

### 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 (Ø0,9/1,2/1,4/1,8 mm). (D)
- Armouring: Two helically applied steel tapes (0,5/0,8 mm thickness). (B)
- Outer sheath: UV resistant black polyethylene. (2Y)



Cables de Comunicaciones Zaragoza, SL.

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Certified Company ISO 9001 - ISO 14001

All drawings, weights and dimensions details, as well as tube and fibre colours in this document are only indicative and

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- 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



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ELECTRICAL	<b>CHARACTERISTICS</b>	(20°C)
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I I	4	J	4	0.9	1.4
Maximum resista	nce (Ω/km)	8	8	≤ 56.9	≥ ≥ 23.4
Minimum insulation	on resistance (MΩx	cm, 20°C, 500V)		≥1000	20000 ≥10000
Mutual capacity (	nF/km, 800 Hz)	Š	Š	≤45	≤45
Dielectric strengt	n (Vdc, 2min) Cond	uctor - Conductor		≥2500	) ≥2500
Dielectric strengt	n (Vdc, 2min) Cond	uctor - Screen	Ã	≥2500	≥2500
AS/DC operating v	voltage (V)	T	8	Š	Š

# **MECHANICAL AND THERMAL PROPERTIES**

Maximum allowable radius		Un-armoured 7.5 x Ø cable armou	red 10 x Ø cable	G.
Operating temperature range	Ì	-40° C to +60° C	ğ	ğ
Installation temperature range	O.	-10° C to +60° €	Q <sub>3</sub>	O'



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# **DIMENSIONS AND WEIGHTS**

Cable HP_AJ-2Y(L)2YDB2Y_H45 RK400 x 0.9					
Number	r of conductors	Nomi	inal Weight (kg/km)	Nomi	nal OD (mm)
1x4	8	642	F	16.1	F
3x4	6-	953	-	21.1	
5x4	, F	1131	Į.	23.5	Ę
7×4	9	1268	49	24.8	9
14×4	Ì	1906	Ì	33.0	Ĭ
<b>2</b> 0x4	O <sub>X</sub>	2193	O	35.5	O.
40x4	2	3273	2	44.6	2
		Cable HP AI-2Y(I)	2YDB2Y H45 RK400 x	(1.4	

Guote III _A) E1(E/E100E1_II+0 III.+00 X 21+						
Number of conductors		Nomina	Nominal Weight (kg/km)		Nominal OD (mm)	
1x4	9	795	9	18.3	9	
3x4	7	1280	3	25.3	Z.	
5x4	$\vee$	1675	~	30.1	~	
7x4	2	1916	2	32.2	2	
10x4	Ş	2446	Ş	38.5	Š	
14x4	4	2890	47	41.5	4	



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