

## Festoonfiberflex loose tube optical cable for data transmission

### Cable type

**FESTOONFIBERFLEX**  
 Rubber sheathed exible bre-optics cable

### Main application

Flexible signal and data transmission cables for use on cranes and material handling equipment, suitable for use on festoon systems, simple reeling. Fibre-optics for absolute immunity from electrical interferences.

### Construction

<b>Fibre optics:</b>	Core diameter: 50 µm, 62,5 µm, 9µm Cladding 125 µm, coating 250 µm Main type 62,5/125, the others on request
<b>Tubes:</b>	Basic material PBTF Hollow core with filling compound
<b>Cores identification:</b>	Color code for tubes (pilot directional system) Different fibre colour in case of 2 or 3 fibres per tube
<b>Tubes arrangement:</b>	Six tubes specially laid-up around a central support element - main construction 6 fibre-optics (1 fibre per tube) - on request 12, 18 fibre-optics (2 or 3 fibres per tube)
<b>Antitwisting protection:</b>	Double layer of synthetic yarns of aramidic fibres
<b>Outer sheath:</b>	Black polychloroprene based compound UV resistant, oil and chemical resistant better than 5GM2 compound
<b>Marking:</b>	PALAZZO - FESTOONFIBERFLEX <i>n. of fibres</i> <i>than type</i>

### Parameters

Optical		Graded index fibre		Single mode fibre	
		50/125	62,5/125	E9/125	
	Fiber type				
	Max attenuation at 850 nm	dB/km	2,8	3,0	-
	Max attenuation at 1300 nm	dB/km	0,8	0,9	-
	Max attenuation at 1310 nm	dB/km	-	-	0,4
	Max attenuation at 1550 nm	dB/km	-	-	0,3
	Bandwidth at 850 / 1300 nm	MHz	≥ 400/800	≥ 160/500	-
	Numerical aperture		0,200 ± 0,02	0,275 ± 0,02	-
	Mode field diameter at 1310 nm	µm	-	-	9,2 ± 0,4
	Chromatic dispersion				
	at 1300 nm	ps/(nm x km)	-	-	< 3,5
	at 1550 nm	ps/(nm x km)	-	-	< 18
<b>Thermal</b>	Fully flexible operation				- 25 °C to +60 °C
	Fixed installation				- 40 °C to +80 °C
<b>Mechanical</b>	Tensile load				1200 N max
	Minimum bending radii				200 mm
	Reeling operation (NO RANDOM WOUND REEL)				Up to 120 m/min
	Festoon /cable tender systems				Up to 240 m/min
<b>Chemical</b>	Resistance to oil				According to VDE / IEC standard
	Weather resistance				Unrestricted use outdoor and indoor, UV resistant, moisture resistant.



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**Table 1: FESTOONFIBERFLEX**

N. of fibers and dimension	Fibre x tubes  (n)	Overall diameter		Net weight approx.  kg/km	Max. permissible tensile force  N
		min. value	max. value		
		mm	mm		
6062,5/125*	1	13,0	15,0	230	1.200
6050/125	1	13,0	15,0	230	1.200
6E9/125	1	13,0	15,0	230	1.200
12062,5/125	2	13,0	15,0	230	1.200
12050/125	2	13,0	15,0	230	1.200
12E9/125	2	13,0	15,0	230	1.200
18062,5/125	3	13,5	15,5	230	1.200
18050/125	3	13,5	15,5	230	1.200
18E9/125	3	13,5	15,5	230	1.200

\* Main type.