	31.2
16	15/16-20 UNEF	31.05	12	16.3	29.7	38.0	24.0	32.70	35.5	24.0	32.9
18	1 1/16-18 UNEF	34.35	12	17.3	30.5	41.5	26.0	34.25	39.3	26.0	34.5
20	1 3/16-18 UNEF	37.55	14	18.1	30.9	45.0	28.0	35.80	42.7	28.0	36.1
22	1 5/16-18 UNEF	40.55	16	18.5	31.1	48.0	29.5	37.40	45.7	29.5	37.6
24	1 7/16-18 UNEF	43.55	18	19.3	32.1	51.0	31.0	38.90	48.4	31.0	39.1

Tinel-Lock Backshell Dimension Table - Entry Size

Entry Size	Ø S Max	Ø Z Min	Ø Y ±0.3
04	9.49 ±0.04	6.35	14.00
05	11.06 ±0.04	7.92	15.50
06	12.66 ±0.04	9.53	17.10
07	14.21 ±0.07	11.10	18.70
08	15.81 ±0.07	12.70	20.30
10	18.96 ±0.08	15.88	23.50
12	22.14 ±0.08	19.05	26.70
14	25.30 ±0.08	22.23	29.80
16	28.48 ±0.08	25.40	33.00
18	31.65 ±0.08	28.58	36.20
20	34.83 ±0.08	31.75	39.40
22	37.98 ±0.08	34.93	42.50
24	41.15 ±0.08	38.10	45.70

Please note that if the entry size required exceeds that listed in table above, the backshell will supplied as the larger Type 2 design, for details on this design modification please contact us for more information



STRAIGHT BACKSHELL - TYPE 2

Moulded Part Selection

Tinel-Lock Entry Size	Straight Part No.	90° Part No.	Cable OD (Min)
04	202K232	-	3.3
04	202W232	-	4.3
04	202K121	222K121	5.6
05, 06	202K132	222K132	5.9
07, 08	202K142	222K142	7.1
10, 12	202K153	222K152	8.4
14, 16	202K163	222K163	9.9
18, 20, 22	202K174	222K174	15.7
24	202K185	222K185	16.8

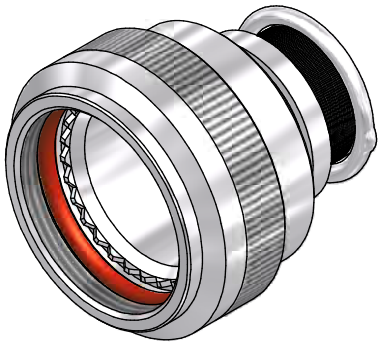
Uniboot Moulded Part Selection

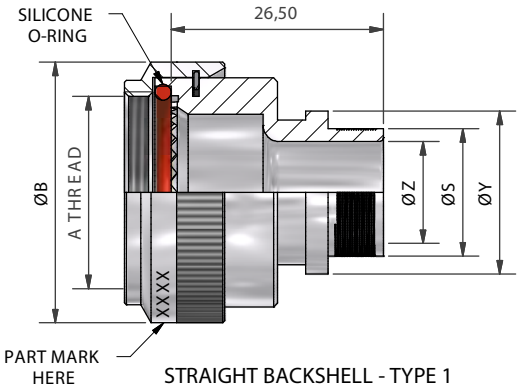
Tinel-Lock Entry Size	Part No.	Cable OD (Min)
04	202C611	4.8
05, 06, 07	202C621	8.1
08, 10, 12	202C632	12.7
12, 14, 16	202C642	17.5
16, 18, 20, 22	202C653	22.4
24	202C663	22.9

