WESTLOCK CONTROLS

DIGITAL EPIC CONTROL TRANSMITTERS

EXPLOSIONPROOF/FLAMEPROOF - ATEX/IEC

Discrete position control and precision, non-contact position feedback with digital communication via HART® protocol in an explosionproof, integrated package. With options for linear or rotary control valves and remote PST/ESD initiation.

FEATURES

- Microprocessor based technology allows digital communication via HART® protocol.
- Remote and local partial stroke test (PST) and emergency shut down (ESD) initiated remotely via HART® signal for safety system applications.
- Valve position measurement via a non-contact magnetic pick-up eliminates mechanical drive arms or linkages increasing reliability in high cycle applications or where vibration is present.
- Highly visible position indicator.
- Available with low power Falcon solenoid valve.
- Solenoid coils integrated within enclosure.
- Choice of factory pre-wired 3 and 4 way Falcon solenoid valves.
- Solenoid valves with a choice of C_v ratings and coil voltage.
- Model D460 features a low copper aluminum enclosure with powder coat finish.
- Model D470 features a heavy duty stainless steel enclosure.

TECHNICAL DATA

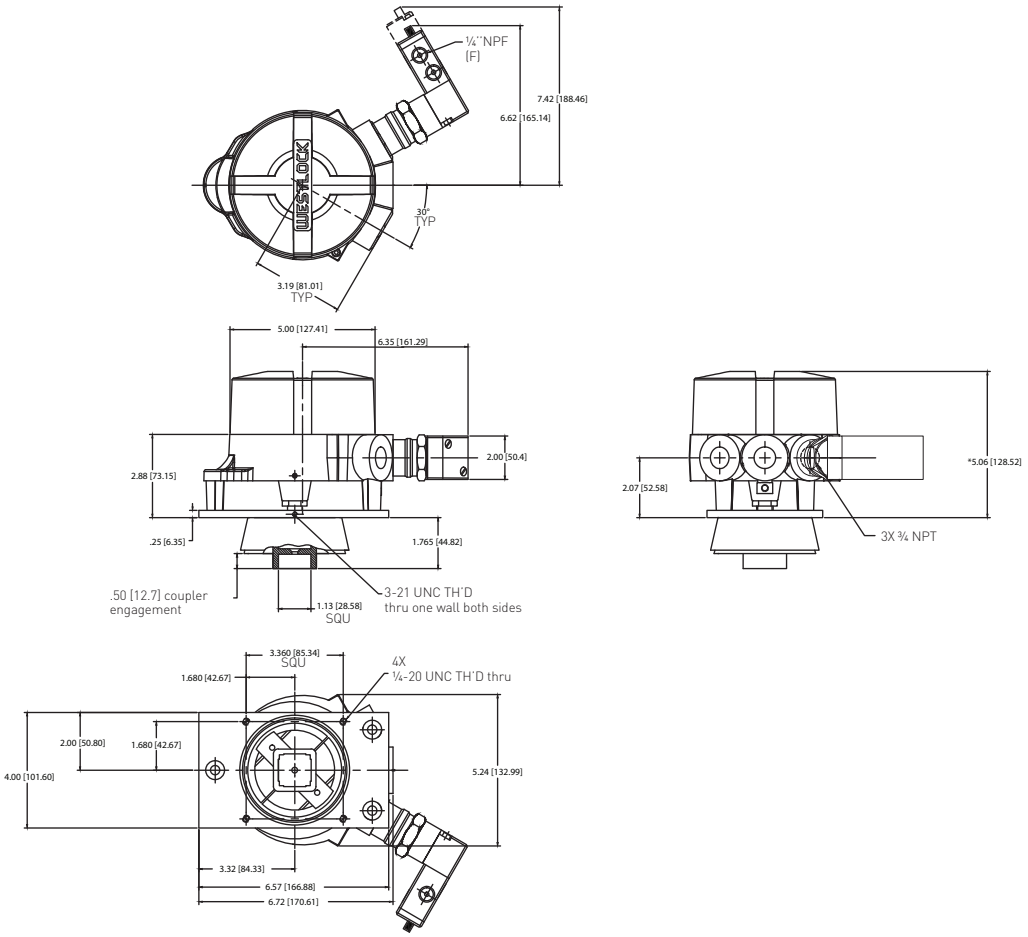
Agency approvals

Area classification (ATEX/IEC)	
All models	Ex II 2 G Ex d IIC T* Gb Tamb -*°C to +*°C Ex II 2 D Ex tb IIIC T* Db IP6X Tamb -*°C to +*°C
Enclosure standards (IEC)	
All models (without solenoid valve)	IP67 & IP68 (20 m for 24 hours)
Enclosure	
D460	Aluminum
D470	Stainless steel

GENERAL APPLICATION

Digital EPIC position transmitters are ideal for applications with sophisticated process patterns and those that require partial stroke testing (PST) or remote emergency shut down (ESD) initiation.

DIMENSIONS MODELS D460 AND D470



Dimension in inches, metric dimension (mm) in parentheses
Solenoid valve dimensions are indicative only and are dependent on solenoid valve selected.

TECHNICAL SPECIFICATIONS

Materials of construction

Enclosure	
Model D460	Aluminum with powder coat finish
Model D470	Stainless steel with electropolished finish
Hardware	Stainless steel

Please consult your sales office for any other requirements

NOTES

Conduit entries
Digital EPIC position and control transmitters are available with a choice of conduit entries. Please see the selection guide for standard entries.

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.

TECHNICAL SPECIFICATIONS

