EU 77

PE Jacket

Waveguide type: ***EU 77***

FRNH Jacket

Waveguide type: ***EU 77-FR***

on request

CHARACTERISTICS

Construction

• ***Description***	Corrugated elliptical copper tube
• ***Conductor***	
Material	copper
Elliptical mm (in)	40,95 x 22,75 (1.61 x 0.90)
• ***Jacket***	
Material	UV resistant, black polyethylene (or black FRNH compound)
Dimensions mm (in)	43,7 x 25,5 (1.72 x 1.00)
Thickness mm (in)	1,4 (0.06)

Mechanical

• ***Minimum bending radius***	
a) single bending	
E plane mm (in)	200 (7.9)
H plane mm (in)	500 (19.7)
b) repeated bends	
E plane mm (in)	250 (9.8)
H plane mm (in)	600 (23.6)
• ***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)	0,7 (0.47)
• ***Minimum drum core diameter*** mm (in)	1200 (47)
• ***Maximum operating pressure*** bar (psi)	0,5 (7.3)
• ***Recommended clamp spacing*** m (ft)	1 (3)

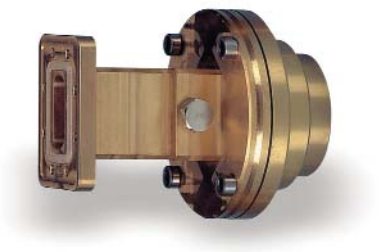
Electrical

- ***Frequency range*** GHz 7.125 - 8.5
- ***Principal mode cut-off frequency HE_{C11}*** GHz 5.0
- ***Attenuation, group velocity of propagation, power***

Frequency GHz	Attenuation[1] dB/100m (dB/100ft)	Group velocity %	Av. Power[2] kW
7.1	6,65 (2.03)	71.0	2.88
7.2	6,56 (2.00)	72.0	2.92
7.3	6,48 (1.97)	72.9	2.96
7.4	6,40 (1.95)	73.7	2.99
7.5	6,33 (1.93)	74.5	3.03
7.6	6,27 (1.91)	75.3	3.06
7.7	6,21 (1.89)	76.0	3.09
7.8	6,15 (1.87)	76.8	3.12
7.9	6,10 (1.86)	77.4	3.14
8.0	6,05 (1.84)	78.1	3.17
8.1	6,00 (1.83)	78.7	3.20
8.2	5,96 (1.82)	79.3	3.22
8.3	5,91 (1.80)	79.8	3.24
8.4	5,87 (1.79)	80.4	3.26
8.5	5,84 (1.78)	80.9	3.28

[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

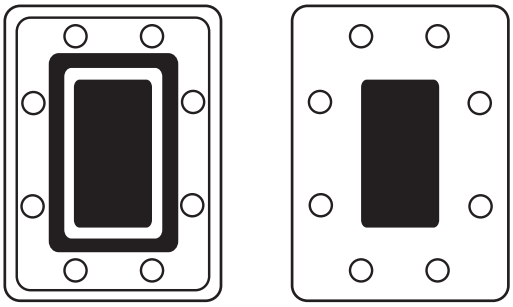


EU77-P-CPR112-G

Features

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

Flange types



PDR84
CPR112-G

*UDR84**
*CPR112-F**

** on request*

Technical characteristics

• ***Frequency range*** (GHz)	7.125 - 8.5
• ***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***
• ***PDR84***	***Threaded gasket***	EU77-P-PDR84
• ***CPR112-G***	***Threaded gasket***	EU77-P-CPR112-G

ACCESSORIES

Description	***Reference***
• ***Flaring Tool***	***EU-FT77-P***
• ***Bending Tool***	see page 18
• ***Saw Guide***	***EU-SG77***
• ***Shim* for PDR flange***	***EU-SH77***
• ***Pressure Window***	see page 20
• ***Twist Flex***	see page 21
• ***Grounding Kit***	***EU-GK77***
• ***Fixing Clamps***	see page 22
• ***Hoisting Grips***	***EU-HG77***
• ***Weatherproofing solutions***	see page 23
• ***Dehydrator***	see page 24
• ***Full-thickness gasket** for CPR flange***	***EU-FGK77***
• ***Half-thickness gasket** for CPR flange***	***EU-HGK77***

** 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.*