All dimension used on tables above are in mm

TXR40 Series

MIL-DTL-38999 Series III and IV



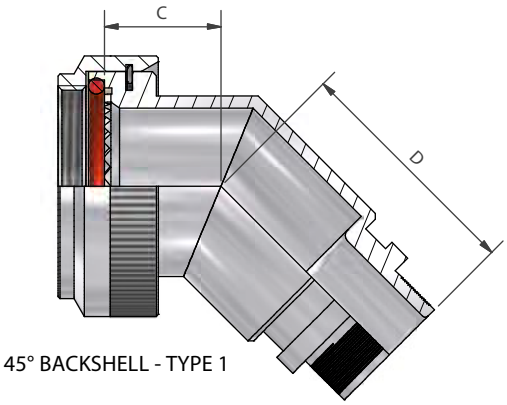


STRAIGHT BACKSHELL - TYPE 1

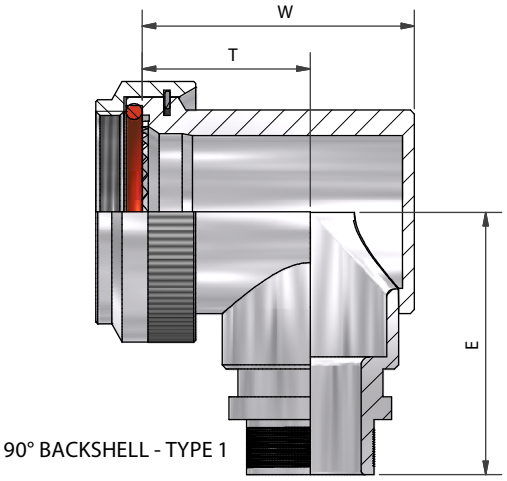
Stock Profile

* Denotes also available in Black Zinc Nickel 'Z'

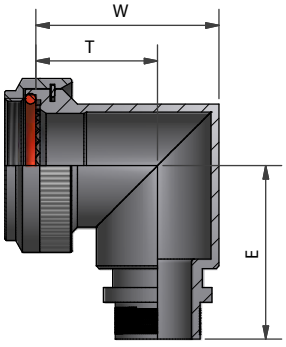
Part Number	Part Number
Straight Adaptors	Straight Adaptors
TXR40AB00-0804AI*	TXR40AB00-2014AI
TXR40AB00-0804BI*	TXR40AB00-2014BI
STXR40AB00-0806AI	TXR40AB00-2016AI
STXR40AB00-0806BI	TXR40AB00-2016BI
TXR40AB00-1006AI*	TXR40AB00-2214AI
TXR40AB00-1006BI*	TXR40AB00-2214BI
STXR40AB00-1008AI	TXR40AB00-2216AI
STXR40AB00-1008BI	TXR40AB00-2016BI
TXR40AB00-1206AI*	TXR40AB00-2218AI*
TXR40AB00-1206BI*	TXR40AB00-2218BI*
TXR40AB00-1208AI*	TXR40AB00-2418AI
STXR40AB00-1210AI	
STXR40AB00-1210BI	Right Angle Adaptors
TXR40AB00-1406AI*	TXR40AB90-0804AI
TXR40AB00-1406BI*	TXR40AB90-0804BI
TXR40AB00-1408AI*	STXR40AB90-0806AI
TXR40AB00-1408BI*	STXR40AB90-0806BI
TXR40AB00-1410AI*	TXR40AB90-1206AI
TXR40AB00-1410BI*	TXR40AB90-1206BI
STXR40AB00-1412AI	TXR40AB90-1208AI
STXR40AB00-1412BI	TXR40AB90-1406AI
TXR40AB00-1608AI*	TXR40AB90-1406BI
TXR40AB00-1608BI*	TXR40AB90-1408AI
TXR40AB00-1610AI*	TXR40AB90-1408BI
TXR40AB00-1610BI*	TXR40AB90-1410AI
TXR40AB00-1612AI*	TXR40AB90-1410BI
TXR40AB00-1612BI*	TXR40AB90-1608AI
TXR40AB00-1812AI*	TXR40AB90-1608BI
TXR40AB00-1812BI*	TXR40AB90-1610AI
TXR40AB00-1814AI*	TXR40AB90-1610BI
TXR40AB00-2012AI	TXR40AB90-1812AI
	TXR40AB90-1812BI



45° BACKSHELL - TYPE 1



90° BACKSHELL - TYPE 1



90° BACKSHELL - TYPE 1
STAINLESS STEEL AND
NICKEL ALUMINIUM BRONZE

The part numbers listed above represents our Stock Profile available for delivery within 24 hours.

For other sizes or angled variants, please contact us.

