

Dual Pressure transmitter & switch

Features

- ▶ Measuring ranges: 0...0.2 bar to 0...600 bar gauge (switchable to psi + MPa)
- ▶ Suitable for indoor or outdoor usage
- ▶ max. 2 switch points
- ▶ Analogue output 4 - 20 mA or 0 - 10 V
- ▶ Rotatable 320° display & electrical connection
- ▶ Menu navigation refers to VDMA standard

Applications

- ▶ Machine tool industry
- ▶ Hydraulic & Pneumatic
- ▶ Injection moulding machines
- ▶ Lubrication monitoring

Technical Data

Sensor element:	Ceramic sensor optional: piezoresistive sensor
Materials: Wetted parts:	Stainless steel 1.4301 (304), brass MS58*
Electronics housing: Seals:	Stainless steel V2A (304), PA / PC FKM, EPDM
Operating elements:	3 easy-response pushbuttons
System of protection:	IP65, IP67
Protection class:	III
Electrical connection:	Plug M12 x 1, 4-pin / 5-pin / 8-pin (depending on output code)
Process connection:	see order code
Dimensions:	110 x 41 mm (without plug connector)
Weight:	approx. 300 g
A/D converter: Resolution:	12 bit (4096 steps per measuring span)
Scanning rate:	1000 / s
Linearity error:	< ± 0.5 % v. f. s. at +25 °C
Temperature influence:	TC zero < ±0.2 % FSO / 10K TC span < ±0.3 % FSO / 10K
Compensation range:	-10 °C... +70 °C
Repeatability:	±0.1 % FSO
Temperature range: Medium: Electronics: Storage:	-25 °C... +100 °C -10 °C... +70 °C -30 °C... +80 °C
Power supply:	15... 32 V DC, output code 6: 20... 32 V DC reversed polarity protected (SELV, PELV)
Digital display:	4-digit 14-segment LED display, red, digit height 9 mm
Error display:	LED red and alphanumeric display
Power consumption:	approx. 50 mA (without load) output code 6: approx. 80 mA



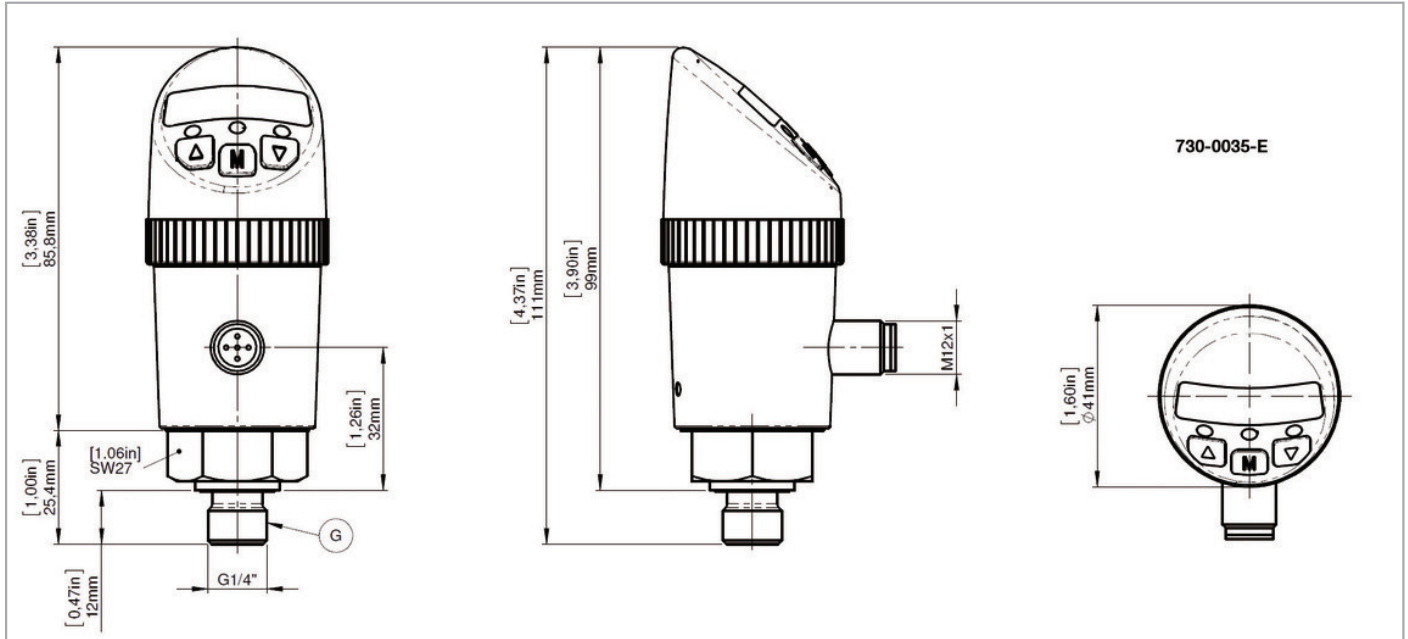
Analog output: Current output: Scanning rate: Voltage output: Rating: Adjustment range:	4...20 mA 2 ms 0...10 V DC max. 10 mA 25 %... 100 % f. s.	
Relay output:	Rel. 1 normally closed, Rel. 2 normally open	
Load:	max. 1A, max. 60V, max. 30W	
Transistor switching outputs PNP:		
Switching function:	Normally open/normally closed, standard / window mode and diagnosis function adjustable	
Adjustment range for switching point and hysteresis:	0 %... 125 % f. s.	
Switching frequency:	max. 100 Hz	
Load	max. 500 mA, short-circuit proof	
Delay	0.0 s ... 50 s adjustable	
Status display(s):	LED(s) red	
Approvals:		
EMV	EN 61000-4-2 ESD	4 kV CD / 8 kV AD
	EN 61000-4-3 HF radiated	10 V/m
	EN 61000-4-4 Burst	2 kV
	EN 61000-4-5-Surge	1/2 kV
	EN 61000-4-6 HF conducted	10 V
Shock resistance	DIN EN 60028-2-27	50 g (11 ms)
Vibrations resistance	DIN EN 60028-2-26	20 g (10...2000 Hz)
cULus (not output code 6)	E42816	

