

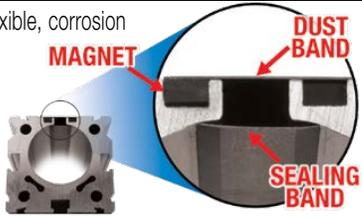
## INTERNAL BEARING RODLESS BAND CYLINDER

# MXP-N

MXP-N internal bearing compact air cylinder is a low-cost solution for applications requiring limited loads and bending moments. It features the lowest breakaway pressure of the MXP line of cylinders. The MXP-N is great for use in vertical applications and its internal bearing is permanently lubricated for reduced maintenance.

### STAINLESS STEEL BANDS WITH NON-WEAR BAND RETENTION

- Durable, flexible, corrosion & fatigue resistant stainless steel of the dust & sealing bands are magnetically retained and are not subject to wear and stretch like materials used by competitors
- Wipers, dust & sealing band all prevent contaminants from entering the cylinder interior, protecting components for increased life



### ADJUSTABLE CUSHIONS

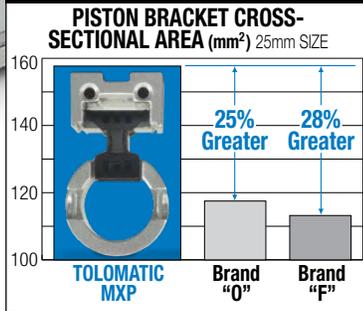
- Adjustable cushions with retained stainless steel needle screw for increased safety
- Easy screw adjustment for smooth deceleration protecting actuator from high stress at end-of-stroke

### INTERNAL BEARINGS

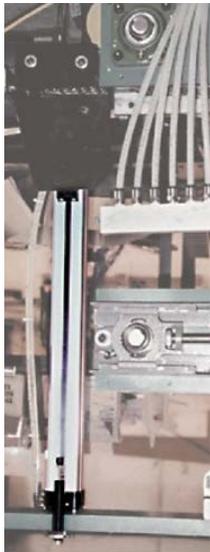


- Design maximizes piston bearing surface area for less pressure on bearing surfaces, less pressure results in less wear
- Permanent lubrication for low friction and extended bearing life
- Internal location provides protection from external contaminants, extending life

### HIGH STRENGTH PISTON



- Single piece extrusion for piston bracket and carrier reduces failure points
- Piston bracket neck cross-sectional area is up to 28% greater than competitive designs, providing increased durability



### Applications:

- Animatronic robots
- Automotive
- Bag positioning
- Carton filling
- Clamping
- Conveying
- Conveyor door control
- Diverting
- Material Handling
- Packaging
- Palletizing
- Pick & place
- Pull-off system
- Test stands
- Transfer station
- Theater animations
- Wire winding
- and many more

### Standard Features:

- Mounting**  
Direct mount via head bolts; US Standard or Metric
- Carrier**  
Flexible mounting pattern
- Sensors**  
Internal magnet
- Porting**  
4 ported heads; NPT, Metric Parallel (ISO-G/BSP) & Metric Taper (Rc/BST) available on both metric and US standard mount actuators

### Available Options:

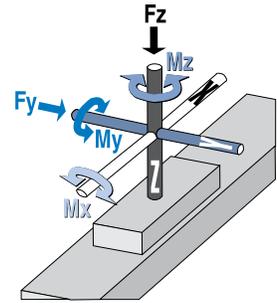
- Mounting**  
Tube clamps; Foot mounts
- Carrier**  
Floating mount; Auxiliary carrier
- Sensors**  
Reed, Solid State PNP or NPN, all available normally open or normally closed
- Porting**  
Single end porting
- Shock Absorbers**  
Fixed or adjustable position shocks

