

# **Rotary Actuator**

### **Double Acting**



<u>J10MD-M</u>

NITRA Pneumatics rotary actuators are an excellent choice for many automation applications. Available in four body sizes with or without shock absorbers. All are double acting and have an adjustable travel range from zero to 190 degrees. Anodized aluminum bodies include integral mounting slots for position switches.

#### Features

- Four body sizes (10, 20, 30, 50 lb•in @ 80 psi)
- Anodized aluminum bodies
- Available with rubber bumpers or shock absorbers
- Position switch ready with integral mounting slots
- Zero to 190 degrees adjustable rotation

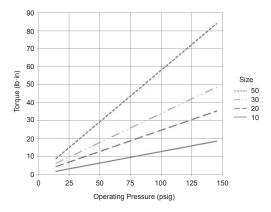


NITRA Rotary Actuators - Double Acting									
Part No.	Description	Action	Size*	Air Consumption (cc/deg)	End Stops	Body	Port(s)	Price	Weight (lbs)
<u>J10MD-M</u>	NITRA pneumatic rotary actuator	Double acting -	10	0.04	Rubber bumpers	Anodized aluminum		\$350.00	1.3
J10MD-MA					Shock			\$429.00	1.3
<u>J20MD-M</u>			20	0.08	Rubber		M5 x 0.8	\$398.00	2.3
J20MD-MA					Shock			\$484.00	2.3
<u>J30MD-M</u>			30	0.10	Rubber			\$429.00	3.0
J30MD-MA					Shock		1/8in female	\$520.00	3.0
<u>J50MD-M</u>			50	0.18	Rubber		NPT	\$489.00	4.9
J50MD-MA					Shock Absorber			\$606.00	4.9

\* Ib•in torque @ 80 psi

NITRA Rotary Acutuator Specifications					
	Fluid	Air (clean/dry)			
A	ction	Double rack and pinion (double acting)			
Drosouro Dongo	Bolt Adjustment	14 to 145 psig (0.97 to 9.99 bar)			
Pressure Range	Shock Adjustment	14 to 87 psig (0.97 to 5.99 bar)			
Proof	Pressure	175 psig			
Tempera	ature Range	32°F to 140°F (0°C to 60°C)			
Adjustmen	nt Angle Range	0° to 190° Rotation			
Repeatable	Bolt Adjustment	0.2°			
Precision	Shock Adjustment	0.05°			
Rotation Times	Bolt Adjustment	0.2 - 1.0			
(s/90°)	Shock Adjustment	0.2 - 0.7			
Cuphian Tuna	Bolt Adjustment	Rubber Bumper			
Cushion Type	Shock Adjustment	Shock Absorber			
Ро	rt Size	M5 x 0.8 (sizes 10 and 20) Rear ports 1/8 NPT / Side ports M5 x 0.8 (sizes 30 and 50)			
Sensor Swit	ch Compatibility	Nitra CPS9C-xx-x			
In	cludes	Magnet			
Ap	provals	None			

### **Torque Output**



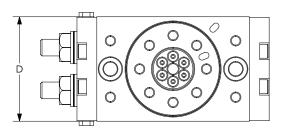
Rotary Loads							
"Loading Type (max allowed)"	J10MD-xx	J20MD-xx	J30MD-xx	J50MD-xx			
Radial	"18lbs	"33.7lbs	"45lbs	"67.4lbs			
	(80N)"	150N"	(200N)"	(300N)"			
Axial	"18lbs	"33.7lbs	"45lbs	"67.4lbs			
	(80N)"	150N"	(200N)"	(300N)"			
Bending Moment	"22.1in-lbs	"35.4in-lbs	"48.7in-lbs	"88.5in-lbs			
	(2.5Nm)"	(4.0Nm)"	(5.5Nm)"	(10.0Nm)"			

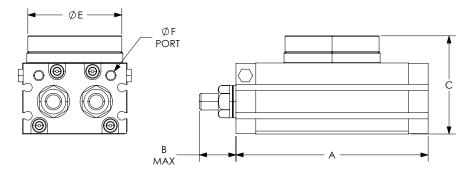


## **Rotary Actuator**

### **Dimensions**

#### mm [inches]





Rotary Actuator Dimensions							
Part #	A	В	C	D	ØE	ØF	
<u>J10MD-M</u>	92.0 [3.62]	17.5 [0.69]	47.0 [1.85]	50.0 [1.97]	45.0 [1.77]	M5 x 0.8	
J10MD-MA	92.0 [3.62]	28.5 [1.12}	47.0 [1.85]	50.0 [1.97]	45.0 [1.77]	M5 x 0.8	
<u>J20MD-M</u>	117.0 [4.61]	26.0 [1.02]	54.0 [2.13]	65.0 [2.56]	60.0 [2.36]	M5 x 0.8	
J20MD-MA	117.0 [4.61]	39.0 [1.54]	54.0 [2.13]	65.0 [2.56]	60.0 [2.36]	M5 x 0.8	
<u>J30MD-M</u>	127.0 [5.00]	25.5 [1.00]	57.0 [2.24]	70.0 [2.76]	65.0 [2.56]	1/8 NPT	
J30MD-MA	127.0 [5.00]	39.0 [1.54]	57.0 [2.24]	70.0 [2.76]	65.0 [2.56]	1/8 NPT	
<u>J50MD-M</u>	152.0 [5.98]	31.5 [1.24]	66.0 [2.60]	80.0 [3.15]	75.0 [2.95]	1/8 NPT	
J50MD-MA	152.0 [5.98]	51.0 [2.01]	66.0 [2.60]	80.0 [3.15]	75.0 [2.95]	1/8 NPT	

See our website <u>www.AutomationDirect.com</u> for complete Engineering drawings.

Accessories



NITRA Rotary Actuator Accessories						
Part No.	Description Pri		Weight (Ibs)			
<u>J10M-SA</u>	NITRA shock absorber, for use with J-series size 10 rotary actuators.	\$43.00	0.1			
<u>J2030M-SA</u>	NITRA shock absorber, for use with J-series sizes 20 and 30 rotary actuators.	\$49.00	0.2			
<u>J50M-SA</u>	NITRA shock absorber, for use with J-series size 50 rotary actuators.	\$62.00	0.2			