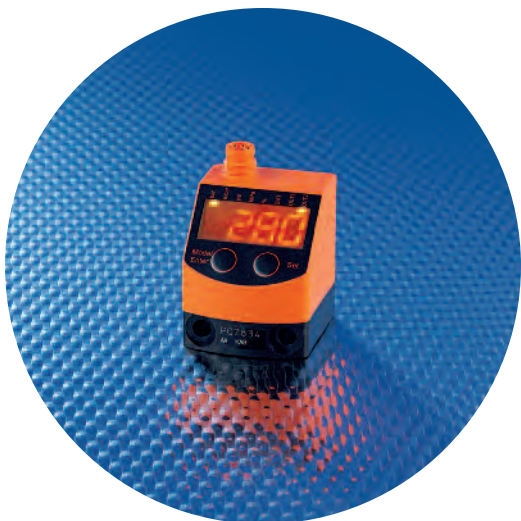


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Pressure



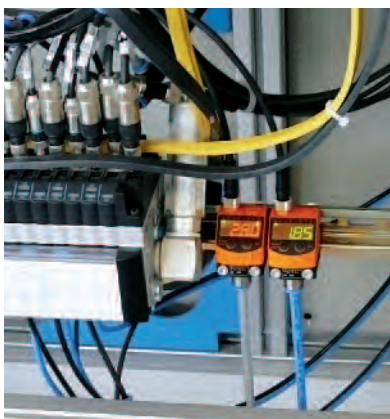
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Top five product features!

- Compact pressure switch for pneumatic applications
- 2-color, 4-digit alpha-numeric display for visual indication of operating status
- Simple pushbutton setup
- Easy installation using integrated mounting holes and accessories
- Flexible outputs available: dual PNP, dual NPN, analog / PNP

Compact pressure switch for applications in robotics and material handling



ifm's PQ Series pressure switches are designed for pneumatic applications in robotics and material handling. The switches precisely measure the full range of vacuum and pressure typical in these applications.

The PQ Series pressure switch family has been expanded to include versions with analog outputs, (i.e. part numbers PQ3809 and PQ3834).

The technology is based on a piezoresistive measuring element. The silicon measuring cell is unaffected by liquids (e.g. condensed water) and deposits that might occur in the system. The silicon measuring cell guarantees a high overload resistance as well as an accuracy of $\pm 0.5\%$.

Application parameters are established using two pushbuttons. The two-color, four-digit display provides system pressure which can be seen from long distances.

Various mounting options



- Can be fixed to flat surfaces and profiles using the two M4 drill holes on the front.
- Can be fixed to a DIN rail using the robust DIN rail clip.
- Can be fixed to a pipe or air-duct plate.

Position Sensors

Company

Inductive

Capacitive

Cylinder position

Photoelectrics and lasers

Distance, color and contrast

Fiber optics

Motion Control

Speed monitors

Vision Sensors

2D / 3D inspection

Safety Technology

Safety products



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Product + accessory selector


Output	Measuring Range	Set Point Range	Reset Point Range	Fixed Analog Start Point	Fixed Analog End Point	Display Units Available	Port Size	Part No.	List Price (1-pc.)
2 x PNP, N.O./N.C.	-14.5...14.5 psi	-14.2...14.6 psi	-14.4...14.4 psi	–	–	bar, psi, kPa, inHg	G1/8 BSPP male	PQ7809	\$156.00
2 x PNP, N.O./N.C.	-14.5...145 psi	-13...145 psi	-14...144 psi	–	–	bar, psi, kPa, inHg	G1/8 BSPP male	PQ7834	\$156.00
2 x NPN, N.O./N.C.	-14.5...14.5 psi	-14.2...14.6 psi	-14.4...14.4 psi	–	–	bar, psi, kPa, inHg	G1/8 BSPP male	PQ0809	\$156.00
2 x NPN, N.O./N.C.	-14.5...145 psi	-13...145 psi	-14...144 psi	–	–	bar, psi, kPa, inHg	G1/8 BSPP male	PQ0834	\$156.00
4...20 mA and 1 x PNP, N.O./N.C.	-14.6...14.6 psi	-14.2...14.6 psi	-14.4...14.4 psi	-14.6 psi	14.6 psi	bar, psi, kPa, inHg	G1/8 BSPP male	PQ3809	\$169.00
4...20 mA and 1 x PNP, N.O./N.C.	-15...145 psi	-13...145 psi	-14...144 psi	-15 psi	145 psi	bar, psi, kPa, inHg	G1/8 BSPP male	PQ3834	\$169.00

Required Accessories

Type	Description	Part No.	List Price (1-pc.)
	1/8" NPT female adapter	U60102	\$9.00
	6 mm Ø tube adapter	E30076	\$10.00
	8 mm Ø tube adapter	E30077	\$10.00
	DIN rail mounting bracket	E37340	\$9.00

Cordsets

Type	Description	Part No.	List Price (1-pc.)
	M8 Pico DC (4-pin) 2 m, PUR cable	EVC150	\$15.00
	M8 Pico DC (4-pin) 5 m, PUR cable	EVC151	\$18.00
	M8 Pico DC (4-pin) 2 m, PUR cable	EVC153	\$15.00
	M8 Pico DC (4-pin) 5 m, PUR cable	EVC154	\$18.00

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Technical Specs

Operating voltage:	18...32 VDC
Maximum load current:	100 mA
Current consumption:	<50 mA
Switch point accuracy:	< ± 0.5 % of full range
Repeatability:	< ± 0.1 % of full range
Medium temperature:	32...140 °F (0...60 °C)
Wetted parts:	Brass, FPM (Viton™), silicon (coated), PBT (Pocan)
Protection rating:	IP65

Reliable service center

The ifm service center team provides tech support, product quotes, delivery information and order placement.

