

# RR HEAVY-DUTY SERIES

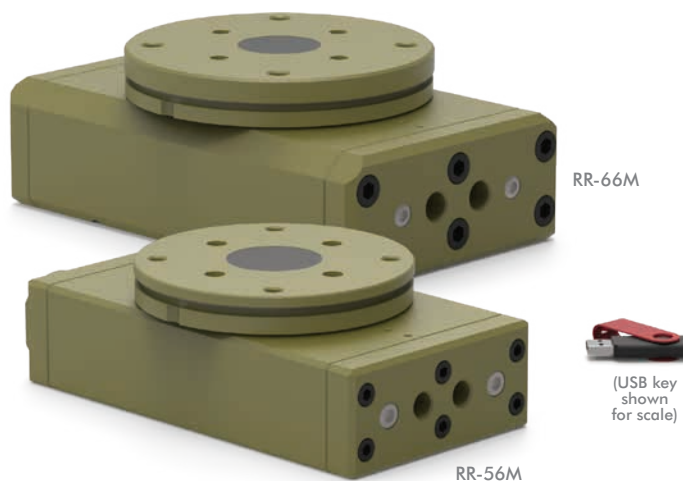
## Rotary Actuators | Features and Benefits | How To Order

### Features:

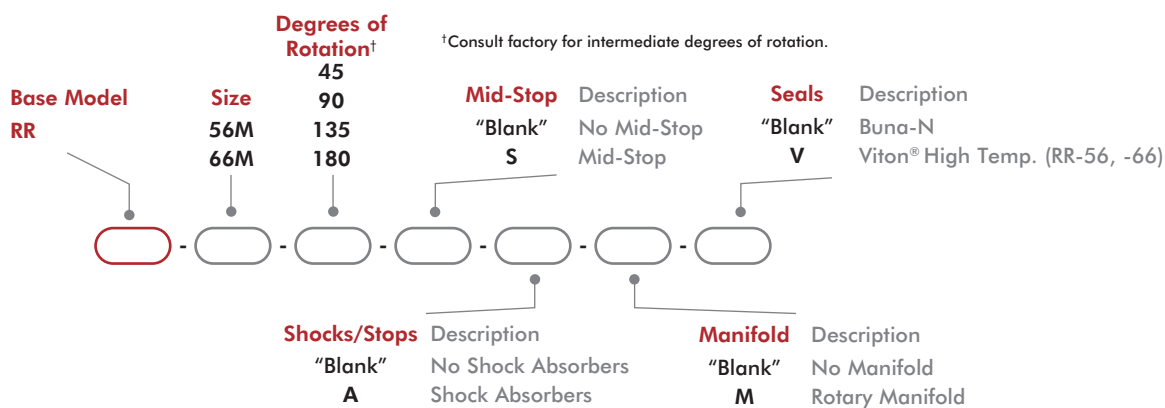
- Compact large capacity, high torque for tight space applications
- Use in heavy duty industrial and foundry applications
- Mount payload directly to flange without additional support
- Preloaded bearings for high repeatability rotary actuation
- Zero backlash & precision slip fit dowel pins
- Adjustable 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
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 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

Pneumatic Accessories	Model Numbers	Part Number	Qty/Unit
G 1/4 BSPP Flow Controls	-56	VLVF-010	2
G 3/8 BSPP Flow Control	-66	VLVF-012	2

\*Sensor and cable sold separately.

