Fisher™ easy-Drive™ 200L

The Fisher easy-Drive 200L is a compact, rugged electric actuator designed for throttling or on/off applications. The actuator can be controlled via Modbus RTU, 4-20mA, or dry contact signals. Set up and calibration is made with the Fisher easy-Drive configurator which provides one button calibration. The actuator is designed to provide dependable on-off or throttling operation of control valves.

Fisher easy-Drive 200L

Features

- Low Temperature— The easy-Drive 200L design allows use in ambient temperatures as low as -20°C (-4°F) without use of a heater.
- Easy Installation—The compact actuator design allows installation where space is a premium. Fisher easy-Drive calibrates by simply opening and closing the valve.
- Application Flexibility— Choice of control method including 4-20mA Positioning and 4-20mA Level along with configurable Loss of Signal Position and Deadband suits this actuator to many applications.
- Low Power Consumption— The Fisher easy-Drive 200L operates with 9 to 30VDC and less than 0.1 watt hours per operation, using Modbus, 4-20 mA, or dry contact control signals.
- Remote Monitoring and Configuration— Loss of signal position is programmable over Modbus.

Installation

Fisher easy-Drive 200L may be installed in any position, but normally the actuator is vertical above the valve.

Table 1. Specifications

Material Temperature Capabilities(1)

Electric Actuator Assembly:
-20 to 70°C (-4 to 158°F)

Available Actuator Configurations

Positioning (flow or pressure control)

Power Requirements

9-30VDC, minimum 4 amp power supply required (fuse to 5 amps)

Maximum Current Draw

4 amps

Idle Current Draw

15 mA at 24VDC, 25 mA at 12VDC

Conduit Connections

Two 3/4 NPT connections

Maximum Stroke Length

19 mm (0.75 inch)

Maximum Thrust Force

3336 N (750 lbf)

Average Thrust Force

2446 N (550 lbf)

Nominal Stroke Speed(2)

3.9 mm/s (0.15 inch/s) at 24 VDC
2.2 mm/s (0.09 inch/s) at 12 VDC

Control Signals

On/Off: Dry contact, Modbus RTU
Positioning: 4-20 mA, 4-20 mA level, Modbus RTU
Auxiliary Digital Input: Dry contact
Auxiliary Digital Output: 10VDC, 25 mA maximum

Hazardous Area Approvals

CSA (C/US): Explosion-Proof Class I, Division 1, Groups C and D, T6, Ex d IIA T6, Class I, Zone 1, AEx d IIA T6
ATEX Flameproof - Gas:
Ⓔx II 2 G, Ex db IIA T6
IECEx Flameproof - Gas: Ex db IIA T6

Enclosure Rating

Type 4X and IP66

Electromagnetic Compatibility

Meets EN 61326-1 (2013)
Immunity: Industrial locations per table 2 of EN 61326-1 Standard. Performance is shown in table 2
Emissions: Class A
ISM Equipment Rating: Group 1, Class A

Duty Cycle

50% maximum

Enclosure Material

Cast aluminum alloy with powder coat paint

Approximate Weight:

9.5 kg (21 lbs)

1. The pressure or temperature limits in the referenced tables and any applicable ASME code limitations should not be exceeded.
2. 10% variation can be expected, based on temperature and pressure of application.

Table 1. Hazardous Area Classifications - CSA (Canada and United States)

