

DIGITAL EPIC D200 DIGITAL POSITION TRANSMITTER
EXPLOSIONPROOF / FLAMEPROOF, INTRINSICALLY SAFE OR NON-INCENDIVE

An EPIC performance in every condition. The Digital EPIC D200 serves a wide range of applications for any environment. A valve position transmitter with available switch options, offering industry leading linearity and hysteresis. The D200 features accurate position measurement with digital communication via HART® protocol in a simple integrated package.



FEATURES AND BENEFITS

- High visibility Beacon
- Simple push button calibration makes commissioning easy
- Clear LCD display showing position and status for ease of reading feedback data
- Standard non contact position sensor for greater reliability
- High update rate of feedback signal for increased accuracy
- HART® 7 Protocol for use with the latest systems
- EEDDL/FDT® DTM
- Offers diagnostics, position and cycle count to enable customer planned maintenance
- Option to include end of travel switches giving more versatility
- Global certification for hazardous areas covers more applications worldwide
- NAMUR mount pattern for standard brackets
- User interface with digital display accessible from all sides
- Available with an integral Falcon V solenoid

GENERAL APPLICATION

The Digital EPIC D200 digital feedback transmitter is a modular 4-20 mA loop current device that can be combined with switch options, standard HART® 7 protocol, and incorporated into the established range of Westlock designed and proven monitors.

Certified for use under US/CA standards and ATEX/IEC standards.

Approval Notes:

^[1]This information can change dependent on the construction, refer to the product certification.

^[2]For T-Class/Ambient range, refer to the product certification.

INMETRO/NEPSI/CCOE regional certificates available on request.

Model		Materials	Agency approvals ^{[1][2]}
No Solenoid	Falcon V Solenoid		
D241	D230	Engineered Resin	North America: IS Cl. I, II, III, Div. 1, Grps ABCDEFG, Cl. III; T6; Type 4X NI Cl. I, Div. 2, Grps ABCD, T6; Type 4X ATEX/IECEx: II *GD Ex ia II* T* G* Ex tb IIIC T135°C Db IP6X Tamb: -*°C to +*°C
D251	D240	Low copper content Aluminum	
	D250	316 Stainless Steel	
D261	D260	Low copper content Aluminum	North America: Cl. I, Div. 1, Grps ABCD; Cl. II & III, Div. 1 Grps EFG NI Cl. I, Div. 2, Grps ABCD ATEX/IECEx: II 2GD Ex db IIC T* Gb Tamb: -60°C to +*°C Ex tb IIIC T *°C Db Tamb: -60°C to + *°C IP6X
D271	D270	316 Stainless Steel	
D281	D280	Low copper content Aluminum	North America: Cl. I, Div. 1, Grps CD; T* Cl. II Div. 1, Grps EFG; T* Cl. I, Zone 1 AEx db/Ex db IIB+H2 T* Zone 21, AEx tb/Ex tb IIIC T* Db IP6X NI Cl. 1 Div. 2, Grps ABCD; T* Type 4/4X, IP66/67 Ta= -*°C to +*°C ATEX/IECEx: II 2GD Ex db IIB+H2 T*, Gb Tamb: -*°C to +*°C Ex tb III C T* Db Tamb: -*°C to +*°C IP6X
D291	D290	316 Stainless Steel	

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OVERVIEW

The innovative Digital EPIC D200 transmitter is a step above the competition offering a wide range of user benefits, including improved linearity, reduced hysteresis (position accuracy), and improved repeatability. The Digital EPIC D200 is engineered to have greater control over wider ranges of temperature and hazardous applications compared to the competition. The D200 offers a clear LCD screen for calibration, and LED's to provide local visibility to position and system statuses including HART® 7 protocol connectivity. Auto-calibration feature reduces installation time by 80% making Digital EPIC D200 the smartest choice for users. Switch box feedback options are available to accommodate our current Westlock portfolio.



TECHNICAL DATA

Standard non-contact sensor

Average position repeatability	0.5% full scale*
Average hysteresis	1% of full scale*
Position resolution	0.5% full scale*
Average linearity	0.5%*
Min/Max rotation	30° - 270°

Potentiometer Option

Average position repeatability	0.5% full scale*
Average hysteresis	1% of full scale*
Average position resolution	0.5% full scale*
Average linearity	0.5%*
Operating temperature range	-40°C to +80°C
Ambient temperature	-40°C to +80°C
Min/Max rotation	30° - 200°
Transmitter update rate	100 ms (HART)

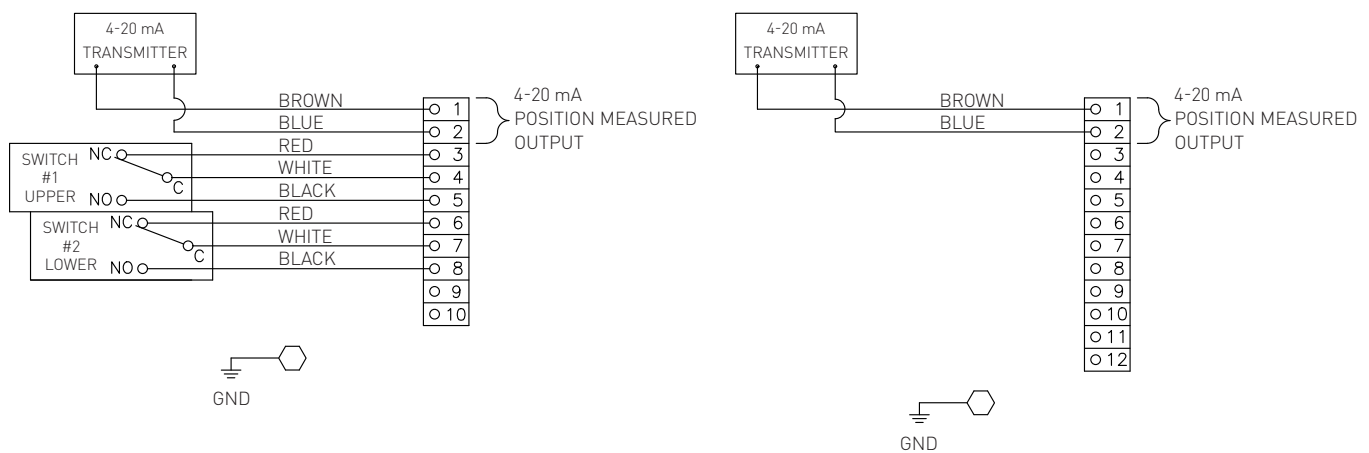
* Based on Calibrated Rotation $\geq 90^\circ$

Intrinsically safe parameters (EPIC Transmitter Module Only)

Intrinsically safe parameters for loop output connector J1 pins 1, 2

Entity parameters
Ui = 30 V
Ii = 100 mA
Pi = 750 mW
Ci = 5 nF
Li = 10 μ H

TYPICAL WIRING DIAGRAM



NOTE:

1. For coil and switch options, please see product ID label.
2. See control drawing WD-12410 for switch transmitter and component entity parameters.
3. For switch option entity parameters, see page 4.

DIGITAL EPIC D200 DIGITAL POSITION TRANSMITTER

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SETUP, OPTIONS AND RATINGS

Setup, calibration and operation

HART® DD or FDT® DTM can be used to configure, calibrate and perform advanced diagnostics functions on the device.