# RR HEAVY-DUTY SERIES

## Rotary Actuators | Technical Specifications

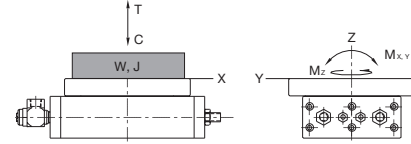
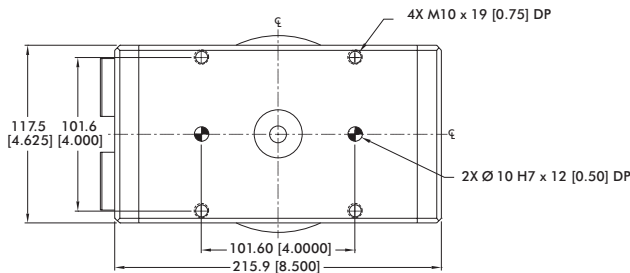
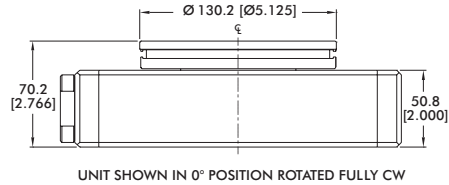
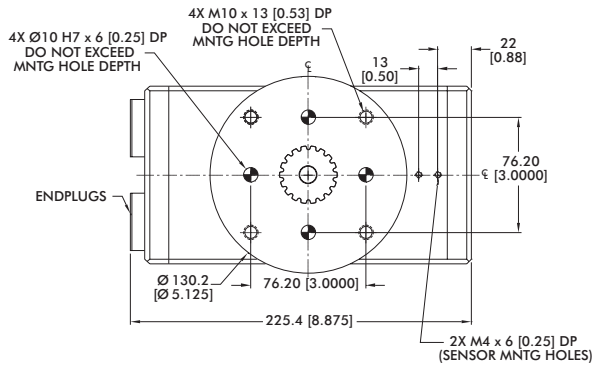
Specifications	Units	56	66
Maximum Payload <sup>†</sup>	kg [lb]	13.6 [30]	34 [75]
Maximum Payload Inertia <sup>†</sup>	Nm sec <sup>2</sup> [in-lbs sec <sup>2</sup> ]	0.02880 [0.2549]	0.11584 [1.0251]
Maximum Rotation		180°	
Maximum Torque Mid-Stroke @ 100psi/7 bar	Nm [lbs-in]	35 [311]	82 [728]
Maximum Torque End-Stroke @ 100psi/7 bar	Nm [lbs-in]	17 [155]	41 [364]
Weight (base unit)	kg [lb]	5.3 [11.6]	11.8 [26]
Weight Adder for Mid-Position Stop	kg [lb]	0.82 [1.8]	0.82 [1.8]
Weight Adder for Rotary Manifold	kg [lb]	0.54 [1.2]	0.36 [0.82]
Pressure Range	bar [psi]	3-7 [40-100]	
Ingress Protection Class (IP)		IP55	
Displacement	cm <sup>3</sup> [in <sup>3</sup> ]	160.1 [9.77]	375 [22.8]
Displacement of Mid-Position Stop	cm <sup>3</sup> [in <sup>3</sup> ]	90.16 [5.502]	60.32 [2.375]
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
Actuation Time (90° @ 100psi/7 bar)	sec	0.40	0.50
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	

<sup>†</sup> 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.

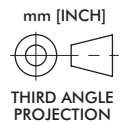
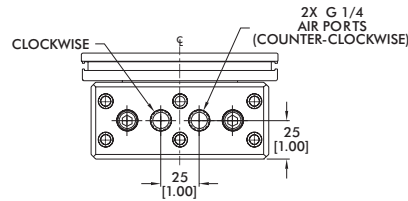
# RR-56

## Rotary Actuators | Dimensions and Technical Specifications



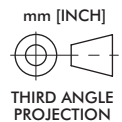
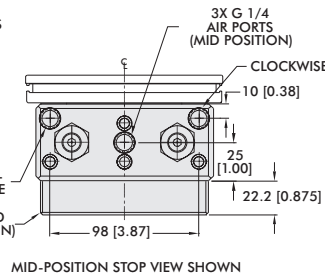
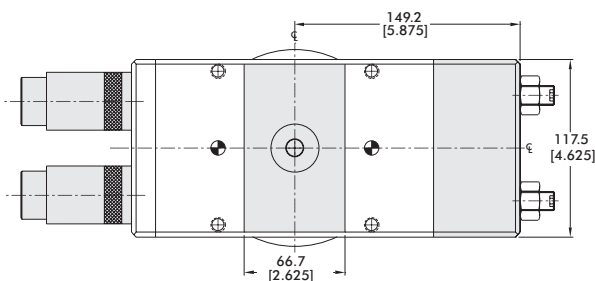
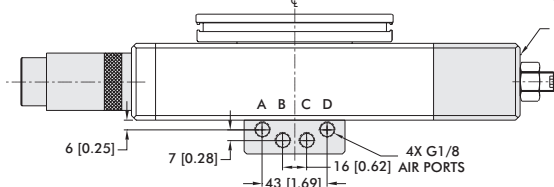
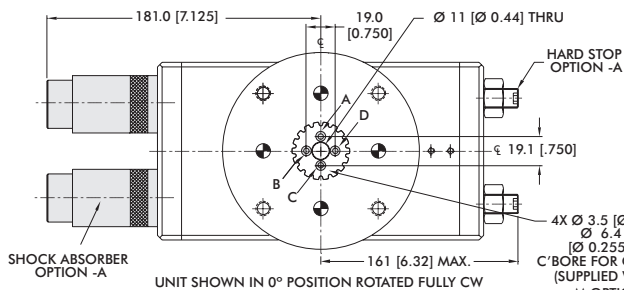
RR-56 Loading information	Static
Maximum Tensile T	3559 N [800 lbs]
Maximum Compressive C	8896 N [2000 lbs]
Maximum Moment M <sub>x</sub>	113 Nm [1000 in-lbs]
Maximum Moment M <sub>y</sub>	113 Nm [1000 in-lbs]
Maximum Payload W <sup>†</sup>	13.64 kg [30 lbs]
Maximum Inertia J <sup>†</sup>	0.0288 N-m-sec <sup>2</sup> [0.2549 in-lbs-sec <sup>2</sup> ]

