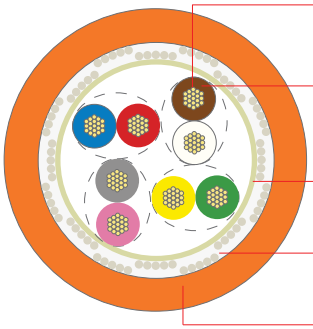
Cable structure



Conductor	Stranded copper wire Class 5, IEC 60228
Insulation	Halogen-free, cross-linked insulation, In compliance with DIN 47100 insulation colour coding
	EI8 EN 50363-5
Separator tape	Pet tape min. 100% coverage
	Fibreglass tape min. 100% coverage
Screen	Al-Pet tape min. 100% coverage
	Tinned braided copper wire
Sheath	HFFR, RAL 2003 Orange
	70°C EN 50290-2-27, HM2 DIN VDE 0207-24

Application

Used to control and supply power to devices that must remain operational during a fire. Used in emergency lighting and operation of equipment necessary for surveillance and evacuation, and systems that should remain functional for a certain time, such as alarm systems (continuity of flow FE180 continuity of flow with mechanical shocks PH120). The cable is protected against ambient electromagnetic interference by its foil and braided screen. Cables are composed of halogen-free materials (flame retardant materials that do not emit toxic gas or black dense smoke that lowers visibility). They are primarily used in highly populated areas that should have fire resistance, such as smart or semi-smart buildings, housing complexes, hospitals, cinema halls, theatres, schools, shopping malls, airports, factories, etc.

Specifications

Temperature range			-30°C ...+70°C
Bending radius		min.	10 x D
Conductor resistance - effective capacity (core/core)	0.75 mm²	max.	26.0 Ω/km - 120 nF/km
	1.0 mm²	max.	19.5 Ω/km - 130 nF/km
	1.5 mm²	max.	13.3 Ω/km - 140 nF/km
	2.5 mm²	max.	7.98 Ω/km - 160 nF/km
Insulation resistance		min.	20 MΩ x km
Test voltage	0.75 mm²		1200 V
	1.0 mm²		1200 V
	1.5 mm²		2500 V
	2.5 mm²		2500 V
Operating voltage		max.	300 V

Standards

TSE K 178, DIN VDE 0812

Fire performance

Vertical flame propagation	EN 60332-1-2
Corrosive gas	EN 60754-1/2
Smoke density	EN 61034-2
Continuity of flow	IEC 60331-21 FE180
Continuity of flow	EN 50200 PH120

EU declaration of conformity

LVD	Low Voltage Directive	2014/35/EU
RoHS	Restriction of Hazardous Substances	2011/65/EU

Specifications may vary depending on technical modifications.

Product code	Cable structure	Diameter [mm]	Copper weight [kg/km]	Cable weight [kg/km]
108104	2x2x0.75 mm²	9 . 6	35	95
108105	3x2x0.75 mm²	10.1	48	117
108106	4x2x0.75 mm²	11.0	62	142
108107	5x2x0.75 mm²	12.2	74	172
108108	6x2x0.75 mm²	13.2	89	200
108110	8x2x0.75 mm²	14.0	115	244
108112	10x2x0.75 mm²	15.8	143	296
108114	12x2x0.75 mm²	16.7	168	347

Product code	Cable structure	Diameter [mm]	Copper weight [kg/km]	Cable weight [kg/km]
108122	2x2x1 mm²	10.3	43	110
108123	3x2x1 mm²	10.8	61	139
108124	4x2x1 mm²	11.8	78	167
108125	5x2x1 mm²	13.1	97	206
108126	6x2x1 mm²	14.2	115	238
108128	8x2x1 mm²	15.1	149	293
108130	10x2x1 mm²	17.4	185	369
108132	12x2x1 mm²	18.2	219	424

Product code	Cable structure	Diameter [mm]	Copper weight [kg/km]	Cable weight [kg/km]
108140	2x2x1.5 mm²	12.3	62	153
108141	3x2x1.5 mm²	13.0	88	195
108142	4x2x1.5 mm²	14.2	114	241
108143	5x2x1.5 mm²	15.5	140	286
108144	6x2x1.5 mm²	17.1	168	343
108146	8x2x1.5 mm²	18.2	219	424
108148	10x2x1.5 mm²	20.6	273	518
108150	12x2x1.5 mm²	21.5	323	598

Product code	Cable structure	Diameter [mm]	Copper weight [kg/km]	Cable weight [kg/km]
108158	2x2x2.5 mm²	13.6	98	201
108159	3x2x2.5 mm²	14.4	139	262
108160	4x2x2.5 mm²	15.8	184	329
108161	5x2x2.5 mm²	17.6	226	403
108162	6x2x2.5 mm²	19.1	269	470
108164	8x2x2.5 mm²	20.4	355	593
108166	10x2x2.5 mm²	23.7	441	758
108168	12x2x2.5 mm²	24.8	525	879

Specifications may vary depending on technical modifications.