

# Precision pressure transducer

## Model NXH

Piezoresistive with internal stainless steel diaphragm  
Accuracy: 0,1 % and 0,2 % F.S.

### Features

- All stainless steel construction
- High shock and vibration stability
- Excellent long term stability
- Protection IP65
- High ambient temperature

### Ranges

-1 ... 400 bar, 1 ... 10 barabs  
-30 in. Hg ... 5800 psi, 15 ... 200 psiabs

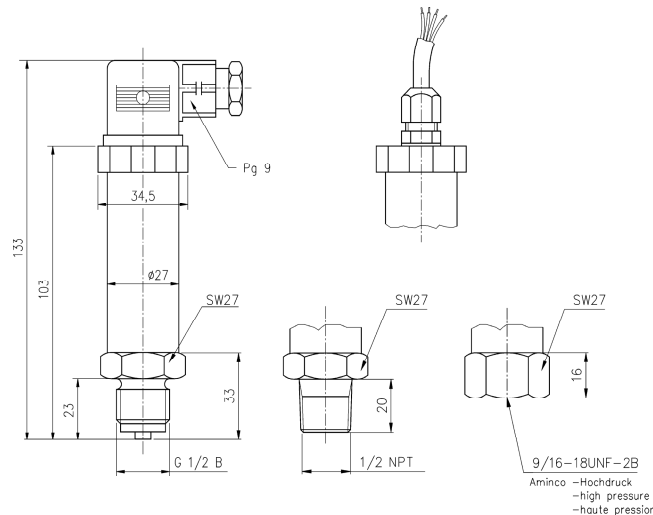
### Applications

Testbenches  
Hydraulic systems  
Process control systems



Technical specification	NXH
Measuring principle	Piezoresistive with internal stainless steel diaphragm
Range [bar]	1 1,6 2,5 4 6 10 16 25 40 60 100 250 350 400 -1/0 -1/1,5 -1/3 -1/5 -1/9 -1/15 -1/24
[barabs]	1 1,6 2,5 4 6 10
[psi]	15 30 50 60 100 160 200 300 400 500 600 800 1000 3000 5000 5800
[in. Hg/psi]	-30/0 -30/15 -30/30 -30/60 -30/100 -30/150 -30/300
[psiabs]	15 30 50 60 100 160 200
Overpressure limit	100 % F.S. (350 bar/5000 psi 60 % F.S. and 400 bar/5800 psi 40 % F.S.)
Pressure type	Gauge, vacuum, compound and absolute
Process connection	G ¼ B male, G ½ B male according EN 837-1 ¼ NPT male, ½ NPT male, according ANSI/ASME B1.20.1/EN 837-1 9/16-18 UNF-2B Aminco (high pressure) Others on request
Material	
Pressure connection	Stainless steel 316Ti (1.4571)
Sensor	Stainless steel diaphragm 316L (1.4404), with liquid filled piezoresistive cell
Case	Stainless steel 304 (1.4301)
Transmission fluid	Silicone oil
Power supply	12 ... 30 VDC
Output signal	4 ... 20 mA, 2-wire, 0 ... 10 VDC on request
Maximum loop resistance for 4 ... 20 mA	≤ (U <sub>B</sub> - 9,5 V) / 0,02 A
Isolation between case and electrical connection	> 1 MΩ at 50 VDC
Supply current	20 mA
Accuracy according DIN 16 086	0,1 % F.S. terminal based (0,2 % F.S. terminal based on request)
Repeatability	≤ ±0,03 % F.S.
Response time (10 ... 90 %)	≤ 1 ms
Permissible	
Ambient temperature	-25 ... 85 °C
Medium temperature	-25 ... 100 °C
Storage temperature	-40 ... 125 °C
Compensated temperature	0 ... 70 °C
Temperature influence	±0,3 % / 10 K from 0 ... 50 °C (ref. 20 °C)
Shock resistance	at 100 g / 20 ms ≤ 0,05 % F.S.
Vibration	≤ 0,1 % F.S. for 20 ... 2000 Hz, 10 g in all directions according IEC 770
Noise of output signal	≤ 0,02 % F.S.
CE-mark/EMC	Emission according EN 50 081-1 (March 1993) Immunity according EN 50 082-2 (March 1996)
Electrical connection	4 PIN angle connector according DIN EN 175301-803 Cable connection, others on request
Protection according EN 60 529/IEC 529	IP65
Weight [kg]	0,27

## General dimensions [mm]

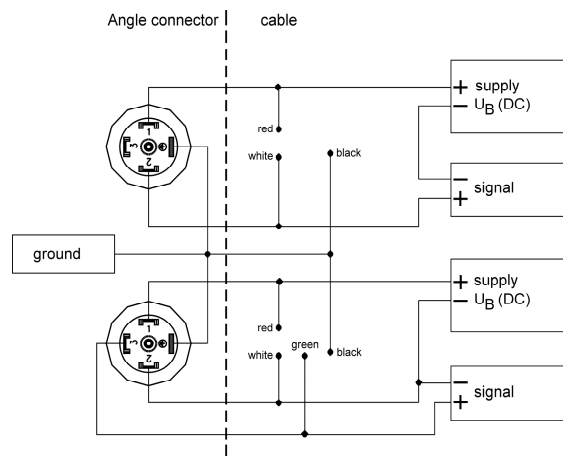


Rev. B

## Electrical connection

### 2-wire

### 3-wire



## Order information

Type	Output signal	Accuracy	Range	Engineering units	Protection	Process connection	Electrical connection	Options
NXH	(42) 4/20 mA (01) 0/10 VDC	(010) 0,1 % (020) 0,2 %	-1/ 0 <sup>1)</sup>	BAR BARABS	(=) IP65	(MG2) G 1/4 B male (MG4) G 1/2 B male (M02) 1/4 NPT male (M04) 1/2 NPT male (F09) 9/16-18 UNF-2B Aminco	(M1) Angle connector according DIN EN 175301-803 (F2) Cable connection  Specify cable lengths in [m]	(NH) Tagging (St. Stl.) wired
			-1/ 1,5 <sup>1)</sup>					
			-1/ 3 <sup>1)</sup>					
			-1/ 5 <sup>1)</sup>					
			-1/ 9 <sup>1)</sup>					
			-1/ 15 <sup>1)</sup>					
			-1/ 24 <sup>1)</sup>					
			0/ 1					
			0/ 1,6					
			0/ 2,5					
			0/ 4					
			0/ 6					
			0/ 10					
			0/ 16 <sup>1)</sup>					
			0/ 25 <sup>1)</sup>					
0/ 40 <sup>1)</sup>								
0/ 60 <sup>1)</sup>								
0/ 100 <sup>1)</sup>								
0/ 250 <sup>1)</sup>								
0/ 350 <sup>1)</sup>								
0/ 400 <sup>1)</sup>								
			<sup>1)</sup> not for absolute ranges	For psi see ranges on front side	others on request			

## How to order

Series	Type	Signal output	Accuracy	Range	Engineering units	Protection	Process connection	Electrical connection	Option
N	XH	42	010	0/10	BAR	=	MG2	M1	NH

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