

# DRG SERIES

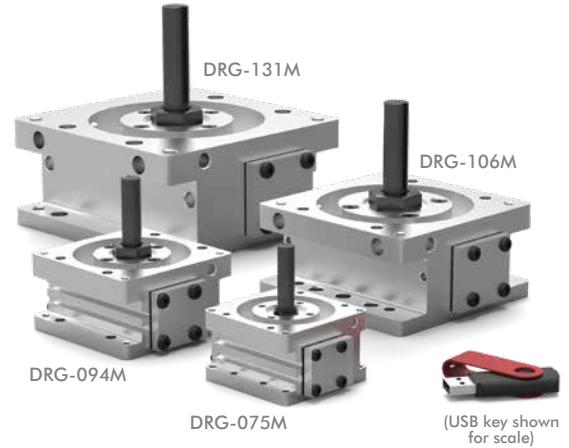
## Rotary Actuators | Features and Benefits | How To Order

### Features:

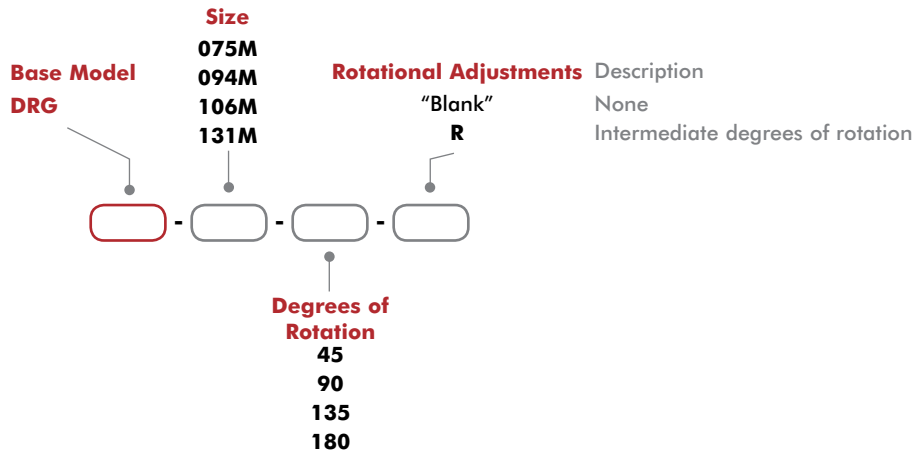
- Shaft output design for low precision end stop positioning applications
- Full Torque at end of stroke
- Metric Keyway on shaft for coupling payload
- Multiple mounting configurations
- -R option allows for rotational adjustment beyond 45°, 90°, 135°, 180°
- Extremely rugged design for long term reliability

### Applications:

- Torque generator
- Diverter gates
- Ejection stations



## How To Order



## Accessories

Sensor Accessories	Model Numbers	Part Number	Qty/Unit
NPN Magneto Resistive Sensor with Quick Disconnect*	All Models	OHSN-017	1-2
PNP Magneto Resistive Sensor with Quick Disconnect*	All Models	OHSP-017	1-2
NPN Magneto Resistive Sensor 90° Barrel with Quick Disconnect*	All Models	OHSN-011	1-2
PNP Magneto Resistive Sensor 90° Barrel with Quick Disconnect*	All Models	OHSP-011	1-2
Quick Disconnect 2 Meter Cable Length*	All Models	CABL-010	1-2
Quick Disconnect 5 Meter Cable Length*	All Models	CABL-013	1-2

Pneumatic Accessories	Model Numbers	Part Number	Qty/Unit
Fitting Push-in 90° Elbow G1/8, 6mm O.D. Tube	131M	PLFT-042	1-2
Fitting Push-in 90° Elbow G1/8, 8mm O.D. Tube	131M	PLFT-048	1-2
Fitting Push-in Straight G1/8, 6mm O.D. Tube	131M	PLFT-038	1-2
Fitting Push-in Straight G1/8, 8mm O.D. Tube	131M	PLFT-045	1-2
Flow Control Push-in 90° Elbow M5-6mm O.D. Tube**	075M, 094M, 106M	VLVF-008	1-2
Flow Control Push-in 90° Elbow G1/8-6mm O.D. Tube**	131M	VLVF-005	1-2