Conduit entries	M20, M25, 1/2"NPT, ¾" NPT
Output	4 - 20 mA proportional to valve position
Terminal voltage required	10 to 30 V
Linearity*	± 1.0% F.S.
Span adjustment	60° to 120°
Zero adjustment	30% of calibration span
Resolution	≤ 0.05% F.S.
Hysteresis	Negligible
Standard operating temperature range**	-40°C to +85°C
Temperature effect	≤ 0.01% F.S./°C
Humidity	10% to 90% non-condensing
Voltage effect	≤ 0.2% F.S. from 10 V DC to 30 V DC
Reverse polarity	Protected
Mounting attitude	Any position
Startup stabilization	0.5 seconds
Output update rate	25 ms

NOTES

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

** Standard Falcon valve operating temperature range -4°F to +185°F, with optional -40°C to +85°C

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SELECTION GUIDE

Base model

D460	Transmitter (Aluminium enclosure with three ¾ NPT)
D470	Transmitter (316SS enclosure with three ¾ NPT)

Application type

LV	Linear transmitter (specify stroke length, fail up or fail down)
LR	Linear transmitter with remote mount (specify stroke length, fail up or fail down)
RO	Rotary transmitter
RR	Rotary transmitter with remote mount

Certification

A	ATEX certified
I	IECEx certified

Conduit options

1	Two ½" NPT
2	Two M20
3	Two ¾" NPT
6	Two M25

Solenoid body material

A	Anodized aluminium
E	Stainless steel (required choice with D470)

Solenoid coil voltage

C	24 V DC

Solenoid valve specification

	Stainless steel ¼"BSP entry; 1.1 C_v		**Stainless steel ¼"NPT entry; 1.1 C_v**
K	3/2 way - fail closed	U	3/2 way - fail closed
L	3/2 way - fail open	V	3/2 way - fail open
Q	5/2 way - fail closed	1	5/2 way - fail closed

Build options

000	Standard build
***	Non-standard please consult with sales office

Beacon options

0	None
1	Black/Yellow Beacon indicator

D470	RO	A	2	E	C	K	000	0	= Model number **D470-RO-A-2-ECK000-0**

NOTES

Specifying your control transmitter

Specifying a control transmitter is a complex process as there are many variables which affect each individual application. To ensure that you receive the best possible combination for your control and monitoring requirement, please contact your local sales office for advice and guidance from one of our experts.

Hazardous area classification

Please see our data sheet for further information on the global standards affecting the specification and installation of equipment in hazardous areas.

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www.westlockcontrols.com