

Shield-Kon® Shield Termination System

Unique shield termination system gets the job done right!

The Shield-Kon® two-piece shield termination system from Thomas & Betts consists of two sleeves: an inner sleeve with a smaller diameter, and an outer sleeve that has a larger diameter but is shorter and less hard than the inner sleeve. All inner and outer sleeves are color coded according to their size.

The conductors of the cable are inserted through the inner sleeve, whereas the shield (braided or foiled) and the ground wire are inserted between the two sleeves. The crimp operation is done by compressing the outer sleeve with a tool, while the inner sleeve provides mechanical protection for the inner conductors.

This unique shield termination system can be used with cables having a diameter of dielectric (after removing the outer insulation and the shield) between .043" and 2.87".

In the "Hexagonal Range" (diameters of dielectric between .043" and .38"), the outer sleeve is crimped with a hand tool and the result is a hexagonal-shaped crimp. This range is used to crimp shielded and coaxial cables.

The "Circular Range" for Multiple or Overall shielded cables refers to larger diameters of dielectric (between .39" and 2.87") and owes its name to the circular shape of the crimp.



Circular Range



Hexagonal Range

Two-piece connector — the Hexagonal Range

The Thomas & Betts hexagonal compression (for diameters of dielectric up to .37") is a reliable method for grounding, terminating and insulating shielded and coaxial cable.

It has literally millions of installations in communications, aerospace, electronic, telephone, radio and TV applications.

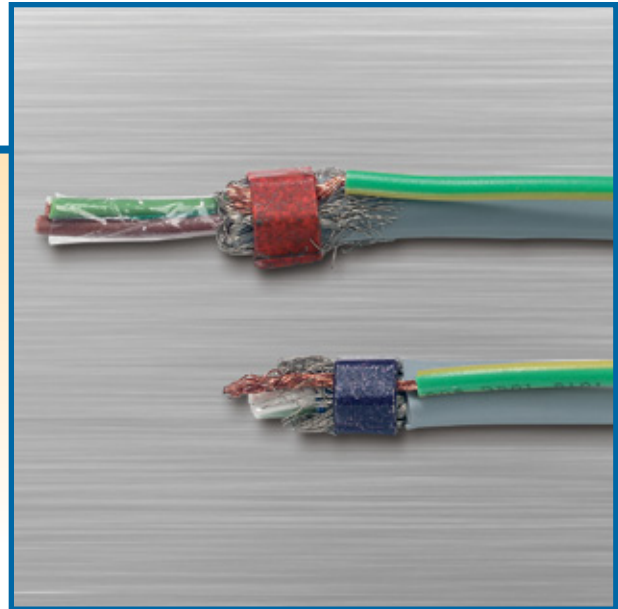
Shield-Kon® Shield Termination System

Select connectors and dies in three easy steps!

The choice of the appropriate combination of inner sleeve, outer sleeve and crimp tool/die will depend on the diameter of the dielectric.

However, a direct correlation with the diameter of the dielectric is not possible, because several different inner sleeves can be combined with the same outer sleeve (*according to the type of shield*).

With the directions shown **below**, a measuring instrument (*caliper*) is all that is required to make the right selection in three steps:



1. Selection of the inner sleeve (GSB)

- Strip the outer insulator and remove the shield
- Measure the maximum value of the diameter of the dielectric (diameter without shield) by gently rotating the cable. When doing so, it should be possible to turn the cable easily between the jaws of the caliper
- Add .01" to the measured value. The sum will give the Inner Diameter (I.D.) of the GSB inner sleeve
- In the table on **page G-87**, select the GSB inner sleeve having this I.D. or the nearest larger I.D.

2. Selection of the outer sleeve (GSC)

Normal method:

- Slide the selected inner sleeve underneath the shield of the cable
- Measure the maximum diameter with the shield over the inner sleeve
- Add .03" to the measured value. The sum will give the Inner Diameter (I.D.) of the GSC sleeve
- In the table on **page G-87**, select the GSC outer sleeve having this I.D. or the nearest larger I.D.

Quick method:

In most cases, a quicker method can be used to define the correct GSC outer sleeve:

- Once the appropriate GSB inner sleeve is found, the table on **page G-87** will give the Outer Diameter (O.D.) of this GSB sleeve
- Add .06" to this O.D. and the sum will give the Inner Diameter (I.D.) of the GSC sleeve
- In the table on **page G-87**, select the GSC sleeve having this I.D. or the nearest larger I.D.

3. Selection of the die

Dies for GSB/GSC Shield-Kon® can be found on **page G-87**.

Tools for GSB/GSC Shield-Kon® can be found on **page G-88**. See GSC outer sleeve table.

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Connectors come full circle with circular connectors!

Two-Piece Connectors for Multiple Conductor Shielded Cable

Connector and Die Selection in the Circular Range

The choice of the appropriate combination of inner ring, outer ring and crimp tool/die depends on the overall diameter of the inner conductors (underneath the shield).

In the case of the Circular range, there is a direct correlation between the diameter of the inner conductors and the inner and outer rings. With the directions (shown **below**), a measuring instrument (caliper) is all that is required to make the right selection.

Selection of the GSB Inner Ring

- Measure the maximum value of the overall diameter of the inner conductors (underneath the flattened shield) by gently rotating the cable. When doing so, it should be possible to turn the cable easily between the jaws of the caliper.
- Add .060" to the measured value. The sum will give the Inner Diameter (I.D.) of the GSB inner ring.
- In the table, select the GSB inner ring having this I.D. or the nearest larger I.D.

Selection of the GSC Outer Ring and of the Die

Once the appropriate GSB inner ring is found, the table (**below**) immediately gives the corresponding GSC outer ring and the appropriate die for the 13640 Hydraulic Head.



Specifications

Inner Sleeve

- Material: Copper alloy ASTM B135
- Finish: Electro tin-plated (per MIL-T-10727A)

Outer Sleeve

- Material: Copper ASTM B188
- Finish: Electro tin-plated (per MIL-T-10727A)

CAT. NO.	COLOR CODE	I.D. (IN.)	O.D. (IN.)	STD. PKG.
<i>Inner Sleeves</i>				
GSB430	Red	.430	.500	50
GSB550	Blue	.550	.620	50
GSB670	Gray	.670	.750	50
GSB810	Brown	.810	.880	50
GSB920	Green	.920	1.000	50
GSB1040	Pink	1.040	1.120	50
GSB1353	Yellow	1.353	1.423	50
GSB1425	Red	1.425	1.545	50

Order multiple is std. pkg.

CAT. NO.	COLOR CODE	I.D. (IN.)	O.D. (IN.)	DIES NOS. FOR 1340	STD. PKG.
<i>Outer Ring</i>					
GSC590	Red	.590	.670	GS590	50
GSC710	Blue	.710	.790	GS710	50
GSC840	Gray	.840	.920	GS840	50
GSC1010	Brown	1.010	1.090	GS1010	50
GSC1130	Green	1.130	1.210	GS1130	50
GSC1250	Pink	1.250	1.330	GS1250	50
GSC1440	Purple	1.440	1.520	GS1440	50
GSC1563	Yellow	1.563	1.643	GS1563	50
GSC1670	Red	1.670	1.750	GS1670	5

Order multiple is std. pkg.