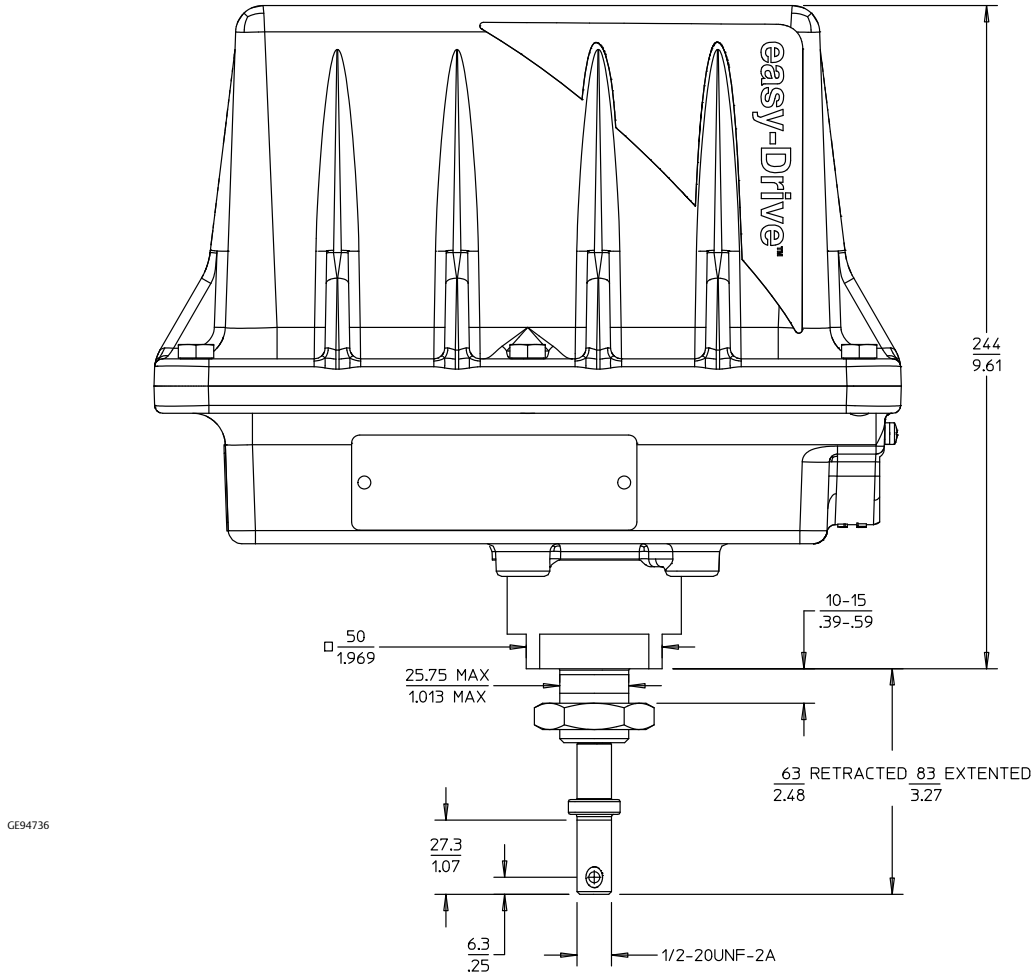
CERTIFICATION BODY	CERTIFICATION OBTAINED	ENTITY RATING	TEMPERATURE CODE	CONDUIT CONNECTIONS	ENCLOSURE RATING
CSA	Class I, Division 1, GP C, D T6	- - -	T6 (Tamb ≤ 70°C)	Two 3/4 NPT Connections	CSA Type 4X Enclosure

Table 2. EMC Summary Results - Immunity

PORT	PHENOMENON	BASIC STANDARD	TEST LEVEL	PERFORMANCE CRITERIA(1)
Enclosure	Electrostatic discharge (ESD)	IEC 61000-4-2	4kV Contact 8kV Air	A
	Radiated EM field	IEC 61000-4-3	80 to 1000 MHz @ 10V/m 1kHz AM at 80% 1400 to 2000 MHz @ 3V/m 1kHz AM at 80% 2000 to 2700 MHz @ 1V/m 1kHz AM at 80%	A
	Rated power frequency magnetic field	IEC 61000-4-8	30 A/m @ 50 and 60 Hz	A
I/O signal/ control	Burst	IEC 61000-4-4	1kV	B
	Surge	IEC 61000-4-5	1kV cable shield, and line to ground	B
	Conducted RF	IEC 61000-4-6	3V 150 kHz to 80 MHz at 3 Vrms	A

Performance criteria is +/- 5% stem position
1. A= No degradation during testing. B = Temporary degradation during testing, but is self recovering.

Figure 1. Fisher easy-Drive 200L Electric Actuator



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