

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: "sequential length in metres" LEONI PROFIBUS Festoon Cable * 23AWG (SHIELDED) (UL)
 E119100 CMG 75 °C or CL3 or AWM 20201 600V FT4 SUN RES OIL RES I
 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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 UL-File E116441 Vol.1 Sec. 6 Page 6

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:

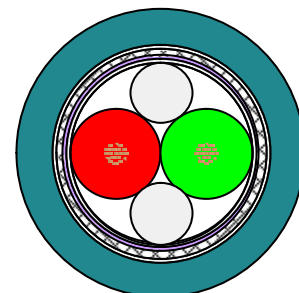
Festoon Cable
 Sunlight resistant acc. to UL 1581 Sec.1200

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