Graphic LCD:

LCD operating temperature: -20°C to +70°C (-4°F to +158°F)

Keypad for local configuration:

2-key ruggedized push-button membrane

Environmental

Storage: -60°C to +80°C (-76°F to +176°F)

Relative Humidity: 0 to 95% non-condensed

Vibration: 2 g, 10 Hz to 1000Hz

Shock: 18 g, 3 axis, 100 bumps each axis

References: IEC61514-2, IEC 60068-2-29/27, IEC 61298-3, IEC 60068-2-1/2

COMMUNICATION

HART® version: 7

PV: Actual position in % FS

SV: Temperature

Polarity insensitive, two wire 4-20 mA, Namur NE43

Normal operation: adjustable $3.8 \leq I \leq 20.5$ mA

Fixed calibration current: 12 mA

Loop current test functions: 4 mA, 12 mA, 20 mA or custom

Minimum operating voltage: 9 VDC - 30 VDC

Maximum operating voltage: 35 VDC

SWITCHES AND SENSORS

Westlock’s control and monitoring equipment can be fitted with a variety of switches and sensors to provide the optimum combination and ideal solution for each application. See ordering guide for available switch options.

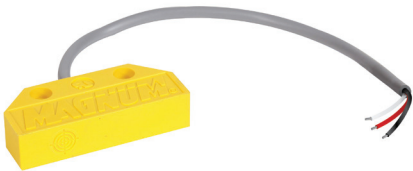
AVAILABLE SWITCH OPTIONS

Magnum XT-90 Hermetically sealed proximity switch

Hermetically-sealed proximity switches with either pure tungsten or rhodium contacts for use with low power I/O’s to provide longer contact life.

MAGNUM XT-90 HERMETICALLY SEALED PROXIMITY SWITCH

Contact arrangement	SPDT, Form C (normally open)
Contacts	Pure tungsten or rhodium
Operating time	3.0 ms
Initial Contact resistance	0.50 ohms (max.) tungsten 0.10 ohms (max.) rhodium
Entity parameters	Ui = 30 V, li = 100 mA, Pi = 1 W, Ci = 10 nF, Li = 10 µ
Seal	Hermetic
Housing (flame retardant)	High impact PBT
Electrical rating	
Rhodium (low power, below 1 watt)	SPDT Form C (normally open) 0.2 A / 120 VAC, 1 A / 24 VDC
Tungsten (high power, above 1 watt)	SPDT Form C (normally open) 3 A / 120 VAC, 2 A / 24 VDC



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AVAILABLE SWITCH OPTIONS (CONTINUED)

P+F NJ2-V3-N inductive proximity sensor Intrinsically safe

A solid state inductive proximity sensor which is available in NAMUR output. It is ideal for use in devices within potentially explosive atmospheres.

P+F NJ2-V3-N

Sensing range	2 mm
Electrical version	DC voltage 2 wire in accordance with EN 60947-5-6 (NAMUR)
Hysteresis	3-15% [5% typical]
Switching frequency	1 kHz
Input voltage range	5-25 VDC
Output/current consumption	Cam trigger present ≤ 1 mA Cam trigger absent ≥ 3 mA (15 mA max)
Entity Parameters	Consult manufacturer's component certificate for entity parameters



SPDT mechanical switch V3

A V3 SPDT [single pole double throw] mechanical switch (Form C) with gold plate contacts.

SPDT MECHANICAL SWITCH V3

Electrical rating

Contact arrangement	SPDT, Form C (normally open) 15 A / 125/250 VAC 6 A / 24 VDC
Hysteresis	3°
Entity Parameters	Ui = 30 V, Ii = 100 mA, Pi = 1 W, Ci = 10 nF, Li = 10µ



DPDT mechanical switch (Licon)

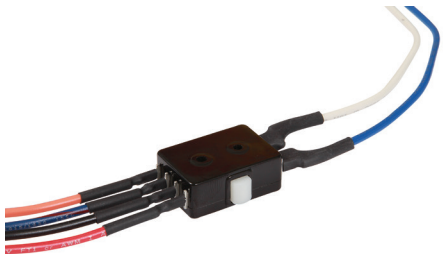
A Form CC DPDT (double pole double throw) mechanical switch with silver-plated contacts.

DPDT MECHANICAL SWITCH

Electrical rating

Contact arrangement	DPDT (Form CC) 10 A / 125/250 VAC 10 A / 24 VDC
Hysteresis	20°

Note: DPDT mechanical switches are available in the explosionproof/flameproof models. See ordering guide for complete set of options available.



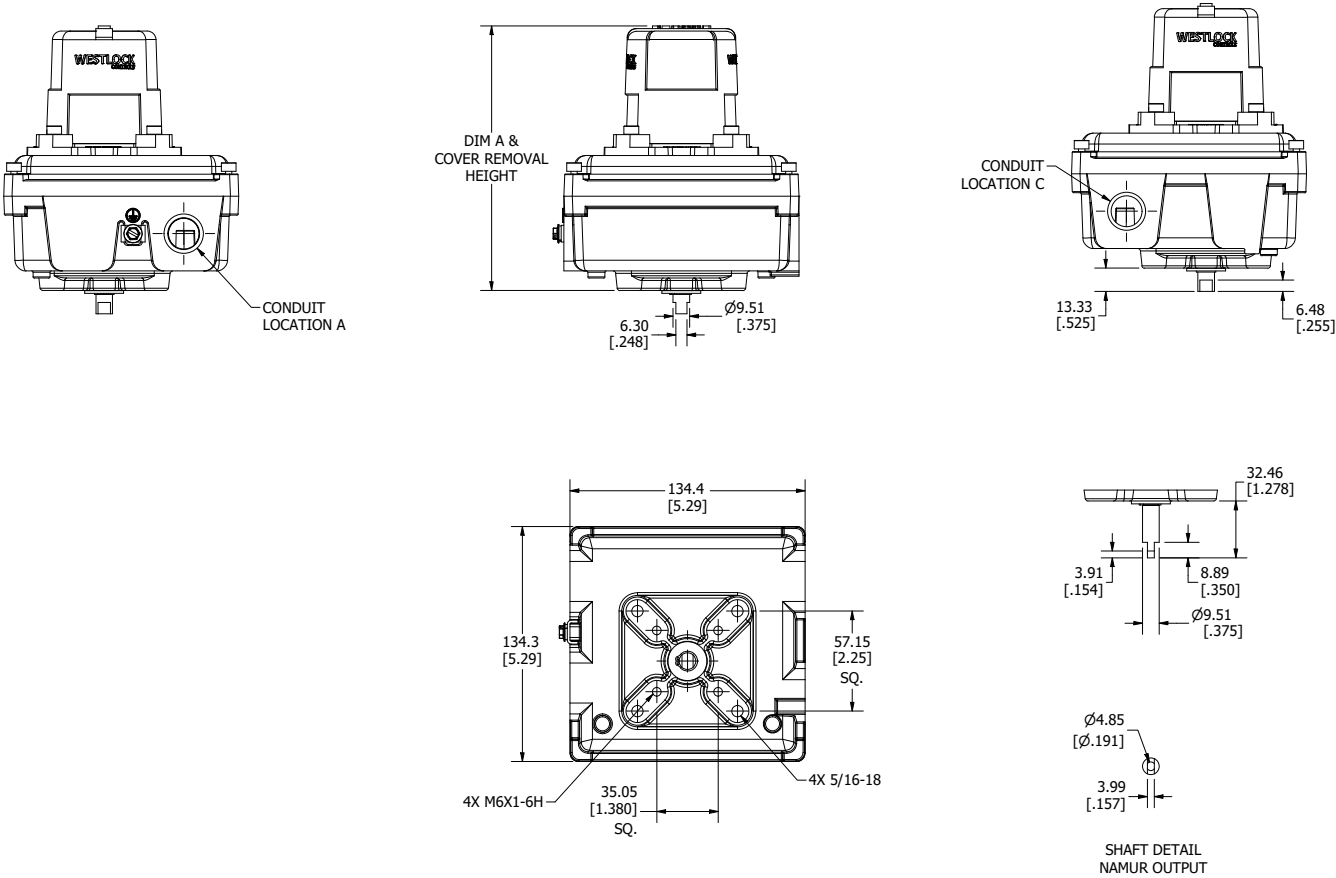
DIGITAL EPIC D200 DIGITAL POSITION TRANSMITTER

