

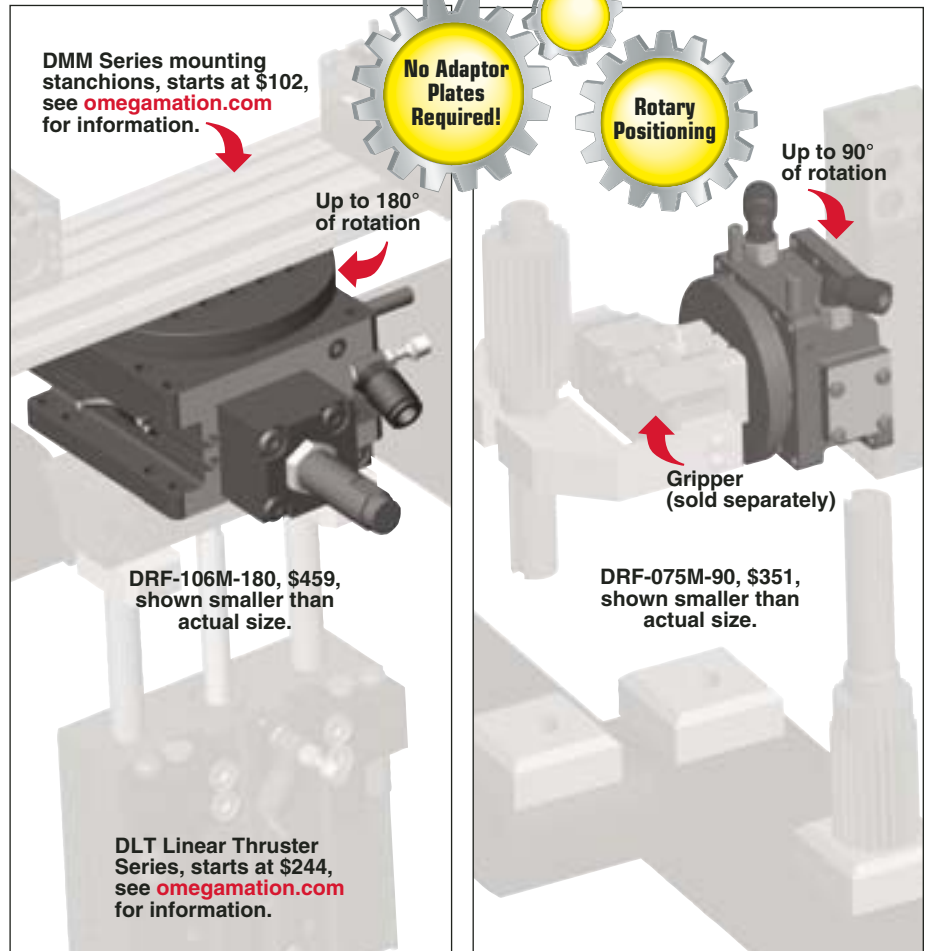


ROTARY ACTUATORS— PNEUMATIC, FLANGE MOUNTABLE DRF DIRECTCONNECT™ SERIES

DRF Series
Starts at
\$351



- Rotary Motion Actuator— Precision End Stop Position and Zero Backlash
- Adjustable Rotation with a Maximum of 180° Full Rotation
- Repeatability $\pm 0.02^\circ$ of Rotation
- Highly Configurable Modular Automation, Exclusive DirectConnect Technology
- Multiple Mounting Locations— Tapped and Through the Flange on Top and Bottom Surfaces
- Up to 5 Million Cycles in Typical Application, Up to 10 Million with Maintenance
- Temperature Operating Range -35 to 80°C (-30 to 180°F)
- Double Acting Air Cylinder
- System Requires 3 to 7 bar (40 to 100 psi) Dry Filtered (40 Micron or Better) Air Supply
- Accessory Equipment Required— 4-Way, 2 Position Pneumatic Direction Control Valve



PRODUCT FEATURES

Sensor Mounting Slots

Standard mounting slots for Magneto Resistive Sensors magnet mounted in piston standard (sensors sold separately).