TXR40 Series

MIL-DTL-38999 Series III and IV

Tinel-Lock Backshell Dimension Table - Shell Size

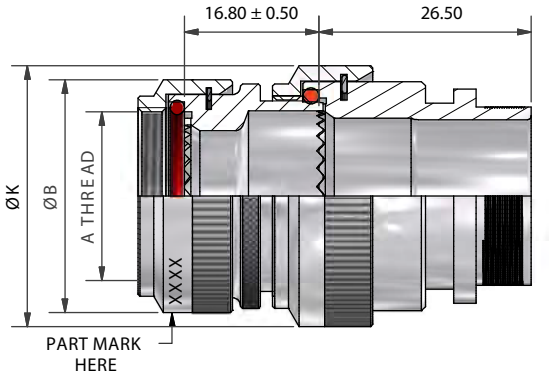
These dimensions apply if backshell is stainless steel or nickel aluminium bronze.

Shell Size	'A' Thread	Ø B Max	Max Entry	C ±0.5	D ±0.5	W ±0.5	T ±0.5	E ±0.5	W ±0.5	T ±0.5	E ±0.5
08	M12 x 1.0	18.0	04	12.0	26.8	21.0	14.0	26.20	21.2	16.3	26.4
10	M15 x 1.0	21.0	07	12.5	27.5	24.0	15.5	27.95	24.3	17.2	28.2
12	M18 x 1.0	24.5	08	13.1	28.0	27.0	17.0	29.45	28.3	19.4	29.7
14	M22 x 1.0	29.0	10	13.5	29.0	31.0	19.5	31.00	31.1	21.0	31.2
16	M25 x 1.0	32.5	12	14.5	29.7	34.0	21.0	32.70	34.2	22.8	32.9
18	M28 x 1.0	35.5	14	15.5	30.5	35.0	20.0	34.25	38.5	25.3	34.5
20	M31 x 1.0	37.0	16	16.1	30.9	38.0	21.5	35.80	40.7	26.1	36.1
22	M34 x 1.0	40.0	18	16.5	31.1	42.0	24.0	37.40	43.7	27.6	37.6
24	M37 x 1.0	43.5	20	17.0	32.1	45.0	25.5	38.90	46.4	29.1	39.1

Tinel-Lock Backshell Dimension Table - Entry Size

Entry Size	Ø S Max	Ø Z Min	Ø Y ±0.3
04	9.49 ±0.04	6.35	14.00
05	11.06 ±0.04	7.92	15.50
06	12.66 ±0.04	9.53	17.10
07	14.21 ±0.07	11.10	18.70
08	15.81 ±0.07	12.70	20.30
10	18.96 ±0.08	15.88	23.50
12	22.14 ±0.08	19.05	26.70
14	25.30 ±0.08	22.23	29.80
16	28.48 ±0.08	25.40	33.00
18	31.65 ±0.08	28.58	36.20
20	34.83 ±0.08	31.75	39.40
22	37.98 ±0.08	34.93	42.50
24	41.15 ±0.08	38.10	45.70

Please note that if the entry size required exceeds that listed in table above, the backshell will supplied as the larger Type 2 (STXR) design, for details on this design modification please contact us for more information



STRAIGHT BACKSHELL - TYPE 2

Moulded Part Selection

Tinel-Lock Entry Size	Straight Part No.	90° Part No.	Cable OD (Min)
04	202K232	-	3.3
04	202W232	-	4.3
04	202K121	222K121	5.6
05, 06	202K132	222K132	5.9
07, 08	202K142	222K142	7.1
10, 12	202K153	222K152	8.4
14, 16	202K163	222K163	9.9
18, 20, 22	202K174	222K174	15.7
24	202K185	222K185	16.8

