

## 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

<b>Sensor element:</b>	Ceramic sensor optional: piezoresistive sensor
<b>Materials:</b> Wetted parts:	Stainless steel 1.4301(304), brass MS58*
Electronics housing: Seals:	Stainless steel V2A(304), PA /PC FKM, EPDM
<b>Operating elements:</b>	3 easy-response pushbuttons
<b>System of protection:</b>	IP65, IP67
<b>Protection class:</b>	III
<b>Electrical connection:</b>	Plug M12 x 1, 4-pin/5-pin/8-pin (depending on output code)
<b>Process connection:</b>	see order code
<b>Dimensions:</b>	110 x 41 mm (without plug connector)
<b>Weight:</b>	approx. 300g
<b>A/Dconverter:</b> Resolution: Scanning rate:	12 bit (4096steps per measuring span) 1000 /s
<b>Linearity error:</b>	<±0.5% v. f. s. at +25°C
<b>Temperature influence:</b>	TC zero <±0.2% FSO /10K TC span <±0.3% FSO /10K
<b>Compensation range:</b>	-10°C... +70°C
<b>Repeatability:</b>	±0.1% FSO
<b>Temperature range:</b> Medium: Electronics: Storage:	-25°C... +100°C -10°C... +70°C -30°C... +80°C 15... 32V DC,
<b>Power supply:</b>	output code 6: 20... 32V DC reversed polarity protected (SELV, PELV)
<b>Digital display:</b>	4-digit14-segmentLED display, red, digit height 9 mm
<b>Error display:</b>	LED red and alphanumericdisplay
<b>Power consumption:</b>	approx. 50 mA (without load) output code 6: approx. 80mA



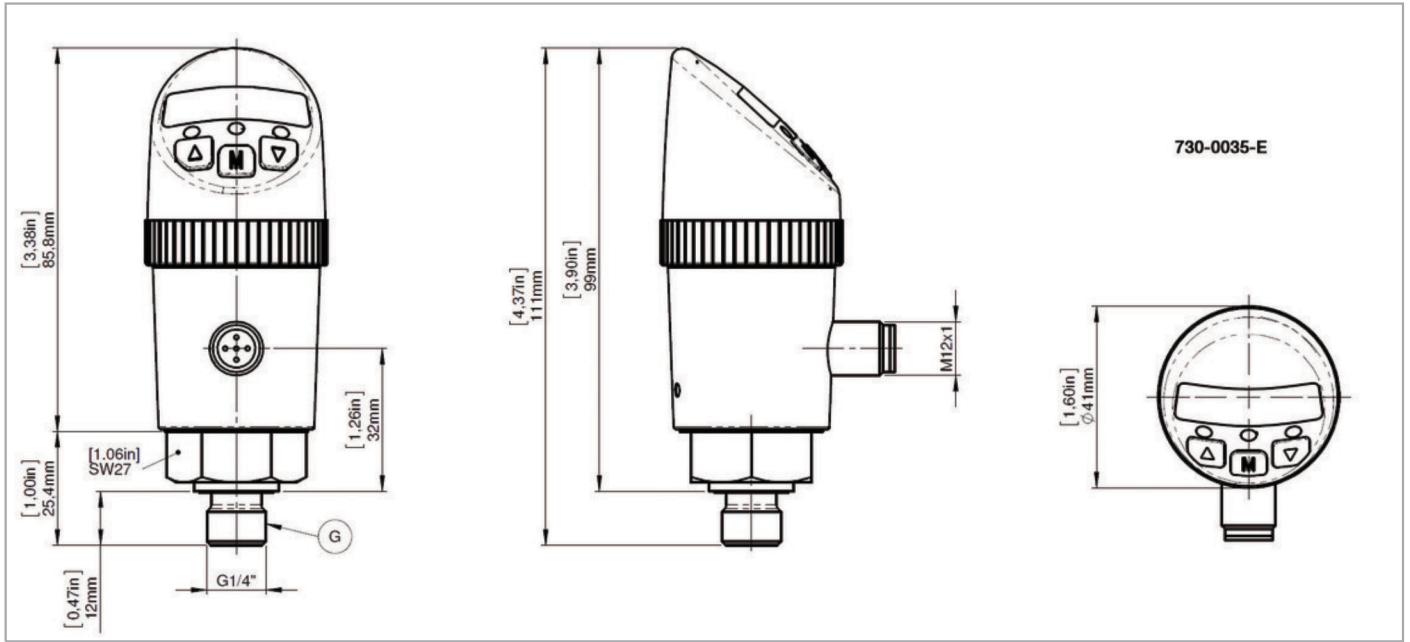
<b>Analog output:</b> Current output: Scanning rate: Voltage output: Rating: Adjustment range:	4...20 mA 2 ms 0...10 V DC max. 10 mA 25%... 100% f. s.	
<b>Relay output:</b>	Rel. 1 normally closed, Rel. 2 normally open	
<b>Load:</b>	Max. 1A, max, 60V, max. 30W	
<b>Transistorswitching outputs PNP:</b>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

