



EN 50288-7 SWA armoured XLPE/LSZH cable

RE-2X(st)H SWAH

Armoured Instrumentation Cable

+90 °C XLPE/LSZH galvanised steel wire armoured halogen-free instrumentation cable



BS EN 50288-7

+90 °C XLPE / SWA / LSZH

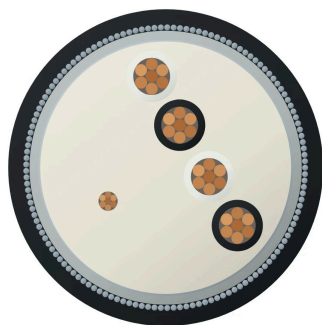
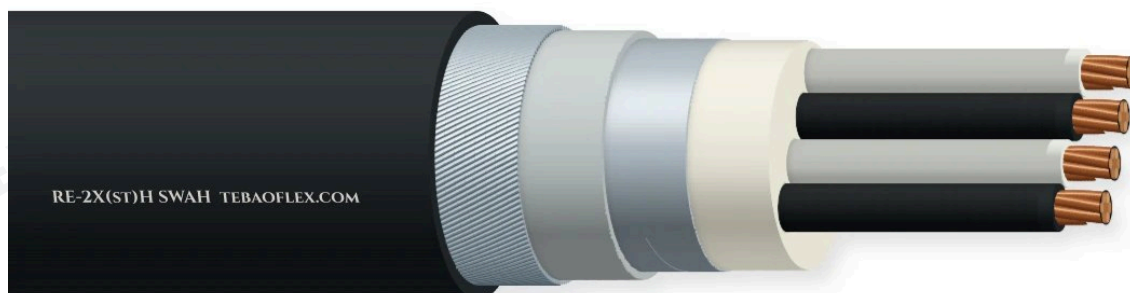
IEC 60754 & 61034

Application

Halogen-free 300/500 V armoured process instrumentation cable built to BS EN 50288-7 with Class 2 copper conductors, +90 °C XLPE (2X) insulation, collective or PiMF Al/PET screen, LSZH inner bedding, galvanised steel wire armour (SWA) and LSZH outer sheath.

Typical uses: LNG Liquefaction & Regasification Terminals, Petrochemical & Hydrogen Process Units, Underground Utility Tunnels & Metro Infrastructure, Power Generation & FGD Environmental Systems, Control Building Direct Trench Entries

Construction



Cross-section, not to scale

- 1 Stranded copper conductors
- 2 Cross-linked polyethylene (XLPE / 2X)
- 3 Individual & collective Al/PET screens
- 4 Extruded LSZH inner bedding (H)
- 5 Galvanised steel wire armour (SWA)
- 6 Low-Smoke Zero-Halogen outer sheath (H)

100 % electrostatic
interference rejection

Technical data

Typical values

Rated voltage U ₀ /U	300/500 V	Test voltage	2000 V AC (core/core & core/screen) for 1 min
Insulation resistance	≥ 5000 MΩ·km at +20 °C	Mutual capacitance (at 800 Hz)	≤ 100 nF/km (OS) · ≤ 115 nF/km (PiMF)
Max. L/R ratio	≤ 25 μH/Ω (0.5–1.0 mm ²) · ≤ 40 μH/Ω (1.5 mm ²)	Operating temperature, fixed	–40 °C to +90 °C
Operating temperature, installation	–5 °C to +50 °C	Short-circuit conductor temperature	+250 °C (max. 5 s)
Armour wire diameter	0.90 mm / 1.25 mm / 1.60 mm galvanised steel (EN 10257-1)	Min. bending radius, fixed	10 × OD
Min. bending radius, during pulling	12 × OD	Flame retardance	IEC 60332-1-2 & IEC 60332-3-22/24 (Cat A/C)
Halogen acid gas	IEC 60754-1 (0 % halogen) · IEC 60754-2 (pH ≥ 4.3, ≤ 10 μS/mm)	Smoke density	IEC 61034-2 light transmittance ≥ 60 %
Standards	BS EN 50288-7 & BS EN 10257-1		

