

Industrial Automation

IMI Bimba



Product Line Guide

for Industrial Automation



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Roundline Actuators



Original Line® SeriesNon-repairable stainless steel body
12 Bore Sizes from 5/16"- 3"



Original Line® with Adjustable Cushions Protection against kinetic energy 3/4" - 3" bores



Original Line® MRS Magenetic piston standard 9/16" - 2-1/2" bores



Original Line® All Stainless Steel Stainless steel body and end caps Food grade grease 5/16"- 3" bores



Original Line® Non-Rotating Square rod design 9/16" - 2-1/2" bores



Original Line® PC Series Delrin end caps 9/16" - 2" bores



Original Line® Z-Line
Heavy duty roundline
3/4" - 2" bores



Original Line® Rod Lock Built-in mechanical lock 3/4"-3" bores



Original Line® Three Position Single cylinder with 3 distinct positions 9/16"-2" bores



Hole Punch Cylinder 1-4*-5/8* diameter cutter and non-cutter options available



Double-WallNFPA interchangeable cylinder with an epoxy coated outer body 1-1/2" - 4" bores



Repairable Stainless Steel Design Food grade grease and secondary wiper 1-1/2" - 8" bores



Position Feedback Internal transducer for feedback or control 1-1/16"- 3" bores



CentaurRepairable roundline
1-1/4"-3" bores



Single Acting Air Clamps Gripping power on extend stroke and spring retract 15 different models

Compact Actuators





Flat-1® 8 bore sizes from 9/16" - 4" bores



Square Flat-1®Horizontal and side mounting 3/4" - 4" bores



Flat-II® Non-rotating twin rod 3/4"- 2" bores



Square Flat-II®Horizontal and side mounting with non-rotating Twin Rod 3/4"-2" bores



Flat-1® Multiple Power Available in 2, 3 and 4 stage force multiplier 2-1/2", 3" and 4" bores



Flat-1® Multiple Position Compact with three distinct positions 9/16" - 4" bores



Stainless Steel Flat-1®Corrosion resistant, IP69K rated 9/16"-4" bores



Stopper CylinderMade to withstand side impact loading
32mm bore



Twist ClampCombination rotary and linear motion
23mm - 63mm bores



Diaphragm Cylinder Extremely compact (0.56"), ideal for clamping 1-1/4" bore







Extruded Flat-1 (EF-1) Extruded body with interchangeable dimensions 12mm - 100mm bores



Extruded Flat-2 (EF-2) Guided and non-rotating extruded body 12mm - 100mm bores



Extruded Flat Lift TableFour guide shafts for supporting vertical lifting 50mm, 80mm, 100mm bores



EFP/EFQMulti-postition and multi-power extruded body designs
12mm - 100mm bores



Miniature Air Cylinders MF and MA series for extremely tight spaces 1/4", 3/8", and 1/2" bores



Twin BoreBasic, double end rod and air table styles available
6mm - 32mm bores



Narrow Profile Air Table Single bore air table with precise load guiding 12mm, 20mm, 32mm bores



Space SaverUnique compact design 3/4"-4" bores

NFPA Actuators



PA SeriesNFPA interchangeable, cost effective
1-1/2"-4" bores



Standard Aluminum (TA Series) Aluminum body NFPA interchangeable 1-1/2" - 12" bores



Flush Mount (FM Series) Aluminum body NFPA interchangable design with sleeve nut constructions 1-1/2" - 8" bores



Stainless Steel (SS Series) Heavy duty stainless steel cylinders interchangeable design 1-1/2" - 8" bores



Triple Rod (TRA Series)Triple rod for non-rotating design
1-1/2" - 8" bores



TAS Series Steel body NFPA interchangeable design 1-1/2" - 8" bores



Multi-Stage
Multiple pistons used to increase force
1-1/2" - 8" bores



Tough Duty (TD Series) Heavy duty aluminum body NFPA interchangeable design 1-1/2" - 8" bores



Back to Back
Two cylinders combined into one unit
1-1/2" - 8" bores



FM with Rod Lock Aluminum body design with 100% ball bearing rod lock 1-1/2" - 6" bores



Three Position
Single cylinder unit
with 3 distinct positions
1-1/2" - 8" bores



Position Feedback Offers continuous position sensing 1-1/2" - 6" bores

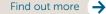


Multi-Stage Multiple piston design in a stainless steel body 1-1/2" - 8" bores



Bench Top Press Heavy duty steel keyed and bolted construction 5" bores





Guided Actuators



TE Series Thruster Composite bearings for high loads

9/16" - 3" bores



T Series ThrusterBall bearings for high precision 9/16" - 3" bores



ET Series Thruster
Extruded body, compact profile
12mm - 32mm bores



PneuMoment®
Heavy moment loading capability
1-1/16" - 2-1/2" bores



Multiple Position Thruster 3 positions in composite or ball bearing options 9/16" - 2" bores



