

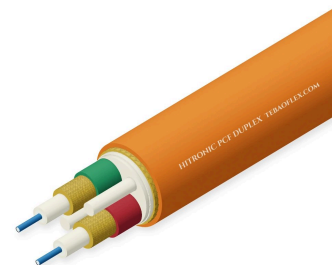


fiber optic cable series

PCF Duplex Industrial FO

PCF Duplex Polymer-Clad Silica Industrial Fibre Optic Cable

200/230 μm Polymer-Clad Silica (PCF / HCS) drag-chain & industrial duplex optical cable

200/230 μm PCF (A4a.2)

5M+ Drag-Chain Cycles

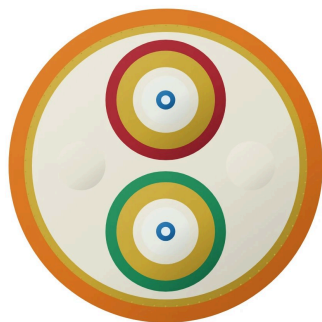
PROFINET / Industrial

Application

HITRONIC PCF DUPLEX Polymer-Clad Silica Industrial Fibre Optic Cable with 200 μm pure silica glass core and 230 μm fluoropolymer cladding, aramid strain relief, and oil-resistant PUR or flame-retardant LSZH jacket for 5+ million.

Typical uses: PROFINET & Profibus Optical Factory Links, Medium-Voltage VFD & IGBT Gate Firing, CNC Machine Tool & Robotics Drag Chains, Wind Turbine Converter & Slip-Ring Optics, Automated Crane & Intralogistics Gantries

Construction



Cross-section, not to scale

- 1 200/230 μm PCF optical waveguide
- 2 $\varnothing$ 2.2 mm simplex sub-cable jackets
- 3 Aramid yarn & flexing filler bed
- 4 Industrial PUR or LSZH outer sheath

IEC 60793-2-40 Category A4a.2

Technical data

Typical values

Galvanic isolation	100 % metal-free dielectric HV & EMC isolation	Data rate & reach	100 Mbps up to 400 m (850 nm) · 100 m (650 nm)
Numerical aperture (NA)	0.37 ± 0.02 (high coupling efficiency with LED/VCSEL)	Operating temp (fixed)	-40 °C to +70 °C (+85 °C sub-units)
Operating temp (flexing)	-20 °C to +70 °C in drag chains	Storage temperature	-40 °C to +80 °C
Core / cladding / buffer Ø	200 µm / 230 µm / 500 µm (sub-unit Ø 2.2 mm)	Drag-chain endurance	≥ 5,000,000 cycles at R ≥ 10 × OD
Max. tensile load	800 N (short-term) · 400 N (permanent)	Crush resistance	1,500 N / 100 mm (round jacket)
Attenuation @ 650 nm	≤ 8.0 to 10.0 dB/km	Attenuation @ 850 nm	≤ 6.0 dB/km
Bandwidth-length product	≥ 17 MHz·km @ 850 nm	Oil & coolant resistance	EN 60811-404 / ASTM Oil No. 2 resistant (PUR)
Flame retardancy	IEC 60332-1-2 & UL 1581 VW-1	Halogen-free & UV	IEC 60754-1/2 halogen-free & UV-stabilised
Standards	IEC 60793-2-40 Category A4a.2 (200/230 PCF)		

Sizes

4 standard constructions

Tick the sizes you need and send this page to info@tebaoflex.com or WhatsApp +86 185 9591 3361.

Order designation	Profile & sheath material	Outer Ø mm	Weight ≈ kg/km	Max. pull N	Min. flex R mm
200/230 µm PCF (HCS) Duplex Industrial Cables 4 sizes					
☐ HITRONIC PCF DUPLEX ZIP-PUR	2×200/230 PCF · 2.2×4.4 mm Zipcord PUR	4.4	14	400	45
☐ HITRONIC PCF DUPLEX FD-PUR	2×200/230 PCF · Round Drag-Chain PUR	7.2	46	800	72
☐ HITRONIC PCF DUPLEX LSZH	2×200/230 PCF · Round Flame-Retardant LSZH	7.2	52	800	72
☐ HITRONIC PCF DUPLEXPN-HD	2×200/230 PCF · Heavy-Duty PUR (1,000 N)	8.0	58	1,000	80

– All 2.2 mm sub-units accept standard crimp-and-cleave SC-RJ, ST, SMA 905 and Versatile Link (HFBR) connectors.

Standards and approvals

- ✓ IEC 60793-2-40 (A4a.2 PCF)
- ✓ PROFINET / IEC 61784-5-3
- ✓ UL VW-1 · RoHS 2 & REACH

Certifications



Management systems: ISO 9001, ISO 14001, ISO 45001

Request a quotation

Send the size, length and destination. An application engineer replies within 2 business hours.

WhatsApp / phone

+86 185 9591 3361

Email

info@tebaoflex.com

Web

tebaoflex.com/cables/hitronic-pcf-duplex-polymer-clad-silica-industrial-fibre-optic-cable



Typical values for this cable type, based on IEC 60793-2-40 (A4a.2) / EN 50173 / PROFINET. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.