

PS600 series – For viscous media or contamination

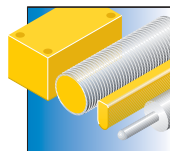


The PS600 series operates with a front-flush mounted diaphragm seal. Pressure applied on the stainless steel diaphragm is transmitted via the filling medium to the ceramic substrate of the measuring cell. Depending on the sensor type, the processed signal is either provided at a switching or an analog output. IO-Link is standard. Highest flexibility achieved with a front-flush or dead space free diaphragm and an accuracy of 0.5% f.s. guarantees safe integration in the process.

Features

- IO-Link capable
- Front-flush and dead space free process connections
- 4-digit 7-segment display
- Measuring range -1...400 bar relative pressure
- Measuring range 0...25 bar absolute pressure
- Stainless steel housing
- Permanent display of pressure (bar, psi, kPa, MPa, misc)

Properties



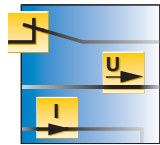
Design

Cylindrical design, non-rotatable, with display



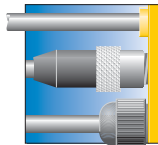
Measuring ranges

-1... 600 bar relative pressure



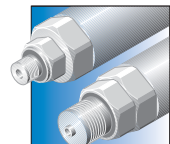
Electrical versions

IO-Link capable, dual-channel, switching, current or voltage output



Electrical connections

4-pole M12 x 1 plug connection



Mechanical connections

G1/2" and G3/4" front-flush process connections




Special features

Failsafe 3-key operation, VDMA menu guide (optional), IP67, fully encapsulated electronics



G3/4" – Front-flush diaphragm – 2 switching outputs



General data

Operating voltage	15...30 VDC	Response time	3 ms
Protection type and class	IP67 / III	Temperature coefficient zero point T_{k0}	0.15% of full scale / 10 K
Output 1 (PIN 4)	switching output or IO-Link mode	Temperature coefficient span T_{ks}	0.15% of full scale / 10 K
Output 2 (PIN 2)	switching output	Medium temperature	-10...85 °C
Output function	 , pnp/npn	Ambient temperature	-40...80 °C
Switching point accuracy	0.5 % of full scale	Housing material	stainless-steel/ plastic, 1.4305 (AISI 303)/PC
Repeatability	0.1 % of full scale	Electrical connection	connector, M12 x 1
Switching frequency	180 Hz	Mechanical connection	G 3/4" front flush


Types and data – selection table

Type	Measuring range	Admissible overpressure		
PS01VR-606-2UPN8X-H1141	-1...0 bar rel.	3 bar	w095	d472
PS001R-606-2UPN8X-H1141	0...1 bar rel.	3 bar	w095	d472
PS001V-606-2UPN8X-H1141	-1...1 bar rel.	3 bar	w095	d472
PS003V-606-2UPN8X-H1141	-1...2.5 bar rel.	7 bar	w095	d472
PS010V-606-2UPN8X-H1141	-1...10 bar rel.	25 bar	w095	d472
PS016V-606-2UPN8X-H1141	-1...16 bar rel.	40 bar	w095	d472
PS025V-606-2UPN8X-H1141	-1...25 bar rel.	65 bar	w095	d472
PS040V-606-2UPN8X-H1141	-1...40 bar rel.	100 bar	w095	d472
PS100R-606-2UPN8X-H1141	0...100 bar rel.	250 bar	w095	d472
PS250R-606-2UPN8X-H1141	0...250 bar rel.	625 bar	w095	d472
PS400R-606-2UPN8X-H1141	0...400 bar rel.	900 bar	w095	d472



