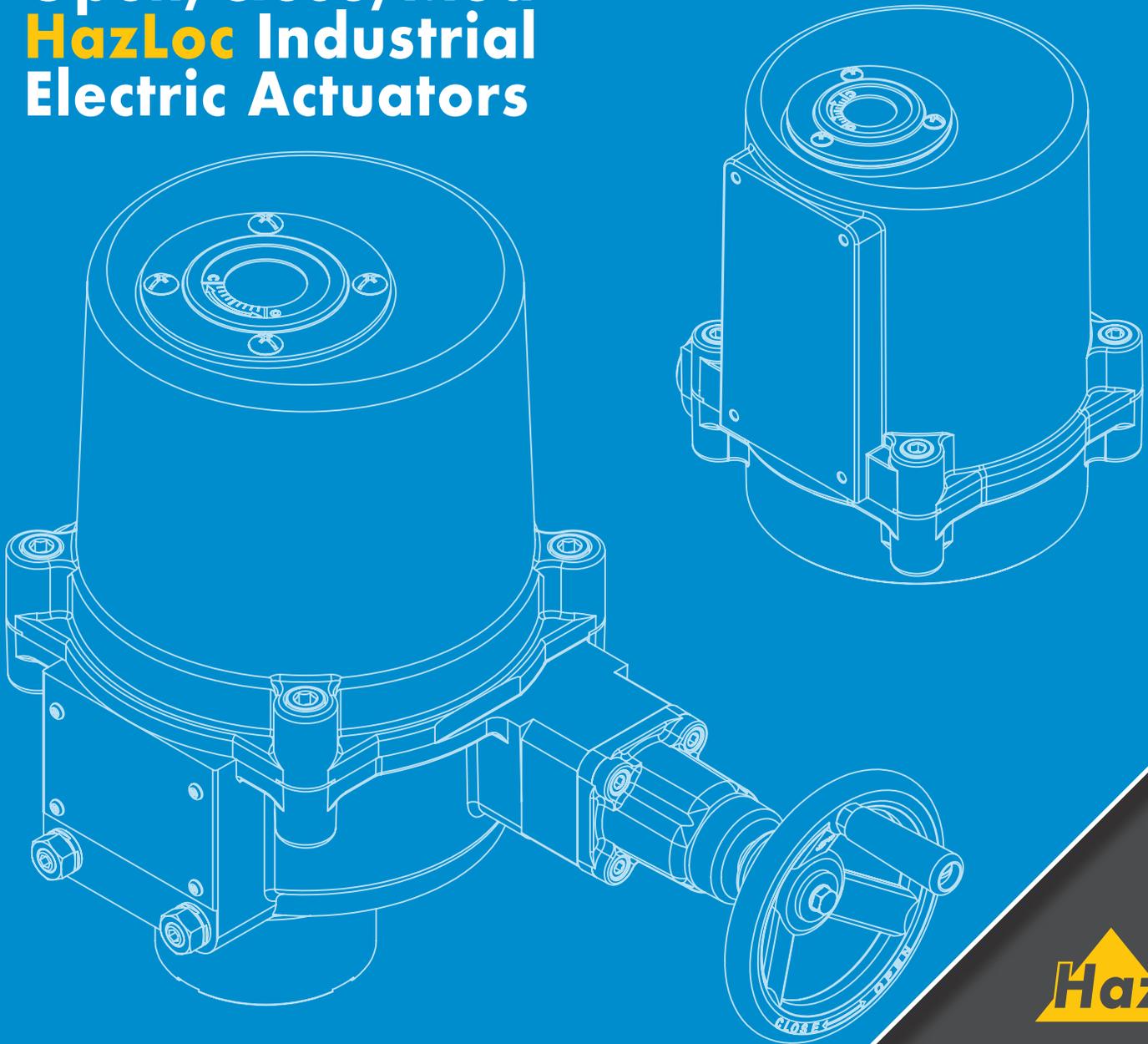




The Best Way To Automate Your Process



Open/Close/Mod **HazLoc** Industrial Electric Actuators

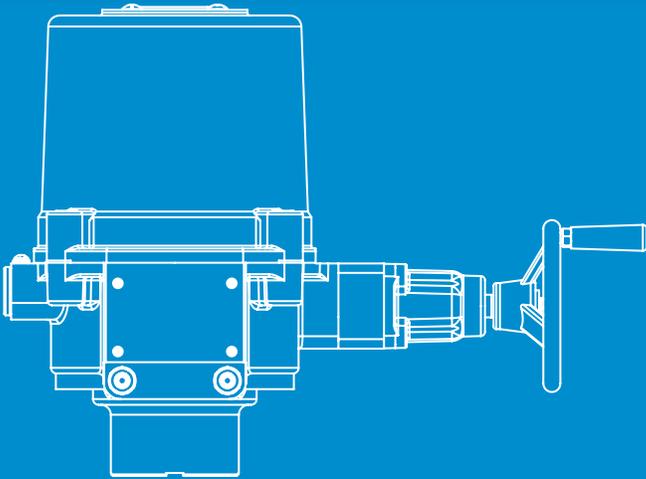


MX Series Technical Brochure

Max-Air Technology Inc. | Rotary Actuators & Valve Automation Solutions

MX Series Electric Actuators

Standard Open/Close & Modulating, for Heavy Industrial Applications.



MX Series Hazardous Location industrial electric actuators comply to Class 1, Division 1, Groups C, D T4 temperature standards as well as Class 2 Division 1 Groups E, F, G with T130 degree temperature standards. All units come standard with an industrial powder coated heavy duty, IP68 aluminum enclosure, torque switches, 360-degree position indicator, manual override, 2 auxiliary switches, anti-condensation heater, ISO mounting and female drive output. MX Series actuators are available in 24 VAC/VDC, 120VAC, or 230 VAC single phase. Additional voltages and customizations also available.

MX Series Part Number Builder

A | **B** — **C** | **D** | **E** Example Part # **MXJC004-24VD0008**

A - SERIES

MXS = Electric, Open/Close/Jog
(All Frames, 120/230vac Only)
MXJ = Electric, Open/Close/Jog
(All Frames, 12/24V ONLY,
E-H Frames, 120/230vac)
MXN = Electric, 4-20mA In/Out
(All frames, All voltages)
MXV = Electric, 2-10vdc In/Out
(All frames, All voltages)