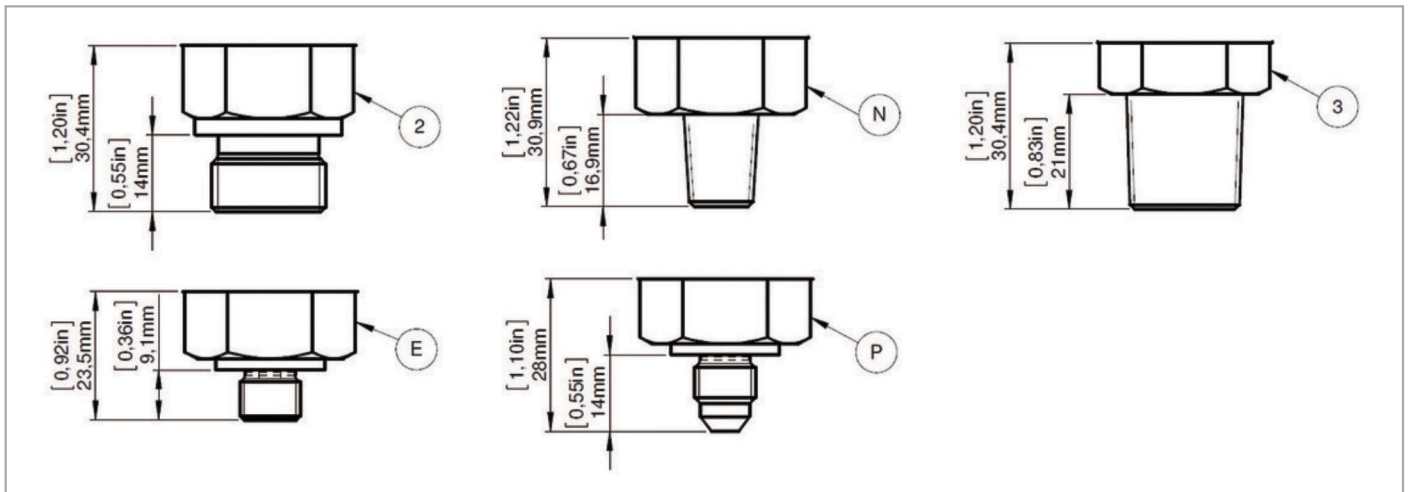
### Accessories

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)**



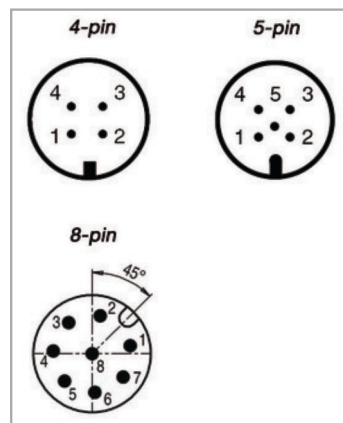
**Additional Process Connections**



**Legend**

G	G1/4" Ceramic
N	1/4" NPT Ceramic
2	G1/2" flush diaphragm
3	1/2" NPT flush diaphragm
E	7/16-20UNF (SAE)
P	7/16-20UNF (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	NC
3	0V	0V	0V	SP1b	
4	SP1 / IO-Link*	SP1	SP1 / IO-Link*	0V	
5	-	-	SP2	SP2a	NO
6	-	-	-	SP2b	
7	-	-	-	-	
8	-	-	-	Housing	

\* Only for ordered output codes 7 or 8

Subject to technical changes.

## Order Code

### HTPS3000 series

<b>HTPS3</b>	Base Model
<b>Output</b>	
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
<b>Process Connection</b>	
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)
1	40x40 Cetop/Manifold - on request
E	7/16"-20 UNF (SAE4) ext. thread
P	7/16"-20 UNF (37° JIC) ext. thread
<b>Sealing</b>	
V	FKM
E	EPDM
<b>Electrical Connection</b>	
M	M12x1
<b>Range</b>	
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)*
<b>Sensor</b>	
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.