



# Dial Type Level Set Attenuator and Variable Phase Shifter

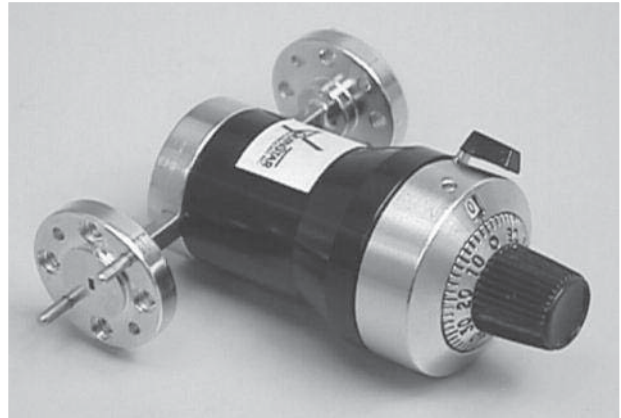
## QDA/QDP

### Characteristics

- ◆ Broadband Operation
- ◆ 0 to 25 dB Attenuation Range
- ◆ Mechanically Stable, Lockable
- ◆ High resolution

### Product Description

QuinStar Technology's QDA and QDP series Level Set Attenuators and Phase Shifters operate over the full waveguide band, and are offered in 7 waveguide bands covering the frequency range of 18 to 110 GHz. These adjustable level-set attenuators and variable phase shifters are driven by a mechanically stable, multi-turn miniature



dial knob to allow accurate and repeatable setting of attenuation and phase shift. The locking feature of the dial allows reliable operation when used in laboratory test setup, subsystems and instruments. The dial can be calibrated at a specified frequency, if desired. These adjustable components offer broadband performance.

### Specifications

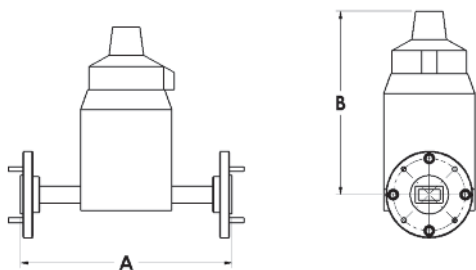
PERFORMANCE PARAMETER	K	Ka	Q	U	V	E	W
Frequency range, GHz	18-26.5	26.5-40	33-50	40-60	50-75	60-90	75-110
Typical Insertion Loss, in dB, at 0 dB setting	0.3	0.3	0.4	0.5	0.6	0.7	0.8
Attenuation Range, dB (for Attenuator)	0-30	0-30	0-25	0-25	0-25	0-25	0-25
Average Power Handling, Watts	1.5	1.0	1.0	1.0	0.6	0.6	0.6
Phase Shift, degrees (for Phase Shifter)	0-180	0-180	0-180	0-180	0-180	0-180	0-180



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### Outline Drawings/Mechanical Specifications



WAVEGUIDE BAND	OUTLINE DIMENSIONS, inches/mm	
	A	B
K	3.00/76.2	2.35/59.7
KA	2.75/69.9	2.16/54.9
Q	2.75/69.9	2.16/54.9
U	2.75/69.9	2.16/54.9
V	2.5/63.5	1.94/49.3
E	2.5/63.5	1.94/49.3
W	2.5/63.5	1.94/49.3

### Ordering Information

Model Number **QD\_ - A 0000**

model prefix

- A = Level Set Attenuator
- P = Variable Phase Shifter

waveguide band designator

- K = K-band
- A = Ka-band
- Q = Q-band
- U = U-band
- V = V-band
- E = E-band
- W = W-band