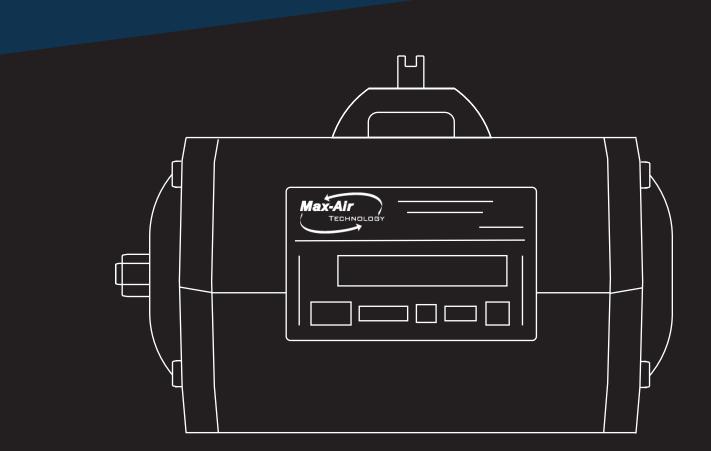


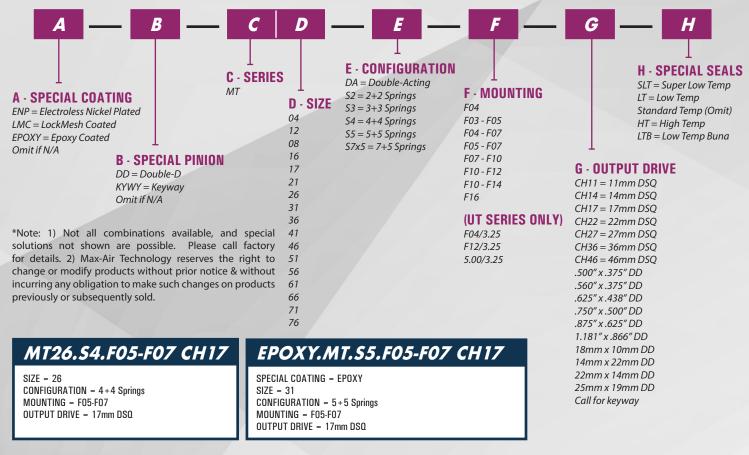
The Best Way To Automate Your Process





Max-Air Technology Inc. | MT Series Pneumatic Actuators

#### MT Series Part Number Builder



### Actuator Quick Reference Table

	🔇 Drive (mm)	Drive (in)	Standard ISO Pattern	DA Torques @ 80 PSI
MT04	9	0.354	F03	80
MT12	11	0.433	F04	125
MT08	11	0.433	F03/F05	207
MT16	14	0.551	F05/F07	275
MT17	14	0.551	F05/F07	360
MT21	17	0.670	F05/F07	500
MT26	17	0.670	F05/F07	750
MT31	17	0.670	F05/F07	1000
MT36	22	0.866	F07/F10	1600
MT41	22	0.866	F07/F10	2000
MT46	22	0.866	F07/F10	3125
MT51	27	1.063	F10/F12	4500
MT56	27	1.063	F10/F12	6000
MT61	36	1.417	F10/F14	9100
MT66	36	1.417	F10/F14	12000
MT71	46	1.811	F14	23500
MT76	46	1.811	F16	31500

#### Seal Options

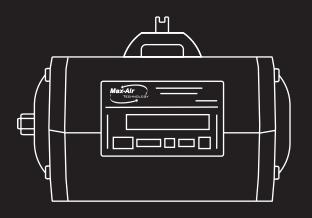
SEALS	CODE	TEMP RANGE	
Super Low Temp. (FVMQ)	SLT	-67°F (-55°C) to 250°F continuous and 300°F cyclic	
Low Temp. (Silicone)	LT	-49°F (-45°C) to 250°F continuous and 300°F cyclic	
Standard (BUNA-N)	STD	-4°F (-20°C) to 176°F (80°C)	
High Temp. (VITON)	HT	-10°F (-23°C) to 250°F continuous and 300°F cyclic	
Low Temp. Buna	LTB	-40°F (-40°C) to 212°F (100°C)	

## **Pinion Options**



# MT SERIES ALUMINUM ACTUATORS

The MT Series actuator design helps make automation effortless.