B - SIZE

A003 = 310 in-lbs (F03/F05, 14 DSQ)
B004 = 445 in-lbs (F07, 17 DSQ)
C004 = 445 in-lbs (F07, 17 DSQ)
E008 = 800 in-lbs (F07, 22 DSQ)
E013 = 1,330 in-lbs (F07, 22 DSQ)
G035 = 3,540 in-lbs (F10, 36 DSQ)
G044 = 4,430 in-lbs (F10, 36 DSQ)
G058 = 5,755 in-lbs (F10, 36 DSQ)
H089 = 8,855 in-lbs (F12, 36 DSQ)
H133 = 13,280 in-lbs (F12, 36 DSQ)

C - VOLTAGE**

12VD = 12 VDC
(Open/Close/Jog Only,
A003 Frame Only)
24VD = 24 VDC
24VA = 24 VAC
120A = 120/1 50/60Hz
230A = 230/1 50/60Hz

D - OPTIONS

00 = None
TS = Torque Switches
(E008+ Frames Not
Available without
Torque Switches)

E - IP RATINGS

08 = IP68 Only

Contact Max-Air Factory Service for additional configurations.

Note: Not all combinations are valid build codes.
Consult Eng/PM for validity.

HAZARDOUS LOCATION RATING

PRODUCTS CLASS - 3228 02 VALVES-Actuators -
For Hazardous Locations
CLASS - 3228 82 VALVES-Actuators -
For Hazardous Locations-Certified to U.S. Standard
Class I, Division 1, Groups C, D T4
Class II, Division 1, Groups E, F, G T130°C
Class I, Zone 1, Ex db IIB T4 Gb (For Canada)
Class I, Zone 1, AEx db IIB T4 Gb (For US)
Ex tb IIIC T130°C Db (For Canada) -
(Zones 20, 21 or 22 not applicable in Canada)
Class II, Zone 21, AEx tb IIIC T130 C Db (For US)
Rated 240 Vac max, 10.0 A max
-30°C ≤ Tamb ≤ 70°C, T4
Enclosure Type 4X, IP68 (72h, 7m).