# INTERNAL BEARING RODLESS BAND CYLINDER

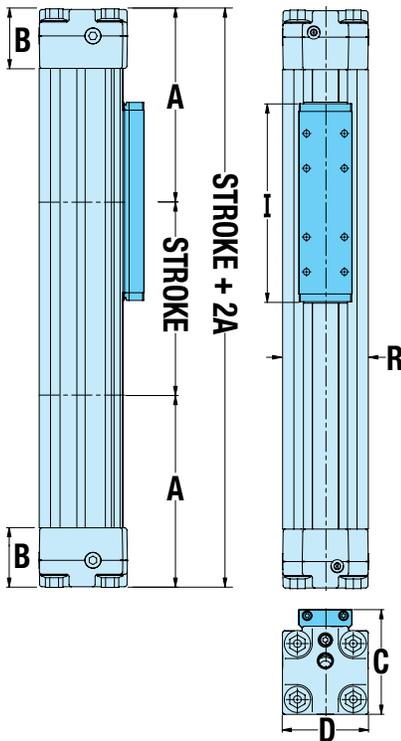
BORE	BENDING MOMENTS			LOAD	THRUST	
	M <sub>x</sub>	M <sub>y</sub>	M <sub>z</sub>	F <sub>z</sub>	(at 100 PSI)	
in	(in-lbs)			lbf	lbf	
16	0.63	3	35	5	30	30.7
25	1.00	9	132	27	65	78.5
32	1.25	36	318	120	115	123
40	1.50	55	575	156	195	177
50	2.00	98	1,017	172	270	314
63	2.50	120	1,776	216	370	491

BORE	BENDING MOMENTS			LOAD	THRUST	
	M <sub>x</sub>	M <sub>y</sub>	M <sub>z</sub>	F <sub>z</sub>	(at 6.9 bar)	
mm	(N-m)			N	N	
16	16	0.3	4.0	0.6	133	136
25	25	1.0	14.9	3.1	289	349
32	32	4.1	35.9	13.6	512	546
40	38	6.2	65	17.6	867	786
50	50	11.1	115	19.4	1,201	1,397
63	64	13.6	201	24.4	1,646	2,184

# MXP-N



## Dimensions



	16	25	32	40	50	63
A	3.13	3.94	4.90	5.82	6.29	8.45
B	0.55	1.11	1.50	1.50	1.97	1.97
C	1.55	2.07	2.67	2.98	3.86	4.76
D	1.17	1.65	2.18	2.52	3.01	3.94
I	3.78	4.45	5.04	5.87	6.57	9.69
R	1.18	1.65	2.18	2.52	3.10	3.94

Dimensions in inches

	16	25	32	40	50	63
A	79.6	100.2	124.5	147.7	159.8	214.5
B	14.0	28.3	38.1	38.0	50.0	50.0
C	39.3	52.6	67.8	75.8	98.1	120.8
D	29.8	42.0	55.4	64.0	78.7	100.0
I	96.0	113.0	128.0	149.0	166.8	246.0
R	30.0	42.0	55.4	64.0	78.7	100.0

Dimensions in millimeters

The MXP-N is a great choice for vertical applications with its low cost and high My bending moment

# Tolomatic™

EXCELLENCE IN MOTION

COMPANY WITH  
QUALITY SYSTEM  
CERTIFIED BY DNV GL  
= ISO 9001 =  
Certified site: Hamel, MN

### USA

**Tolomatic Inc.**  
3800 County Road 116  
Hamel, MN 55340, USA  
**Phone:** (763) 478-8000  
**Fax:** (763) 478-8080  
Toll-Free: **1-800-328-2174**  
sales@tolomatic.com  
[www.tolomatic.com](http://www.tolomatic.com)

### CHINA

**Tolomatic Automation Products (Suzhou) Co. Ltd.**  
(ServoWeld® inquiries only)  
No. 60 Chuangye Street, Building 2  
Huqiu District, SND Suzhou  
Jiangsu 215011 - P.R. China  
**Phone:** +86 (512) 6750-8506  
**Fax:** +86 (512) 6750-8507  
ServoWeldChina@tolomatic.com

### EUROPE

**Tolomatic Europe GmbH**  
Elisabethenstr. 20  
65428 Rüsselsheim  
Germany  
**Phone:** +49 6142 17604-0  
help@tolomatic.eu

All brand and product names are trademarks or registered trademarks of their respective owners. Information in this document is believed accurate at time of printing. However, Tolomatic assumes no responsibility for its use or for any errors

that may appear in this document. Tolomatic reserves the right to change the design or operation of the equipment described herein and any associated motion products without notice. Information in this document is subject to change without notice.

Visit [www.tolomatic.com](http://www.tolomatic.com) for the most up-to-date technical information