-  **Place orders, tech support**
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Process Sensors

Pressure

Flow

Level

Temperature

Industrial Networks

AS-i network

Safety systems

ID Systems

RF identification systems

Machine Condition

Diagnostic systems

Power Supplies

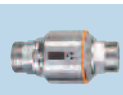
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Top five product features!

- Simple setup with mechanical adjustment dials that rotate to quickly establish setpoint and resetpoint
- 316 stainless steel process connection and strain gauge technology provide higher reliability than mechanical pressure switches
- Accuracy is consistent across the range reducing the number of ranges required.
- The switch's high accuracy and long-term stability insure the setpoint does not drift
- LEDs provide switching status and power indication

Mechanical adjustment dials provide simple setup

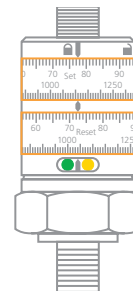


PK pressure switches feature mechanical adjustment dials that rotate to quickly establish the setpoint and resetpoint. The switch is adjustable without system pressure and supply voltage.

The PK pressure switch is an ideal alternative to mechanical piston pressure switches. The PK switch features a gas-tight measuring cell that reliably detects gas and liquid pressure. The switch withstands aggressive media and detects pressure ranges up to 5800 psi (400 bar).

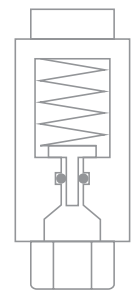
The PK's compact design is ideal for space saving mounting. Quick electrical connection is made using an industry standard Micro DC connector.

Simple mounting is plug-and-play



Electronic PK pressure switch

No moving parts reduces wear and prevents leaks.



Mechanical piston pressure switch

Piston movement can wear the sealing ring resulting in pressure leaks.

Position Sensors

Company

Inductive

Capacitive

Cylinder position

Photoelectrics and lasers

Distance, color and contrast

Fiber optics

Motion Control

Speed monitors

Vision Sensors

2D / 3D inspection

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Product + accessory selector


Output	Measuring Range [psi]	Setpoint Range [psi]	Resetpoint Range [psi]	Overload Pressure [psi]	Port Size	Part No.	List Price (1-pc.)
2 x PNP, N.O. and N.C.	0...145	7.5...145	5.0...142	362	1/4" NPT male	PK6224	\$151.00
2 x PNP, N.O. and N.C.	0...1450	75...1450	50...1420	2900	1/4" NPT male	PK6222	\$151.00
2 x PNP, N.O. and N.C.	0...5800	290...5800	175...5685	8700	1/4" NPT male	PK6220	\$151.00
2 x PNP, N.O. and N.C.	0...145	7.5...145	5.0...142	362	G1/4 BSPP male	PK6524	\$151.00
2 x PNP, N.O. and N.C.	0...363	18...363	11.0...355	870	G1/4 BSPP male	PK6523	\$151.00
2 x PNP, N.O. and N.C.	0...1450	75...1450	50...1450	2900	G1/4 BSPP male	PK6522	\$151.00
2 x PNP, N.O. and N.C.	0...3625	181...3625	109...3553	5800	G1/4 BSPP male	PK6521	\$151.00
2 x PNP, N.O. and N.C.	0...5800	2900...5800	175...5685	8700	G1/4 BSPP male	PK6520	\$151.00

Optional Accessories

Type	Description	Part No.	List Price (1-pc.)
	Protective cover	E30094	\$9.00
	G1/4 BSPP female to 1/4" NPT male, 316 stainless steel	U25003	\$20.00
	G1/4 BSPP female to 7/16" SAE male, 316 stainless steel	US0017	\$37.00

Cordsets

Type	Description	Part No.	List Price (1-pc.)
	M12 Micro DC (4-pin) 2 m, PUR	EVC001	\$9.95
	M12 Micro DC (4-pin) 5 m, PUR	EVC002	\$13.50
	M12 Micro DC (4-pin) 10 m, PUR	EVC003	\$18.00
	M12 Micro DC (4-pin) 2 m, PUR	EVC004	\$9.95
	M12 Micro DC (4-pin) 5 m, PUR	EVC005	\$13.50
	M12 Micro DC (4-pin) 10 m, PUR	EVC006	\$18.00

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Technical Specs

Supply voltage:	9.6...32 VDC
Maximum load current:	2 x 250 mA
Current consumption:	<25 mA
Voltage drop:	<2 V
Medium temperature range:	-13...176 °F (-25...80 °C)
Accuracy of switch point:	< ± 2.5% of full range
Repeatability:	< ± 0.5% of full range
Wetted parts:	316 stainless steel
Protection rating:	IP67



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Top five product features!

- Solid state sensors are more reliable than mechanical switches
- Integrated built-in display eliminates the need for a reference gauge; values may be set in green or red providing at-a-glance status indication
- Simple pushbutton setup allows the switch to be adjusted in minutes using new scroll and enter buttons
- 2 large bright LEDs for output indication can be seen easily from all angles
- Stainless steel construction designed to last in harsh environments

New generation pressure switches



NEW! ifm has provided reliable pressure monitoring for pneumatic and hydraulic applications for more than 20 years.

ifm now introduces the next generation pressure sensor, the PN7 Series, with enhanced features that provide more flexibility in adapting the product to fit your pressure application.

ifm pressure switches are a solid state alternative to mechanical pressure switches. Because there are no moving parts to jam or break, ifm pressure switches eliminate the maintenance headaches of mechanical switches.

The PN7 family now incorporates the best combination of over pressure, burst pressure and long term stability for each measuring range. The technology allows for use in high pressure gas applications as well as liquid applications. Encased in a stainless steel housing, these switches can withstand extreme shock and vibration and provide high accuracy and reliability for most pressure applications.

Through innovative design technology and features that make the switch easy to implement, ifm once again, sets a new benchmark for price/performance with the new generation PN7 family of products.

Compact, reliable and easy to use!