Table of Contents

Pg - Description

[02 - Part Number Builder](#)

[03 - Table of Contents](#)

[04 - Features & Benefits](#)

[06 - Data Sheet Links](#)

[06 - Other Brochure Links](#)



STANDARD WARRANTY

Max-Air Technology Inc. | The Best Way to Automate Your Process

Max-Air Technology provides the following warranty regarding products manufactured by it. **THE WARRANTY STATED HEREIN IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES AND REPRESENTATIONS, EXPRESSED OR IMPLIED, OR STATUTORY, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE.** Max-Air Technology warrants its products to be free from defects in materials and workmanship when these products are used for the purpose for which they were designed and manufactured. Max-Air Technology does not warrant its products against chemical or stress corrosion or against any other failure other than from defects in materials or workmanship. The warranty period is for twelve (12) months from installation date or eighteen (18) months from shipment date, whichever date comes first. Any claims regarding this warranty must be in writing and received by Max-Air Technology before the last effective date of the warranty period. Upon Max-Air Technology's receipt of a warranty claim, Max-Air Technology reserves the right to inspect the product(s) in question at either the field location or at the Max-Air Technology Manufacturing plant. If, after inspection of the product(s) in question, Max-Air Technology determines that the purchaser's claim is covered by this warranty, Max-Air Technology's sole liability and the purchaser's sole remedy under this warranty is limited to the refunding of the purchase price or repair or replacement thereof at Max-Air Technology option. Max-Air Technology will not be liable for any repairs, labor, material or other expenses that are not specifically authorized in writing by Max-Air Technology, and in no event shall Max-Air Technology be liable for any direct or consequential damages arising out of any defect from any cause whatsoever. If any Max-Air Technology product is modified or altered at any location other than Max-Air Technology – St. Louis (Missouri) UNITED STATES or Max-Air Technology – Agrate Brianza (MB) ITALY without the express written authorization of Max-Air Technology, said product is not covered by this warranty. The warranty for such products shall be subject only to the warranty relief, if any, provided by the suppliers and/or manufacturers of such products.

Features & Benefits

Standard Open/Close & Modulating, for Hazardous Location Applications.

Hazardous Location Open/Close & Modulating Electric

MX Series Hazardous Location industrial electric actuators are offered in 6 frame sizes and 10 different torque ratings providing 310 in-lbs thru 13280 in-lbs. All units comply to CSA Class 1, Division 1, Groups C, D T4 temperature standards as well as Class 2 Division 1 Groups E, F, G with T130 degree temperature standards. All units come standard with an industrial powder coated heavy duty, IP68 aluminum enclosure, ISO mounting and female drive output. MX Series actuators are available in 24 VAC/VDC, 120VAC, or 230 VAC single phase. All MX Series are available in either Open / Close / Jog control or full Modulating control configuration. Torque switches are standard on all units. A 360-degree viewable position indicator, manual override, 2 auxiliary switches, and anti-condensation heater are standard on all units.



Specifications:

Locations Ordinary	Indoors/Outdoors
Enclosure Protection	IP68 Standard; Class 1, Division 1, Groups C, D T4 temperature standards as well as Class 2 Division 1 Groups E, F, G with T130 degree temperature standards (US). The units are also fully CSA rated for Class 1, Zone 1 Ex dbIIB T4 Gb (Canada) and Class 1, Zone 1 AEx db IIB T4 Gb (for US); Ex tb IIIC T130C Db Canada).
Torque Range	310 to 13.280 in-lbs
Materials	Aluminum w/ Polyester Powdercoat
Ambient Temp.	-22°F to 149°F (-30°C to +65°C)
Rotation	90 Degrees
Voltages - Single Ph	24 vac/vdc, 120 vac, 230 vac
Hz Rating	Dual 50/60 Hz certified
Motor Design	Class F & H

Duty Cycle	100% (EN 60034 / ISO 22153)
Signal Type	Open/Close/Jog or Modulating (4-20mA, 2-10V)
Mounting ISO 5211	Yes
Gears	310 & 445 in-lbs = Spur Gear, 800 in-lbs + above = Epicyclic
Back-Drive Resistance Method	High gearing ratio; Epicyclic design
Relative Humidity	Range < 95%
Condensation Protection	Heater / Thermostat Heater
Auxiliary Position Indication	SPDT Mechanical Switches (2 Auxiliary)
Manual Override	Hex Socket (310 & 445 / Handwheel 800 in-lbs +)
Failsafe Battery Backup	Yes - releasing fall 2022

Electric Series Selection

Start work down the comparison chart to select the correct electric actuator series.