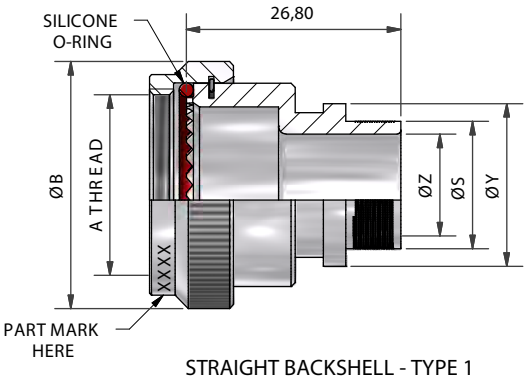
Uniboot Moulded Part Selection

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

All dimension used on tables above are in mm

TXR41 Series

MIL-DTL-38999 Series I and II

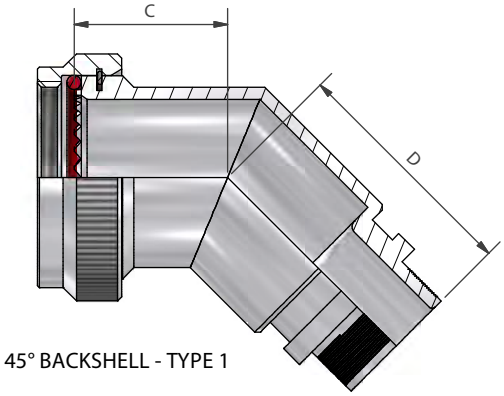


STRAIGHT BACKSHELL - TYPE 1

TXR41AB00-1608AI

Part Number Example

Tinel-Lock backshell suitable for MIL-DTL-38999 Series I and II connectors, material aluminium alloy, plating cadmium, angle straight, shell size 16, entry size 08, with single braid ring option.



45° BACKSHELL - TYPE 1

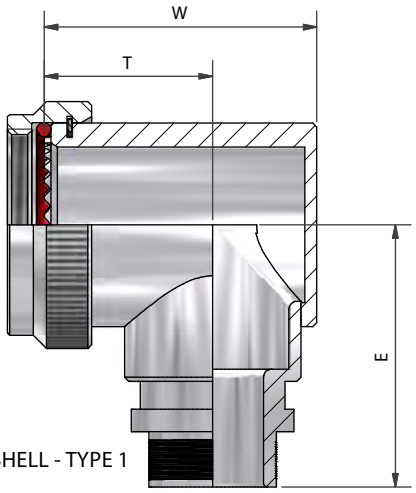
Stock Profile

Part Number
Straight Adaptors
TXR41AB00-0804AI
TXR41AB00-0804BI
TXR41AB00-1006AI
TXR41AB00-1006BI
TXR41AB00-1208AI
TXR41AB00-1208BI
TXR41AB00-1410AI
TXR41AB00-1410BI
TXR41AB00-1612AI
TXR41AB00-1612BI

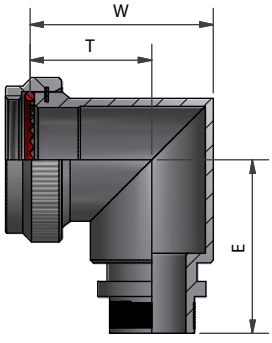
The part numbers listed above represents our Stock Profile available for delivery within 24 hours.

For other sizes or angled variants, please contact us.

The self-locking coupling nut modification below applies to all TXR family types.



90° BACKSHELL - TYPE 1



90° BACKSHELL - TYPE 1
STAINLESS STEEL AND
NICKEL ALUMINIUM BRONZE

TXR41 Series

MIL-DTL-38999 Series I and II

Tinel-Lock Backshell Dimension Table - Shell Size

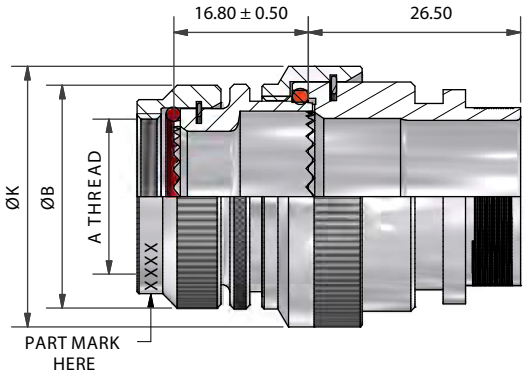
These dimensions apply if backshell is stainless steel or nickel aluminium bronze.