<sup>†</sup> Max. payload based on -A shock option.



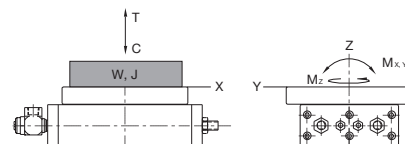
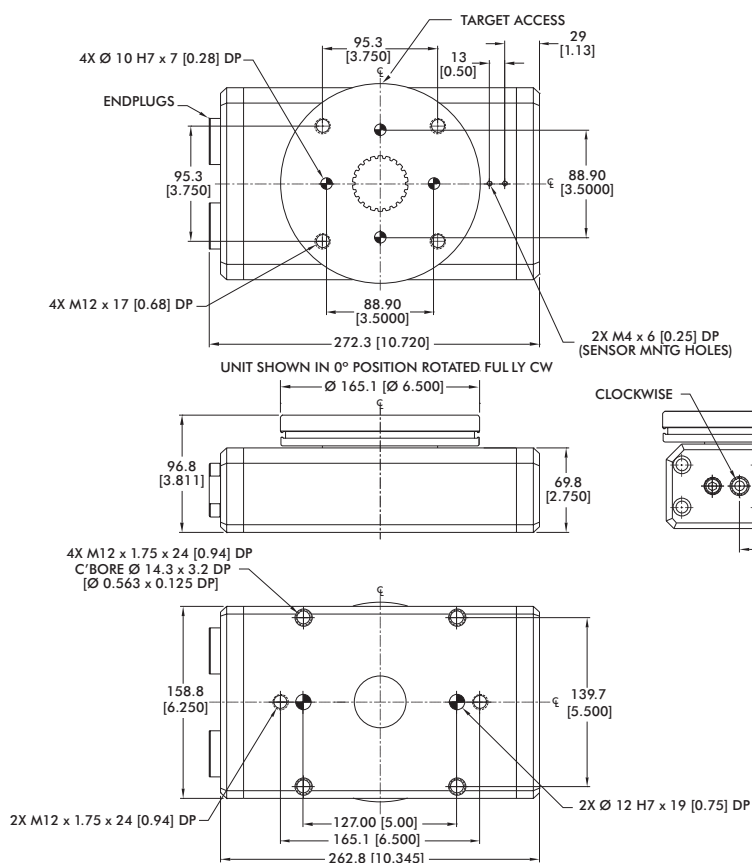
Base Unit Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-124
Viton® Seal Repair Kit	SLKT-124V

## Options Dimensions



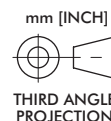
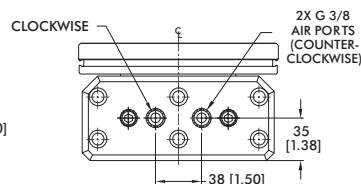
Options Seal Repair Kits		Order #
Buna-N Manifold Seal Repair Kit	-M	SLKT-126
Viton® Manifold Seal Repair Kit	-M-V	SLKT-126V
Buna-N Mid-Stop Seal Repair Kit	-S	SLKT-127
Viton® Mid-Stop Seal Repair Kit	-S-V	SLKT-127V
Buna-N Shock Seal Repair Kit	-A	SLKT-125
Viton® Shock Seal Repair Kit	-A-V	SLKT-125V

