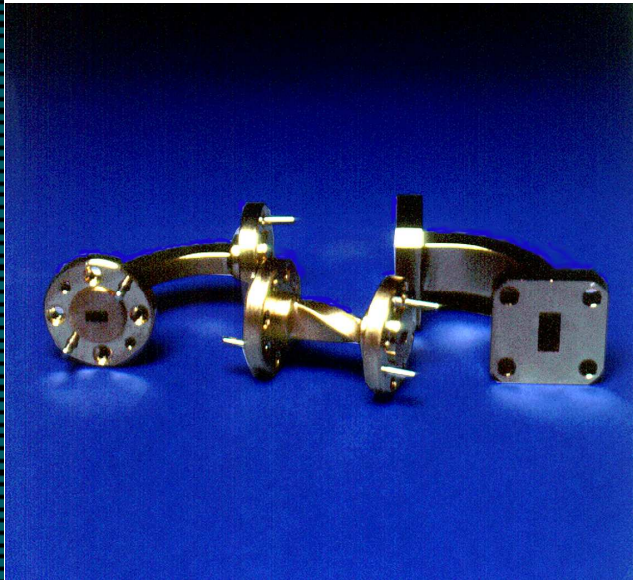


SERIES WGB/WTW/TEH

## E- AND H-PLANE BENDS, TWISTS AND TEES



### FEATURES:

- Low insertion loss
- Rugged, compact

### APPLICATIONS:

- Subsystems
- Test and measurement equipment
- General purpose

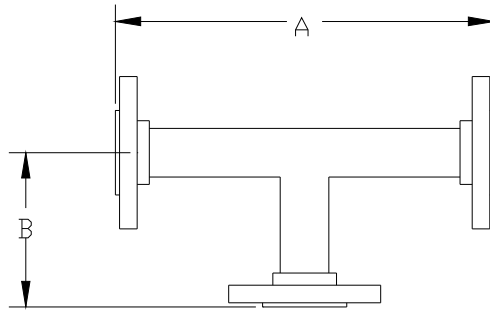
### DESCRIPTION

Millitech series WGB E- and H-plane bends, series WTW waveguide twists and series TEH tees are precisely formed waveguide sections which maintain internal waveguide dimensions while changing the external orientation. The E- and H-plane bends, twists and tees are all offered from 18 to 220 GHz.

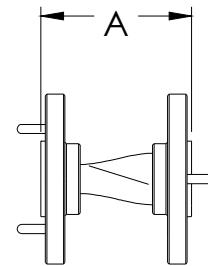
The bends are supplied with angles of 30°, 45°, 60° and 90°. The twists are supplied with angles of 45° (left- or right-handed) and 90°. Millitech also offers a highly miniaturized 90° twist (0.040 in/1.02 mm at 94 GHz, 0.120 in/3.05 mm at 35 GHz) for subsystems operating over a moderate bandwidth (25% typical). Please consult Millitech for details.

### OUTLINE DRAWINGS

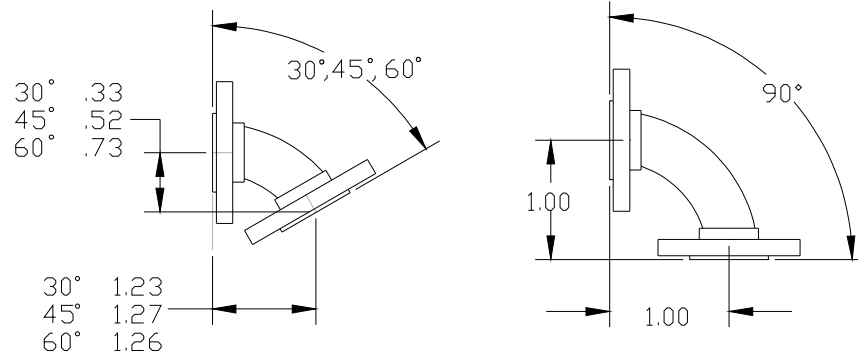
Series TEH



Series WTW



Series WGB (dimensions in inches)



