

Electr. Pressure Switch

UDS3V3

Electronic pressure switch for pressure control with internal stainless steel diaphragm, digital display, 4 switching outputs and 1 analog output, linearity error f. s.

Features

8-digit 14-segment LCD display with Bargraph and trend indication, microprocessor controlled, self monitoring, all parameters are configured by keypad, display unit selectable, adjustable keypad lock, high accuracy, quick scanning rate (1000/s)

Measuring ranges

0...1 bar 0...10 bar, absolute pressure
-1...0 bar to 0...600 bar gauge

Applications

OEM applications
hydraulic and pneumatic systems,
heavy industry and plant engineering,
automobile industry



Technical Data

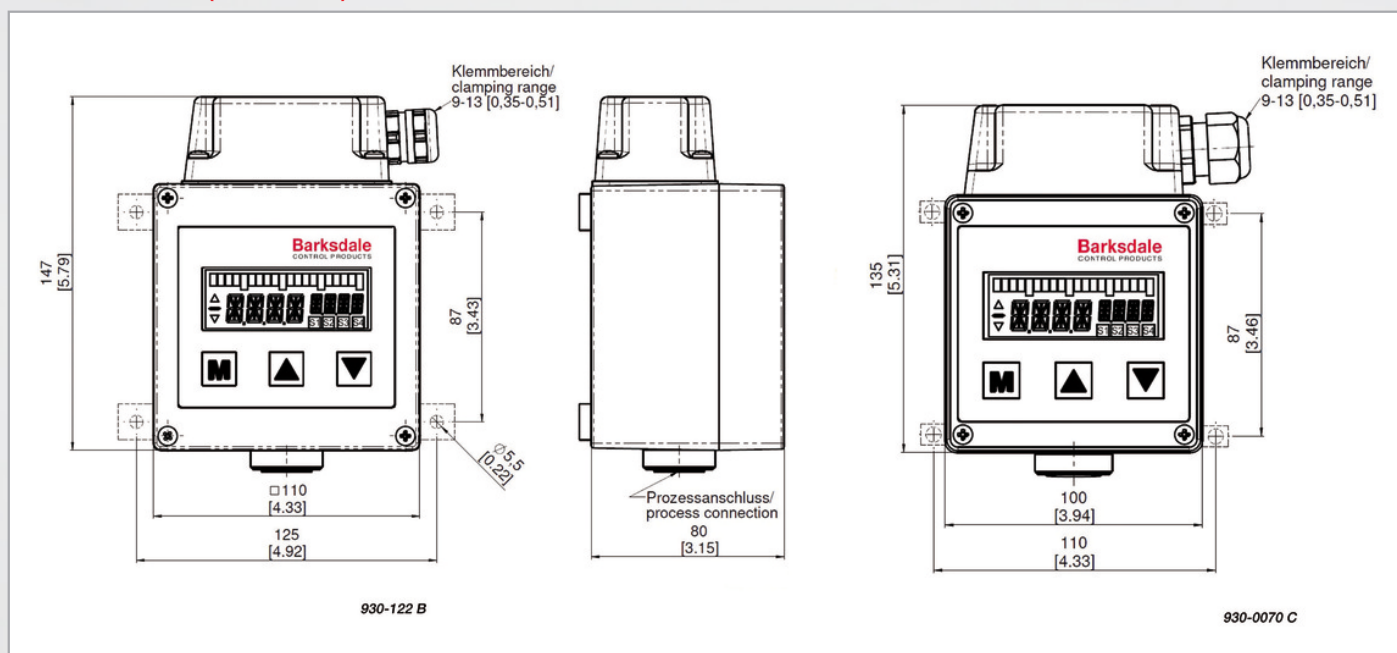
Sensor element:	Piezoresistive silicon measuring cell					
Materials:						
Wetted parts:	Stainless steel, material no. 1.4301					
Electronics housing:	Cast aluminum G AL SI 12					
Seals:	FKM, optionally: EPDM					
Keypad:	Polyester					
Operating elements:	Keypad with easy-response pushbuttons					
System of protection:	IP65					
Protection class:	I					
Process connection:	G1/4 female thread, bottom entry Option: 1/4" NPT female thread					
Dimensions:	100 x 135 x 80 mm (W x H x D)					
Weight:	approx. 1080 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:	12 bit (4096 steps per measuring span)					
Scanning rate:	1000 / s					
On-status display:	8-digit 14-segment LCD display, digit height 12 mm, green					
Bargraph:	20-segment for current value					
Trend arrows:	last changes					
Display range:	-9999... 9999					
Display rate:	4 / s					
Display unit:	bar / psi / psi x 10 / hPa / mbar switchable					
Electrical connection:	14-pin screw terminal for 1.5 mm2 AWG14, plug-in type					
Cable gland:	1 x PG13.5 side entry					

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:	18... 32 V DC, reversed polarity protected (SELV, PELV)
Power consumption:	approx. 350 mA at Ub = 24 V DC (without load)
Analog output:	
Current output:	4...20 mA
Load:	max. RI = (Ub-12 V) / 20 mA RI = 600 Ohm at Ub = 24 V DC
Load influence:	0.3 % / 100 Ohm
Scanning rate:	1 ms
Voltage output:	0...10 V DC
Rating:	max. 10 mA, short-circuit proof
Adjustment range:	25 %... 100 % f. s.
4x relay output(s) - change-over contacts (SPDT):	
Switching voltage:	max. 120 V DC / 250 V AC
Switching power:	max. 12 W / 1250 VA
Cycles:	1 mio. at 24 V DC / 2 A
Switching rate:	max. 20 / s
Delay:	0.0 s ... 9.9 s adjustable
Operation time:	1 ms
Status display:	S1... S4 on LCD display
Accessories:	Damping screw 0.2 mm; mounting traverse; vibration damper
Approval:	cULus: file no. E42816

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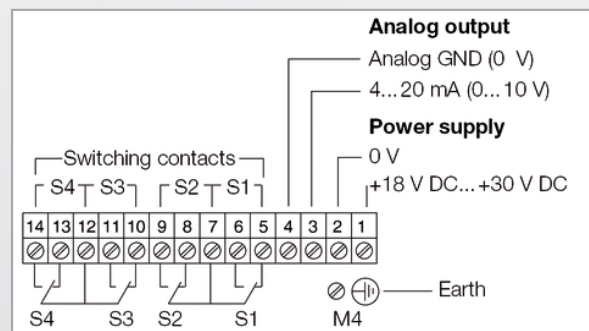
Dimensions (mm / inch)



Order Numbers

Pressure switch with digital display and 4 relays, G1/4 female		
Measuring ranges [bar]	Analog Output	Order No.
10	---	0423-129
10	4...20 mA	0423-117
10	0...10 V	0423-118
50	---	0423-130
50	4...20 mA	0423-119
50	0...10 V	0423-120
100	---	0423-131
100	4...20 mA	0423-121
100	0...10 V	0423-122
200	---	0423-132
200	4...20 mA	0423-123
200	0...10 V	0423-124
400	---	0423-133
400	4...20 mA	0423-125
400	0...10 V	0423-126
600	---	0423-134
600	4...20 mA	0423-127
600	0...10 V	0423-128

Electronic connections



Accessories

Order Number	Description
901-0677	Damping screw M4 x 0.2 for UDS 3, UDS 7, Switch 2000, material: brass
903-0681	Mounting traverse (1 set = 2 pcs)
914-0107	Vibration damper (1 pack = 4 pcs)