G3/4" – Front-flush diaphragm – 1 switching and 1 current output



General data

Operating voltage	18...30 VDC	Accuracy (Lin. + Hys. + Rep.)	0.5% of final value BSL
Protection type and class	IP67 / III	Response time	3 ms
Output 1 (PIN 4)	switching output or IO-Link mode	Temperature coefficient zero point T_{k0}	0.15% of full scale / 10 K
Output 2 (PIN 2)	analog or switching output	Temperature coefficient span T_{kS}	0.15% of full scale / 10 K
Output function	 , pnp/npn	Medium temperature	-10...85 °C
Switching point accuracy	0.5% of full scale	Ambient temperature	-40...80 °C
Repeatability	0.1% of full scale	Housing material	stainless-steel/ plastic, 1.4305 (AISI 303)/PC
Switching frequency	180 Hz	Electrical connection	connector, M12 x 1
Operating range	4...20/0...20/20...4/ 20...0 mA	Mechanical connection	G 3/4" front flush



Types and data – selection table

Type	Measuring range	Admissible overpressure		
PS01VR-606-LI2UPN8X-H1141	-1...0 bar rel.	3 bar	w096	d472
PS001R-606-LI2UPN8X-H1141	0...1 bar rel.	3 bar	w096	d472
PS001V-606-LI2UPN8X-H1141	-1...1 bar rel.	3 bar	w096	d472
PS003V-606-LI2UPN8X-H1141	-1...2.5 bar rel.	7 bar	w096	d472
PS010V-606-LI2UPN8X-H1141	-1...10 bar rel.	25 bar	w096	d472
PS016V-606-LI2UPN8X-H1141	-1...16 bar rel.	40 bar	w096	d472
PS025V-606-LI2UPN8X-H1141	-1...25 bar rel.	65 bar	w096	d472
PS040V-606-LI2UPN8X-H1141	-1...40 bar rel.	100 bar	w096	d472
PS100R-606-LI2UPN8X-H1141	0...100 bar rel.	250 bar	w096	d472
PS250R-606-LI2UPN8X-H1141	0...250 bar rel.	625 bar	w096	d472
PS400R-606-LI2UPN8X-H1141	0...400 bar rel.	900 bar	w096	d472



G3/4" – Front-flush diaphragm – 1 switching and 1 voltage output



General data

Operating voltage	18...30 VDC	Accuracy (Lin. + Hys. + Rep.)	0.5% of final value BSL
Protection type and class	IP67 / III	Response time	3 ms
Output 1 (PIN 4)	switching output or IO-Link mode	Temperature coefficient zero point T_{k0}	0.15% of full scale / 10 K
Output 2 (PIN 2)	analogue output	Temperature coefficient span T_{kS}	0.15% of full scale / 10 K
Output function	 /  , pnp/npn	Medium temperature	-10...85 °C
Switching point accuracy	0.5% of full scale	Ambient temperature	-40...80 °C
Repeatability	0.1% of full scale	Housing material	stainless-steel/ plastic, 1.4305 (AISI 303)/PC
Switching frequency	180 Hz	Electrical connection	connector, M12 x 1
Voltage output, programmable	0...10V/0...5V/ 1...6V/10...0V/ 5...0V/6...1V	Mechanical connection	G 3/4" front flush

Types and data – selection table

Type	Measuring range	Admissible overpressure		
PS001R-606-LUUPN8X-H1141	0...1 bar rel.	3 bar	w097	d472
PS01VR-606-LUUPN8X-H1141	-1...0 bar rel.	3 bar	w097	d472
PS001V-606-LUUPN8X-H1141	-1...1 bar rel.	3 bar	w097	d472
PS003V-606-LUUPN8X-H1141	-1...2.5 bar rel.	7 bar	w097	d472
PS010V-606-LUUPN8X-H1141	-1...10 bar rel.	25 bar	w097	d472
PS016V-606-LUUPN8X-H1141	-1...16 bar rel.	40 bar	w097	d472
PS025V-606-LUUPN8X-H1141	-1...25 bar rel.	65 bar	w097	d472
PS040V-606-LUUPN8X-H1141	-1...40 bar rel.	100 bar	w097	d472
PS100R-606-LUUPN8X-H1141	0...100 bar rel.	250 bar	w097	d472
PS250R-606-LUUPN8X-H1141	0...250 bar rel.	625 bar	w097	d472
PS400R-606-LUUPN8X-H1141	0...400 bar rel.	900 bar	w097	d472