## Rotary Actuators | Dimensions and Technical Specifications



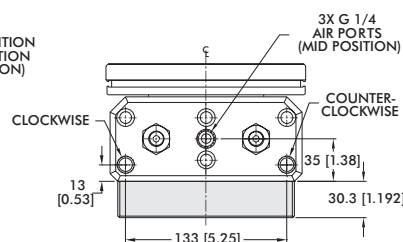
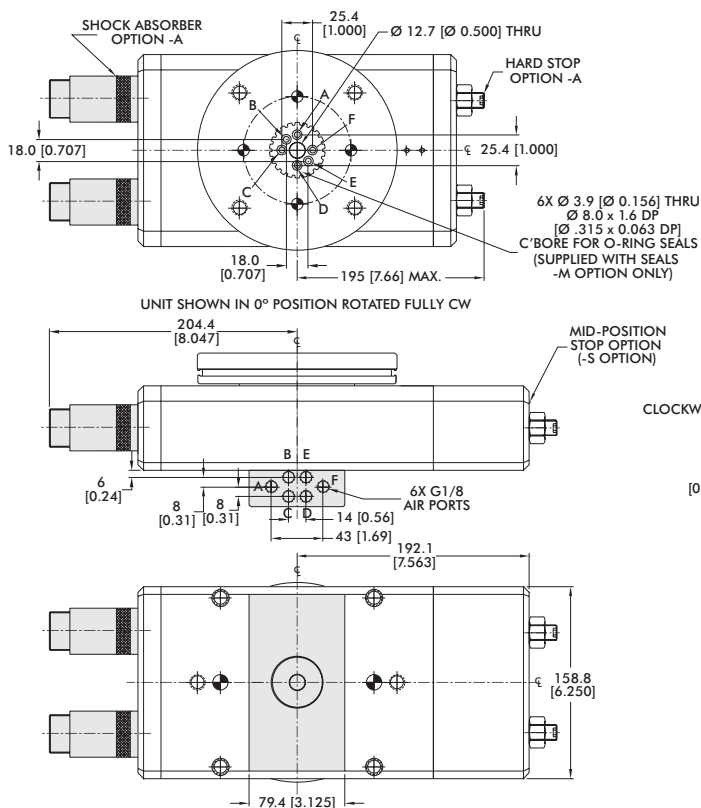
RR-66 Loading Information	Static
Maximum Tensile T	4448 N [1000 lbs]
Maximum Compressive C	15569 N [3500 lbs]
Maximum Moment $M_x$	226 Nm [2000 in-lbs]
Maximum Moment $M_y$	226 Nm [2000 in-lbs]
Maximum Payload $W^i$	34 kg [75 lbs]
Maximum Inertia $J^i$	0.1158 N-m-sec <sup>2</sup> [1.025 in-lbs-sec <sup>2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

† Max. payload based on -A shock option.

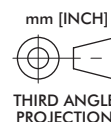


Base Unit Seal Repair Kits	Order #
Buna-N Seal Repair Kit	SLKT-128
Viton® Seal Repair Kit	SLKT-128V

## 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

# LINEAR SLIDES

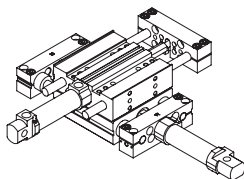
## Linear Slides | Product Overview | DIRECTCONNECT™ Mounting

	Model	Stroke mm [in]	Thrust Force N [lbs]	Operating Environment	Special Features	Page GR-LIN-#
DLB		6-500 [0.25-26]	89-560 [20-126]	IP54	High Reliability with smooth operation base slide. Internal or external air cylinder options. <b>DIRECTCONNECT</b>	3
DLT		6-700 [0.25-28]	89-560 [20-126]	IP54	High Reliability with smooth operation Thrust slide. Internal or external air cylinder options. <b>DIRECTCONNECT</b>	19
DLM		5-100 [0.2-4]	67-230 [15-52]	IP54	Precise positioning with stroke adjustments. High load and moment capacity. <b>DIRECTCONNECT</b>	41
MPS		13-51 [0.5-2]	67-196 [15-44]	IP54	Compact slide with zero side play. Dual-V bearing design. Adjustable stops.	47

### **DIRECTCONNECT** Modular Direct Mounting System without Adapter Plates

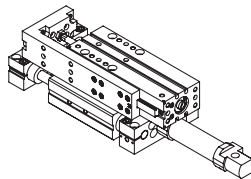
Products can be mounted in multiple positions. Refer to datasheet for complete info.