EXPLOSIONPROOF / FLAMEPROOF, INTRINSICALLY SAFE OR NON-INCENDIVE

D241 / D251

Intrinsically safe – NEC/CEC/ATEX/IEC - Intrinsically Safe/Non-Incendive - NEC/CEC

DIMENSIONS mm (in)



HOUSING DIMENSIONS

Base model	Dim. A	Cover removal height
D241	151.9 [5.98]	237.3 [9.34]
D251	153.2 [6.03]	237.0 [9.33]

TECHNICAL SPECIFICATIONS

Materials of Construction

Enclosure	D241: Aluminum with black polyester powder coat finish D251: Stainless Steel with electro-polished Finish
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Shaft and hardware	Stainless steel
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Bushing	Nylon, D241 Bronze Bearing
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Beacon visual indicator	Co-polyester
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Drive shaft	
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Westlock standard	Double-D with ¼" A/F
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NAMUR standard	NAMUR standard with VDI/VDE 3845
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Mounting pattern	5/16 – 18 UNC and M6 x 1.0
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Available switches	
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Magnum, SPDT hermetically sealed switches, with rhodium contacts	
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Pepperl + Fuchs NJ2-V3-N inductive proximity sensor	
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SPDT mechanical switches, with gold-plated contacts	
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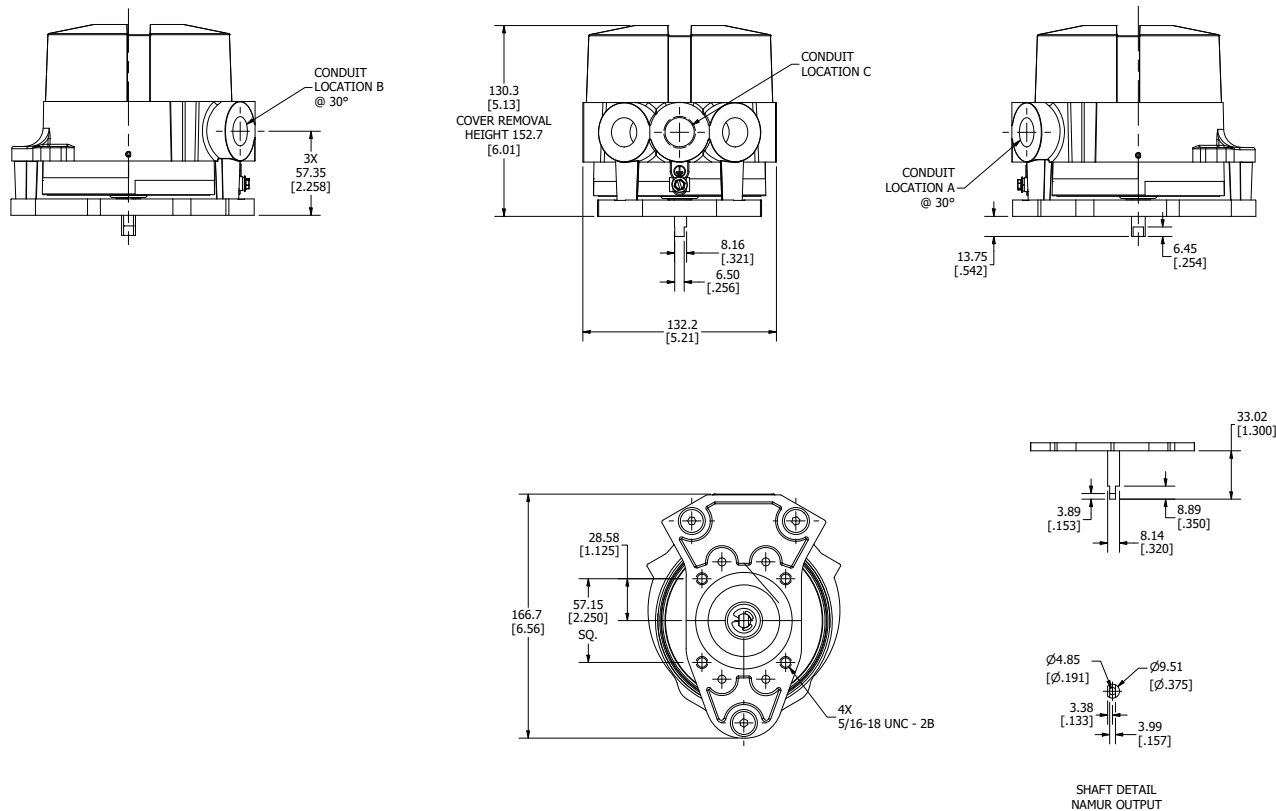
DIGITAL EPIC D200 DIGITAL POSITION TRANSMITTER

EXPLOSIONPROOF / FLAMEPROOF, INTRINSICALLY SAFE OR NON-INCENDIVE

D261 / D271

Explosionproof / Flameproof – NEC/CEC/ATEX/IEC

DIMENSIONS mm (in)



TECHNICAL SPECIFICATIONS

Materials of Construction

Enclosure	D261 Aluminum with black polyester powder coat finish
	D271 Stainless steel with electro-polished finish

Shaft and hardware	Stainless steel
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Bushing	Oil impregnated bronze
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Beacon visual indicator	Co-polyester
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Drive shaft

Westlock standard	Double-D with 1/4" A/F
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NAMUR standard	NAMUR standard complies with VDI/VDE 3845
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Mounting pattern	5/16 - 18 UNC
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Available switches

