

# Electronic Pressure Transducers

**UPA2**

Electronic pressure transducers for general measuring tasks,  
with internal or flush  
stainless steel diaphragm,  
linearity error 0.5% and 0.25% f. s.

## Features

Variety of measuring ranges  
Absolute and gauge pressure ranges  
Rugged stainless steel construction  
GL approval (German Lloyd)

## Measuring ranges

-1...0 bar to 0...800 bar gauge  
0...1 bar 0...10 bar absolute pressure

## Applications

OEM applications  
Hydraulic and pneumatic systems,  
test beds,  
shipbuilding and offshore applications

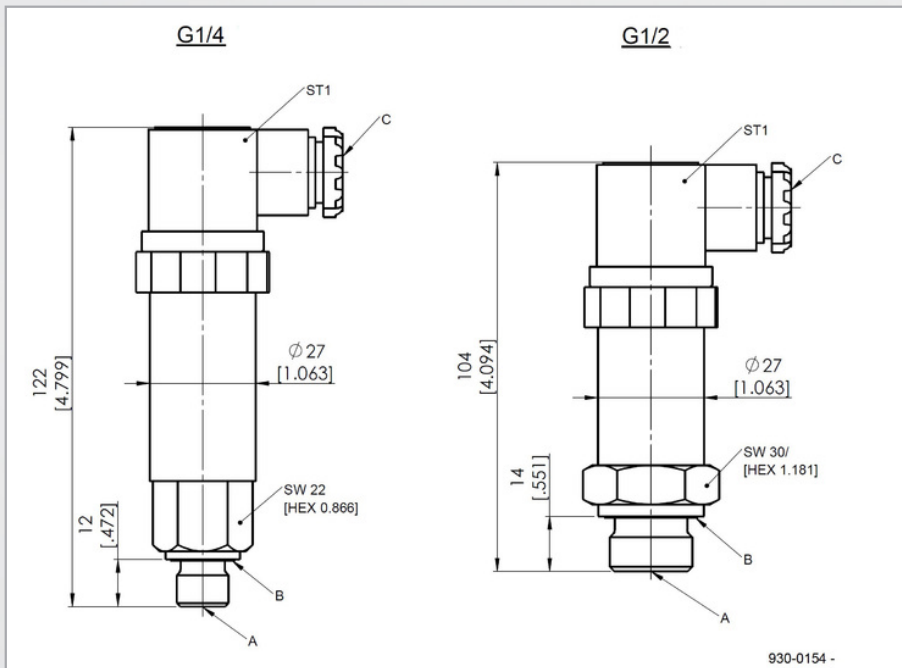


## Technical Data

<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. 1.4301					
Seals:	FKM, EPDM					
<b>System of protection:</b>	IP67 with PG / IP65 with plug					
<b>Protection class:</b>	III					
<b>Process connection:</b>	G1/4 M, G1/2 M manometer connection or quasi flush diaphragm					
<b>Dimensions:</b>	Ø32 x approx. 120 mm (with plug connector)					
<b>Weight:</b>	250 g					
<b>Measuring ranges [bar]:</b>	-1... 0	-1...+1	0.2	0.4		
<b>Overpressure [bar]:</b>	2.5	2.5	2.5*	2.5		
<b>Measuring ranges [bar]:</b>	0.6	1	2	5	10	50
<b>Overpressure [bar]:</b>	2.5	3	4	7	15	75
<b>Measuring ranges [bar]:</b>	100	200	400	600	800	
<b>Overpressure [bar]:</b>	150	300	500	700	1000	
<b>Linearity error:</b>	≤±0.5 % f. s. (Option: ≤±0.2 % f. s.)					

<b>Electrical connection:</b>	Plug 4-pin, DIN EN 175 301-803-A (prev. DIN 43650)
<b>Temperature influence:</b>	≤±0.2 % f. s. / 10K
<b>Compensation range:</b>	-10 °C... +70 °C
<b>Repeatability:</b>	≤±0.1 % v. f. s.
<b>Temperature range:</b>	
Medium:	-25 °C... +100 °C
Electronics:	-25 °C... +80 °C
Storage:	-40 °C... +100 °C
<b>Output signals:</b>	4...20 mA (2 wire) 0...10 V DC (3 wire)
<b>Power supply:</b>	8... 30 V DC, 13... 30 V DC at 0... 10 V, reversed polarity protection (SELV, PELV)
<b>Power consumption:</b>	max. 25 mA at current output max. 5 mA at voltage output
<b>Load:</b>	≤(U <sub>b</sub> -10 V) / 20 mA
<b>Delay:</b>	≤1 ms
<b>Accessories:</b>	Damping screw to limit pressure peaks
<b>Approval:</b>	GL optional

### Dimensions (mm / inch)



### G1/4

A	Process connection G1/4 acc. to DIN ISO 228-1
B	Profile seal acc. to DIN 3869
C	Cable gland Pg 11, clamping range $\varnothing$ 6...8 mm / 0.23...0.31 in

### G1/2

A	Process connection G1/2 acc. to DIN ISO 228-1 flush at the front
B	Profile seal acc. to DIN 3869
C	Cable gland Pg 11, clamping range $\varnothing$ 6...8 mm / 0.23...0.31 in

### Electrical Connection

Connection	Current output 4... 20 mA (2-wire)			Voltage output 0... 10 V (3-wire)		
	Plug	Cable	GL cable	Plug	Cable	GL cable
+ Supply	1	brown	blue 1	1	brown	blue 1
- Supply	2	white	blue 2	2	blue	blue 2
+ Signal	---			3	white	white 1
- Signal	---			---		

### Order Numbers

Standard pressure reducer DIN 43650, 4... 20 mA			
Measuring ranges [bar] relative pressure	Overpressure [bar]	Order No.	
		G1/2", flush	G1/4" M
10	15	0431-032	0431-017
50	75	0431-043	0431-441
100	150	0431-036	0431-315
200	300	0431-042	0431-010
400	600	0431-038	0431-314
600	780	0431-464	0431-238

Further measuring ranges on request

### Accessories

Order Number	Description
926-0420	Plug connector, 3-pin + PE, DIN EN 175 301-803-A (prev. DIN 43650)
998-9991	Manufacturer test certificate O DIN 55350 part 18 4.2.1
998-9992	Manufacturer test certificate M DIN 55350 part 18 4.2.2