

LEONI Special Cables GmbH

Technisches Datenblatt – Technical Data Sheet – Technisches Datenblatt – Technical Data Sheet – Technisches Datenblatt – Technical Data Sheet

Design**Wire:**

Stranded bare copper wire 19 X 0.14 ø 0.67 mm (0,026 in)
 Insulation of foamed Polyethylene (PE) with skin ø 2.56 mm (0,101 in)
 Wall thickness about 0.95 mm

Core:

2 wires, RD and GN twisted to a pair with fillers in the gaps
 Plastic tape, overlapped
 Alulaminat foil overlapped
 Shield braiding of tinned copper wires 0.1 mm dia
 Coverage about 70%
 Plastic tape, overlapped ø 5.8 mm (0.228 in)

Jacket:

Polyvinylchloride (PVC) PETROL
 Wall thickness about 1.0 mm ø (8.0 ±0.3) mm (0.315 ±0.012 in)

Printing: LEONI PROFIBUS Festoon Cable * 23AWG (SHIELDED) (UL) E119100 CMG 75 °C or PLTC
 or AWM 20201 600V FT4 SUN RES OIL RES I + marking every meter

The gap between the text is filled out with lengthways line (-----).
 Textintervals about 1000 mm

Electrical data at 20°C

Loop resistance		≤	133	Ohm/km
Screen resistance		≤	19	Ohm/km
Insulation-Resistance		≥	16000	MOhm*km
Characteristic Impedance				
	3 - 20	MHz	(150 ± 15)	Ohm
	31.25 - 38.4	kHz	(185 ± 18.5)	Ohm
	9.6	kHz	(270 ± 27)	Ohm

Attenuation

	16	MHz	<	49	dB/km
	4	MHz	<	25	dB/km
	38.4	kHz	<	4	dB/km
	9.6	kHz	<	3	dB/km
Inductance	31.25	kHz	≈	750	µH/km
Capacitance unbalance to ground			≤	1500	pF/km
Surface transfer impedance	20	MHz	≤	75	mOhm/m
Capacitance	1	kHz		28	nF/km
Operating voltage (effective value)			≤	100	V
UL-Rating				600	V
rel. velocity of propagation			≈	81	%
Test voltage (wire/wire/screen rms 50Hz 1min)			=	2000	V

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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 2/A (HD 624.3)

Jacket material acc. to DIN VDE 0207, compoundtype YM5

Flame retardant acc. to UL 1685 (CSA FT 4)

Oil resistant acc. to UL 758 Sec. 15 (60°C)

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Assembling Regulation

When installed, the cable have to pay off from the drum in a tangential way and to install free of torsion (attend the longitudinally line marking) into the cable roller assemblies.

The cable must mount tangential on a flat cable roller assemblies with a round half shell (angle between line and half shell 90 degree), whereby the radius of the half shell have to be ≥ 70 mm).

The strain reliefs of the cable roller assemblies must be fitted out with rubber clutches in order to avoid too strong bruise of the conductor.

- | Other cables, which are also in the festoon, mustn't curse underruns of the minimal bending radii of the assembling conductors.

Other characteristics:

Festoon Cable

Sunlight resistant acc. to UL 1581 Sec.1200

Festoon Cable for following requirements

- 5 million bending cycles
- bending radius ≥ 70 mm
- acceleration 4 m/s²
- min. bending radius allowed: single ≥ 30 mm

Permissible temperature range : -40 °C (-40 °F) up to 80 °C (176 °F)

Tensile strength < 80 N

PVC weight with Phthalate : 33,1 Kg/km

PVC weight without Phthalate : 0 Kg/km

Weight about : 64 Kg/km (42,9 lb/1000ft)

Designation of order:

L45467-G16-C255

203374

02YS(ST)CY 1X2X0.65/2.56 LI PETROL FR

1000 m (3281 ft) on non-returnable reel

