



The right choice for your application

Pressure sensors from ifm

Automation solutions from ifm

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ifm.com/gb/pressure

Systems for pressure monitoring

The optimum solution for every requirement



Contents

	Sensor type	Measuring range [bar]	Medium temperature [°C]	Integrated temperature measurement	Hydraulic applications	Shipbuilding (DNV-GL approval)	Applications				
							Machine tools	Hydrous media	Gaseous media	Viscous media and media containing solids	
With display for industrial applications	PN	-1...600	-25...80		✓	✓ ¹⁾	✓	✓	✓		4 – 7
	PE	-1...250	-25...80			✓	✓	✓			
	PG24	-1...400	-25...80		✓		✓	✓			
Without display for industrial applications	PA	-1...600	-25...90		✓		✓	✓			8 – 11
	PK	0...400	-25...80		✓		✓		✓		
	PT/PU	-1...600	-40...90 ⁴⁾		✓	✓ ²⁾	✓		✓		
	PS	0...1	-10...85			✓ ³⁾	✓				
	PV	-1...600	-40...90	✓	✓		✓		✓		
Flush for industrial applications	PL54	0...400	-25...90				✓	✓		✓	12 – 13
	PL15	-1...160	-25...110	✓			✓	✓		✓	
For pneumatic applications	PQ3	-1...10	0...60				✓		✓		14 – 15
	PQS/PQC	-1...16	0...60				✓		✓		
For mobile applications	PT/PU	0...600	-40...125		✓				✓		16 – 17
With display for hygienic applications	PG27/28	-1...25	-25...125					✓	✓	✓	18 – 19
	PI	-1...100	-25...150/200	✓				✓	✓	✓	
Without display for hygienic applications	PM	-1...100	-25...150	✓				✓	✓	✓	20 – 21
Process adapters and mounting accessories for pressure sensors											22 – 23

1) PN2xxx 2) PTxxx 3) PS3xxA 4) PT50xx: -40...125 °C

5 YEARS
Warranty
on ifm products

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For more articles see
ifm.com

With display for industrial applications

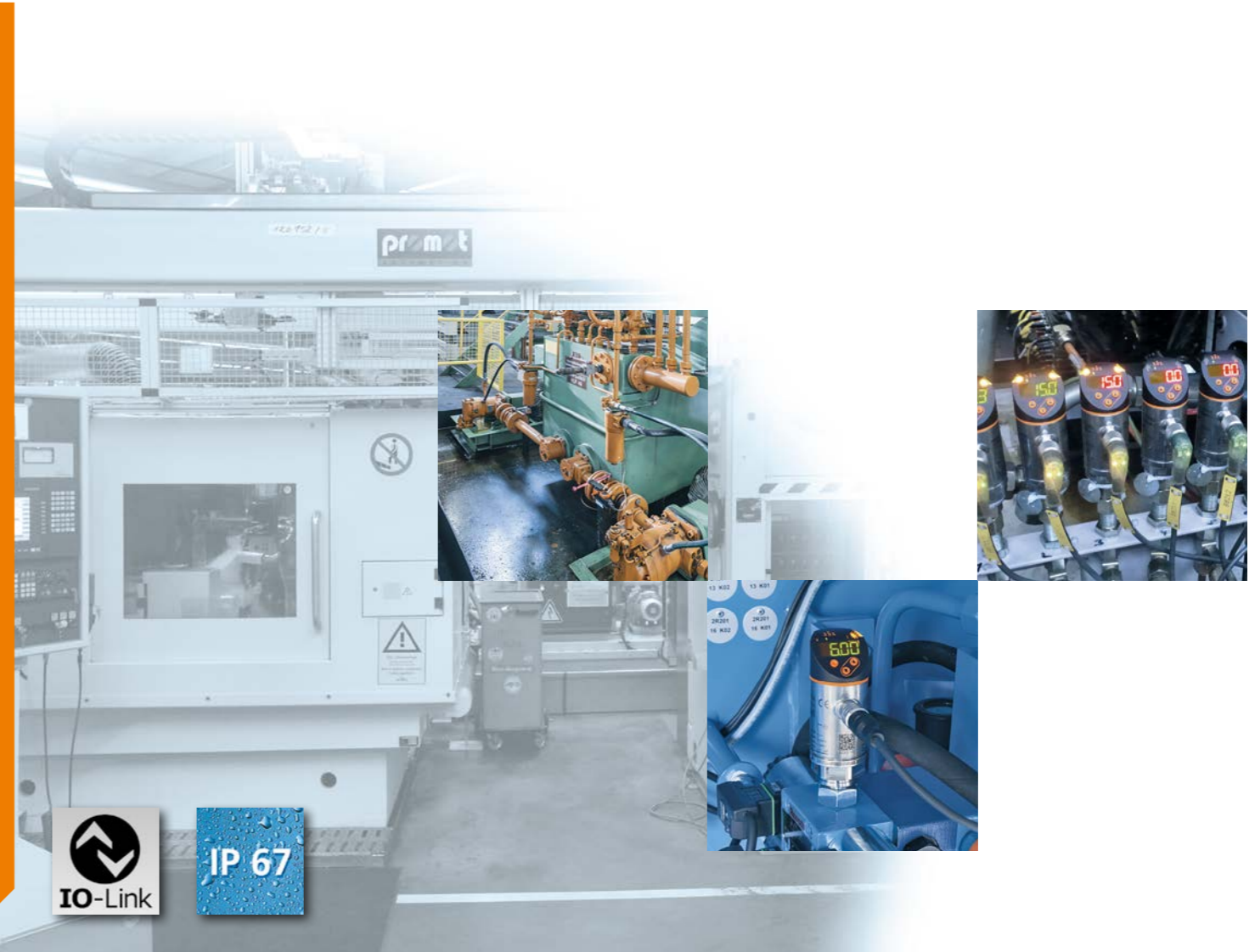
Robust:
The ideal measuring cell for every pressure range.

Red/green ranges:
"Good ranges" or switching states can be identified quickly via the display colour.

Quick setting:
Easy to use to VDMA standard via 3 pushbuttons.

Optimum orientation:
Process connection rotatable by approx. 345°.

Universal application areas:
High overload protection and protection rating IP67 in pressure ranges of -1...600 bar.



Pressure sensor type PN
FKM seal for hydraulic applications.



