



S4-type 75 kVDC rated High Voltage Cable

Highly flexible, small diameter, 4-conductor, 75kVDC rated rubber insulated high voltage cable.

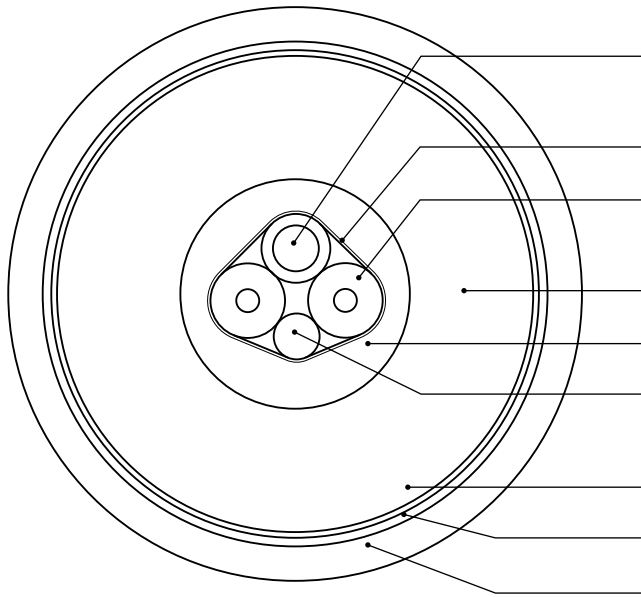
Features

- High flexibility.
- Small diameter.
- 95% shielding braid coverage.

Description

This 4-conductor, rubber insulated high voltage cable's typical applications are:

- Medical X-ray equipment like standard X-ray, computer tomography and angiography equipment.
- Industrial and scientific X-ray or electron beam equipment like electron microscopy and X-ray diffraction equipment.
- Low power high voltage test- and measuring equipment.



Construction

- Yellow Teflon insulated conductor, 1.5 mm² (19xØ0.32mm), stranded tinned copper wires.
- Semi-conducting tape.
- 2 Teflon insulated conductors (white and blue), 0.5 mm² (19xØ0.16mm), stranded tinned copper wires.
- High voltage insulation, EP rubber, black.
- Semi-conducting EP rubber.
- Bare conductor, 1.5mm² (19xØ0.32mm), stranded tinned copper wires.
- Semi-conducting tape.
- Shielding braid, 95% coverage, tinned copper wires.
- PVC jacket, color: light gray, white, black, or black with a white stripe. PUR jacket available also.

Technical data

Number of conductors	4
Rated voltage	75kVDC
Routine test voltage (high voltage insulation)	120kVDC / 10 min
Routine test voltage (conductor insulation)	2kVACrms / 1 min
Maximum conductor current	1.5 mm ² : 16 A; 0.5 mm ² : 9 A
Corona level at 75kVDC	≤10 pC
Nominal outside diameter	19.7 mm / 0.776 in / ±0.5mm / ±0.020 in
Thickness of PVC jacket	1.2 mm / 0.047 in
Thickness of high voltage insulation	4.3 mm / 0.167 in
Diameter of core-assembly	5.8 mm / 0.228 in
Insulation resistance core to shield @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	11.4 mΩ/m / 3.7 mΩ/ft / ±5%
Conductor resistance yellow cond. @20°C	11.4 mΩ/m / 3.7 mΩ/ft / ±5%
Conductor resistance white/blue cond. @20°C	38.5 mΩ/m / 12.6 mΩ/ft / ±10%
Shield resistance @20°C	7.1 mΩ/m / 2.3 mΩ/ft / ±5%
Capacitance between conductors and shield	206 pF/m / 68 pF/ft / ±10%
Capacitance between insulated and bare cond.	118 pF/m / 39 pF/ft / ±10%
Capacitance between insulated conductors	82 pF/m / 27 pF/ft / ±10%
Cable min. bending radius (static installation)	40 mm / 1.6 in
Cable min. bending radius (dynamic installation)	80 mm / 3.1 in
Operating temperature	-10/+70 °C / +14/+158 °F
Storage temperature	-40/+70 °C / -40/+158 °F
Net weight	510 kg/km