#### Slide to Slide



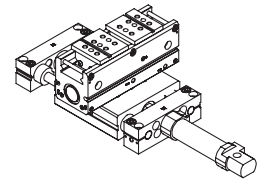
DLB Base Slide to  
DLT Thruster Slide

#### Slide to Slide



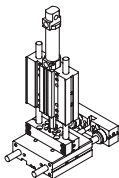
DLB Base Slide to  
DLM Thruster Slide

#### Slide to Gripper



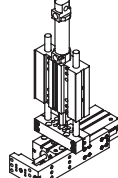
DLB Base Slide to  
DPG Parallel Gripper

#### Slide to Slide



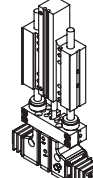
DLT Thruster Slide to  
DLT Thruster Slide

#### Slide to Slide



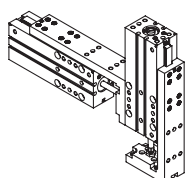
DLT Thruster Slide to  
DLM Thruster Slide

#### Slide to Gripper



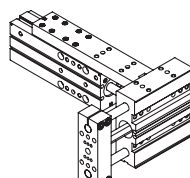
DLT Thruster Slide to  
DPDL Parallel Gripper

#### Slide to Slide



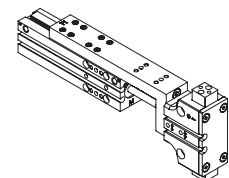
DLM Thruster Slide to  
DLM Thruster Slide

#### Slide to Slide



DLM Thruster Slide to  
DLT Thruster Slide

#### Slide to Gripper

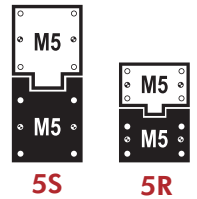


DLM Thruster Slide to  
DPDL Parallel Gripper

DESTACO's DIRECTCONNECT™ technology, allows all components of the system—grippers and slides—to be mounted together directly. Look for matching icons on product datasheets for mounting compatibility.

**Note:** The numbers in the cell represent the metric screw size and basic mounting pattern.

S=Square, R=Rectangle. ie; 5S = M5 Screw with square mounting pattern.



Catalog Models		Base Slides			Thruster Slides				
		DLB-06&08	DLB-10,12,16	DLB-20&25	DLT-06&08	DLT-10,12,16	DLT-20&25	DLM-07	DLM-09&12
Base Slides	DLB-06,08				3R,3S			3R,3S	
	DLB-10,12,16				3S	5R,5S		3S	5R,5S
	DLB-20,25					5S	10R,10S		5S
Thruster Slides	DLT-06,08	3R,3S	3S		3R	3R		3R	3R
	DLT-10,12,16		5R,5S	5S		5R	5R		5R
	DLT-20,25			10R,10S			10R		
	DLM-07	3R,3S	3S		3R	3R		3R	3R
	DLM-9,12		5R,5S	5S		5R	5R		5R
Grippers	DGC		5R			5R	5R		5R
	DPG		5R			5R	5R		5R
	DCT-12, 16,25	3R			3R	3R		3R	3R
	DCT-25		5R			5R	5R		5R
	DPDL-047,056	3R			3R	3R		3R	3R
	DPDL-088,125		5R			5R	5R		5R
	DPDL-175,250			10R			10R		
	DPDS-047,056	3R			3R	3R		3R	3R
	DPDS-088,125		5R			5R	5R		5R
	DPDS-175,250			10R			10R		
	DPL-25xx		5R			5R	5R		5R
	DPL-32xx,40xx			10R			10R		
	DPP-10,14	3R			3R	3R		3R	3R
	DPP-20		5R			5R	5R		5R
	DPP-28		5R	10R		5R	10R		5R
	DPW-250	3R			3R	3R		3R	3R
	DPW-375,500		5R			5R	5R		5R
	G100-08,011	3R			3R	3R		3R	3R
	G100-18,25		5R			5R	5R		5R
	DPE-200		5R			5R	5R		5R
	DPE-400			10R			10R		