

RR HEAVY-DUTY SERIES

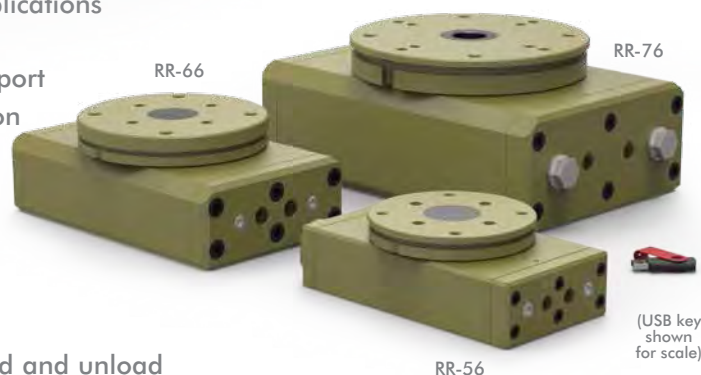
Rotary Actuators | Features and Benefits | How To Order

Features:

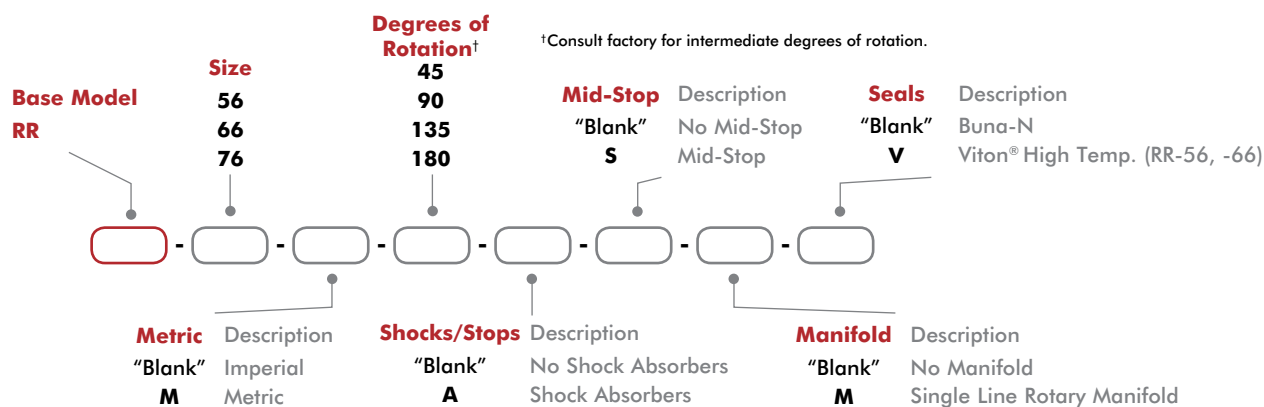
- Compact large capacity, high torque for tight space applications
- Use in heavy duty industrial and foundry applications
- Mount payload directly to flange without additional support
- Preloaded bearings for high repeatability rotary actuation
- Zero backlash & precision slip fit dowel pins
- Adjustable flow controls
- Optional manifold eliminates twisted airlines
- 3 position rotary with option mid-stop

Applications:

- Large torque application
- Foundry applications
- Load and unload



How To Order



Accessories

Sensor Accessories	Model Numbers	Part Number	Qty/Unit
Inductive Sensor Mounting Kit (mounts 2 sensors)	-56, -66	OSMK-075	1
Inductive Sensor Mounting Kit (mounts 2 sensors)	-76	OSMK-096	1
Magneto Resistive Sensor Mounting Kit (mounts 2 sensors)	-56, -66	OSMK-069	1
NPN Inductive Sensor with Quick Disconnect*	-56, -66	OISN-011	1-2
PNP Inductive Sensor with Quick Disconnect*	-56, -66	OISP-011	1-2
NPN Inductive Sensor with Quick Disconnect*	-76	OISN-017	1-2
PNP Inductive Sensor with Quick Disconnect*	-76	OISP-017	1-2
NPN Magneto Resistive Sensor with Quick Disconnect*	-56, -66	OHSN-017	1-2
PNP Magneto Resistive Sensor with Quick Disconnect*	-56, -66	OHSP-017	1-2
Quick Disconnect 2 Meter Cable Length*	-56, -66	CABL-010	1-2
Quick Disconnect 5 Meter Cable Length*	-56, -66	CABL-013	1-2
Quick Disconnect 2 Meter Cable Length*	-76	CABL-014	1-2
Quick Disconnect 5 Meter Cable Length*	-76	CABL-018	1-2

