



as fieldbus cable for PROFIBUS (Process Field BUS) systems, for high flexible applications (e.g. power chains, gantry robots, pick&place units, conveyors, machine tools, automated production systems, etc.)

Standard acc. to Profibus-Spec.: EN61158 & EN61784 (DIN19245 T3 & EN50170)



- low adhesion
- largely resistant to grease, coolant fluids and lubricants
- oil-resistant: PUR & PVC acc.to DIN EN 60811-2-1 (PVC only mineral oil)
- UV-resistant
- optimized EMC compliant shielding
- max. cable lengths for a bus segment acc.to PI at stated transmission rate:
PROFIBUS DP: 93,75kbit/s-max.1,2km | 187,5kbit/s-max.1km | 0,5Mbit/s-max.400m
 1,5 Mbit/s-max.200m | 12,0 Mbit/s-max.100m
FIP : 2,5 Mbit/s-max. 200m

- conform to RoHS // conform to DESINA (violet)
- LABS-silicone-free (during production)
- conform to 2014/35/EU-Guideline ("Low-Voltage Directive") CE
- FRNC: Flame Retardant Non Corrosive, halogen free
- FC-Type = 'fast-connect' construction // PI = Profibus & Profinet International

Conductor material:	Bare copper strand
Conductor class:	Ø 0,64L & 0,34 mm²; 19-wired; 1,0 mm²: fine wired acc. to IEC 60228 cl. 6
Core insulation:	BUS: foamed PE/PP; supply cores: Polyolefin
Core identification:	BUS: gn, rd; supply cores: bk, bu, gnye (1,0mm²) bk with numerals (1,5mm²)
Stranding:	BUScores stranded to a pair
Shield:	Alu-lam. polyester foil, metal side outside, coverage 100% under copper braid tinned
Overall stranding:	HYBRID: screened BUSelem. a. supply cores stranded
Outer sheath:	PVC resp. PUR
Outer sheath construction:	Violet RAL 4001 (VT) or petrol (PT)
Rated voltage:	BUScores: 250 V (not for high voltage purposes); supply cores: 500 V
Loop resistance:	Max. 133,0 Ω/km-0,64L & 0,8L, max. 39,0 Ω/km-1 mm², max. 26,6 Ω/km-1,5 mm²
Capacity:	Nom. 30 nF/km
Characteristic impedance:	150 +/- 15 Ω
Min. bending radius fixed:	5 x d
Min. bending radius moved:	7,5 x d < 3mTL* 15 x d ≥ 3mTL*, FESTOON: 10 x d
Operat. temp. fixed min/max:	-40 °C / +80 °C
Operat. temp. moved min/max:	PVC: -10 °C / +70 °C; PUR: -30 °C/ +70 °C
Halogen free:	Acc. to IEC 60754-1 (FRNC types)
Burning behavior:	PVC CMG: acc. IEC 60332-3-24(Cat.C), FT 4 PUR: acc. IEC 60332-1-2 PUR CMX: acc. IEC 60332-1-2, VW-1
Torsion:	TORSION: ± 180°/m
Approvals:	See table right side
Speed:	Self-supporting: 4 m/s
Acceleration:	Max. 5 m/s² TORSION: max. 10 m/s²

Product No.	Dimension [n x mm²]	Outer-Ø [mm]	Cu-Index [kg/km]	Weight [kg/1.000]	sheath colour	Variant
2003646	1X2X0,64L (AWG23/19)	7,8	30,00	65,00	violet	V1: PROFIBUS DP - Trailing
2003647	1X2X0,64L (AWG23/19)	7,8	30,00	78,00	violet	V1: PROFIBUS DP - Trailing
2003648	1X2X0,64L (AWG23/19)	7,8	30,00	78,00	petrol	V1: PROFIBUS DP - Trailing
2003649	1X2X0,64L (AWG23/19)	8,0	30,00	70,00	violet	V1: PROFIBUS DP - Trailing
2003650	1X2X0,64L(AWG23/19)+3G1(AWG18)	9,9	60,00	108,00	violet	V2.1: PROFIBUS DP - HYBRID
2003651	1X2X0,64L(AWG23/19)+2X1,5(AWG16)	11,0	60,00	128,00	violet	V2.1: PROFIBUS DP - HYBRID

Product No.	Dimension [n x mm²]	Outer-Ø [mm]	Cu-Index [kg/km]	Weight [kg/1.000]	sheath colour	Variant
2003652	1X2X0,64L(AWG23/19)+2X1,5(AWG16)	11,0	60,00	131,00	violet	V2.1: PROFIBUS DP - HYBRID
2003653	1X2X0,64L(AWG23/19)+4X1,5(AWG16)	11,0	90,00	162,00	violet	V2.2: PROFIBUS DP - ECOFAST
2003654	1X2X0,64L(AWG23/19)+4X1,5(AWG16)	11,0	90,00	170,00	violet	V2.2: PROFIBUS DP - ECOFAST
2003655	1 X 2 X 0,8L (AWG22/19)	8,2	31,00	75,00	violet	V3: PROFIBUS DP - TORSION
2003656	1 X 2 X 0,64L (AWG23/19)	8,0	30,00	71,00	petrol	V4: PROFIBUS DP - Festoon
2003657	1 X 2 X 0,64L (AWG23/19)	8,0	30,00	75,00	petrol	V4: PROFIBUS DP - Festoon