Sizes

17 standard constructions

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

Order designation	Format	SWA wire Ø	Outer Ø ≈ mm	Copper kg/km	Weight ≈ kg/km	Min. bend R fixed mm
0.5 mm ² SWA Armoured XLPE/LSZH — L/R ≤ 25 μH/Ω 5 sizes						
☐ RE-2X(st)H SWAH 1×2×0.5	1×2×0.5 mm ²	0.9 mm SWA	10.6	15	218	106
☐ RE-2X(st)H SWAH 2×2×0.5	2×2×0.5 mm ²	0.9 mm SWA	13.0	25	305	130
☐ RE-2X(st)H PiMF SWAH 4×2×0.5	4×2×0.5 mm ²	0.9 mm SWA	15.5	52	428	155
☐ RE-2X(st)H PiMF SWAH 8×2×0.5	8×2×0.5 mm ²	1.25 mm SWA	19.5	98	685	195
☐ RE-2X(st)H PiMF SWAH 12×2×0.5	12×2×0.5 mm ²	1.25 mm SWA	22.4	144	885	224
0.75 mm ² SWA Armoured XLPE/LSZH — L/R ≤ 25 μH/Ω 4 sizes						
☐ RE-2X(st)H SWAH 1×2×0.75	1×2×0.75 mm ²	0.9 mm SWA	11.0	20	240	110
☐ RE-2X(st)H SWAH 2×2×0.75	2×2×0.75 mm ²	0.9 mm SWA	13.8	34	346	138
☐ RE-2X(st)H PiMF SWAH 4×2×0.75	4×2×0.75 mm ²	0.9 mm SWA	16.7	71	490	167
☐ RE-2X(st)H PiMF SWAH 8×2×0.75	8×2×0.75 mm ²	1.25 mm SWA	21.1	136	788	211
1.0 mm ² SWA Armoured XLPE/LSZH — L/R ≤ 25 μH/Ω 3 sizes						
☐ RE-2X(st)H SWAH 1×2×1.0	1×2×1.0 mm ²	0.9 mm SWA	11.4	25	260	114
☐ RE-2X(st)H PiMF SWAH 4×2×1.0	4×2×1.0 mm ²	1.25 mm SWA	18.1	90	605	181
☐ RE-2X(st)H PiMF SWAH 8×2×1.0	8×2×1.0 mm ²	1.25 mm SWA	22.5	174	905	225
1.5 mm ² SWA Armoured XLPE/LSZH — L/R ≤ 40 μH/Ω 5 sizes						
☐ RE-2X(st)H SWAH 1×2×1.5	1×2×1.5 mm ²	0.9 mm SWA	12.2	35	300	122
☐ RE-2X(st)H SWAH 2×2×1.5	2×2×1.5 mm ²	0.9 mm SWA	15.9	63	455	159
☐ RE-2X(st)H PiMF SWAH 4×2×1.5	4×2×1.5 mm ²	1.25 mm SWA	19.9	129	735	199
☐ RE-2X(st)H PiMF SWAH 8×2×1.5	8×2×1.5 mm ²	1.6 mm SWA	25.2	252	1,155	252
☐ RE-2X(st)H PiMF SWAH 12×2×1.5	12×2×1.5 mm ²	1.6 mm SWA	29.0	374	1,510	290

– Both the inner bedding and outer sheath are 100 % halogen-free LSZH compounds.

Electrical parameters by cross-section

4 sizes

Conductor size	Max. DC R @ 20 °C Ω/km	Max. L/R ratio $\mu\text{H}/\Omega$	Max. C (OS) nF/km	Max. C (PiMF) nF/km
0.50 mm ²	36.7	25	100	115
0.75 mm ²	25.0	25	100	115
1.00 mm ²	18.5	25	100	115
1.50 mm ²	12.3	40	100	115

– Suitable for Zone 1 and Zone 2 hazardous area process instrumentation per IEC 60079-14.

Standards and approvals

✓ BS EN 50288-7 & EN 10257-1 Compliant

✓ IEC 60754-1/2 & IEC 61034-2 LSZH

✓ IEC 60332-1-2 & IEC 60332-3-22/24

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

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Email

info@tebaoflex.com

Web

tebaoflex.com/cables/re-2x-st-h-swah-armoured-instrumentation-cable



Typical values for this cable type, based on BS EN 50288-7 / EN 10257-1 / IEC 60754. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.