Factory setting measuring range relative pressure [bar]	Process connection /order no.				Process connection /order no.	
	G 1/4 female	G 1/4 male	G 1/4 female	G 1/4 male	G 1/4 female	G 1/4 male
	2 switching outputs		1 switching output and 1 analogue output 4...20 mA / 0...10 V		2 switching outputs or 1 switching output and 1 analogue output 4...20 mA / 0...10 V, scalable	
Metal measuring cell						
0...600	PN7160	PN7560	PN3160	PN3560	PN2160	PN2560
0...400	PN7070	PN7570	PN3070	PN3570	PN2070	PN2570
0...250	PN7071	PN7571	PN3071	PN3571	PN2071	PN2571
Ceramic-capacitive measuring cell						
0...160	PN7012	PN7512			PN2012	PN2512
0...100	PN7092	PN7592	PN3092	PN3592	PN2092	PN2592
0...40	PN7043	PN7543			PN2043	PN2543
0...25	PN7093	PN7593	PN3093	PN3593	PN2093	PN2593
0...16	PN7014	PN7514			PN2014	PN2514
0...10	PN7094	PN7594	PN3094	PN3594	PN2094	PN2594
0...6	PN7015	PN7515			PN2015	PN2515
0...2.5	PN7096	PN7596	PN3096	PN3596	PN2096	PN2596
0...1	PN7097	PN7597	PN3097	PN3597	PN2097	PN2597
0...0.25					PN2098	PN2598
-1...1	PN7099	PN7599			PN2099	PN2599
-1...0			PN3129	PN3529		

Pressure sensor type PE
EPDM seal for water applications.



Accessories and process adapters:
see pages 22 - 23

Factory setting measuring range relative pressure [bar]	Process connection / order no.	
	G 1/4 female	G 1/4 male
	2 switching outputs or 1 switching output and 1 analogue output 4...20 mA / 0...10 V, scalable	
Ceramic-capacitive measuring cell		
0...250	PE2091	PE2591
0...100	PE2092	PE2592
0...25	PE2093	PE2593
0...10	PE2094	PE2594
0...2.5	PE2096	PE2596
-1...1	PE2099	PE2599

For NPT type units please go to ifm.com



With display for industrial applications

Robust:
Overload-resistant ceramic-capacitive measuring cells with long-term stability.

Unambiguous:
Digital manometer with clearly visible pointer display and LED ring.

Design:
Stainless steel housing for use in harsh industrial environments.



Pressure sensor type PG

Rotatable display with LED bar graph for switch point indication.

Output functions programmable via LED display and optical touch fields.



Factory setting measuring range relative pressure [bar]	Process connection / order no.
	G 1/2 male
1 switching output and 1 analogue output 4...20 mA / 20...4 mA, scalable	
Indication	bar/psi
0...400	PG2450
0...250	PG2451
0...100	PG2452
0...25	PG2453
0...10	PG2454
0...4	PG2455
0...2.5	PG2456
-1...1	PG2409
0...1	PG2457
0...0.25	PG2458
0...0.1	PG2489

Good to know – select the suitable pressure sensor online.



Scan the QR code and select the sensor according to your application. This will help you to make the right choice.



Accessories and process adapters: see pages 22 - 23

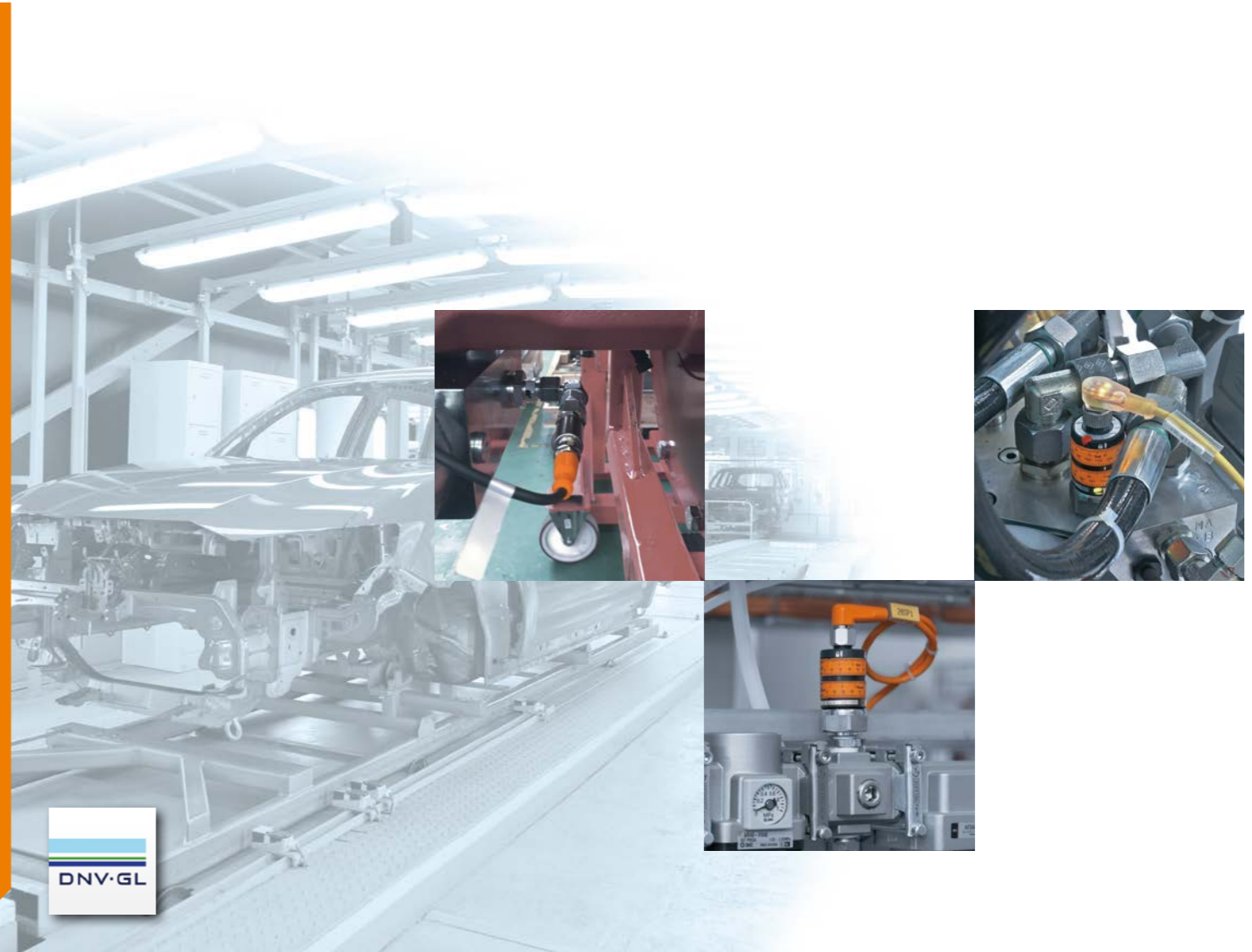
Without display for industrial applications

Space-saving:
Compact sensors and pressure transmitters without display.