Extremely Rugged Design

Pinion is supported with upper and lower sealed ball bearings.

End Stop Deceleration (-A Option)

Shock absorbers decelerates load at end of stroke.

Case Hardened

Rack and pinion are case hardened for wear and long life.

Rotational Adjustments

All rotational adjustments made from front face. Adjustments are locked with set screw on side.

Black Anodize Body

The body and End Plates are Black anodized, steel parts are black oxide.

Flange Mounting

Turntable has DIRECTCONNECT mounting pattern

One Piece Body

One piece lightweight aircraft quality aluminum body.

Dowel Holes

Slip fit dowel pin holes in bottom body, and on turntable.

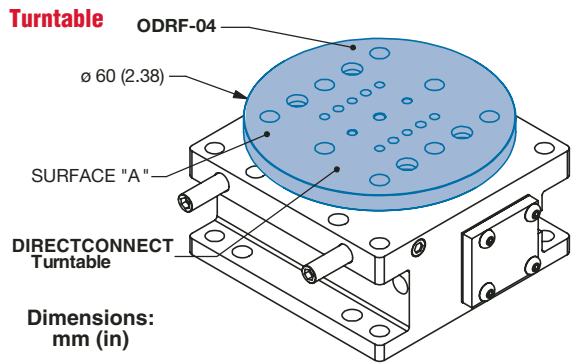
Piston

Made of Delrin® for extended life.

DRF-075M-090-A, \$486 shown close to actual size.

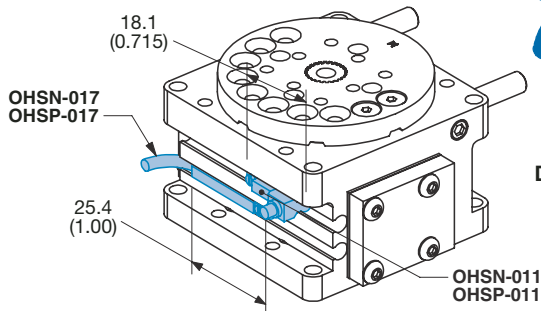
DIRECTCONNECT™ Mounting Patterns

Tapped and Dowel mounting surface on bottom of body and on turntable.



- DIRECTCONNECT Turntable, Easily Removed, Pin Located
- High Quality Aircraft Aluminum, Black Anodized Finish
- Mounts Through Pinion with One Screw and Two Dowels
- No Machining Required, DIRECTCONNECT Grippers Mount Directly
- 90° Orientations

Sensor and Flow Controls



Dimensions:
mm (in)

- PNP and NPN Magneto Resistive Available
- Sensors Are Slot Mounted, No Mounting Kits Required
- Precision Rotary Adjustments Made from Face and Locked with Set Screws
- Tubing, Fittings and Additional Pneumatic Controls and Accessories Available, see omegamation.com or Consult Sales



To Order (Specify Model Number)

MOST POPULAR MODELS HIGHLIGHTED!

