

With integrated signal amplifier (mA or V)

# DAI Series Pressure Transmitter



The DAI Series offers – in addition to maximum reliability – improved user friendliness in the form of an Auto-Zero Function for local or remote configuration. These models offer mA and V output signals for further processing.

The popular and most commonly used 2-wire and 4...20mA configuration provide unequalled interference in critical environments.

## Technical specifications

Pressure range	0..17 to 0..2000 bar 0..250 to 30000 psi
Accuracy incl. linearity, hysteresis, and reproducibility in % to full scale	0.15 % 0.25 % 0.50 %
Reproducibility in % to full scale	± 0.1 %
Membrane coating	G-Coating
Resolution	16 Bit
Max. pressure overload without influence on operating value	2 x range up to 1000 bar (14500 psi) 1.5 x pressure range over 1000 bar (14500 psi)
Bridge resistance	350 Ω Wheatstone Bridge
Temperature element:	–
Heater:	–
Supply voltage	19..32 V DC
Output signal	4..20 mA 0..20 mA 0..10 V
Transmission medium	NTX™ as standard
Process connection	1/2" 20 UNF or M18 x 1.5
Calibration point	80% of measuring range
Insulation resistance	>1000 MOhm at 50 V
Max. temperature at diaphragm	300°C NTX™ (572°F) 400°C Hg (750°F) 500°C NaK (932°F)
Max. temperature at terminal head during operation	- 40 .. + 125°C (40°F..260°F)
Zero deviation with temperature Variations at the diaphragm:	± 0.003% from final value/°C
Zero deviation with temperature Variations at the measuring head:	± 0.003% from final value/°C
Ingress protection housing Ingress protection connector	IP 65 / IP 55
Max torque	1/2" 20 UNF 30 Nm (22 lbf ft) M18 x 1.5 50 Nm (32 lbf ft)

- Interference resistant signals over long distances
- No damage in case of reversed connection
- 3 and 4 wire technology available
- High temperature design for temperatures of up to 500 °C (932 °F)
- Maximum reliability through new membrane technology
- Standard G-coating to counteract adhesive materials



Authorized distributor for Gneuß products  
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**Order specification DAI Series**  
**Pressure Transmitter with V or mA output**

valid from: 01.01.2015

Order specification	→	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Standard configuration</b>																				
	<b>DAI</b>																			
<b>Total measurement error FSO</b>																				
0.15%	*1	0																		
0.25%	*1	1																		
0.50%		2																		
<b>Output signal</b>																				
4..20 mA (2-wire)			E 2																	
4..20 mA (3-wire)			E 3																	
4..20 mA (4-wire)			E 4																	
0..20 mA (3-wire)			D 3																	
0..20 mA (4-wire)			D 4																	
0..10 V (3-wire)			C 3																	
0..10 V (4-wire)			C 4																	
<b>Thread connection</b>																				
1/2" UNF 2A (Standard)				1 2 A																
M18 X 1.5 A				1 8 A																
M18 X 1.5 B				1 8 B																
<b>Pressure range</b>																				
17 bar				B 1 7 E																
35 bar				B 3 5 E																
50 bar				B 5 0 E																
100 bar				B 1 0 Z																
200 bar				B 2 0 Z																
350 bar				B 3 5 Z																
400 bar				B 4 0 Z																
500 bar				B 5 0 Z																
600 bar				B 6 0 Z																
700 bar				B 7 0 Z																
800 bar				B 8 0 Z																
1000 bar				B 1 0 H																
1400 bar				B 1 4 H																
2000 bar				B 2 0 H																
250 psi				P 2 5 Z																
500 psi				P 5 0 Z																
750 psi				P 7 5 Z																
1500 psi				P 1 5 H																
3000 psi				P 3 0 H																
5000 psi				P 5 0 H																
6000 psi				P 6 0 H																
7500 psi				P 7 5 H																
9000 psi				P 9 0 H																
10000 psi				P 1 0 T																
12000 psi				P 1 2 T																
15000 psi				P 1 5 T																
20000 psi				P 2 0 T																
30000 psi				P 3 0 T																
<b>Shaft length (rigid)</b>																				
152 mm, 6" (Standard)					S 0															
203 mm, 8.0"					S 1															
254 mm, 10.0"					S 2															
318 mm, 12.5"					S 3															
356 mm, 14.0"					S 4															
457 mm, 18.0"					S 5															
38 mm, 1.5"	*4				S 6															
50 mm, 2.0"	*4				S 7															
76 mm, 3.0"					S 8															
Special length					S 9															
<b>Length of flexible capillary</b>																				
No flexible capillary					F 0															
457 mm, 18" (Standard)					F 5															
610 mm, 24"					F 6															
760 mm, 30"					F 8															
Special length					F 9															

<b>Diaphragm</b>												
Stainless steel (Standard)	*2										R	
Alloy C4	*2										H	
Alloy 718	*2										I	
Stainless steel/GX-Coating	*2										B	
Alloy C4/GX-Coating	*2										C	
Alloy 718/GX-Coating	*2										D	
Special diaphragm											S	
<b>Sensor medium</b>												
Mercury-free (NXT 300°C / 572°F)												W
Mercury-free high temp. (NaK 500°C 932°F)	*5											N
Mercury (Hg 400°C / 752°F)												M
<b>Electrical connection</b>												
6-pole connection (Standard)												6 P
6-pole connection with optic auto-zero												6 P A
8-pole connection												8 P
6-pole connection (type 98)												9 8
Cable exit stainless steel , 3 m	*3											3 3
<b>Special design</b>												
No special design												0 0 0
Special design												X X X

\*1 Only available >= 100 bar (1500 psi)

\*2 As a standard, all diaphragms are coated with Gneuss unique "G-Coating" against adhesive and glutinous media. Special coatings are available on request.

\*3 For cable exit, please confirm cable length. Unless specified, the standard length will be 3 m.

\*4 Only available with flexible capillary

\*5 Mercury-free High Temperature >= 300°C (only available for 100 bar (1500 psi) up to 800bar (12000 psi))