Shell Size	'A' Thread	Ø B Max	Max Entry	C ±0.5	D ±0.5	W ±0.5	T ±0.5	E ±0.5	W ±0.5	T ±0.5	E ±0.5
08	7/16-28 UNEF	18.3	04	16.4	26.8	21.0	14.0	26.2	21.3	16.4	26.4
10	9/16-24 UNEF	21.5	07	17.2	27.5	24.0	15.5	27.95	24.4	17.3	28.2
12	11/16-24 UNEF	24.5	08	17.6	28.0	27.0	17.0	29.45	28.4	19.5	29.7
14	13/16-20 UNEF	27.8	10	18.5	29.0	31.0	19.5	31.00	31.2	21.0	31.2
16	15/16-20 UNEF	30.8	12	19.2	29.7	34.0	21.0	32.70	34.3	22.8	32.9
18	1 1/16-18 UNEF	34.1	14	19.6	30.5	35.0	20.0	34.25	38.6	25.3	34.5
20	1 3/16-18 UNEF	37.3	16	20.4	30.9	38.0	21.5	35.80	40.8	26.1	36.1
22	1 5/16-18 UNEF	40.5	18	20.8	31.1	42.0	24.0	37.40	43.8	27.6	37.6
24	1 7/16-18 UNEF	43.7	20	21.7	32.1	45.0	25.5	38.90	46.5	29.1	39.1

Tinel-Lock Backshell Dimension Table - Entry Size

Entry Size	Ø S Max	Ø Z Min	Ø Y ±0.3
04	9.49 ±0.04	6.35	14.00
05	11.06 ±0.04	7.92	15.50
06	12.66 ±0.04	9.53	17.10
07	14.21 ±0.07	11.10	18.70
08	15.81 ±0.07	12.70	20.30
10	18.96 ±0.08	15.88	23.50
12	22.14 ±0.08	19.05	26.70
14	25.30 ±0.08	22.23	29.80
16	28.48 ±0.08	25.40	33.00
18	31.65 ±0.08	28.58	36.20
20	34.83 ±0.08	31.75	39.40
22	37.98 ±0.08	34.93	42.50
24	41.15 ±0.08	38.10	45.70

Please note that if the entry size required exceeds that listed in table above, the backshell will supplied as the larger Type 2 design, for details on this design modification please contact us for more information



Moulded Part Selection

Tinel-Lock Entry Size	Straight Part No.	90° Part No.	Cable OD (Min)
04	202K232	-	3.3
04	202W232	-	4.3
04	202K121	222K121	5.6
05, 06	202K132	222K132	5.9
07, 08	202K142	222K142	7.1
10, 12	202K153	222K152	8.4
14, 16	202K163	222K163	9.9
18, 20, 22	202K174	222K174	15.7
24	202K185	222K185	16.8

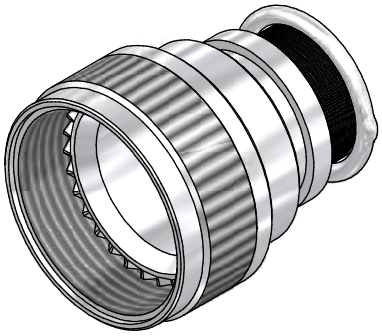
Uniboot Moulded Part Selection

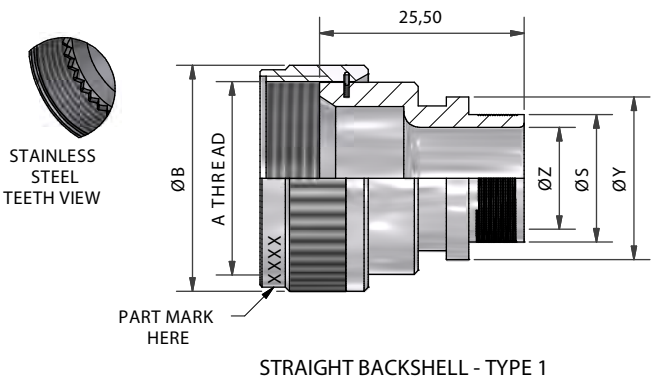
Tinel-Lock Entry Size	Part No.	Cable OD (Min)
04	202C611	4.8
05, 06, 07	202C621	8.1
08, 10, 12	202C632	12.7
12, 14, 16	202C642	17.5
16, 18, 20, 22	202C653	22.4
24	202C663	22.9