Magnum, SPDT hermetically sealed switches, with tungsten contacts

Magnum, SPDT hermetically sealed switches, with rhodium contacts

Pepperl + Fuchs model NJ2-V3-N

SPDT mechanical switches, with gold-plated contacts

DPDT (Form CC) mechanical switches

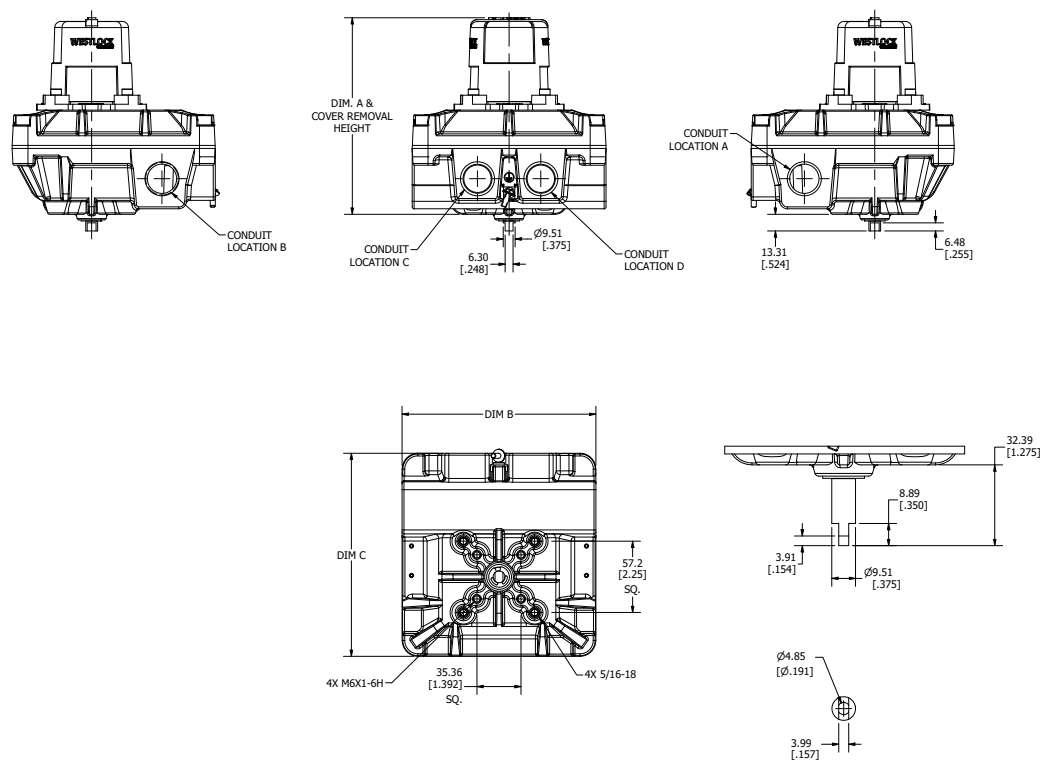
DIGITAL EPIC D200 DIGITAL POSITION TRANSMITTER

EXPLOSIONPROOF / FLAMEPROOF, INTRINSICALLY SAFE OR NON-INCENDIVE

D281 /D291

Explosionproof / Flameproof – NEC/CEC/ATEX/IEC

DIMENSIONS mm (in)



HOUSING DIMENSIONS

Base model	Cover type	Dim. A	Cover removal height
D281	Hi cover	211.1 [8.31]	332.3 [13.08]
D281	Std. cover	157.8 [6.21]	247.2 [9.73]
D281	Flat cover	88.4 [3.48]	111.3 [4.38]
D291	Hi cover	211.1 [8.31]	332.3 [13.08]
D291	Std. cover	157.8 [6.21]	247.2 [9.73]
D291	Flat cover	88.4 [3.48]	111.3 [4.38]

TECHNICAL SPECIFICATIONS

Materials of Construction

Enclosure	D281 Aluminum with black polyester powder coat finish
	D291 Stainless steel with electro-polished finish

Shaft and hardware	Stainless steel
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Bushing	Oil impregnated bronze
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Beacon visual indicator	Co-polyester
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Drive shaft

Westlock standard	Double-D with 1/4" A/F
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NAMUR standard	NAMUR standard complies with VDI/VDE 3845
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Mounting pattern	5/16 – 18 UNC and M6 x 1.0
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Available switches

Magnum, SPDT hermetically sealed switches, with tungsten contacts

Magnum, SPDT hermetically sealed switches, with rhodium contacts
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Pepperl + Fuchs model NJ2-V3-N

V3 SPDT mechanical switches, with gold plated contacts
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DPDT (Form CC) mechanical switches

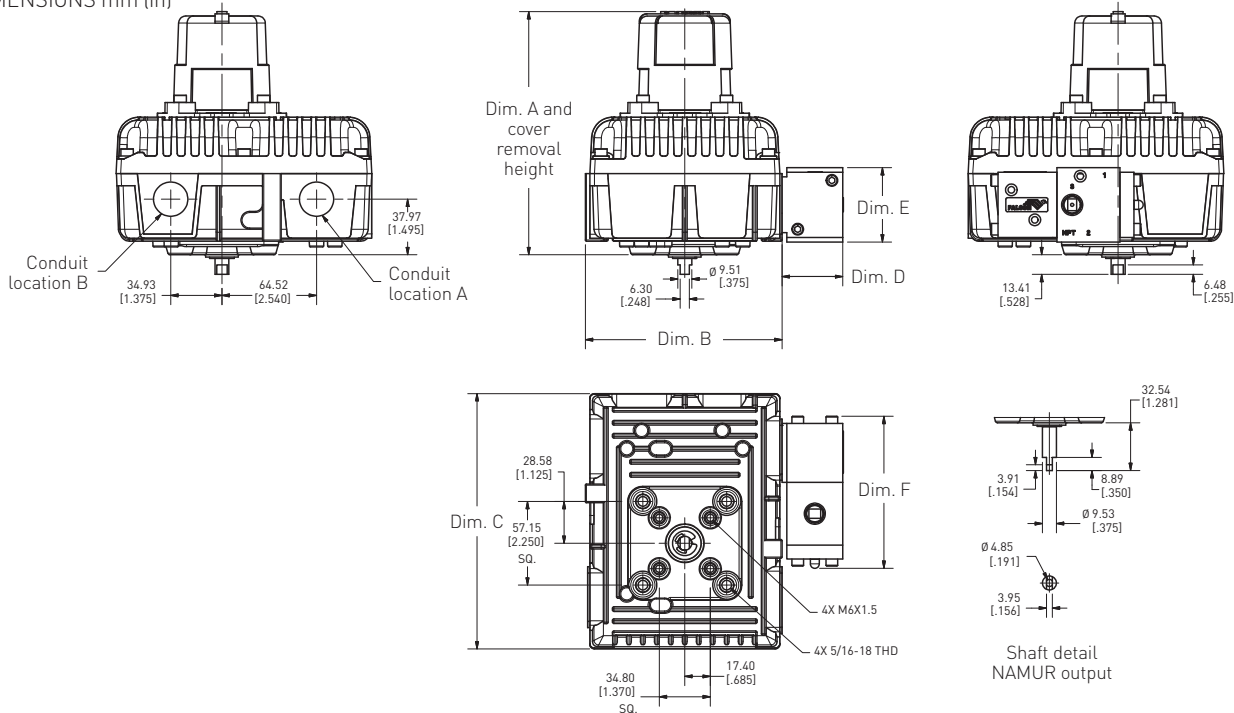
DIGITAL EPIC D200 DIGITAL POSITION TRANSMITTER

EXPLOSIONPROOF / FLAMEPROOF, INTRINSICALLY SAFE OR NON-INCENDIVE

D230 / D240 / D250

Intrinsically safe – NEC/CEC/ATEX/IEC

DIMENSIONS mm (in)



HOUSING DIMENSIONS

Base model	Dim. A	Cover removal height	Dim. B	Dim. C
D230	166.1 [6.54]	258.6 [10.18]	134.6 [5.30]	175.3 [6.90]
D240	165.1 [6.50]	257.6 [10.14]	147.3 [5.80]	180.3 [7.10]
D250	165.1 [6.50]	257.6 [10.14]	147.3 [5.80]	180.3 [7.10]

SOLENOID VALVE DIMENSIONS

Solenoid valve option	Dim. D	Dim. E	Dim. F
1.4 C _v , 3-Way, Brass/Aluminum/316 SS	41.4 [1.53]	50.8 [2.00]	103.8 [4.09]
4.3 C _v , 3-Way, Aluminum	58.7 [2.31]	57.2 [2.25]	179.9 [7.08]
1.4 C _v , Dual Coil, Brass/Aluminum/316 SS	54.1 [2.13]	50.8 [2.00]	153.7 [6.05]
4.3 C _v , Dual Coil, Aluminum	58.7 [2.31]	57.2 [2.25]	219.5 [8.64]
1.4 C _v , 4-Way, Brass/Aluminum/316 SS	41.4 [1.53]	50.8 [2.00]	124.5 [4.90]
3.5 C _v 4-Way, 316 SS	47.5 [1.87]	69.9 [2.75]	166.6 [6.56]
4.3 C _v , 4-Way, Aluminum	58.7 [2.31]	57.2 [2.25]	179.9 [7.08]