* In the pressure inlet a damping screw made of brass is mounted. This screw can be removed of required, e.g. in case of soiled medium or material incompatibility, using a slotted screw driver (max. width 3 mm). The pressure switch is less resistant to pressure peaks when the damping screw has been removed.

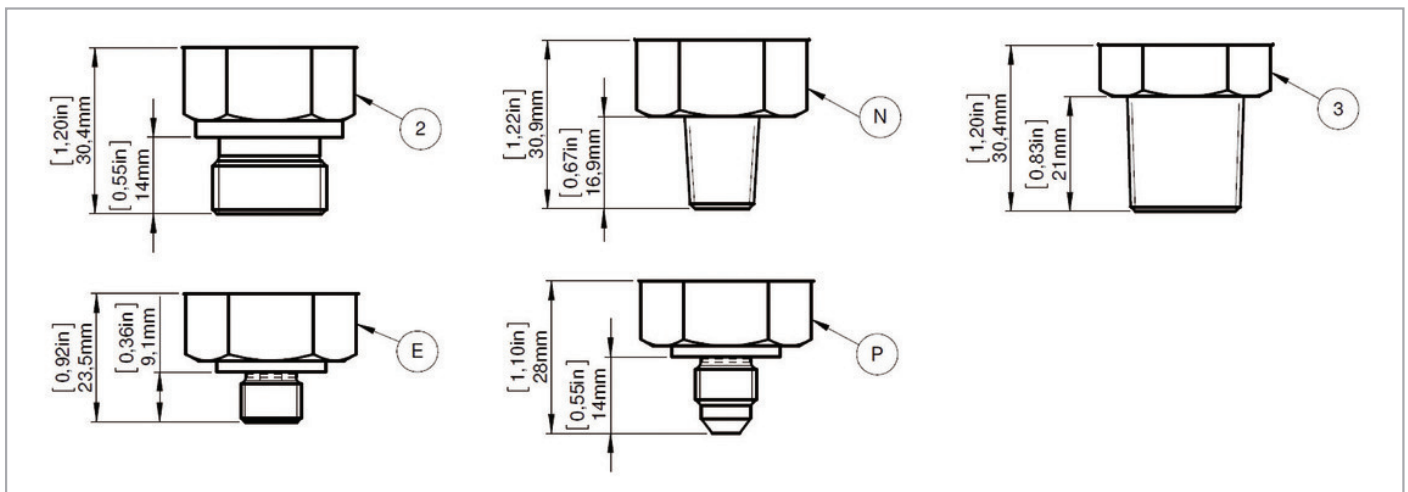
Accessories

Order Number	Description
99-0536-12-05	Plug connector M12 x 1, 5-pin, cable clamp (non solder), straight (IP67)
8824-M12X-03.00ME	Plug connector M12 x 1, 4-pin, with moulded cable, 3m length (IP67)
7000-12241-0250300	Plug connector M12 x 1, 5-pin, with moulded cable, 3m length (IP67)