Simple:
Pressure transmitters with fixed ranges; pressure sensors to be set via setting ring (type PK) or via IO-Link (type PV).

Focussed:
Ideal for industrial applications, such as hydraulic applications.

Robust:
Stainless steel measuring cell without any seal.



Pressure transmitter type PU / PT

Pressure transmitter with fixed measuring range.

Fast response time of 1 ms.

Stainless steel measuring cell without any seal.



Measuring range relative pressure [bar]	Order no.	Order no.	Order no.
Connector	M12	M12	Valve plug type A
Analogue output	4...20 mA	0...10 V	4...20 mA
0...600	PT5460	PU5460	PT5060
0...400	PT5400	PU5400	PT5000
0...250	PT5401	PU5401	PT5001
0...160	PT5412	PU5412	PT5012
0...100	PT5402	PU5402	PT5002
0...60	PT5423	PU5423	PT5023
0...40	PT5443	PU5443	PT5043
0...25	PT5403	PU5403	PT5003
0...16	PT5414	PU5414	PT5014
0...10	PT5404	PU5404	PT5004
0...6	PT5415	PU5415	PT5015
-1...10	PT5494		



Matching valve plugs E10058 and E30447 at ifm.com

Pressure sensor type PK

Easy switch point adjustment via two setting rings allowing optimum read-out.

Mechanical locking prevents inadvertent switch point manipulation.



Measuring range relative pressure [bar]	Order no.	Order no.	Order no.
	2 x NO	1 x NO	2 switching outputs NC / NO complementary
0...400	PK7520	PK5520	PK6520
0...250	PK7521	PK5521	PK6521
0...100	PK7522	PK5522	PK6522
0...25	PK7523	PK5523	PK6523
0...10	PK7524	PK5524	PK6524

Pressure sensor type PV

Programmable pressure sensor with switching outputs.

Stainless steel measuring cell without any seal. IO-Link.

Type PV8xxx Medium temperature via IO-Link.



Measuring range relative pressure [bar]	Order no.	Order no.
2 x switching outputs, IO-Link		
0...600	PU7060 ¹⁾	PV8060
0...400	PV7000	PV8000
0...250	PV7001	PV8001
0...100	PV7002	PV8002
0...60	PV7023	PV8023
-1...25	PV7003	PV8003
-1...10	PV7004	PV8004

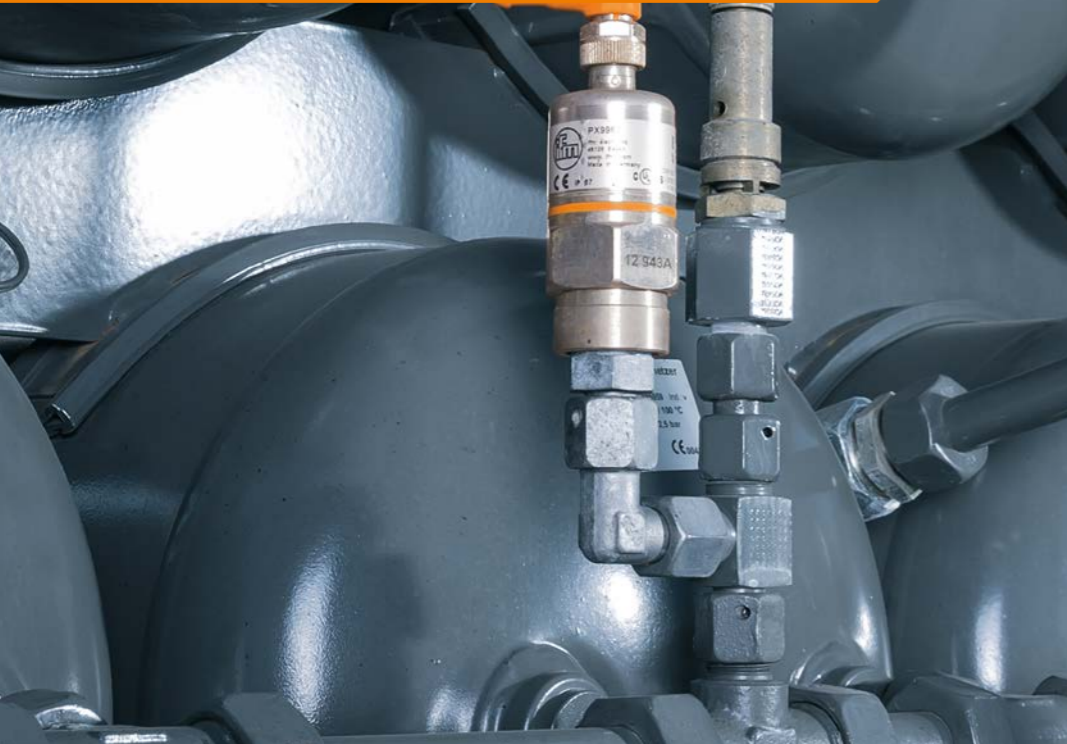
More designs at ifm.com

Without display for industrial applications

Compact:
Pressure transmitters without display and with analogue output.

Robust:
Overload-resistant ceramic-capacitive measuring cells with long-term stability (PA).

Application-specific:
Designs for level measurement (type PS), absolute pressure measurement (type PT05).



Pressure transmitter type PA

Pressure transmitter with fixed measuring range.
High resistance to overload due to ceramic measuring cell.



