

Electronic pressure switch for pressure control in explosion-proof areas with internal stainless steel diaphragm, digital display, 2 solid state contacts accord. to Namur DIN 19234 and 1 analog output, linearity error 0.5 % f. s.

## Features

Intrinsically safe accord. to ATEX, alphanumeric 4-digit LCD display, microprocessor controlled, self monitoring with error display, all parameters are configured by keypad, adjustable keypad lock, various access levels, rugged stainless steel construction

## Measuring ranges

0...1 bar 0...10 bar, absolute pressure  
-1...0 bar; 0...0.2 bar to 0...600 bar; relative pressure

## Applications

Gas compressors, process / chemical technology  
test bed and apparatus engineering,  
injection moulding machines

## Technical Data

<b>Sensor element:</b>	Piezoresistive silicon measuring cell				
<b>Materials:</b>	Wetted parts: Stainless steel, mat. no. 1.4301 Electronics housing: Stainless steel, mat. no. 1.4571 Seals: FKM (standard), EPDM				
<b>Operating elements:</b>	3 easy-response pushbuttons				
<b>System of protection:</b>	IP65 plug				
<b>Protection class:</b>	---				
<b>Process connection:</b>	G1/4 M				
<b>Dimensions:</b>	32 x 163 mm				
<b>Weight:</b>	approx. 250 g				
<b>Measuring ranges [bar]:</b>	10	50	100	200	400
<b>Proof pressure [bar]:</b>	15	75	150	300	600
<b>Linearity error:</b>	±0.5% v. f. s. at 25 °C				
<b>A/D converter:</b>	Resolution: 12 bit (4096 steps per measuring span) Scanning rate: 100/s (for peak value memory)				
<b>Electrical connection:</b>	Plug M12 x 1; 4-pin, female / male thread				
<b>Temperature influence:</b>	±0.2 % f. s. /10K (20 °C)				
<b>Compensation range:</b>	-10 °C... +70 °C				
<b>Repeatability:</b>	±0.1 % v. f. s.				
<b>Temperature range:</b>	Medium: 0 °C... +60 °C Operating range: 0 °C... +60 °C Storage: -10 °C... +65 °C				



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<b>Max. ambient temperature</b>	-20 °C... +80 °C
<b>Power supply:</b>	18...28 V DC, intrinsically safe acc. to ATEX
<b>On-status display:</b>	4-digit LCD display, digit height 10 mm Display rate: 5/s Delay: 0.0 s ... 9.9 s adjustable on LCD display Error display:
<b>Power consumption:</b>	approx. 40 mA at Ub = 24 V DC
<b>Analog output:</b>	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 Adjustment range: 25 %... 100 % f. s.
<b>Transistor switching outputs:</b>	Switching function: acc. to Namur DIN 19234 Normally open / normally closed, standard / window mode and diagnosis function adjustable Adjustment range: 0 %... 125 % f. s. Switching frequency: max. 100 Hz Delay: Status display: 0.0... 9.9 s adjustable on LCD display
<b>Item designation</b>	II 1/2 G EEx ia IIC T4 category 1, 2
<b>Certificate no.:</b>	TÜV 02 ATEX 1879X

Specifications are subject to changes without notice.