2-color digital display is easier to see from a distance

Robust 316 stainless steel construction

Laser etched part numbers will not fade for future referencing

Sensor can be rotated 345° for optimum visibility after installation

Large bright LEDs can be seen from all angles indicate output status

Simple pushbutton setup allows the sensor to be parameterized in less than 5 minutes with new scroll and enter buttons

QR code for quick access to technical data and installation instructions

Atmospheric reference is achieved via the electrical connection for high IP67 rating

Available with 5 different process connections, including 1/4" NPT male and female for direct installation. No extra fittings are required.



Position Sensors

Company

Inductive

Capacitive

Cylinder position

Photoelectrics and lasers

Distance, color and contrast

Fiber optics

Motion Control

Speed monitors

Vision Sensors

2D / 3D inspection

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Product + accessory selector


Measuring Range (psi)	Over Pressure / Burst Pressure (psi)	Part No. 1/4" NPT Female Port Size	Part No. 1/4" NPT Male Port Size	Part No. G1/4 BSPP Female Port Size	Part No. G1/4 BSPP Male Port Size	Part No. SAE 7/16-20 Female Port Size	List Price (1-pc.)
Vacuum switches · 2 x PNP / NPN · N.O. / N.C.							
-14.5...14.5	290 / 725	PN7299	PN7699	PN7099	PN7599	—	\$339.00
-14.5...145	1087 / 2175	PN7294	PN7694	PN7094	PN7594	—	\$339.00
Pressure switches · 2 x PNP / NPN · N.O. / N.C.							
0...14.5	145 / 450	PN7297	PN7697	PN7097	PN7597	—	\$339.00
0...36.2	290 / 725	PN7296	PN7696	PN7096	PN7596	—	\$339.00
-14.5...145	1087 / 2175	PN7294	PN7694	PN7094	PN7594	—	\$339.00
0...362	2175 / 5075	PN7293	PN7693	PN7093	PN7593	—	\$339.00
0...1450	4350 / 9400	PN7292	PN7692	PN7092	PN7592	PN7392	\$339.00
0...3620	7250 / 15,950	PN7271	PN7671	PN7071	PN7571	—	\$339.00
0...5800	11,580 / 24,650	PN7270	PN7670	PN7070	PN7570	PN7370	\$339.00
0...8700	11,600 / 36,300	—	—	PN7160	PN7560	—	\$339.00

Optional Accessories

Type	Description	Part No.	List Price (1-pc.)
	G 1/4 BSPP male to 1/4" NPT male adapter	U20172	\$18.00
	G 1/4 BSPP male to 7/16" SAE male adapter	U20171	\$27.00
	Universal angle bracket	E30421	\$7.00
	Conduit adapter	E30062	\$78.00

Cordsets

Type	Description	Part No.	List Price (1-pc.)
	M12 Micro DC (4-pin) 2 m, PUR	EVC001	\$9.95
	M12 Micro DC (4-pin) 5 m, PUR	EVC002	\$13.50
	M12 Micro DC (4-pin) 10 m, PUR	EVC003	\$18.00
	M12 Micro DC (4-pin) 2 m, PUR	EVC004	\$9.95
	M12 Micro DC (4-pin) 5 m, PUR	EVC005	\$13.50
	M12 Micro DC (4-pin) 10 m, PUR	EVC006	\$18.00

 Can't find the right sensor for your application, call 800-441-8246 or visit www.ifm.com/us

Technical Specs

Supply voltage:	18...30 VDC
Maximum load current:	150 mA per output
Medium temperature range:	-13...176 °F (-25...80 °C)
Accuracy of switch point:	< ± 0.5% of full range
Wetted parts:	316 stainless steel, ceramic, Viton™ PN7x71, PN7x70, PN7160, PN7560: 630 stainless steel (1.4542)
Protection rating:	IP67



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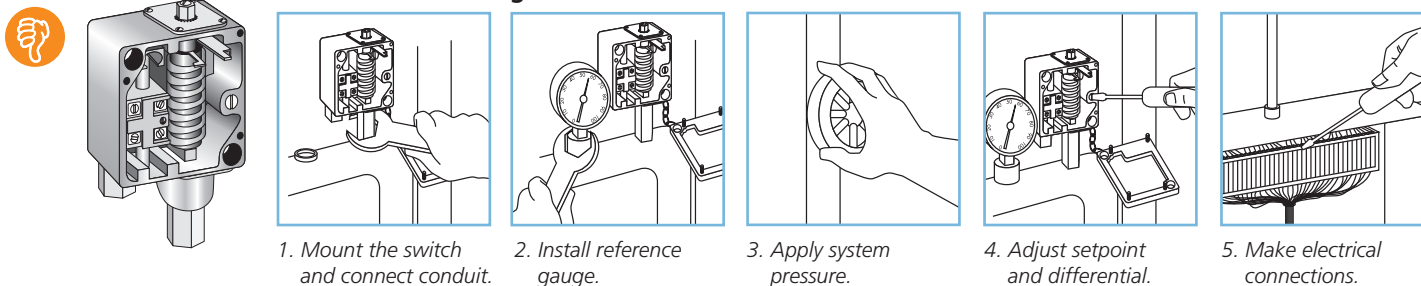


Top five product features!

