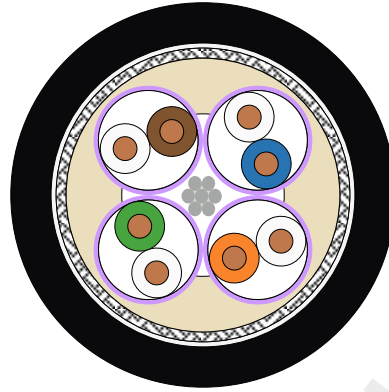


CAT 7

for explosive atmospheres
acc. to DIN EN 60079-14 appendix E



Design

Wire

Bare copper wire (23 AWG)
Insulation of foamed Polyethylene (PE) with skin

∅ 0.6 mm (0.024 in dia)
∅ 1.43 mm (0.056 in dia)

Screened pair

2 wires twisted to a pair
Alulminate foil overlapped, applied longitudinally

Core

Central element: Stranded tinned copper drain wire
4 screened pairs WH/BU-WH/OG-WH/GN-WH/BN
Gap filling material
Plastic tape overlapped
Shield braiding of tinned copper wires
Coverage about 85%
Plastic tape overlapped

∅ 7.3 mm (0.287 in dia)

Jacket

Thermoplastic copolymer (FRNC) BK

∅ (8.9 ±0.4) mm (0.350 ±0.016 in dia)

Printing: "sequential length in metres" BizLink **SeaLine** SCG * L45467-J416-C796 * 02YSFCH 4X2X0.6/1.43-100
PIMF CAT7 IEC 60332-3-22 SHF1 * "internal lot number"

Electrical data at 20°C

Loop resistance	≤	140	Ohm/km
Insulation resistance	≥	500	MOhm*km
Signal run time	≤	5.13	ns/m
Capacitance (1 kHz)	≈	42	nF/km
Operating voltage (peak)	≤	100	V
Characteristic impedance at 100 MHz	(100 ±5)		Ohm
Surface transfer impedance 10 MHz		10	mOhm/m
Test voltage (wire/wire/screen rms 50Hz 1min)		700	V

Frequency (MHz)	1	4	10	16	20	31.25	62.5	100	155	200	300	600
Next (dB)	80	80	80	80	80	80	75.1	72.4	69.6	67.9	65.3	60.8
PSNext (dB)	77	77	77	77	77	77	72.5	69.4	66.6	64.9	62.3	57.8
ELFext (dB)	80	80	74.0	69.9	68	64.1	58.1	54	50.2	48	44.5	38.4
PSELFext (dB)	77	77	71	66.9	65	61.1	55.1	51	47.2	45.0	41.5	35.4
Attenuation dB/100m)	2.0	3.6	5.7	7.2	8.1	10.1	14.5	18.5	23.4	26.8	33.3	48.9
Frequency	4	8	10	16	20	31.25	62.5	100	155	250	350	600
Return loss (dB)	23.1	24.5	25	25	25	23.6	21.5	20.1	18.8	17.3	17.3	17.3

Electrical requirements acc. to. EN 50288-4-1 & IEC 61156-5

Mechanical and thermal characteristics

Insulating material acc. to DIN EN 50290-2-23 (VDE 0819), table 2/A (HD 624.3) (02Y)

Jacket material acc. to IEC 60092-360 (IEC 60092-359) SHF1

Oil resistant acc. to IEC 60811-404 (4 hours / 70°C)

Flame retardant acc. to IEC 60332-1-2

Flame retardant acc. to IEC 60332-3-22 (Cat. A)

Approved for Marine and Offshore Applications

DNV Certificate No. TAE00003J7

Other characteristics

RoHS compliant (Directive 2011/65/EU & 2015/863/EU RoHS 3)

Requirements acc. to DIN EN 60079-14 appendix E

Halogen free acc. to IEC 60754

UV-resistant

While making assembly the drain wire must be connected with shield braiding

Permissible temperature range

Transport and fixed installation: -40 °C (-40 °F) up to 80 °C (176 °F)

Installation and flexible use : -30 °C (-22 °F) up to 80 °C (176 °F)

Min. bending radius allowed : repeated 8X \varnothing , single 4X \varnothing

Weight about : 100 kg/km (67 lb/1000ft)

Designation of order

L45467-J416-C796

235299

02YSFCH 4X2X0.6/1.43-100 PIMF SW

1000 m (3281 ft) on non-returnable reel

Product has not been tested and classified according to the CPR (EU/305/2011).

The product shall not be permanently installed in buildings in the EU.