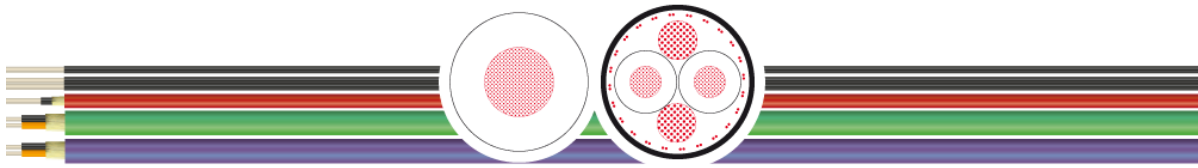


# POF - SIMPLEX, DUPLEX & BUS



for fixed installation, limited flexible &amp; flexible use, UL/CSA



## APPLICATION

as data cable for transmission optical signals for Industrial Ethernet, ICT network applications, PROFIBUS & PROFINET systems, in harsh industrial environments.

Standard: for fixed installation, with low mechanical stress, ...  
Robust: for fixed installation & limited flexible applications, at medium (PE/PUR) or very high (PA/PUR) mechanical stress, ...for machines, devices and cabinet wiring. Trailing: for highly flexible applications (e.g. power chains, gantry robots, pick and place units, conveyor systems, machine tools, etc.)

## SPECIAL FEATURES

- largely resistant to grease, coolant fluids and lubricants
- oil resistant: PUR & PVC acc. to DIN EN 60811-2-1 (PVC mineral oil only)
- UV-resistant
- easy installation, suitable for direct connector installation in the field
- bugproof, cables do not radiate
- protection of the transmission path against electromagnetic interference
- Real-time transmission of highly compressed information on large path lengths, with maximum transfer rates - Transmission length: max. 80 m
- max. cable length at stated transmission rate acc. to PI: 100 Mbit/s - max.50m

## REMARKS

- RoHS-compliant
- LABS/silicon-free (during production)
- PNO = PROFIBUS User Organization e.V.
- Special versions according to your specifications on request



## PRODUCT DETAILS

### DESIGN

<b>Conductor material</b>	fiber core: polymethylmetacrylat (PMMA)   fiber coat: fluoridated special polymer
<b>Conductor class</b>	step index fibre 980/1000 µm
<b>Core insulation</b>	polyethylene (PE - 2Y) or polyamid (PA - 4Y)
<b>Core insulation thickness</b>	<b>P980/1000</b> 2,2 mm
<b>Core identification</b>	black resp. black/orange
<b>Supporting element</b>	(ZN) - non-metallic strain relief elements (aramid)
<b>Outer sheath material</b>	PVC resp. PUR
<b>Sheath colour</b>	black RAL9005 (BK), violet RAL4001 (VT), green RAL6018(GN), orange RAL2003 (OG), resp. red RAL3000 (RD)

### ELECTRICAL PROPERTIES

<b>Attenuation</b>	max. 160 dB/km at 650 nm (Laser); max. 230 dB/km at 660 nm (LED)
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### OPTICAL PROPERTIES

<b>Optical transfer (FO)</b>	bandwidth 10 MHz x 100 m
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## MECHANICAL & DYNAMIC PROPERTIES

Min. bending radius fixed	10 x d
Min. bending radius moved	10 x d - Trailing: 10 x d < 5m TL*   15 x d ≥ 5m TL*
Traverse length (m) - drag chain	Trailing: max. 10 m (TL)
Traverse speed (m/s) - drag chain	Trailing: self-supporting: 4 m/s
Acceleration (m/s <sup>2</sup> ) - drag chain	Trailing: max. 3 m/s <sup>2</sup>

## THERMAL PROPERTIES

Operat. temp. fixed min./max. [°C]	-50 °C / +80 °C (J-V2Y)   Robust:-40°C bis +70°C
Operat. temp. moved min/max [°C]	-20 °C / +70 °C (Trailing & Robust)   installation temperature: -10 °C / +50 °C

## PROPERTIES IN CASE OF FIRE

Halogen-free	POF Robust and Trailing: acc. to IEC 60754-1 (except the fiber coatings)
Burning behavior	PVC OFNG: acc. IEC 60332-3-24(Kat.C), FT 4

## STANDARDS & APPROVALS

Approvals	UL/CSA: PVC cULus - OFNG
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## ITEM OVERVIEW

### POF - Standard - J-V2Y & J-V4Y(ZN)Y

Item no. [TKD]	Type	OEM - Ref. no.	Dimension	Outer-Ø [mm]	Cu Index [kg/km]	Weight [kg/km]
2003785	SIMPLEX PE - BK		1 P980/1000	2,2		3,8
2003786	DUPLEX PE - BK		2 P980/1000	4,4 x 2,2		7,6
2003787	DUPLEX PROFIBUS PA/PVC - VT	6XV1821-0AH10	2 P980/1000	7,8		59,0
2003788	DUPLEX PROFINET PA/PVC - GN	6XV1874-2A	2 P980/1000	7,8		59,0

### POF - Robust - J-V2Y(ZN)11Y & J-V4Y(ZN)11Y

Item no. [TKD]	Type	OEM - Ref. no.	Dimension	Outer-Ø [mm]	Cu Index [kg/km]	Weight [kg/km]
2003789	SIMPLEX PE/PUR - RD		1 P980/1000	3,6		11,0
2003790	DUPLEX PE/PUR - OG		2 P980/1000	5,5		30,0
2003792	DUPLEX PROFIBUS PA/PUR - VT		2 P980/1000	8,0		52,0
2003791	DUPLEX PROFINET PA/PUR - GN		2 P980/1000	8,0		52,0

### POF - Trailing - J-V2Y(ZN)11Y & J-V4Y(ZN)11Y

Item no. [TKD]	Type	OEM - Ref. no.	Dimension	Outer-Ø [mm]	Cu Index [kg/km]	Weight [kg/km]
2003793	SIMPLEX SK-PE/PUR - RD		1 P980/1000	6,0		30,0
2003794	DUPLEX SK-PE/PUR - OG		2 P980/1000	6,0		31,0
2003795	DUPLEX PROFIBUS SK-PA/PUR - VT		2 P980/1000	8,0		53,0
2003796	DUPLEX PROFINET SK-PA/PUR - GN	6XV1874-2B	2 P980/1000	8,0		53,0