fiber optic cable series

# Air-Blown Microduct Fibre (EPFU)

## Air-Blown Microduct Fibre Optic Unit & Microcable (12–864F)



Ultra-high-density (12 to 864F) 200 µm & 180 µm air-blown microduct fibre cables &

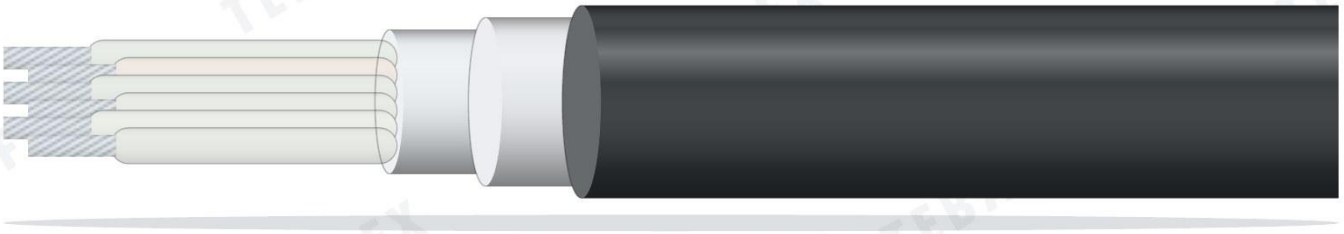
IEC 60794-5-10/20 | 180 / 200 / 250 µm | 12 to 864 Fibres

## Application

Air-Blown Microduct Fibre, High-Density Microcable & Extreme-Density Microcable Air-Blown Microduct Fibre Optic Unit & Cable series engineered per IEC 60794-5-10/5-20 with 250 µm, 200 µm (HD) and 180 µm (XT) bend-insensitive G.657.A1/A2 fibres for

**Typical uses:** Hyperscale Data-Centre Interconnects (DCI), FTTH / FTTx Metro Access Networks, 5G Mobile Fronthaul & Backhaul Ducts, Smart Highway & Railway Trackside Ducts, Utility & Campus Microduct Infrastructure

## Construction





Cross-section, not to scale

1. 250 µm / 200 µm (HD) / 180 µm (XT) optical fibres
2. Thin-wall colour-coded micro-tubes (or acrylate EPFU matrix)
3. Central dielectric FRP rod & dry water-block
4. Low-friction virgin HDPE micro-sheath

## Technical data

Typical values

| | | | |
|---|---|---|---|
| Dielectric design | 100 % metal-free all-dielectric construction | Glass cladding diameter | 125.0 µm ± 0.7 µm across all 250/200/180 µm tiers |
| Mode field diameter | 8.6 to 9.2 µm ± 0.4 µm @ 1310 nm | Operating temperature | -30 °C to +70 °C (-40 °C on 12–144F standard) |
| Installation (blowing) temp. | -10 °C to +50 °C | Storage temperature | -40 °C to +70 °C |
| Outer diameter range | 1.1 mm (4F EPFU) · 5.5 mm (288F XT) · 9.7 mm (864F) | Max. blowing / pulling load | 15 N (EPFU) · 700 N to 1,800 N (microcables) |
| Crush resistance | 500 N to 1,000 N / 100 mm | Min. bend radius | 15 × OD (static) · 20 × OD (blowing) |
| Attenuation @ 1310 nm | ≤ 0.35 dB/km | Attenuation @ 1550 / 1625 nm | ≤ 0.21 dB/km @ 1550 nm · ≤ 0.23 dB/km @ 1625 nm |
| PMD link design value | ≤ 0.06 ps/√km | Water penetration | IEC 60794-1-22 Method F5B longitudinal block |
| Blowing track performance | ≥ 1,000–2,500 m on IEC 60794-1-21 Method E19 track | Sheath friction coeff. | µ ≤ 0.12 against ribbed/silicone-lined HDPE microducts |
| Standards | IEC 60794-5-10 & IEC 60794-5-20 (EPFU) | | |

## Sizes

7 standard constructions

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

| Order designation | Fibre count & coating | Cable Ø mm | Weight ≈ kg/km | Max. pull N | Min. duct ID mm |
|---|---|---|---|---|---|
| **Air-Blown Microduct Fibre EPFU & Standard 250 µm** 2 sizes | | | | | |
| ☐ Air-Blown Microduct Fibre EPFU-12F | 12F × 200 µm G.657.A1 EPFU | 1.6 | 2.1 | 25 | 3.5 |
| ☐ Air-Blown Microduct Fibre-48F-250 | 48F (4×12) × 250 µm G.657.A1 | 5.2 | 24.0 | 700 | 8.0 |
| **High-Density Microcable (200 µm) & Extreme-Density Microcable (180 µm) High-Density** 5 sizes | | | | | |
| ☐ High-Density Microcable-144F-200 | 144F (12×12) × 200 µm G.657.A1 | 6.2 | 36.0 | 900 | 8.0 |
| ☐ High-Density Microcable-288F-200 | 288F (12×24) × 200 µm G.657.A1 | 6.0 | 35.0 | 900 | 8.0 |
| ☐ Extreme-Density Microcable-288F-180 | 288F (12×24) × 180 µm G.657.A2 | 5.5 | 29.0 | 850 | 8.0 |
| ☐ Extreme-Density Microcable-552F-180 | 552F (23×24) × 180 µm G.657.A2 | 7.9 | 61.0 | 1,400 | 10.0 |
| ☐ High-Density Microcable-864F-200 | 864F (36×24) × 200 µm G.657.A1 | 9.7 | 92.0 | 1,800 | 12.0 |

– Recommended microduct fill ratio is 50 % to 75 % of microduct inner diameter (ID) for maximum blowing distance.

## Standards and approvals

- IEC 60794-5-10 & IEC 60794-5-20
- ITU-T G.652.D / G.657.A1 / A2
- RoHS 2 & REACH Compliant

## 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/sirocco-siroccohd-siroccoxt-air-blown-microduct-fibre-optic-unit-cable**

Typical values for this cable type, based on IEC 60794-5-10 / IEC 60794-5-20 / ITU-T G.657.A1/A2. Values for your order are confirmed in the quotation. Subject to change without notice. Jiangsu Tebaoflex Special Cable Co., Ltd., Taicang, Jiangsu, China.