Pneumatic Accessories	Model Numbers	Part Number	Qty/Unit
1/4 NPT Flow Controls (Imperial)	-56	VLVF-009	2
G 1/4 BSPP Flow Controls	-56	VLVF-010	2
3/8 Flow Control (Imperial)	-66, -76	VLVF-011	2
G 3/8 BSPP Flow Control	-66, -76	VLVF-012	2
Adapter 1/8 NPT to G 1/8	-76	PLFT-028	1
Adapter 3/8 NPT to G 3/8	-76	PLFT-029	1

*Sensor and cable sold separately.



GR-ROT-23

Dimensions and technical information are subject to change without notice

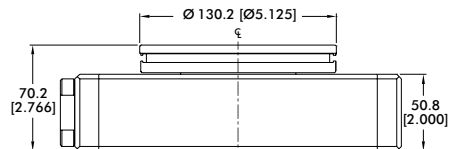
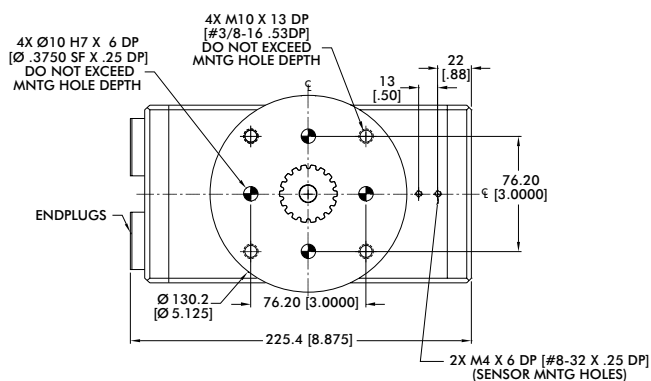
RR HEAVY-DUTY SERIES

Rotary Actuators | Technical Specifications

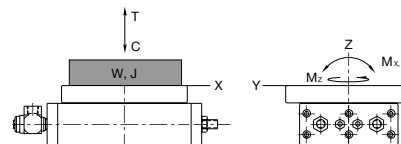
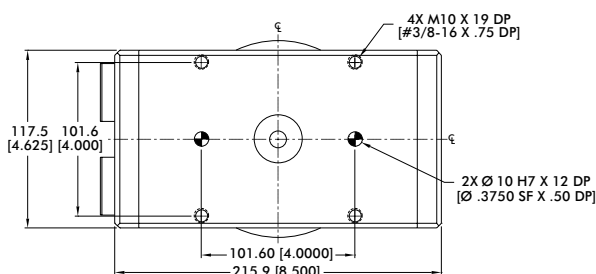
Specifications	Units	56	66	76
Maximum Payload [†]	kg [lb]	13.6 [30]	34 [75]	91 [200]
Maximum Payload Inertia [†]	Nm sec ² [in-lbs sec ²]	0.02880 [0.2549]	0.11584 [1.0251]	0.5596 [4.95]
Maximum Rotation		180°		
Maximum Torque Mid-Stroke @ 100psi/7 bar	Nm [lbs-in]	35 [311]	82 [728]	215 [1900]
Maximum Torque End-Stroke @ 100psi/7 bar	Nm [lbs-in]	17 [155]	41 [364]	107 [950]
Weight (base unit)	kg [lb]	5.3 [11.6]	11.8 [26]	24 [53]
Weight Adder for Mid-Position Stop	kg [lb]	0.82 [1.8]	0.82 [1.8]	3.8 [8.3]
Weight Adder for Rotary Manifold	kg [lb]	0.54 [1.2]	0.36 [0.82]	2.0 [4.2]
Pressure Range	bar [psi]	3-7 [40-100]		
Ingress Protection Class (IP)		IP55		
Displacement	cm³ [in³]	160.1 [9.77]	375 [22.8]	1026 [62.6]
Displacement of Mid-Position Stop	cm³ [in³]	90.16 [5.502]	60.32 [2.375]	885 [54]
Temperature Range (Buna-N seals)	°C [°F]	0°~66° [-32°~150°]		
Temperature Range (Viton® seals)				
Actuation Time (180° @ 100psi/7 bar)	sec	0.48	0.70	1.4
Actuation Time (90° @ 100psi/7 bar)	sec	0.40	0.50	0.8
End-Stop Repeatability		±0.02°		
Mid-Stop Repeatability		±0.5°		
End-Stop Adjustability*		30°	20°	
Over Travel (each end)		4°		
Valve required to actuate		4-way, 2-position		
Valve required to actuate Mid-Stop		3-way, 2-position		

