



FRA 145/S EMC Screened Multicore

Applications

Multicore 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 fixed and flexible application in dry, humid and wet rooms.

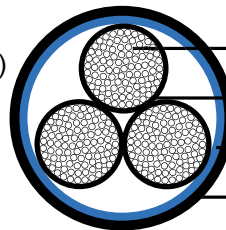


Standard

- 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
- Copper Wire Screen
- Electron Beam Crosslinkable Polyolefine Copolymer Sheath

Construction

- **Conductors:** Class 5 stranded tinned copper to IEC60228/VDE 0295.
- **Insulation:** Electron beam crosslinkable polyolefine copolymer.
- **Screen:** Copper wire screen.
- **Sheath:** Electron beam crosslinkable polyolefine copolymer.

Electrical Characteristics at 20°C

Nominal Conductor Cross Section	mm ²	0.50	0.75	1.0	1.5	2.5	4.0
Maximum Conductor Resistance	Ω/km	40.1	26.7	20.0	13.7	8.21	5.09
Voltage Rating	V	300/500V (≤1mm ²); 450/750V (≥1.5mm ²)					



↳ **Mechanical and Thermal Properties**

Minimum Bending Radius: 4xOD

Temperature Range: -55°C ~+145°C

↳ **Dimensions and Weight**

No. of cores& Nominal Conductor Cross Sectional Area No.×mm ²	Number and Nominal Diameter of Strands No./mm	Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
1×0.5	16/0.20	0.5	3.7	23
2×0.5	16/0.20	0.5	5.6	45
3×0.5	16/0.20	0.5	6.1	59
4×0.5	16/0.20	0.5	6.7	72
5×0.5	16/0.20	0.5	7.3	86
6×0.5	16/0.20	0.5	7.9	102
7×0.5	16/0.20	0.5	8.4	118
8×0.5	16/0.20	0.5	9.0	133
10×0.5	16/0.20	0.5	10.0	157
12×0.5	16/0.20	0.5	10.0	164
1×0.75	24/0.20	0.6	4.0	28
2×0.75	24/0.20	0.6	6.7	66
3×0.75	24/0.20	0.6	7.1	78
4×0.75	24/0.20	0.6	7.7	94
5×0.75	24/0.20	0.6	8.5	113
6×0.75	24/0.20	0.6	8.9	132
7×0.75	24/0.20	0.6	9.9	158
8×0.75	24/0.20	0.6	10.6	181
10×0.75	24/0.20	0.6	11.5	209
12×0.75	24/0.20	0.6	11.5	219
14×0.75	24/0.20	0.6	12.2	251
16×0.75	24/0.20	0.6	12.9	279
19×0.75	24/0.20	0.6	14.5	347
21×0.75	24/0.20	0.6	15.3	385
1×1	30/0.20	0.6	4.2	33
2×1	30/0.20	0.6	7.2	79
3×1	30/0.20	0.6	7.7	89
4×1	30/0.20	0.6	8.3	113
5×1	30/0.20	0.6	9.0	134
6×1	30/0.20	0.6	9.5	156
7×1	30/0.20	0.6	10.9	187
8×1	30/0.20	0.6	11.4	218
10×1	30/0.20	0.6	12.5	253
12×1	30/0.20	0.6	12.5	266
1×1.5	30/0.25	0.6	4.8	43
2×1.5	30/0.25	0.6	8.4	105



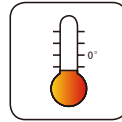
No. of cores& Nominal Conductor Cross Sectional Area No.×mm ²	Number and Nominal Diameter of Strands No/mm	Nominal Insulation Thickness mm	Nominal Overall Diameter mm	Nominal Weight kg/km
3×1.5	30/0.25	0.6	8.9	119
4×1.5	30/0.25	0.6	9.9	163
5×1.5	30/0.25	0.6	10.7	183
6×1.5	30/0.25	0.6	11.5	219
7×1.5	30/0.25	0.6	12.7	273
8×1.5	30/0.25	0.6	13.7	305
10×1.5	30/0.25	0.6	15.0	309
2×2.5	50/0.25	0.7	9.9	157
3×2.5	50/0.25	0.7	10.5	198
4×2.5	50/0.25	0.7	11.5	236
5×2.5	50/0.25	0.7	12.8	287
7×2.5	50/0.25	0.7	15.5	430
4×4	56/0.30	0.8	13.2	317
5×4	56/0.30	0.8	14.5	376



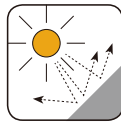
Impact Resistant



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



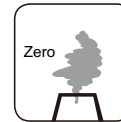
Low Corrosivity
EN 50267-2-2/NF C32-074
IEC 60754-2/NF C20-453



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