Dynisco

Model IDA3X4

CE

Industrial pressure transmitters Series IDA3X4 4-wire technology

Description

Due to modern diaphragm and amplifier technology, these transducers are intended for use in the hardest industrial applications.
Specializing in dynamic, pulsating hydraulic pressure regulation for injection moulding machines and presses, they have for more than 20 years proven their excellent accuracy and long term stability.
Automotive cranes, industrial robots, concrete pumps, industrial test purposes and off-shore business are further installation possibilities with high demands with respect to accurate pressure, vibration and shock resistance, as well as weatherproofing.
The flush diaphragm version IDA 37X is designed for applications requiring a zero volume pressure port in measurement of gases, viscous liquids and slurries and has excellent cleanability.

Features

- Stainless steel construction withstands harsh operating environments and corrosive media
- Contoured diaphragm ensures greater accuracy, repeatability and fatigue strength
- Optimum diaphragm heat treatment contributes a longer operating life
- Internal Shunt-Calibration provides quick transducer and system calibration
- Potted electronics resists shock and vibration

Technical Data / Operating Data

Pressure range	0 - 20* bar to 0 - 1000 bar	Burst pressure	4 x pressure range 3 x pressure range at 0 - 20 bar and 0 - 1000 bar
Accuracy	± 0.25 % f.s.v. ± 0.5 % for IDA374		
Repeatability	± 0.1 % f.s.v.	Material in contact with media	15-5 Mat. No. 1.4545
Resolution	infinite		
Response	1.5 kHz (-3dB)		

* 20 bar range only with 35 bar element and Option D30/20 calibration 20 bar range

Electrical Characteristics

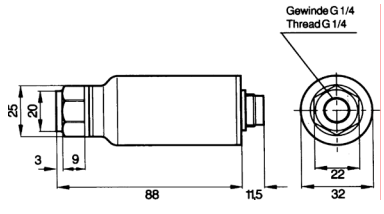
Configuration	4-arm Wheatstone bridge strain gauge (DMS)	Supply voltage	19 - 32V DC (unipolar) ± 10 to ± 16 V DC (bipolar)
Strain resistance	350 Ω	Internal	
Output signal	0 - 5 V DC / 0 - 10 V DC	Shunt-Calibration	80 % f.s.v. ± 5 %
Load resistance	> 5 kΩ / > 10 kΩ	Span adjustment	± 5 % f.s.v.
Zero adjustment	± 5 % f.s.v.	Leakage resistance	1000 MΩ at 50 V DC

Temperature influence

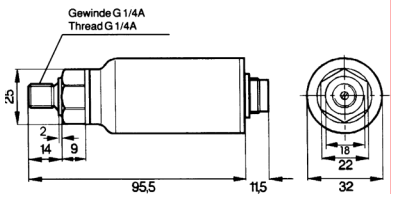
Max. media temperature	85 °C	Max. operating temperature	85 °C
Zero shift due to temperature change	± 0.1 % f.s.v. / 10 °C IDA374 ± 0.4 % f.s.v. / 10 °C	Sensitivity shift due to temperature change	± 0.2 % f.s.v. / 10 °C IDA374 ± 0.4 % f.s.v. / 10 °C

Dimensions

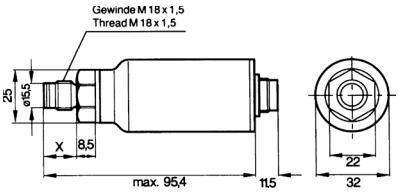
IDA334



IDA354



IDA374



Order specifications

IDA3X4 - XXXX - XXX - XXX

Pressure side connection
3 = Internal thread ISO 228/1-G1/4
5 = External thread DIN 3852-AG1/4A
7 = M18 x 1.5 flush diaphragm

Pressure range

(**20***=	0 - 20 bar)	**2C** =	0 - 200 bar
35*=	0 - 35 bar	**3,5C** =	0 - 350 bar
50 =	0 - 50 bar	**5C** =	0 - 500 bar
1C =	0 - 100 bar	**7C** =	0 - 700 bar
1,5C =	0 - 150 bar	**1M** =	0 - 1000 bar

* only for IDA374, 20 bar range only with option D30/20 calibration 20 bar range

Options
D05 = Cable connection
D06 = Cable connector IP65
D21 = Bendix-Connector
D30 = Special calibration for IDA with amplifier

Output voltage
5V = 0 - 5 V DC
10V = 0-10 V DC