

PE Jacket

Waveguide type: **EU 90**

FRNH Jacket

Waveguide type: **EU 90-FR**

on request





CHARACTERISTICS

Construction

- **Description** Corrugated elliptical copper tube
- **Conductor**
 - Material copper
 - Elliptical mm (in) 30,2 x 17,1 (1.19 x 0.67)
- **Jacket**
 - Material UV resistant, black polyethylene (or black FRNH compound)
 - Dimensions mm (in) 32,8 x 19,7 (1.29 x 0,78)
 - Thickness mm (in) 1,3 (0.05)

Mechanical

- **Minimum bending radius**
 - a) single bending
 - E plane mm (in)  150 (5.9)
 - H plane mm (in)  300 (11.8)
 - b) repeated bends
 - E plane mm (in) 200 (7.9)
 - H plane mm (in) 500 (19.7)
- **Maximum twist** °/m (°/feet) 3 (1)
- **Max. pulling length per hoisting grip** m (ft) 60 (197)
- **Recommended temperature range**
 - Installation °C (°F) -20 to +60 (-4 to +140)
 - Operation °C (°F) -40 to +80 (-40 to +176)
- **Weight approx.** kg/m (lb/ft) 0,5 (0.34)
- **Minimum drum core diameter** mm (in) 1200 (47)
- **Maximum operating pressure** bar (psi) 0,5 (7.3)
- **Recommended clamp spacing** m (ft) 1 (3)

Electrical

- **Frequency range** GHz 10.2 - 11.7
- **Principal mode cut-off frequency HE_{C11}** GHz 6.75
- **Attenuation, group velocity of propagation, power**

Frequency GHz	Attenuation ⁽¹⁾		Group velocity %	Av. Power ⁽²⁾ kW
	dB/100m (dB/100ft)			
10.2	10,08	(3.07)	75.0	1.58
10.3	10,01	(3.05)	75.5	1.59
10.4	9,94	(3.03)	76.1	1.60
10.5	9,87	(3.01)	76.6	1.61
10.6	9,81	(2.99)	77.1	1.62
10.7	9,74	(2.97)	77.6	1.63
10.8	9,68	(2.95)	78.1	1.64
10.9	9,63	(2.93)	78.5	1.65
11.0	9,57	(2.92)	79.0	1.66
11.1	9,52	(2.90)	79.4	1.67
11.2	9,47	(2.89)	79.8	1.68
11.3	9,43	(2.87)	80.2	1.69
11.4	9,38	(2.86)	80.6	1.70
11.5	9,34	(2.85)	81.0	1.70
11.6	9,30	(2.83)	81.3	1.71
11.7	9,26	(2.82)	81.7	1.72

⁽¹⁾ Attenuation at 20°C (68°F)

⁽²⁾ Average power ratings based on VSWR 1.0, 82°C (180°F) inner temperature, 40°C (140°F) ambient temperature

CONNECTOR

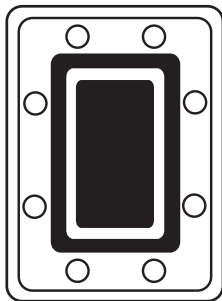


EU90-P-CPR90-G

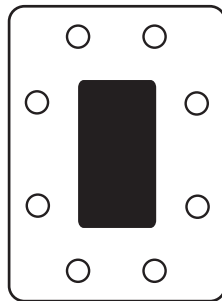
Features

- Very low VSWR across entire frequency range
- No tuning required
- Easy and reliable installation

Flange types



PDR100
CPR90-G



UDR100*
CPR90-F*

* on request

Technical characteristics

• Frequency range (GHz)	10.2 - 11.7
• Recommended pressure bar (psi)	0,25 (3.6)
• Gas port thread	P 1/8"
• Temperature range °C (°F)	-40 / +80 (-40 / +176)
• Connector material	brass
• VSWR	< 1.03

References

Flange type	Sealing Method	Reference
• PDR100	Threaded gasket	EU90-P-PDR100
• CPR90-G	Threaded gasket	EU90-P-CPR90-G

ACCESSORIES



Description

- Flaring Tool
- Bending Tool
- Saw Guide
- Shim* for PDR flange
- Pressure Window
- Twist Flex
- Grounding Kit
- Fixing Clamps
- Hoisting Grips
- Weatherproofing solutions
- Dehydrator
- Full-thickness gasket** for CPR flange
- Half-thickness gasket** for CPR flange

Reference

- EU-FT90-P
- see page 18
- EU-SG90
- EU-SH90
- see page 20
- see page 21
- EU-GK85
- see page 22
- EU-HG85
- see page 23
- see page 24
- EU-FGK90
- EU-HGK90

* Use shim when mating two PDR flanges. Not required when mating PDR/UDR. Order separately.

** Use full-thickness gasket (supplied with connector) when mating two CPR-G flanges. Use half-thickness gasket (order separately) when mating CPR-G with CPR-F.