4 Shaft T Series Higher load ball bearing thruster 2", 2-1/2", 3" bores



Movable Housing Thruster Composite or ball bearing options 9/16" - 3" bores

Rodless Actuators



Ultran® RodlessMagnetically coupled 5/16" - 2" bores



Ultran® Rodless SlideMagnetically coupled
with built in guide
5/16" - 2" bores



Ultran® High Load Slide High moment load capability 1-1/16", 1-1/4", & 1-1/2" bores



Ultran® Band PlusThree carriage styles and patented dust protection design 16mm - 80mm bores

Rotary Actuators



Pneu-TurnRack and pinion, single and double rack configurations 9/16" - 2" bores



Pneu-Turn 3 Position
Three distinct rotation positions, single and double rack configurations
9/16" - 2" bores



Position Feedback Pneu-Turn Transducer installed for feedback or control 1-1/2* - 2* bores

ISO Actuators



ISO 15552 Extruded body conforms to ISO 15552 standards 32mm - 125mm bores



ISO 6432 Roundline cylinder conforms to ISO 6432 standards 10mm - 25mm bores





Hydraulic Actuators



Medium Pressure (MH Series)

NFPA tie-rod for up to 1500 PSI 1-1/2" - 8" bores



High Pressure (HH Series)

NFPA tie-rod for up to 3000 PSI 1-1/2" - 8" bores



Original Line 500 Series

Replaceable rod stud - 500 PSI



Original Line "HL" Option

With 'HL' option - 250 PSI 5/16" - 3" bores



Standard Aluminum "TA" & "FM'

with 'TH' option - 400 PSI 1-1/2" - 12" bores



Compact Medium Pressure (CMH Series)

Compact medium pressure hydraulic up to 2030 PSI 25mm - 101mm bores



Compact High Pressure (CHH Series)

Compact high pressure hydraulic up to 3000 PSI 25mm - 76mm bores

Electric Actuators



Norgren ELION Rod-style

32, 40, 50, 63, 80, 100mm bores ISO 15552 ball screw Stroke up to 59" Thrust: up to 6,800 lbs.



Norgren ELION Rodless

48, 60, 80, 100mm bores Toothbelt or ball screw Stroke up to 18 feet Belt Thrust: up to 337 lbs. Screw Thrust: up to 2,282 lbs.



EFE/EFET Extruded Flat

16, 20, 25, 32, 40, 50mm hores Stroke up to 5" Thrust: up to 260 lbs.



EET Extruded Thruster

16, 20, 25, 32mm bores Ideal for high side loading applications Stroke up to 10" Thrust: up to 248 lbs.



NPET Narrow Profile Table

20 & 32mm bores Ideal for cartesian-type and pick & place applications Stroke up to 8" Thrust: up to 248 lbs.



Multi-Axis

2-axis, 3-axis and more Highly configurable in any profile style and size combination

Extensive library of mountings and accessories



L Series

40mm – 100mm profile sizes Compact design Flexible mounting Low maintenance



Q Series

60 – 125mm profile sizes Suitable for clean room applications Flexible mounting High operational reliability



E Series

30mm – 125mm profile sizes Long travel distances High dynamics and speed capable Most available configurations



D Series

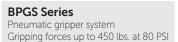
120, 160, 200mm profile sizes High-load bearing capacity Internal guiding High rigidity





Grippers







BPGS Hot Metal GripperPneumatic gripper system - high temperature Gripping forces up to 450 lbs. at 80 PSI Max. operating temperature: 1650°F

Switches







Track MountedEdge detection
10-28 VDC, 50mA rating



Tie-Roded MountedModels available for cylinders with a 5" bore size or greater For use with Original Line, Pneu-Turn, Guided Thrusters, Double-Wall, RS cylinders



Digital Pressure(2) individually programmed sinking (NPN) or sourcing (PNP) digital outputs (1) 1-5V or 4-20mA analog output optional IP65 enclosure protection

Sensors



Threaded Proximity Sensors End of stroke switches compatibale with Ultran®

rodless cylinders



TransducerPressure ranges from vacuum to 5,000 PSI IP67 stainless steel housing Accuracy 0.4% FS, BFSL

BPT Pressure





07

Directional Control Valves



Isonic® V1000 Port: PIF 5/32", 1/4" Function: 2/2, 3/2 Cv: 0.01 to 0.05 Voltage: 12, 24 VDC, 24, 120 VAC