TECHNICAL SPECIFICATIONS

Materials of Construction

Enclosure	D230 Engineered polyamide resin D240 Aluminum with black polyester powder coat finish D250 Stainless steel with electro-polished finish
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Shaft and hardware Stainless steel

Bushing D230/D250 Nylon bearing, D240 Bronze bearing

Beacon visual indicator Co-polyester

Drive shaft

Westlock standard Double-D with 1/4" A/F

NAMUR standard NAMUR standard with VDI/VDE 3845

Mounting pattern 5/16 – 18 UNC and M6 x 1.0

Available switches

Magnum, SPDT hermetically sealed switches, with rhodium contacts

Pepperl + Fuchs NJ2-V3-N inductive proximity sensor

V3 SPDT mechanical switches, with gold-plated contacts

SOLENOID VALVES

The Falcon range of solenoid valves allows you to choose the material, voltage, number of ports, number of coils and C_v to best suit your application. See the Falcon data sheet for more information.

Note: 4.3 C_v solenoid valve is available in aluminum only.

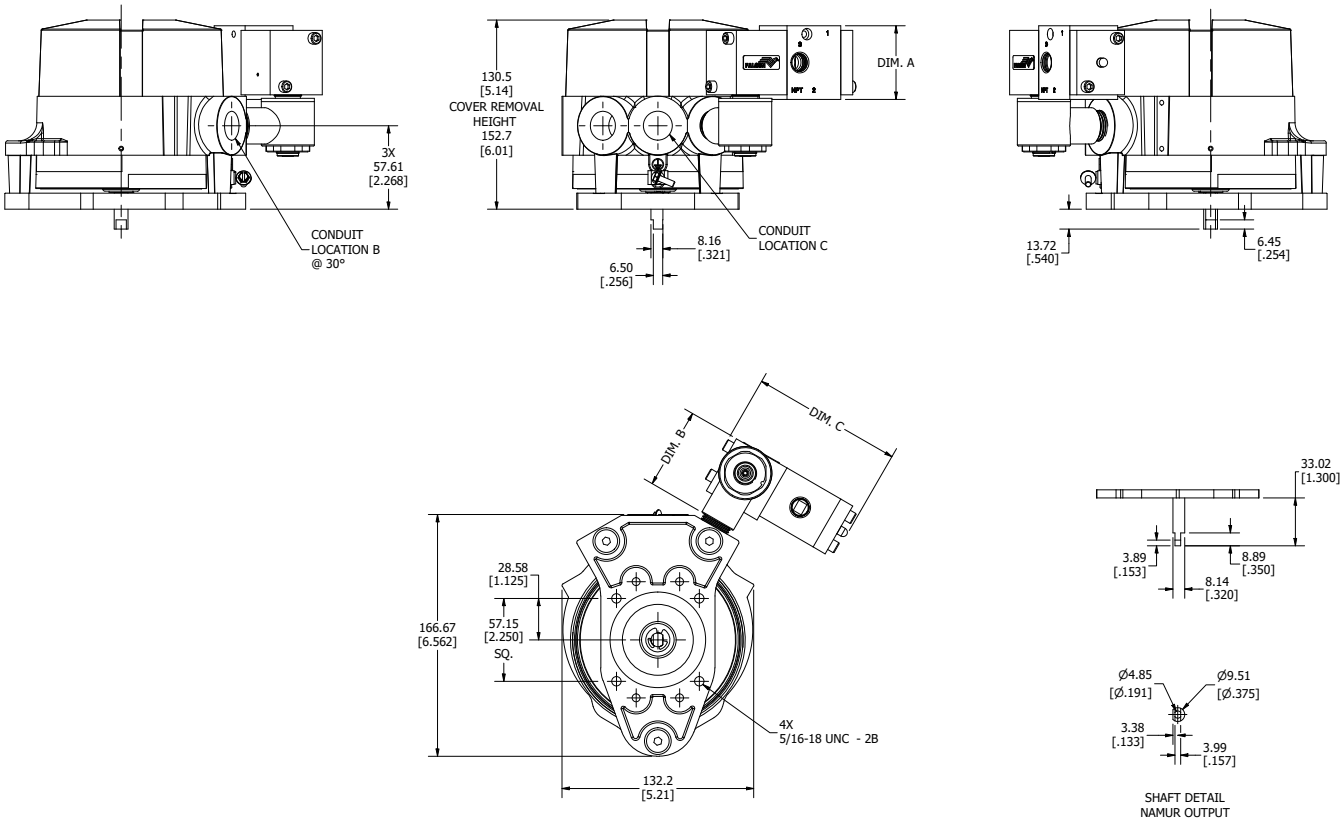
DIGITAL EPIC D200 DIGITAL POSITION TRANSMITTER

EXPLOSIONPROOF / FLAMEPROOF, INTRINSICALLY SAFE OR NON-INCENDIVE

D260 / D270

Explosionproof / Flameproof – NEC/CEC/ATEX/IEC

DIMENSIONS mm (in)



SOLENOID VALVE DIMENSIONS

Solenoid valve option	Dim. A	Dim. B	Dim. C
1.4 C _v , 3-Way, Brass/Aluminum/316 SS	50.8 [2.00]	55.8 [2.20]	103.8 [4.09]
4.3 C _v , 3-Way, Aluminum	57.2 [2.25]	60.5 [2.38]	179.9 [7.08]
1.4 C _v , 4-Way, Brass/Aluminum/316 SS	50.8 [2.00]	55.8 [2.20]	124.5 [4.90]
4.3 C _v , 4-Way, Aluminum	57.2 [2.25]	60.5 [2.38]	179.9 [7.08]

TECHNICAL SPECIFICATIONS

Materials of Construction	
Enclosure	D260 Aluminum with black polyester powder coat finish D270 Stainless steel with electro-polished finish
Shaft and hardware	Stainless steel
Bushing	Oil impregnated bronze
Beacon visual indicator	Co-polyester
Drive shaft	
Westlock standard	Double-D with ¼" A/F
NAMUR standard	NAMUR standard complies with VDI/VDE 3845
Mounting pattern	5/16 – 18 UNC
Available switches	
Magnum, SPDT hermetically sealed switches, with tungsten contacts	
Magnum, SPDT hermetically sealed switches, with rhodium contacts	
Pepperl + Fuchs model NJ2-V3-N	
V3 SPDT mechanical switches, with gold plated contacts	
DPDT (Form CC) mechanical switches	

SOLENOID VALVES

The Falcon range of solenoid valves allows you to choose the material, voltage, number of ports, number of coils and C_v to best suit your application. See the Falcon data sheet for more information.

