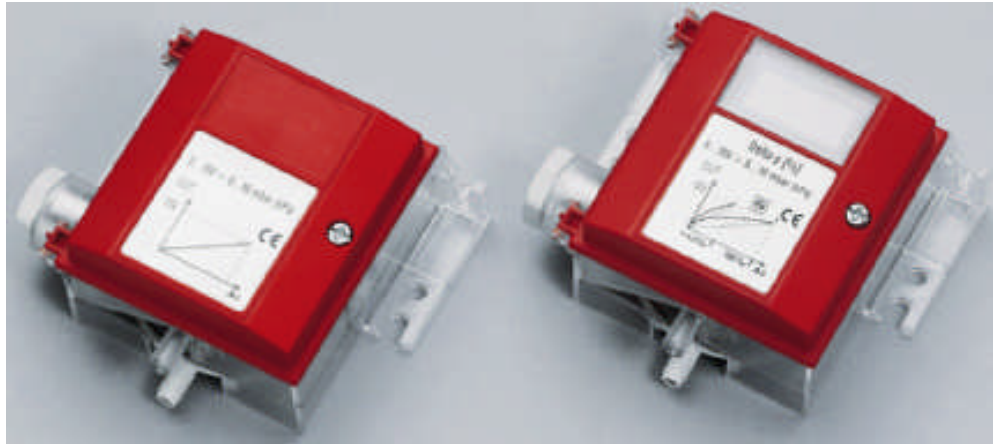


PD-U Differential pressure transmitter

Features

- Pressure measurement from 100 Pa up to 2kPa
- Programmable pressure display range
- Minimum and maximum pressure memory
- 0...10V or 4...20mA measuring signals, selectable with jumpers
- Signal range programmable
- Selectable averaging signal



Applications

- Pressure measurement in the field of heating, ventilation and air conditioning.
- Measuring of air flow velocity
- Measuring and control of positive or negative pressure for example for clean rooms.
- Measure exactly the range you need
- Recording of minimum and maximum values for critical environments
- Supervision of critical pressures.

Functions

The transmitter measures the pressure by the use of a diaphragm that transfers the force onto a ceramic fulcrum lever. The signal is temperature compensated and calibrated. The microprocessor samples the pressure once per second. It calculates an averaging signal over a preset number of seconds and generates an output signal based on minimum and maximum pressure values.

