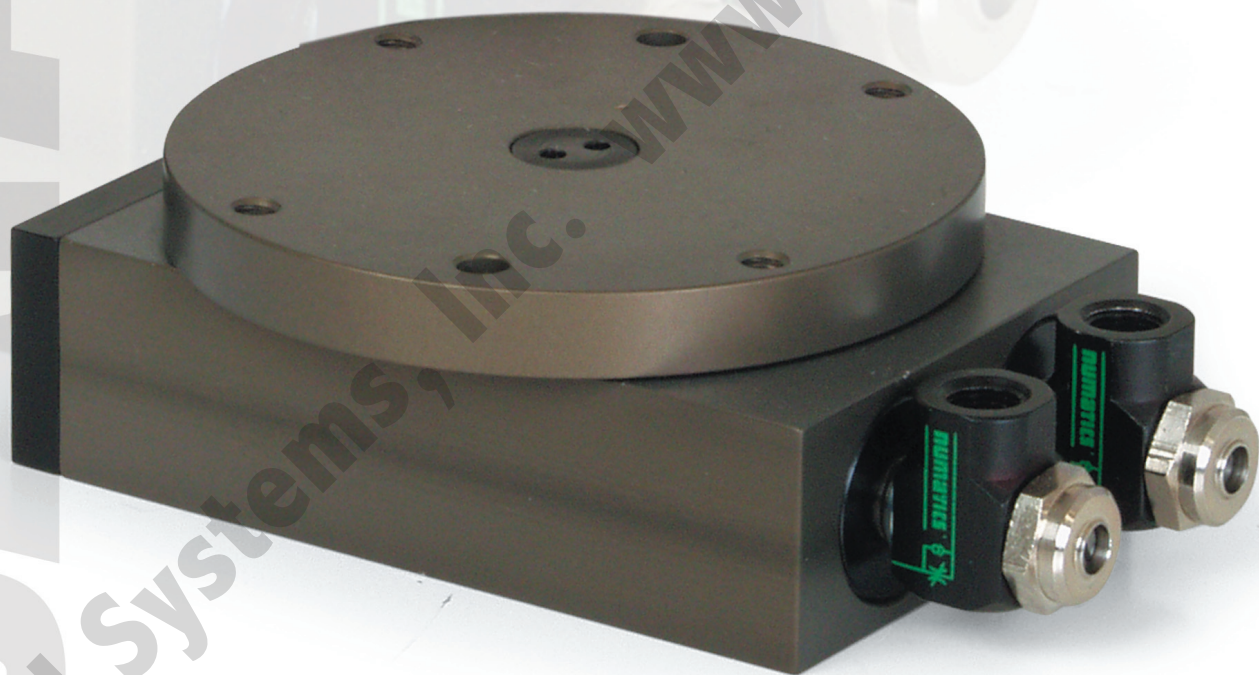


actuators

LR Series
Low Profile Rotary Actuator



numatics

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Air-Oil Systems, Inc. www.airoil.com



The LR series rotary actuator is a low profile rack and pinion design. Two independent pistons drive their corresponding racks against the pinion thereby rotating the platform.

A. Body

Hardcoated anodized aluminum Teflon impregnated, lightweight, high strength to weight ratio.

B. Rotary Platform

Hardcoated anodized aluminum durable. Supported by two bearings. One on each side of the pinion shaft providing superior dynamic load capacity

C. Stroke Adjustment

Built in rotary hard stops, protects rotary platform from over travel. External stroke adjust screws with locking set screws provide fine tuned rotary position.

D. Flow Controls

Built in design easily adjustable, provide precise deceleration speed control in both directions.