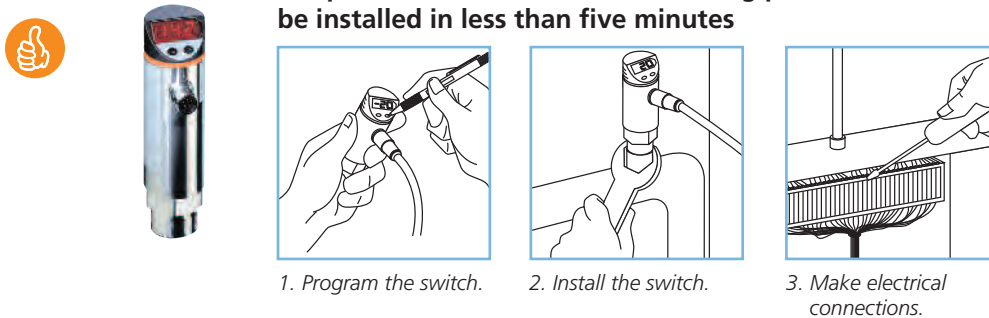
- Simple pushbutton setup allows the switch to be adjusted and mounted in less than 5 minutes
- Ceramic pressure sensor element is more reliable than mechanical switches
- Solid state relay output to switch loads up to 2.5 A
- Integrated built-in display eliminates the need for a reference gauge
- Stainless steel construction designed to last in harsh environments

Customer benefits!

Mechanical pressure switches are not reliable and are time-consuming to install



ifm pressure switches have no moving parts and can be installed in less than five minutes



Position Sensors

Company

Inductive

Capacitive

Cylinder position

Photoelectrics and lasers

Distance, color and contrast

Fiber optics

Motion Control

Speed monitors

Vision Sensors

2D / 3D inspection

Safety Technology

Safety products



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Product + accessory selector

Measuring Range	Display in Steps of	Overload Pressure	Display Units Available	Port Size	Part No.	List Price (1-pc.)
Vacuum switches · Solid state relay · N.O. / N.C.						
-30...30 inHg	1 inHg	290 psi	bar, inHg, kPa	1/4" NPT female	PN4229	\$375.00
Pressure switches · Solid state relay · N.O. / N.C.						
0...14.5 psi	0.1 psi	150 psi	mbar, kPa, psi	1/4" NPT female	PN4227	\$375.00
0...36.3 psi	0.1 psi	290 psi	bar, kPa, psi	1/4" NPT female	PN4226	\$375.00
0...145 psi	1 psi	725 psi	bar, kPa, psi	1/4" NPT female	PN4224	\$375.00
0...363 psi	1 psi	1450 psi	bar, MPa, psi	1/4" NPT female	PN4223	\$375.00
0...1450 psi	10 psi	4350 psi	bar, MPa, psi	1/4" NPT female	PN4222	\$375.00
0...3630 psi	10 psi	5800 psi	bar, MPa, psi	1/4" NPT female	PN4221	\$375.00
0...5800 psi	10 psi	8700 psi	bar, MPa, psi	1/4" NPT female	PN4220	\$375.00

Optional Accessories

Type	Description	Part No.	List Price (1-pc.)
	Transparent protective cover	E30006	\$8.00
	1/4" NPT male to 1/4" NPT male adapter	U30039	\$10.00
	Mounting clamp	E10077	\$9.00
	Conduit adapter	E30062	\$78.00

Cordsets

Type	Description	Part No.	List Price (1-pc.)
	1/2" Micro AC (5-pin), 4 m, PUR	E18026	\$32.00
	1/2" Micro AC (5-pin), 4 m, PUR	E18027	\$32.00

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Technical Specs

Supply voltage:	90...250 VAC
Maximum load current:	2.5 A @ 68°F / 0.25 A @ 158 °F
Current consumption:	<10 mA
Voltage drop:	<2 V
Medium temperature range:	-13...176 °F (-25...80 °C)
Accuracy of switch point:	< ± 1% of full range
Repeatability:	< ± 0.1% of full range
Wetted parts:	303 stainless steel, ceramic, Viton™
Protection rating:	IP67 (363 psi / 25 bar ranges and lower: IP65)

R&D that delivers solutions



ifm R&D engineers design products that reduce machine downtime, increase productivity and simplify installation.

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Pressure

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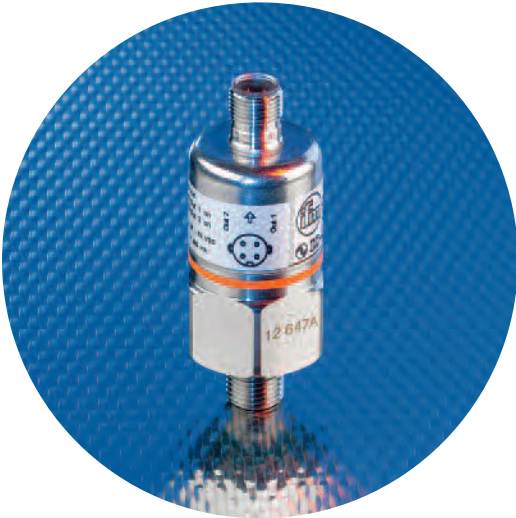
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Top five product features!

- Ceramic sensing element provides high burst / over pressure protection and exceptional reliability
- Robust stainless steel housing
- Repeatability 0.15% of full range
- Ideally suited for hydraulic applications and applications subjected to pressure spikes
- No compromise in performance at a great price

Compact size fits easily in applications with limited mounting space

The compact PX pressure transmitter provides an analog output for reliable pressure indication. Pressure transmitter output options include 4...20 mA and 0...10 V.

PX pressure transmitters are an ideal alternative to mechanical piston pressure transmitters. The transmitters feature a ceramic measuring cell that reliably detects line pressure and withstands aggressive media.

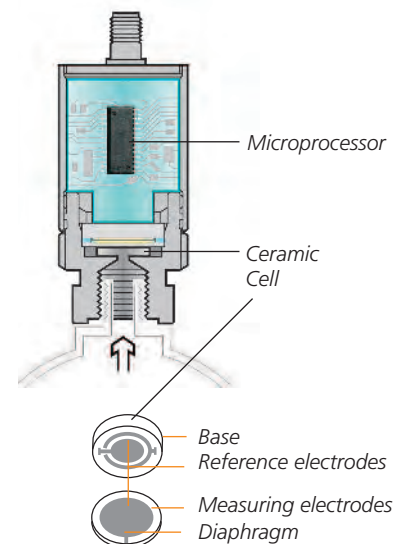


Capacitive sensing technology using ceramic measuring cells

The most important element of the capacitive sensing technology is the ceramic pressure measuring cell made of aluminum oxide (Al_2O_3).

