



## USE OF CABLE

as fieldbus cable for PROFIBUS (Process Field BUS) systems, for fixed installation & limited flexible applications.

These cables are suitable for PROFIBUS DP (Decentralized Peripherals) and PROFIBUS FMS (Fieldbus Message Specification) and also for FIP (Factory Instrumentation Protocol) applications.

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



## SPECIAL FEATURES

- largely resistant to grease, coolant fluids and lubricants
- oil-resistant: PUR & PVC acc.to DIN EN 60811-2-1 (PVC only mineral oil)  
Marine MUD acc.to NEK 606 (drilling mud)
- UV-resistant: PUR; FEP; PVC & PE black; CMG & CMX types
- 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

## REMARKS

- 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

## PRODUCT INFORMATION

Conductor material:	Bare copper wire resp. bare copper strand
Conductor class:	Ø 0,64 mm: solid; Ø 0,64L & 0,34 mm <sup>2</sup> : 7-wired; 1,0 mm <sup>2</sup> : fine wired acc. to IEC 60228 cl. 5
Core insulation:	BUS: foamed Polyolefin resp. foamed FEP; supply cores: Polyolefin
Core identification:	BUS: gn, rd; supply cores: bk, bu, gnye
Stranding:	BUScores stranded to a pair
Shield:	Alu-lamin. polyester foil, metal side outside, cover. 100% under copper braid tinned
Overall stranding:	HYBRID: screened BUSElem. a. supply cores stranded
Outer sheath:	PVC, PE, FEP, PUR, XP, HP, halogen-free compound
Sheath colour:	Violet RAL4001(VT), blue RAL5015(BU) or black(BK)
Rated voltage:	BUScores: 250 V (not for high voltage purposes); supply cores: 500 V
Loop resistance:	Max. 110,0 Ω/km - 0,64 mm; max. 175,2 Ω/km - 0,64L; max. 39,0 Ω/km - 1,0 mm <sup>2</sup>
Capacity:	Nom. 30 nF/km
Characteristic impedance:	150 +/- 15 Ω
Min. bending radius fixed:	7,5 x d
Min. bending radius moved:	15 x d
Operat. temp. fixed min/max:	FRNC, XP: -25 °C/+80 °C   PE: -40 °C/+70 °C   PVC, PUR, HP: -40 °C/+80 °C   PVCExt.: -40 °C/+105 °C   FEPExt.: -50 °C/+180 °C
Operat. temp. moved min/max:	-10 °C/+70 °C; PUR, FEP: -30 °C/+80 °C
Halogen free:	Acc. to IEC 60754-1 (FRNC types)
Burning behavior:	PE: not flame retardant   PVC+Marine C-XP: acc. to IEC 60332-1-2   AWM: acc. to IEC 60332-1-2, cable flame test (UL 2556)   CMX: acc. to IEC 60332-1-2, FT1, VW-1   CMG: acc. to IEC 60332-3-24(Cat.C), FT4   CM: acc. to IEC 60332-3-24(Cat.C), UL FlameExposure (UL 1685/CSA)   Marine C-HP: acc. to IEC 60332-3-22(Cat.A/F)
Approvals:	See table right side

## ITEM OVERVIEW

Product No.	Dimension [n x mm <sup>2</sup> ]	Outer-Ø [mm]	Cu-Index [kg/km]	Weight [kg/1.000]	sheath colour	Variant
2003630	1X2X0,64 (AWG 22/1)	7,0	26,00	50,00	violet	V1: PROFIBUS DP - STANDARD
2003631	1X2X0,64 (AWG 22/1)	7,8	30,00	75,00	violet	V1: PROFIBUS DP - STANDARD
2003632	1X2X0,64 (AWG 22/1)	7,8	30,00	75,00	blue	V1: PROFIBUS DP - STANDARD
2003633	1X2X0,64L(AWG 24/7)+3G1(AWG 18)	9,8	60,00	108,00	violet	V2: PROFIBUS DP - HYBRID
2003634	1X2X0,64 (AWG 22/1)	8,0	30,00	82,00	violet	V3: PROFIBUS DP - TRAY
2003635	1X2X0,64L (AWG 24/7)	8,0	30,00	74,00	violet	V4: PROFIBUS DP - Flexible
2003636	1X2X0,64 (AWG 22/1)	7,8	30,00	77,00	violet	V5: PROFIBUS DP - FRNC

# PROFIBUS DP / FMS / FIP 150 Ohm

Product No.	Dimension [n x mm <sup>2</sup> ]	Outer-Ø [mm]	Cu-Index [kg/km]	Weight [kg/1.000]	sheath colour	Variant
2003637	1X2X0,64 (AWG 22/1)	10,0	30,00	98,00	black	V6: PROFIBUS DP - Burial
2003638	1X2X0,64 (AWG 22/1)	10,0	30,00	98,00	black	V6: PROFIBUS DP - Burial
2003639	1X2X0,64 (AWG 22/1)	8,0	30,00	89,00	violet	V7: PROFIBUS DP - Robust
2003640	1X2X0,64 (AWG 22/1)	7,8	30,00	65,00	black	V8: PROFIBUS DP - Food