

Pressure Transducer



IPT-1500 pressure transducer meet the highest specifications for longevity, accuracy, temperature stability and EMC characteristics, making them suitable for an extremely wide range of demanding industrial truck applications.

- * Compact, rugged construction for highest operational reliability
- * No media egress when exceeding rupture pressure
- * Negligible temperature influence on accuracy
- * Excellent EMC capacity
- * Saving time by quick cable mounting by the customer with quick connector

TECHNICAL

Pressure range

Relative 0 - 3000 PSI

Operating conditions

Medium, liquids

Temperature

FPM -15 ... +125 ÅC -40 ... +150 ÅC (UL max. 125 ÅC)

EPDM -25 ... +125 ÅC NBR -25 ... +85 ÅC Ambient 1)

Tolerable overload / Rupture pressure 2) < 6 3.0 x fs
> 6 2.5 x fs (max. 900 bar)

Materials

Case Stainless steel 1.4305 / AISI 303

Materials in contact with the medium

Pressure connection Stainless steel 1.4305 / AISI 303

Sensor Ceramic Al₂O₃ (96%)

Media stop system PPS

Sealing material FPM, EPDM, NBR, FPM spec.

Media stop system

Patented media stop system to prevent media egress when exceeding rupture pressure range (> 40 bar nominal value).

Electrical

Output Power supply Load Current consumption

3 wire

0 ... 2.5 V 8.0 ... 33 VDC >10 kOhm / < 100 nF < 4 mA ratiom.

Polarity reversal protection. Short circuit proof and protected against polarity reversal. Each connection is protected against crossover up to max. supply voltage.

Insulation voltage, standard 500 VDC

Dynamic response

Response time < 2 ms, typ. 1 ms

Load cycle < 100 Hz

Protection standard

With connector DIN EN 175301-803-C IP 65

Electrical connection

Cable 1.5 m

Quick connector, connector M12x1 metal thread

Connector DIN EN 175301-803-C (industrial standard 9.4 mm)

Pressure transducer connection

Male thread 1/4"-18 NPT

Installation arrangement unrestricted

Tests / Admissions

Electromagnetic compatibility CE conformity acc. EN 61326-2-3

UL acc. Standard 61010-1

Shock acc. IEC 60068-2-27 100 g, 11 ms half sine wave, all 6 directions. Free fall from 2 m on concrete (6x)

Constant shock acc. IEC 60068-2-29 40 g for 6 ms, 1000x all 3 directions

Vibration acc. IEC 60068-2-6 20 g, 2 ... 2000 Hz with amplitude μ 15 mm, 1 Octave/min. all 3 directions, 50 constant load

Weight, 95 g

Tolerance zero point max. % fs μ 0.3

Tolerance full scale max. % fs μ 0.3

Resolution % fs 0.1

Total of linearity,

hysteresis and repeatability max. % fs μ 0.3

Long term stability acc. DIN EN 60770 % fs μ 1.0

TC zero point 4) max. % fs/10K μ 0.15

TC sensitivity 4) max. % fs/10K μ 0.15

Test conditions: 25 ÅC, 45% RH, power supply 24 VDC

TC z.p. / TC s. -40 ... +125 ÅC

Order Number IPT-1500

Technical data subject to change