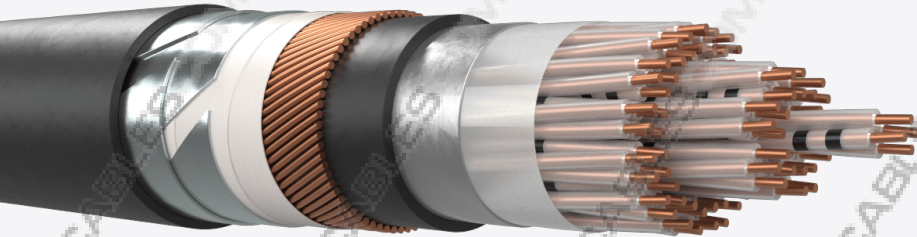


Cable HP_AJ-2Y(L)2YDB2Y_H45 RK400

RAILWAY SIGNALLING CABLES, MULTICORE, PE SHEATH FOR EXTERNAL INSTALLATIONS WATERBLOCKING AND RODENT RESISTANT



Description and application

Cables from 1 to 40 quads of 0.9 or 1.4 mm, polyethylene insulated. Quads are stranded in layers to form the core (dry core) which is then protected by an anti inductive (L)2YBD2Y sheath with reduction factor according to customer's requirements. They are used as control cables up to 90 kHz signals, especially in rail infrastructures, when protection is required against the induction of high voltage lines. For installation in ducts or directly buried. The cable is rodent resistant. Generally according to DB AG 416.0116 and DB AG 416.0115

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Construction

- Conductors: Annealed copper solid wire, 0.9 or 1.4 mm. diameter.
- Insulation: Solid polyethylene. (2Y)
- Cabling element: quads and 2 stranded perforated sheathing conductors (≥ 7 quads) to detect water presence. Identification according to DB AG 416.0116
- Core formation: Stranded in Layers.
- Screen and moisture barrier: Aluminium tape. (L)
- Inner sheath: PE sheath. (2Y)
- Screening: Layer of copper wires ($\emptyset 0,9/1,2/1,4/1,8$ mm). (D)
- Armoring: Two helically applied steel tapes (0,5/0,8 mm thickness). (B)
- Outer sheath: UV resistant black polyethylene. (2Y)

- Sheath marks: The sheath shall be marked, at regular intervals with the following information:
 - SIGNAL / AJ-2Y(L)2YDB2Y / Capacitance / Manufacturer / Length marks
 - Other type of marks according to the costumer



| TITLE | EDITION | APPROVED BY | DATE |
|-----------------------------------|---------|-------------|------------|
| Cable HP_AJ-2Y(L)2YDB2Y_H45 RK400 | 2 | O.salomon | 2019-03-06 |

ELECTRICAL CHARACTERISTICS (20°C)

| | 0.9 | 1.4 |
|---|---------|---------|
| Maximum resistance (Ω/km) | ≤ 56.9 | ≤ 23.4 |
| Minimum insulation resistance (MΩxkm, 20°C, 500V) | ≥ 10000 | ≥ 10000 |
| Mutual capacity (nF/km, 800 Hz) | ≤ 45 | ≤ 45 |
| Dielectric strength (Vdc, 2min) Conductor - Conductor | ≥ 2500 | ≥ 2500 |
| Dielectric strength (Vdc, 2min) Conductor - Screen | ≥ 2500 | ≥ 2500 |
| AS/DC operating voltage (V) | | |

MECHANICAL AND THERMAL PROPERTIES

| | |
|--------------------------------|--|
| Maximum allowable radius | Un-armoured 7.5 x Ø cable armoured 10 x Ø cable |
| Operating temperature range | -40° C to +60° C |
| Installation temperature range | -10° C to +60° C |

DIMENSIONS AND WEIGHTS

Cable HP_AJ-2Y(L)2YDB2Y_H45 RK400 x 0.9

| Number of conductors | Nominal Weight (kg/km) | Nominal OD (mm) |
|----------------------|------------------------|-----------------|
| 1x4 | 642 | 16.1 |
| 3x4 | 953 | 21.1 |
| 5x4 | 1131 | 23.5 |
| 7x4 | 1268 | 24.8 |
| 14x4 | 1906 | 33.0 |
| 20x4 | 2193 | 35.5 |
| 40x4 | 3273 | 44.6 |

Cable HP_AJ-2Y(L)2YDB2Y_H45 RK400 x 1.4

| Number of conductors | Nominal Weight (kg/km) | Nominal OD (mm) |
|----------------------|------------------------|-----------------|
| 1x4 | 795 | 18.3 |
| 3x4 | 1280 | 25.3 |
| 5x4 | 1675 | 30.1 |
| 7x4 | 1916 | 32.2 |
| 10x4 | 2446 | 38.5 |
| 14x4 | 2890 | 41.5 |