RD-1 Rotary Drive



0-180° Fully Adjustable



3.56

2.50

Dimensions

Features

- Angle of rotation adjusted with built in stop screws with fine threads
- Stop screws are compatible with sensing switches
- Designed for production rates and long life
- Two sealed ball bearings at top and bottom of drive shaft
- Tapped holes and offset dowel pin area in shaft and driving flange allows higher torque transmittal and accuracy
- Bearings are positioned very close to the drive gear for rigidity, precision, wear resistance and accuracy.
- Shaft is stopped with an adjustable hard stopscrew against a hardened pin, eliminating backlash



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Technical Data

Bore	= 0.5"	
Repeat accuracy	= +/-0.0005"	↓ F
Life expectancy	= 5-6 million cycles	
Compressed air	= 60 to 100 psi	
Angle of rotation	= 0 to 180 degrees	
Weight	= 1 lbs	у
Air connection	= 10-32	
Max radial		
bearing load	= 4 lbs	
Max axial		
bearing load	= 6 lbs	

Pressure	Piston Area (in^2)	Max Torque (in-lbs)
60	.196	2.9
70	.196	3.4
80	.196	3.9
90	.196	4.4
100	.196	4.9

The diagrams above depict the load (F) on an arm of length = y. Also shown is the torque of the RD-1 which is given in the chart:



This chart shows how the cycle time of the RD-1 is affected by the amount of load and distance the load is from the shaft, for 180° rotation. For operating pressures other than 80, take value from graph and multiply by (Pressure in psi/80).

Options

Sensing switches are available as an option. They are mounted to the stopscrews as seen in the photo to the right. For specifications on sensing please see page 49.

