



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 contact with tinned copper drain wire, 0.5mm ²			
Binder tape	PETP transparent tape			
Collective screen	Aluminium/polyester tape is applied over the laid up pairs metallic side down contact with tinned copper drain wire, 0.5mm ²			
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			







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 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		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	mm ²	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

