

**1 5/8", 3 1/8", 4 1/6",
6 1/8", 7 3/16", 8 3/16",
9 3/16"**

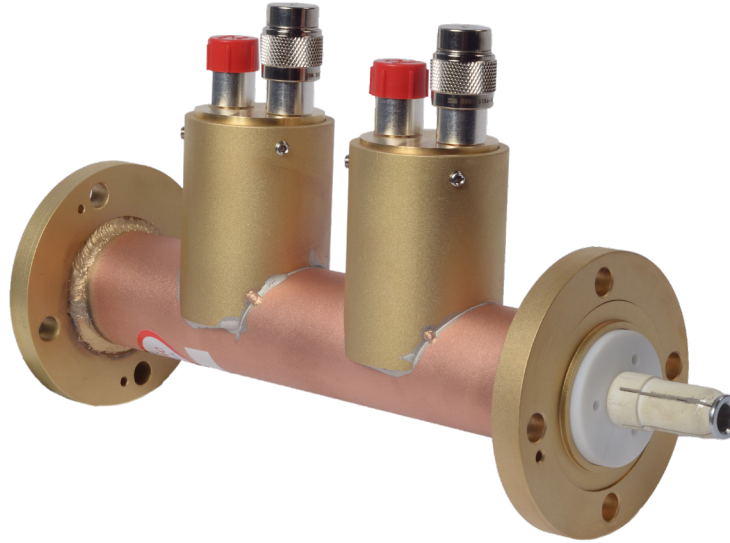
- Low VSWR
- 30 dB Directivity or Greater
- Type N Output
- Field Replaceable Resistor

Dielectric VHF/UHF Directional Couplers are designed to couple signals from a transmission line to external monitoring equipment for tuning, operating, and maintaining the station. By installing several couplers in the output transmission line, it is possible to monitor parameters including: VSWR, RF line power, system losses, sideband response, and filter performance.

The directional characteristic of the coupler permits sampling of the transmitter output line without any of the inherent variations in frequency response obtained with non-directional couplers. The voltages obtained with a directional coupler in the line are a sample of either the incident or reflected wave. The directional coupler provides a source impedance to the RF coaxial cable equal to the characteristic impedance of the cable.

These directional couplers are designed for mounting on any section of transmission line with an impedance of 50 or 75 ohms. Coupling is electromagnetic with directivity of 30 dB or better, and is accomplished with a coupling loop inserted into the fields of the main output line. Etched angle and penetration scales on the coupler assembly permit accurate adjustment for calibration of the output voltage at the particular frequency desired. The output is type "N" and at maximum, 2-3 watts. VSWR is 1.03:1 or less.

The coupling loop termination resistor is a high tolerance, fixed composition resistor, which is field replaceable.



Single

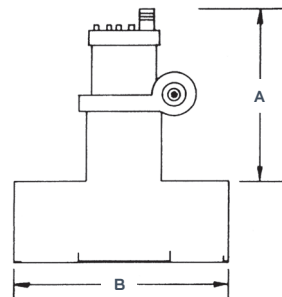
Supplied with Hose Clamps.

| Outer Diameter | Part Number | Dimensions | | Weight |
|----------------|-------------|------------|------|---------|
| | | A Max | B | |
| 1 5/8" | 4270-503 | 3.63" | 4" | 3.5 lbs |
| 3 1/8" | 5500-501 | 5.13" | 4.5" | 4 lbs |
| 4 1/6" | 5500-518 | 5.13" | 4.5" | 4 lbs |
| 6 1/8" | 5500-502 | 5.13" | 4.5" | 4 lbs |
| 7 3/16" | 5500-502 | 5.13" | 4.5" | 4 lbs |
| 8 3/16" | 5500-517 | 5.13" | 4.5" | 4 lbs |
| 9 3/16" | 5500-504 | 5.13" | 4.5" | 4 lbs |

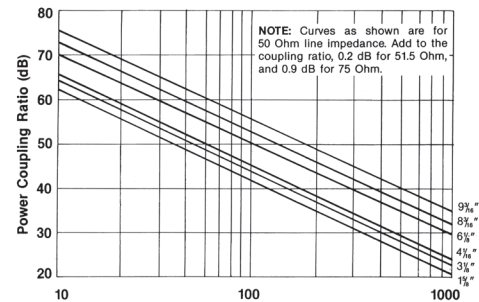
Dual

Supplied with Hose Clamps.

| | | | | |
|---------|----------|-------|------|-------|
| 3 1/8" | 5500-525 | 5.13" | 4.5" | 4 lbs |
| 4 1/6" | 5500-526 | 5.13" | 4.5" | 4 lbs |
| 6 1/8" | 5500-523 | 5.13" | 4.5" | 4 lbs |
| 7 3/16" | 5500-523 | 5.13" | 4.5" | 4 lbs |
| 8 3/16" | 5500-524 | 5.13" | 4.5" | 4 lbs |
| 9 3/16" | 5500-527 | 5.13" | 4.5" | 4 lbs |



MOUNTING NOTE: A HOLE IS MADE IN OUTER CONDUCTOR TO ACCOMMODATE THE COUPLER.



FREQUENCY (MHz)
NOTE: MAXIMUM COUPLING RATIO IS APPROXIMATELY 50 dB GREATER THAN THE MINIMUM VALUES SHOWN.