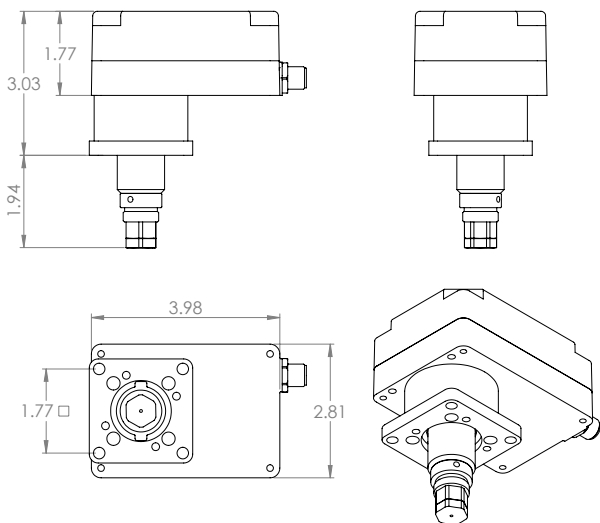
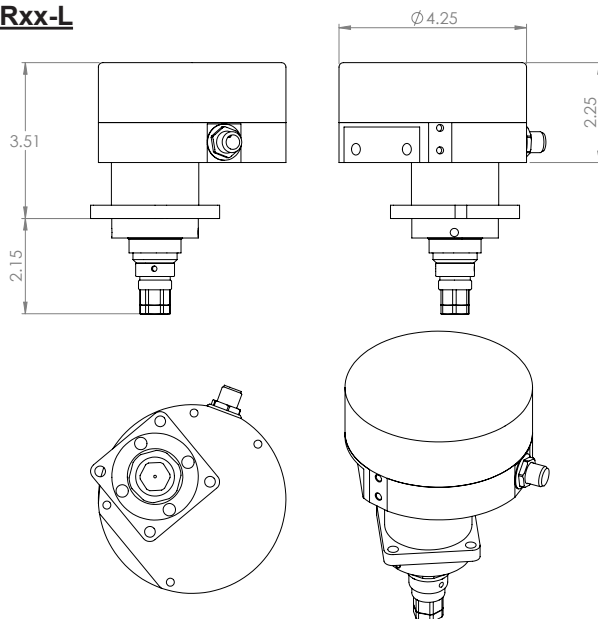


## Mxx-L



## Rxx-L



## Linear models

Model	Seating force range [lbs]	Running force [lbs]	Speed range [time for 1 inch]
xCJ - L1 (16)	5 .. 46	58	26 .. 120*
xCL - L1 (16)	13 .. 138	175	26 .. 120
xCM - L1 (16)	35 .. 400	517	78 .. 360
xCJ - L2 (8)	12 .. 60	67	13 .. 64
xCL - L2 (8)	37 .. 180	200	13 .. 64
xCM - L2 (8)	110 .. 535	600	40 .. 189

\* De-rate the duty cycle to 25% for the highest torque values  
**Note:** speed and torque depend on settings by dip switch of actuator  
 Consult user manuals of individual units. Actuators are set for optimum speed.

**Weight:**  
 Mxx-L: 1300 g  
 Rxx-L: 1600 g  
 (weight of linear assembly included)

## Other Specifications:

**Isolated Signals:** Optical isolation 1000V min [AI and AF models only]

**Feedback 4..20mA:** For sensing resistor of [AF model only] [AF model only] max. 250 ohms. Floats +6VDC / -2VDC from power Gnd

**Position power loss:** Standard: "remembers" position before shut down, will reseat valve based on torque setting when the signal is between 3 and 4 mA

**Stroke length:** Regular 1" (25.4 mm)  
 Extended: 2" (60mm) or 4" (120mm)

## Certifications:


**Mxx-L & Rxx-L model:**  
 ICES-001 ISSUE 5 July 2020  
 IEC 61000-6-2:2016, IEC 61000-6-4:2018  
 FCC 47 CFR PART 15 SUBPART B  
 EN 61362-1:2013 (GROUP 1, CLASS A; Industrial electromagnetic environment)  
 IP66 (60529:2013) / NEMA 4X

**Rxx-L model only:**  
 IP 68 (60529:2013)  
 CSA & IECEx Certified Enclosure

## Description and Specifications:

### Enclosure:

**Mxx-L Model:** Aluminum die cast E-coating or stainless

**Rxx-L Model:** Aluminum die cast anodized or stainless  
 Class I, Div 1 Groups B, C, D/ T6  
 Class II Groups E, F, G/ T6 (85 °C)

**Temperature range:** 0 .. 65 °C internal  
 (derate duty cycle at high temp.)

**Ext. temp. range:** -40 .. 60 °C (w. Heater option)

**Stall protection:** Electronic position and motion detection

**Feedback:** TTL, 4 - 20mA, Modbus

**Gears & Bearings:** Metal and bronze, oiled/greased for life

**External Fasteners:** Stainless Steel

**Life Expectance:** 250,000 cycles in specified conditions

**Motor:** Brushless DC motor, computer control

**Voltages/Current:** 12-24 VDC/Max3A  
 110 - 240 VAC/Max1.5A @ 50/60 Hz

**Positioning precision:** +/- 0.001" (0.025mm)

**Positioning resolution:** +/- 0.00005" (0.0013mm)

**Positioning detection:** Hall detectors

**Range/ Speed setting:** Dip switches inside enclosure

**Control options:** Analog (4 - 20 mA, 1 - 5 V, 1 - 10 V),  
 Modbus, TTL (on/off)

**End travel detection:** For needle valve, by motion detection

**Power setting:** Adjustable

**Mechanical shock:** Repeated ≤ 130 g - force no effect,  
 occasional ≤ 150 g - force no effect  
 > 150 g - force not tolerated

**Mechanical vibration:** Random SAE J1211, Chassis, Exterior

**Thermal Shock:** -20 °C to + 70 °C in 10 min

**Failsafe battery:** LiPo rechargeable battery, will position  
 the actuator to predetermined desired  
 position (Rxx Series only)