



HBT Screening Braid

HBT99 & HBT90

HBT99 & HBT90

Cable and Harness Screening Braid

HBT screening braid provides a simple and cost effective method of screening wire bundles, harnesses, cables and conduit systems.

- Supplied on a former
- Wide size range
- High expansion ratios
- Excellent EMI Screening Performance
- Standard reel sizes
- Tin & Nickel plated copper
- Wide temperature range
- VG approved



HBT90 and HBT99 screening braids are tested and certified to VG 96936-10

"HBT99 screening braid provides an exceptional degree of screening performance, suitable for the most demanding applications."

Benefits

- Fast and easy to install
- One size fits many cables
- Easy storage
- Available from stock
- Cost effective alternative to over-braiding
- Suitable for many screening applications
- Reliable and reproducible

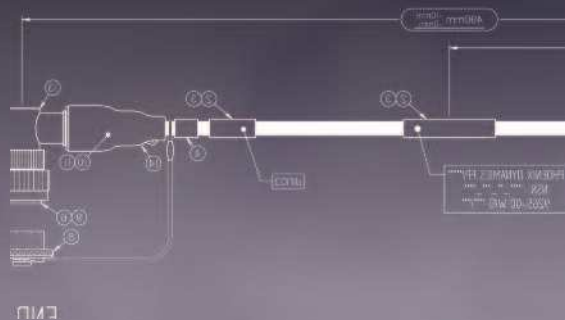
HBT Assembly

Step 1 – Select the size of HBT braid that fits your wire bundle or cable and cut the braid to the length required.

Step 2 – Remove the internal former and feed through your wire bundle or cable, taking care not to damage the braid.

Step 3 – Connect your wire bundle or cable to the required connector/backshell adapter assembly as per the manufacturer's instructions.

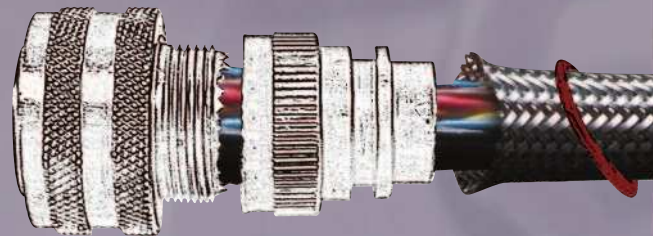
Step 4 – Carefully position the HBT braid onto the backshell adapter and secure with a suitable fixing or clamping device. To ensure effective EMI screening, a 360° uniform and secure attachment of the braid to the backshell is essential.



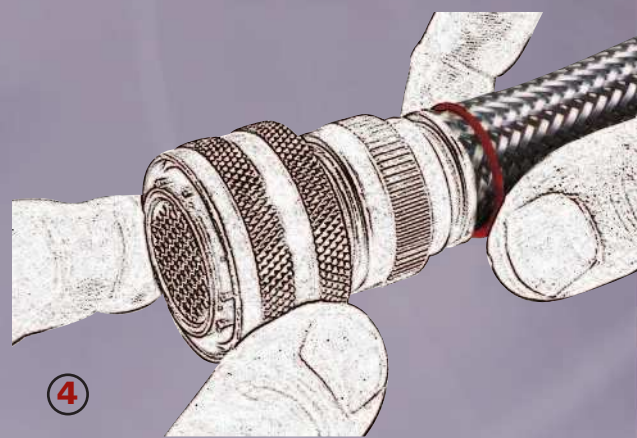
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For further information on methods of fixing HBT braid to a connector or backshell adapter, please contact our technical department on +44 (0)1934 424900.

Screening Performance

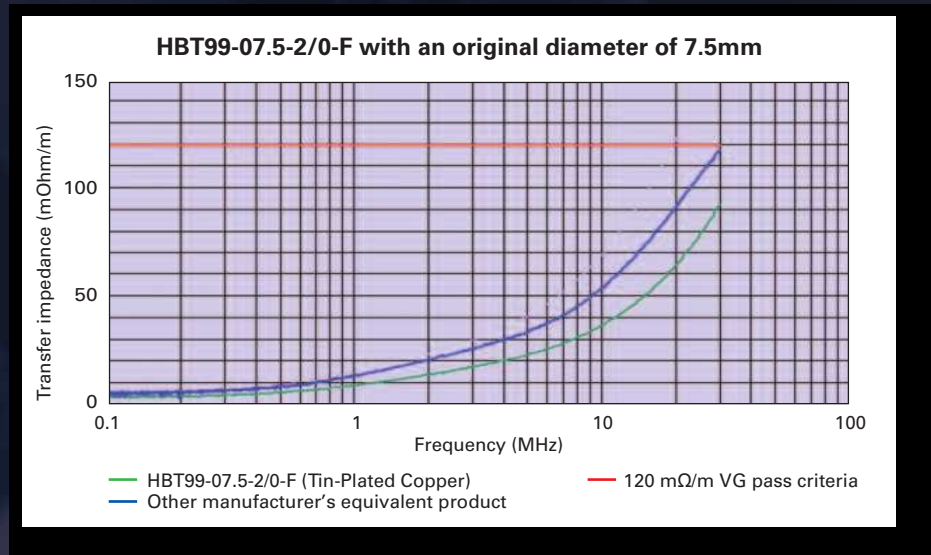


Shielding effectiveness is the ability of a screening braid or cable both to contain RF frequencies and, conversely, to prevent RF currents from being induced into inner conductors.