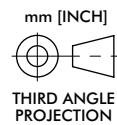
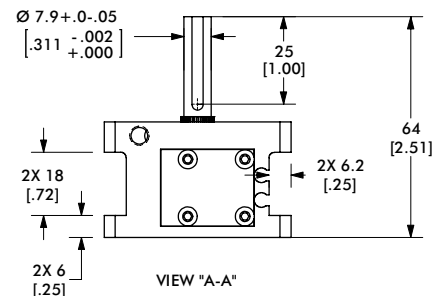
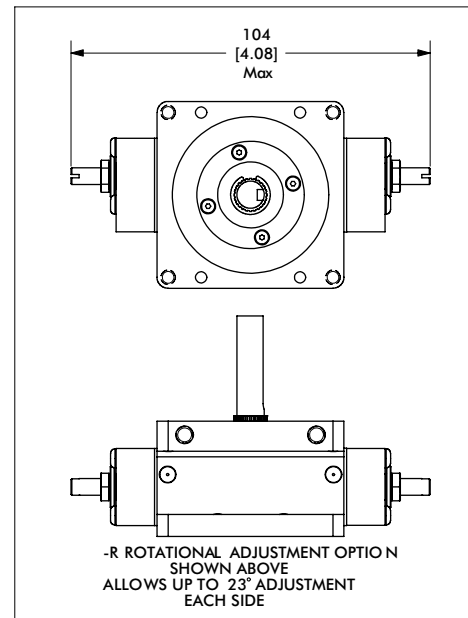
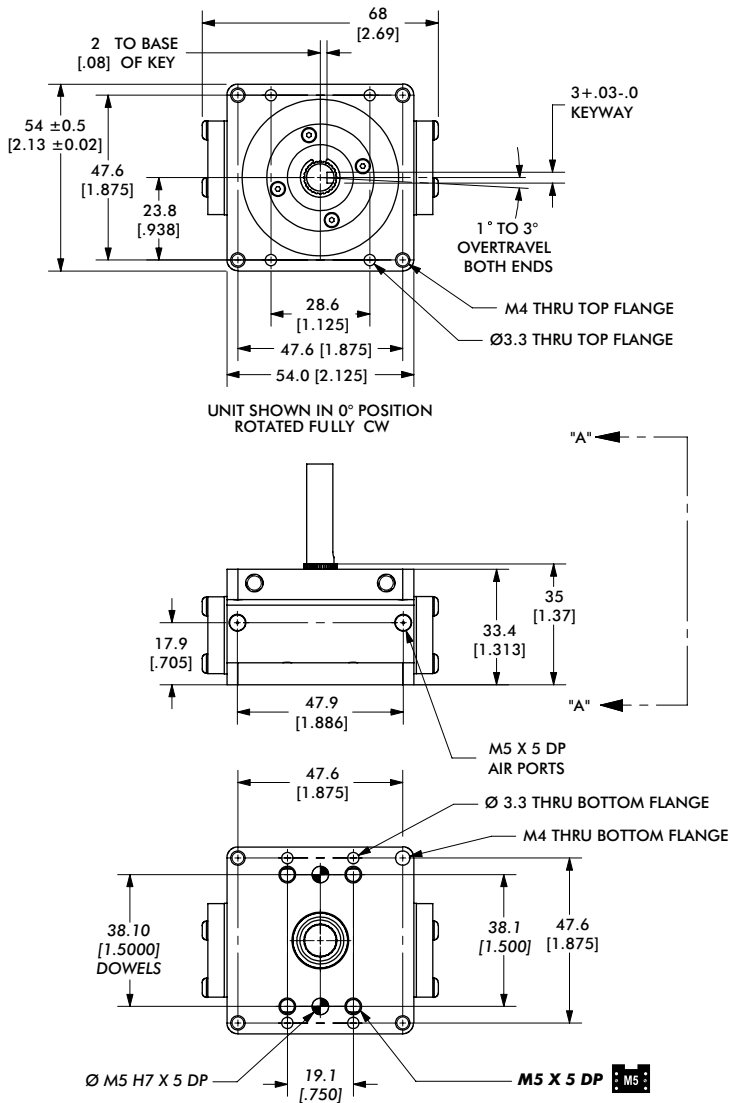
\*Sensor and cable sold separately.

