LEONI Special Cables GmbH

Design

Wire:
Bare copper wire ø 0.6 mm
Insulation with foamed Polypropylen (PP) with Skin ø (1.2 ±0.04) mm
Wall thickness about (0.3 -0.05) mm

Quad:
4 wires twisted to form a star-quad

Core:
Filler as central element
1.layer: 4 quad are twisted
Sequence of colors: WH/TQ/BU/VT - WH/TQ/OG/VT - WH/TQ/GN/VT - WH/TQ/BN/VT
Idendification thread
Plastic tape, overlapped
Alulaminate foil overlapped, Alu outside
Tinned copper drain wire ø 0.6 mm
Shield braiding of tinned copper wires 0.15 mm dia
Coverage about 70%

Quad	a-wire	b-wire	c-wire	d-wire
1	WH	BU	TQ	VT
2	WH	OG	TQ	VT
3	WH	GN	TQ	VT
4	WH	BN	TQ	VT

Jacket:
Polyvinylchloride (PVC) GY, RAL 7032
Wall thickness about 0.8 mm ø (9.0 ±0.5) mm

Printing: LEONI L + marking every meter
Textintervals about 1000 mm

Electrical data at 20°C

Loop-resistance	≤	130	Ohm/km
Characteristic Impedance 1 MHz		(120 ±12)	Ohm
Surface transfer impedance of screen (10 MHz)	≤	25	mOhm/m
Insulation-resistance	≥	10.000	MOhm*km
Capacity unbalanced k_1 und $_{k9-12}$ 800 Hz	≤	50	pF/100m
Capacity unbalanced $e_{1/2}$ 800 Hz	≤	150	pF/100m
Near-end crosstalk attenuation 1 MHz			
Circuit/circuit in the same starquad	≥	50	dB
Circuit/circuit in different cables(2X60m)	≥	75	dB
Far-end crosstalk attenuation 1 MHz			
Circuit/circuit in the same starquad	≥	60	dB
Circuit/circuit in different cables(2X60m)	≥	75	dB
max. Attenuation 1 MHz	≤	16	dB/1000m
Screening efficiency 30-900 MHz	≥	80	dB
Operating Voltage (effective value)		150	V
Test voltage (wire/wire/screen rms 50Hz 1min)	=	800	V

Date of issue : 14.09.1999 Technical modification reserved Creator : LSC E / Jedebrock
Number : **V45482-D87-G45-EN**

Up-dating : 12.10.2004 Name: Langemeyer
Supersedes : 28.04.2004 which is to be intended with drawn

Mechanical and thermal characteristics

Elongation at break ≥ 15 % (Conductor material)
Insulating material acc. to DIN EN 50290-2-25 (09YS)
Stripping force of insulation ≤ 8 N, Samples 50mm
Jacket material acc. to DIN EN 50290-2-22 (VDE 0819), compoundtype TM51 (HD 624.2)
Flame retardant acc. to UL 1581, Sec. 1080 (VW-1)

Solderability acc. to DIN VDE 0472, part 808/B
Solder shrink acc. to DIN VDE 0472, part 808/B, degree of contraction ≤ 1.0 mm

Other characteristics:

Max. across pressure load corresponding F45050-F6019-X-*-66
Smoke opacity acc. EN 60 950

Permissible temperature range: -5°C up to +70°

Min. bending diameter allowed:
multiple bendings ≥ 135 mm
one bending ≥ 70 mm

Connection technigue:
Solderind,Wrap and insulation piercing connection
For KAA- Wrap tools
Test acc. IEC 352, part 1

PVC weight with Phthalat e : 33.2 Kg/km
PVC weight without Phthalate : 0.0 Kg/km
Weight about : 118 Kg/km (79 lb/1000ft)

Designation of order:

V45482-D87-G45 1000 m (3281 ft) on non-returnable reel
V45482-D87-G45-L8 2000 m (6562 ft) on non-returnable reel

S-09YS(ST)CY 8X2X0.6/1.2 BD