[†] Max. payload based on -A shock option.

*Any adjustment of the End Stop Adjustment Screw must be accompanied by an equal adjustment of the Shock Absorbers to prevent bottoming of the pistons against the Shock Absorbers.

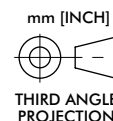
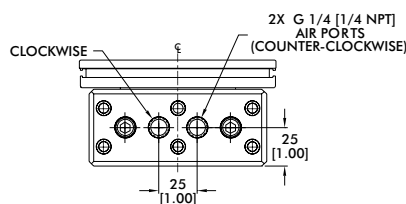


UNIT SHOWN IN 0° POSITION ROTATED FULLY CW



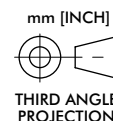
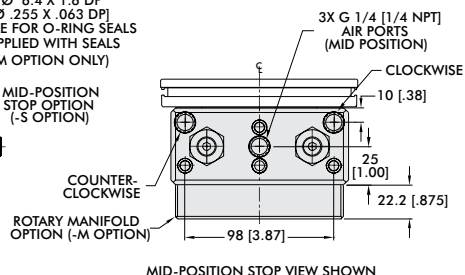
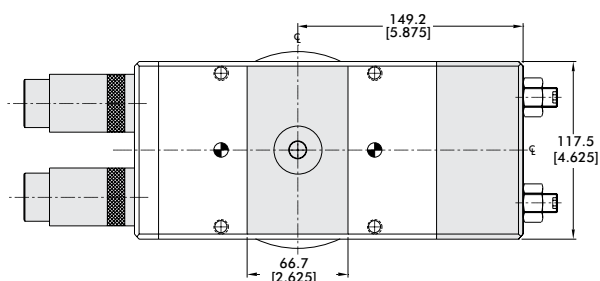
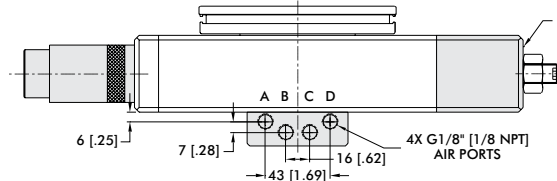
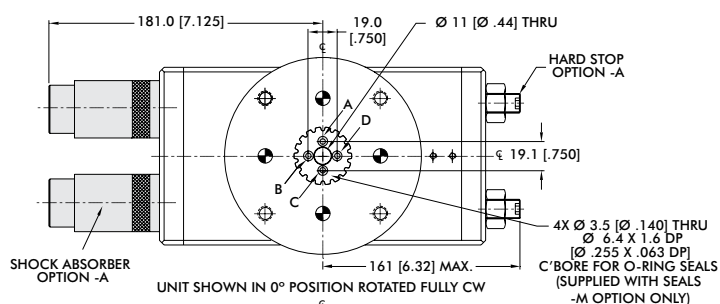
RR-56 Loading information	Static
Maximum Tensile T	3559 N [800 lbs]
Maximum Compressive C	8896 N [2000 lbs]
Maximum Moment M_x	113 Nm [1000 in-lbs]
Maximum Moment M_y	113 Nm [1000 in-lbs]
Maximum Payload W[†]	13.64 kg [30 lbs]
Maximum Inertia J[†]	0.0288 N-m-sec ² [0.2549 in-lbs-sec ²]

[†]Max. payload based on -A shock option.