\*\*Flow Controls recommended for most applications

Specifications	Units	075M	094M
Maximum Payload	kg [lb]	0.23 [0.5]	0.68 [1.5]
Maximum Payload Inertia	Nm sec <sup>2</sup> [in-lbs sec <sup>2</sup> ]	9.0 X 10 <sup>5</sup> [0.0008]	6.3 X 10 <sup>4</sup> [0.0056]
Maximum Torque @ 100psi/7 bar	Nm [lbs-in]	0.9 [0.83]	1.9 Nm [17.3]
Maximum Rotation		180°	
Pitch Diameter of Pinion	mm [in]	9.5 [0.375]	12.7 [0.500]
Weight with rotational adjuster (-R option)	mm [in]	0.33 [0.72]	0.54 [1.2]
Weight without rotational adjuster	mm [in]	0.24 [0.52]	0.45 [1.0]
Pressure Range	bar [psi]	3-7 [40-100]	
Ingress Protection Class (IP)		IP54	
Displacement (180°)		5.1 [0.31]	9.0 [0.55]
Actuation Time (180° @ 100psi/7 bar)	sec	0.38	
Actuation Time (90° @ 100psi/7 bar)	sec	0.29	
Temperature Range	°C [°F]	-35°~82° [-30°~180°]	
End Stop Adjustability (-R option)	°C [°F]	23°	
Over Travel (each end)		1°-3°	
Valve required to actuate		4-way, 2-position	

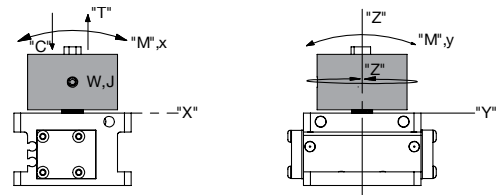
Specifications	Units	106M	131M
Maximum Payload	kg [lb]	1.8 [4]	3.5 [7.5]
Maximum Payload Inertia	Nm sec <sup>2</sup> [in-lbs sec <sup>2</sup> ]	2.3 X 10 <sup>3</sup> [0.0207]	5.5 X 10 <sup>3</sup> [0.0485]
Maximum Torque @ 100psi/7 bar	Nm [lbs-in]	3.8 [33.2]	7.6 [68]
Maximum Rotation		180°	
Pitch Diameter of Pinion	mm [in]	19.1 [0.750]	25.4 [1.000]
Weight with rotational adjuster (-R option)	mm [in]	1.2 [2.7]	2.5 [5.6]
Weight without rotational adjuster	mm [in]	1.1 [2.5]	2.4 [5.4]
Pressure Range	bar [psi]	3-7 [40-100]	
Ingress Protection Class (IP)		IP54	
Displacement (180°)		19.0 [1.16]	34.6 [2.11]
Actuation Time (180° @ 100psi/7 bar)	sec	0.60	0.87
Actuation Time (90° @ 100psi/7 bar)	sec	0.45	0.68
Temperature Range	°C [°F]	-35°~82° [-30°~180°]	
End Stop Adjustability (-R option)	°C [°F]	23°	
Over Travel (each end)		1°-3°	
Valve required to actuate		4-way, 2-position	

## Rotary Actuators | Dimensions and Technical Specifications



Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-210
Buna-N Rotational Adjustment Seal Kit	SLKT-212

