

Feedback cables PUR high flexible feedback cables for drag chain, EMC-preferred type, meter marking



Technical data	Cable structure	Properties
Temperature range flexing -30°C to +80°C fixed installation -40°C to +80°C Nominal voltage TOPFLEX®-PUR 350 V Tachofeedback-cable-C-PUR 450 V Incremental Feedback-cable-C-PUR 250 V Test voltage core/core 2000 V core/screen 1000 V Insulation resistance min. 20 MOhm x km Minimum bending radius flexing 10x cable Ø fixed installation 5x cable Ø Coupling resistance max. 250 Ohm/km Radiation resistance up to 100x10 ⁶ c J/kg (up to 100Mrad)	Bare copper-conductor, to DIN VDE 0295 cl. 6, extra fine-wire, BS 6360 cl. 6 IEC 60228 cl. 6 Core insulation of PP Part No. 22847 Cu-screen of single pairs or single cores and PETP (polyethylene terephthalate) sheath Core identification see table below Single cores or pairs stranded in layer with optimal lay-length Drain wire Core wrapping with film Tinned copper braided screen, approx. 85% coverage Outer sheath of special PUR, matt Sheath colour see table below	Special PUR outer sheath low adhesion Resistant to Oils and fats Acids and alkalis Hydraulic fluids Oxygen and ozone UV-radiation Hydrolysis Microbial attack Water and weathering effects The high abrasion resistance and notch resistance meet the highest requirements The materials used in manufacture are cadmium-free and contain no silicone and free from substances harmful to the wetting properties of lacquers

Note

For extreme applications extending beyond standard solutions we recommend that you request our questionnaire, which has been especially designed for energy supply systems. Please observe the assembly instruction for use in energy supply chains. AWG sizes are approximate equivalent values. The actual cross-section is in mm².

Application

Both cables fulfil different tasks for the control of servo-motors. The tachofeedback-cable or response cable serves the regulation of the motor speed and measurement of the actual values. The incremental feedback-cable or position response cable transfers the control signals for positioning and engineering characteristics and is used as the flexible connecting cable for tachometer, brakes and pulse transmitter in case of high mechanical stress in plant, machine and control engineering in dry, moist and wet rooms. Particularly suitable for continuous operating in drag chains, industrial robotics and handling equipment as these cables enable an excellent transmission of data and signals. Additional cores for the power supply to individual components are available. The braided screen guarantees reliable signal transmission. Optimum functionality, long service life and an excellent cost-performance ratio are given for the mentioned applications by the special compounds used for insulation and sheath.

EMC = Electromagnetic compatibility

To optimize the EMC features we recommend a large round contact of the copper braiding on both ends.

CE = The product is conformed with the EC Low-Voltage Directive 2006/95/ECs and alkalis

TOPFLEX®-PUR

Part No.	No. cores x cross-sec. mm ²	Core marking 0,14 mm ²	Core marking 0,5 mm ²	Sheath colour	Outer Ø approx. mm	Cop. weight kg/km	Weight approx. kg/km	AWG-No.
22847	(3 x (2 x 0,14) + (2 x 0,5))	DIN 47100	WH, BN	Grey	8,3	78,0	103,0	26
22852	4 x 2 x 0,14 + 4 x 0,5	BN+GN, YE+VT, GY+PK, RD+BU	WH, BN, WH/GN, BN/GN	Grey	8,4	73,0	105,0	26
22849	(10 x 0,14 + 2 x 0,5)	DIN 47100	WH, BN	Grey	7,2	39,0	83,0	26

Tachofeedback-cable

Part No.	No. cores x cross-sec. mm ²	Core marking 0,14 mm ²	Core marking 0,5 mm ²	Sheath colour	Outer Ø approx. mm	Cop. weight kg/km	Weight approx. kg/km	AWG-No.
22823	(9 x 0,5)	WH, BN, GN, YE, GY, PK, BU, RD, BK		Orange	8,8	80,8	128,0	20

Incremental feedback-cable

Part No.	No. cores x cross-sec. mm ²	Core marking 0,14 mm ²	Core marking 0,5 mm ²	Sheath colour	Outer Ø approx. mm	Cop. weight kg/km	Weight approx. kg/km	AWG-No.
22818	(4 x 2 x 0,25 + 2 x 1,0)	RD+BK, BN+GN, YE+VT, GN+PK	WH, BN	Oorange	8,8	65,0	105,0	24