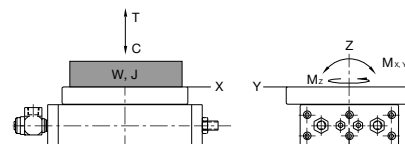
Base Unit Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-124
Viton® Seal Repair Kit	SLKT-124V

Options Dimensions



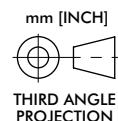
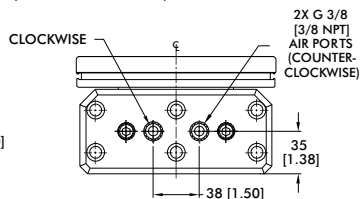
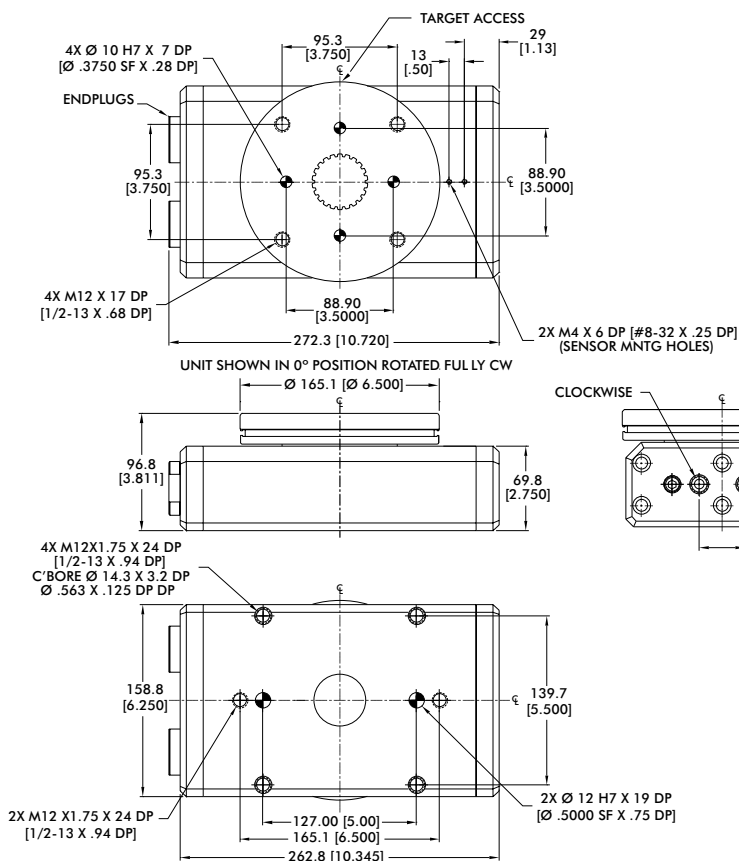
Options Seal Repair Kits		Order #
Buna-N Manifold Seal Repair Kit	-M	SLKT-126
Viton® Manifold Seal Repair Kit	-M-V	SLKT-126V
Buna-N Mid-Stop Seal Repair Kit	-S	SLKT-127
Viton® Mid-Stop Seal Repair Kit	-S-V	SLKT-127V
Buna-N Shock Seal Repair Kit	-A	SLKT-125
Viton® Shock Seal Repair Kit	-A-V	SLKT-125V