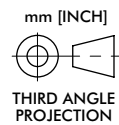
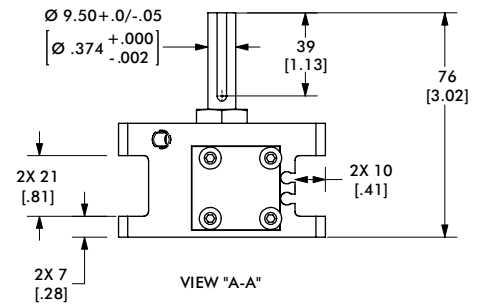
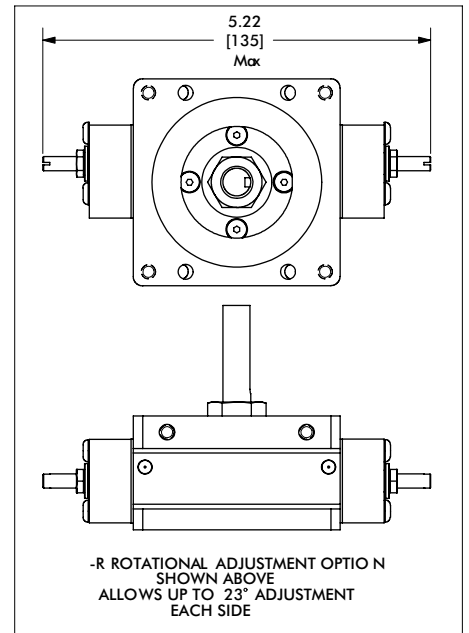
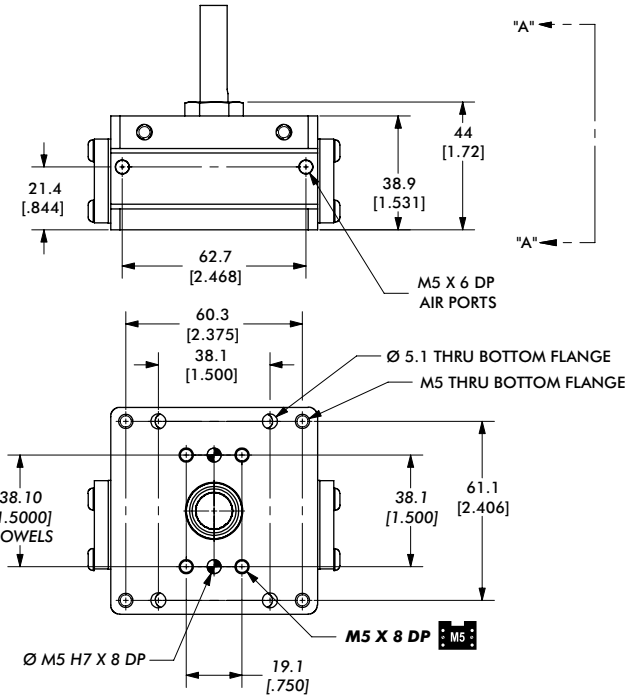
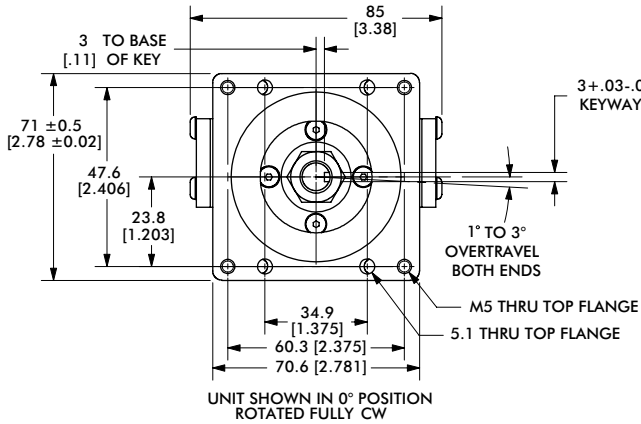
## Loading Information



DRG-075M Loading information	Static
Maximum Tensile <b>T</b>	44 N [10 lbs]
Maximum Compressive <b>C</b>	89 N [20 lbs]
Maximum Moment <b>M<sub>x</sub></b>	2.3 Nm [20 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	2.3 Nm [20 in-lbs]
Maximum Payload <b>W</b>	0.23 kg [0.5 lbs]
Maximum Inertia <b>J</b>	9.0 X 10 <sup>-5</sup> N-m-sec <sup>2</sup> [0.008 in-lbs-sec <sup>2</sup> ]

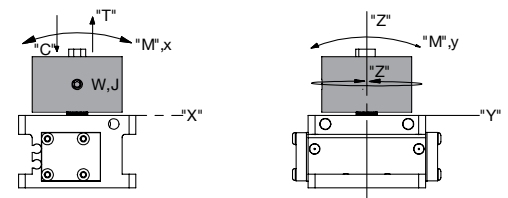
Note: Higher payloads and inertia possible with external shocks and stops.

