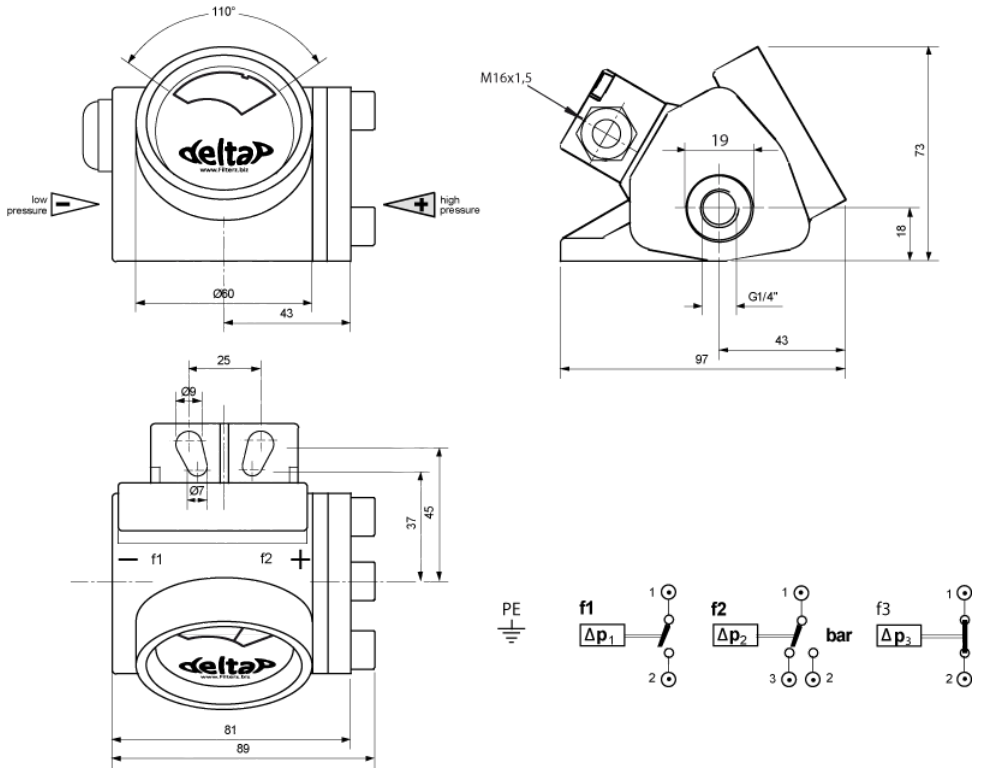
Series 5.01
Technical Data Sheet

ROLF HEUN GMBH

deltaP® Differential pressure indicator

Dimensions



Use

Differential pressure indicators serve to monitor a variable pressure difference. They can be used with fuels, lubricating oils, hydraulic oils, emulsions and water, for example.

The distinguishing characteristic of series 5.01 is that all parts coming into contact with the medium are made of rust-proof and acid-resistant Cr-Ni-Steel.

Method of operation

A hermetically sealed piston moves with increasing pressure difference against the force of a calibrated measuring spring.

The piston position corresponding to the respective differential pressure is constantly magnetically conveyed to the indicator disk at a rotation angle analogue to the differential pressure. This analogically indicates the increasing differential pressure from blue=Differential pressure 0 bar to red=Differential pressure maximum.

In addition, electrical signals can be generated at up to two switching points within the indication range. NO contacts, NC contacts and changeover contacts are available for this purpose.

Technical data

Perm. operating overpressure	100 bar
Perm. operating temperature	Medium: max. 120°C Environmental / housing temperature: max. 120°C (dep. on attachment parts) Cable gland: max. 100°C
Basic measuring range	Standard: beginning at 0 to Δp_{max} = 0,3 - 0,5 - 0,6 - 0,7 - 0,8 - 1,0 - 1.2 – 1.3 – 1.5 – 1.6 – 2.0 – 2.5 – 3.0 – 3.5 – 4.2 – 5.0 bar Optionally: beginning at 0.8 to Δp_{max} = 2.2 bar
Measuring range extension (high pressure attachment):	Pressure transmission of the entire measuring range; possible factors: x 2.0 / x 3.0 / x 4.0

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deltaP® Differential pressure indicator

Technical data (continuation)

Optical signalling:	V-shaped 110° (0.1…1.0 x Δp_{max}) via rotating indicator disk blue(clean)/red(contaminated)
Installation position:	any
Electrical signalling:	Can be equipped with 0 / 1 / 2 contacts Type f1: NO contact (standard switchpoint at 0.75x Δp) Type f2: Changeover contact (standard switchpoint at 1.0x Δp) Type f3: NC contact (standard switchpoint at 1.0x Δp) Other switchpoints on request
Switching accuracy:	± 0.05 bar (Δp_{max} <= 2.0 bar); ± 0.08 bar (Δp_{max} > 2.0 bar)
Switching capacity:	Contact type f1: 120W / 250 V / 3.0 A / 120 VA Contact type f2: 30W / 250 V / 1.0 A / 60 VA Contact type f3: 30W / 250 V / 1.0 A / 60 VA

