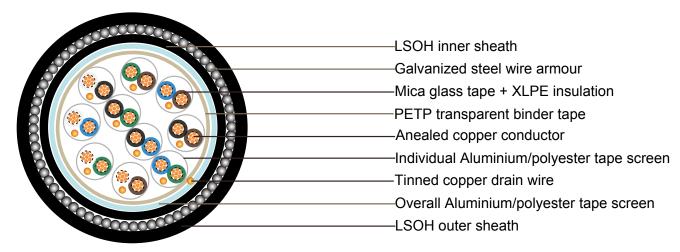
# BS5308 Cable Part 1 Type 2 MG-XLPE-IS-OS-SWA-LSOH

## **Application**

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

#### 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				
Individual screen	Aluminium/polyester tape is applied over each pair metallic side down in conta with tinned copper drain wire, 0.5mm <sup>2</sup>				
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 <sup>2</sup>				
Inner Sheath	LSOH(Low Smoke Zero Halogen) sheath				
Amour	Galvanized steel wire armour				
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				

### **BS5308 Part 1**

## **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

Conductor Area Size		mm <sup>2</sup>	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 Thick- ness of Insulation	Nominal Thick- ness of bedding	Nominal Dia. over Bedding	Nominal Thick- ness of Armour	Nominal Thick- ness of Sheath	Nominal Dia. of Cable	Approx. Weight
	no./mm	mm²	mm	mm	mm	mm	mm	mm	kg/km
5	7/0.37	0.75	0.6	0.8	15.0	0.9	1.4	20.3	870
10	7/0.37	0.75	0.6	0.8	19.8	0.9	1.4	25.9	1480
5	7/0.44	1	0.6	0.8	14.8	0.9	1.4	20.0	890