E. Position Sensing

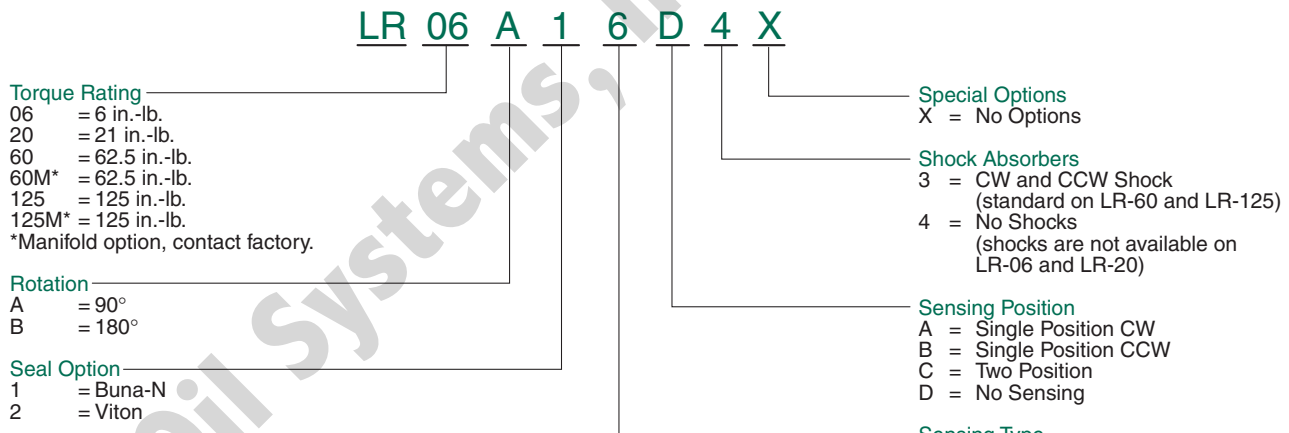
Proximity switch sensors available for rotary position sensing.

F. Shocks

LR60 & LR125 come standard with internal shock absorbers.

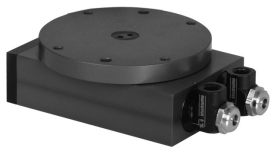


How to Order

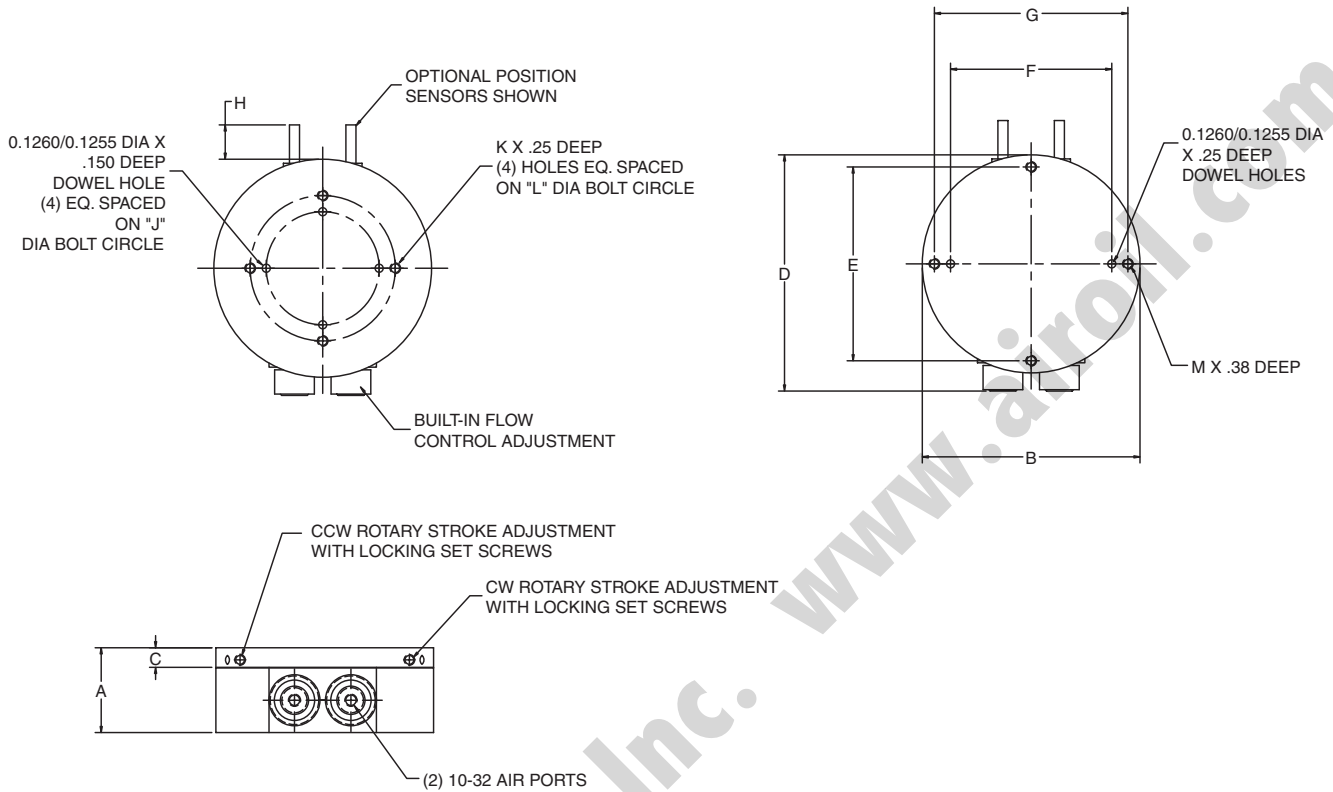


When ordering additional switches

SWITCH DESCRIPTION	STANDARD PART NO.	QUICK DISCONNECT PART NO.
Prox Switch-PNP (Sourcing)	PX05PS	PX05PQ
Prox Switch-NPN (Sinking)	PX05NS	PX05NQ
Quick Disconnect Cable	-	PXCST
90° 5 meter cable	-	PXC90
Bronze switch housing for LR & RM Rotaries	-	RSH05



