



D30 Smart Digital Positioner

High throughput and process efficiency



Experience In Motion

Our mission is continuous improvement in flow management



Flowserve offers a range of intelligent flow control solutions for almost every application and works with different industries to master the varied and challenging conditions and helps to provide a process solution that keeps operation safe, efficient and profitable. Industries we serve includes oil and gas, pulp and paper, power, chemicals, waste water management and many more. Today, Flowserve employs more than 17,500 associates in 300-plus locations around the world, including over 180 quick response centers that provide aftermarket parts and services to customers.



The PMV D30 Digital positioner offers reliable and precise valve control, yet it is very simple and quick to set up and calibrate.

All Inclusive package - Simple configuration with smart communication, easy calibration and reliable performance

The PMV D30 Digital positioner is an advanced engineered design which offers reliable and precise valve control, yet it is simple to set up and easy to calibrate. Based on proven digital technology, it features a large, high-performance spool valve controlled by a unique intelligent control algorithm.

A graphical LCD and LEDs allows for local operation, configuration and calibration. It suits both rotary and linear moving valves actuated by double or single acting spring return actuators. Plug in modules for limit switches and pressure sensors for advanced diagnostic is available with software ValveSight® which enables optimization and predictive maintenance, reducing cost, and improving service level.

Up and running in minutes...

D30 is the latest valve positioner from PMV. Here, proven technology, such as a spring-loaded spindle with a friction clutch for easy and flawless installation, is combined with modern control processors and a full-text LCD display. The D30 is characterized by high air capacity, which means that it fits small to very large actuators.

Features & Benefits

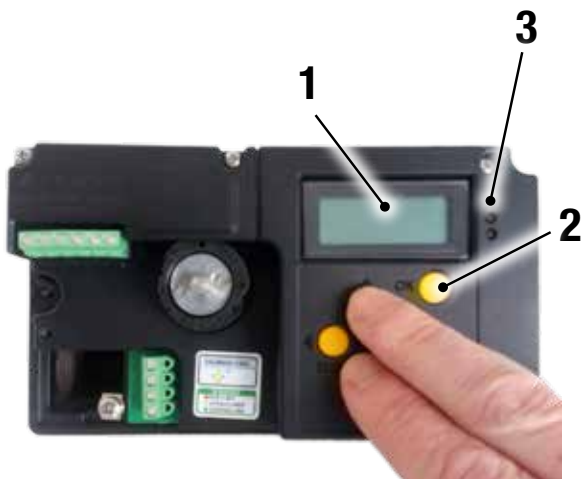
- Spring loaded solid metal shaft - Eliminates play and improves control accuracy
- Friction clutch for position sensor
 - Shaft can rotate free 360 °, sensor will not be damaged
- High Air delivery capacity
 - Fits big range of actuators, eliminates volume booster
- Simple to use - Quick set up, configuration and calibration
- Language options- Programming in local languages (8)
- Sturdy cover with indicator - Durability and visibility



Options

- 4-20 mA position transmitter
- HART, Profibus PA and Foundation Fieldbus
- Bolt on gauge block
- Plug in pressure sensors
- Direct and Remote mounting version
- 270 deg rotation version
- Silencers
- Plug in limit switches
- Free of charge DTM, ValveSight*

(* for full functionality, pressure sensors are required)



Auto-Calibration is completed in less than a minute.

1. LCD with 5 buttons for simple menu navigation.
2. Push 2 buttons simultaneously to perform instant, accurate calibration.
3. LED's to provide instant indication of following
 - Green - Normal operation,
 - Yellow - Fully open/close valve
 - Red - Alarm active



Mounting Kits

PMV offer many mounting kits and accessories to make it a perfect fit for controlling all major types of valve. Mounting options include brackets and direct mounting for rotary and linear applications.

Plug in limit switches

Limit switches to indicate open or closed position can be added anytime to the D30. You can select between SPDT mechanical or proximity switches and NAMUR 2 wire sensors.