All dimension used on tables above are in mm

TXR54 Series

MIL-DTL-26482 Series II



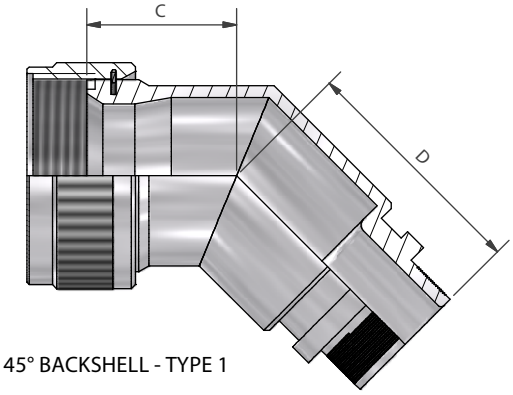


STRAIGHT BACKSHELL - TYPE 1

TXR54AB00-1608AI

Part Number Example

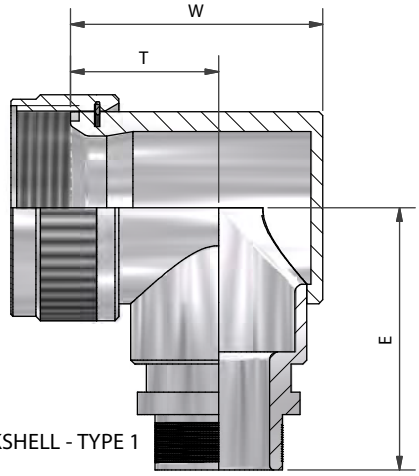
Tinel-Lock backshell suitable for MIL-DTL-26482 Series II connectors, material aluminium alloy, plating cadmium, angle straight, shell size 16, entry size 08, with single braid ring option.



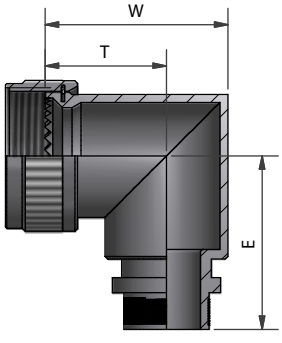
45° BACKSHELL - TYPE 1

Stock Profile

Part Number
Straight Adaptors
TXR54AB00-0804AI
TXR54AB00-0804BI
TXR54AB00-1006AI
TXR54AB00-1006BI
TXR54AB00-1208AI
TXR54AB00-1208BI
TXR54AB00-1408AI
TXR54AB00-1408BI
TXR54AB00-1410AI
TXR54AB00-1410BI



90° BACKSHELL - TYPE 1



90° BACKSHELL - TYPE 1
STAINLESS STEEL AND
NICKEL ALUMINIUM BRONZE

TXR54 Series

MIL-DTL-26482 Series II

Tinel-Lock Backshell Dimension Table - Shell Size

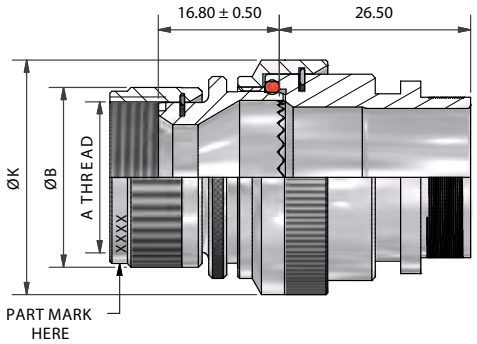
These dimensions apply if backshell is stainless steel or nickel aluminium bronze.

