ZB7003-xxxx | EtherCAT P cable, shielded, PUR, fixed installation, (1 x 4 x AWG22/7), black with red stripe, OD = 5.1 mm (±0.15 mm)

Electrical data	
Rated voltage	max. 300 V (peak value, not for high voltage purposes)
Attenuation of shielding	≥ 65 dB (30...100 MHz)
Insulation resistance	≥ 500 MΩ * km (DIN EN 50395)
Unbalanced capacitance to ground	≤ 2000 pF/km
Mutual capacitance	45 ± 15 pF/m at 800 Hz according to EN 50289-1-5
Characteristic impedance (Ethernet)	100 Ω ±5 Ω (100 MHz) (EN 50289-1-11)
Loop resistance	≤ 110 Ω/km
Signal running time (Ethernet)	4.8 ns/m
Electrical parameters (Ethernet)	CAT 5e according to IEC 61156-6
Test voltage	1000 V, 50 Hz, 1 min. (wire/wire and wire/screen)
Mechanical data	
Cable structure (Ethernet)	star quad
Cross section (Ethernet)	0.34 mm² (AWG 22/7)
Min. bending radius, moved	8 x outer cable diameter
Min. bending radius, fixed installation	5 x outer cable diameter
Weight	50 kg/km (33.6 lb/1000 ft)
Outer cable diameter	5.1 mm ± 0.15 mm (0.200787" ± 0.0059")
Conductor material (Ethernet)	copper, tinned
Optical covering factor of shielding (Ethernet)	≥ 85 %
Use	fixed installation
Jacket colour	black (RAL 9005) with red stripe (RAL 3020)
Material jacket	PUR (polyurethane)
Wire colour code	yellow, orange, white, blue
Wire insulation material	Polyolefine
Printing on the jacket	Beckhoff Automation GmbH & Co. KG - Germany - EtherCATp Cat5e AWG22/7 E170315 AWM 21198 AWM I/II A/B 80°C 300 V
Printing colour	white
Environmental data	
Operation temperature range, moved	-30…+80 °C, -22…+176 °F
Operation temperature range, fixed installation	-40…+80 °C, -40…+176 °F
UV resistance	yes
Oil resistance	HD 22.10 annex A (DIN EN 60811-404)
Flame-retardant	FT-2
CFC-free	yes
Halogen-free	DIN VDE 0472 part 815
Silicone-free	yes

Attenuation								
Max. insertion loss								
Frequency [MHz]	1	4	10	16	20	31.25	62.5	100
[db/100 m]	3.3	5.3	7.5	9.1	10.1	12.4	17.6	22.5
[db/100 ft]	1	1.6	2.3	2.8	3.1	3.8	5.4	6.9
Min. near-end crosstalk attenuation								
Frequency [MHz]	1	4	10	16	20	31.25	62.5	100
[db/100 m]	65	56.3	50.3	47.2	45.8	42.9	38.4	35.3
[db/100 ft]	19.8	17.2	15.3	14.4	14	13.1	11.7	10.8

Notes

- The following length tolerances apply: 2-3 %
- Illustrations similar

Ordering information	Length
ZB7003-xxxx	sold by the metre