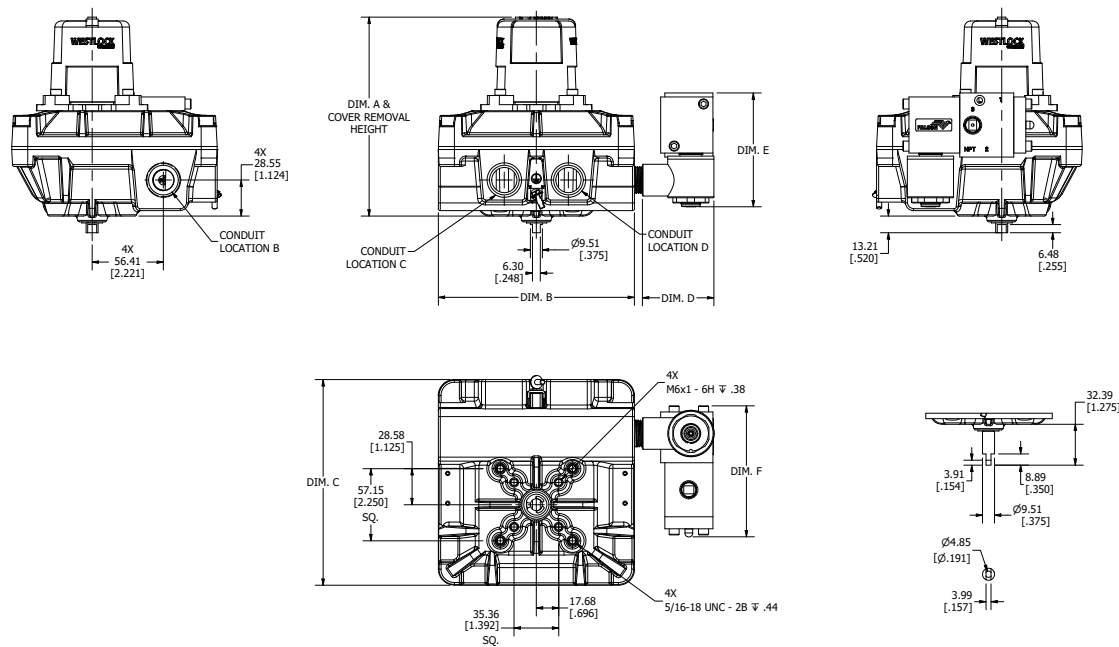
Note: 4.3 C_v solenoid is available in aluminum only.

DIGITAL EPIC D200 DIGITAL POSITION TRANSMITTER

EXPLOSIONPROOF / FLAMEPROOF, INTRINSICALLY SAFE OR NON-INCENDIVE

D280 / D290 - NEC/ATEX/IEC

DIMENSIONS mm (in)



HOUSING DIMENSIONS

Base model	Cover type	Dim. A	Cover removal height
D281	Hi cover	211.1 [8.31]	332.3 [13.08]
D281	Std. cover	157.8 [6.21]	247.2 [9.73]
D281	Flat cover	88.4 [3.48]	111.3 [4.38]
D291	Hi cover	211.1 [8.31]	332.3 [13.08]
D291	Std. cover	157.8 [6.21]	247.2 [9.73]
D291	Flat cover	88.4 [3.48]	111.3 [4.38]

SOLENOID VALVE DIMENSIONS

Solenoid valve option	Dim. D	Dim. E	Dim. F
1.4 C _v , 3-Way, Brass/Aluminum/316 SS	56.7 [2.24]	90.2 [3.56]	103.9 [4.09]
1.4 C _v , 4-Way, Brass/Aluminum/316 SS	56.7 [2.24]	90.2 [3.56]	124.6 [4.91]

TECHNICAL SPECIFICATIONS

Materials of Construction

Enclosure	D280 Aluminum with black polyester powder coat finish D290 Stainless steel with electro-polished finish
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Shaft and hardware	Stainless steel
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Bushing	Oil impregnated bronze
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Beacon visual indicator	Co-polyester
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Drive shaft

Westlock standard	Double-D with ¼" A/F
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Option	NAMUR standard VDI/VDE 3845
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Available switches

Magnum (hermetically sealed proximity type) with tungsten contacts

Magnum (hermetically sealed proximity type) with rhodium contacts

V3 SPDT mechanical switches, with gold plated contacts

DPDT (Form CC) mechanical switches

Pepperl + Fuchs model NJ2-V3-N

SOLENOID VALVES

The Falcon range of solenoid valves allows you to choose the material, voltage, number of ports, number of coils and C_v to best suit your application. See the Falcon data sheet for more information.

Note: 4.3 C_v solenoid valve is available in aluminum only.

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FALCON V FEATURES

- The Falcon V is engineered specifically to address low power valve actuation requirements in hazardous locations.
- Available in 3 and 4 – way anodized aluminum (all wetted parts), nickel-plated brass with stainless steel internals and 316 SS (all wetted parts)
 - Larger 4.3 C_v valve body available in Aluminum with ½” NPT ports
 - Viton seals as standard (1.4 C_v and 4.3 C_v only)
 - Internal venting design as standard
 - Increased C_v of the standard valve body (1.4 C_v) of the standard of a wider range of actuators and reduces stock requirements
 - Reduced pilot pressure coil allows use on low supply pressure without external pilot
 - Anti-extrusion seal design
 - Common global porting system and location allows all Westlock brands for ease of automation (model in ISO view)
 - Spool indicator design protects the indicator from incidental contact damage
 - 5cc or less air leakage at steady state reduces losses
 - Standard valve temperature range -20°C to +85°C [-4°F to +185°F]
 - Extended low temp -40°C [-40°F] seal optional
 - Suitable for high cycle applications

FALCON V STANDARD SPECIFICATION

	Falcon V	Falcon
Materials	Anodized aluminum (4.3 C _v only), nickel plated brass	Available in stainless steel
Valve flow rates	1.4 C _v , 4.3 C _v	3.5 C _v
Standard coil voltage	24 VDC, 1.8 watt	24 VDC, 1.8 watt
	110/120 VAC, 1.8 watt	110/120 VAC, 1.8 watt
Valve port tapping	1.4 C _v – ¼” NPT air ports for inlet, outlet and exhaust 4.3 C _v – ½” NPT air ports for inlet, outlet and exhaust	3.5 C _v - 1/2” NPT air ports for inlet, outlet and exhaust

