rotork®

Keeping the World Flowing
for Future Generations

M and R series battery backup

Failsafe ¼ turn and ½ turn electric valve actuators

The battery backup acts as a failsafe. When 24 VDC power to the actuator is lost, the battery will engage. The actuator will then move to a user-defined position.

When 24 VDC power is restored, the actuator will return to its input signal position.

Fail-safe position

Modulating actuator: Fail-safe position is set using DIP switches on the PCB. To set this position, change the analogue input signal to the desired value. When the actuator has reached its final position, switch DIP 9 ON. When power is lost, the actuator will return to this same position. To re-set fail-safe position, switch DIP 9 OFF and repeat above procedure.

Discrete position actuator: When power is lost, actuator will move to its default, "centre" position. Typically the valve will be installed so as to make this the fully closed position. Other positions are available.

Using the actuator

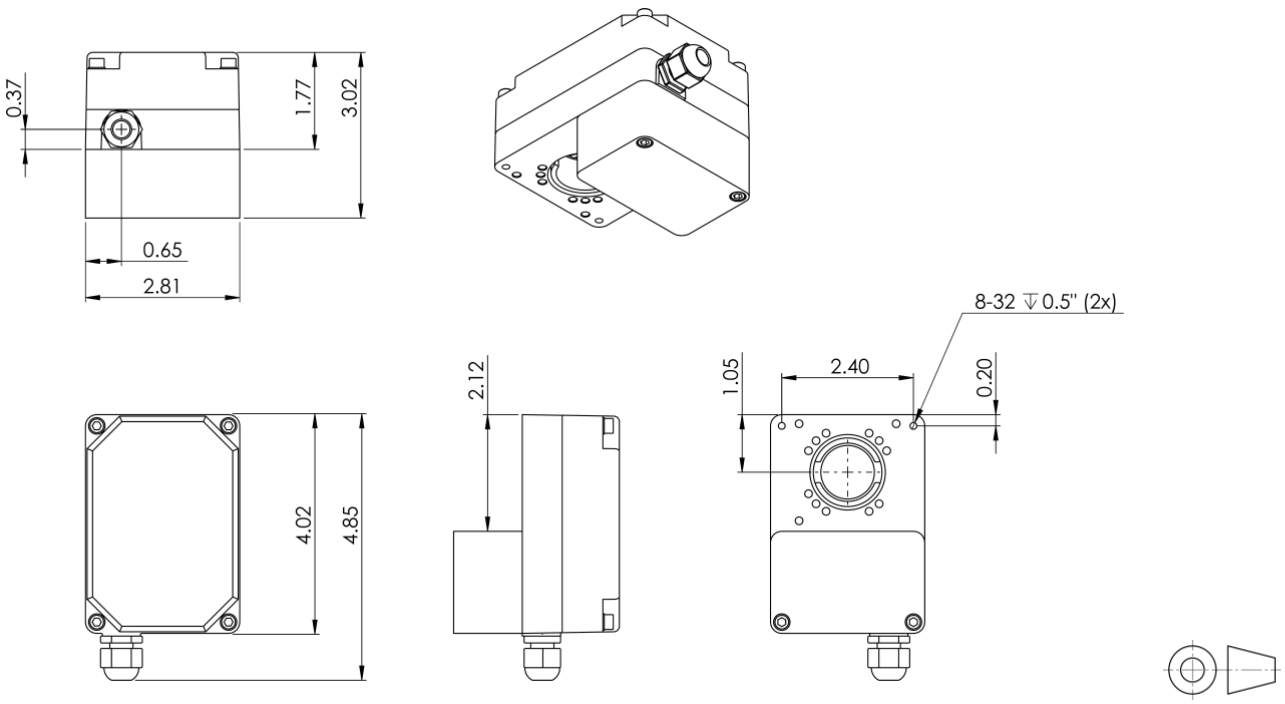
Actuator is to remain powered at all times. If actuator is left unpowered, the battery will degrade over time. The battery backup is intended for emergency use only. The actuator should not be used with the intention of employing the battery backup.