Shell Size	'A' Thread	Ø B Max	Max Entry	C ±0.5	D ±0.5	W ±0.5	T ±0.5	E ±0.5	W ±0.5	T ±0.5	E ±0.5
03	9/16-24 UNEF	17.0	04	16.8	27.0	26.4	17.8	25.9	26.3	16.0	25.9
08	1/2-20 UNF	15.6	04	16.6	26.8	24.5	17.5	26.2	22.4	17.5	26.2
10	5/8-24 UNEF	18.6	06	16.8	27.5	26.5	17.8	28.0	25.0	18.8	28.0
12	3/4-20 UNEF	21.7	08	17.3	28.0	29.0	18.7	29.5	28.3	20.4	29.5
14	7/8-20 UNEF	24.9	08	18.1	29.0	30.5	19.0	30.3	30.4	21.5	31.0
16	1-20 UNEF	28.2	10	19.0	29.7	34.0	21.0	32.7	33.5	23.0	32.7
18	1 1/16-18 UNEF	30.9	12	19.2	30.5	37.0	23.5	32.7	35.5	24.0	32.7
20	1 3/16-18 UNEF	34.1	14	20.1	30.9	42.0	27.0	34.3	38.8	25.7	34.3
22	1 5/16-18 UNEF	37.3	16	20.3	31.1	44.0	27.0	35.8	41.9	27.2	35.8
24	1 7/16-18 UNEF	40.4	18	21.8	32.1	45.0	27.0	37.4	44.8	28.7	37.4
28	1 3/4-18 UNS	50.0	22	23.3	32.5	54.2	31.4	41.9	50.7	31.6	41.9
32	2-18 UNS	56.3	24	25.0	29.3	60.9	36.4	45.3	60.0	33.5	45.3
36	2 1/4-16 UN	62.7	28	26.2	30.7	67.2	38.0	48.4	65.5	36.0	48.4

Tinel-Lock Backshell Dimension Table - Entry Size

Entry Size	Ø S Max	Ø Z Min	Ø Y ±0.3
04	9.49 ±0.04	6.35	14.00
05	11.06 ±0.04	7.92	15.50
06	12.66 ±0.04	9.53	17.10
07	14.21 ±0.07	11.10	18.70
08	15.81 ±0.07	12.70	20.30
10	18.96 ±0.08	15.88	23.50
12	22.14 ±0.08	19.05	26.70
14	25.30 ±0.08	22.23	29.80
16	28.48 ±0.08	25.40	33.00
18	31.65 ±0.08	28.58	36.20
20	34.83 ±0.08	31.75	39.40
22	37.98 ±0.08	34.93	42.50
24	41.15 ±0.08	38.10	45.70
28	47.50 ±0.08	44.45	52.00

Please note that if the entry size required exceeds that listed in table above, the backshell will supplied as the larger Type 2 design, for details on this design modification please contact us for more information



STRAIGHT BACKSHELL - TYPE 2

Moulded Part Selection

Tinel-Lock Entry Size	Straight Part No.	90° Part No.	Cable OD (Min)
04	202K232	-	3.3
04	202W232	-	4.3
04	202K121	222K121	5.6
05, 06	202K132	222K132	5.9
07, 08	202K142	222K142	7.1
10, 12	202K153	222K152	8.4
14, 16	202K163	222K163	9.9
18, 20, 22	202K174	222K174	15.7
24	202K185	222K185	16.8

Uniboot Moulded Part Selection

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

All dimension used on tables above are in mm

TXR Series

Modifications Available - Tinel-Lock Backshells

Modifications

Part Numbering example TXR41AB00-1608AI2-12 D N

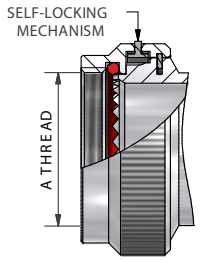
Assembled Backshell - Ring and Braid
- 2 Tinned copper braid
- 3 Nickel copper braid

Braid Length
- \- Standard 6” (150mm)
- 12 1” (305mm)
- 18 18” (457mm)

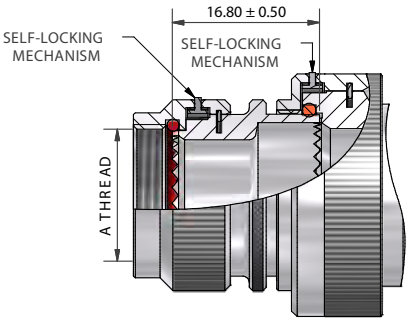
Design Modification
- D Drain Holes
- J Chain Attachment assembly
- L Lock Wire Holes
- M Maulflex Conduit System
- T Solid Adaptor modification
- S Self Locking Spin Nut (family 40, 41 and 54 only)
- H Helical Conduit Thread
- F Internal Abrasion Resistant Coating

Optional ‘O’ Ring Material
- \- 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

Self Locking Coupling Nut - Modification S



BACKSHELL - TYPE 1



BACKSHELL - TYPE 2

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2 Lydiard Fields, Swindon, Wiltshire, SN5 8UB, UK.