Max Electric.

#### The Best Way To Automate Your Process



Haz

Open/Close & Mod, Mechanical Spring Return Fail-Safe Hazloc Electric Actuators

## **SX Series Technical Brochure**

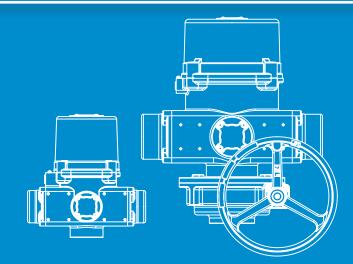
Max-Air Technology Inc. | Rotary Actuators & Valve Automation Solutions

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

# **SX Series Electric Actuators**

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

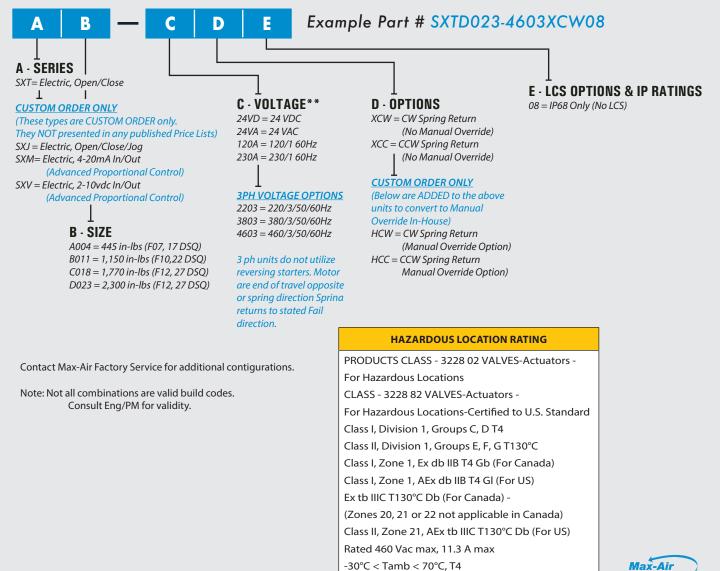




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SX Series Hazardous Location industrial electric mechanical spring return actuators are available in torques from 475 in-lbs thru 2,300 in-lbs. Units offered in 24 VAC, 24 VDC, 120 VAC, 230 VAC; complete 3 phase configurations, and open / control configuration (please contact the factory for additional control requirements). All units comply to CSA Class 1, Division 1, Groups C, DT4 temperature standards as well as Class 2 Division 1 Groups E, F, G with T130 degree temperature standards, ATEX 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(for Canada). Units come standard with an industrial powder coated heavy duty, IP68 rated aluminum endosure, mechanical failsafe positioning to either a full CW or CCW position upon loss of mains power, 360-degree position indicator, 2 auxiliary switches, anti-condensation heater, with or without a manual override handwheel, ISO mounting, and female drive output. Additional voltages and customizations also available.

#### SX Series Part Number Builder



Enclosure Type 4X, IP 68 (72h, 7m).

### **SX Series Technical Brochure** Max-Air Technology Inc. | Rotary Actuators & Valve Automation Solutions



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## **STANDARD WARRANTY**

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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-

## **Features & Benefits**

Spring Return Open/Close & Modulating, for Hazardous Location Applications.

## **Hazardous Locations Mechanical Spring** Return Fail-Safe Electric

SX Series Hazardous Location industrial electric mechanical spring return actuators are offered in 4 frame sizes and 4 different torque ratings providing 475 in-lbs thru 2,300 in-lbs. SX Series actuators are available in 24 VAC, 24 VDC, 120 VAC, 230 VAC; these are also offered in complete 3 phase configurations in 220, 380 or 460 VAC. All SX Series are available in Open / control configuration (please contact the factory for additional control requirements). Units will provide mechanical failsafe positioning to either a full CW or CCW position upon loss of mains power. All units are available with or without a manual override handwheel. All units comply to CSA Class 1, Division 1, Groups C, D T4 temperature standards as well as Class 2 Division 1Groups E, F, G with T130 degree temperature standards. The units are also fully ATEX rated for Class 1, Zone 1 Ex dbllB T4 Gb (Canada) and Class 1, Zone 1 AEx db llB T4 Gb (for US); Ex tb IIIC T130C Db(for Canada). All units come standard with an industrial powder coated heavy duty, IP68 rated aluminum enclosure, ISO mounting and female drive output. A 360-degree viewable raised position indicator, 2 auxiliary switches, and anti-condensation heater are standard on all units.

