



P3-type 250 kVDC rated High Voltage Cable

Highly flexible 3-conductor, 250kVDC rated rubber insulated high voltage cable.

Features.

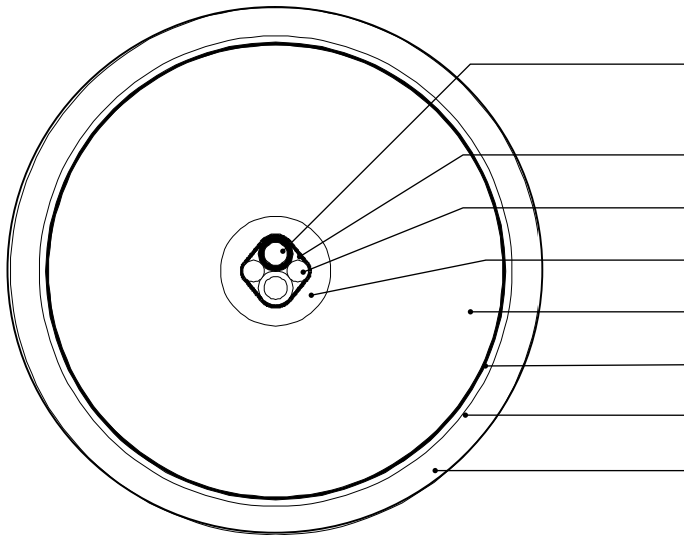
- High flexibility.
- 80% shielding braid coverage.

Description

This 3-conductor, rubber insulated high voltage cable's typical applications are:

- Industrial and scientific X-ray or electron beam equipment.
- Low power, high voltage test- and measuring equipment.

Construction



Red and white Teflon insulated conductors, 1.5 mm² (19 x Ø 0.32mm), stranded tinned copper wires.

Semi-conducting tape.

Bare cond., 2.5 mm² (2 x 50 x Ø 0.18), stranded tinned copper wires.

Semi-conducting EP rubber.

High voltage insulation, EP rubber, black.

Semi-conducting tape.

Shielding braid, > 80 % coverage, tinned copper wires.

PVC jacket, color: black.

Technical data

Number of conductors	3
Rated voltage	250 kVDC
Routine test voltage (high voltage insulation)	300 kVDC / 10 min.
Routine test voltage (conductor insulation)	4.5 kVACrms / 1 min.
Maximum conductor current (each conductor)	1.5 mm ² : 15 A; 1.25 mm ² : 14 A
Nominal outside diameter	36 mm / 1.417 in / ±1.5 mm / ±0.059 in
Thickness of polychloroprene jacket	2 mm / 0.079 in
Thickness of high voltage insulation	12 mm / 0.472 in
Diameter of core-assembly	4.8 mm / 0.189 in
High voltage insulation resistance @20°C	≥1x10 ¹² Ω·m / ≥3x10 ¹² Ω·ft
Conductor insulation resistance @20°C	≥1x10 ¹² Ω·m / ≥3x10 ¹² Ω·ft
Conductor resistance bare conductor @20°C	6.6 mΩ/m / 2.2 mΩ/ft / ±5%
Conductor resistance insul. conductor @20°C	11.4 mΩ/m / 3.7 mΩ/ft / ±5%
Capacitance between conductors and shield	107 pF/m / 35 pF/ft / ±10%
Cable min. bending radius (static installation)	74 mm / 2.9 in
Cable min. bending radius (dynamic installation)	148 mm / 5.8 in
Operating temperature	-10/+70 °C / +14/+158 °F
Storage temperature	-40/+70 °C / -40/+158 °F
Net weight	1580 kg/km