

Electr. Dual Pressure Switch

Type Switch 2000

Features

7-segment LED display, microprocessor controlled, self monitoring with error display, linearity error 0.5 % f.s., ceramic sensor

All parameters are configured by keypad, adjustable keypad lock, rugged construction, vibration and shock-proof, long-term stability

Measuring ranges

0...10 bar to 0...600 bar gauge

Applications

OEM applications in hydraulic and pneumatic systems, press construction, lubricant monitoring, apparatus engineering, machine/machine tool industry, automobile industry, injection molding machines



Technical Data

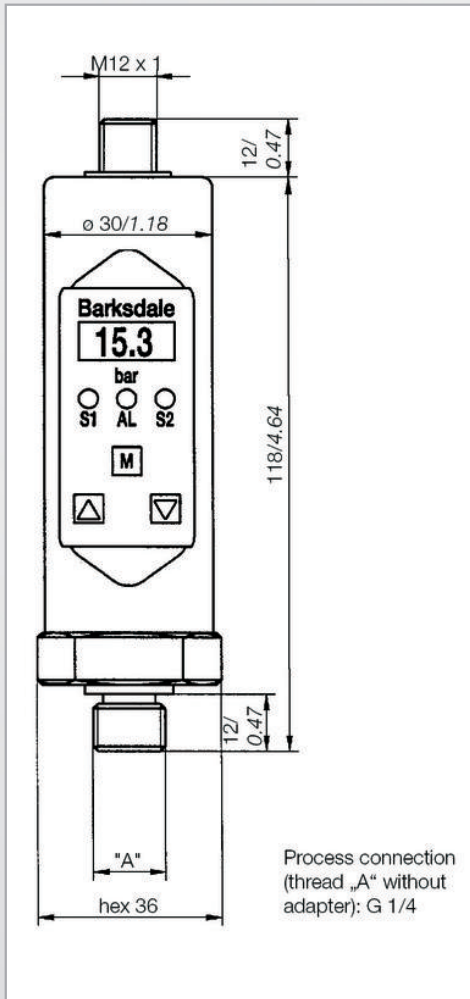
Measuring element:	Ceramic sensor optional: piezoresistive sensor; at 600 bar: only piezoresistive sensor					
Materials: Wetted parts:	Stainless steel, mat. no. 1.4301, ceramic Al ₂ O ₃ 96%					
Electronics housing:	Aluminum die-cast					
Seals:	FKM					
Operating elements:	3 easy-response pushbuttons					
System of protection:	IP65					
Protection class:	III					
Process connection:	G1/4 M					
Dimensions:	36 x 130 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
Linearity error:	< ±0.5 % f. s. at +25 °C					
A/D converter: Resolution:	10 bit (1024 steps per measuring span)					
Scanning rate:	200 / s					
Electrical connection:	Plug M12 x 1, 4/5-pin					
Temperature influence:	< ±0.2 % 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: Display range: Display rate:	3-digit 7-segment LED display, red, digit height 10 mm -1 ... 999 20 / s
Error display:	LED yellow and alphanumeric display
Power consumption:	approx. 50 mA (without load)
Analog output: Current output: Load:	4...20 mA max. RI = (U _b -12 V) / 20 mA RI = 600 Ohm at U _b = 24 V DC
Load influence: Scanning rate: Voltage output: Rating: Adjustment range:	0.3 % / 100 Ohm 5 ms 0...10 V DC max. 10 mA 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: Switching frequency: Load: Delay: Status display(s):	0 %... 125 % f. s. max. 100 Hz max. 500 mA, short-circuit proof 0.0 s ... 9.9 s adjustable LED(s) green
Accessories:	Adapter for pressure switch adjustment, damping screw, plug connector
Approvals:	cULus: file no. E42816, only for devices with piezoresistive sensor

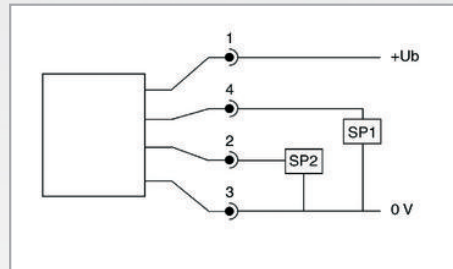
Electr. Dual Pressure Switch

Type Switch 2000

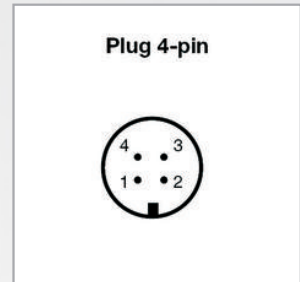
Dimensions (mm / inch)



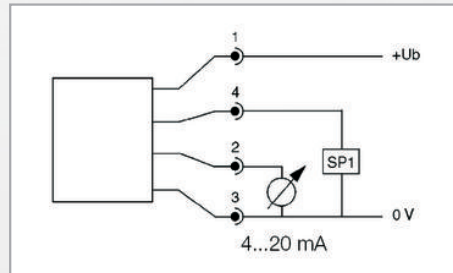
Connection Diagram 1



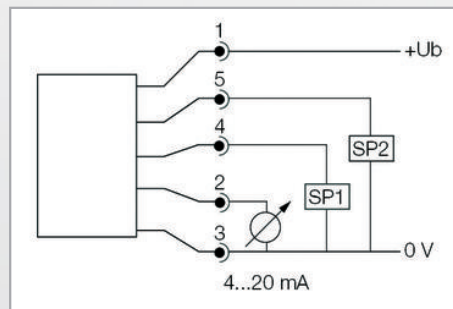
Plug



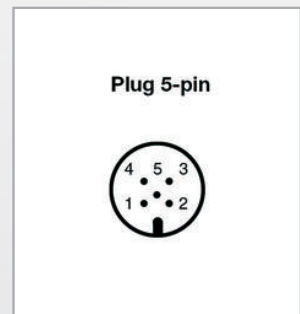
Connection Diagram 2



Connection Diagram 3



Plug 2



Order Code

Pressure range	0...10 bar	0...50 bar	0...100 bar	0...200 bar	0...400 bar	0...600 bar
2 switching outputs	0428-017	0428-018	0428-019	0428-020	0428-021	0428-022
1 switching output 1 analog output 4... 20 mA	0428-127	0428-128	0428-129	0428-130	0428-131	0428-132
2 switching outputs 1 analog output 4... 20 mA	0428-393	0428-394	0428-395	0428-396	0428-397	0428-398

Further measuring ranges on request

Accessories

Order Number	Description
0499-016	Adapter G1/4 IG - G1/4 male thread for optimum alignment of pressure switch
901-0677	Damping screw with 0.2 mm restriction against quick pressure changes and high pulsation rate
907-0357	Plug connector M12 x 1, 4-pin, with screw terminals, angled
907-0344	Plug connector M12 x 1, 4-pin, with screw terminals, straight