



Product Line Guide for Industrial Automation



1.800.442.4622 cs@bimba.com



Roundline Actuators



Original Line SeriesNon-repairable stainless steel body

12 Bore Sizes from 5/16" - 3"



Original Line Three Position

Single cylinder with 3 distinct positions 9/16"-2" bores



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 Non-Rotating

Square rod design 9/16" - 2-1/2" bores



Original Line PC Series

Delrin end caps 9/16" - 2" bores



Original Line All Stainless Steel

Stainless steel body and end caps Food grade grease 5/16"- 3" bores



Original Line Z-Line

Heavy duty roundline 3/4" - 2" bores



Original Line Rod Lock

Built-in mechanical lock 3/4"-3" bores



Hole Punch Cylinder

1-4"-5/8" diameter cutter and non-cutter options available



Position Feedback

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



Centaur

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



Double-Wall

NFPA 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



Single Acting Air Clamps

Gripping power on extend stroke and spring retract 15 different models







Flat-1

8 bore sizes from 9/16" - 4" bores



Flat-II

Non-rotating twin rod 3/4" - 2" bores



Square Flat-1

Horizontal and side mounting 3/4" - 4" bores



Square Flat-II

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



Stainless Steel Flat-1

Corrosion resistant, IP69K rated 9/16"-4" bores



Flat-1 Multiple Power

Available in 2, 3 and 4 srage force multiplier 2-1/2", 3" and 4" bores



Flat-1 Multiple Position

Compact with three distinct positions 9/16"-4" bores



EF-1

Extruded body with interchangeable dimensions 12mm - 100mm bores



EF-2

Guided and non-rotating extruded body 12mm - 100mm bores



EFP/EFQ

Multi-postition and multi-power extruded body designs 12mm - 100mm bores







Twin BoreBasic, double end rod and air table styles available

6mm - 32mm bores



NPASingle bore air table with precise load guiding 12mm, 20mm, 32mm bores



Stopper Cylinder Made to withstand side impact loading 32mm bore



Twist Clamp Combination rotary and linear motion 23mm - 63mm bores



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

Extruded Flat Lift



Space Saver Unique compact design 3/4"-4" bores



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





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



TA SeriesAluminum body NFPA interchangeable
1-1/2" - 12" bores



TD SeriesHeavy duty aluminum body
NFPA interchangeable design
1-1/2" - 8" bores



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



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



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



TRA SeriesTriple rod for non-rotating
1-1/2" - 8" bores



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



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



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



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



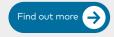
FM with Rod Lock Aluminum body design with 100% ball bearing rod lock 1-1/2" - 6" bores



Position FeedbackOffers continuous position sensing 1-1/2" - 6" bores



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





Guided Actuators



TE Series ThrusterComposite bearings for high loads 9/16" - 3" bores



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



Extruded body, compact profile 12mm - 32mm bores



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



Thruster3 positions in composite or ball bearing options
9/16" - 2" bores

Multiple Position



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 BandMechanically coupled
18mm - 63mm 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



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



500 Series Original

Replaceable rod stud - 500 PSI



Standard Aluminum 'TA' & 'FM'

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



MH Series

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



HH Series

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



CMH Series

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



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 bores 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 SeriesPneumatic gripper system
Gripping forces up to 450 lbs. at 80 PSI



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

Switches



Band MountedEdge detection
10-28 VDC, 50mA rating



Track MountedEdge detection
10-28 VDC, 50mA rating



Tie-Roded Mounted
Models 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



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



Directional Control Valves



Isonic® V1000

Manifold mounted 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



LTV

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



MHL

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



Dyna-Coil

Mini solenoid valves Port: 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



ACV

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



QEV

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"



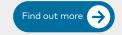
Manifolds

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



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









Port: 1/8" NPT Function: 3/2 Cv: 0.051 Voltage: 12-24VDC, 24-120VAC



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



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



11

Norgren Vacuum Generators











NVP Series Modular Venturi Generators Vacuum levels up to 29.5"Ha Vacuum flows up to 28.0 SCFM

NJ Series Rugged Cylindrical Generators Vacuum levels up to 28.0"Ha Vacuum flows up to 28.0 SCFM

NVDF Series Variable Flow Vacuum Generators Vacuum levels up to 25.0"Ha 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"Ha Vacuum flows up to 600.0 SCF



NMVS Series Multi-stage Generators Vacuum levels up to 28.0" Hg Vacuum flows up to 20.0 SCFM

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

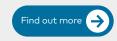
Warning

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.









Whether it's a modification to an existing product, a custom design for your application, or specific industry need, we deliver exceptional solutions.



1. Opportunity Identification

Identify potential opportunities for us to solve a customer problem through the creation of a specialty device.



2. Application Discovery

Engage with the customer to ascertain their application needs and begin preliminary talks via phone call, "Talk to an Engineer" meeting, or in-person.



3. Design

Our design teams work with your engineers and technical support staff to understand the problem and begin creating concepts to address the customer's challenges.



4. Quote

The quoting process engages manufacturing engineers and Bimba's global procurement team to develop a cost-effective and competitively priced solution.



5. Prototype

Dedicated resources in engineering and manufacturing concentrate on prototype builds to test real-world viability, using real and simulated products.



6. Production Build

Bimba is positioned to leverage its full weight of manufacturing resources to supply production quantities in a timely fashion.

Due to our policy of continuous development, Bimba reserve the right to change specifications without prior notice.

BIM-PG-07/22

Bimba

25150 S. Governors Hwy University Park, IL 60484

Tel: +(1) 708 534 8544 Fax: +(1) 708 235 2014 Toll Free (US): 800-44-BIMBA Bimba is part of Norgren, a world leader in motion and fluid control technologies. Norgren operates four global centres of technical excellence and a sales and service network in 50 countries, as well as manufacturing capability in Brazil, China, Czech Republic, Germany, India, Mexico UK and the USA.

For information on all Norgren companies visit

www.norgren.com

Supported by distributors worldwide.