#### **Specifications:**

Locations Ordinary	Indoors/Outdoors			
Enclosure Protection	IP68 Standard; CSA Class 1, Division 1, Groups C, D T4 temperature standards as well as Class 2 Division 1Groups 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	445 to 2300 in-lbs			
Materials	Aluminum w/ Polyester Powdercoat			
Ambient Temp.	-40°F to 149°F (-40°C to +65°C)			
Rotation	90 Degrees			
Voltages - Single Ph	24 vac/vdc, 120 vac, 230 vac			
Voltages - 3 Ph	220,380,460 vac			

## **Electric Series Selection**



Hz Rating	Dual 50/60 Hz certified			
Motor Design	Class F & H			
Duty Cycle	100% (EN 60034 / ISO 22153)			
Signal Type	Open/Close, Jog (Modulating (4-20mA, 2-10V) option)			
Mounting ISO 5211	Yes			
Gears	Spur design - Hardened Steel			
Back-Drive Resistance Method	Motor Brake, Gear Ration			
Relative Humidity	Range < 95%			
<b>Condensation Protection</b>	Heater / Thermostat Heater			
Auxilliary Position Indication	SPDT Mechanical Switches (2 Auxiliary)			
Manual Override	With or Without external handwheel			

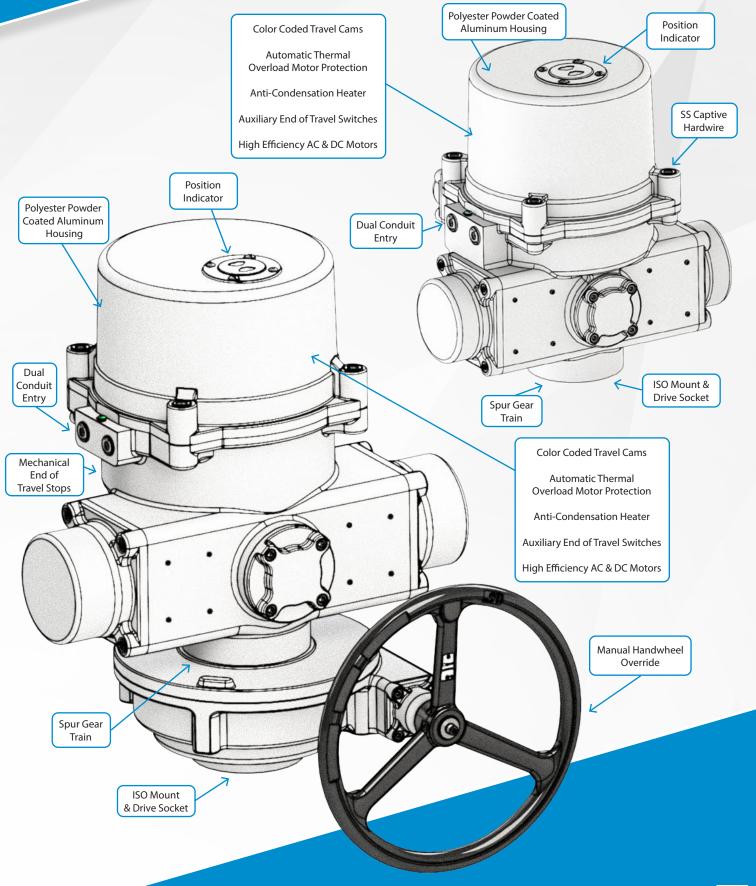
Start work down the comparison chart to select the correct electric actuator series.			Spring Return		
Series	MA	ME	MX - HazLoc	SE	SX - HazLoc
Torque	133 to 1770 in-lbs	310 to 40,000 in-lbs	310 to 13.280 in-lbs	445 to 3518 in-lbs	445 to 2300 in-lbs
Rating	NEMA 4/4x IP67	NEMA 4/4X IP67	Class 1, Div 1, 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)



# **SX Series Technical Brochure**

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# Links for Data Sheets & Brochures

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

## **SX 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!

#### **SX Series**

SX-A004-HW SX-A004-XH SX-B011-HW SX-B011-XH SX-C018-HW SX-C018-XH SX-D023-HW SX-D023-XH

#### **SX Series 3ph**

SX-A004-HW-3ph SX-A004-XH-3ph SX-B011-HW-3ph SX-B011-XH-3ph SX-C018-HW-3ph SX-C018-XH-3ph SX-D023-HW-3ph SX-D023-XH-3ph

## **Additional Electric Brochures**

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



# **SX Series Technical Brochure**



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R: 07/21/22