



Fibre optic | Z1103

plastic fibre optics, 1,000 µm, PUR sheat ø 6 mm, heavy duty, drag-chain suitable

Cable

Transmission Characteristics	
Attenuation at 650 nm (Laser)	< 160 dB/km
Attenuation at 660 nm (LED)	< 230 dB/km
Bandwidth at 650 nm	> 10 MHz x 100 m
Numerical aperture	0.50
Design	
Fiber	Polymer optical fiber 980/1000 µm, PMMA with fluorine polymer cladding
Fiber diameter	1.0 mm
Cord jacket material	Polyamide (PA)
Cord jacket color	black
Cord jacket diameter	2.2 mm
Strain Relief	Aramid yam
Outher jacket material	Polyurethan (TPE-U)
Outher jacket thickness	1.7 mm
Outher jacket color	orange
Outher diameter	6.0 mm (typical)
Imprint (black)	E47543 A UL AWM STYLE 5422 80C VW-1 -- BECKHOFF Z1103 - I (meter imprintr. xxx,x m)
Mechanical data	
Usage	Suited for applications in heavy industrial environment.
Laying	Polymer fiber optic cable for adverse industrial environments and flexible applications with low mechanical stress and installations in cable ducts, tubes and trays
Drag chain suitable	yes
Direct connector assembly	yes
Min. bending radius short-term (installation)	50 mm
Min. bending radius long-term (operation)	30 mm
Max. tensile force short-term (installation)	500 N
Max. tensile force long-term (operation)	200 N
Crush short-term (installation)	2000 N/dm
Crush long-term (operation)	200 N/dm
Alternate bending strength	30.000 cycles
Drag chain test	Radius 10 x cable diameter, 2 million cycles
Impact strength max.	Radius 300 mm, 10 strokes with an energy of 4 Nm, stroke frequency: 30 min ⁻¹
Abrasion resistance	according to DIN VDE 0888, part 100, procedure 502 min. 5.000 cycles, 1mm radius of pin point, 5N
Weight	ca. 32 kg/km
Environmental data	
Ambient temperature, transport/storage	-40 °C to +80 °C (-40 °F to 176 °F)
Ambient temperature, installation	-5 °C to +50 °C (23 °F to 122 °F)
Ambient temperature, operation	-20 °C to +70 °C (-4 °F to 158 °F)
Fire-properties	UL VW-1, vertical flame test approved
Standards	IEC 60793-2-40 :2002-0, IEC 61491: 1995-11 (SERCOS), UL 758 AWM Style 5422