



Agency Approvals:

Class I, Division 2; Groups A, B, C & D

Class II & III, Division 2; Groups F & G

Type 4, 4X Enclosures, NEMA 6P, IP67

Product Overview

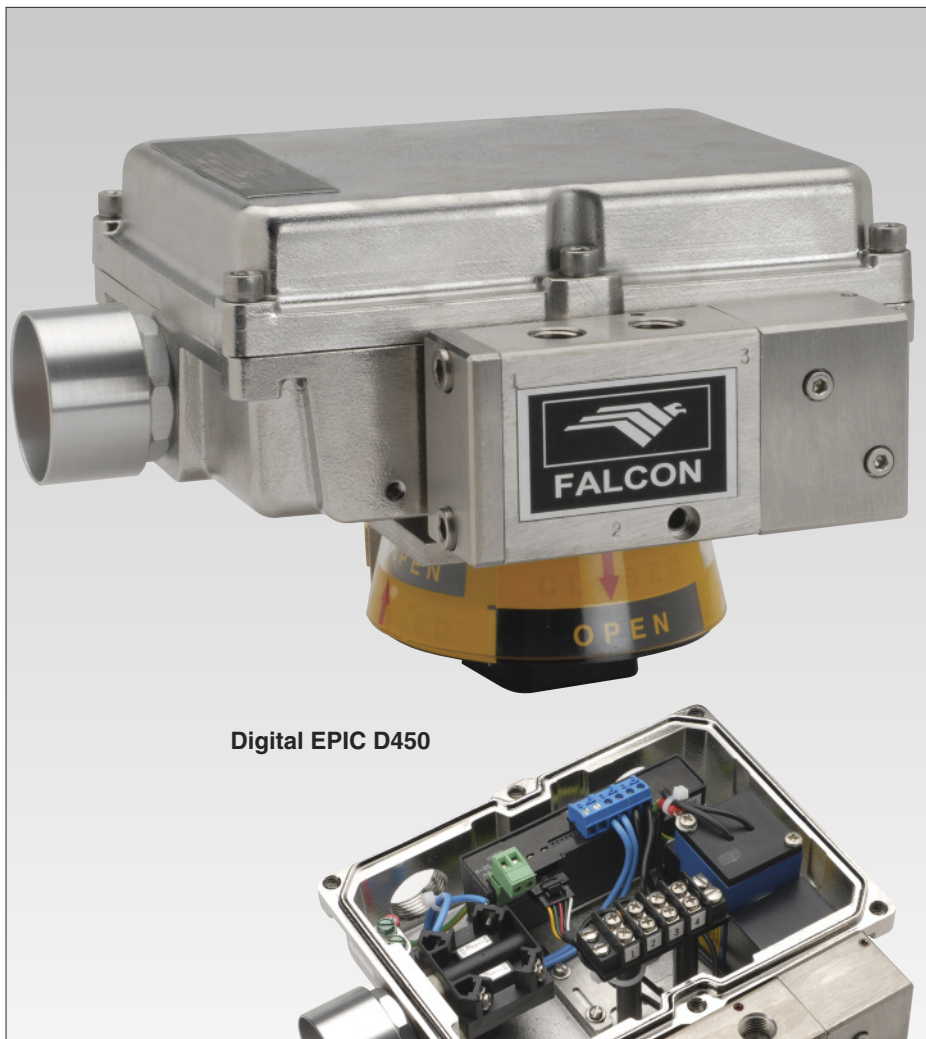
Digital Epic Control Transmitters provide discrete valve position control and precision, non-contact position feedback with digital communication via HART® protocol in a simple, integrated package. Additional bonus features include remote and local PST (partial stroke testing) and ESD (emergency shut down) initiation for safety system applications.

D450 – Large 316 stainless steel enclosure, dual coil valve options available

D451 – Small 316 stainless steel enclosure, single coil valve options only

Features and Benefits

- Microprocessor based technology allows digital communication via HART® protocol.
- Measuring of valve position is accomplished with a non-contact magnetic pick-up. This eliminates any mechanical devices such as drive arms or linkages, greatly increasing reliability in high cycle applications or where vibration is present.
- Available with PST capability and an ESD feature which may be initiated remotely via HART® signal.
- Optional external button to initiate partial stroke test.
- Available with low power Falcon solenoid valve.