Remote mounting

Remote mounting is a solution for demanding process conditions such as extreme temperatures, vibrations, dusty environment.

It is also an solution for long stroke linear valves or valves installed in a location that is difficult to get access to. Max. suggested distance is 10 meters between remote sensor and D30 positioner.

ValveSight®

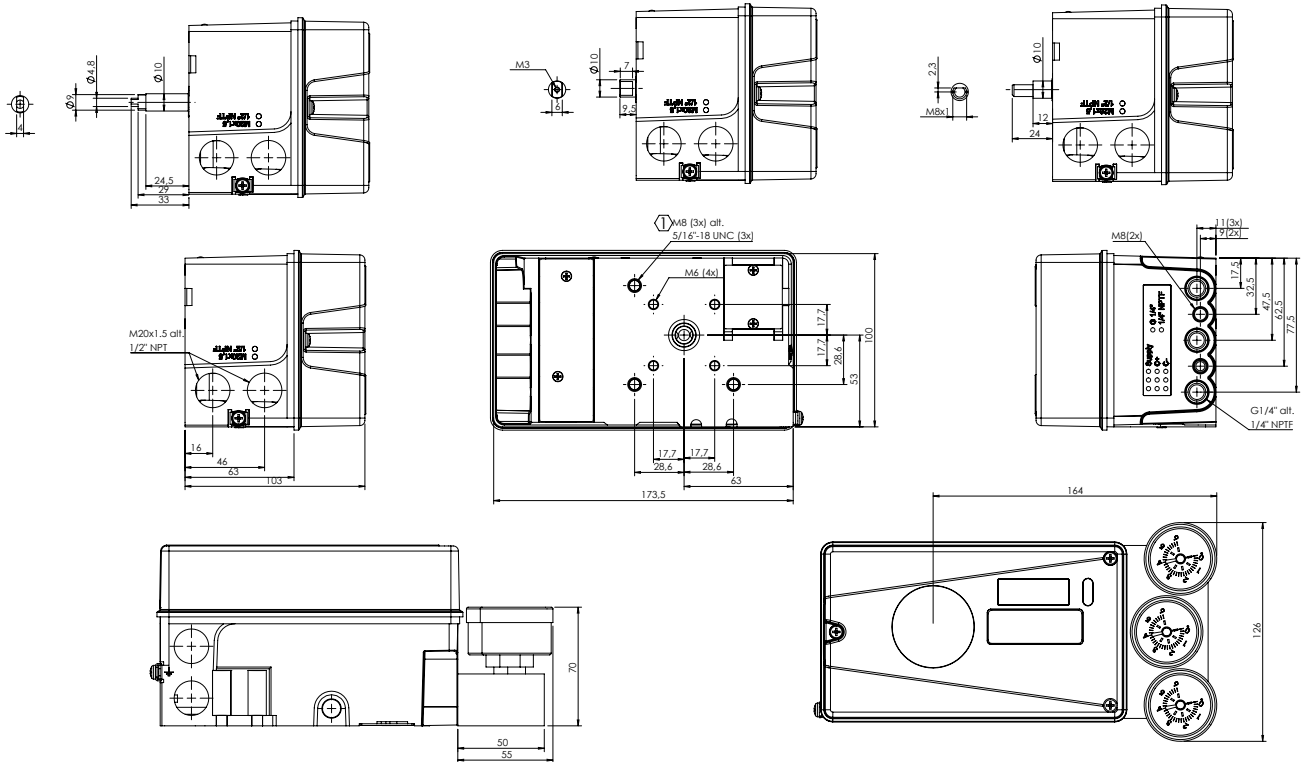
PMV ValveSight® is an FDT / DTM-based, proactive diagnostic solution for process and control valves that can be integrated into a DCS or AMS system, which improves system efficiency without compromising safety and reliability.

This user friendly and charge free software monitors the valve assembly 24/7 and the data is saved and stored inside the positioner.

