

# Straight Waveguides, Bends, Twists, Transitions / Adapters

- 26.5-220 GHz operating frequency
- Low Insertion loss

### **Applications**

- Mm-wave components assembling
- Subsystems



### Description

Different waveguide parts like straight waveguide sections (SWG-XX/L), bends (WB-XX/E/A), tapered transitions/adapters (WGT-XX/YY/L) are used for assembling of mm-wave components. ELVA-1 produce all the list of necessary elements.

Straight waveguide sections have flanges at ends and can vary in length.

Twists and bends are used for connection of mm-wave components which has different waveguide orientation. They are short sections and have standard waveguide flanges at ends.

Tapered transitions are intended for connection of mm-wave devices with different waveguide dimensions and flange types. Can be produced also in accordance with custom design.

The waveguide components use standard rectangular cupper tube with standard waveguide dimensions or are made using electroforming technologies.

Standard components are silver plated.

Custom requests are acceptable for the waveguide components.

#### How to Order

Specify Model Number

- straight waveguide sections: SWG-XX/L
- bends: WB-XX/E/Atwists: TW-XX/A
- tapered transitions/adapters: WGT-XX/YY, where
- XX and YY number of waveguide standard (Ex. 10 for WR-10 and 06 for WR-06)
- L- length
- $\mathbf{E}$  can be  $\mathbf{E}$  for E-plane bend or  $\mathbf{H}$  for H-plane bend
- A- bend angle, empty if 90 degrees

## Example

SWG-10/20 (Straight W- band waveguide section with flanges, WR-10 waveguide. Length 20 mm WB-12/H (E- band waveguide bend with flanges, WR-12 waveguide, H-plane, 90 degrees angle WB-06/E/45 (D- band waveguide bend with flanges, WR-06 waveguide, E-plane, 45 degrees angle