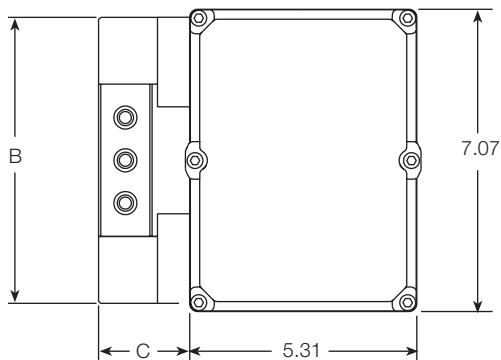


Digital EPIC D450

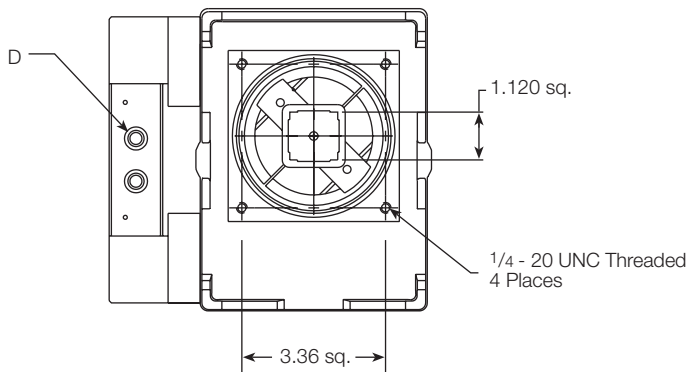
Westlock™ Digital EPIC D450/D451

Control Transmitter, Non-incendive

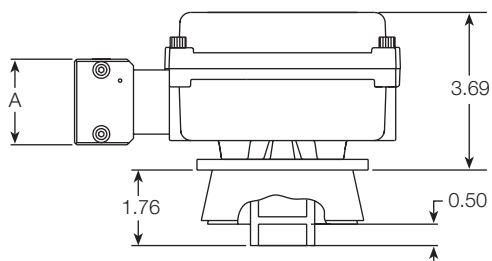
Dimensions Model D450



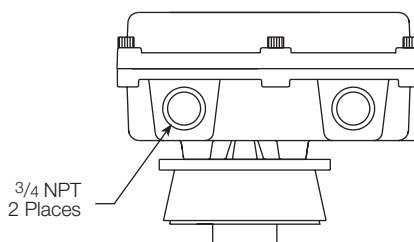
Top View



Bottom View



Side View



Technical Specifications

Conduit Entries	3/4" NPT
Output	4 - 20 mA proportional to valve position
Terminal Voltage Required	10 to 30 volts
Linearity*	± 1.0% F.S.
Span Adjustment	60 to 120 degrees
Zero Adjustment	30% of calibration span
Resolution	≤ 0.05% F.S.
Hysteresis	Negligible
Standard Operating Temperature Range**	-40°F to +185°F
Temperature Effect	≤ 0.01% F.S./°C
Humidity	10% to 90% non-condensing
Voltage Effect	≤ 0.2% F.S. from 10 VDC to 30 VDC
Reverse Polarity	Protected
Mounting Attitude	Any position
Startup Stabilization	0.5 seconds
Output Update Rate	25 ms

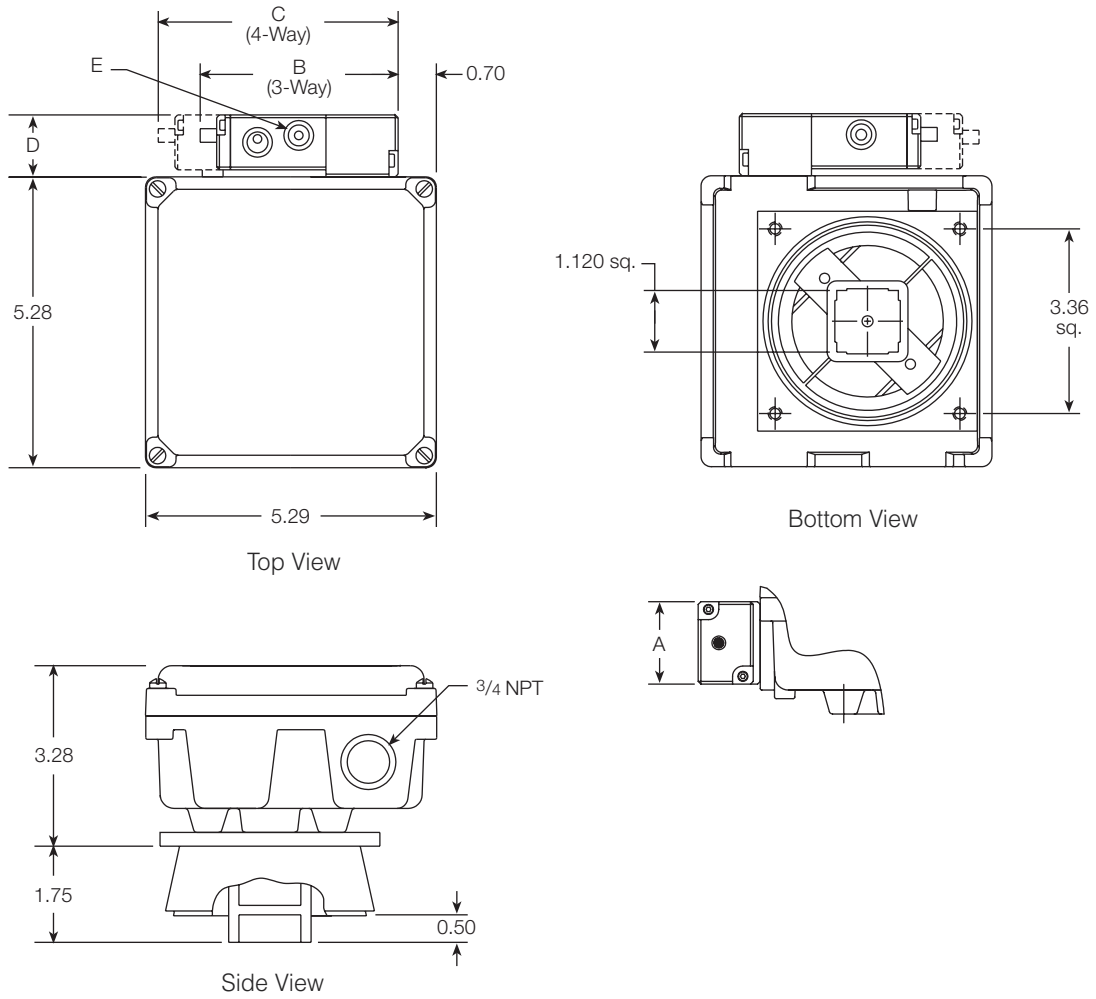
* Linearity is applicable for stroke 2" and under for linear application.

