

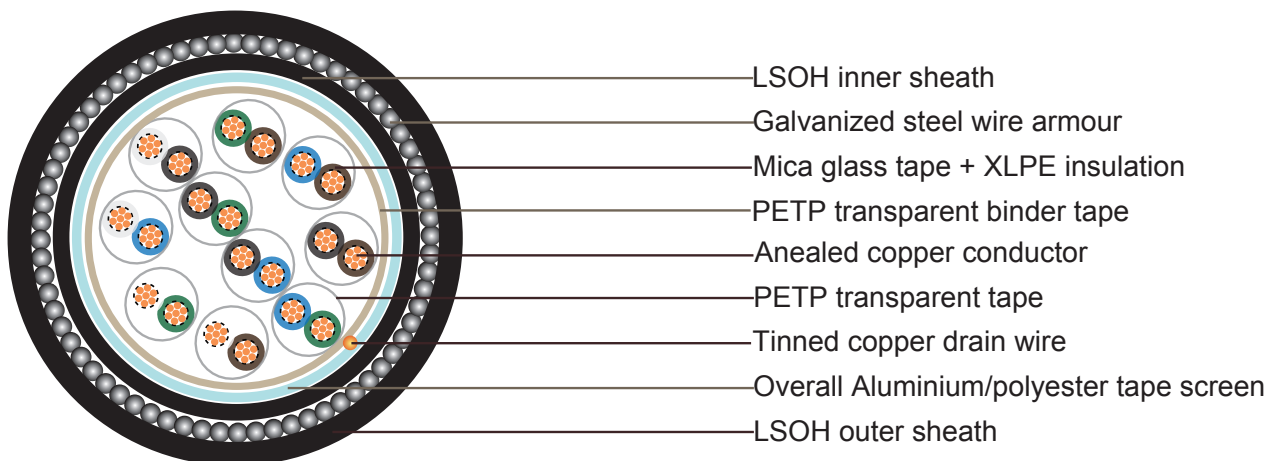


## BS5308 Cable Part 1 Type 2 MG-XLPE-OS-SWA-LSOH

### Application

The armoured fire resistant versions (Part 1 Type 2) are typically used in chemical and process industries where there is danger of fire. The galvanised steel wire armour provides excellent protection.

### Construction



<b>Conductor</b>	Annealed or tinned copper, Class 2
<b>Insulation</b>	Mica glass tape, XLPE (Cross Linked Polyethylene),, or PE (optional)
<b>Pairing</b>	Two insulated conductors uniformly twisted together with a lay not exceeding 100mm
<b>Colour code</b>	See technical information
<b>Binder tape</b>	PETP transparent tape
<b>Collective screen</b>	Aluminium/polyester tape is applied over the laid up pairs metallic side down in contact with tinned copper drain wire, 0.5mm <sup>2</sup>
<b>Inner Sheath</b>	LSOH(Low Smoke Zero Halogen) sheath
<b>Amour</b>	Galvanized steel wire armour
<b>Outer sheath</b>	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
<b>Sheath colour</b>	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: 6 x overall diameter

<b>Conductor Area Size</b>	mm <sup>2</sup>	0.5	0.75	1.0	1.5	
<b>Conductor Stranding</b>	No. x mm	7 x 0.3	7 x 0.37	7 x 0.44	7 x 0.53	
<b>Conductor resistance max</b>	ohm/km	36	24.5	18.1	12.1	
<b>Insulation resistance min</b>	Gohm/km	5	5	5	5	
<b>Capacitance unbalance at 1 kHz(pair to pair screen)</b>	pF/250m	250				
<b>Max. Mutual Capacitance @ 1 kHz for Non OS or OS cables (except one-pair and two-pairs)</b>	pF/m	115	115	115	115	
<b>Max. Mutual Capacitance @ 1 kHz IS/OS cables (include 1 pair and 2 pair)</b>	pF/m	75	75	75	75	
<b>Max. L/R Ratio for adjacent cores(Inductance/Resistance)</b>	µH/ohm	25	25	25	40	
<b>Test voltage</b>	<b>Core to core</b>	V	1000	1000	1000	1000
	<b>Core to screen</b>	V	1000	1000	1000	1000
<b>Rated voltage max</b>	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 bedding	Nominal Dia. over Bedding	Nominal Thickness of Armour	Nominal Thickness of Sheath	Nominal Dia. of Cable	Approx. Weight
	no./mm	mm <sup>2</sup>	mm	mm	mm	mm	mm	mm	kg/km
1	7/0.44	1	0.6	0.8	7.0	0.9	1.4	11.6	340
2	7/0.44	1	0.6	0.8	8.4	0.9	1.4	13.0	350
5	7/0.44	1	0.6	0.8	12.3	0.9	1.4	16.9	740
10	7/0.44	1	0.6	0.8	16.5	0.9	1.4	21.1	1150
20	7/0.44	1	0.6	0.8	21.4	0.9	1.4	26.0	1840
1	7/0.53	1.5	0.6	0.8	7.5	0.9	1.4	11.9	320
2	7/0.53	1.5	0.6	0.8	9.1	0.9	1.4	13.7	410
5	7/0.53	1.5	0.6	0.8	14.8	0.9	1.4	21.1	910

