

M-TEC

Single Core
Aluminium, XLPE Insulated, Cu tape screened, FRPVC / LHFRPVC. (Type A) armoured.
SIZE CODE: XLA 1x(Conductor size)FR / LH 11kV

Application
For use in power circuits of 6.35/11kV systems. Installed in cable trays and ducts.

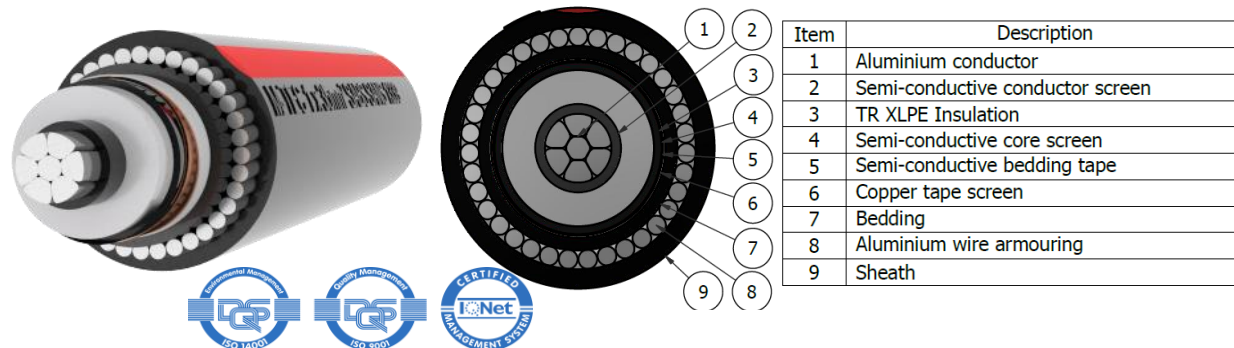
Specification: SANS 1339

Voltage Rating: 6.35/11kV

Construction
Single core, Circular Aluminum stranded conductor (water blocked), XLPE insulated, copper tape screened, FRPVC / LHFRPVC bedded, Al wire armoured, FRPVC / LHFRPVC sheathed.

| Physical properties and dimensions | | | | | | | | | | | Electrical Properties | | | | | | | | | |
|------------------------------------|--------------------|---------------------|----------------------|----------|---------------|----------------------|----------------|--------------|-------------------|----------------|-----------------------|--------|-------|------------|-----------|-----------|-----------|-------------|-----------------------|-------------|
| Conductor size | Conductor diameter | Insulation diameter | Insulation thickness | Armour | | | Cable diameter | Cable weight | Gross mass (500m) | Bending radius | Current rating | | | Resistance | | Reactance | Impedance | Capacitance | Short circuit ratings | |
| | | | | diameter | wire diameter | total area | | | | | Amps | | | Ω/km max | | | | | Symmetrical | Earth fault |
| mm ² Nom. | mm Nom. | mm Nom. | mm Nom. | mm Nom. | mm Nom. | mm ² Min. | mm Nom. | kg/m Nom. | kg Nom. | mm min. | air | ground | ducts | dc @ 20°C | ac @ 90°C | Ω /km | Ω /km | μF/km | | |
| 50 | 8.3 | 18.5 | 3.4 | 25.2 | 1.60 | 90.5 | 29.6 | 1.04 | 870 | 592 | 145 | 160 | 130 | 0.641 | 0.822 | 0.146 | 0.835 | 0.144 | 4.0 | 12.2 |
| 70 | 10.0 | 20.5 | 3.4 | 26.9 | 1.60 | 96.5 | 31.5 | 1.19 | 1 044 | 630 | 185 | 195 | 160 | 0.443 | 0.568 | 0.139 | 0.585 | 0.159 | 5.8 | 13.0 |
| 95 | 11.8 | 22.0 | 3.4 | 28.7 | 1.60 | 104.6 | 33.3 | 1.35 | 1 123 | 667 | 220 | 230 | 185 | 0.320 | 0.411 | 0.129 | 0.430 | 0.177 | 8.0 | 14.1 |
| 120 | 13.1 | 23.5 | 3.4 | 30.0 | 1.60 | 110.6 | 34.8 | 1.49 | 1 296 | 697 | 255 | 260 | 210 | 0.253 | 0.325 | 0.129 | 0.350 | 0.189 | 10.2 | 14.9 |
| 150 | 14.8 | 25.0 | 3.4 | 32.5 | 2.00 | 144.5 | 37.5 | 1.74 | 1 421 | 751 | 290 | 290 | 230 | 0.206 | 0.265 | 0.122 | 0.291 | 0.204 | 12.5 | 19.5 |
| 185 | 16.4 | 26.5 | 3.4 | 34.1 | 2.00 | 153.9 | 39.1 | 1.93 | 1 513 | 782 | 330 | 325 | 265 | 0.164 | 0.211 | 0.117 | 0.241 | 0.218 | 15.7 | 20.8 |
| 240 | 18.9 | 29.0 | 3.4 | 36.6 | 2.00 | 163.4 | 41.9 | 2.22 | 1 559 | 837 | 380 | 370 | 300 | 0.125 | 0.163 | 0.112 | 0.197 | 0.204 | 20.6 | 22.0 |
| 300 | 21.2 | 31.5 | 3.4 | 38.9 | 2.00 | 175.9 | 44.2 | 2.50 | 1 800 | 883 | 435 | 415 | 335 | 0.100 | 0.129 | 0.109 | 0.169 | 0.261 | 25.7 | 23.7 |
| 400 | 23.9 | 34.5 | 3.4 | 41.6 | 2.00 | 188.5 | 47.3 | 2.91 | 1 905 | 945 | 495 | 470 | 380 | 0.125 | 0.101 | 0.105 | 0.146 | 0.285 | 33.1 | 25.4 |
| 500 | 27.2 | 37.5 | 3.4 | 46.1 | 2.50 | 260.2 | 52.0 | 3.58 | 2 341 | 1039 | 560 | 520 | 420 | 0.100 | 0.083 | 0.103 | 0.132 | 0.314 | 42.5 | 35.1 |
| 630 | 31.2 | 41.5 | 3.4 | 50.3 | 2.50 | 279.8 | 56.4 | 4.23 | 2 566 | 1128 | 630 | 570 | 465 | 0.125 | 0.070 | 0.099 | 0.121 | 0.350 | 55.0 | 37.7 |

Cable Identification:
FRPVC (red stripe), LHFRPVC (blue stripe),
LSZH / HFFR (white stripe), PE (no stripe).



Revision: R00 23/06/2020

