

PROFINET 4TP type B Cable 8-wire, Cat. 6A, PVC

Advantages

- Suitable for PROFINET cabling Category 6A / Class EA according to ISO/IEC 11 801 respectively EN 50 173-1 and ISO/IEC 24 702 respectively EN 50 173-3
- Capable flexible cords
- Applicable for industrial premises
- RoHS conform
- UL certified
- flame retardant
- UV-resistant

General

This data cable is suitable for PROFINET cabling according to type B in industrial premises and areas. It is useable for flexible cords.

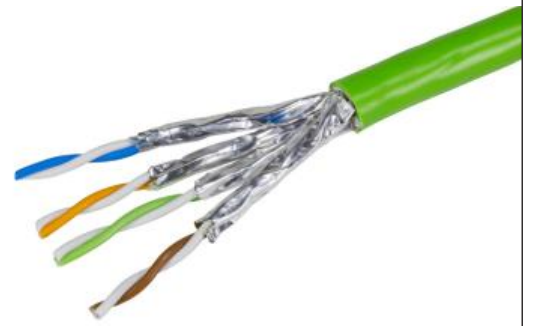
The four pair/eight wire PIMF-construction allows the transmission of IT digital and analogue signals like Ethernet 10/100 Mbit/s, 10 GigaBit/s, video and voice services as well as IP-based data services.

The cable is fully screened (each pair in metal foil plus an overall wire braid) and guaranties a very protective signal transmission and high EMC performance.

This PROFINET cable can be assembled with all HARTING RJ Industrial® 10G connector.

Technical Characteristics

Performance	Category 6A according to EN 50 288, IEC 61 156
Mechanical Characteristics	
Minimal bending radius	Repeated bending: 8 x diameter Single bending: 4 x diameter
Tensile strength (UL-Style 21695 (80°C/600V))	max. < 150N
Electrical Characteristics at 20 °C	
Conductor resistance	max. 75 Ohm/km
Insulation resistance	min. 500 MOhm*km
Propagation delay	5,13 ns/m
Characteristic impedance at 100 MHz	100 Ohm ± 5 Ohm
Test voltage (wire/wire/screen rms 50 Hz 1 min.)	≤800 V
Operating voltage	80 V
Chemical Characteristics	
Flame retardant	IEC 60 332-1-2
Free of hazardous substances	RoHS 2002/95/EG
Thermal Characteristics	
Permissible temperature range fixed operation flexible operation	- 40 °C to + 80 °C - 40 °C to + 80 °C
Printing	
HARTING INDUSTRIAL ETHERNET STANDARD CABLE CAT6A * 4x2xAWG23/7 (SHIELED) „RU“ AWM Style 21695 094560001080200 „sequential length in metres“ * „year/internal order number“	
Weight about	81 kg/km



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Identification

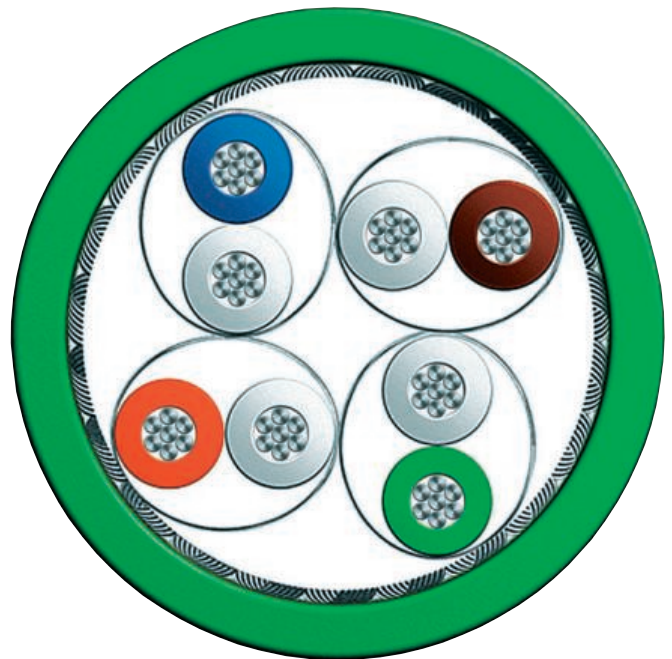
Part number

Drawing

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cable 8-wire, Cat. 6A, PVC

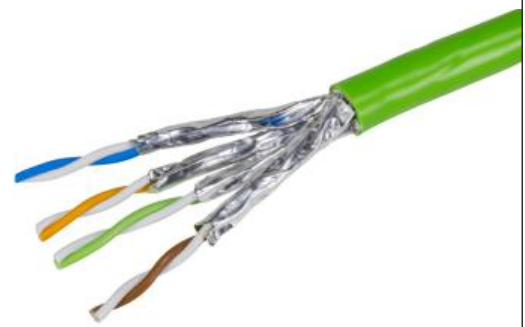
20 m ring
50 m ring
100 m ring
500 m reel

09 45 600 1211
09 45 600 1221
09 45 600 1231
09 45 600 1241



- Wire: Stranded tinned copper AWG 23/7
- Insulation: PE Ø 1.59 mm
- Color: wh/bu, wh/og, wh/gn, wh/bn
- 4 Pairs: Aluminate foil overlapped (PIMF)
- Overall screen: tinned copper wire braid, braid coverage about 85%
- Outer sheath: Polyvinylchloride (PVC), flame retardant

Color of outer sheath: green, RAL 6018
Overall diameter: 8.7 mm



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Technical Characteristics

Frequency (MHz)	Attenuation (dB/100m)	Next (dB)	PS next (dB)	EL fext (dB)	PSEL fext (dB)	Return loss (dB)
1	2.1	75,3	72.3	67.8	64.8	20
4	3.8	66,3	63.3	55.8	52.8	23
8	5.3	61,8	58.8	49.7	46.7	24.5
10	5.8	60,3	57.3	47.8	44.8	25
16	7.5	57,2	54.2	43.7	40.7	25
20	8.4	55,8	52.8	41.8	38.8	25
25	9.4	54,3	51.3	39.8	36.8	24.3
31,25	10.5	52,8	49.9	37.9	34.9	23.6
62,5	15	48,4	45.4	31.9	28.9	21.5
100	19.1	45,3	42.3	27.8	24.8	20.1
200	27.6	40,8	37.8	21.8	18.8	18
250	31.1	39,3	36.3	19.8	16.8	17.3
300	34.3	38,1	35.1	18.3	15.3	17.3
400	40.1	36,3	33.3	15.8	12.8	17.3
500	45.3	34,8	31.8	13.8	10.8	17.3