










PUR Fiber optic cable | CFLK

- Plastic Optical Fibers (POF) for high mechanical load requirements and interference-free transmission
- PUR outer jacket
- Oil-resistant and coolant-resistant







Dynamic Information

	Bend radius	E-Chain®	min. 12.5 x d
		flexible	min. 10 x d
		fixed	min. 7 x d
	Temperature	E-Chain®	-4 °F to +140 °F (-20 °C to +60 °C)
		flexible	-40 °F to +176 °F (-40 °C to +80 °C)
		fixed	-58 °F to +140 °F (-50 °C to +60 °C)
	v max.	unsupported	32.81 ft/s (10 m/s)
		gliding	16.41 ft/s (5 m/s)
	a max.		65.6 ft/s ² (20 m/s ²)
	Travel distance		Unsupported travel distances and for gliding applications up to 66 ft (20 m), Class 3

Cable structure

	Fibers		980/1000 µm fiber with PE Insulation.
	Conductor construction		Polymer Optical Fiber cabled with high-tensile plastic reinforcement.
	Color code		Core black.
	Outer jacket		Low-adhesion mixture on the basis of PUR, adapted to suit the requirements in E-Chains® (following DIN VDE 0282 Part 10). Color: Red lilac (comparable RAL 4001)

Properties and approvals

	UV resistance		Medium
	Oil resistance		Oil-resistant (following DIN EN 50363-10-2), Class 3
	Silicone-free		Free from silicone which can affect paint adhesion (following PV 3.10.7 – status 1992)
	Halogen-free		Following EN 50267-2-1
	Lead-free		Following 2011/65/EC (RoHS-II)
	CE		Following 2014/35/EG

 Configurators ► www.igus.com/CFLK

Requirements	low	1	2	3	4	5	6	7	highest
Travel distance	unsupported	1	2	3	4	5	6	1,312 ft +	
Oil-resistance	none	1	2	3	4	highest			
Torsion	none	1	2	3	±180°				

Class 5.3.3.1

Guaranteed lifetime according to guarantee conditions (Page 22-25)

Cycles*		5 million			7.5 million		10 million
Temperature, from/to [°F]	v max. [ft/s]	a max. [ft/s ²]	Travel distance [ft]	R min. [factor x d]	R min. [factor x d]	R min. [factor x d]	
	unsupported	gliding					
-4 / +14				15	16	17	
+14/ +122	32.81	16.41	≤ 65.62	12.5	13.5	14.5	
+122/ +140				15	16	17	

* Higher number of cycles possible - please ask for your individual calculation.

Typical application areas

- For high mechanical load requirements
- Maximum EMC safety
- Almost unlimited resistance to oil
- Preferably indoor applications
- Unsupported travel distances and for gliding applications up to 66 ft (20 m)
- Wood/stone processing, packaging industry, supply systems, handling, adjusting equipment

Part No.	Fiber Count	Fiber Diameter approx. [µm]	Outer diameter max.		Weight	
			in.	mm	lbs/mft	kg/km
CFLK-L1-01	1	980/1000	0.24	6.0	16.8	25
CFLK-L1-02	2	980/1000	0.28	7.0	20.8	31

Note: The mentioned outer diameters are maximum values.

Part No.	Bandwidth [MHz x km] @ 650 nm	Attenuation [dB/km] @ 650 nm	Fiber identification
CFLK-L1-01	40	200	black
CFLK-L1-02	40	200	black



Woodworking machines with E-Chains® and Chainflex® cables

