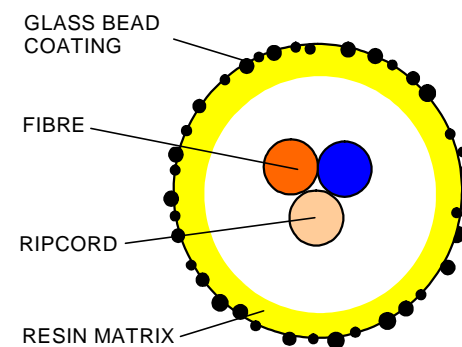


EPFU STANDARD PRODUCT RANGE DETAILS AND TECHNICAL PARAMETERS

Utilising its core competencies in the manufacturing and cabling of optical fibre, Prysmian produces optical fibre units EPFU (Enhanced Performance Fibre Units) specifically engineered for Blown Fibre applications. The fibres are contained within a soft inner acrylate layer which cushions the fibres, an outer harder layer which protects the fibre from damage and a low friction layer that assists in improving blowing distance. Sirocco units can be supplied in a range of SingleMode and MultiMode fibre types

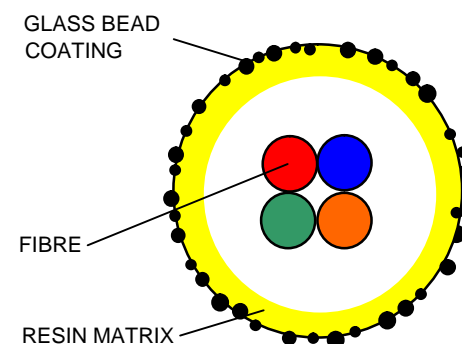
2 Fibre Unit

Diameter	1.0 mm
Weight	0.8 g/m
Break out	2 minutes (typical)
Blow distance	1000m (typical at 10 Bar)
Fibres	Two + ripcord
Fibre colours	Blue and Orange
Packaging	Fibre rosette into pan
Max length	6000m
Fibre types	Singlemode; G.652.B, G.652.D, G.657.A1, G.657.A2. Multimode; OM1, OM2, OM3 and OM4



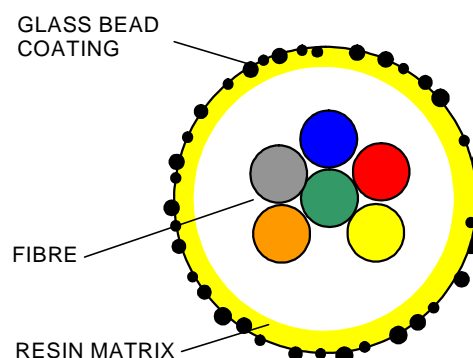
4 Fibre Unit

Diameter	1.0 mm
Weight	0.8 g/m
Break out	3 minutes (typical)
Blow distance	1000m (typical at 10 Bar)
Fibres	Four
Fibre colours	Blue, orange, green and red
Packaging	Fibre rosette into pan
Max length	6000m
Fibre types	Singlemode; G.652.B, G.652.D, G.657.A1, G.657.A2. Multimode; OM1, OM2, OM3 and OM4



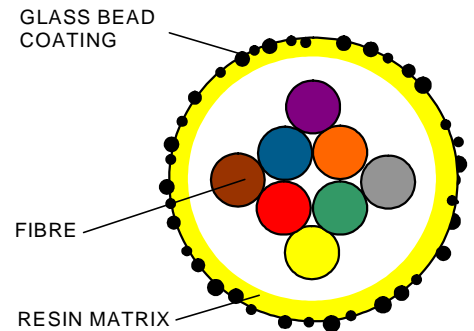
6 Fibre Unit

Diameter	1.1 mm
Weight	0.95 g/m
Break out	4 minutes (typical)
Blow distance	800m (typical at 10 Bar)
Fibres	Six
Fibre colours	Blue, orange, green, red, grey and yellow
Packaging	Fibre rosette into pan
Max length	4000m
Fibre types	Singlemode; G.652.B, G.652.D, G.657.A1, G.657.A2. Multimode; OM1, OM2, OM3 and OM4



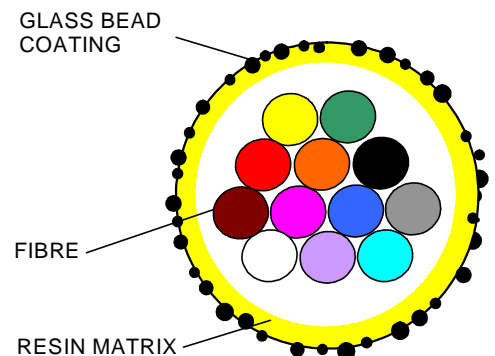
8 Fibre Unit

Diameter	1.4 mm
Weight	1.5 g/m
Break out	5 minutes (typical)
Blow distance	800m (typical at 10 Bar)
Fibres	Eight
Fibre colours	Blue, orange, green, red, grey, yellow, violet and brown
Packaging	Fibre rosette into pan
Max length	6000m
Fibre types	Singlemode; G.652.B, G.652.D, G.657.A1, G.657.A2. Multimode; OM1, OM2, OM3 and OM4