Nova Inline solenoid and air pilot Port: 1/8" and 1/4" Function: 4/2 Cv: 0.07 to 1.0 Voltage: 12, 24 VDC, 24, 120, 220, 240 VAC



Capsula Sub-base manifold Port: 1/4" and 1/2" Function: 2/2, 3/2, 5/2, 5/3 Cv: 0.07 to 3.17 Voltage: 12, 24 VDC, 24, 120, 220, 240 VAC



Dura-Matic Pressure and bleed valve Port: 1/4" and 1/8" Operating pressure: 20 - 150 PSI



Miniature Manual Port: 10-32 UNF (F), 1/8" NPT/ 10-32 UNF (F), 1/8" (F) NPT Function: 2/2, 3/2, 5/2 Cv: 0.2 to 0.54

Specialty Valves



CSV Two-hand anti-tiedown controls Port: 1/8", PIF 1/4", 1/8" Cv: 0.11 to 1.00



Low stress valves Port: 1/8" Function: 5/2 Cv: 0.24



SLV Slide/lockout valves Port: 1/4", 3/8", 1/2" Function: Cv: 0.94 to 3.18



Rotary hand valve Port: 1/8" Function: 4/2, 4/3 Cv: 0.14



Dyna-Coil Mini solenoid valves Fort: 1/4", 3/8", 1/2" Function: 2/2, 3/2 Cv: 0.94 to 3.18 Voltage: 12, 24 VDC, 24, 120, 240 VAC



Dash/panel mount PTO control valve Port: 5/32", 1/4" Cv: 0.053 to 0.12 Voltage: 12, 24VDC



Pneumatic Isolation Valve (PIV) OSHA required lockout/tagout Port: 1/4"-1-1/2" Cv: 2.0 to 54.0



BPV Series Pneumatic pinch valve Supports tubing from 0.125" - 0.500"



600/900 Series Pneumatic pinch valve Supports tubing from 0.187" - 1.625"



Versagrip® Solenoid Solenoid pinch valve Supports tubing from 0.063" - 0.375"

Function Fittings and Flow Control Valves



Flow Control Valves Inline and right-angle flow controls Port: 1/8", 1/4", 1/2" Cv: 0.1 to 3.1



SV/CV Series Shuttle/check valves Port: 1/8", 1/4" Cv: 0.4 to 0.32



Quick exhaust valve Port: 1/8", 1/4", 3/8", 3/4", 1" Cv: 0.10 to 4.40



PBV Series Bleed valves Port: 10-32 UNF, 1/8", 1/4"



Needle Valves Port: 10-32 UNF, 1/8" Cv: 0.09









Logic Valves Port: 1/8", 1/4", 1/2" Function: binary/timers/relay Cv: 0.12 to 0.75



Stroke Completion Sensors Send air signal when rod motion stops Port: 1/8", 1/4", 3/8", 1/2"





Fittings & Accessories





Metal Push-In

Nickel plated brass

Inch - 1/8" to 1/2" O/D tube

Metric - 4 to 12mm O/D tube Vacuum to 260 psi

Composite Push-In

Composite Inch - 1/8" to 1/2" O/D tube Metric - 3 to 16mm O/D tube Vacuum to 150 psi



Barb Fittings

Nickel plated brass Inch - 1/16" to 3/8" I/D tube



Silencers Bronze and plastic 10-32 UNF, 1/8", 1/4", 3/8", 1/2"



Tubing Single and multi-bore polyurethane 1/8", 5/32", 1/4", 5/16", 3/8"



Manifolds

Available in a variety of port sizes, configurations, and materials including aluminum, brass, stainless steel, polypropylene, and nylon materials.



Air Jets

For cooling and blowing 1/32 and 1/16 orifice Cv: 0.02 to 0.10





MFD Series

Actuators



MACQ

Extruded body cylinders, interchangeable dimensions 12mm - 100mm bores



MTC Series

Extruded thruster with bronze or ball bushing 12mm - 63mm bores



MHRQ

Double rack and pinion 4 model sizes

Air Preparation



MGAFC

Combination unit 1/8" to 1/2" NPT Pressure range: 20 to 130 PSI Temperature range: 23°F to 158°F



MGAFR Series

Filter / regulator 1/8" to 1" NPT Pressure range: 20 to 130 PSI Temperature range: 23°F to 158°F



MGAF

Filter
1/8" to 1" NPT
Pressure range: 20 to 145 PSI
Temperature range: 23°F to 158°F



