

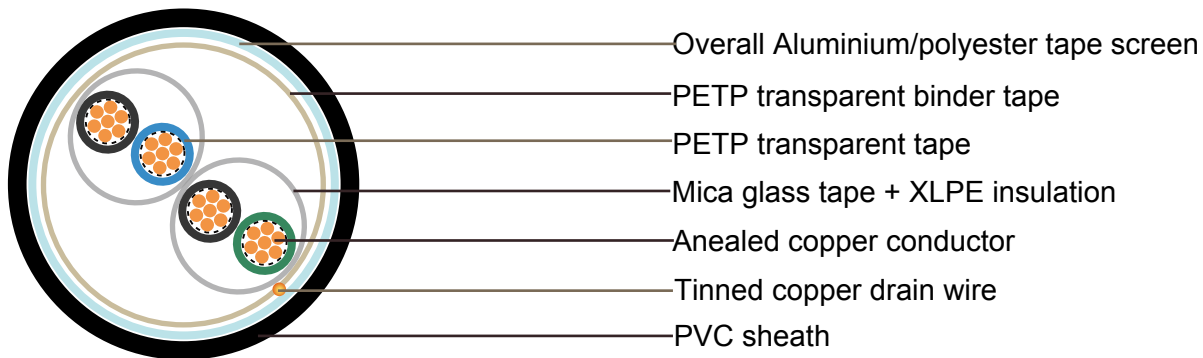


BS5308 Cable Part 1 Type 1 MG-XLPE-OS-LSOH

Application

The unarmoured fire resistant versions (Part 1 Type 1) are typically used in chemical and process industries where there is danger of fire.

Construction



Conductor	Annealed or tinned copper, Class 2
Insulation	Mica glass tape, XLPE (Cross Linked Polyethylene), or PE (optional)
Pairing	Two insulated conductors uniformly twisted together with a lay not exceeding 100mm
Colour code	See technical information
Binder tape	PETP transparent tape
Collective screen	Aluminium/polyester tape is applied over the laid up pairs metallic side down in contact with tinned copper drain wire, 0.5mm ²
Outer sheath	LSOH(Low Smoke Zero Halogen) sheath Flame retardant to IEC60332-3-22 Fire resistant to IEC60331 Halogen free to IEC60754-1 Low smoke emission to IEC61034-1-2
Sheath colour	Black or blue



Mechanical and Electrical Properties

Operating temperature: -20°C up to + 90°C(fixed installation)

0°C to +50°C(during operation)

Minimum bending radius: 5 x overall diameter

Conductor Area Size	mm ²	0.5	0.75	1.0	1.5	
Conductor Stranding	No. x mm	7 x 0.3	7 x 0.37	7 x 0.44	7 x 0.53	
Conductor resistance max	ohm/km	36	24.5	18.1	12.1	
Insulation resistance min	Gohm/km	5	5	5	5	
Capacitance unbalance at 1 kHz(pair to pair screen)	pF/250m	250				
Max. Mutual Capacitance @ 1 kHz for Non OS or OS cables (except one-pair and two-pairs)	pF/m	115	115	115	115	
Max. Mutual Capacitance @ 1 kHz IS/OS cables (include 1 pair and 2 pair)	pF/m	75	75	75	75	
Max. L/R Ratio for adjacent cores(Inductance/ Resistance)	µH/ohm	25	25	25	40	
Test voltage	Core to core	V	1000	1000	1000	1000
	Core to screen	V	1000	1000	1000	1000
Rated voltage max	V	300/500	300/500	300/500	300/500	

Parameter

No.of Pairs	No.and Dia. of Wires	Nominal Conductor Cross-Sectional Area	Nominal Thickness of Insulation	Nominal Thickness of Sheath	Nominal Dia. of Cable	Approx. Weight
	no./mm	mm ²	mm	mm	mm	kg/km
1	7/0.44	1	0.6	1.4	7.8	89
2	7/0.44	1	0.6	1.4	9.2	121
5	7/0.44	1	0.6	1.4	13.9	298