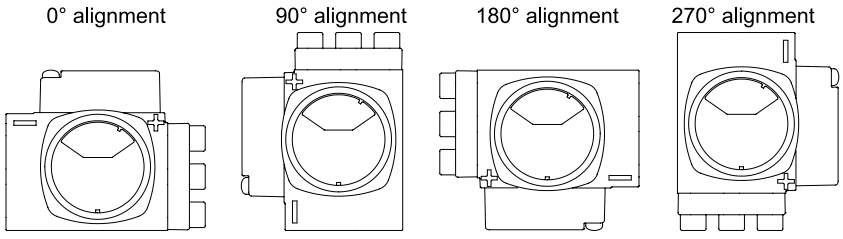
Materials (standard design)

Housing:	GK-AlSi 12 (Cu) (no contact with medium)
Interior housing:	1,4448 (CrNi Steel) (for medium-contact)
Pistons:	1,4435 (CrNi Steel) (for medium-contact)
Measuring element:	1.4310 (CrNi Steel) (for medium-contact)
Screws:	Stainless steel (VA)
Seal (roll membrane):	NBR
Cable gland:	PA (polyamide); seal: CR (chloroprene rubber)

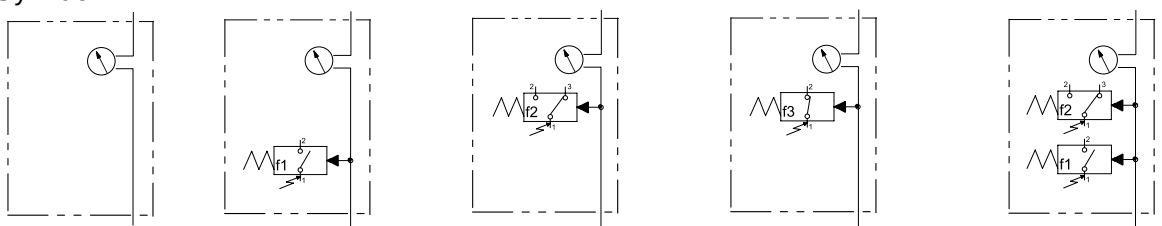
Connections

Fixture:	2x universal slot, spacing 20mm / 25mm to fit M6 / M8 hexagon socket screws
Fluid connections:	internal thread both sides G1/4 , suitable screw joints DIN 2353
Switch contacts (standard):	Terminal strip with cover cap and cable gland (Clamping range 4.5...10mm) Suitable for connection cables max. 1.5mm², stripping length ≤ 8mm Optionally: div. plug connectors, see type code

Viewing glass alignment



Symbol



Optical display

Optical display with electrical contact f1

Optical display with electrical contact f2

Optical display with electrical contact f2

Optical display with two electrical contacts

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Type code

DP 5.01-2.0 (2.0=Δp measuring range)	Basic device without electrical contacts	
	includes:	Spring made of 1.4310
		Pistons made of 1.4435
		Roll membrane NBR
		Viewing glass with inscription "deltaP®"

DP 5.01 - 2,0 .T - f1.1. - f2.2. - V - HD - 1 - X - N

Viewing glass inscription (Standard deltaP®)	
N	neutral
S	Special design acc. to customer specification

Viewing glass alignment (Standard 0° see Page 2)	
X	90°
Y	180°
Z	270°

Electr. connection/connector (if with contact(s) standard terminal strip)	
1	1x DIN 43650connector
2	2x DIN 43650connector
3	1x circular connector M12 4-pole
4	2x circular connector M12 4-pole
5	1x Han-7Dconnector

Piston design (standard roll membrane)	
HD	for HD attachment

Seal material (standard NBR)	
V	FPM (fluorine-polymer rubber)
E	EPDM (ethylene-propylene rubber)

Changeover contact f2/NC contact f3	
f2.X.X	Switchpoint in bar /standard 100% Δp max.)
f3.X.X	Switchpoint in bar /standard 100% Δp max.)
other switchpoints on request	

NO contact f1	
f1.X.X	Switch point in bar /standard 75% Δp max.)
other switchpoints on request	

Measuring spring	
X.X.T	Add. T for PTFE coated

Measuring range	
X.X	Δp max.. see page 1

Series	
DP 5.01	deltaP® differential pressure indicator type 5.01

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