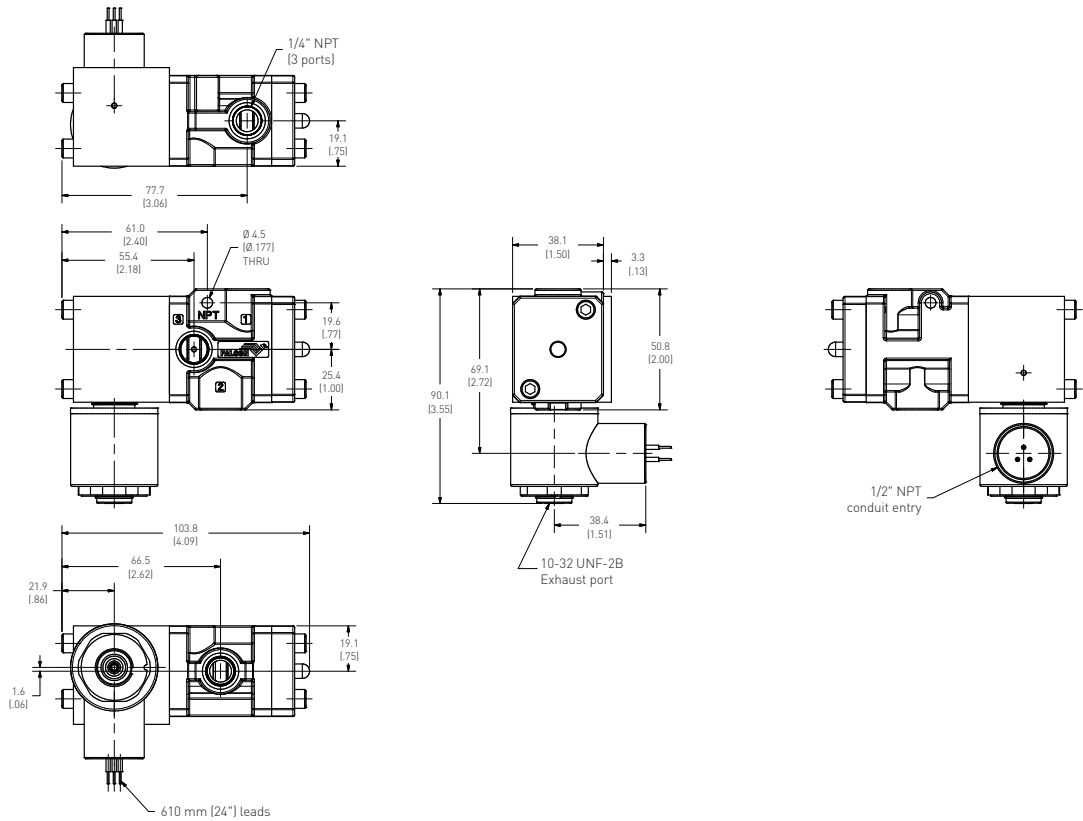
FALCON V TECHNICAL DATA

	Falcon V (1.4 C _v / 4.3 C _v)	Falcon
Operating pressure	30 – 120 psi (2.1 – 8.3 bar)	45 - 120 psi (3.1 - 8.3 bar)
Operating temperature	Standard: -20°C to +85°C (-4°F to +185°F)	-20°C to +65°C (-4°F to +149°F)
	Optional: -40°C to +85°C (-40°F to +185°F)	-20°C to +82°C (-4°F to +180°F)
Operating media	Filtered air to 20 microns	Filtered air to 20 microns

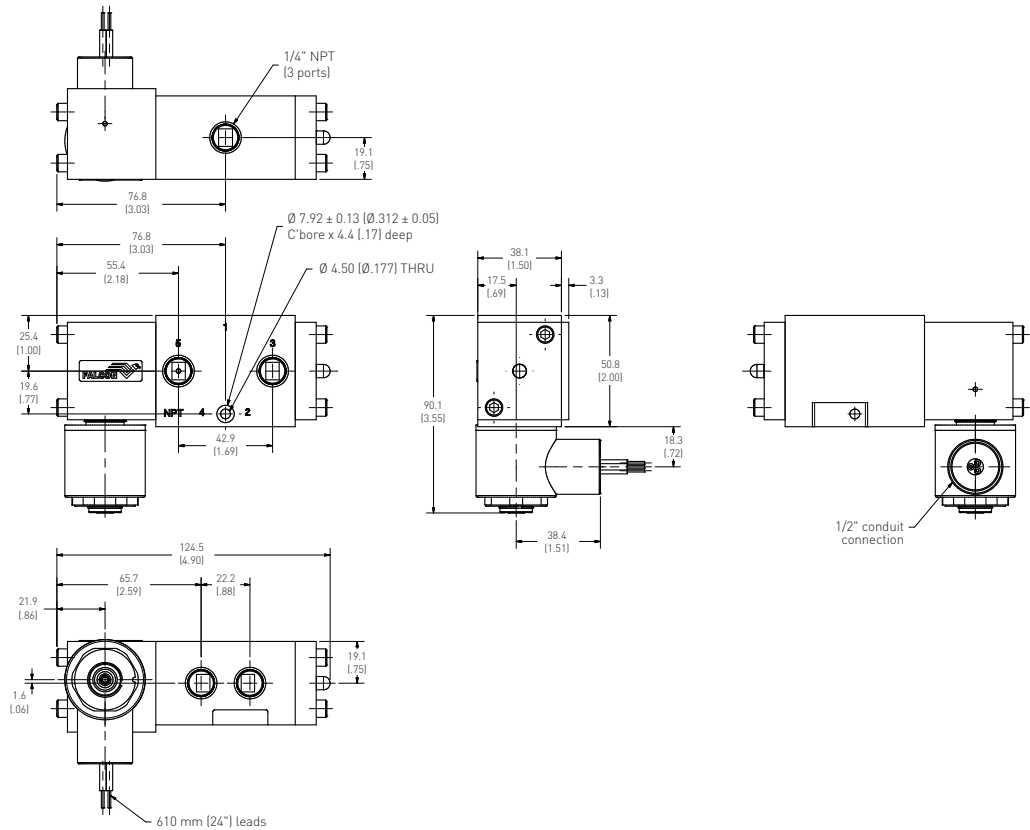
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EXPLOSIONPROOF / FLAMEPROOF, INTRINSICALLY SAFE OR NON-INCENDIVE

FALCON V SOLENOID VALVE

FALCON 3-WAY SOLENOID VALVE



FALCON 4-WAY SOLENOID VALVE (SHOWN WITH COIL)



DIGITAL EPIC D200 DIGITAL POSITION TRANSMITTER

EXPLOSIONPROOF / FLAMEPROOF, INTRINSICALLY SAFE OR NON-INCENDIVE - SELECTION GUIDE NO SOLENOID VALVE

Base Model D EPIC-Transmitters					
D241	Intrinsically Safe/Non-Incendive - Aluminum encl., (2) conduits, 12 pt. terminal strip				
D251	Intrinsically Safe/Non-Incendive - 316 Stainless Steel encl., (2) conduits, 12 pt. terminal strip				
D261	Explosionproof - Screw-on cover, Aluminum encl., (2) conduits, 10 pt. terminal strip				
D271	Explosionproof - Screw-on cover, 316 Stainless Steel encl., (2) conduits, 10 pt. terminal strip				
D281	Explosionproof - Bolted cover, Aluminum encl., (2) conduits, 12 pt. terminal strip (exceptions noted in switch options)				
D291	Explosionproof - Bolted cover, 316 Stainless Steel encl., (2) conduits, 12 pt. terminal strip (exceptions noted in switch options)				
Continuous Rotary Position Sensing Option with Shaft Option					
NP	Potentiometer/NAMUR Output Shaft				
NT	Non-Contact Sensor/NAMUR Output Shaft				
SP	Potentiometer/Standard Output Shaft				
ST	Non-Contact Sensor/Standard Output Shaft				
End-of-Travel Feedback Switch Option					
0000	No end-of-travel confirmation required				
2M04	(2) DPDT mechanical switches, (3) conduits w/14pt. Terminal Strip (D261/D271) or (4) conduits w/16 pt. Terminal Strip (D281/D291 standard) - D261/D271/D281/D291 only				
2M06	(2) SPDT Magnum XT-90 proximity switches, Tungsten Contacts* - D261/D271/D281/D291 Only				
2M08	(2) P&F NJ2-V3-N inductive proximity sensors				
2M09	(2) SPDT mechanical switches with gold contacts (requires suitable barrier for Div. 2 installation)				
2M12	(2) SPDT Magnum XT-90 proximity switches with rhodium contacts*				
4M06	(4) SPDT Magnum XT-90 proximity switches, Tungsten Contacts*, (4) conduits, high cover, 16 pt. terminal strip - D281/D291 Only				
4M08	(4) NJ2-V3-N inductive proximity sensors, (4) conduits, high cover, 16 pt. terminal strip - D281/D291 only				
4M09	(4) SPDT mechanical switches, (4) conduits, high cover, 16 pt. terminal strip (requires suitable barrier for Div. 2 installation) - D281/D291 Only				
4M12	(4) SPDT Magnum XT-90 proximity switches, Rhodium Contacts* (4) conduits, high cover, 16 pt. terminal strip - D281/D291 Only				
Beacon					
BY	Black Open/Yellow Closed				
RG	Green Open/Red Closed				
FE	French/English BY				
LP	Low-Profile BY				
B1	3-Way 90° B1 Flow Path				
B3	3-Way 90° B3 Flow Path				
B5	3-Way 90° B5 Flow Path				
B7	3-Way 90° B7 Flow Path				
B9	3-Way 90° B9 Flow Path				
FC	Flat Cover (no beacon)				
Approval Options					
NS	NEC/ATEX/IEC Intrinsically Safe (IS) and NEC Nonincendive (NI)- D231, D241, D251 only				
EX	NEC/ATEX/IEC Explosionproof/Flameproof and NEC Nonincendive (NI)- D261, D271, D281, D291 Only				
Conduit Options					
2	M20 (Quantity based on switch options)				
3	3/4" NPT (Quantity based on switch options)				
D281	NP	4M02	RG	EX	2 = Model Number D281NP4M02RGEX2