After assembly, the ceramic cell element resembles a plate capacitor with a reference electrode and measuring electrode placed 10 μm apart. The capacitance is inversely proportional to the distance between the electrodes. If the distance changes by a small value because of an increase in pressure applied to the cell, the capacitance changes proportionately. This signal is then processed by a microprocessor.

Accurate and reliable




Position Sensors							Motion Control	Vision Sensors	Safety Technology
Company	Inductive	Capacitive	Cylinder position	Photoelectrics and lasers	Distance, color and contrast	Fiber optics	Speed monitors	2D / 3D inspection	Safety products
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Product + accessory selector

Output	Fixed Analog Range	Overpressure Limit	Port Size	Part No.	List Price (1-pc.)
4...20 mA	-14.5...0 psi	145 psi	1/4" NPT male	PX3229	\$199.00
4...20 mA	0...100 inH ₂ O	4015 inH ₂ O	1/4" NPT male	PX3228	\$199.00
4...20 mA	0...5 psi	145 psi	1/4" NPT male	PX3238	\$199.00
4...20 mA	0...15 psi	145 psi	1/4" NPT male	PX3227	\$199.00
4...20 mA	0...20 psi	145 psi	1/4" NPT male	PX3237	\$199.00
4...20 mA	0...30 psi	290 psi	1/4" NPT male	PX3226	\$199.00
4...20 mA	0...100 psi	1087 psi	1/4" NPT male	PX3224	\$199.00
4...20 mA	0...150 psi	1087 psi	1/4" NPT male	PX3244	\$199.00
4...20 mA	0...200 psi	1087 psi	1/4" NPT male	PX3234	\$199.00
4...20 mA	0...250 psi	2175 psi	1/4" NPT male	PX3233	\$199.00
4...20 mA	0...500 psi	2175 psi	1/4" NPT male	PX3223	\$199.00
4...20 mA	0...1000 psi	4350 psi	1/4" NPT male	PX3222	\$199.00
4...20 mA	0...3000 psi	5800 psi	1/4" NPT male	PX3111	\$199.00
4...20 mA	0...5000 psi	11,600 psi	1/4" NPT male	PX3220	\$199.00
0...10 V	-14.5...0 psi	145 psi	1/4" NPT male	PX9119	\$199.00
0...10 V	0...100 inH ₂ O	4015 inH ₂ O	1/4" NPT male	PX9118	\$199.00
0...10 V	0...15 psi	145 psi	1/4" NPT male	PX9117	\$199.00
0...10 V	0...30 psi	290 psi	1/4" NPT male	PX9116	\$199.00
0...10 V	0...100 psi	1087 psi	1/4" NPT male	PX9114	\$199.00
0...10 V	0...200 psi	1087 psi	1/4" NPT male	PX9134	\$199.00
0...10 V	0...1000 psi	4350 psi	1/4" NPT male	PX9112	\$199.00
0...10 V	0...3000 psi	5800 psi	1/4" NPT male	PX9111	\$199.00
0...10 V	0...5000 psi	11,600 psi	1/4" NPT male	PX9110	\$199.00

Optional Accessories

Type	Description	Part No.	List Price (1-pc.)
	Mounting clamp	E10077	\$9.00

Cordsets

Type	Description	Part No.	List Price (1-pc.)
	M12 Micro DC (4-pin) 2 m, PUR	EVC001	\$9.95
	M12 Micro DC (4-pin) 5 m, PUR	EVC002	\$13.50
	M12 Micro DC (4-pin) 10 m, PUR	EVC003	\$18.00
	M12 Micro DC (4-pin) 2 m, PUR	EVC004	\$9.95
	M12 Micro DC (4-pin) 5 m, PUR	EVC005	\$13.50
	M12 Micro DC (4-pin) 10 m, PUR	EVC006	\$18.00

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Technical Specs

Supply voltage: PX3: 9.6...32 VDC; PX9: 16...32 VDC
 Max. load for PX3: [(supply voltage - 9.6) x 50] Ω; 720 Ω at 24 VDC
 Min. load for PX9: 2000 Ω
 Medium temperature range: -13...194 °F (-25...90 °C)
 Accuracy: < ± 0.75% of full range
 Repeatability: < ± 0.15% of full range
 Wetted parts: 303 stainless steel, ceramic, Viton™
 Protection rating: IP68 / IP69K (363 psi / 25 bar ranges and lower: IP65)


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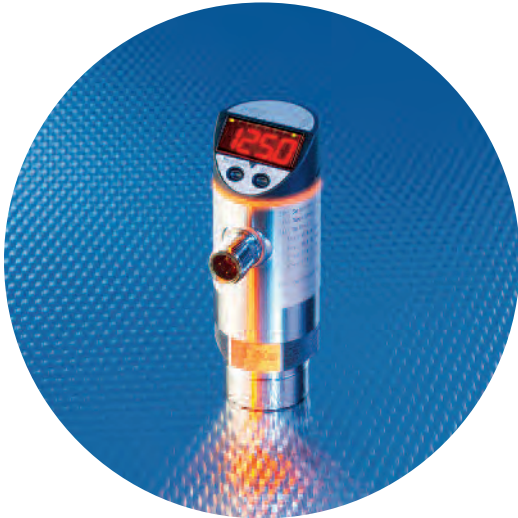
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Top five product features!