12 Fibre Unit

Diameter	1.4 mm
Weight	1.7 g/m
Break out	5 minutes (typical)
Blow distance	800m (typical at 10 Bar)
Fibres	Twelve
Fibre colours	Blue, orange, green, red, yellow, grey, violet, brown, black, white, pink and turquoise
Packaging	Fibre rosette into pan
Max length	6000m
Fibre types	Singlemode; G.652.B, G.652.D, G.657.A1, G.657.A2. Multimode; OM1, OM2, OM3 and OM4



Fibre data sheets

EPFU Standard Product Range Details & Technical Parameters
 EPFU SingleMode G.652.B Fibre Specification
 EPFU G.652.D Fibre Specification
 EPFU 62/125 Multimode (OM1) Fibre Specification
 EPFU 50/125 Multimode (OM2) Fibre Specification
 EPFU 50/125 Multimode (OM3) Fibre Specification
 EPFU 50/125 Multimode (OM4) Fibre Specification
 EPFU Bend insensitive G.657.A1 Fibre Specification
 EPFU Bend insensitive G.657.A2 Fibre Specification
 EPFU Hybrid Product Range Details & Technical Parameters
 EPFU Environmentally Friendly Deep Pan
 EPFU Environmentally Friendly Double Deep Pan

Data sheet SE001
 Data sheet SE002
 Data sheet SE003
 Data sheet SE004
 Data sheet SE005
 Data sheet SE006
 Data sheet SE007
 Data sheet SE008
 Data sheet SE009
 Data sheet SE010
 Data sheet SE013
 Data sheet SE014

Detailed Test Specification

Mechanical Properties	Test method	Test Standard	Test conditions	Performance
Tensile strength	IEC 60794-1-2 E1	IEC 60794-5-20 BT CW1574	1W N x (9.81 x mass of 1km)	Pass Maximum fibre strain ≤ 0.4% Residual fibre strain ≤ 0.05% Note 1
Crush	IEC 60794-1-2 E3	IEC 60794-5-20 BT CW1574	100N for 60 seconds	Pass Note 1 & 2
Bend	IEC 60794-1-2 E11	IEC 60794-5-20 BT CW 1574	4 turns, 3 cycles 3 turns, 5 cycles Ø40mm (2f and 4f) Ø60mm (6f, 8f & 12f)	Pass Note 1 and 2 Singlemode ≤0.15dB/km Multimode ≤ 0.30dB/km
Environmental				
Temperature performance	IEC 60794-1-2 F1	IEC 60794-5-20	-15 to +60. 2 cycles -40 to +70. 2 cycles	Pass Note 2 Singlemode ≤0.15dB/km Multimode ≤0.30dB/km
		BT CW1574	-10 to +65. 3 cycles	Pass Note 2,3 and 4
Cold test	BS EN 60068-2-1	BT CW1574	-20 °C 96 hours	Pass ≤0.5dB/km
Condensation test	IEC 60068-2-38	BT CW1574	-10 °C to +65 °C at 93% RH 10 cycles 24 hour dwells	Pass Note 3 & 4
Water immersion	IEC 60793-1-53 BT CW1500 pt 4	IEC 60794-5-20	30days, room temp	Pass Singlemode ≤0.05dB/km Multimode ≤0.20dB/km
		BT CW1574	20 °C +/- 2 °C 2000 hours	Pass Note 3 & 4
Static Bend	BT CW1500 pt 4	BT CW1574	1000hours, +60°C 40mm (2f, 4f & 6f) 60mm (8f & 12F)	Pass Note 1
Fibre break out from unit /buffer removal	BT CW1500 pt 4	IEC 60794-5-20 BT CW1574	0 °C, 20 °C, 40 °C 2m samples	2f: ≤2 minutes 4f: ≤3 minutes 6f: ≤4 minutes 8f: ≤5 minutes 12f: ≤5 minutes

- Note 1 No significant damage.
 Note 2 No change in attenuation after test
 Note 3 Pass for Singlemode = +/- 0.07dB/km at 1310 nm and 1550 nm
 Note 4 Pass for Multimode = +/- 0.25 dB/km at 850 nm and 1300 nm

Pan dimensions and weights

Length	2 Fibre		4 Fibre		6 Fibre		8 Fibre		12 Fibre	
	Pan	Kg	Pan	Kg	Pan	Kg	Pan	Kg	Pan	Kg
500m	S	3.0	S	3.1	S	3.2	S	3.3	S	3.4
1000m	S	3.3	S	3.3	S	3.5	S	4.0	S	4.2
2000m	S	4.1	S	4.1	S	4.5	D	6.4	D	6.8
3000m	D	6.1	D	6.1	D	6.2	D	7.9	D	8.5
4000m	D	6.9	D	6.9	D	7.1	D	9.4	DD	11.7
6000m	D	8.5	D	8.5	N/A	N/A	DD	11.7	DD	12.5

Pan codes
 Shallow (S)
 Environmentally Friendly Deep (D)
 Environmentally Friendly Double Deep (DD)

Dimensions (mm)
 L = 615 x W = 530 x H = 155
 L = 615 x W = 530 x H = 251
 L = 513 x W = 513 x H = 390