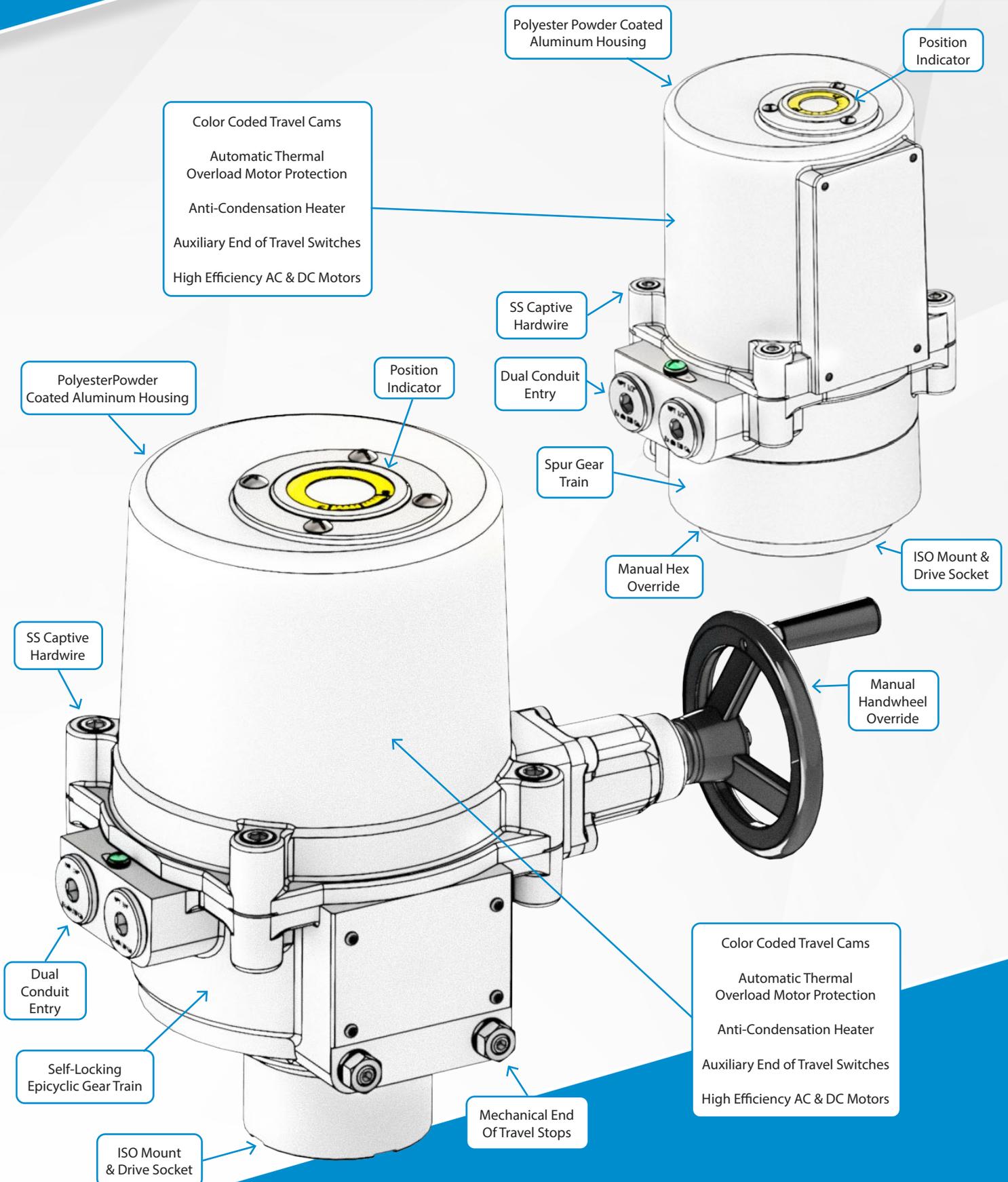
Series	Spring Return				
	MA	ME	MX - HazLoc	SE	SX - HazLoc
Torque	133 to 1770 in-lbs	310 to 40,000 in-lbs	310 to 13.280 in-lbs	445 to 3518 in-lbs	445 to 2300 in-lbs
Rating	NEMA 4/4x IP67	NEMA 4/4X IP67	Class 1, Div 1, Grp. C, D T4 & Class 2 Div 1 Grp. E, F, G T130	NEMA 6/6P IP68	Class 1, Div 1, Grp. C, D T4 & Class 2 Div 1 Grp. E, F, G T130
Voltages Single Ph	24 vac/vdc, 90 to 265 vac/vdc	24 vac/vdc, 120 vac, 220 vac	24 vac/vdc, 120 vac, 220 vac	24 vac/vdc, 120 vac, 220 vac	24 vac/vdc, 120 vac, 220 vac
Voltages 3 Ph	n/a	220,380,460 vac	n/a	220,380,460 vac	220,380,460 vac
Control Type	Open/Close/Jog or Modulating (4-20mA, 2-10V)	Open/Close/Jog or Modulating (4-20mA, 2-10V)	Open/Close/Jog or Modulating (4-20mA, 2-10V)	Open/Close/Jog or Modulating (4-20mA, 2-10V)	Open/Close/Jog or Modulating (4-20mA, 2-10V)
Features & Options	Electronic Fail-Safe Digital End of Travel Setting	Submersible Torque Switches Chainwheel Override Local Control	Submersible Torque Switches Chainwheel Override	Submersible Handwheel Fail Direction (CW/CCW) Local Control	Submersible Handwheel Fail Direction (CW/CCW)