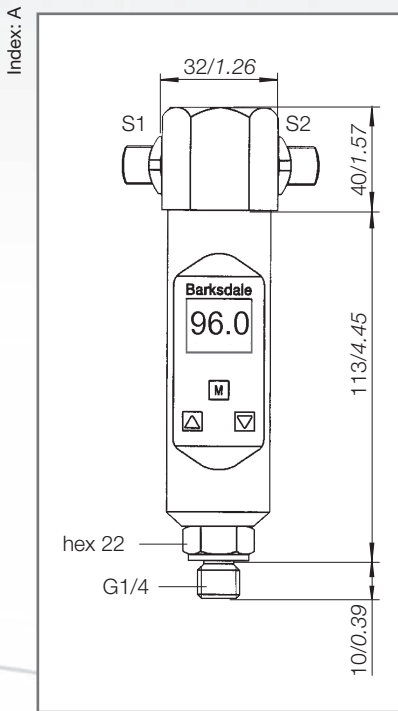
# Pressure

## Electr. Dual Pressure Switch

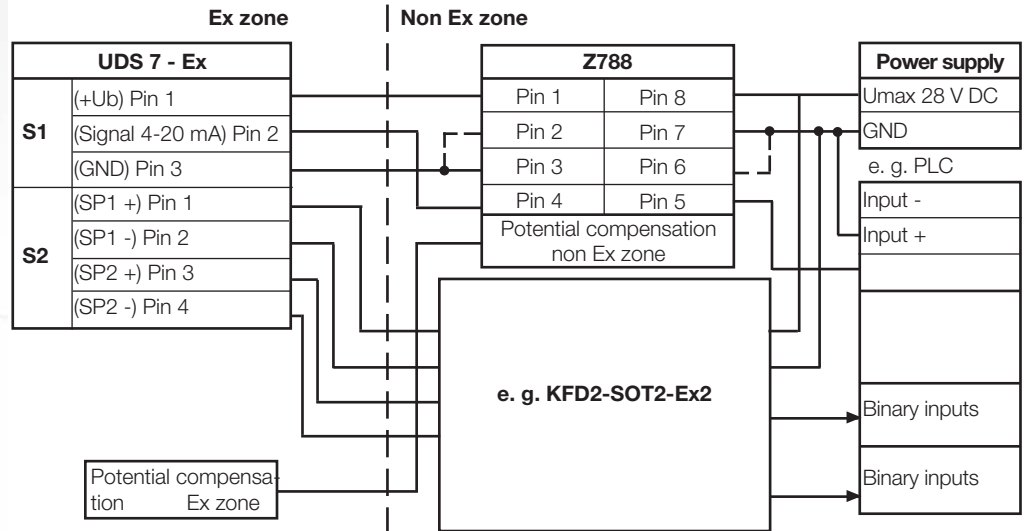


## Type UDS 7 - Ex

### Dimensions (in mm / inch)



### Connection scheme



Note: Power supply and analog output must run via a type Z788 from Pepperl & Fuchs.

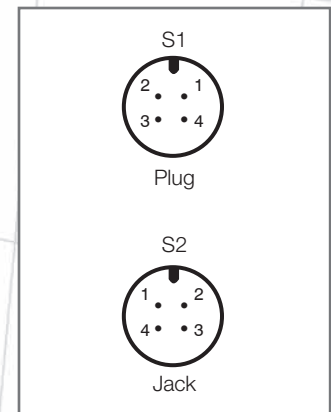
Zener barrier

### Order Numbers

2 solid state outputs acc. to Namur DIN 19234, analog output 4...20 mA, plug/load M12x1, 4-pin		
Measuring ranges	Process connection: G1/4 M	Process connection: G1/2 M
0... 10 bar relative	0427-818	0427-879
0... 50 bar relative	0427-819	0427-880
0... 100 bar relative	0427-820	0427-881
0... 200 bar relative	0427-821	0427-882
0... 400 bar relative	0427-822	0427-883
0... 600 bar relative	0427-866	0427-884

Further measuring ranges on request

### Plug



### Accessories

Order Number	Description
0499-016	Adapter G1/4 IG - G1/4 male thread for optimum alignment of pressure switch
0499-002	Wall mounting brackets, stainless steel
901-0677	Damping screw with 0.2 mm restriction against quick pressure changes and high pulsation rate
907-0357	S1 plug M12 x 1, 4-pin, female thread, with screw terminals
907-0418	S2 plug M12 x 1, 4-pin, male thread, with screw terminals
909-0482	Zener barrier type Z788 with potential compensation
909-0483	Isolation amplifier type KFD2-SOT2-Ex2