The data can be retrieved anytime and is not lost in case of loss of input signal/power. The data is divided into Online diagnostics and Offline diagnostics. ValveSight monitors the health for the valve, actuator, positioner and control signal and display it in easy to understand bar graph scale. Offline tests included step and ramp tests to check the valves performance and stroke times. ValveSight integrates seamlessly with your existing host system using open standards and can be retrofitted with existing control valves.



D30 Dimensional Drawing



Optional plug-in modules

Mechanical switches	
Type	SPDT
Size	V3
Rating	3 A/125 VAC / 2 A/30 VDC
Temperature range	-40 °C to 85 °C (-40 °F to 185 °F)

NAMUR sensors	
(NJ2-V3-N on RHS)	
Type	Proximity DIN EN 60947-5-6:2000
Load current	1 mA ≤ I ≤ 3 mA
Voltage range	8 VDC
Hysteresis	0.2%
Temperature range	-25°C to 85°C (-13°F to 185°F)

Proximity switches	
Type	SPDT
Rating	0.4 A @ 24 VDC, Max 10 W
Operating time	Max 1.0 ms
Max voltage	200 VDC
Contact resistance	0.2 Ω
Temperature range	-30°C to 80°C (-22°F to 180°F)

Slot NAMUR switches	
(SJ2-N, SJ2-SN)	
Type	Proximity DIN EN 60947-5-6:2000
Load current	1 mA ≤ I ≤ 3 mA
Voltage	8 VDC
Hysteresis	0.2%
Temperature range	-40 °C to 85 °C (-40 °F to 185 °F)

4-20 mA transmitter	
Supply	11-28 VDC
Output	4-20 mA
Resolution	0.1%
Linearity full span	+/-0.5%
Output current limit	30 mA DC
Load impedance	800 Ω @ 24 VDC

Safety certifications

For installation in hazardous areas D30 is approved
Intrinsically Safe or Non-incendive:

ATEX, FM, CCC, TR-CU, INMETRO and SIL 3

For a complete list of certificates please go to www.pmv.nu



Specifications and certifications

Rotation angle	min 2.5° max 100°
Stroke	From 5 mm (0.2")
Input signal	4-20 mA DC
Air supply	1.4-8 bar (20-115 psi) DIN/ISO 8573-1 3.2.3 Free from oil, water and moisture.
Air delivery	Up to 45.6 Nm ³ /h at 6 bar (29.3 scfm @ 87 psi)
Air consumption	0.5 Nm ³ /h at 6 bar (0.31 scfm @ 87 psi)
Air connections	¼" G or NPT
Cable entry	2x M20x1.5 or ½" NPT
Electrical connections	Screw terminals 2.5 mm ² /AWG14
Linearity	<0.4%
Repeatability	<0.5%
Hysteresis	<0.3%
Dead band	0.1-10% adjustable

Display	Graphic, view area 15 x 41 mm (0.6 x 1.6")
UI	5 push buttons
CE directives	2014/30/EU (EMC) 2014/35/EU (Certain voltage limit) 2014/34/EU (ATEX)EEC
Voltage drop, w/o HART	8 V
Voltage drop, with HART	9.4 V
Vibrations	< 0.25% FS 10-500 Hz 2g max
Enclosure	IP66 / NEMA 4X
Material	Die-cast Aluminum
Surface treatment	Powder coating, polyester
Temperature range	-40°C to +80°C (-40°F to 176°F)
Weight	1.8 kg (4 lbs)
Mounting position	Any
Communication protocols	Hart Profibus PA Foundation Fieldbus