HANBAY INC.
A rotork Brand

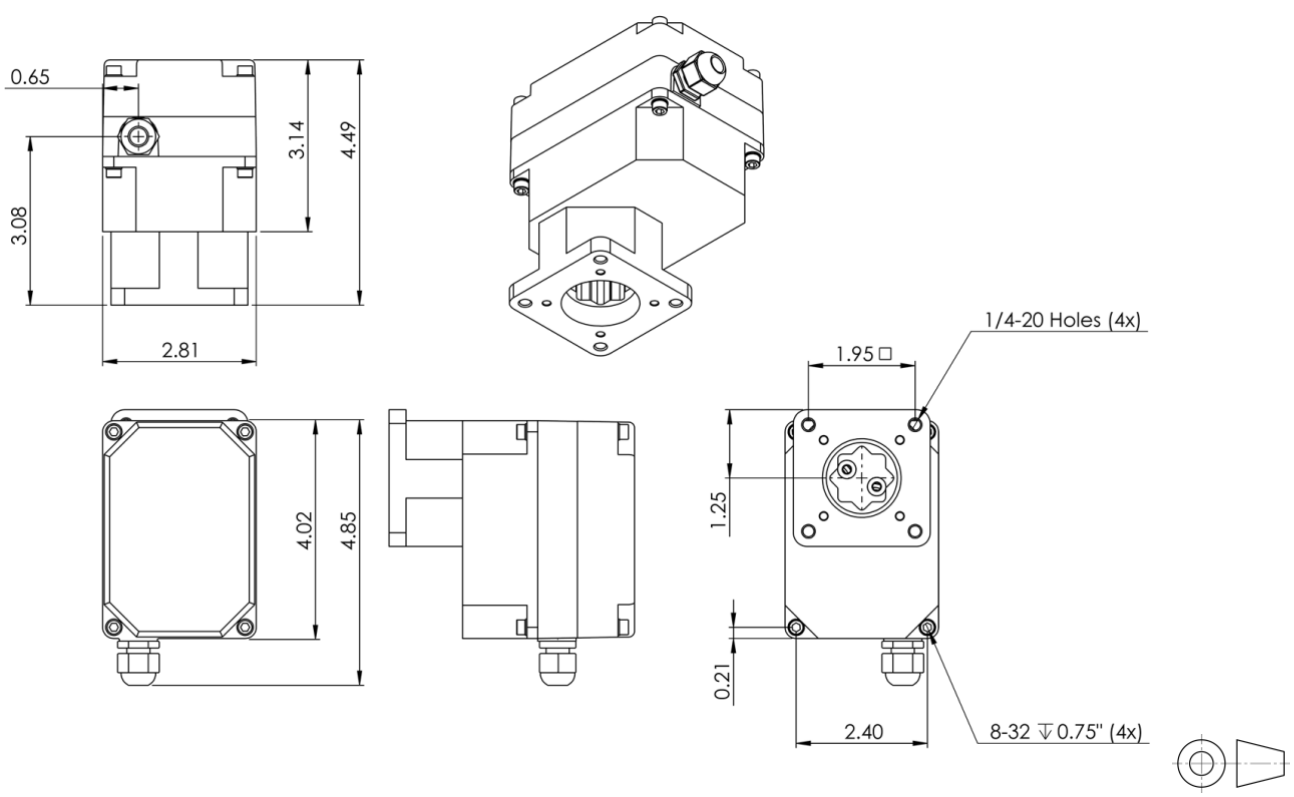
UL CE

Dimensional data

MDL & MDM -B-xxxAx models



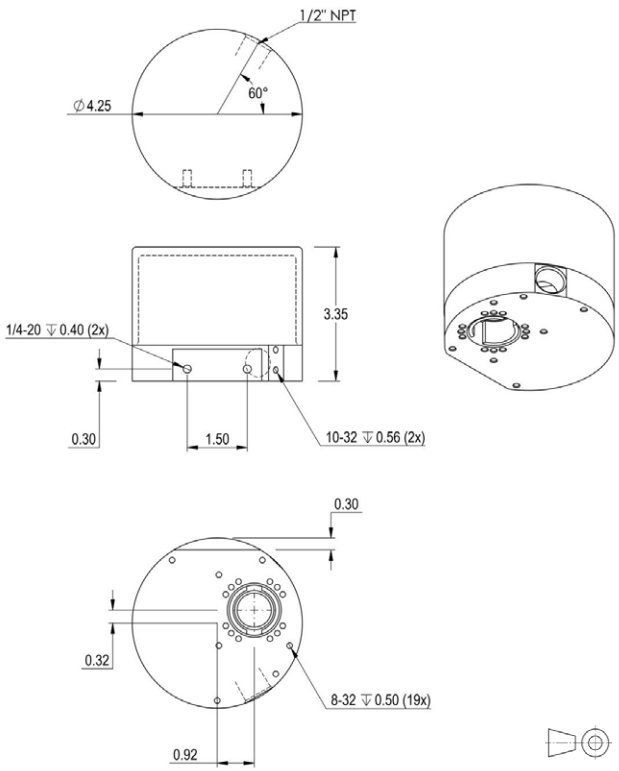
MDF-B-xxxAx models



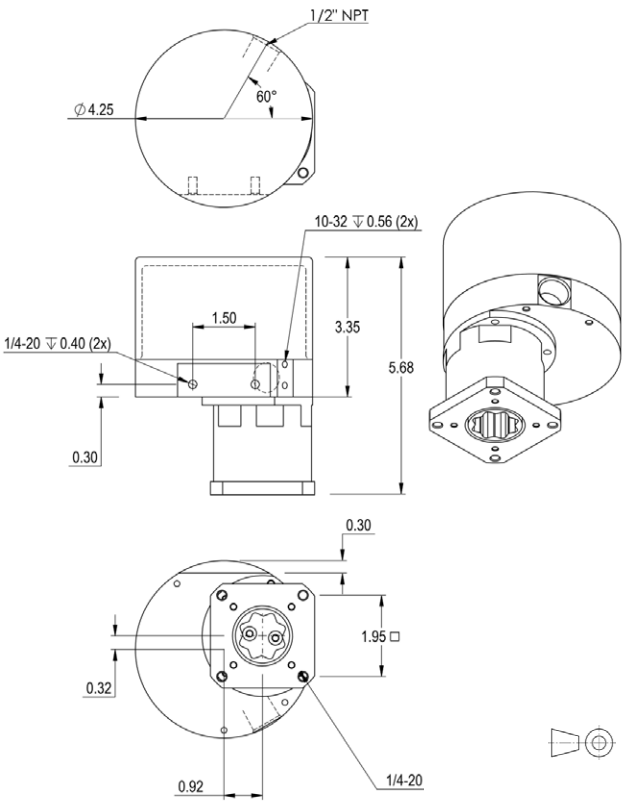
Dimensions in inches

Dimensional data

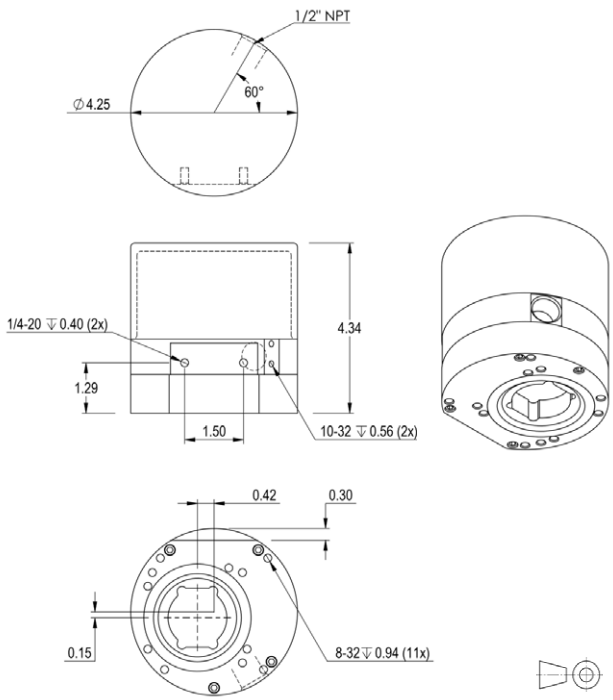
RDL & RDM -B-xxxDT models



RDF-B-xxxDT models



RDH-B-xxxDT models



Dimensions in inches

M and R series battery backup

Performance data

Torque and speed

Model	Torque range Nm	(lbf.in)	Speed range
MCx Multi-turn models			**(1 turn in sec)**
MCL	1.4 to 5.4	12 to 48	1 to 7
MCM	4.0 to 16.4	35 to 145	4 to 23
MCF	26.0 to 103.4	230 to 915	38 to 186
MDx ¼ and ½ turn models			**(¼ turn in sec)**
MDL	7.1 to 9.4	63 to 83	0.5 to 1
MDM	24.0 to 27.9	212 to 247	1 to 3
MDF	80.2 to 118.6	710 to 1050	5 to 15
RCx Multi-turn models			**(1 turn in sec)**
RCL	1.4 to 5.4	12 to 48	1 to 7
RCM	4.0 to 16.4	35 to 145	4 to 23
RCH	13.6 to 56.1	120 to 497	18 to 90
RCF	26.0 to 103.4	230 to 915	38 to 186
RDx ¼ and ½ turn models			**(¼ turn in sec)**
RDL	7.1 to 9.4	63 to 83	0.5 to 1
RDM	24.0 to 27.9	212 to 247	1 to 3
RDH	48.6 to 60.1	430 to 532	3 to 9
RDF	80.2 to 118.6	710 to 1050	5 to 15

Battery properties

Voltage required: 20 to 28 VDC

Fail-safe duration: 60 seconds of continuous use

Recharge time: 1 hour

Battery type: Lithium polymer

Lifetime: 250 uses at room temperature. If used at 45 °C (113 °F), the capacity is cut in half

Maintenance: Battery functionality should be tested every 6 months

Note: Battery backup option is not compatible with some actuator optional extras. Please contact Rotork for details.

A full listing of the Rotork sales and service network is available on our website.

www.rotork.com

Corporate Headquarters
Rotork plc
tel +44 (0)1225 733200
email mail@rotork.com

Electric Actuators and Control Systems
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