Rotary Actuators | Dimensions and Technical Specifications



Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-216
Buna-N Rotational Adjustment Seal Kit	SLKT-218

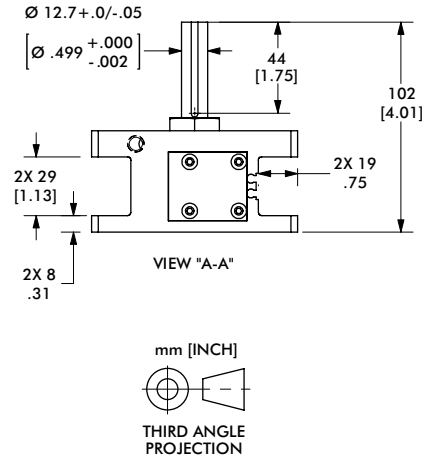
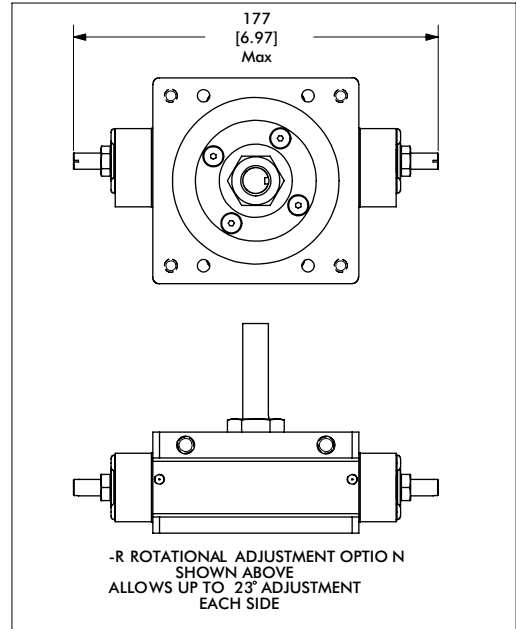
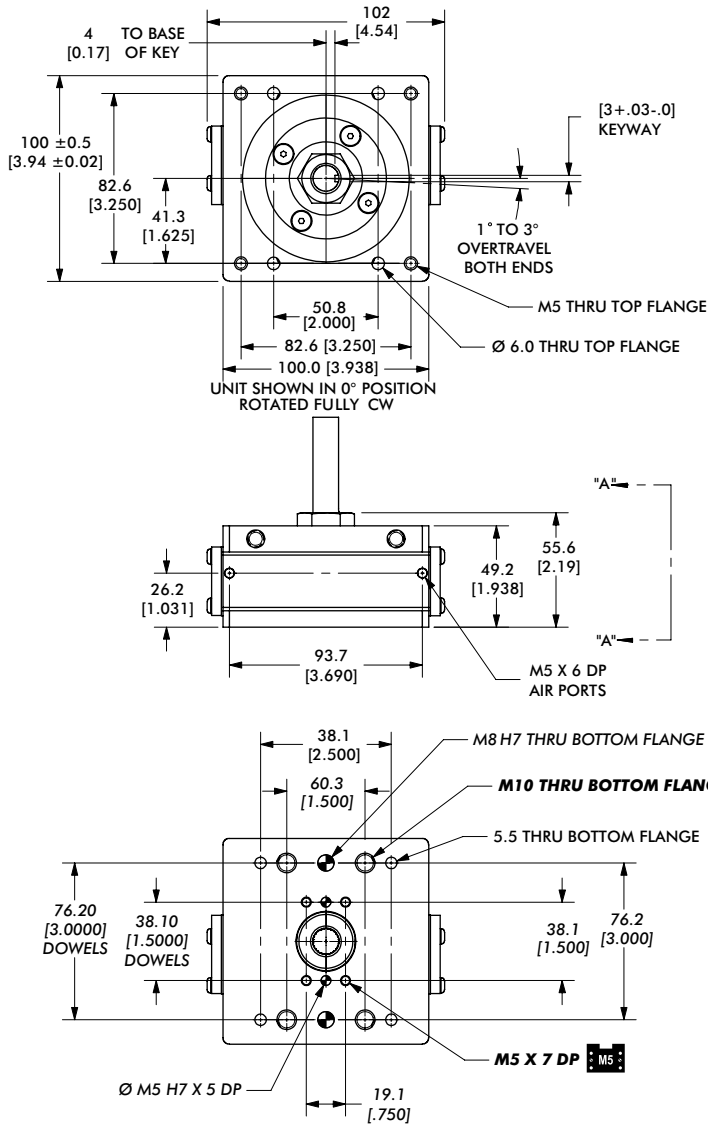
**Loading Information**