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***Magnum Proximity Switch Application Note:**
For 24 VDC **service below 1 Watt**, M12 (Rhodium Magnum) is recommended
For 24 VDC **service above 1 Watt**, M06 (Tungsten Magnum) is recommended

DIGITAL EPIC D200 DIGITAL POSITION TRANSMITTER

EXPLOSIONPROOF / FLAMEPROOF, INTRINSICALLY SAFE OR NON-INCENDIVE - SELECTION GUIDE WITH SOLENOID VALVE

Base Model									
D230	Intrinsically Safe/Non-Incendive - Resin encl., (2) conduits, clear cover, 12 pt. terminal strip, Falcon interface								
D240	Intrinsically Safe/Non-Incendive - Aluminum encl., (2) conduits, 12 pt. terminal strip, Falcon interface								
D250	Intrinsically Safe/Non-Incendive - 316 stainless steel encl., (2) conduits, 12 pt. terminal strip, Falcon interface								
D260	Explosionproof - Screw-on cover, aluminum encl., (2) conduits and (1) male fitting, 14 pt. terminal strip								
D270	Explosionproof - Screw-on cover, 316 stainless steel encl., (2) conduits and (1) male fitting, 14 pt. terminal strip								
D280	Explosionproof - Bolted cover, aluminum encl., (3) conduits**** and (1) male fitting, 16 pt. terminal strip (exceptions noted in switch options)								
D290	Explosionproof - Bolted cover, 316 stainless steel encl., (3) conduits**** and (1) male fitting, 16 pt. terminal strip (exceptions noted in switch options)								
Continuous Rotary Position Sensing Option with Shaft Option									
NP	Potentiometer/NAMUR Output Shaft								
NT	Non-Contact Sensor/NAMUR Output Shaft								
SP	Potentiometer/Standard Output Shaft								
ST	Non-Contact Sensor/Standard Output Shaft								
End-of-Travel Feedback Switch Option									
2M04	(2) DPDT mechanical switches - D280/D290 Only								
2M06	(2) SPDT Magnum XT-90 proximity switches, Tungsten Contacts* - D260/D270/D280/D290 Only								
2M08	(2) P&F NJ2-V3-N inductive proximity sensors								
2M09	(2) SPDT mechanical switches with gold contacts (require suitable barrier for Div. 2 installation)								
2M12	(2) SPDT Magnum XT-90 proximity switches with Rhodium Contacts*								
4M06	(4) SPDT Magnum XT-90 proximity switches, high cover - D280/D290 Only								
4M08	(4) NJ2-V3-N inductive proximity sensors, high cover - D280/D290 Only								
4M09	(4) SPDT mechanical switches with gold contacts, high cover - D280/D290 Only								
4M12	(4) SPDT Magnum XT-90 proximity switches, rhodium contacts - D280/D290 Only								
Beacon									
BY	Black Open/Yellow Closed								
RG	Green Open/Red Closed								
FE	French/English BY								
LP	Low-Profile BY								
B1	3-Way 90° B1 Flow Path								
B3	3-Way 90° B3 Flow Path								
B5	3-Way 90° B5 Flow Path								
B7	3-Way 90° B7 Flow Path								
B9	3-Way 90° B9 Flow Path								
FC	Flat Cover (no beacon)								
Coil Voltage/Type									
I	24 VDC Dual-certified IS/NI (Optional for D230, D240, D250 Only) ; entity Vmax=35V, Imax=300mA, Pmax=2.98W, Li=0m,Ci=0µF								
T	24 VDC Explosionproof, 1.8W, Potted Hub (D260, D270, D280, D290 Only)								
Z	120 VAC Explosionproof, 3.2 VA, Potted Hub (D260, D270, D280, D290 Only)								
Falcon Valve Body (NPT Ports unless noted)									
2V3	1.4Cv, 3-Way, Brass				2V7	1.4Cv, 4-Way, Brass			
3V3	1.4Cv, 3-Way, Aluminum				3V7	1.4Cv, 4-Way, Aluminum			
5V3	1.4Cv, 3-Way, 316 SS				5V7	1.4Cv, 4-Way, 316 SS			
3V4	4.3Cv, 3-Way, Aluminum***,**				3V8	4.3Cv, 4-Way, Aluminum **			
540	3.5Cv, 3-Way, 316SS**				580	3.5Cv, 4-Way, 316SS**			
2VY	1.4Cv, Dual Coil, Brass**				3VY	1.4Cv, Dual Coil, Aluminum**			
5VY	1.4Cv, Dual Coil, 316 SS**				3VZ	4.3Cv, Dual Coil, Aluminum**			
3B3	1.4Cv, 3-Way, Alum., 1/4 BSP				3B7	1.4Cv, 4-Way, Alum., 1/4 BSP			
5B3	1.4Cv, 3-Way, 316 SS, 1/4 BSP				5B7	1.4Cv, 4-Way, 316 SS, 1/4 BSP			
3B4	4.3Cv, 3-Way, Alum., 1/2 BSP***,**				3B8	4.3Cv, 4-Way, Alum., 1/2 BSP**			
Valve Option									
O	None								
X	Low Temp. Seals (-40°C service)- comes with low-temp. coil								
M	Momentary Override								
L	Locking Override								
E	External Pilot - required for inlet pressure below 45 psi								
Approval Option									
NS	NEC/ATEX/IEC Intrinsically Safe/NEC Nonincendive- ratings as noted above; D230, D240, D250 Only								
EX	NEC/ATEX/IEC Explosionproof/Flameproof- ratings as noted above; D260, D270, D280, D290 Only								
Conduit Options									
2	M20 (Quantity based on options)								
3	3/4" NPT (Quantity based on options)****								
3	= Model Number D250NT2M12BYI5V30NS3								
D250	NT	2M12	BY	I	5V3	0	NS	3	

***Magnum Proximity Switch Application Note:**
For 24 V DC service below 1 Watt, M12 (Rhodium Magnum) is recommended
For 24 V DC service above 1 Watt, M06 (Tungsten Magnum) is recommended

Ordering notes:
**Valve bodies are only available for series D230, D240 and D250; consult Sales for availability of options M, L, E on "540" & "580" Falcon Valve Bodies
***3V4 and 3B4 valve bodies are 3V8 and 3B8 valve bodies respectively, with ports 2 & 3 plugged at the factory for 3-way functionality
****3 open conduits are (2) 3/4 NPT and (1) 1/2 NPT for D280/D290

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