G1/2" – Front-flush diaphragm – 2 switching outputs



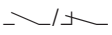
General data

Operating voltage 15...30 VDC

Protection type and class IP67 / III

Output 1 (PIN 4) switching output or IO-Link mode

Output 2 (PIN 2) switching output

Output function , pnp/npn

Switching point accuracy 0.5 % of full scale

Repeatability 0.1 % of full scale

Switching frequency 180 Hz

Response time 3 ms

Temperature coefficient zero point T_{k0} 0.15% of full scale / 10 K

Temperature coefficient span T_{kS} 0.15% of full scale / 10 K

Medium temperature -10...85 °C



Ambient temperature -40...80 °C

Housing material stainless-steel/
plastic, 1.4305 (AISI 303)/PC

Electrical connection connector, M12 x 1

Mechanical connection G 1/2" front flush


Types and data – selection table

Type	Measuring range	Admissible overpressure		
PS010V-609-2UPN8X-H1141	-1...10 bar rel.	25 bar	w095	d473
PS016V-609-2UPN8X-H1141	-1...16 bar rel.	40 bar	w095	d473
PS025V-609-2UPN8X-H1141	-1...25 bar rel.	65 bar	w095	d473
PS040V-609-2UPN8X-H1141	-1...40 bar rel.	100 bar	w095	d473
PS100R-609-2UPN8X-H1141	0...100 bar rel.	250 bar	w095	d473
PS250R-609-2UPN8X-H1141	0...250 bar rel.	625 bar	w095	d473
PS400R-609-2UPN8X-H1141	0...400 bar rel.	900 bar	w095	d473



G1/2" – Front-flush diaphragm – 1 switching and 1 current output



General data

Operating voltage	18...30 VDC	Accuracy (Lin. + Hys. + Rep.)	0.5% of final value BSL
Protection type and class	IP67 / III	Response time	3 ms
Output 1 (PIN 4)	switching output or IO-Link mode	Temperature coefficient zero point T_{k0}	0.15% of full scale / 10 K
Output 2 (PIN 2)	analog or switching output	Temperature coefficient span T_{kS}	0.15% of full scale / 10 K
Output function	 , pnp/npn	Medium temperature	-10...85 °C
Switching point accuracy	0.5% of full scale	Ambient temperature	-40...80 °C
Repeatability	0.1% of full scale	Housing material	stainless-steel/ plastic, 1.4305 (AISI 303)/PC
Switching frequency	180 Hz	Electrical connection	connector, M12 x 1
Operating range	4...20/0...20/20...4/ 20...0 mA	Mechanical connection	G 1/2" front flush


Types and data – selection table

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PS016V-609-LI2UPN8X-H1141	-1...16 bar rel.	40 bar	w096	d473
PS025V-609-LI2UPN8X-H1141	-1...25 bar rel.	65 bar	w096	d473
PS040V-609-LI2UPN8X-H1141	-1...40 bar rel.	100 bar	w096	d473
PS100R-609-LI2UPN8X-H1141	0...100 bar rel.	250 bar	w096	d473
PS250R-609-LI2UPN8X-H1141	0...250 bar rel.	625 bar	w096	d473
PS400R-609-LI2UPN8X-H1141	0...400 bar rel.	900 bar	w096	d473



G1/2" – Front-flush diaphragm – 1 switching and 1 voltage output



General data

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PS040V-609-LUUPN8X-H1141	-1...40 bar rel.	100 bar	w097	d473
PS100R-609-LUUPN8X-H1141	0...100 bar rel.	250 bar	w097	d473
PS250R-609-LUUPN8X-H1141	0...250 bar rel.	625 bar	w097	d473
PS400R-609-LUUPN8X-H1141	0...400 bar rel.	900 bar	w097	d473

w Wiring diagrams on page 832 ff

d Dimension drawing on page 842 ff

a Accessories on page 772 ff

