

## Festoonfiberflex loose tube optical cable for data transmission

### Cable type

**FESTOONFIBERFLEX**  
Rubber sheathed flexible fibre-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

Fibre optics:	Core diameter: 50 µm, 62,5 µm, 9µm. Cladding 125 µm, coating 250 µm Main type 62,5/125, the others on request
Tubes:	Basic material PBTf Hollow core with filling compound
Cores identification:	Color code for tubes (pilot directional system) Different fibre colour in case of 2 or 3 fibres per tube
Tubes arrangement:	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)
Antitwisting protection:	Double layer of synthetic yarns of aramidic fibres
Outer sheath:	Black polychloroprene based compound UV resistant, oil and chemical resistant better than 5GM2 compound
Marking:	PALAZZO - FESTOONFIBERFLEX n. of fibres & type

### Parameters

		Graded index fibre		Monomode fibre	
		50/125	62,5 /125	E9/125	
Optical	Max attenuation at 850 nm	dB/km	2,8	3,0	-
	Max attenuation at 1300 nm	dB/km	0,8	0,9	0,4
	Max attenuation at 1550 nm	dB/km	≥ 400/800	≥ 160/500	0,3
	Bandwidth at 850 / 1300 nm	MHz	0,200 ± 0,02	0,275 ± 0,02	-
	Chromatic dispersion				
	at 1300 nm	ps/(nm x km)	-	-	< 3,5
	at 1550 nm	ps/(nm x km)	-	-	< 18
	Thermal	Fully flexible operation		- 20 °C to +60 °C	
		Fixed installation		- 40 °C to +80 °C	
	Mechanical	Tensile load		1200 N max	
Minimum bending radii			200 mm		
Reeling operation			Up to 120 m/min (NO RANDOM WOUND REEL)		
Festoon /cable tender systems			Up to 240 m/min		
Chemical	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 mm	max. value mm		
6G62,5/125*	1	13,0	15,0	230	1200
6G50/125	1	13,0	15,0	230	1200
6E9/125	1	13,0	15,0	230	1200
12G62,5/125	2	13,0	15,0	230	1200
12G50/125	2	13,0	15,0	230	1200
12E9/125	2	13,0	15,0	230	1200
18G62,5/125	3	13,5	15,5	230	1200
18G50/125	3	13,5	15,5	230	1200
18E9/125	3	13,5	15,5	230	1200

\*Main type