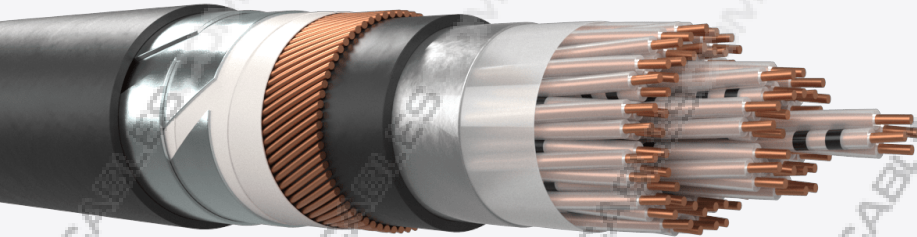


## Cable HP\_AJ-2Y(L)2YDB2Y\_H45 RK400

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 ( $\geq 7$  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 ( $\varnothing 0,9/1,2/1,4/1,8$  mm). (D)
- Armouring: 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 customer



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