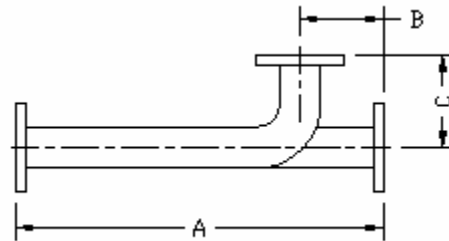


Key Features

- Low insertion loss
- High directivity

General Description

WHC series multi-hole waveguide directional couplers are offered for frequency range from 2.6 to 110 GHz. The standard coupling levels are 3, 6, 10, 20, and 30dB with full waveguide operational bandwidth. The high directivity is achieved via low VSWR built-in termination. The typical usages of the multi-hole coupler are for power sampling and frequency monitoring with minimum signal loss on the main transmitting path.

**Outline Drawing****Typical Specification**

| Part No. | Frequency, GHz | Waveguide Sizes | Flange Type | Coupling dB | Directivity, dB | VSWR | Dimensions, mm | | |
|--------------|----------------|-----------------|-------------|-------------|-----------------|--------|----------------|----|-----|
| | | | | | | | A | B | H |
| WHC075-03-01 | 8.2~12.4 | WR-90 | UG-39/U | 3.0±1.0 | 30 | 1.15:1 | 78 | 30 | 590 |
| WHC075-03-01 | 8.2~12.4 | WR-90 | UG-39/U | 6.0±1.2 | 30 | 1.15:1 | 78 | 30 | 560 |
| WHC075-03-01 | 8.2~12.4 | WR-90 | UG-39/U | 10.0±1.5 | 30 | 1.15:1 | 78 | 30 | 530 |
| WHC075-03-01 | 8.2~12.4 | WR-90 | UG-39/U | 20.0±2.0 | 30 | 1.15:1 | 78 | 30 | 500 |
| WHC075-03-01 | 8.2~12.4 | WR-90 | UG-39/U | 30.0±3.0 | 30 | 1.15:1 | 78 | 30 | 470 |
| WHC075-03-01 | 10.0~15.0 | WR-75 | UBR120 | 3.0±1.0 | 30 | 1.15:1 | 68 | 22 | 500 |
| WHC075-06-01 | 10.0~15.0 | WR-75 | UBR120 | 6.0±1.2 | 30 | 1.15:1 | 68 | 22 | 460 |
| WHC075-10-01 | 10.0~15.0 | WR-75 | UBR120 | 10.0±1.5 | 30 | 1.15:1 | 68 | 22 | 420 |
| WHC075-20-01 | 10.0~15.0 | WR-75 | UBR120 | 20.0±2.0 | 30 | 1.15:1 | 68 | 22 | 380 |
| WHC075-30-01 | 10.0~15.0 | WR-75 | UBR120 | 30.0±3.0 | 30 | 1.15:1 | 68 | 22 | 340 |
| WHC062-03-01 | 12.0~18.0 | WR-62 | UG419/U | 3.0±1.0 | 30 | 1.15:1 | 58 | 22 | 410 |
| WHC062-06-01 | 12.0~18.0 | WR-62 | UG419/U | 6.0±1.2 | 30 | 1.15:1 | 58 | 22 | 390 |
| WHC062-10-01 | 12.0~18.0 | WR-62 | UG419/U | 10.0±1.5 | 30 | 1.15:1 | 58 | 22 | 370 |