MGAFB

Coalescing filter 1/8" to 1/2" NPT Pressure range: 20 to 145 PSI Temperature range: 23°F to 158°F



MGAL

Lubricator 1/8" to 1" NPT Pressure range: 7 to 145 PSI Temperature range: 23°F to 158°F





MGAR

Regulator 1/8" to 1" NPT Pressure range: 7 to 130 PSI Temperature range: -4°F to 158°F



MSR

Miniature regulator 1/8", 1/4" NPT Pressure range: 7 to 130 PSI Temperature range: -4°F to 158°F



MGZ

Pressure relief valve 1/8" to 1/2" NPT Pressure range: 0 to 130 PSI Temperature range: -4°F to 158°F



MGV

Soft start / dump valve 1/8" to 1/2" NPT Pressure range: 36 to 130 PSI Temperature range: -4°F to 158°F

Grippers



Parallel Grippers with Roller Bearings

Gripper Pressure range 15-100 PSI depending on bore size 6, 10, 16, 20, 25, 32, 40 mm bores



Parallel Multi-Finger Grippers

Gripper Pressure range 22-100 PSI 120 cycles per minute 16, 20, 25, 32, 40, 50, 63 mm bores



Angular Grippers

Gripper Pressure range 15-100 PSI depending on bore size 180 cycles per minute 6, 10, 16, 20, 25, 32 mm bores



180° Grippers

Gripper Pressure range 21-100 PSI 60 cycles per minute 10, 16, 20, 25, 32 mm bores





Valves



M₃V

Inline solenoid valve

Port: 1/8" NPT Function: 3/2

Cv: 0.051





M4V

Inline solenoid valve Port: 1/8", 1/4", 3/8", 1/2" NPT Function: 5/2, 5/3 Cv: 0.67-2.79 Voltage: 12, 24VDC, 24, 120VAC



MPS

Manifold Powerstrip™ 2 to 8 stations for M3V/M4V valves

Voltage: 12, 24VDC, 24, 120VAC Temperature range: 0°F to 120°F



M4M

Inline solenoid valve Port: 1/4" NPT Function: 5/2 Cv: 1.40 Voltage: 12, 24VDC, 24, 120VAC



M4H

Inline mechanical valve Port: 1/8", 1/4" NPT Funtion: 5/2, 5/3 Cv: 0.67 - 1.39



Voltage: 12, 24VDC, 24, 120VAC

M4A

Inline solenoid and air pilot Port: 1/8", 1/4" NPT Function: 5/2, 5/3 Cv: 0.78 - 2.79



M4L

Inline mechanical valve Port: 1/8", 1/4" NPT Function: 5/2 Cv: 0.78, 1.39



M4F

Foot pedal valve Port: 1/4" NPT Function: 5/2 Cv: 0.78



MASC

Flow control valve Port: 1/8", 1/4", 3/8", 1/2" NPT





IMI Norgren Vacuum Generators





Modular Venturi Generators Vacuum levels up to 29.5"Hg Vacuum flows up to 28.0 SCFM



NJ Series

Rugged Cylindrical Generators Vacuum levels up to 28.0"Hg Vacuum flows up to 28.0 SCFM



NVDF Series

Variable Flow Vacuum Generators Vacuum levels up to 25.0"Hg Vacuum flows up to 120.0 SCFM



NCDF Series

Adjustable Air Amplifier/Blowers Vacuum levels up to 9.0"Hg Vacuum flows up to 330.0 SCFM



NDF Series

Material Transfer Generators Vacuum levels up to 11.0"Hg Vacuum flows up to 600.0 SCF

IMI Norgren Vacuum Cups



Vacuum Cups

A wide range of styles, materials, and sizes



NCRVT

Fully integrated vacuum tool designed for collaborative robots



Custom Solutions

Custom vacuum end-of-arm tooling designs available



Spring Levelers

Mechanical compensation for uneven surfaces



Mounting Brackets

To connect spring levelers and accessories to extrusions



Manifold Blocks

For mounting vacuum cups to extrusions and/or distributing vacuum to multiple locations

Warning

Improper selection, misuse, age or malfunction of components used in systems can cause failure in various modes. The system designer is warned to consider the failure modes of all component parts and to provide adequate safeguards to prevent personal injury or damage to equipment or property in the event of such failure modes. System designers and end users are cautioned to consult instruction sheets and specifications available from the factory. The system designer/end user is responsible for verifying that all requirements for the application are met.

Warranty

The products described herein are warranted subject to seller's Standard Terms and Condition of Sale, available at seller's website.

▲ WARNING: Cancer and Reproductive Harm - www.p65warnings. ca.gov.





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