MT Series rack & pinion pneumatic actuators continue the Max-Air tradition of easy integration, flexible customization, and reliable operation. Features include two ISO bolt circle patterns drilled directly in the body, NAMUR standard mounting for accessories, and our patented  $\pm 10^{\circ}$  adjustment for the open/closed positions, all backed by the best unlimited cycle life warranty.

### Standard Features:

- Compact Rack and Pinion Design
- 3D Models Available for All 17 Sizes
- Direct ISO 5211 Standard Valve Mounting
- Direct NAMUR Accessory Mounting
- Anti-Blowout Bi-Directional Pinion Retention
- High Visibility Open/Closed Beacon
- Pre-Loaded Spring Cartridges
- Double-Acting (Air-to-Air) Operation
- Spring-Return (Air-to-Spring), Fail-Close or Fail-Open
- Standard (CCW open) or Reverse (CW open) Rotation
- Patented Dual Travel Stop Design ±10° Adjustment
- Designed for High Cycles 1,000,000+
- Unlimited Cycle Life Warranty

### **Options:**

- Female Double-D and Keyed Pinions
- T-Port & L-Port indicators for multiport applications
- Extended travel stops for greater stroke adjustment
- ENP, Polyamide Epoxy, & LockMesh<sup>™</sup> coatings
- Alternative Operating Media (Water, Oil, Inert Gas)
- High and Low Temperature Options
- Fast Open / Fast Close Options



# Patented Dual Travel Stop Design

#### STANDARD +/- 10° ADJUSTMENT OPEN & CLOSE

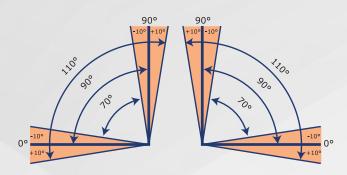
- Travel adjustable from 70° up to 110° rotation
- Angle seating capable with standard travel stops
- Compensates for slop in valve/actuator/coupling interface
- Typical industry standard is +/-3°

#### LINEAR PISTON STOPS, BOTH ON SAME SIDE

- Easier adjustment for tighter space requirements
- Cleary marked "0" (Closed) and "MAX" (Open)
- Extremely high repeatability, no hysteresis
- Allows for greater travel adjustment than rotary cam stops
- Lower degrees per turn allows for more precision
- No uneven side loading or wear on the pinion

#### **OPTIONAL EXTENDED TRAVEL STOPS**

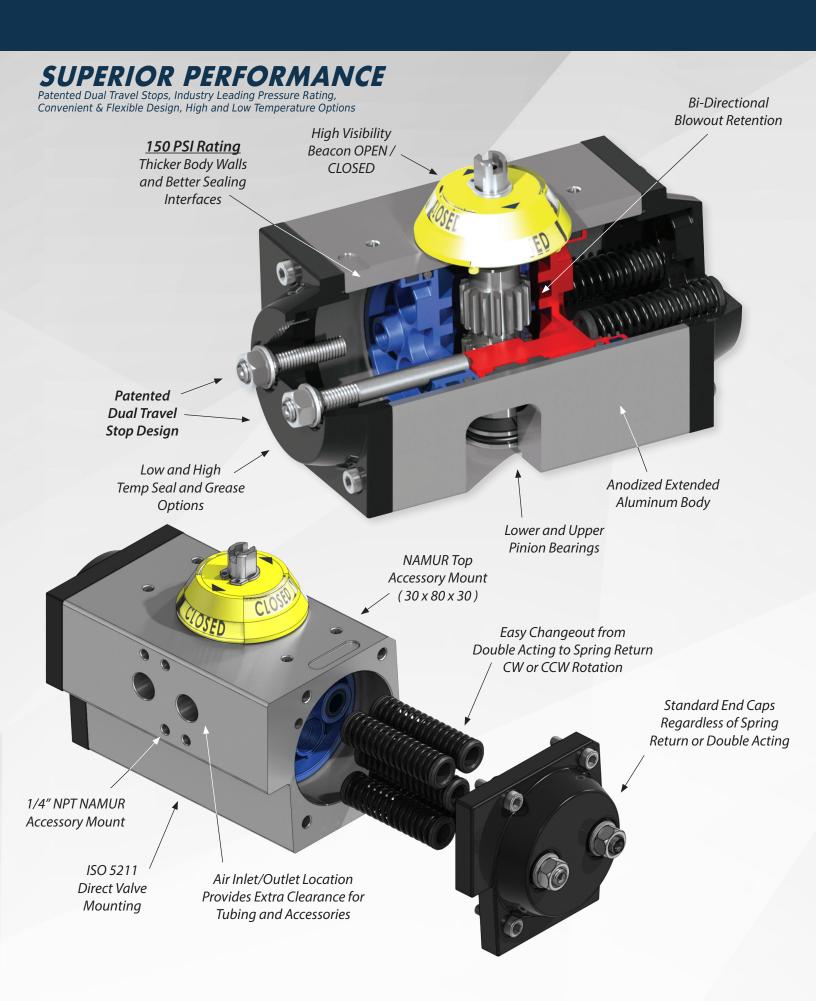
- Close adjustment up to 30° or more from full closed
- Open adjustment up to full actuator stroke (90° from open)
- Fail-safe applications where full close shutoff is not desired
- Special rotations where travel is much less than 90° (i.e. 45°, 60°)