- Simple pushbutton setup allows the sensor to be configured in less than 5 minutes
- Ceramic pressure sensor element is more reliable than mechanical switches
- Each transmitter has multiple outputs including scaleable analog for flexibility
- Integrated 4-digit display eliminates the need for a reference gauge
- Stainless steel construction is designed to last in harsh environments

PN Series: A switch / transmitter with numeric display



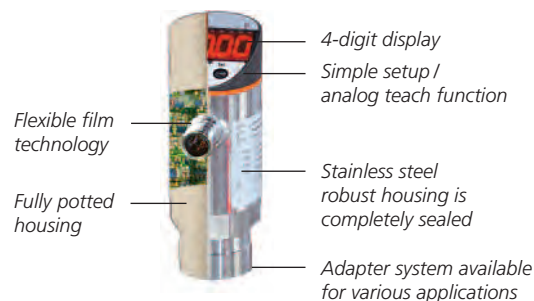
ifm offers the PN Series of pressure and vacuum transmitters for hydraulic and pneumatic applications. Simple pushbutton setup allows the sensor to be parameterized and mounted in less than 5 minutes.











The transmitter's numeric display provides an accurate readout of system pressure and switch setpoints. Vacuum transmitters provide an accurate readout of increases and decreases in vacuum systems. Stainless steel construction enables the sensor to last in harsh environments.

- Ceramic pressure sensor element is more reliable than mechanical switches.
- Integrated built-in display eliminates the need for a reference gauge.



The PN pressure sensor monitors line pressure in a pipe and provides 4-digit numeric indication.







Company	Position Sensors						Motion Control	Vision Sensors	Safety Technology
	Inductive	Capacitive	Cylinder position	Photoelectrics and lasers	Distance, color and contrast	Fiber optics	Speed monitors	2D / 3D inspection	Safety products
									
1 - 7	10 - 47	48 - 53	54 - 59	60 - 91	92 - 97	98 - 103	106 - 109	112 - 125	128 - 141





Product + accessory selector

Measuring Range	Display in steps of	Scaleable Analog Start Point	Scaleable Analog End Point	Overload Protection	Display Units Available	Part No. 1/4" NPT Female Port Size	Part No. G1/4 BSPP Female Port Size	List Price (1-pc.)
Vacuum transmitters • 4-20 mA / 0-10 V and PNP / NPN or 2 x PNP / NPN • N.O. / N.C.								
-29.4...29.5 inHg	0.1 inHg	-29.4...14.8 inHg	-14.6...29.5 inHg	290 psi	mbar, psi, kPa, inHg, inH ₂ O	PN2209	PN2009	\$465.00
-14.5...145.0 psi	0.2 psi	-14.6...49.4 psi	25.4...145.0 psi	1087 psi	bar, psi, kPa	PN2224	PN2024	\$465.00
-14.5...362.5 psi	0.5 psi	-14.5...145.0 psi	76.0...362.5 psi	1450 psi	bar, psi, MPa	PN2223	PN2023	\$465.00
Pressure transmitters • 4-20 mA / 0-10 V and PNP / NPN or 2 x PNP / NPN • N.O. / N.C.								
-5...100.4 inH ₂ O	0.2 inH ₂ O	-5...40.2 inH ₂ O	20.2...100.4 inH ₂ O	4000 inH ₂ O	mbar, inH ₂ O, kPa, mmWS	PN2228	PN2028	\$465.00
-0.74...14.50 psi	0.02 psi	-0.74...5.80 psi	3.64...14.50 psi	145 psi	mbar, psi, kPa, inH ₂ O	PN2227	PN2027	\$465.00
-1.45...36.25 psi	0.05 psi	-1.80...14.50 psi	7.25...36.25 psi	290 psi	bar, psi, kPa	PN2226	PN2026	\$465.00
-14.5...145.0 psi	0.2 psi	-14.6...49.4 psi	25.4...145.0 psi	1087 psi	bar, psi, kPa	PN2224	PN2024	\$465.00
-14.5...362.5 psi	0.5 psi	-14.5...145.0 psi	76.0...362.5 psi	1450 psi	bar, psi, MPa	PN2223	PN2023	\$465.00
0...1450 psi	2 psi	0...580 psi	364...1450 psi	4350 psi	bar, psi, MPa	PN2222	PN2022	\$465.00
0...3625 psi	5 psi	0...1450 psi	905...3625 psi	5800 psi	bar, psi, MPa	PN2221	PN2021	\$465.00
0...5800 psi	10 psi	0...2320 psi	1450...5800 psi	8700 psi	bar, psi, MPa	PN2220	PN2020	\$465.00

Optional Accessories

Type	Description	Part No.	List Price (1-pc.)
	Transparent protective cover	E30006	\$8.00
	G 1/4 BSPP male to 1/4" NPT male adapter	U20172	\$18.00
	G 1/4 BSPP male to 7/16" SAE male adapter	U20171	\$27.00
	1/4" NPT male to 1/4" NPT male adapter	U30039	\$10.00
	Mounting clamp	E10077	\$9.00
	Conduit adapter	E30062	\$78.00

Cordsets

Type	Description	Part No.	List Price (1-pc.)
	M12 Micro DC (4-pin) 2 m, PUR	EVC001	\$9.95
	M12 Micro DC (4-pin) 5 m, PUR	EVC002	\$13.50
	M12 Micro DC (4-pin) 10 m, PUR	EVC003	\$18.00
	M12 Micro DC (4-pin) 2 m, PUR	EVC004	\$9.95
	M12 Micro DC (4-pin) 5 m, PUR	EVC005	\$13.50
	M12 Micro DC (4-pin) 10 m, PUR	EVC006	\$18.00

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Technical Specs

Supply voltage: 20...30 VDC
 Maximum load current: 2 x 250 mA
 Medium temperature range: -13...176 °F (-25...80 °C)
 Accuracy of switch point: < ± 0.5% of full range
 Repeatability: < ± 0.1% of full range
 Wetted parts: 303 stainless steel, ceramic, Viton™
 Analog scaling turndown: 4:1
 Protection rating: IP67 (363 psi / 25 bar ranges and lower: IP65)