Rotary Actuators | Dimensions and Technical Specifications



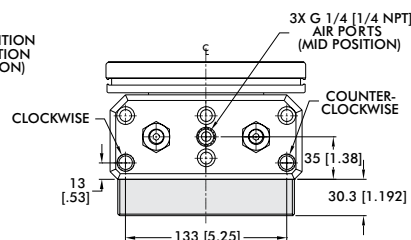
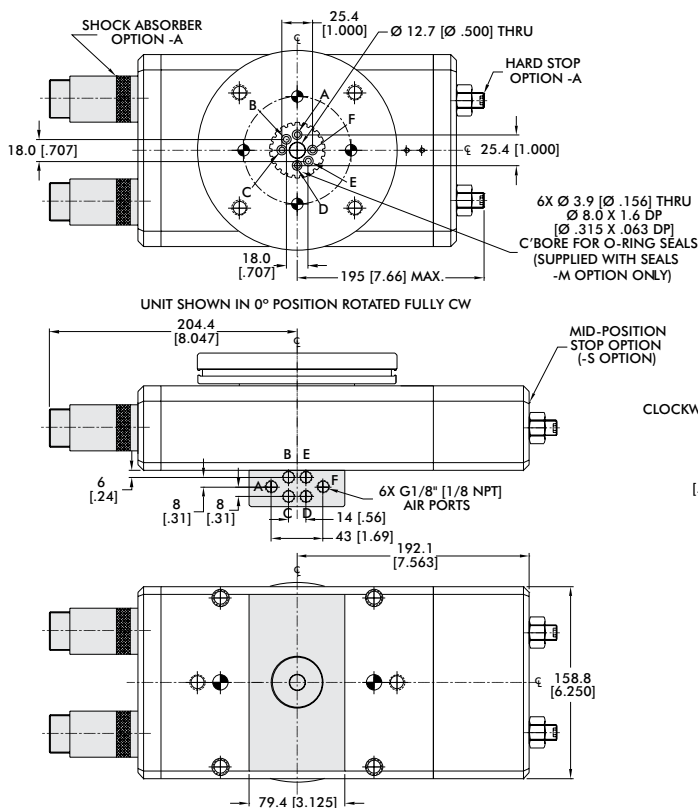
RR-66 Loading Information	Static
Maximum Tensile T	4448 N [1000 lbs]
Maximum Compressive C	15569 N [3500 lbs]
Maximum Moment M_x	226 Nm [2000 in-lbs]
Maximum Moment M_y	226 Nm [2000 in-lbs]
Maximum Payload W[†]	34 kg [75 lbs]
Maximum Inertia J[†]	0.1158 N-m-sec ² [1.025 in-lbs-sec ²]

[†]Max. payload based on -A shock option.

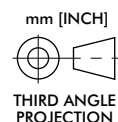


Base Unit Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-128
Viton® Seal Repair Kit	SLKT-128V

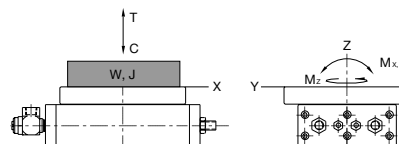
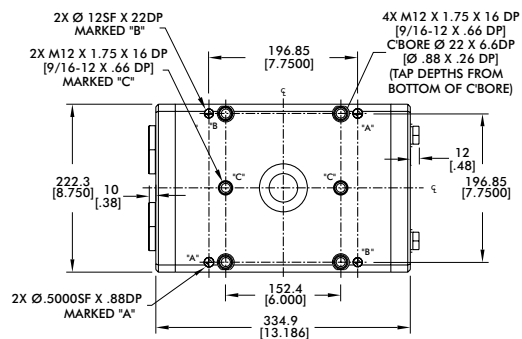
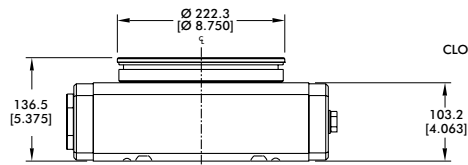
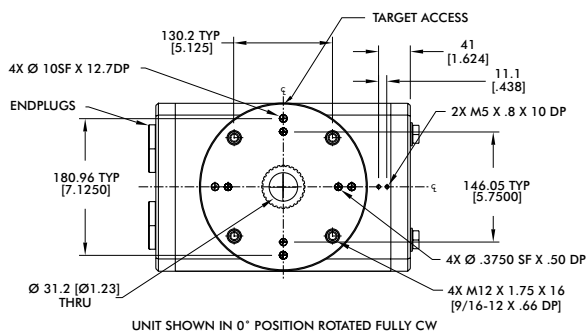
Options Dimensions



