

Electr. Dual Pressure Switch

BPS3000

Features

- ▶ Measuring ranges: 0...10 bar to 0...600 bar gauge
- ▶ 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 at 600 bar: only piezoresistive sensor
Materials:	
Wetted parts:	Stainless steel, mat. no. 1.4301
Electronics housing:	Stainless steel, mat. no. V2A, PA
Seals:	FKM
Operating elements:	3 easy-response pushbuttons
System of protection:	IP67
Protection class:	III
Electrical connection:	Plug M12 x 1, 4-pin / 5-pin
Process connection:	G1/4" M, 1/4" NPT, G1/2" flush diaphragm (only piezo.)
Dimensions:	110 x 40 mm (without plug connector)
Weight:	approx. 200 g
Measuring ranges [bar]:	10 50 100 200 400 600
Proof pressure [bar]:	15 75 150 300 600 800
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:	< ±0.2 % v. f. s. / 10K
Compensation range:	-10 °C... +70 °C
Repeatability:	±0.1 % v. f. s.
Temperature range:	
Medium:	-25 °C... +100 °C
Electronics:	-10 °C... +70 °C
Storage:	-30 °C... +80 °C
Power supply:	15... 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)	
Analog output:		
Current output:	4...20 mA	
Scanning rate:	2 ms	
Voltage output:	0...10 V DC	
Rating:	max. 10 mA	
Adjustment range:	25 %... 100 % f. s.	
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 ... 9.9 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	0.5/1 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)

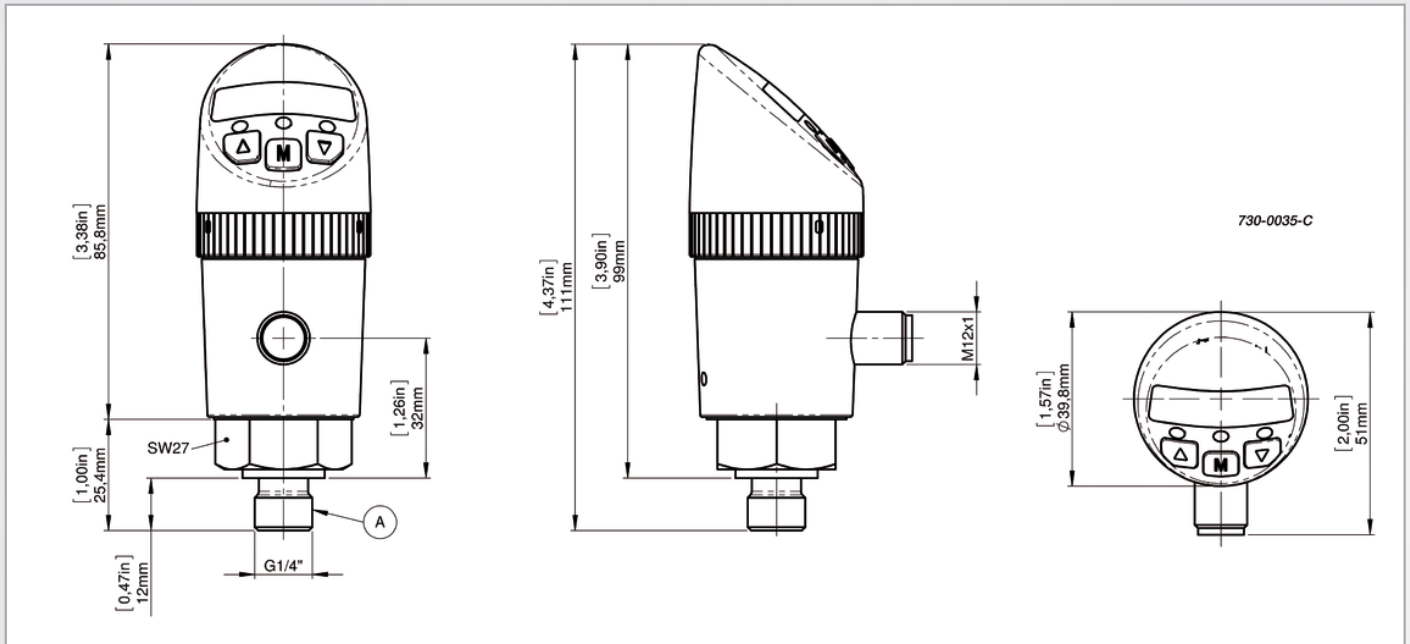
Accessories

Order Number	Description
907-0357	Plug connector M12 x 1, 4-pin, with screw terminals, angled (IP65)
907-0185	Plug connector M12 x 1, 5-pin, with screw terminals (IP65)
908-0361	Plug connector M12 x 1, 5-pin, with sharded cable (IP67)

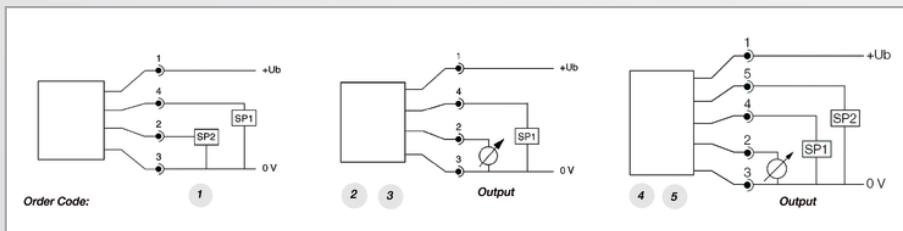
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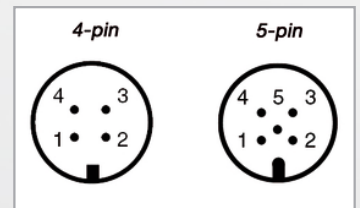
Dimensions (mm / inch)



Connection diagram



Plug



Order Code

BPS	3	X	X	X	X	XXXXX	
							Range
						XXXXB	0...x bar gauge pressure (e.g. 200B = 200Bar)
						XXXXP	0...x PSI gauge pressure (e.g. 3000P = 3000PSI)
							Electrical Connection
						M	M12
							Sealing
						V	FKM
						E	EPDM
							Process Connection
						G	G1/4" male
						2	G1/2" flush diaphragm
						N	1/4" NPT male
							Output
						1	2 switch points
						2	4...20mA 1 switch points
						3	0...10V 1 switch points
						4	4...20mA 2 switch points
						5	0...10V 2 switch points

Process connection

