Wire Termination Technical Information

Platings/Finish

Electroplated-Tin is standard finish. All others require minimum order quantities and are generally not stocked. Alternative platings are as follows: Gold, Silver, Tin-Alloys, Nickel or plain finish. See table **(below)** for specification information.

FINISH	SUFFIX	SPEC.	TEMP. RATING
Gold Plate	**GP**	MIL-G-45204 Type II, Grade B, C, D, Class 0	260˚ C
Nickel Plate	**NP**	QQ-N-290 Class 2, Grade G	260˚ C
Plain Finish	**PF**	None	150˚ C
Silver Plate	**SP**	MIL-T-16366 Type I or II, 400° F, 204° C	150˚ C

Listing

Sta-Kon® Rings, Forks and Locking Forks are tested and listed to UL 486A, two-way splices to UL 486C, disconnects to UL 310 and all applicable products to CSA 22.2.

Sta-Kon® Technical Data

TERMINALS & SPLICES INSULATION RATING	UL® 94 FLAMMABILITY	VOLTAGE	TEMPERATURE
Nylon	V-2	600V*	105° C
Vinyl	V-0	600V*	105° C
Tefzel®	V-0	600V*	150° C
Disconnects		300V	105° C
Non-Insulated	—	600V	150º C

**1000V fixture or sign*

Minimum pull-out test — UL 486A and UL 486C

Thomas&Betts

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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.

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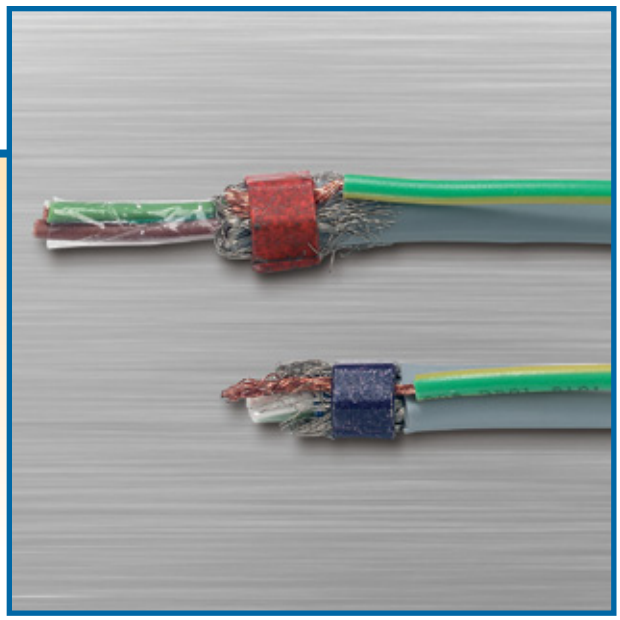
Select connectors and dies in three easy steps!

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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Shield-Kon® Shield Termination System

Stay grounded with easy-to-install connectors!

Connector Inner and Outer Sleeves

Non-Insulated Inner Sleeve — GSB

- Hard bronze inner sleeve is installed under braid
- Length 5⁄16"
- Tin plated per MIL-T-10727A