# 17 Different Sizes Available

With 50% more actuator sizes than the competition, the MT Series can better match valve torques and reduce oversizing. This saves valuable space, reduces overall weight, and eliminates unnecessary cost.

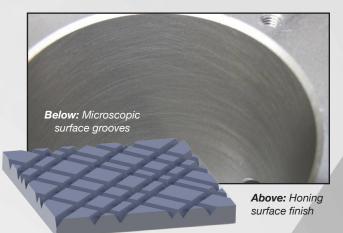




# MT SERIES SALES GUIDE Max-Air Technology Inc. | MT Series Pneumatic Actuators

# HIGH CYCLE LIFE DESIGN

Precision Honed Bore, High Cycle Wear Bearings, Unlimited Cycle Life Warranty, Rugged Tooth Design



## Precision Honed Bore

- High end feature, not industry standard
- Extremely uniform bore surface provides consistent seal contact and compression
- Micro-scratches provide even lubrication and minimize "wiping" effect
- Honed for consistent long-life operation with multiple seal materials and greases



#### High Cycle Wear Bearings

High performace technopolymer bearings eliminate metal-to-metal sliding contact.

- Low friction , Large contact area
- 2 axial + 1 thrust bearing for pinion
- 2 axial bearings per piston, plus zero travel stop bearing

# Unlimited Cycle Life Warranty

MT Series actuators have the best warranty in the industry, made possible by a holistic high-cycle life design. To maximize actuator life and take full advantage of the warranty, Max-Air always recommends clean, dry air for operation and regular preventative maintenance. Rebreathers are readily available and also recommended to keep dirty environmental air out of the internals and prolong the life of seals and grease. The Max-Air MT Series design is tested and verified to over 1,000,000+ cycles under full rated load.

SIL3

#### DESIGNED & TESTED 1,000,000+ CYCLES

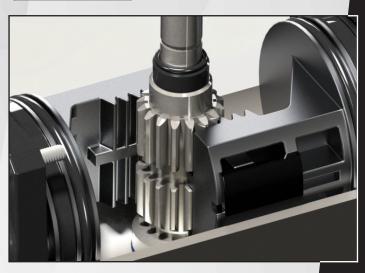
# Rugged Tooth Rack and Pinion Design

The MT Series exclusive rack and pinion tooth design was created to better withstand valve "slamming" and other dynamic forces. After years of research and development, Max-Air was able to optimize a tooth profile for higher strength and resiliency, but with minimal backlash.

- Tooth profile has larger base and deeper engagement than typical rack & pinion
- More curved profile allows for longer contact with increased tooth pitch for low backlash



Blow-out proof feature incorporated into piston rack Pinion electroless nickel plated for increased hardness and corrosion resistance





The Best Way To Automate Your Process

Your nearest Max-Air dealer can be found at:



www.maxairtech.com/

NORTH AMERICAN HEADQUARTERS

114 Resource Drive Wentzville, MO 63385 USA Tel: (636) 272-4934 - Fax: (636) 272-4937 Toll Free: (888) 842-9998 www.maxairtech.com - info@maxairtech.com

EUROPEAN HEADQUARTERS Sesto San Giovanni, Italy ASIAN OFFICE Jinan, China





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