MX Series Technical Brochure

Max-Air Technology Inc. | Rotary Actuators & Valve Automation Solutions



maxairtech.com



Links for Data Sheets & Brochures

Data Sheet w/ Technical Information & Additional Max-Electric Actuator Brochures

MX Series Data Sheets

Looking for ME Series echnical info? Use the [PART NUMBER BUILDER](#) to select which data sheet is needed, then click the link!

MX Series

[MX-A003](#)

[MX-B004](#)

[MX-C004](#)

[MX-E008-E013](#)

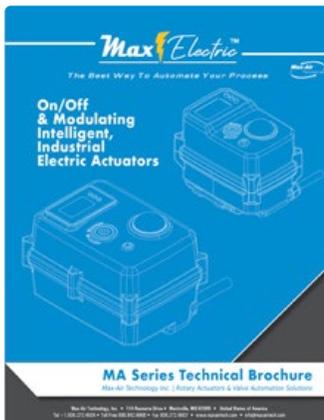
[MX-G035-G044](#)

[MX-G058](#)

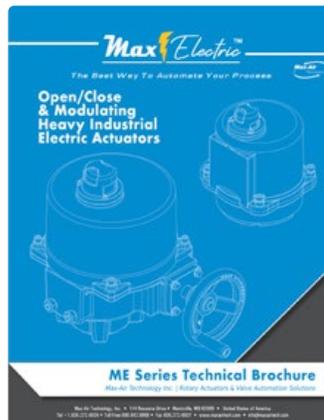
[MX-H089-H133](#)

Additional Electric Brochures

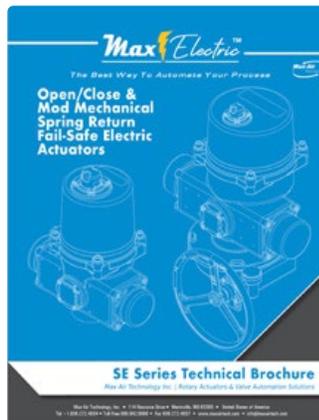
Looking for additional information on other models of Max-Electric actuators? Click the link below!



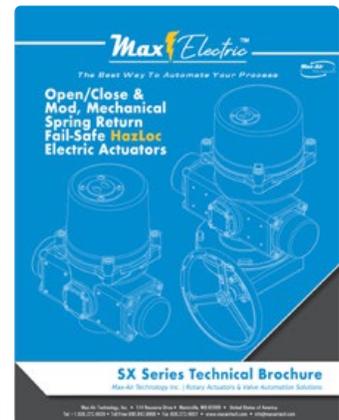
**MA Series
Intelligent
Brochure**



**ME Series
Industrial
Brochure**



**SE Series
Spring Return
Brochure**



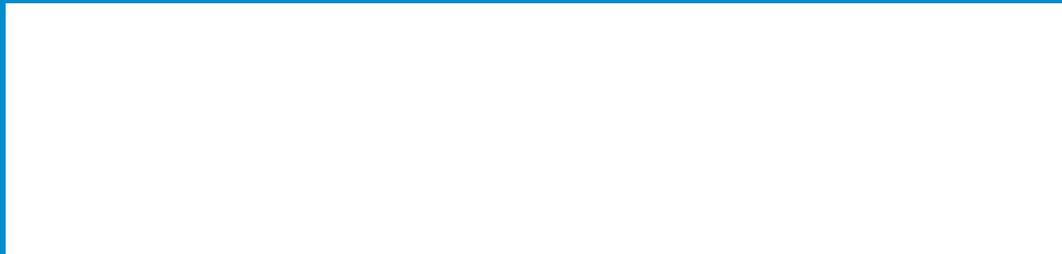
**SX Series
Spring Hazloc
Brochure**

MAX-AIR TECHNOLOGY

The Best Way To Automate Your Process



Your nearest Max-Air dealer can be found at:



maxairtech.com

Max-Air Technology, Inc. • 114 Resource Drive • Wentzville, MO 63385 • United States of America
Tel +1.636.272.4934 • Toll Free 888.842.9998 • Fax 636.272.4937 • www.maxairtech.com • info@maxairtech.com

© Max-Air Technology, Inc. 2021



R: 02/23/23