Measuring range relative pressure [bar]	Process connection /order no.		
	G 1/4 female	G 1/4 male	G 1/4 female
Analogue output	4...20 mA		0...10 V
0...600	PA3060		PA9060
0...400	PA3020	PA3520	PA9020
0...250	PA3021	PA3521	PA9021
0...100	PA3022	PA3522	PA9022
0...25	PA3023	PA3523	PA9023
0...10	PA3024	PA3524	PA9024
0...2.5	PA3026	PA3526	PA9026
-1...1		PA3509	
-1...0	PA3029		PA9029
0...1	PA3027		PA9027
0...0.25	PA3028	PA3528	PA9028
0...0.1		PA3589	

Pressure transmitter type PT

For absolute pressure measurement.
Transmitter with fixed measuring range.
Stainless steel measuring cell without any seal.



Measuring range absolute pressure [bar]	Order no.
Analogue output	4...20 mA
0...10	PT0504
0...4	PT0505
0...1.6	PT0517
0...1	PT0507

Submersible pressure transmitter type PS

For level measurement.
PUR or FEP cable for high resistance to media.
Version with ATEX approval for group I, category M1 and group II, category 1G and 1D.
Pressure compensation via internally vented cable.



Accessories and process adapters:
see pages 22 - 23

Measuring range relative pressure [bar]	Cable [m]	Order no.
For standard applications, CE approval		
0...0.25	PUR, 5	PS3208
0...0.6	PUR, 10	PS3407
0...0.6	PUR, 15	PS3427
0...0.6	PUR, 30	PS3607
0...1	PUR, 15	PS3417
0...1	PUR, 30	PS3617
For high resistance to media, CE approval		
0...0.25	FEP, 5	PS4208
0...0.25	FEP, 10	PS4408
0...0.6	FEP, 10	PS4407
0...0.6	FEP, 20	PS4506
0...1	FEP, 15	PS4417
0...1	FEP, 30	PS4607
For hazardous areas, CE, Ex, GL approvals		
0...0.25	FEP, 5	PS308A
0...0.6	FEP, 10	PS307A
0...1	FEP, 15	PS317A



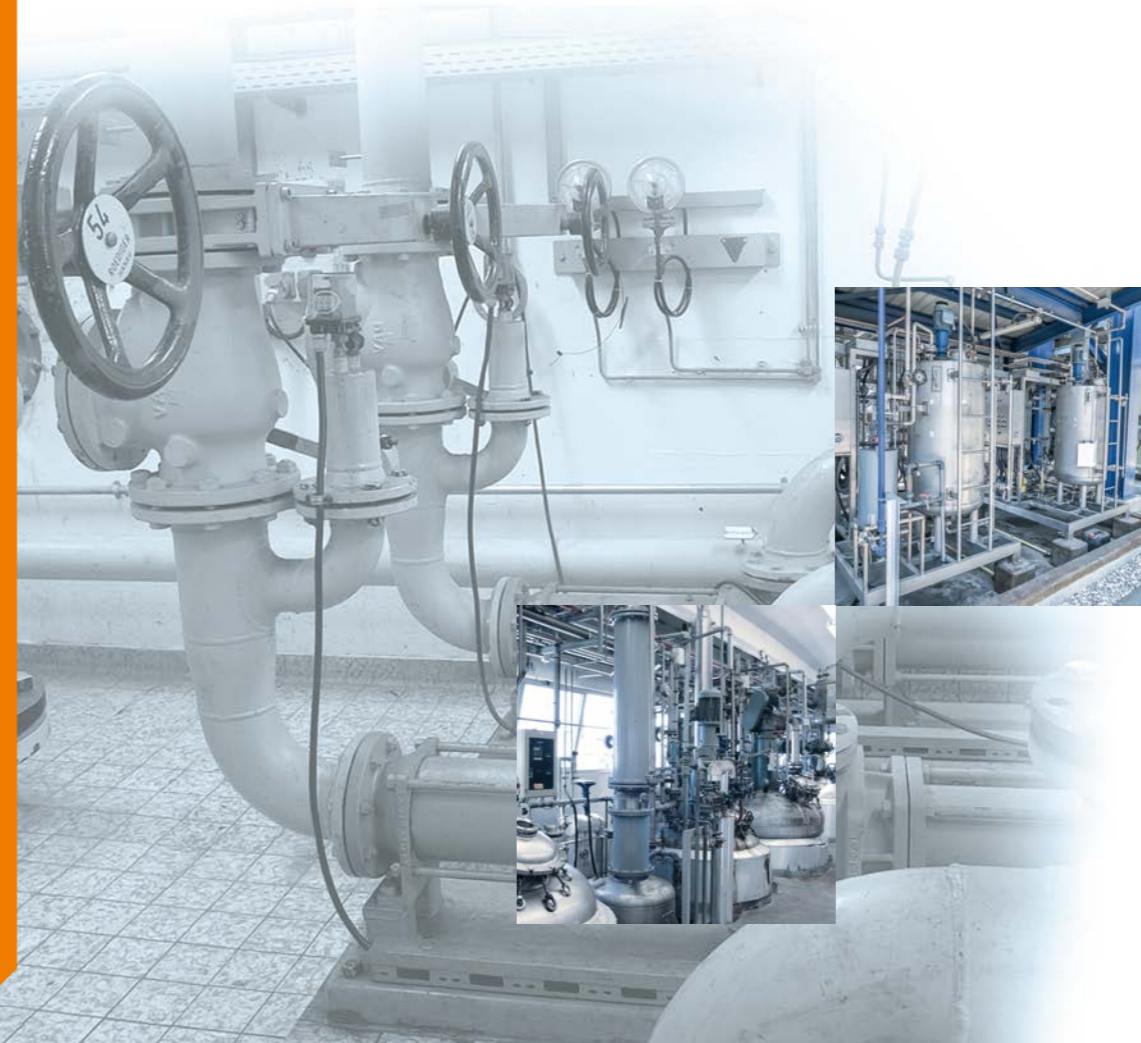
Flush for industrial applications



Compact:
Very slim housing, suitable even for the smallest dosing heads.

Accurate & precise:
High measuring accuracy <math>< \pm 0.5\%</math> and precise repeatability <math>< \pm 0.05\%</math>.

Resistant:
High shock and vibration resistance.



Pressure sensors type PL54
4..20 mA transmitter.
1/4" diaphragm seal technology.



