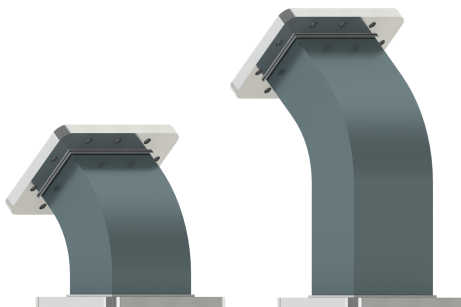


## WAVEGUIDE E-PLANE BEND

**WR284–RW45E / WR284–RW45E–LS**



### Electrical Parameters

|                       |                                   |
|-----------------------|-----------------------------------|
| Operating band        | S (per IEEE)                      |
| Frequency range       | 2600 ÷ 3950 MHz (2,60 ÷ 3,95 GHz) |
| Internal dimensions   | 72,14 × 34,04 mm                  |
| Wall thickness        | min. 3 mm                         |
| Waveguide attenuation | 0,021 dB/m                        |
| Flange attenuation    | 0,02 dB per flange                |
| VSWR                  | max. 1,10                         |
| Peak power            | max. 39 MW                        |
| Average power         | max. 8 kW (CW)                    |

#### Conditions:

- frequency: 2998 MHz
- waveguide made of Cu-ETP copper
- dielectric medium: SF<sub>6</sub> 3 bar or vacuum  $1 \times 10^{-3}$  mbar
- load VSWR: 1.0 : 1
- pulse parameters: 15  $\mu$ s, 20 Hz
- waveguide temperature above ambient temperature: max. 20 °C
- internal finish: bare
- external finish: bare

## Mechanical Parameters

|                       |                                                           |
|-----------------------|-----------------------------------------------------------|
| Waveguide material    | Al (AW6082) / Cu-ETP (AW004A) / SS (316L)                 |
| Internal surfaces     | raw / additional finishing                                |
| External surfaces     | raw / powder coated                                       |
| Seal                  | Viton (fluoroelastomer)                                   |
| Operating temperature | max 75 °C                                                 |
| Operating pressure    | ≤3 bar (absolute)                                         |
| Operating vacuum      | ≤1×10 <sup>-3</sup> mbar (absolute)                       |
| Gas leak rate         | <5×10 <sup>-3</sup> mbar l/s (<0,00002 m <sup>3</sup> /h) |

## Environmental Conditions

The waveguide may be filled with SF<sub>6</sub> gas, N<sub>2</sub> nitrogen, dry air at an absolute pressure of 3×10<sup>5</sup> Pa (3 bar), or evacuated to a maximum absolute pressure of 1×10<sup>-1</sup> Pa (1×10<sup>-3</sup> mbar).

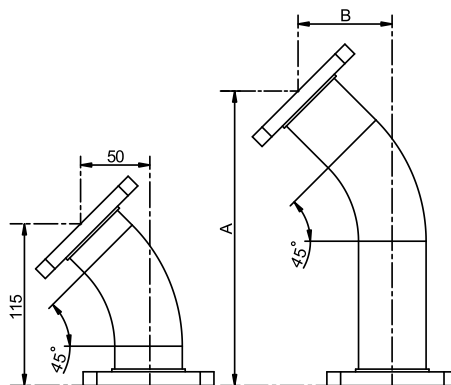
## Waveguide Dimensions

A typical WR284-RW45E waveguide bent at a 45° angle has dimensions A=115 mm, B=50 mm.

LS series waveguides are bent at a 45° angle and have extended arms.

The arm length is arbitrary, provided that dimension A does not exceed 600 mm.

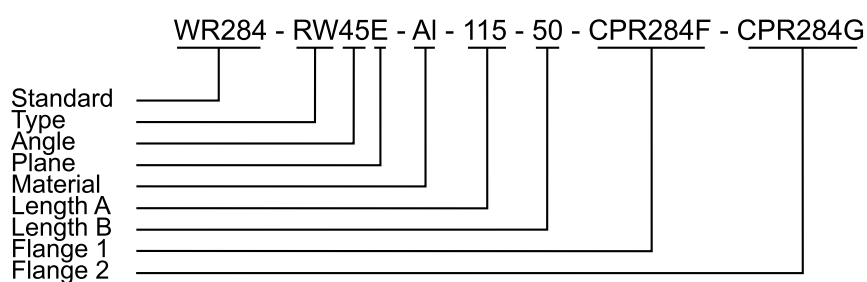
Length tolerance is standardly ± 1 mm (± 0,1 mm on request).



# Microwave Flanges

|         |                                           |
|---------|-------------------------------------------|
| CPR284F | Connector Pressurized Rectangular Flat    |
| CPR284G | Connector Pressurized Rectangular Grooved |
| FDP26   | Flange Design Plain                       |
| FDM26   | Flange Design Modified (Grooved)          |

## Ordering Code



Remaining parameters should be added in descriptive form.