### MECHANICAL SPECIFICATIONS

Model Number		WTW-42	WTW-28	WTW-22	WTW-19	WTW-15	WTW-12	WTW-10	WTW-08	WTW-06	WTW-05
A (in/mm)	90° Twist	2.56/65.0	1.75/44.5	1.25/31.8	1.25/31.8	1.00/25.4	1.00/25.4	1.00/25.4	1.00/25.4	1.00/25.4	1.00/25.4
	45° Twist	2.56/65.0	1.25/31.8	1.25/31.8	1.25/31.8	1.00/25.4	1.00/25.4	1.00/25.4	1.00/25.4	1.00/25.4	1.00/25.4
Flange MIL.F-3922		/54-001	/54.003	/67B-006	/67B-007	/67B-008	/67B-009	/67B-010	/67B-M08	/67B-M06	/67B-M05
Model Number		TEH-42	TEH-28	TEH-22	TEH-19	TEH-15	TEH-12	TEH-10	TEH-08	TEH-06	TEH-05
A (in/mm)		2.8/71	2.8/71	2.8/71	2.85/71	2.2/56	2.2/56	2.0/51	2.0/51	2.0/51	2.0/51
B (in/mm)		1.5/38	1.5/38	1.5/38	1.5/38	1.1/28	1.1/28	1.0/25	1.0/25	1.0/25	1.0/25
Flange MIL.F-3922		/54-001	/54.003	/67B-006	/67B-007	/67B-008	/67B-009	/67B-010	/67B-M08	/67B-M06	/67B-M05

### HOW TO ORDER

Specify Model Number WGB-XX-ABCCØ
<b>XX</b> = Waveguide Band <b>WR</b> – number
<b>A</b> = Flange Type <b>R</b> – round (WR-28 through WR-05 only) <b>S</b> – square (WR-42 and WR-28 only) <b>P</b> – pin contact (WR-08 through WR-05 only)
<b>B</b> = Bend Plane <b>E</b> – E-plane <b>H</b> – H-plane
<b>CC</b> = Bend Angle <b>30</b> – 30° <b>45</b> – 45° <b>60</b> – 60° <b>90</b> – 90°

#### EXAMPLE:

**To Order:** a series WGB in WR-15, 90° bend in H-plane with round flanges

**Specify:** WGB-15-RH900

### HOW TO ORDER

Specify Model Number WTW-XX-ABCCØ (waveguide twists)
<b>XX</b> = Waveguide Band <b>WR</b> – number
<b>A</b> = Flange Type <b>R</b> – round (WR-28 through WR-05 only) <b>S</b> – square (WR-42 and WR-28 only) <b>P</b> – pin contact (WR-08 through WR-05 only)
<b>B</b> = Twist Polarity <b>N</b> – 90° <b>L</b> – left-hand (45° only) <b>R</b> – right-hand (45° only) <b>C</b> – compact version* (90° only)
<b>CC</b> = Twist Angle <b>45</b> – 45° (not available for compact version) <b>90</b> – 90°
<b>*Note: Please specify center frequency if requesting compact twist.</b>

**EXAMPLE:**

**To Order:** a series WTW 45°lefthand twist in WR-42 with square flanges

**Specify:** WTW-42-SL450

**HOW TO ORDER**

Specify Model Number TEH-XX-ABØØØ (E- and H-plane tees)
<b>XX</b> = Waveguide Band <b>WR</b> – number
<b>A</b> = Flange Type <b>R</b> – round (WR-28 through WR-05 only) <b>S</b> – square (WR-42 and WR-28 only) <b>P</b> – pin contact (WR-08 through WR-05 only)
<b>B</b> = Tee Plane Type <b>E</b> – E-plane <b>H</b> – H-plane

**EXAMPLE:**

**To Order:** an E-plane tee in WR-06 with pin contact flanges

**Specify:** TEH-06-PE000