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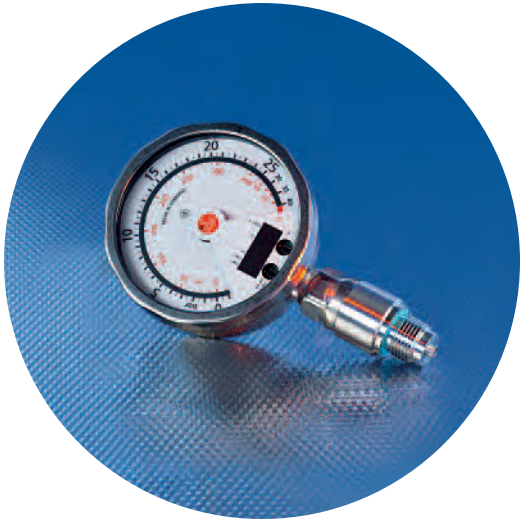
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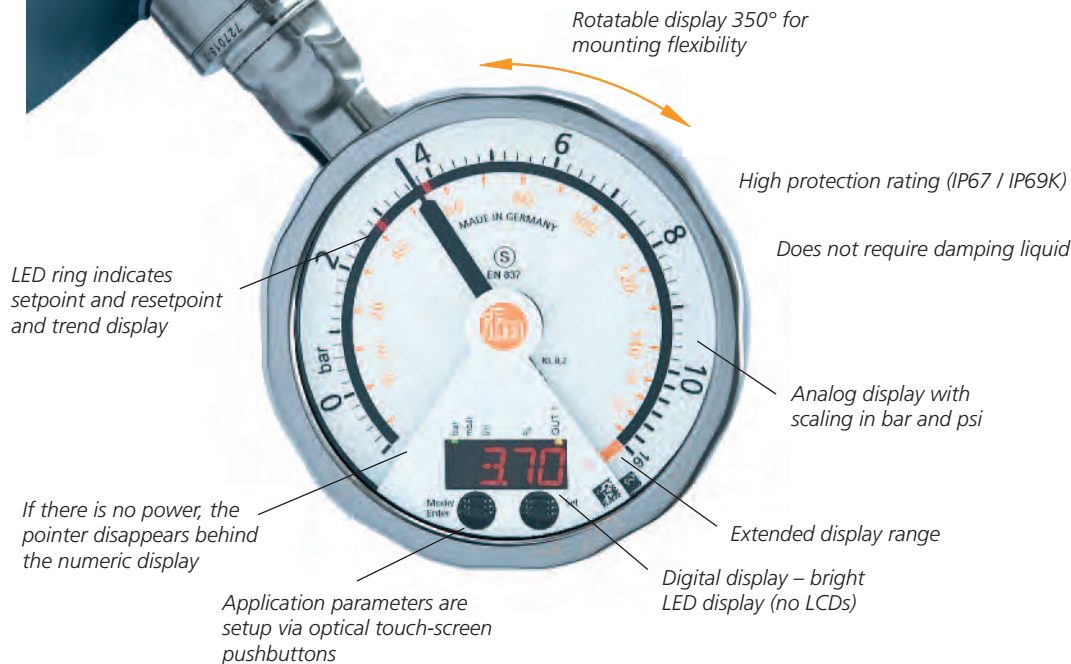
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Top five product features!

- 3-in-1 unit: Transmitter and switch with the advantages of a gauge display
- Gauge display indicates the current operating pressure relative to the overall range
- Pointer does not require damping liquid and is driven by an integrated stepper motor
- Transmitter can be configured in less than 5 minutes using two optical pushbuttons
- Display can be rotated 350 degrees for optimal visibility

PG transmitter features highly visible gauge with the functionality of a pressure sensor



High-precision measurement



ifm's PG Series pressure family offers a 3-in-1 solution for pressure applications. The PG is a transmitter, switch and gauge in a light-weight, stainless steel housing.

Position Sensors

Company

Inductive

Capacitive

Cylinder position

Photoelectrics and lasers

Distance, color and contrast

Fiber optics

Motion Control

Speed monitors

Vision Sensors

2D / 3D inspection

Safety Technology

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Product + accessory selector

Measuring Range	Extended Display Range	Overload Pressure	Scaleable Analog Start Point	Scaleable Analog End Point	Setpoint Range	Port Size	Part No.	List Price (1-pc.)
Vacuum transmitters • 4-20 mA and PNP / NPN • N.O. / N.C.								
-14.5...14.5 psi	23.2 psi	435 psi	-14.5...15.9 psi	-7.2...23.2 psi	-14.4...23.2 psi	G 1/2 BSPP male	PG2409	\$419.00
-14.5...58 psi	93 psi	435 psi	-14.5...78.3 psi	0...92.8 psi	-14.2...92.5 psi	G 1/2 BSPP male	PG2455	\$419.00
-14.4...145 psi	232 psi	725 psi	-14.4...196 psi	22...232 psi	-14...232 psi	G 1/2 BSPP male	PG2454	\$419.00
-14.5...363 psi	580 psi	1450 psi	-14.5...490 psi	76...580 psi	-13...580 psi	G 1/2 BSPP male	PG2453	\$419.00
Pressure transmitters • 4-20 mA and PNP / NPN • N.O. / N.C.								
-2...40 inH ₂ O	64 inH ₂ O	1606 inH ₂ O	-2...54 inH ₂ O	8...64 inH ₂ O	-1.8...64 inH ₂ O	G 1/2 BSPP male	PG2489	\$419.00
-5...100 inH ₂ O	160 inH ₂ O	4015 inH ₂ O	-5...135 inH ₂ O	20...160 inH ₂ O	-4.6...160 inH ₂ O	G 1/2 BSPP male	PG2458	\$419.00
-0.7...14.5 psi	23 psi	145 psi	-0.7...19.6 psi	2.9...23 psi	-0.66...23 psi	G 1/2 BSPP male	PG2457	\$419.00
-1.8...36 psi	58 psi	290 psi	-1.8...48.6 psi	7.6...58 psi	-1.65...58 psi	G 1/2 BSPP male	PG2456	\$419.00
-14.5...58 psi	93 psi	435 psi	-14.5...78.3 psi	0...92.8 psi	-14.2...92.5 psi	G 1/2 BSPP male	PG2455	\$419.00
-14.4...145 psi	232 psi	725 psi	-14.4...196 psi	22...232 psi	-14...232 psi	G 1/2 BSPP male	PG2454	\$419.00
-14.5...363 psi	580 psi	1450 psi	-14.5...490 psi	76...580 psi	-13...580 psi	G 1/2 BSPP male	PG2453	\$419.00
0...1449 psi	2322 psi	4350 psi	0...1959 psi	363...2322 psi	6...2322 psi	G 1/2 BSPP male	PG2452	\$419.00
0...3625 psi	5800 psi	8700 psi	0...5075 psi	725...5800 psi	15...5800 psi	G 1/2 BSPP male	PG2451	\$419.00
0...5800 psi	8700 psi	11,600 psi	0...7250 psi	1450...8700 psi	30...8700 psi	G 1/2 BSPP male	PG2450	\$419.00