Dimensions (mm / inch)



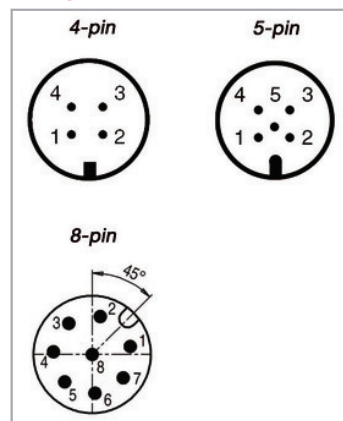
Additional Process Connections



Legend

G	G1/4" Ceramic
N	1/4" NPT Ceramic
2	G1/2" flush diaphragm
3	1/2" NPT flush diaphragm
E	7/16-20 UNF (SAE)
P	7/16-20 UNF (JIC)

Plug



Electrical Connection

Pin	Signal Output Code 1, 7	Signal Output Code 2, 3	Signal Output Code 4, 5, 8	Signal Output Code 6
1	+Ub	+Ub	+Ub	+Ub
2	SP2	Signal	Signal	SP1a
3	0V	0V	0V	SP1b
4	SPI / IO-Link*	SPI	SPI / IO-Link*	0V
5	-	-	SP2	SP2a
6	-	-	-	SP2b
7	-	-	-	-
8	-	-	-	Housing

* Only for ordered output codes 7 or 8

Subject to technical changes.

Order Code

HTPS3000 series

HTPS3	Base Model
Output	
1	2 switch points
2	4...20mA - 1 switch point
3	0...10V - 1 switch point
4	4...20mA - 2 switch points
5	0...10V - 2 switch points
6	2 relay switch points (1 x NO SPST / 1 x NC SPST) (requires piezoresistive sensor / code P)*
7	IO-Link / 2 switch points (PNP, NPN, PP)
8	IO-Link / 2 switch points (PNP, NPN, PP) / Analogue Output
Process Connection	
G	G1/4" ext. thread
2	G1/2" flush diaphr. (requires piezoresistive sensor / code P* / 10-600 bar only)
A	G1/2" ext. thread (adapted)
N	1/4"NPT ext. thread
3	1/2"NPT flush diaphr. (requires piezoresistive sensor / code P* / 10-600 bar only)
I	40x40 Cetop/Manifold - on request
E	7/16"-20 UNF (SAE4) ext. thread
P	7/16"-20 UNF (37° JIC) ext. thread
Sealing	
V	FKM
E	EPDM
Electrical Connection	
M	M12x1
Range	
0 0 0 1 B A	0 - 1 bar absolute (requires piezoresistive sensor / code P)*
0 0 0 5 B A	0 - 5 bar absolute (requires piezoresistive sensor / code P)*
0 0 1 0 B A	0 - 10 bar absolute (requires piezoresistive sensor / code P)*
0 0 . 2 B	0 - 0.2 bar (requires piezoresistive sensor / code P)*
0 0 . 5 B	0 - 0.5 bar (requires piezoresistive sensor / code P)*
0 0 0 1 B	0 - 1 bar (requires piezoresistive sensor / code P)*
0 0 0 2 B	0 - 2 bar (requires piezoresistive sensor / code P)*
0 0 0 5 B	0 - 5 bar (requires piezoresistive sensor / code P)*
0 0 1 0 B	0 - 10 bar
0 0 2 5 B	0 - 25 bar
0 0 5 0 B	0 - 50 bar
0 1 0 0 B	0 - 100 bar
0 2 5 0 B	0 - 250 bar
0 4 0 0 B	0 - 400 bar
0 6 0 0 B	0 - 600 bar (requires piezoresistive sensor / code P)*
Sensor	
Blank	Standard ceramic sensor
P	*Piezoresistive sensor

Example:

HTPS3 **4** **2** **V** **M** **0 2 0 0 B** **P**

Others pressure ranges on request

Special designs on request

Subject to technical changes.