

### Application

60331 mica armoured fire resistant Iszh 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
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

### 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	pF/m	75	75	75	75

IS/OS cables (include 1 pair and 2 pair)						
Max. L/R Ratio for adjacent cores (Inductance/ Resistance)		??H/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 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
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
15	7/0.44	1	0.6	0.8	14.8	0.9	1.4	20.0	890