** Engineered resin enclosures -10°F to +185°F for hazardous area use. Standard Falcon valve operating temperature range -4°F to +185°F, with optional -40°F to +185°F.

Dimensions

	A	B	C	D
0.5 C _V	1.50	5.13	1.13	1/4 NPT (F)
1.2 C _V	2.00	6.69	2.13	1/4 NPT (F)
3.5 C _V	2.75	7.74	2.62	1/2 NPT (F)

Dimensions Model D451



Dimensions

	A	B (3-way)	C (4-way)	D	E
0.5 C _v	1.50	3.62	4.38	1.13	1/4 NPT (F)
1.2 C _v	2.00	4.96	5.95	1.39	1/4 NPT (F)
3.5 C _v	2.75	5.31	6.62	1.87	1/2 NPT (F)

Ordering Guide

Base Model

- D450 Digital EPIC Digital Transmitter (Large 316 SS Enclosure w/three 3/4" NPT (F) or two 3/4" NPT (F) when used with Falcon valve)
 D451 Digital EPIC Digital Transmitter (Small 316 SS Enclosure w/two 3/4" NPT [F] or one 3/4" NPT [F] when used with Falcon valve)

Application Type

- LV Linear Transmitter†
 LR Linear Transmitter with Remote Mount Option†
 RO Rotary Transmitter
 RR Rotary Transmitter with Remote Mount Option

ESD/PST

- 0 None
 1 ESD/PST Function
 2 PST with Push Button Initiation

Coil Voltage

- 0 None
 D 24 VDC
 A 120 VAC

Falcon Valve Body

22	0.5 C _v , 3-Way, Brass	26	0.5 C _v , 4-Way, Brass
32	0.5 C _v , 3-Way, Aluminum	36	0.5 C _v , 4-Way, Aluminum
42	0.5 C _v , 3-Way, 303 SS	46	0.5 C _v , 4-Way, 303 SS
52	0.5 C _v , 3-Way, 316 SS	56	0.5 C _v , 4-Way, 316 SS
23	1.2 C _v , 3-Way, Brass	27	1.2 C _v , 4-Way, Brass
33	1.2 C _v , 3-Way, Aluminum	37	1.2 C _v , 4-Way, Aluminum
43	1.2 C _v , 3-Way, 303 SS	47	1.2 C _v , 4-Way, 303 SS
53	1.2 C _v , 3-Way, 316 SS	57	1.2 C _v , 4-Way, 316 SS
34	3.5 C _v , 3-Way, Aluminum	38	3.5 C _v , 4-Way, Aluminum
54	3.5 C _v , 3-Way, 316 SS***	58	3.5 C _v , 4-Way, 316 SS***
20	0.5 C _v , Dual Coil, Brass*	30	0.5 C _v , Dual Coil, Aluminum*
40	0.5 C _v , Dual Coil, 303 SS*	50	0.5 C _v , Dual Coil, 316 SS*
2Y	1.2 C _v , Dual Coil, Brass*	3Y	1.2 C _v , Dual Coil, Aluminum*
4Y	1.2 C _v , Dual Coil, 303 SS*	5Y	1.2 C _v , Dual Coil, 316 SS*
3Z	3.5 C _v , Dual Coil, Aluminum*	00	None

Special Valve Features

- 0 None
 V Non-venting (available in 1.2 C_v only)
 I Non-venting, No Indicator (available in 1.2 C_v only)

Override Option

- 0 None
 M Momentary**
 L Locking**
 R No-voltage Release, Non-Latching (available in 1.2 C_v only)
 N No-voltage Release, Latching (available in 1.2 C_v only)
 E External Pilot**

D450 RO 1 D 53 0 0 = Model Number **D450RO1D5300**

† Valve stroke and fail position must be specified at time of quotation for LV and LR options.

* Dual Coil valves options not available on D451.

** Override Options M, L, E are not available with option "54" and "58" Falcon valve bodies. These options are available in 303 SS.

*** 5400 valves are 5800 with ports 2 and 3 plugged for 3-way functionality.

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