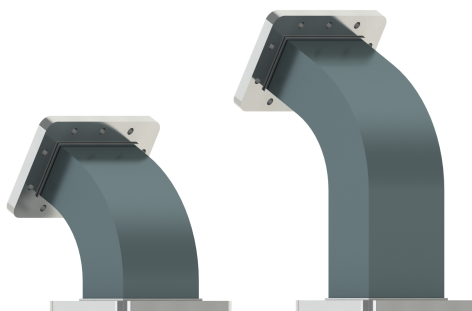


## WAVEGUIDE E-PLANE BEND

**WR284–RW60E / WR284–RW60E–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    | $\leq 3$ bar (absolute)                                        |
| Operating vacuum      | $\leq 1 \times 10^{-3}$ mbar (absolute)                        |
| Gas leak rate         | $< 5 \times 10^{-3}$ 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  $3 \times 10^5$  Pa (3 bar), or evacuated to a maximum absolute pressure of  $1 \times 10^{-1}$  Pa ( $1 \times 10^{-3}$  mbar).

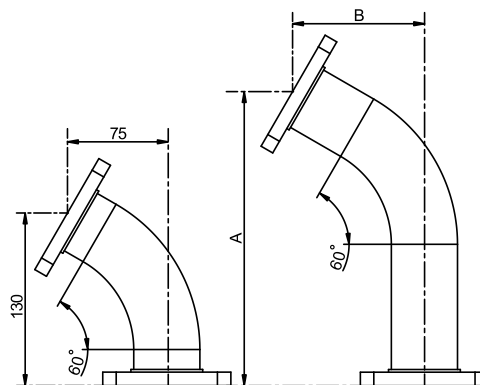
## Waveguide Dimensions

A typical WR284-RW60E waveguide bent at a 60° angle has dimensions A=130 mm, B=75 mm.

LS series waveguides are bent at a 60° angle and have extended arms.

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

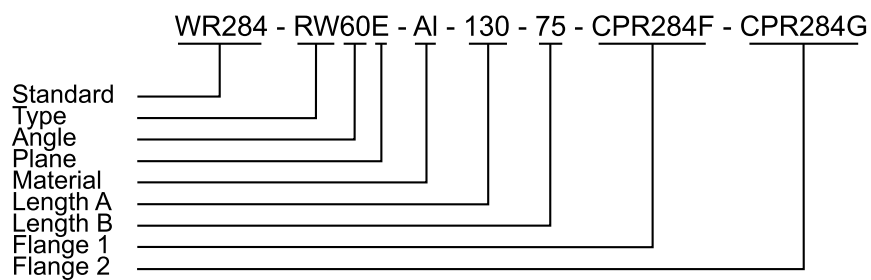
Length tolerance is standardly  $\pm 1$  mm ( $\pm 0,1$  mm on request).



# 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.