Measuring range relative pressure [bar]	Process connection / order no.
0...400	G 1/4 male PL5400
0...250	PL5401
0...160	PL5412
0...100	PL5402
0...60	PL5423

Pressure sensor type PL15
1/2" ceramic measuring cell.
2/3-wire selection.
Medium temperature transmission via IO-Link.



Factory setting Measuring range relative pressure [bar]	Process connection / order no.
0...160	G 1/2 male PL1512
0...100	PL1502
0...60	PL1523
0...40	PL1543
0...25	PL1503
0...16	PL1514
0...10	PL1504
0...6	PL1515
0...2.5	PL1506

FKM sealing material supplied, EPDM and FFKM under accessories at ifm.com

For pneumatic applications

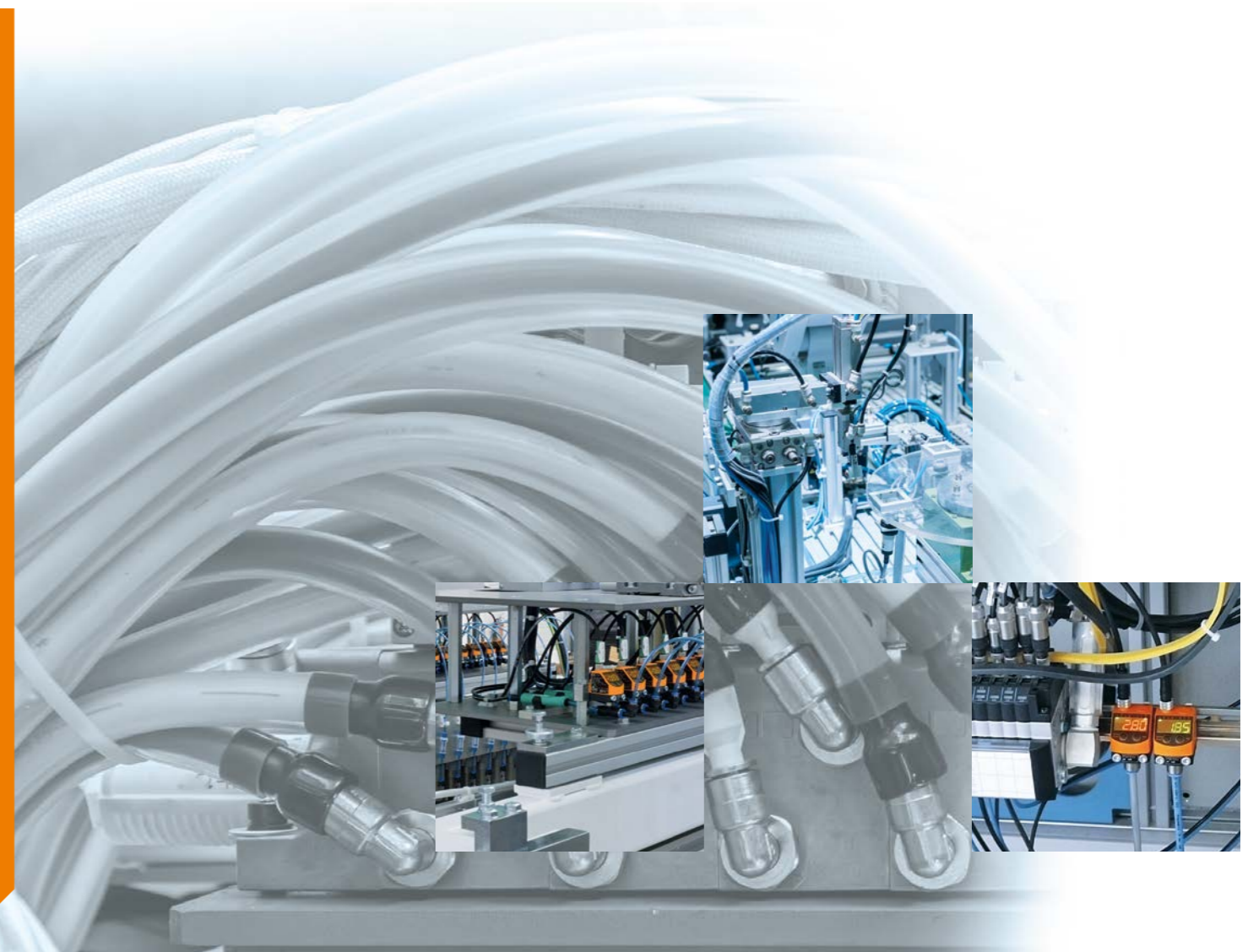


Robust:
Reliable measurement, even if the air quality is not optimal.

Vacuum:
Extremely resistant even to foreign bodies or moisture in the vacuum.

Transparent:
Clearly visible, sloping LED display.

Unambiguous:
Alternating red/green display for clear indication of acceptable ranges.



Pressure sensor type PQ
Differential pressure measurement.
Two-colour LED display for immediate status detection.



Measuring range relative pressure [bar]	Process connection / order no.
	G 1/8
Connector	M8
1 switching output and 1 analogue output 4...20 mA	
-1...10	PQ3834
-1...1	PQ3809

Pressure sensor type PQS, PQC⁴⁾
Full graphic display.
Suitable for front panel mounting.
M8 and M12 variants.
IO-Link Com3.
Analogue output scalable and invertible.



Measuring range* relative pressure [bar]	Process connection / order no.			
	G 1/8	M5	G 1/8	M5
Connector	M8		M8	
	2 switching outputs DC PNP/NPN		1 switching output and 1 analogue output 4...20 mA/0...10 V/1...5 V	
0...16	PQS810	PQS510	PQC810	PQC510
-1...10	PQS812	PQS512	PQC812	PQC512
-1...1	PQS816	PQS516	PQC816	PQC516
-1...0	PQS819	PQS519	PQC819	PQC519

Measuring range* relative pressure [bar]	Process connection / order no.	
	G 1/8	G 1/8
Connector	M12	
	2 switching outputs DC PNP/NPN	1 switching output and 1 analogue output 4...20 mA/0...10 V/1...5 V
0...16	PQS820	PQC820
-1...10	PQS822	PQC822
-1...1	PQS826	PQC826
-1...0	PQS829	PQC829

More designs at ifm.com

4) Available from Q1 2023 *Factory setting

Without display for mobile applications

Compact:
Pressure transmitters without display and with analogue output.

Robust:
Stainless steel measuring cell without any seal; shock and vibration-resistant.

