

Fiber Unit (EPFU)



Application: EPFU for injection into micro tubes.

Construction and technical data:

- optical fibers embedded in resin
- PE coating
- recommended for microduct dimension 7/4 mm

| | |
|---|--|
| Sheathing material: | polyethylene |
| Colour of outer sheath: | orange |
| Cable metal-free: | yes |
| Permitted storage and transport temperature: | -10 - +70 °C |
| Permitted installation temperature: | -10 - +60 °C |
| Permitted operating temperature: | -10 - +70 °C |
| Bending radius (under tension): | 40 x Ø |
| Bending radius (without tension): | 40 x Ø |
| Printing method: | ink jet |
| Type of installation: | Microducts (Single cable installation) |
| Maximum tensile strength (installation), N: | 250 N |
| Meter mark: | yes |

The products and information presented here are for technical calculation only. They are subject to technical progress and in no way represent the ability of shipment. Outer diameters are approximately.

EPFU 1xn E9 G.657A1

| | |
|---|--------------------------------|
| Standard: | ITU-T G.657A1 |
| Fibre attenuation @1310 nm cabled: | ≤0.40 dB/km |
| Fibre attenuation @1550 nm cabled: | ≤0.30 dB/km |
| Fibre attenuation @1625 nm cabled: | ≤0.30 dB/km |
| Mode field diameter (MFD) @1310 nm: | 9.2 ± 0.4 μm |
| Mode field diameter (MFD) @1550 nm: | 10.4 ± 0.8 μm |
| Zero dispersion wavelength: | 1300 ~ 1324 nm |
| Zero dispersion slope: | ≤0.092 ps/nm ² * km |
| Polarisation mode dispersion (PMD): | ≤0.1 ps/√km |
| Cut-off wavelength: | ≤1260 nm |
| Macro bending loss @1550 nm (10 turns Ø30 mm): | ≤0.25 dB |
| Macro bending loss @1625 nm (10 turns Ø30 mm): | ≤1.00 dB |
| Macro bending loss @1550 nm (1 turn Ø20 mm): | ≤0.75 dB |
| Macro bending loss @1625 nm (1 turn Ø20 mm): | ≤1.50 dB |
| Outer diameter (fibre): | 250 ± 10 μm |
| Cladding diameter (fibre): | 125 ± 1.0 μm |
| Core/clad concentricity error: | ≤0.6 μm |
| Cladding non-circularity: | ≤1.0 % |

| part no. | part name | Number of fibres [n] | Wm [mm] | Ø [mm] | Fzv [N] | p [N] | G [kg] | |
|----------|------------------------------------|----------------------|---------|--------|---------|-------|--------|------------|
| 073697 | FIBER UNIT 01X2 G.657A1 OD 1.2 OG | 2 | 0.25 | 1.2 | 6 | 100 | 0.6 | singlemode |
| 072568 | FIBER UNIT 01X4 G.657A1 OD 1.2 OG | 4 | 0.25 | 1.2 | 6 | 100 | 1.2 | singlemode |
| 072569 | FIBER UNIT 01X6 G.657A1 OD 1.4 OG | 6 | 0.25 | 1.4 | 10 | 100 | 1.7 | singlemode |
| 073698 | FIBER UNIT 01X8 G.657A1 OD 1.4 OG | 8 | 0.25 | 1.4 | 12 | 100 | 2.4 | singlemode |
| 072570 | FIBER UNIT 01X12 G.657A1 OD 1.8 OG | 12 | 0.25 | 1.8 | 15 | 100 | 2.9 | singlemode |

| | |
|------------------|--|
| Number of fibres | Number of fibres |
| Wm | Wall thickness of sheath |
| Ø | outer diameter approx. |
| Fzv | Tensile strength (during installation) |
| p | Crush resistance / 10 cm |
| G | net weight per 1000 |
















Farbfolge Fasern / Colour sequence of fibres

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 |
|--|---|---|---|---|---|---|--|---|---|---|---|
| red | green | blue | yellow | white | grey | brown | violet | cyan | black | orange | pink |
|  |  |  |  |  |  |  |  |  |  |  |  |
| 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 | 21 | 22 | 23 | 24 |
| red | green | blue | yellow | white | grey | brown | violet | cyan | natural | orange | pink |
|  |  |  |  |  |  |  |  |  |  |  |  |

Farbfolge Bündeladern – Variante 1 / Colour sequence of Loose tubes – variant 1

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|--|---|---|---|---|---|
| red | green | blue | yellow | white | grey | brown | violet | cyan | black | orange | pink | white | white | white |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Jede Lage beginnend mit 1; ab der 13. Bündelader weiß; Blindelemente sind naturfarben / Each layer beginning with 1; from the 13th Loose tube white; dummies are natural coloured | | | | | | | | | | | | | | |

Farbfolge Bündeladern – Variante 2 / Colour sequence of Loose tubes – variant 2

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 |
|---|---|---|---|---|---|---|---|---|--|---|---|---|---|---|
| red | green | blue | yellow | white | grey | brown | violet | cyan | black | orange | pink | red | green | blue |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Jede Lage beginnend mit 1; ab der 13. Bündelader mit Ringsignierung; Blindelemente sind naturfarben / Each layer beginning with 1; from the 13th Loose tube with ring marking; dummies are natural coloured | | | | | | | | | | | | | | |