CAT. NO.	COLOR CODE	I.D. (IN.)	O.D. (IN.)	MILITARY SPEC. NO.	STD. PKG.
Inner Sleeves					
GSB046	Gray	.046	.075	21981-046	1,000
GSB058	Yellow	.058	.083	21981-058	1,000
GSB063	Red	.063	.088	21981-063	1,000
GSB071	Green	.071	.096	21981-071	1,000
GSB080	Blue	.080	.103	21981-080	1,000
GSB090	Orange	.090	.113	21981-090	1,000
GSB096	Purple	.096	.119	21981-096	1,000
GSB101	Yellow	.101	.124	21981-101	1,000
GSB109	Red	.109	.131	21981-109	1,000
GSB115	Gray	.115	.146	21981-115	1,000
GSB124	Green	.124	.145	21981-124	1,000
GSB128	Gray	.128	.152	21981-128	1,000
GSB134	Orange	.134	.156	21981-134	1,000
GSB149	Blue	.149	.179	21981-149	1,000
GSB156	Red	.156	.193	21981-156	1,000
GSB165	Gray	.165	.194	21981-165	1,000
GSB175	Green	.175	.215	21981-175	1,000
GSB187	Yellow	.187	.227	21981-187	1,000
GSB194	Blue	.194	.226	21981-194	1,000
GSB205	Orange	.205	.245	21981-205	1,000
GSB219	Gray	.219	.250	21981-219	1,000
GSB225	Yellow	.225	.256	21981-225	1,000
GSB232	Red	.232	.263	21981-232	1,000
GSB250	Green	.250	.281	21981-250	1,000
GSB261	Blue	.261	.297	21981-261	1,000
GSB266	Gray	.266	.297	21981-266	1,000
GSB275	Orange	.275	.306	21981-275	1,000
GSB281	Yellow	.281	.331	21981-281	1,000
GSB287	Gray	.287	.327	21981-287	1,000
GSB297	Red	.297	.335	21981-297	1,000
GSB312	Purple	.312	.362	21981-312	1,000
GSB348	Orange	.348	.400	21981-348	1,000
GSB375	Blue	.375	.406	21981-375	1,000

Order multiple is standard package.

Non-Insulated Outer Sleeve — GSC

- Soft bronze outer sleeve slips over the braid and ground wire
- Length ¼"
- Tin plated per MIL-T-10727A

CAT. NO.	COLOR CODE	I.D.	O.D.	TOOLS: DIE NOS. FOR WT440/WT540*	TOOLS: DIE NOS. FOR 11901A	MILITARY SPEC. NO.	STD. PKG.
Outer Sleeves							
GSC101	Gray	.101	.124	4419	11989	21980-101	1,000
GSC128	Blue	.128	.152	4400	11970	21980-128	1,000
GSC149	Purple	.149	.179	4401	11971	21980-149	1,000
GSC156	Yellow	.156	.193	4402	11972	21980-156	1,000
GSC175	Blue	.175	.215	4403	11973	21980-175	1,000
GSC187	Orange	.187	.227	4406	11976	21980-187	1,000
GSC194	Red	.194	.226	4406	11976	21980-194	1,000
GSC199	Gray	.199	.235	4406	11976	21980-199	1,000
GSC205	Yellow	.205	.245	4408	11978	21980-205	1,000
GSC219	Green	.219	.250	4408	11978	21980-219	1,000
GSC225	Purple	.225	.256	4409	11979	21980-225	1,000
GSC232	Orange	.232	.263	4410	11980	21980-232	1,000
GSC261	Yellow	.261	.297	4411	11981	21980-261	1,000
GSC275	Gray	.275	.306	4412	11982	21980-275	1,000
GSC281	Purple	.281	.331	4414	11984	21980-281	1,000
GSC287	Blue	.287	.327	4414	11984	21980-287	1,000
GSC297	Green	.297	.335	4414	11984	21980-297	1,000
GSC312	Yellow	.312	.362	4415	11985	21980-312	1,000
GSC327	Gray	.327	.372	4416	11986	21980-327	1,000
GSC348	Orange	.348	.393	4417	11987	21980-348	1,000
GSC359	Purple	.359	.399	5450	—	21980-359	1,000
GSC375	Yellow	.375	.406	5451	—	21980-375	1,000
GSC405	Red	.405	.453	5452	11988	21980-405	1,000
GSC415	Blue	.415	.463	5452	11988	21980-415	1,000
GSC425	Gray	.425	.475	5454	—	—	1,000
GSC460	Gray	.460	.510	5456	—	21980-460	1,000
GSC500	Green	.500	.550	5457	—	21980-500	1,000

**Dies 4419 to 4417 are for WT440. Dies 5450 to 5457 are for WT540.*

Order multiple is standard package.