| | | | | | | | | | |
|--------------|------------|-------|----------|----------|----|--------|----|----|-----|
| WHC062-20-01 | 12.0~18.0 | WR-62 | UG419/U | 20.0±2.0 | 30 | 1.15:1 | 58 | 22 | 350 |
| WHC062-30-01 | 12.0~18.0 | WR-62 | UG419/U | 30.0±3.0 | 30 | 1.15:1 | 58 | 22 | 330 |
| WHC042-03-01 | 18.0~26.5 | WR-42 | UG595/U | 3.0±1.0 | 30 | 1.15:1 | 38 | 15 | 288 |
| WHC042-06-01 | 18.0~26.5 | WR-42 | UG595/U | 6.0±1.2 | 30 | 1.15:1 | 38 | 15 | 268 |
| WHC042-10-01 | 18.0~26.5 | WR-42 | UG595/U | 10.0±1.5 | 30 | 1.15:1 | 38 | 15 | 248 |
| WHC042-20-01 | 18.0~26.5 | WR-42 | UG595/U | 20.0±2.0 | 30 | 1.15:1 | 38 | 15 | 228 |
| WHC042-30-01 | 18.0~26.5 | WR-42 | UG595/U | 30.0±3.0 | 30 | 1.15:1 | 38 | 15 | 208 |
| WHC034-03-01 | 22.0~33.0 | WR-34 | UG1530/U | 3.0±1.0 | 30 | 1.15:1 | 38 | 15 | 240 |
| WHC034-06-01 | 22.0~33.0 | WR-34 | UG1530/U | 6.0±1.2 | 30 | 1.15:1 | 38 | 15 | 230 |
| WHC034-10-01 | 22.0~33.0 | WR-34 | UG1530/U | 10.0±1.5 | 30 | 1.15:1 | 38 | 15 | 220 |
| WHC034-20-01 | 22.0~33.0 | WR-34 | UG1530/U | 20.0±2.0 | 30 | 1.15:1 | 38 | 15 | 210 |
| WHC034-30-01 | 22.0~33.0 | WR-34 | UG1530/U | 30.0±3.0 | 30 | 1.15:1 | 38 | 15 | 190 |
| WHC028-03-01 | 26.5~40.0 | WR-28 | UG599/U | 3.0±1.0 | 30 | 1.15:1 | 33 | 18 | 210 |
| WHC028-06-01 | 26.5~40.0 | WR-28 | UG599/U | 6.0±1.2 | 30 | 1.15:1 | 33 | 18 | 205 |
| WHC028-10-01 | 26.5~40.0 | WR-28 | UG599/U | 10.0±1.5 | 30 | 1.15:1 | 33 | 18 | 200 |
| WHC028-20-01 | 26.5~40.0 | WR-28 | UG599/U | 20.0±2.0 | 30 | 1.15:1 | 33 | 18 | 186 |
| WHC028-30-01 | 26.5~40.0 | WR-28 | UG599/U | 30.0±3.0 | 30 | 1.15:1 | 33 | 18 | 180 |
| WHC022-03-01 | 33.0~50.0 | WR-22 | UG383/U | 3.0±1.0 | 30 | 1.15:1 | 33 | 18 | 200 |
| WHC022-06-01 | 33.0~50.0 | WR-22 | UG383/U | 6.0±1.2 | 30 | 1.15:1 | 33 | 18 | 190 |
| WHC022-10-01 | 33.0~50.0 | WR-22 | UG383/U | 10.0±1.5 | 30 | 1.15:1 | 33 | 18 | 180 |
| WHC022-20-01 | 33.0~50.0 | WR-22 | UG383/U | 20.0±2.0 | 30 | 1.15:1 | 33 | 18 | 170 |
| WHC022-30-01 | 33.0~50.0 | WR-22 | UG383/U | 30.0±3.0 | 30 | 1.15:1 | 33 | 18 | 160 |
| WHC019-03-01 | 40.0~60.0 | WR-19 | UG383/U | 3.0±1.0 | 30 | 1.15:1 | 33 | 18 | 180 |
| WHC019-06-01 | 40.0~60.0 | WR-19 | UG383/U | 6.0±1.2 | 30 | 1.15:1 | 33 | 18 | 170 |
| WHC019-10-01 | 40.0~60.0 | WR-19 | UG383/U | 10.0±1.5 | 30 | 1.15:1 | 33 | 18 | 160 |
| WHC019-20-01 | 40.0~60.0 | WR-19 | UG383/U | 20.0±2.0 | 30 | 1.15:1 | 33 | 18 | 150 |
| WHC019-30-01 | 40.0~60.0 | WR-19 | UG383/U | 30.0±3.0 | 30 | 1.15:1 | 33 | 18 | 140 |
| WHC010-03-01 | 75.0~110.0 | WR-10 | UG387/U | 3.0±1.0 | 30 | 1.15:1 | 33 | 18 | 140 |
| WHC010-06-01 | 75.0~110.0 | WR-10 | UG387/U | 6.0±1.2 | 30 | 1.15:1 | 33 | 18 | 123 |
| WHC010-10-01 | 75.0~110.0 | WR-10 | UG387/U | 10.0±1.5 | 30 | 1.15:1 | 33 | 18 | 109 |
| WHC010-20-01 | 75.0~110.0 | WR-10 | UG387/U | 20.0±2.0 | 30 | 1.15:1 | 33 | 18 | 97 |
| WHC010-30-01 | 75.0~110.0 | WR-10 | UG387/U | 30.0±3.0 | 30 | 1.15:1 | 33 | 18 | 90 |