Required Accessories

Type	Description	Part No.	List Price (1-pc.)
	G 1/2 BSPP female to 1/2" NPT male adapter	UP0021	\$38.00

Technical Specs

Operating voltage:	18...32 VDC
Maximum load current:	250 mA
Switchpoint accuracy:	<± 0.6%
Switchpoint accuracy in extended display range:	<± 1.5%
Repeatability:	<± 0.1%
Medium temperature:	-13...176 °F (-25...80 °C)
Wetted parts:	316L stainless steel, ceramic, FPM (Viton™)
Analog scaling turndown:	4:1
Protection Rating:	IP67 / IP69K

Cordsets

Type	Description	Part No.	List Price (1-pc.)
	M12 Micro DC (4-pin) 2 m, PUR	EVC001	\$9.95
	M12 Micro DC (4-pin) 5 m, PUR	EVC002	\$13.50
	M12 Micro DC (4-pin) 10 m, PUR	EVC003	\$18.00
	M12 Micro DC (4-pin) 2 m, PUR	EVC004	\$9.95
	M12 Micro DC (4-pin) 5 m, PUR	EVC005	\$13.50
	M12 Micro DC (4-pin) 10 m, PUR	EVC006	\$18.00



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Top five product features!

- Pressure compensation via internally vented cable
- 2-wire connection technology with 4...20 mA analog output
- Stainless steel housing rated IP68 for durability and long-term immersion
- Models available with measuring ranges of 100, 240 and 400 inH₂O
- Good overall accuracy and long-term stability

Submersible pressure transmitter for liquid level applications

ifm's PS3 Series submersible pressure transmitters indicate liquid level measurement in tanks, containers, sumps, wells and river water.

The two-wire, stainless steel transmitter is inserted directly into the medium and provides a 4...20 mA analog output signal. Its watertight, vented polyurethane cable withstands over 220 pounds of strain.

The transmitter measures liquid level through pressure sensing technology. The weight of the liquid creates pressure on the transmitter's measuring element. As the liquid level changes, the output changes. The transmitter's accuracy of 0.5% of full scale and repeatability of 0.1% contribute to the operational reliability of the transmitter.

Models are available with measuring ranges of 100 inH₂O, 240 inH₂O and 400 inH₂O with a variety of cable lengths.

The combination of analog output signal, two-wire technology and various mounting accessories allow easy integration into existing applications.



Level measurement in a water treatment plant





Position Sensors							Motion Control	Vision Sensors	Safety Technology
Company	Inductive	Capacitive	Cylinder position	Photoelectrics and lasers	Distance, color and contrast	Fiber optics	Speed monitors	2D / 3D inspection	Safety products
1 - 7	10 - 47	48 - 53	54 - 59	60 - 91	92 - 97	98 - 103	106 - 109	112 - 125	128 - 141




Product + accessory selector

Fixed Output	Measuring Range	Overload Pressure	Connection	Operating Voltage	Part No.	List Price (1-pc.)
4...20 mA	0...100 inH ₂ O	803 inH ₂ O	PUR cable 5 m	10...30 VDC	PS3208	\$549.00
4...20 mA	0...240 inH ₂ O	1606 inH ₂ O	PUR cable 10 m	10...30 VDC	PS3407	\$599.00
4...20 mA	0...240 inH ₂ O	1606 inH ₂ O	PUR cable 15 m	10...30 VDC	PS3427	\$619.00
4...20 mA	0...240 inH ₂ O	1606 inH ₂ O	PUR cable 30 m	10...30 VDC	PS3607	\$659.00
4...20 mA	0...400 inH ₂ O	2007 inH ₂ O	PUR cable 15 m	10...30 VDC	PS3417	\$619.00
4...20 mA	0...400 inH ₂ O	2007 inH ₂ O	PUR cable 30 m	10...30 VDC	PS3617	\$659.00

Optional Accessories

Type	Description	Part No.	List Price (1-pc.)
	Junction box with ventilation	E30401	\$99.00
	Filter element to protect vent tube in cable	E30400	\$11.00
	Cable clamp	E30399	\$29.00
	Additional weight to stabilize transmitter	E30402	\$63.00

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Technical Specs

Maximum load: [(supply voltage - 10) x 50] Ω; 700 Ω at 24 VDC
 Medium temperature range: 14...122 °F (-10...50 °C)
 Accuracy: <± 0.5% of full range
 Repeatability: <± 0.1% of full range
 Wetted parts: 316 stainless steel
 Protection rating: IP68



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