MODEL NO.	PRICE	DEPTH mm (in)	WIDTH mm (in)	HEIGHT mm (in)	MAX PAYLOAD Kg (lbs)	MAX ROTATION	WEIGHT Kg (lbs)
DRF-075M-90	\$351	54 (2.13)	69 (2.69)	37 (1.52)	0.23 (0.5)	90°	0.24 (0.54)
DRF-075M-180	351	54 (2.13)	69 (2.69)	37 (1.52)	0.23 (0.5)	180°	0.24 (0.54)
DRF-075M-90-A	486	54 (2.13)	151 (5.93)	37 (1.52)	0.45 (1)	90°	0.34 (0.72)
DRF-075M-180-A	486	54 (2.13)	151 (5.93)	37 (1.52)	0.45 (1)	180°	0.34 (0.72)
DRF-094M-90	384	71 (2.78)	86 (3.36)	49 (1.76)	0.68 (1.50)	90°	0.50 (1.10)
DRF-094M-180	384	71 (2.78)	86 (3.36)	49 (1.76)	0.68 (1.50)	180°	0.50 (1.10)
DRF-094M-90-A	548	71 (2.78)	189 (7.45)	49 (1.76)	1.4 (3.00)	90°	0.64 (1.40)
DRF-094M-180-A	548	71 (2.78)	189 (7.45)	49 (1.76)	1.4 (3.00)	180°	0.64 (1.40)
DRF-106M-90	459	100 (3.94)	115 (4.54)	58 (2.28)	1.8 (4.00)	90°	1.1 (2.50)
DRF-106M-180	459	100 (3.94)	115 (4.54)	58 (2.28)	1.8 (4.00)	180°	1.1 (2.50)
DRF-106M-90-A	648	100 (3.94)	250 (9.84)	58 (2.28)	3.6 (8.00)	90°	1.4 (3.10)
DRF-106M-180-A	648	100 (3.94)	250 (9.84)	58 (2.28)	3.6 (8.00)	180°	1.4 (3.10)
DRF-131M-90	536	133 (5.25)	153 (6.02)	72 (2.82)	3.4 (7.50)	90°	2.9 (6.30)
DRF-131M-180	536	133 (5.25)	153 (6.02)	72 (2.82)	3.4 (7.50)	180°	2.9 (6.30)
DRF-131M-90-A	785	133 (5.25)	301 (11.85)	72 (2.82)	6.8 (15.00)	90°	3.1 (6.80)
DRF-131M-180-A	785	133 (5.25)	301 (11.85)	72 (2.82)	6.8 (15.00)	180°	3.1 (6.80)

Ordering Example: DRF-075M-90-A, precision rotary actuator with 90° of rotation and built in shock absorber, \$486. Recommend accessories include 2 sensors and 2 pneumatic flow controls for each slide, along with a 4-way 2 position valve. DRF-075M models: acutation time [180° @ 7 bar (100 psi) 0.38 seconds], actuation time [90° @ 7 bar (100 psi) 0.29 seconds]. DRF-094M models: acutation time [180° @ 7 bar (100 psi) 0.38 seconds], actuation time [90° @ 7 bar (100 psi) 0.29 seconds]. DRF-106M models: acutation time [180° @ 7 bar (100 psi) 0.38 seconds], actuation time [90° @ 7 bar (100 psi) 0.29 seconds]. DRF-131M models: acutation time [180° @ 7 bar (100 psi) 0.38 seconds], actuation time [90° @ 7 Bar (100 psi) 0.29 seconds]. All models end stop adjustability 23°, over travel (each end) 1 to 3°. Detailed specification and CAD drawings available at omegamation.com.

Accessories

MODEL NO.	PRICE	DESCRIPTION
SENSOR ACCESSORIES		
OHSP-011	\$63	PNP magneto resistive sensor 90° barrell with quick disconnect fitting
OHSN-011	63	NPN magneto resistive sensor 90° barrell with quick disconnect fitting
OHSP-017	63	PNP magneto resistive sensor short barrell with quick disconnect fitting
OHSN-017	63	NPN magneto resistive sensor short barrell with quick disconnect fitting
CABL-010	23	2 m sensor extension cable with quick disconnect fitting
PNEUMATIC ACCESSORIES		
Pneumatic Tubing	Consult Sales	Polyurethane tubing in multiple diameters and colors available, see omegamation.com
Pneumatic Fittings	Consult Sales	Poly-tube fittings in male or female NPT in multiple configurations, see omegamation.com
Pneumatic Flow Controls	Consult Sales	Adjustable flow control fittings and directional control valves, see omegamation.com
MECHANICAL ACCESSORIES		
ODRF-004	49	Rotary Size 075, DirectConnect turntable metric, direct mounting for gripper, no machining necessary
ODRF-010	49	Rotary Size 094, DirectConnect turntable metric, direct mounting for gripper, no machining necessary
DMM Series	Consult Sales	Aluminum extruded mounting stanchions for slides and thrusters, see omegamation.com
Hardware	Consult Sales	Gussets, and other hardware for stanchions, see omegamation.com

Turntables and output shafts available for all DRF models, see omegamation.com.



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• Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

• pH and Conductivity

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• Pressure, Strain and Force

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• Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters