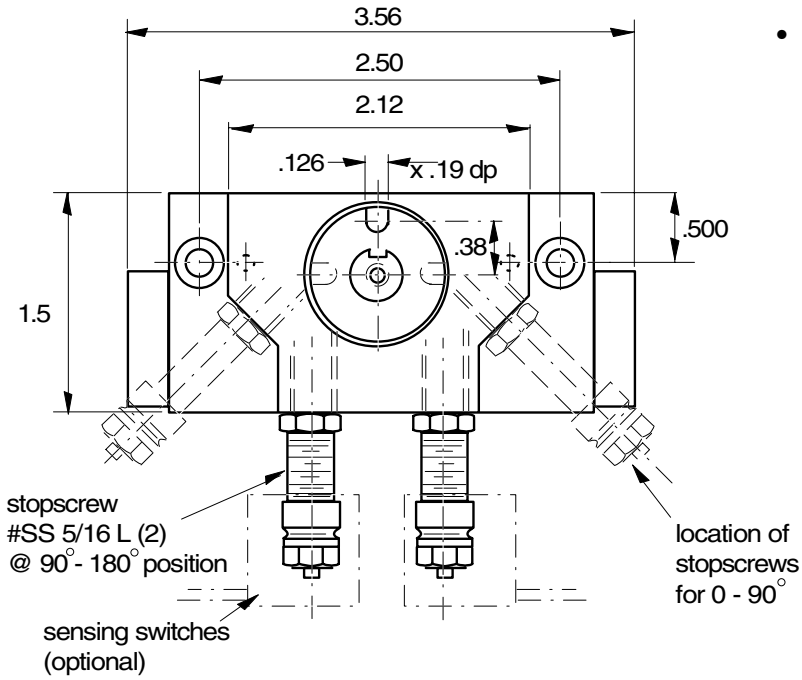
RD-1 Rotary Drive

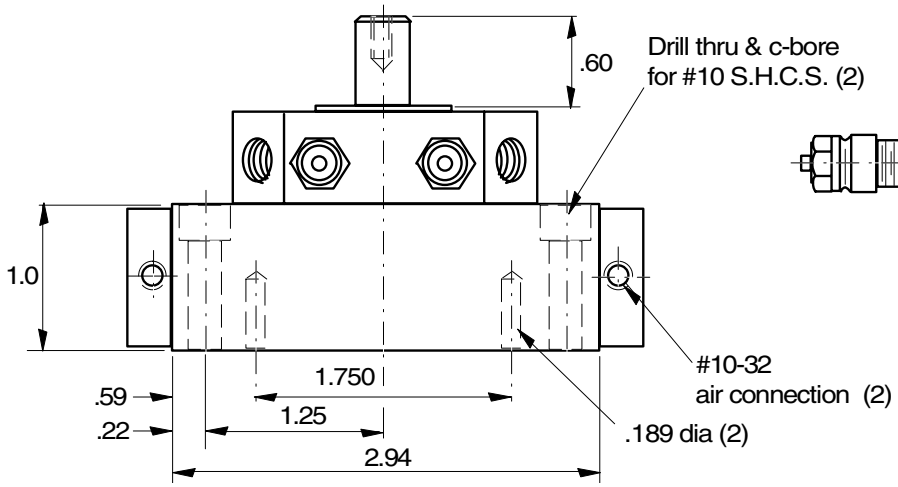
0-180° Fully Adjustable

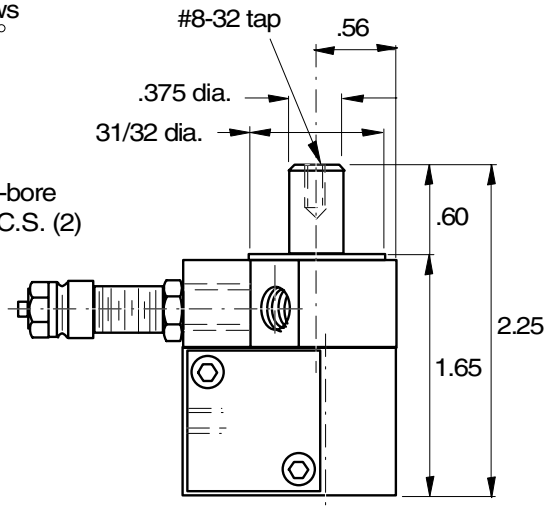
Features

- 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

Dimensions







Note: shown in mid-position

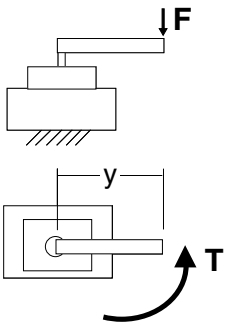
M

780 E. Tek Drive Crystal Lake, IL 60014 Telephone 815/477-1400 FAX 815/477-9818
web: www.barringtonautomation.com e-mail:info@barringtonautomation.com

RD-1 Rotary Drive

Technical Data

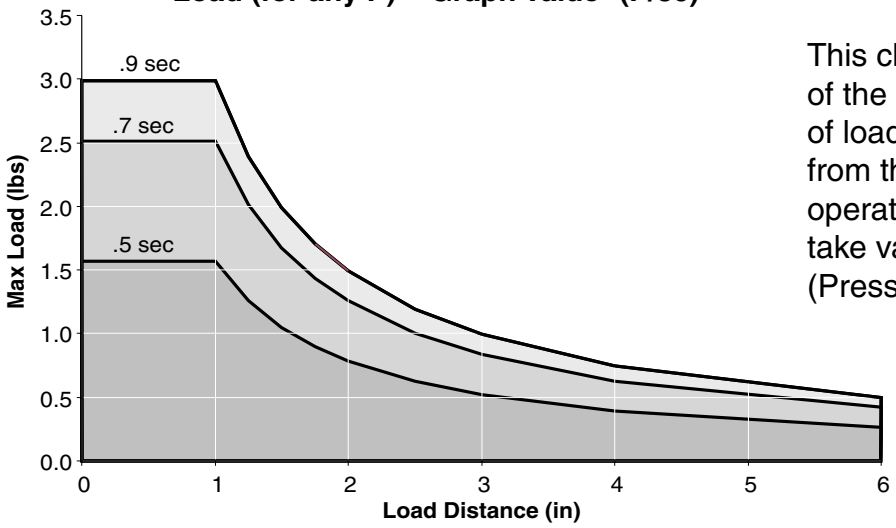
Bore	= 0.5”
Repeat accuracy	= +/-0.0005”
Life expectancy	= 5-6 million cycles
Compressed air	= 60 to 100 psi
Angle of rotation	= 0 to 180 degrees
Weight	= 1 lbs
Air connection	= 10-32
Max radial bearing load	= 4 lbs
Max axial bearing load	= 6 lbs



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:

Load vs. Distance for Different Cycle Times (@80psi)
Load (for any P) = Graph value *(P/80)



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).

M

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 143.

.