DRG-094M Loading Information	Static
Maximum Tensile <b>T</b>	67 N [15 lbs]
Maximum Compressive <b>C</b>	133 N [30 lbs]
Maximum Moment <b>M<sub>x</sub></b>	5.6 Nm [50 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	5.6 Nm [50 in-lbs]
Maximum Payload <b>W</b>	0.68 kg [1.5 lbs]
Maximum Inertia <b>J</b>	6.3 X 10 <sup>-4</sup> N-m-sec <sup>2</sup> [0.0056 in-lbs-sec <sup>2</sup> ]

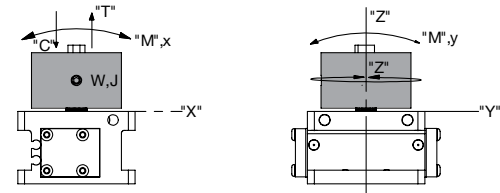
Note: Higher payloads and inertia possible with external shocks and stops.

## Rotary Actuators | Dimensions and Technical Specifications



Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-222
Buna-N Rotational Adjustment Seal Kit	SLKT-224

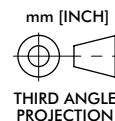
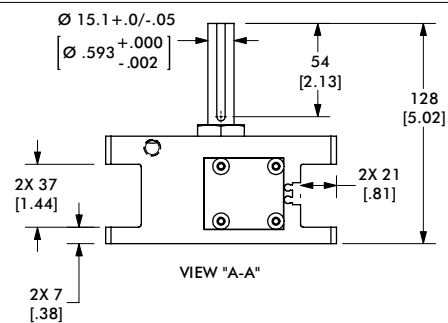
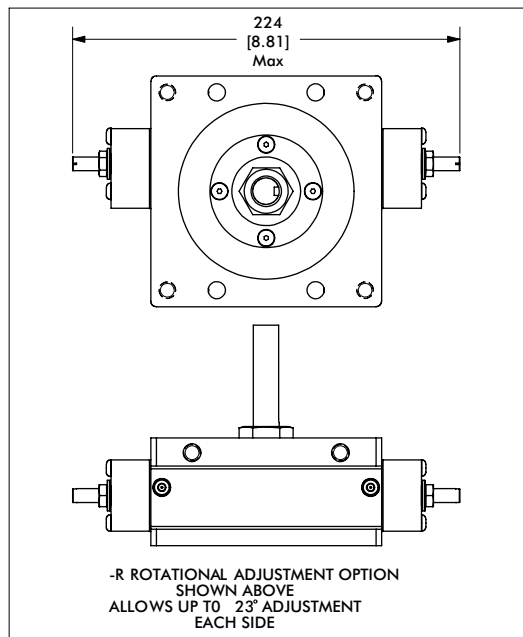
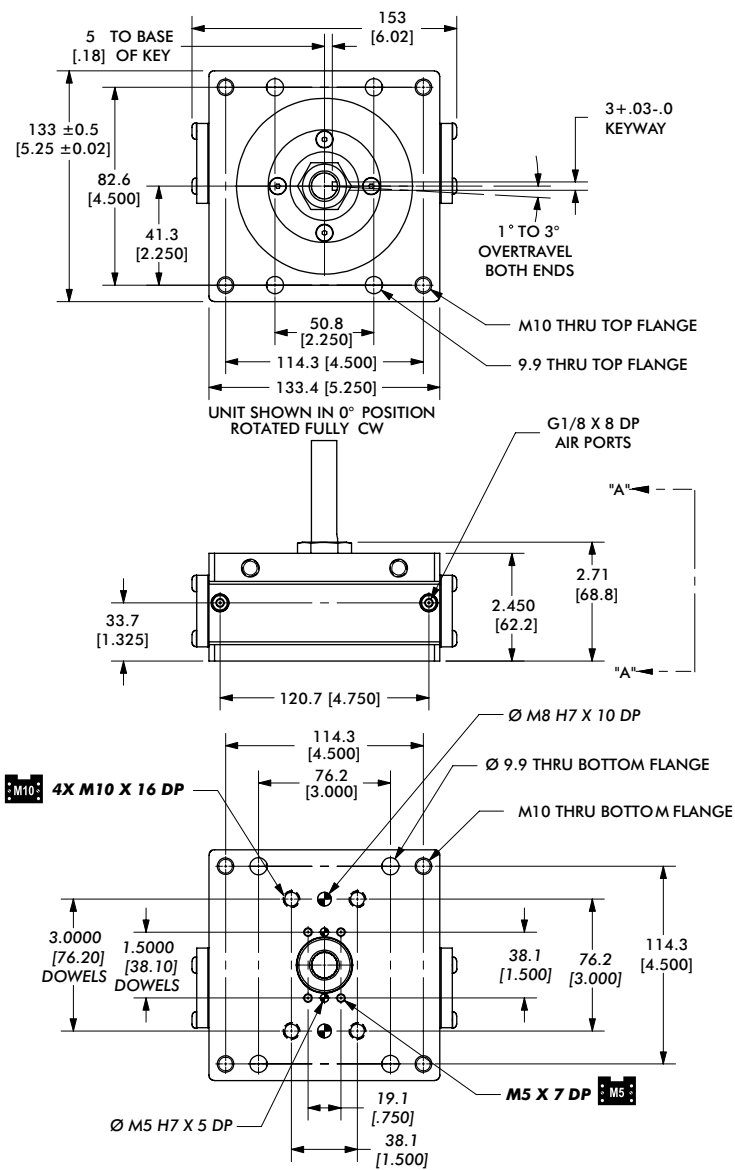
## Loading Information



DRG-106M Loading Information	Static
Maximum Tensile <b>T</b>	111 N [25 lbs]
Maximum Compressive <b>C</b>	222 N [50 lbs]