D30 Order Code

A =	Model no	
	D30	Full LCD menu, LED status
B =	Approval, Certificate	
	D	General purpose version / IP66
	A	Intrinsically safe version ATEX II 1G Ex ia IIC T4 Ga
	F	Intrinsically Safe Version FM Ex ia
	B	Intrinsically safe version INMETRO Ex ia IIC T4 Ga
	N	Intrinsically Safe version NEPSI Ex ia IIC T4 Ga
	T	Intrinsically safe version TR-CU Ex ia IIC T4 Ga X
	E	Intrinsically safe version IEC Ex ia IIC T4 Ga
C =	Function	
	H	High Flow - Single/double acting - Spool valve
D =	Connections Air, Electrical	
	G	1/4" G air, M20 x 1,5 electrical
	M	1/4" NPT air, M20x1,5 electrical
	N	1/4" NPT air, 1/2"NPT electrical
E =	Connection feature	
	2	2 Electrical conduits
	T	2 Electrical conduits, threaded Aux. ventilation
F =	Housing material/ Surface treatment	
	U	Aluminium/Powder epoxy, black
G =	Mounting options / Shaft	
	R	M Remote mounting (position sensing unit sold separately)
	0	9 Double D type 6 mm
	2	1 NAF shaft, including Mounting bracket for Turnex 0 -5
	2	3 VDI/VDE 3845 rotary, Mounting kit not included
	2	6 For DeZurik Power Rack actuator
	3	0 Male square 1/2"
	3	9 Flat + D type, nut incl. For IEC 534-6, Mounting kit not included
H =	Cover and Indicator	
	P	V B PMV, Black cover, No indicator
	F	W B Flowserve, White, No indicator
	P	V A PMV, Black cover, Arrow indicator
	F	W A Flowserve, White, Arrow indicator
I =	Temperature/seals	
	U	-40°C to 80°C
J =	Input signal/Protocoll	
	4	4-20 mA / none
	5	4-20 mA, / HART
	P	Profibus PA
	F	Foundation Fieldbus
K =	Feedback option, switches	
	X	No feedback option
	T	4-20 mA transmitter only (Not when J = P or F)
	S	Limit switches Mechanical SPDT
	N	P+F NJ2-V3-N Namur 2 wire
	P	Limit switches Proximity SPDT
	5	P+F SJ2-SN Slot type Namur 2 wire
	6	P+F SJ2-N Slot type Namur 2 wire
L =	Options, Add in electronics	
	0	No pressure sensors
	3	3x pressure sensors built in for advanced diagnostics
M =	Accessories	
	X	No accessories
	M	Gauge block 1/4" G (DA, 3 x gauges included)
	N	Gauge block 1/4" NPT (DA, 3 x gauges included)
N =	Special Options	
	N	No special options
	S	Exhaust silencers
	T	270 deg rotary version (no shaft spring)
	U	270 deg rotary version (no shaft spring) + Exhaust silencers

*Note :- Contact us for valid combination

A A A B C D E - F G G H H H - I J K L M N



Regional contacts

If you have questions about the PMV D30 positioner or to find your local Logix sales representative, please contact one of the regional offices below.

North America

PMV USA Houston
Phone: +1 281 671 9214

Latin America

Brazil - Flowserve Ltda.
Phone: +55 11 2169 6300

Europe, Middle East, Africa

PMV Automation Solna
Phone: +46(0) 8 555 106 00
Email: infopmv@flowserve.com

Flowserve Netherlands
Phone: +31 10 524 1050

Flowserve Russia
Phone: +7 495 781 5977 / 79
Fax: +7 495 781 5979

Flowserve Abahsain (Saudi Arabia)
Flow Control Company Ltd.
Phone: +966 3 857 3150 X 243

Flowserve Ettlingen (Germany)
Phone: +49 2743 103 739

Asia Pacific

Flowserve (Singapore) Pte Ltd.
Phone: + 65 6879 8900

Flowserve (China)
Phone: +86 512 6255 2388

Flowserve India Controls
Phone: +91 80 401 46217

Flowserve Australia Pty Ltd.
Phone: +61 397 593 300

To Learn More

For more details on the
D30 Smart Digital Positioner visit
www.pmv.nu

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