The screening performance of HBT99 braid has been independently tested and verified using an industry standard triaxial test method (EN 62153-4-7:2006).



Triaxial Test Equipment used for Determining Transfer Impedance



VG 96936-10 Performance Requirements

Part Number	Supplied Diameter (mm)	Maximum Transfer Impedance (Zt) @ 30MHz (mΩ/m)	Minimum Shielding Effectiveness (SE) @ 30MHz (dB)	Maximum Resistance @ 20°C at supplied diameter (Ω/m)
VG 96936T10 A001A	3.0	220	53	17.00
VG 96936T10 A002A	4.0	200	54	10.30
VG 96936T10 A003A	6.0	200	54	8.00
VG 96936T10 A004A	7.5	120	58	5.20
VG 96936T10 A005A	10.0	90	61	3.96
VG 96936T10 A006A	12.5	75	62	3.23
VG 96936T10 A007A	20.0	75	62	2.32

Transfer Impedance and Shielding Effectiveness values are relative to the application range as detailed in the VG 96936-10 specification.

Product Information

HBT99

Tin-plated copper

Operating Temperature
-65°C to +150°C

Optical Coverage
99% Maximum
93% Minimum

Part Number	Internal Dia. (mm)	Strand Size (mm)	Expansion Range (mm)	VG Cross Reference	Reel Size (m)
HBT99-03.0-2/0-F	3.0	0.10	2.5 – 5.0	VG 96936 T10 A001A	100
HBT99-04.0-2/0-F	4.0	0.13	3.5 – 7.5	VG 96936 T10 A002A	100
HBT99-05.0-2/0-F	5.0	0.13	3.5 – 8.5	-	100
HBT99-06.0-2/0-F	6.0	0.13	4.5 – 9.5	VG 96936 T10 A003A	100
HBT99-07.5-2/0-F	7.5	0.13	7.0 – 14.0	VG 96936 T10 A004A	100
HBT99-10.0-2/0-F	10.0	0.13	8.0 – 22.0	VG 96936 T10 A005A	100
HBT99-12.5-2/0-F	12.5	0.13	11.0 – 24.0	VG96936 T10 A006A	100
HBT99-15.0-2/0-F	15.0	0.13	14.5 – 30.0	-	100
HBT99-20.0-2/0-F	20.0	0.13	16.0 – 38.0	VG 96936 T10 A007A	50
HBT99-25.0-2/0-F	25.0	0.20	21.0 – 39.0	-	50
HBT99-30.0-2/0-F	30.0	0.20	27.0 – 40.0	-	50
HBT99-35.0-2/0-F	35.0	0.20	30.0 – 52.0	-	50
HBT99-40.0-2/0-F	40.0	0.20	36.0 – 62.0	-	50

HBT99 is also available in nickel-plated copper (-65°C to +260°C).

HBT90

Tin-plated copper

Operating Temperature
-65°C to +150°C

Optical Coverage
90% Nominal

Part Number	Internal Dia. (mm)	Strand Size (mm)	Expansion Range (mm)	VG Cross Reference	Reel Size (m)
HBT90-03.0-2/2-F	3.0	0.13	2.0 – 3.5	VG 96936 T10 B001A	100
HBT90-04.0-2/2-F	4.0	0.13	3.0 – 5.0	VG 96936 T10 B002A	100
HBT90-05.0-2/2-F	5.0	0.13	4.0 – 6.0	VG 96936 T10 B003A	100
HBT90-06.0-2/2-F	6.0	0.13	5.0 – 7.0	VG 96936 T10 B004A	100
HBT90-07.5-2/2-F	7.5	0.13	6.5 – 9.5	-	100
HBT90-10.0-2/2-F	10.0	0.16	7.0 – 12.0	VG 96936 T10 B005A	100
HBT90-12.5-2/2-F	12.5	0.16	11.0 – 13.0	VG 96936 T10 B006A	100
HBT90-15.0-2/2-F	15.0	0.20	13.0 – 18.0	VG 96936 T10 B007A	100
HBT90-20.0-2/2-F	20.0	0.25	17.0 – 23.0	VG 96936 T10 B008A	50
HBT90-25.0-2/2-F	25.0	0.25	22.0 – 28.0	VG 96936 T10 B009A	50
HBT90-30.0-2/2-F	30.0	0.32	27.0 – 36.0	VG 96936 T10 B0010A	50

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