

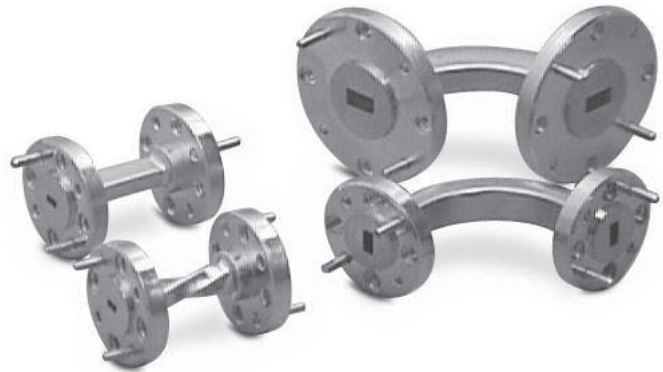


# Waveguide Bends and Twists

## QWB/QWT

### Characteristics

- ◆ 30°, 45°, 60° and 90° Bends
- ◆ 45° and 90° Twists
- ◆ Minimum Insertion Loss

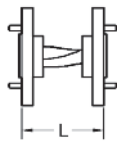


### Product Description

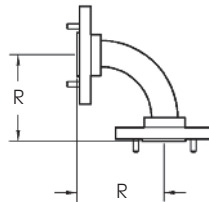
QuinStar Technology's **QWB** and **QWT** series **waveguide bends and twists** cover the frequency range of 18 to 220 GHz in ten waveguide bands. E-Plane and H-Plane formed bends are available with angles of 30°, 45°, 60°, and 90°. The twists allow changing the orientation in a waveguide

assembly. They are available with angles of 45° in either a left- or right-hand twist or a standard 90°. The bends and twists are built with high precision and then gold plated for low insertion loss and high corrosion resistance. Typical VSWR is 1.10:1 over entire frequency band.

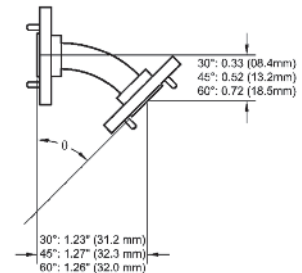
### Outline Drawings/Mechanical Specifications



Waveguide Twist  
(round flange pattern shown)



Right Angle



Waveguide Bends  
(round flange pattern shown)

FREQUENCY BAND	K	Ka	Q, U	V, E, W, F, D, G
Waveguide Size	WR-42	WR-28	WR-22, -19	WR-15, -12, -10, -8, -6, -5
Twist Length, inches/mm	2.5/63.5	1.75/44.5	1.25/31.8	1.00/25.4
Right Angle (90°) Bend Radius, inch/mm	1.5/38.1	1.5/38.1	1.5/38.1	1.0/25.4

### Ordering Information

#### Model Number

**QW - A B C D E**

model prefix

B = bend  
T = twist

waveguide band designator

K = K-band      E = E-band  
A = Ka-band     W = W-band  
Q = Q-band      F = F-band  
U = U-band      D = D-band  
V = V-band      G = G-band

flange type

R = round  
S = square  
Z = custom

type of twist or bend

L = left-handed twist      E = E-plane bend  
R = right-handed twist    H = H-plane bend  
0 = 90° twist

angle of twist or bend

30 = 30° / 60 = 60° / 45 = 45° / 90 = 90°