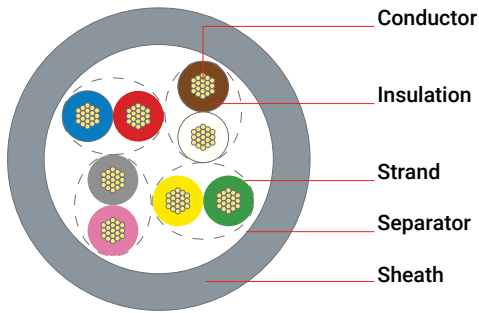




**Cable structure**



Stranded copper wire  
Class 5, IEC 60228

HFFR, in compliance with DIN 47100 insulation colour coding  
70°C EN 50290-2-26, HJ2 DIN VDE 0207-23

Pairs are bundled together in stranded layers

Polyester tape min. 100% coverage

HFFR, RAL 7001 Grey  
70°C EN 50290-2-27, HM2 DIN VDE 0207-24

**Application**

Halogen-free insulated and sheathed, twisted-pair cable range is used for signal transmission in interior installations. Flexible and slim design provides installation advantages in confined spaces. Used in industrial electronics, computers and office equipment, indoor communication, audio and security systems. 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.

**Standards** TSE K 353, DIN VDE 0812

**Fire performance**

Vertical flame propagation EN 60332-1-2  
Corrosive gas EN 60754-1/2  
Smoke density EN 61034-2

**EU Declaration of conformity**

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

**Specifications**

<b>Temperature range</b>			
fixed			-30°C ...+70°C
flexing			0°C ...+50°C
<b>Bending radius</b>			
fixed min.			7.5 x D
flexing	min.		15 x D
<b>Conductor resistance</b>			
0.22 mm <sup>2</sup>	max.		96.0 Ω/km
0.50 mm <sup>2</sup>	max.		39.0 Ω/km
0.75 mm <sup>2</sup>	max.		26.0 Ω/km
1.0 mm <sup>2</sup>	max.		19.5 Ω/km
1.5 mm <sup>2</sup>	max.		13.3 Ω/km
2.5 mm <sup>2</sup>	max.		7.98 Ω/km
<b>Insulation resistance</b>			
	min.		200 MΩ x km
<b>Test voltage</b>			
0.22 mm <sup>2</sup>			1200 V
0.50 mm <sup>2</sup>			1200 V
0.75 mm <sup>2</sup>			1200 V
1.0 mm <sup>2</sup>			1200 V
1.5 mm <sup>2</sup>			2500 V
2.5 mm <sup>2</sup>			2500 V
<b>Operating voltage</b>			
	max.		300 V

Specifications may vary depending on technical modifications.

Product code	Cable structure	Diameter [mm]	Copper weight [kg/km]	Cable weight [kg/km]
210050	2x2x0.22 mm <sup>2</sup>	5.5	8	30
210051	3x2x0.22 mm <sup>2</sup>	5.8	12	37
210052	4x2x0.22 mm <sup>2</sup>	6.3	16	46
210053	5x2x0.22 mm <sup>2</sup>	7.1	20	58
210054	6x2x0.22 mm <sup>2</sup>	7.7	24	67
210056	8x2x0.22 mm <sup>2</sup>	8.2	32	82
210058	10x2x0.22 mm <sup>2</sup>	9.7	40	109
210060	12x2x0.22 mm <sup>2</sup>	10.1	48	124

Product code	Cable structure	Diameter [mm]	Copper weight [kg/km]	Cable weight [kg/km]
210086	2x2x0.50 mm <sup>2</sup>	7.4	17	53
210087	3x2x0.50 mm <sup>2</sup>	7.8	25	68
210088	4x2x0.50 mm <sup>2</sup>	8.6	33	85
210089	5x2x0.50 mm <sup>2</sup>	9.8	42	111
210090	6x2x0.50 mm <sup>2</sup>	10.7	50	129
210092	8x2x0.50 mm <sup>2</sup>	11.4	67	160
210094	10x2x0.50 mm <sup>2</sup>	13.1	83	201
210096	12x2x0.50 mm <sup>2</sup>	13.7	100	231

Product code	Cable structure	Diameter [mm]	Copper weight [kg/km]	Cable weight [kg/km]
210104	2x2x0.75 mm <sup>2</sup>	8.1	25	66
210105	3x2x0.75 mm <sup>2</sup>	8.5	37	86
210106	4x2x0.75 mm <sup>2</sup>	9.8	50	117
210107	5x2x0.75 mm <sup>2</sup>	10.7	62	141
210108	6x2x0.75 mm <sup>2</sup>	11.7	75	164
210110	8x2x0.75 mm <sup>2</sup>	12.7	100	212
210112	10x2x0.75 mm <sup>2</sup>	14.4	125	259
210114	12x2x0.75 mm <sup>2</sup>	15.0	150	299

Product code	Cable structure	Diameter [mm]	Copper weight [kg/km]	Cable weight [kg/km]
210122	2x2x1 mm <sup>2</sup>	8.6	33	77
210123	3x2x1 mm <sup>2</sup>	9.5	50	112
210124	4x2x1 mm <sup>2</sup>	10.4	66	140
210125	5x2x1 mm <sup>2</sup>	11.4	83	168
210126	6x2x1 mm <sup>2</sup>	12.7	100	203
210128	8x2x1 mm <sup>2</sup>	13.5	133	254
210130	10x2x1 mm <sup>2</sup>	15.3	166	311
210132	12x2x1 mm <sup>2</sup>	16.0	200	363

Product code	Cable structure	Diameter [mm]	Copper weight [kg/km]	Cable weight [kg/km]
210140	2x2x1.5 mm <sup>2</sup>	10.5	50	116
210141	3x2x1.5 mm <sup>2</sup>	11.1	74	154
210142	4x2x1.5 mm <sup>2</sup>	12.5	99	201
210143	5x2x1.5 mm <sup>2</sup>	13.7	124	242
210144	6x2x1.5 mm <sup>2</sup>	15.0	149	285
210146	8x2x1.5 mm <sup>2</sup>	16.0	199	361
210148	10x2x1.5 mm <sup>2</sup>	18.4	249	452
210150	12x2x1.5 mm <sup>2</sup>	19.3	298	527

Product code	Cable structure	Diameter [mm]	Copper weight [kg/km]	Cable weight [kg/km]
210158	2x2x2.5 mm <sup>2</sup>	12.2	83	167
210159	3x2x2.5 mm <sup>2</sup>	13.0	124	226
210160	4x2x2.5 mm <sup>2</sup>	14.3	166	288
210161	5x2x2.5 mm <sup>2</sup>	15.8	207	350
210162	6x2x2.5 mm <sup>2</sup>	17.4	249	421
210164	8x2x2.5 mm <sup>2</sup>	18.6	331	537
210166	10x2x2.5 mm <sup>2</sup>	21.3	414	662
210168	12x2x2.5 mm <sup>2</sup>	22.3	497	777

Specifications may vary depending on technical modifications.