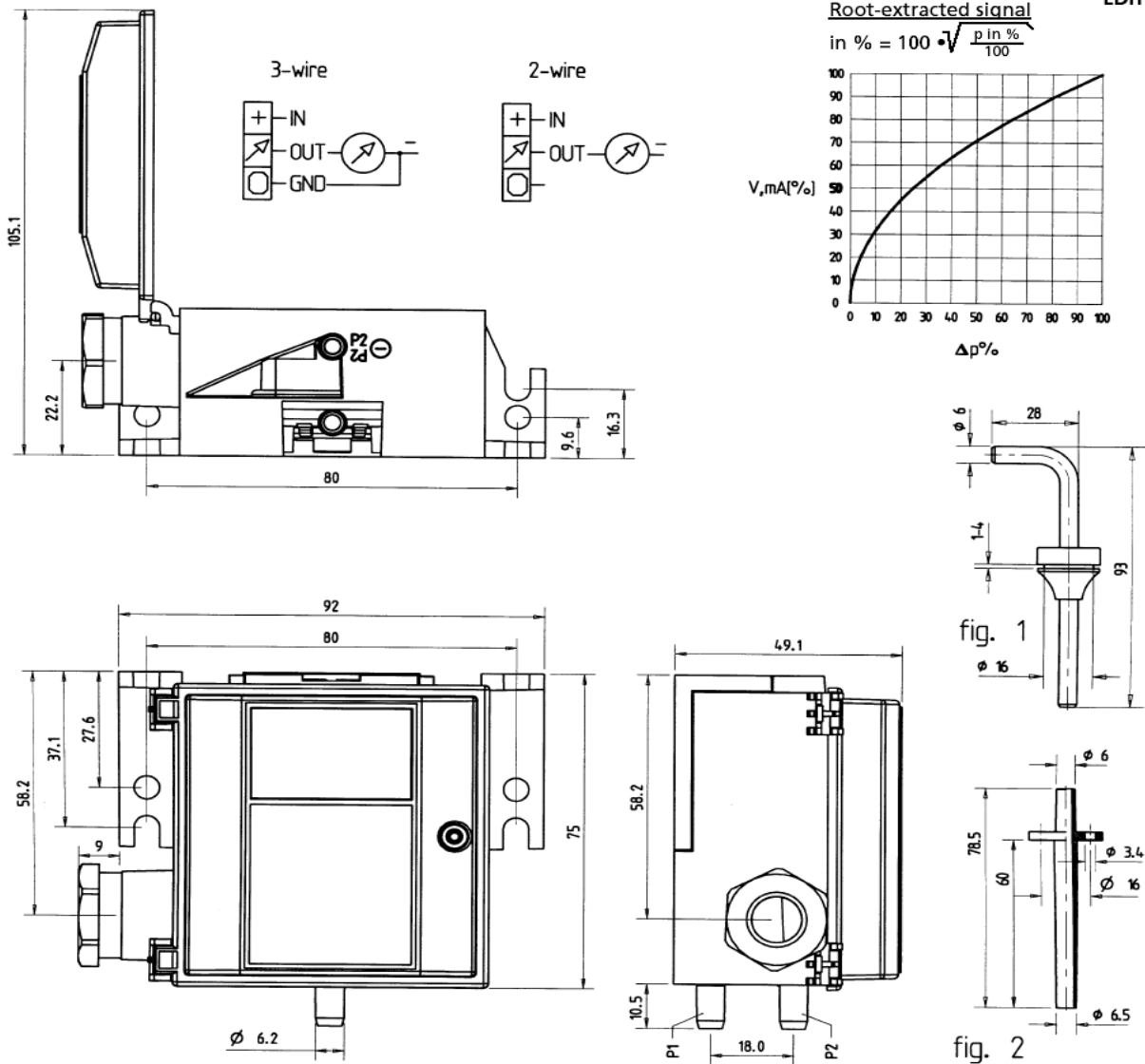
Technical Specification

Power Supply	Operating Voltage	24 V AC 50/60 Hz \pm 10%, 24VDC \pm 10%				
	Power Consumption	Max 2 VA				
	Electrical Connection	Terminal Connectors				
Sensing Probe	Product type	PD-U1	PD-U3	PD-U5	PD-U10	PD-U20
	Pressure Range	100 Pa	300 Pa	500Pa	1kPa	2kPa
	Linearity	\pm 0.5%	\pm 0.5%	\pm 0.3%	\pm 0.3%	\pm 0.3%
	Hysteresis	0.5%	0.4%	0.3%	0.2%	0.2%
	Stability over 1 year	0.5%	0.5%	0.5%	0.5%	0.5%
	Diaphragm:	Silicone polymer (LSR)				
	Pressure Sensing element	Ceramic Fulcrum Lever				
Connection	Temperature coefficient sensitivity and zero point	\pm 0.04%/°C				
	Connection Terminals	2.5 mm ²				
Signal Outputs	Connection Terminals	2.5 mm ²				
	Analog Outputs	DC 0-10V or 4...20mA				
Environment	Output Signal	10 Bit, 9.7 mV, 0.019.5 mA				
	Resolution	\pm 2%				
Environment	Accuracy	20 mA, 500 Ω				
	Maximum Load	20 mA, 500 Ω				
Environment	Operation	To IEC 721-3-3				
	Climatic Conditions	class 3 K5				
Environment	Temperature	-40...70°C				
	Humidity	<95% RH				
Environment	Transport & Storage	To IEC 721-3-2 and IEC 721-3-1				
	Climatic Conditions	class 3 K3 and class 1 K3				
Environment	Temperature	-40...80°C				
	Humidity	<95% RH				
Environment	Mechanical Conditions	class 2M2				
	Housing Materials	Fire proof ABS plastic				
Standards	Cover & Mounting Plate	Fire proof ABS plastic				
	Standards	conform according to EMC Standard 89/336/EEC EMEI Standard 73/23/EEC				
Standards	Degree of Protection	EN 61 000-6-1/ EN 61 000-6-3				
	Degree of Protection	IP43 to EN 60 529				

Ordering

Name	type	Description
Differential pressure transmitter	PD-U1	AC or DC 24V; 4-20mA or 0-10V; 0-100Pa;
	PD-U3	AC or DC 24V; 4-20mA or 0-10V; 0-300Pa;
	PD-U5	AC or DC 24V; 4-20mA or 0-10V; 0-500Pa;
	PD-U10	AC or DC 24V; 4-20mA or 0-10V; 0-1000Pa;
	PD-U20	AC or DC 24V; 4-20mA or 0-10V; 0-2000Pa;
	PD-U1-D	AC or DC 24V; 4-20mA or 0-10V; 0-100Pa; LCD display

Dimension [mm] and connections



PD-U	ADC 24V	1	
	OUT	2	
	GND	3	
	T		

T JUMPER
 1 AND 2 : 0 - 10V
 2 AND 3 : 4 - 20mA

Terminal connections
 1 . Power supply DV 24V or AC 24V
 2 . Pressure signal output 0-10V or 4-20mA
 3 . Power supply ground or signal ground