Flexible:
Deutsch, AMP or M12 connector.

Temperature-resistant:
-40...125 °C medium temperature.

Fast:
Response time 2 ms.

Application-specific:
Ideal for use in mobile hydraulic applications.



E1 IP 67
IP 69 K

Pressure transmitter type PT / PU
For mobile applications.



Accessories and process adapters:
see pages 22 - 23

Process connection	Measuring range relative pressure [bar]	Order no.	Order no.	Order no.
Connector		M12	DEUTSCH	AMP
Analogue output 4...20 mA				
G 1/4 male	0...600	PT5560	PT5760	PT5660
	0...400	PT5500	PT5700	PT5600
	0...250	PT5501	PT5701	PT5601
	0...100	PT5502	PT5702	PT5602
	0...25	PT5503	PT5703	PT5603
	0...10	PT5504	PT5704	PT5604
Analogue output 4...20 mA, E1 approval				
G 1/4 male	0...600	PT560E	PT760E	
	0...400	PT500E	PT700E	
	0...250	PT501E	PT701E	
	0...100	PT502E	PT702E	
	0...25	PT503E	PT703E	
	0...10	PT504E	PT704E	

Process connection	Measuring range relative pressure [bar]	Order no.	Order no.	Measuring range relative pressure [bar]	Order no.	Order no.	Order no.	
Connector		M12	DEUTSCH		M12	DEUTSCH	AMP	
Analogue output 0.5...4.5 V				Analogue output 0...10 V				
G 1/4 male	0...600	PU8560	PU8760	0...600		PU5760	PU5660	
	0...400	PU8500	PU8700	0...400		PU5700	PU5600	
	0...250	PU8501	PU8701	0...250		PU5701	PU5601	
	0...160		PU8712	0...100		PU5702	PU5602	
	0...100	PU8502	PU8702	0...25		PU5703	PU5603	
	0...60	PU8523		0...10		PU5704	PU5604	
	0...40		PU8743					
	0...25	PU8503	PU8703					
	0...10	PU8504	PU8704					
	Analogue output 0.5...4.5 V, E1 approval							
	G 1/4 male	0...600	PU560E					
		0...400	PU500E					
0...250		PU501E						
0...100		PU502E						
0...60		PU523E						
0...25		PU503E						
0...10	PU504E							

More technical data and prices?
ifm.com



With display for hygienic applications



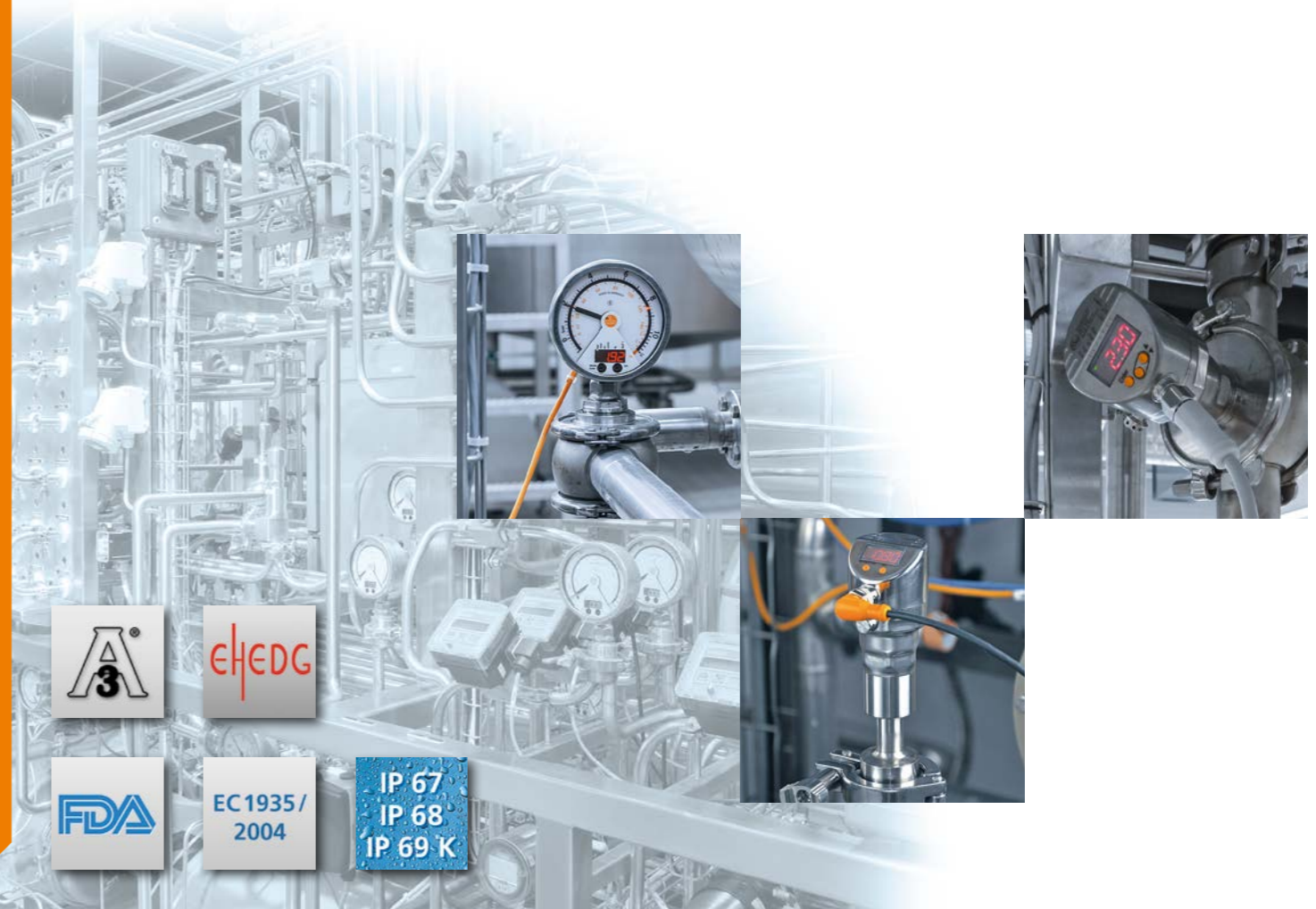
Hygienic:
Ingress resistance, materials and approvals comply with hygienic requirements.