Maximum Moment <b>M<sub>x</sub></b>	8.5 Nm [75 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	8.5 Nm [75 in-lbs]
Maximum Payload <b>W</b>	1.8 kg [4 lbs]
Maximum Inertia <b>J</b>	$2.3 \times 10^{-3}$ N-m-sec <sup>2</sup> [0.0207 in-lbs-sec <sup>2</sup> ]

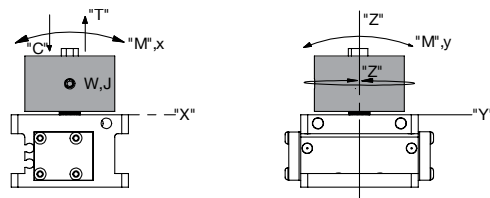
Note: Higher payloads and inertia possible with external shocks and stops.

## Rotary Actuators | Dimensions and Technical Specifications



Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-228
Buna-N Rotational Adjustment Seal Kit	SLKT-230

### Loading Information



DRG-131M	Static
Maximum Tensile <b>T</b>	222 N [50 lbs]
Maximum Compressive <b>C</b>	445 N [100 lbs]
Maximum Moment <b>M<sub>x</sub></b>	11.3 Nm [100 in-lbs]
Maximum Moment <b>M<sub>y</sub></b>	11.3 Nm [100 in-lbs]
Maximum Payload <b>W</b>	3.4 kg [7.5 lbs]
Maximum Inertia <b>J</b>	5.5 X 10 <sup>-3</sup> N-m-sec <sup>2</sup> [0.0485 in-lb-sec <sup>2</sup> ]

Note: Higher payloads and inertia possible with external shocks and stops.