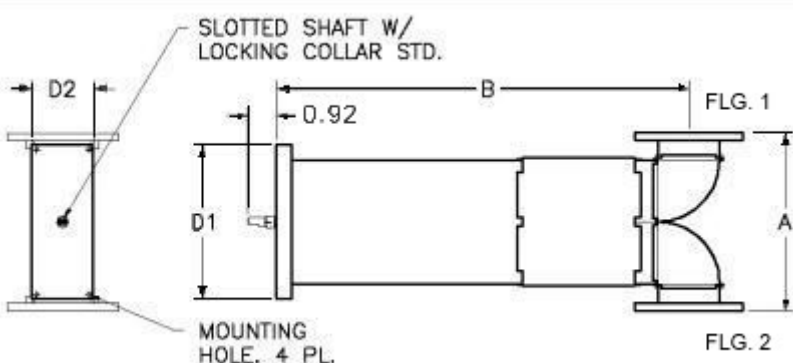


## Waveguide Phase Shifters, High Powered (Line Stretchers)

ATM type 410 Waveguide Phase Shifters utilize hybrid design, making it ideal for high power and low loss. The phase shift is approximately linear with dial rotation, but not frequency. These models have 0-360 deg min phase shift over the operating frequency range and are precisely adjustable and re-settable. The standard models are supplied with digital counting dials so models can be calibrated at a spot frequency or re-set to a desired point.

For Direct Reading Models add DRE to the P/N. These units are supplied with electronic digital dials calibrated in degrees at the center frequency. Please call us and discuss your needs with one of our design engineers.



### High Power Waveguide Phase Shifters

WG Size	Freq GHz	Power (W) Avg.	Power (kW) Peak	VSWR max	IL (dB) max	A (in)	B (in) max	D1 (in) max	D2 (in) max	Standard Model No.
WR284	<b>2.66 - 2.99</b>	11,500	2500.0	1.20	0.25	10.25	20.15	7.22	2.70	284-410-6-6
WR284	<b>2.99 - 3.44</b>	11,500	2500.0	1.20	0.25	10.25	20.15	7.22	2.70	284-411-6-6
WR284	<b>3.44 - 3.95</b>	11,500	2500.0	1.20	0.25	10.25	20.15	7.22	2.70	284-412-6-6
WR229	<b>3.70 - 4.20</b>	7200	1640.0	1.20	0.25	9.75	19.0	6.00	3.00	229-410-2-2
WR187	<b>3.95 - 4.50</b>	5000	925.0	1.20	0.25	5.80	13.0	5.03	2.00	187-410-6-6
WR187	<b>4.50 - 5.20</b>	5000	925.0	1.20	0.25	5.80	13.0	5.03	2.00	187-411-6-6
WR187	<b>5.20 - 5.90</b>	5000	925.0	1.20	0.25	5.80	13.0	5.03	2.00	187-412-6-6
WR159	<b>5.40 - 5.90</b>	4000	753.0	1.20	0.25	5.50				159-410-2-2
WR159	<b>5.90 - 6.50</b>	4000	753.0	1.20	0.25	5.50				159-411-2-2
WR137	<b>5.40 - 6.00</b>	3500	515.0	1.20	0.25	4.70	9.60	3.80	1.60	137-410-2-2
WR137	<b>6.00 - 7.00</b>	3500	515.0	1.20	0.25	4.70	9.60	3.80	1.60	137-411-2-2
WR137	<b>6.85 - 7.80</b>	3500	515.0	1.20	0.25	4.70	9.60	3.80	1.60	137-412-2-2
WR137	<b>7.15 - 8.20</b>	3500	515.0	1.20	0.25	4.70	9.60	3.80	1.60	137-413-2-2
WR112	<b>6.90 - 8.00</b>	2200	307.0	1.20	0.25	4.40	7.40	3.22	1.40	112-410-6-6
WR112	<b>7.90 - 9.00</b>	2200	307.0	1.20	0.25	4.40	7.40	3.22	1.40	112-411-6-6

WR112	<b>8.80 - 10.25</b>	2200	307.0	1.20	0.25	4.40	7.40	3.22	1.40	112-412-6-6
WR90	<b>8.10 - 9.30</b>	1100	175.0	1.20	0.25	3.25	6.40	2.58	1.60	90-410-6-6
WR90	<b>9.10 - 10.2</b>	1100	175.0	1.20	0.25	3.25	6.40	2.58	1.60	90-411-6-6
WR90	<b>9.40 - 10.8</b>	1100	175.0	1.20	0.25	3.25	6.40	2.58	1.60	90-412-6-6
WR90	<b>10.5 - 11.9</b>	1100	175.0	1.20	0.25	3.25	6.40	2.58	1.60	90-413-6-6
WR75	<b>10.0 - 11.6</b>	900	136.4	1.20	0.25	2.80				75-410-6-6
WR75	<b>11.6 - 13.4</b>	900	136.4	1.20	0.25	2.80				75-411-6-6
WR75	<b>13.0 - 15.0</b>	900	136.4	1.20	0.25	2.80				75-412-6-6
WR62	<b>12.4 - 14.0</b>	600	98.9	1.20	0.30	2.70	4.40	1.77	1.35	62-410-6-6
WR62	<b>13.5 - 15.6</b>	600	98.9	1.20	0.30	2.70	4.40	1.77	1.35	62-411-6-6
WR62	<b>15.5 - 18.0</b>	600	98.9	1.20	0.30	2.70	4.40	1.77	1.35	62-412-6-6
WR51	<b>15.5 - 17.5</b>	400	65.0	1.20	0.30	2.40				51-410-6-6
WR51	<b>17.35 - 19.65</b>	400	65.0	1.20	0.30	2.40				51-411-6-6
WR42	<b>17.6 - 20.0</b>	320	34.0	1.25	0.30	2.00	4.25	1.39	0.90	42-410-6-6
WR42	<b>19.3 - 22.0</b>	320	34.0	1.25	0.30	2.00	4.25	1.39	0.90	42-411-6-6
WR42	<b>22.5 - 26.0</b>	320	34.0	1.25	0.30	2.00	4.25	1.39	0.90	42-412-6-6
WR28	<b>26.0 - 30.0</b>	160	18.0	1.25	0.30	1.90	4.0	1.39	1.30	28-410-6-6
WR28	<b>30.0 - 34.0</b>	160	18.0	1.25	0.30	1.90	4.0	1.39	1.30	28-411-6-6
WR28	<b>33.5 - 37.0</b>	160	18.0	1.25	0.30	1.90	4.0	1.39	1.30	28-412-6-6
WR28	<b>36.0 - 40.0</b>	160	18.0	1.25	0.30	1.90	4.0	1.39	1.30	28-413-6-6