Robust:
Overload-resistant ceramic-capacitive measuring cells with long-term stability.

Versatile:
Variable process connections.

Precise:
High total accuracy of 0.2%.

Suitable for CIP/SIP:
High temperature resistance and electronic temperature compensation.



Type PG pressure sensor

Rotatable display with LED bar graph for switch point indication.

Output functions programmable via LED display and optical touch fields.

Digital manometer with clearly visible pointer display and LED ring.



Factory setting measuring range relative pressure [bar]	Process connection /order no.	
	G 1 male Aseptoflex Vario	G 1 male sealing cone
1 switching output and 1 analogue output 4...20 mA / 20...4 mA, scalable		
Indication	bar/psi	bar/psi
0...25	PG2793	PG2893
0...10	PG2794	PG2894
0...4	PG2795	PG2895
0...2.5	PG2796	PG2896
-1...1	PG2799	PG2899
0...1	PG2797	PG2897
0...0.25	PG2798	PG2898
0...0.1	PG2789	PG2889

Accessories and process adapters: see pages 22 - 23



Pressure sensor type PI1

Programmable analogue output in 2-wire operation.

Medium temperatures up to 150 °C. High 32-bit IO-Link resolution.



Pressure sensor type PI22/PI23

Pressure transmitters with clamp process connection.

Medium temperatures up to 200 °C.



Factory setting measuring range relative pressure [bar]	Process connection /order no.		Process connection /order no.	
	G 1 male Aseptoflex Vario	G 1 male sealing cone	Clamp 1.5" (200°)	Clamp 2" (200°)
1 switching output and 1 analogue output 4...20 mA / 20...4 mA, scalable				
0...100		PI1602		
0...25	PI1703	PI1803	PI2203	PI2303
0...16	PI1714	PI1814		
0...10	PI1704	PI1804	PI2204	PI2304
0...6	PI1715	PI1815		
0...4	PI1705	PI1805	PI2205	PI2305
0...2.5	PI1706	PI1806	PI2206	PI2306
0...1.6	PI1717	PI1817		
-1...1	PI1709	PI1809	PI2209	PI2309
0...1	PI1707	PI1807	PI2207	PI2307
0...0.4	PI1718	PI1818		
0...0.25	PI1708	PI1808		
0...0.1	PI1789	PI1889		



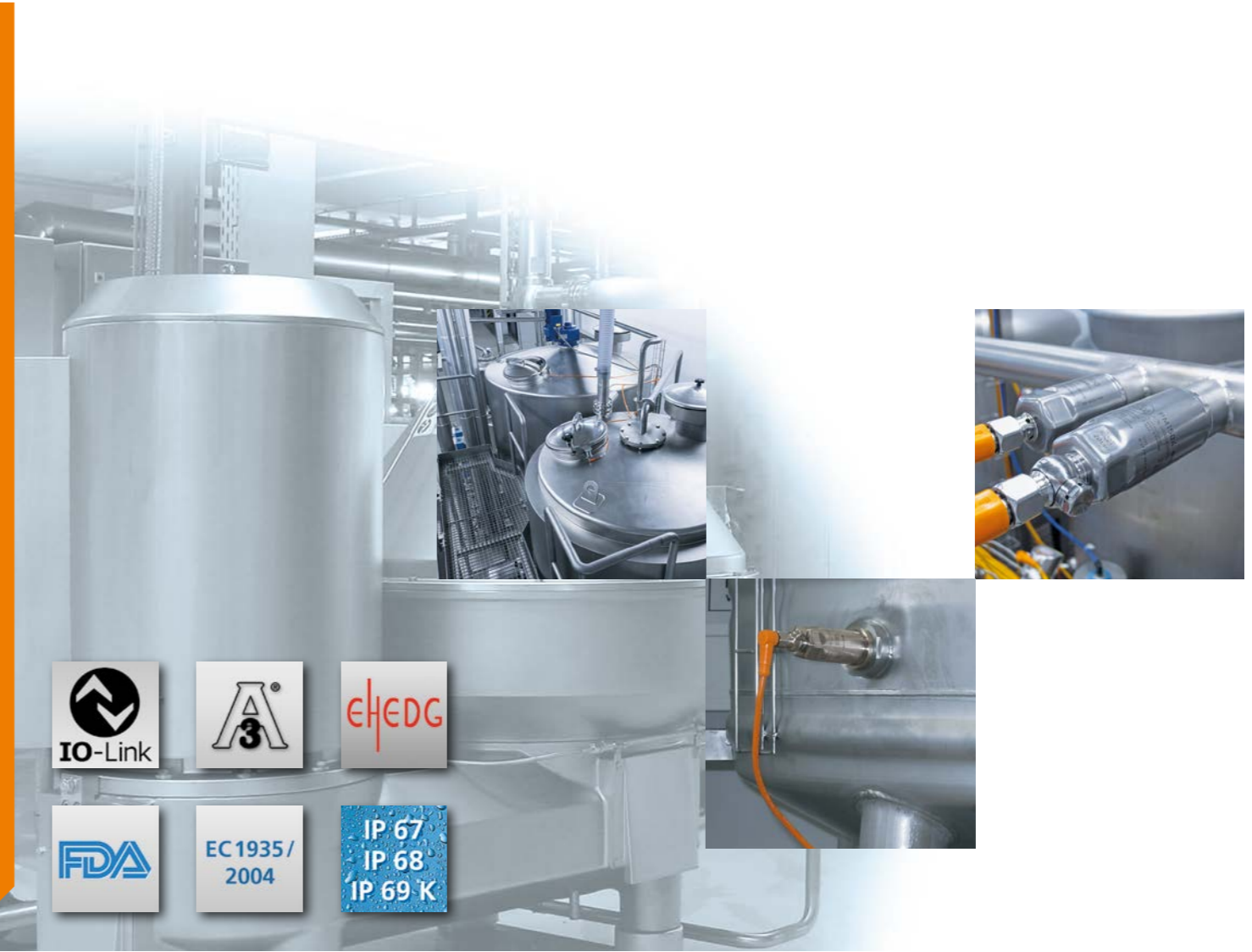
Without display for hygienic applications

Precise and documented:
0.2 % total accuracy documented in a freely downloadable factory calibration certificate.

Hygienic:
Ingress resistance, materials and approvals comply with hygienic requirements.

Robust:
Overload-resistant ceramic-capacitive measuring cells with good long-term stability.