LR06 & LR20 Series

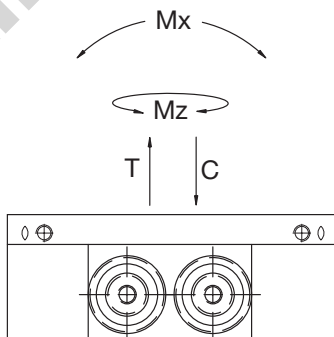


Dimensions

	LR06	LR20
A	0.969	1.313
B	2.250	3.375
C	0.281	0.303
D	2.625	3.656
E	N/A	3.000
F	1.624/1.626	2.499/2.501
G	2.000	3.000
H	0.600	0.600
J	0.750	1.750
K	#6-32	#8-32
L	1.250	2.250
M	#6-32	#8-32

Specifications

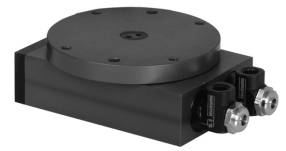
	LR06	LR20
Max. Payload	1.0 lb	3.0 lbs
Max. Air Pressure	120 psi	120 psi
Torque Output @ 100 psi	6.5 in.-lbs.	21.2 in.-lbs.
Max. Payload Inertia	0.012 lb.-in ²	0.012 lb.-in ²
Cylinder Bore Dia.	2 @ 0.5 in.	2 @ 0.75 in.
Displacement	0.3 cu.in.	0.72 cu.in.
Repeatability	0.015 degrees	0.015 degrees
Max. Rotation	180 degrees	180 degrees
Degrees Adjustment	+/- 5 degrees	+/- 5 degrees
Max. Speed for 180 degrees	0.3 sec.	0.4 sec.
Unit Weight	7 oz.	1.2 lbs



Load Capacity*

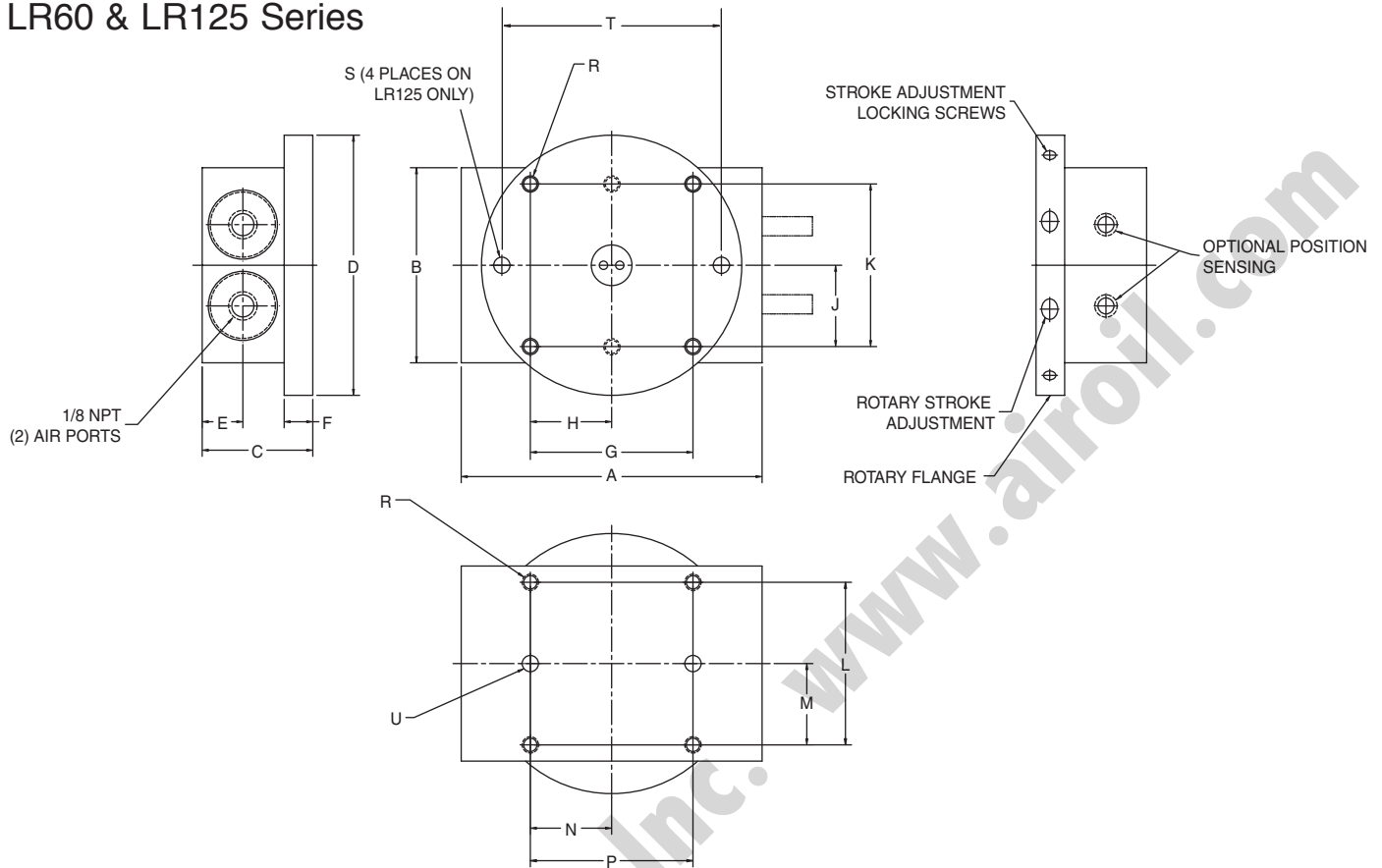
	STATIC CONDITION		DYNAMIC CONDITION	
	LR06	LR20	LR06	LR20
C-Compression	250 lbs	350 lbs	50 lbs	75 lbs
T-Tension	50 lbs	75 lbs	12 lbs	20 lbs
Mx	100 in.-lbs.	200 in.-lbs.	25 in.-lbs.	50 in.-lbs.
Mz	100 in.-lbs.	200 in.-lbs.	25 in.-lbs.	50 in.-lbs.

