

## Festoonfiberflex loose tube optical cable for data transmission

### 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>	U.T.V. CAVI manufactured BY PALAZZO - FESTOONFIBERFLEX n. of fibres & type

### PARAMETERS

	Fiber type	Graded index fibre		Single mode 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	-	-	0,3
	Bandwidth at 850 / 1300 nm	MKz	≥ 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
	<b>Chromatic dispersion</b>				
	at 1300 nm dB/km	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.

If the environment reaches - 40 °C, Palazzo can provide a special version of this cable (differentiated from the standard one by the "-K" add to the code name), which is constructed with a special rubber compound that can face this condition. For temperature down to - 40 °C we suggest to use the Panzerflex-K. To allow this cable operating at - 40°C we use an outer-sheath compound that is less resistant to abrasion and tear so please contact our sales department for more information regarding application.



### FESTOONFIBERFLEX

Rubber sheathed  
exible fibre-optics  
cable

## TABLE 1 - FESTOONFIBERFLEX

LOW VOLTAGE REELING AND FESTOONING

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