Suitable for CIP/SIP:
High temperature resistance and electronic temperature compensation.



Pressure transmitter type PM
Programmable analogue output.
Accuracy 0.2 %.



Factory setting measuring range relative pressure [bar]	Process connection / order no.		
	G 1 male Aseptoflex Vario	G 1 male sealing cone	TriClamp DN25...DN40 (1...1.5") DIN32676 (ISO 2852)
Analogue output 4...20 mA, scalable			
0...100		PM1602	
0...40			PM1143
0...25	PM1703	PM1603	PM1103
0...16	PM1714	PM1614	PM1114
0...10	PM1704	PM1604	PM1104
0...6	PM1715	PM1615	PM1115
0...4	PM1705	PM1605	PM1105
0...2.5	PM1706	PM1606	PM1106
0...1.6	PM1717	PM1617	PM1117
-1...1	PM1709	PM1609	
0...1	PM1707	PM1607	PM1107
0...0.4	PM1718	PM1618	PM1118
0...0.25	PM1708	PM1608	PM1108
0...0.1	PM1789	PM1689	

Pressure transmitter type PM
First G 1/2 pressure sensor with hygienic approval for easy connection to small pipes.
Accuracy 0.5 %.
Medium temperature via IO-Link.



Factory setting measuring range relative pressure [bar]	Process connection / order no.
	G 1/2 male / sealing cone
Analogue output 4...20 mA, scalable, IO-Link	
0...40	PM1543
0...25	PM1503
0...16	PM1514
0...10	PM1504
0...6	PM1515
0...4	PM1505
0...2.5	PM1506
0...1	PM1507

Accessories description	Order no.
Zero point teach button for PM1xxx	E30425



Accessories and process adapters: see pages 22 - 23



Process adapters and mounting accessories for pressure sensors



Want to find the suitable connector?
ifm.com

Process adapters



Device connection	Process connection	Material	Order no.	For sensor type
Adapters for industrial applications				
G 1/4	G 1/4	high-grade stainless steel (316L / 1.4404) FKM	E30143	PN, PA with internal thread
G 1/4	G 1/2	stainless steel (303/1.4305), FPM (Viton)	E30050	
G 1/4	G 1/2	stainless steel (303/1.4305), FPM (Viton)	E30000	
G 1/4	G 1/2	high-grade stainless steel (316L / 1.4404) FPM (Viton)	E30002	
G 1/4	M20 x 1.5	stainless steel (303/1.4305), FPM (Viton)	E30010	
G 1/4	SAE 7/16-20	high-grade stainless steel (316L / 1.4404) FPM (Viton)	E30087	
G 1/4	1/4" NPT	high-grade stainless steel (320S17 / 1.4571)	E30058	
G 1/4	1/2" NPT	high-grade stainless steel (316L / 1.4404)	E30133	
G 1/4	DN16	stainless steel (304 / 1.4301)	E30065	
G 1/4	R 1/4	1.0718 (12L13)	E30427	
G 1/4	G 1/2	high-grade stainless steel (316Ti / 1.4571) FPM (Viton)	E30135	Sensors with G 1/4" external thread

Accessories



Description	Order no.	For sensor type
Accessories for industrial applications		
Damping screw for PN with G 1/4 internal thread	E30419	PN
Protective cover	E30420	
Angle bracket	E30421	
Label tag	E30422	
Damping screw for sensors with G 1/4 external thread	E30057	PN, PK, PA35xx
Siphon G 1/4	E30140	PK
Siphon G 1/2	E30141	
Protective cover	E30094	PS
Cable clamp fastener	E30399	
Filter element	E30400	PQ
Splitter box with ventilation and terminal block	E30401	
Additional weight	E30402	PQ
Connector QS-G 1/8-6 for standard tube with Ø 6 mm	E30076	
Connector QS-G 1/8-8 for standard tube with Ø 8 mm	E30077	
DIN rail clip	E37340	
Adapter R 1/8 - R 1/8 rotatable	E37350	
Parameter setting tools		
USB IO-Link master	ZZ1060	
Memory plug, parameter memory for IO-Link sensors	E30398	
moneo configure	QMP010	

Process adapters



Device connection	Process connection	Sealing	Order no.	Order no. with leakage port	For sensor type
High-grade stainless steel adapter (316L/1.4435) for hygienic applications					
G 1 male Aseptoflex Vario	clamp 1 - 1.5"	sealing ring	E33201	E33208	PG27xx, PI17xx, PM17xx
		metal to metal	E33701	-	
	clamp 2"	sealing ring	E33202	E33209	
		metal to metal	E33702	-	
	pipe fitting DN32 (1.25")	sealing ring	E33211	-	
		metal to metal	E33711	-	
	pipe fitting DN40 (1.5")	sealing ring	E33212	-	
		metal to metal	E33712	-	
	pipe fitting DN50 (2")	sealing ring	E33213	-	
		metal to metal	E33713	-	
	Varivent type F DN25 (1") D = 50	sealing ring	E33221	E33228	
		metal to metal	E33721	-	
	Varivent type N DN40...DN150 (1.5...6") D = 68	sealing ring	E33222	E33229	
		metal to metal	E33722	-	
	SMS DN40 (1.5")	metal to metal	E33731	-	
SMS DN50 (2")	metal to metal	E33732	-		
DRD flange D65	sealing ring	E33242	-		
universal adapter Rd 52	sealing ring	E33340	-		
DIN11864 DN/OD33.7	sealing ring	E33304	-		
G 1/2	sealing ring	E30131	-		
G 1 male sealing cone	clamp 1 - 1.5"	metal to metal	E33601	-	PG28xx, PI18xx, PM16xx
	pipe fitting DN40 (1.5")	metal to metal	E33612	-	
	Varivent type N DN40...DN150 (1.5...6") D = 68	metal to metal	E33622	-	
High-grade stainless steel welding adapters for hygienic applications					
G 1 male Aseptoflex Vario	welding adapter D50	sealing ring	E30122	E30130	PG27xx, PI17xx, PM17xx
G 1 male sealing cone	welding adapter D50	metal to metal	E30013	-	PG28xx, PI18xx, PM16xx
		sealing ring	E30072	-	
G 1 male sealing cone	welding mandrel		E30435	-	
G 1 male Aseptoflex Vario	welding mandrel		E30452	-	