* Dynamic rating applicable with external shocks or stops.



LR Series

LR60 & LR125 Series

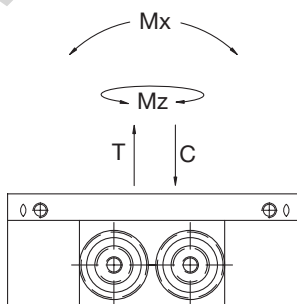


Dimensions

	LR60	LR125
A	4.625	5.500
B	3.000	3.500
C	1.700	2.125
D	4.000	4.470
E	0.625	0.750
F	0.440	0.609
G	2.500	2.750
H	1.250	1.375
J	2.500	1.375
K	1.250	2.750
L	2.500	3.000
M	1.250	1.500
N	1.250	1.500
P	2.500	3.000
R	1/4-20 X .43 DP	5/16-18 X .43 DP
S	0.2505/0.2510 X 0.38 DP	0.2505/0.2510 X 0.38 DP
T	3.38	2.75
U	0.2505/0.2510 X 0.38 DP	0.3130/0.3135 X 0.37 DP

Specifications

	LR60	LR125
Max. Payload	8.0 lb	15.0 lbs
Max. Air Pressure	120 psi	120 psi
Torque Output @ 100 psi	61 in.-lbs.	126 in.-lbs.
Max. Payload Inertia	0.041 lb.-in. ²	0.1 lb.-in. ²
Cylinder Bore Dia.	2 @ 1 in.	2 @ 1.25 in.
Displacement	2.06 cu.in.	3.855 cu.in.
Repeatability	0.018 degrees	0.018 degrees
Max. Rotation	180 degrees	180 degrees
Degrees Adjustment	+/- 5 degrees	+/- 5 degrees
Max. Speed for 180 degrees	0.35 sec.	0.4 sec.
Unit Weight	2.9 lbs	5 lbs



Load Capacity*

	STATIC CONDITION		DYNAMIC CONDITION	
	LR60	LR125	LR60	LR125
C-Compression	500 lbs	1000 lbs	100 lbs	200 lbs
T-Tension	100 lbs	200 lbs	20 lbs	40 lbs
Mx	300 in.-lbs.	500 in.-lbs.	75 in.-lbs.	100 in.-lbs.
Mz	300 in.-lbs.	500 in.-lbs.	75 in.-lbs.	100 in.-lbs.

* Dynamic rating applicable with external shocks or stops.

