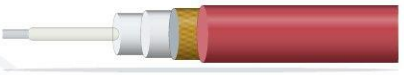
fiber optic cable series

DTS BSTE / BSSA M

Armoured Distributed Temperature Sensing Cable



Stainless-steel FIMT & steel-wire-armoured distributed temperature sensing (DTS) cable

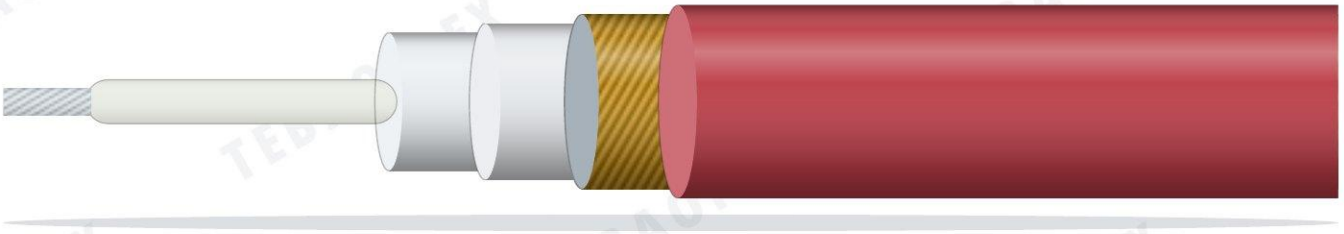
IEC 61757-2-2 DTS | 316L FIMT + Wire Armour | 6,000 N/100 mm Crush

Application

DTS BSTE / BSSA M Armoured Distributed Temperature Sensing Cable featuring strain-free multimode/single-mode optical fibres inside a laser-welded 316L stainless-steel FIMT, helical galvanized or stainless steel wire armour,.

Typical uses: Oil, Gas, LNG & District Heating Pipeline Leak, Buried HV/Subsea Export Cable RTTR, Concrete Dam Hydration & Seepage Profiling, Mining Conveyor Idler & Coal Stockpile Fire, Geothermal & Hydrogeological Boreholes

Construction





Cross-section, not to scale

1. Strain-free DTS sensing fibres
2. Laser-welded 316L stainless-steel FIMT
3. Helical steel wire armour (M)
4. Outer protective jacket

Technical data

Typical values

Sensing principle	Raman OTDR (MM) & Brillouin BOTDA/BOTDR (SM)	**Temperature resolution**	±0.1 °C (Raman 50/125 µm OM3)
Armour earthing	Metallic FIMT + wire armour bonded at termination cabinet	**Operating temperature**	-40 °C to +85 °C (+125 °C PA12/TPEE option)
Thermal response (τ_{63})	≤ 2.2 s in water · ≤ 8.0 s in air	**Installation temperature**	-20 °C to +60 °C
Nominal outer diameter	4.6 mm (BSSA M) · 6.0 mm (BSTE M)	**Max. tensile load**	3,500 N (BSSA M) · 7,500 N (BSTE M)
Crush resistance	5,000 N/100 mm (BSSA M) · 7,000 N/100 mm (BSTE M)	**Min. bend radius**	15 × OD static · 20 × OD dynamic
Multimode DTS fibres	50/125 µm OM3 (≤ 2.4 / 0.6 dB/km @ 850/1300 nm)	**Single-mode fibres**	ITU-T G.652.D / G.657.A1 (≤ 0.35 / 0.21 dB/km)
Strain-free margin	Zero fibre strain up to full rated installation pull	**Hydrostatic pressure**	30 MPa (300 bar) on 316L FIMT
Rodent & rock impact	100 % steel wire armour (30 J impact Method E4)	**Flame option (LSZH)**	IEC 60332-3-24, IEC 60754-2 & EN 54-22
Standards	IEC 61757-2-2 & EN 54-22		

Sizes

6 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Fibre compliment & jacket	Outer Ø mm	Weight ≈ kg/km	Max. pull N	Crush N/100 mm
BSSA M — Compact Wire-Armoured (Ø 4.6 mm) 3 sizes					
☐ **DTS BSSA M-02MM**	2 × 50/125 OM3 · LSZH/HDPE	4.6	46	3,500	5,000
☐ **DTS BSSA M-04MM**	4 × 50/125 OM3 · LSZH/HDPE	4.6	47	3,500	5,000
☐ **DTS BSSA M-02MM02SM**	2 × OM3 + 2 × G.652.D SM · HDPE	4.6	47	3,500	5,000
BSTE M — Heavy-Duty Wire-Armoured (Ø 6.0–6.5 mm) 3 sizes					
☐ **DTS BSTE M-04MM**	4 × 50/125 OM3 · Heavy SWA	6.0	78	7,000	7,000
☐ **DTS BSTE M-02MM02SM**	2 × OM3 + 2 × G.652.D SM · Heavy SWA	6.0	78	7,000	7,000
☐ **DTS BSTE M-04MM04SM**	4 × OM3 + 4 × G.652.D SM · Heavy SWA	6.5	92	7,500	7,000

– Available with galvanized carbon steel wires (standard) or full AISI 316L stainless-steel armour wires for marine/corrosive soils.

Standards and approvals

- IEC 61757-2-2 & EN 54-22
- IEC 60794-1-21 & ITU-T G.652.D
- RoHS 2 & REACH Compliant

Certifications

Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone
+86 185 9591 3361

Email
info@tebaoflex.com

Web
tebaoflex.com/cables/brusens-dts-bste-bssa-m-armoured-distributed-temperature-sensing-cable

Typical values for this cable type, based on IEC 61757-2-2 / IEC 60794-1-21 / EN 54-22. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.