

HARTING RJ Industrial® Trailing Cable, halogen-free



Wire:	
Stranded tinned copper wire 7 X 0.25 (22 AWG)	ø 0.75 mm (0,030 in)
Insulation of Polyethylen (PE)	ø 1.5 mm (0.059 in)

Core:	
Filler as central element	
1. layer: 4 wire twisted	
Sequence of colors: WH-YE-BU-OG	
Plastic tape, overlapped	
Jacket: Thermoplastic copolymer (FRNC)	ø 3.9 mm (0.154 in)
Alulaminat foil overlapped, applied longitudinally	
Shield braiding of tinned copper wires 0.13 mm dia (36 AWG)	
Coverage about 85%	ø 4.7 mm (0,185 in)

Jacket:	
Polyurethane (PUR) GN	
Wall thickness about 0.9 mm	ø (6.5 ±0.2) mm (0.256 ±0.008 in)

Electrical data at 20 °C:	
Loop resistance	≤ 120 Ohm/km
Signal run time	≤ 5.3 ns/m
Insulation resistance	≥ 500 MOhm*km
Characteristic impedance 1 – 100 MHz	(100 ± 5) Ohm
UL-Rating	600 V
Surface transfer impedance 10 MHz	≤ 100 mOhm/m
Test voltage (wire/wire/screen rms 50Hz 1min)	= 2000 V

Near-end crosstalk attenuation

Frequency (MHz)	1	4	10	16	20	31.25	62.5	100
Cat 5E requirements (dB – 100m) ≥	65.3	56.3	50.3	47.2	45.8	42.9	38.4	35,3
typ. Value (dB – 100m)	80	76	70	65	63	60	55	50

Attenuation

Frequency (MHz)	1	4	10	16	20	31.25	62.5	100
Cat 5E requirements (dB – 100m) ≤	3.2	6.0	9.5	12.1	13.6	17.1	24.8	32.0
typ. Value (dB – 100m) (dB – 100ft)	2.1 (0.6)	4 (1.2)	6.3 (1.9)	8 (2.4)	9 (2.7)	11.4 (3.5)	16.5 (5)	21.3 (6.5)

The electrical requirements acc. to EN 50288-2-1

Mechanical and thermal characteristics:

Conductor material acc. to DIN EN 13602 Cu-ETP-A...
Screen material acc. to DIN EN 13602 Cu-ETP-A...-B
Insulating material acc. to DIN EN 50290-2-23 (VDE 0819), table L/MD (HD 624.3)
Jacket material acc. F45052-F5100 (similar to DIN VDE 0282)
Flame retardant acc. to IEC 60332-1-2
Oil resistant acc. to DIN EN 60811-2-1
UL File E119100 Vol.1 Sec. 13
UL-File E119100 Vol.2 Sec. 5 Verified CAT 5E

Other characteristics:

Trailing cables for following requirements (in work)	
- 5 million bending cycles	
- bending diameter 200 mm	
UV-resistant	
Trailing cable for following requirements (in work)	5 million bending cycles bending diameter 200 mm
Pull force	≤ 150 N
Permissible temperature range	-40 °C up to +70 °C
During laying:	- 20 °C up to +60 °C
Transport temperature range:	- 50 °C up to +70 °C
Min. bending radius allowed	repeated 7X ø single 3X ø
Weight about	61 Kg/km (41 lb/1000ft)



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Technical Data Sheet

part numbers:	colour:	length:
09 45 600 0101	green	100 m
09 45 600 0141	green	50 m
09 45 600 0131	green	20 m
09 45 600 0111	green	500 m non-returnable reel

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