MID-POSITION STOP VIEW SHOWN

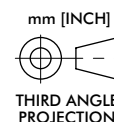


Options Seal Repair Kits	Order #
Buna-N Manifold Seal Repair Kit	-M SLKT-130
Viton® Manifold Seal Repair Kit	-M-V SLKT-130V
Buna-N Mid-Stop Seal Repair Kit	-S SLKT-131
Viton® Mid-Stop Seal Repair Kit	-S-V SLKT-131V
Buna-N Shock Seal Repair Kit	-A SLKT-129
Viton® Shock Seal Repair Kit	-A-V SLKT-129V



RR-76 Loading Information	Static
Maximum Tensile T	8896 N [2000 lbs]
Maximum Compressive C	20017 N [4500 lbs]
Maximum Moment M_x	452 Nm [4000 in-lbs]
Maximum Moment M_y	452 Nm [4000 in-lbs]
Maximum Payload W_i	91 kg [200 lbs]
Maximum Inertia J_i	0.5596 N-m-sec ² [4.952 in-lbs-sec ²]

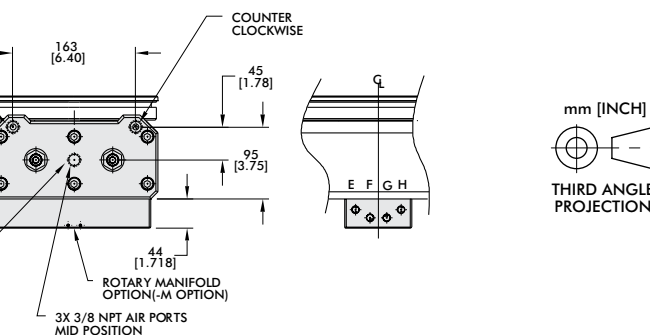
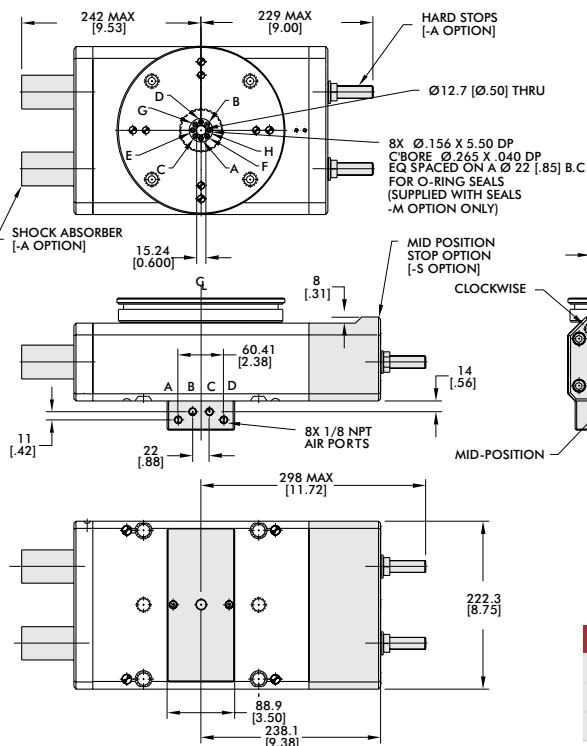
[†]Max. payload based on -A shock option.



Note: Shock Absorbers "Option -A" are recommended for all applications. All specifications provided are with this option.

Base Unit Seal Repair Kits	Order #
Viton® Seal Repair Kit	SLKT-167V

Options Dimensions



Options Seal Repair Kits	Order #
Viton® Manifold Seal Repair Kit	-M SLKT-169V
Viton® Mid-Stop Seal Repair Kit	-S SLKT-168V
Buna-N Shock Seal Repair Kit	-A SLKT-179