



for high flexible applications, Typ C, UL/CSA



APPLICATION

Data cable for transmitting digital and analog signals for PROFINET systems, Industrial Ethernet ICT network applications. For high flexible applications (e.g. power chains, gantry robots, pick&place units, conveyors, machine tools, automated production systems, etc.) in harsh industrial environments.

Standard according to Profinet-spec. & according to the requirements for industrial secondary & tertiary cabling: EN 50173, ISO/IEC 11801, TIA/EIA 568, TSB36, EN 50288, IEC 61156-5/-6



SPECIAL FEATURES

- Low adhesion
- Largely resistant to grease, coolant fluids and lubricants.
- Oil-resistant: acc. to DIN EN 60811-2-1 (Mineral oil) & acc. to UL OIL RES.
- UV-resistant: SUN RES acc. to UL 1581.
- Optimized EMC compliant shielding.
- FC-Type = 'fast-connect' construction.
- IDC - Insulation Displacement Connector, displacement technology
- 2 pairs: 10/100 Mbit/s for Industrial Ethernet.
- HF-characteristics Cat.5e acc. to IEC 61156-5 (AWG22)

REMARKS

- Complies with RoHS and the 2014/35/EU Directive (Low Voltage Directive) CE.
- LABS-/silicone-free (during production).
- max. cable lengths at stated transmission rate:
Typ C: 100Mbit/s - max.85m

PRODUCT DETAILS

DESIGN

Conductor material	copper strand, tinned (7-wired) resp. bare copper strand(19-wired)
Conductor class	7- or 19-wired
Core insulation	Polyolefin
Core identification	wh,ye - bu,og
Stranding	4 cores twisted to quad
Overall shielding	alu-lamin. polyester foil, metal side outside, cover. 100% under copper braid tinned
Outer sheath material	PVC
Outer sheath color	green, RAL 6018 (GN)

ELECTRICAL PROPERTIES

Rated voltage	125 V (not for high voltage purposes)
Loop resistance	max. 115,0 Ω/km
Capacity	nom. 48 nF/km
Characteristic impedance	100 +/- 15 Ω
Data transfer rate	up to 100 Mbit/s

MECHANICAL & DYNAMIC PROPERTIES

Min. bending radius fixed	10 x d
Min. bending radius moved	7,5 x d < 3m TL 15 x d ≥ 3m TL
Traverse speed	self-supporting: 4 m/s
Traverse length	max. 10 m (TL)
Acceleration	max. 5 m/s²
Bending cycles	up to 2 Mio

THERMAL PROPERTIES

Operat. temp. fixed min/max	-40 °C / +80 °C
Operat. temp. moved min/max	-10 °C / +70 °C



FIRE BEHAVIOR

Burning behavior flame-retardant acc. to IEC 60332-1, UL/CSA types: acc. to IEC 60332-3-24, FT4

CHEMICAL RESISTANCE & OTHER

Oil resistance OIL RES acc. to UL 1277 and UL 1063; acc. to DIN EN 60811-2-1 (Mineral oil)
UV resistance SUN RES acc. to UL 1581

STANDARDS & APPROVALS

Standards acc. to EN 50173, ISO/IEC 11801, TIA/EIA 568, TSB36, EN 50288, IEC 61156-5/-6
Approvals UL/CSA types : cULus: 300V, 75°C, CMG/PLTC/SunRes/OilRes & cURus: 600 V, 60°C

ITEM OVERVIEW

PROFINET - Trailing Cat.5e PVC UL/CSA

Item no.	OEM Reference	Type	Dimension [n x 2 x AWG]	Conductor structure	Outer-Ø [mm] nom.	Outer-Ø. [inch] nom.	Weight [≈lbs/mft]
2003735	6XV1870-2D	FC SK-C-PVC UL/CSA - GN	2 X 2 X AWG 22/19	► AWG 22 (19/AWG 34) – 0,34 mm ²	6,5	0,256	47,0
2003736		FC IDC SK-C-PVC UL/CSA - GN	2 X 2 X AWG 22/7	► AWG 22 (7/AWG 30) – 0,34 mm ²	6,5	0,256	47,0