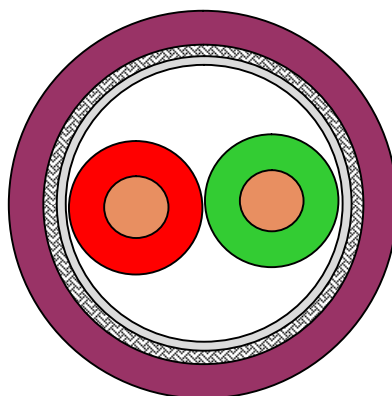


RS 485 PROFIBUS FMS/DP

FB-02YS(ST+C)H FC 1x2xAWG22/1 VE2L

FAST CONNECT CERN SCEN 04.21.60.020.4

Fieldbus Cable



Application

RS 485 Multi Point communications network up to 10 Mb/s
PROFIBUS

Standards

EIA/TIA

Fire Propagation

IEC 60332-3 24

Construction

Conductor	bare copper wire Ø 0.645 mm (AWG 22)
Insulation	Foam skin Polyethylene, Ø 2.3 mm
Twisting	2 cores to the pair Ø 4.6 mm
Inner sheath	FRNC Megolon S534, colour white, Ø 5.5 mm
Pair screen	Al-laminated plastic foil, Al outside Ø 5.6 mm
Overall screen	Copper braid, tinned (approx. 80% coverage) Ø 6.2 mm
Sheath	FRNC, violett RAL 4005 Megolon S534 Ø 7.4 mm (the cable should be round)
Marking	DRAKA – RS 485 PROFIBUS –CERN VE2L –Zero halogen - Manufacturing date – calibration in meter

Mechanical properties

Bending radius	≥ 55 mm without load, ≥ 110 mm with load
Temperature range, during operation during installation	-35°C up to + 85°C -5°C up to + 50°C
Corrosivity	acc. to IEC60754-2
Smoke density	acc. to IEC 61034

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Electrical properties

at 20°C

DC loop resistance	≤ 110 Ω/km
Resistance unbalance	≤ 4%
Insulation resistance (500 V)	≥ 2000 MΩ *km
Capacitance at 800 Hz	≤ 30 nF/km
Capacitance unbalance (pair to ground)	≤ 1500 pF/km
Characteristic impedance at (250 kHz-3 MHz) (3 MHz-20 MHz)	(150 ± 15) Ω (150 ± 15) Ω
Nominal velocity of propagation	approx. 79 %
Propagation delay	≤ 460 ns/100m
Attenuation at 250 kHz 625 kHz 1.25 MHz 3.125 MHz 16 MHz 20 MHz	≤ 6.5 dB/km ≤ 10 dB/km ≤ 13 dB/km ≤ 20 dB/km ≤ 45 dB/km ≤ 51 dB/km
Test voltage (DC, 1 min)	1000 V (Core/Core and Core/Screen)
Transfer impedance	at 100 kHz nom 1 mΩ/m at 1 MHz nom 3.5 mΩ/m at 10 MHz nom 2.5 mΩ/m at 20 MHz nom 3.5 mΩ/m

All other requirements according to Cern Specification 577 REV 1 – 15-10-2004

Technical data

Product code	Designation	Brand name	Outer diameter	Fire load		Weight	Copper content	Tensile force
			mm	MJ/km	kWh/m	kg/km	kg/km	N
1003279 CS7605802	02YS(ST+C)H 1x2xAWG22/1	FIELDDBUS CABLE RS485 PROFIBUS FMS/DP – CERN VE2L	7.4			70	23.2	100