



FRA 145 Single Core

Applications

Single core cable with improved fire performance and very high resistance to temperature designed for internal wiring in lamps, heating appliances and distribution boxes in apparatus, mechanical and plant engineering, etc. Used for laying in tubes, surface wiring, direct in plaster or underneath it, as well in conduits.

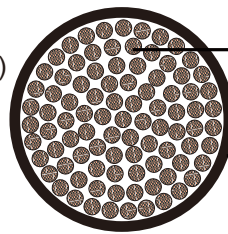


Standard

- IEC 60754-1, EN 50267-2-1 (halogen free)
- IEC 60754-2, EN 50267-2-2 (no corrosive gases)
- NES 02-713, NFC 20-454 (no toxic gases)
- IEC 61034, EN 50268-2 (low smoke density)
- IEC 60332-1, EN 50265-2-1 (flame retardant)
- IEC 60332-3, EN 50266-2, NF C 32-070

(non-flame propagating)

- DIN 51900 (low fire load)



Stranded Tinned Copper Conductor

Electron Beam Crosslinkable

Polyolefine Copolymer Insulation

Construction

- **Conductors:** Class 5 stranded tinned copper to IEC60228/VDE 0295.
- **Insulation:** Electron beam crosslinkable polyolefine copolymer.
- **Colour Code:** Various colours on request.

Electrical Characteristics at 20°C

Nominal Conductor Cross Section	mm ²	0.25	0.34	0.50	0.75	1.0	1.5	2.5	4.0	6.0	10	16
Maximum Conductor Resistance	Ω/km	85.9	57.2	40.1	26.7	20.0	13.7	8.21	5.09	3.39	1.95	1.24
Voltage Rating	V	300/500V (≤1mm ²); 450/750V (≥1.5mm ²)										

Nominal Conductor Cross Section	mm ²	25	35	50	70	95	120	150	185	240	300
Maximum Conductor Resistance	Ω/km	0.795	0.565	0.393	0.277	0.21	0.164	0.132	0.108	0.0817	0.0654
Voltage Rating	V	300/500V (≤1mm ²); 450/750V (≥1.5mm ²)									



➤ Mechanical and Thermal Properties

Minimum Bending Radius: 4xOD (Static); 6xOD (Flexing)
 Temperature Range: -55°C ~+145°C (Static); -40°C ~+120°C (Flexing)
 Short Circuit Temperature: +280°C

➤ Dimensions and Weight

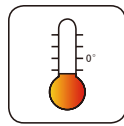
No. of cores& Nominal Conductor Cross Sectional Area No. xmm ²	Number and Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
1x0.25	19/0.13	0.5	1.5	5
1x0.34	19/0.16	0.5	1.7	6
1x0.50	19/0.18	0.5	1.9	8
1x0.75	24/0.20	0.6	2.2	11
1x1.0	32/0.20	0.6	2.5	14
1x1.5	30/0.25	0.6	3.0	21
1x2.5	48/0.25	0.7	3.7	33
1x4.0	56/0.30	0.8	4.2	48
1x6.0	81/0.30	0.9	4.7	67
1x10.0	78/0.40	1.0	6.1	112
1x16.0	119/0.40	1.1	7.5	172
1x25.0	182/0.40	1.3	9.0	262
1x35.0	266/0.40	1.3	10.1	362
1x50.0	378/0.40	1.6	12.7	512
1x70.0	348/0.50	1.6	14.7	710
1x95.0	444/0.50	1.8	16.4	937
1x120.0	551/0.50	1.8	18.2	1159
1x150.0	722/0.50	1.9	20.9	1447
1x185.0	874/0.50	2.0	22.9	1790
1x240.0	1147/0.50	2.2	25.8	2318
1x300.0	1443/0.50	2.4	28.3	2897



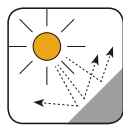
Impact Resistant



Highly Flexible



Weather Resistant



UV Resistant



Fire Retardant
NF C32-070-2.2(C1)
IEC 60332-3/EN50266



Flame Retardant
NF C32-070-2.1(C2)
IEC 60332-1/EN 50265-2-1



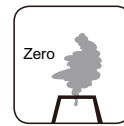
Low Corrosivity
EN 50267-2-2/NF C32-074
IEC 60754-2/NF C20-453



Low Toxicity



Low Smoke Emission
IEC 61034/NFC20-902
EN 50268/NF C32-073



Zero Halogen
IEC 60754-1/NF C20-454
EN 50267-2-1