



## APPLICATION

The BOLL Differential Pressure Indicator is a robust and compact device indicating the contamination level of the filter elements.

The differential pressure between filter inlet and filter outlet is the measurable indicator for the contamination degree of the filter element. When the preset maximum value of differential pressure is reached, the filter needs to be cleaned.

The color of the disc segments visible in the two displays indicates the contamination degree: The red segment rises proportionally to the level of contamination. When the segment is completely red, the differential pressure limit is reached.

## DESIGN AND OPERATION

Inside the device is a plunger which is held in zero position by a spring. As differential pressure rises with increasing contamination, the plunger is displaced against the resistance of the spring. By magnetic transmission the display disc turns according to the movement of the plunger and shows more and more red segments. The setting of the requested differential pressure is effected by factory installation of a corresponding spring.

Differential Pressure Indicators with integral electronic contacts are provided with two switches which can be independently used either as switching contact or alarm contact. At 75% and at 100% of the preset dif-

ferential pressure threshold value, the contacts of the two reed-switches are activated magnetically.

The housing of the Differential Pressure Indicator is made of coated die-

cast aluminium and for use at an operating pressure of up to 100 bar. In case of type 4.46 the internal parts are made of stainless steel and for use at an operating pressure of up to 160 bar.

## BOLL Differential Pressure Indicator

**TYPE 4.36.1**

**TYPE 4.36.2**

**TYPE 4.46.1**

**TYPE 4.46.2**

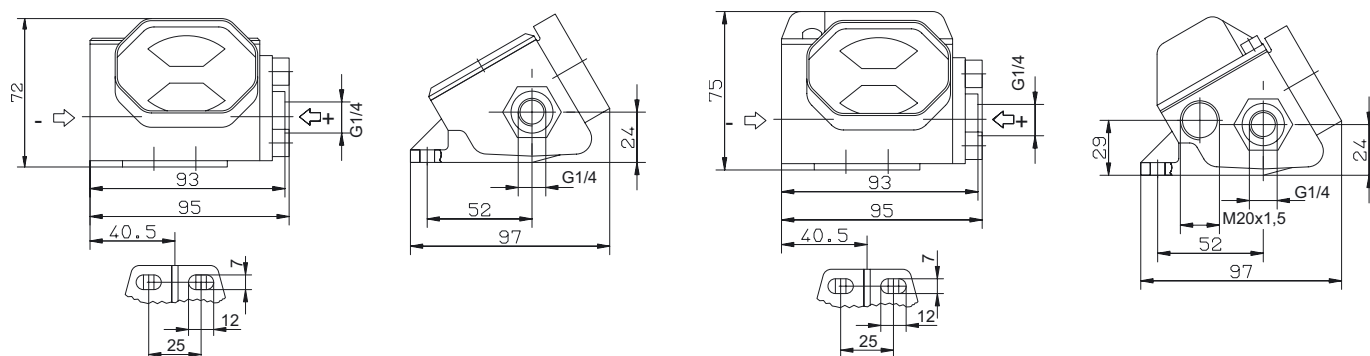


# TYPES OF DIFFERENTIAL PRESSURE INDICATORS

Application / Medium	Execution		with contacts		
	without contacts	Type	Type of contact		Type of connector for electrical wiring
	Type	Make contact	Make break contact		
Oil, Fuels, Cooling Lubricants	4.36.1	4.36.2 4.36.2.2 4.36.2.3	1x	1x 2x 3x	1 x M20 x 1.5 Harting plug type R 15 M M20 x 1.5 Harting plug type Han 7D M20 x 1.5
Water and chemicals compatible with austenitic steels and Viton	4.46.1	4.46.2 4.46.2.2 4.46.2.3	1x	1x 2x 3x	1 x M20 x 1.5 Harting plug type R 15 M M20 x 1.5 Harting plug type Han 7D M20 x 1.5

## TECHNICAL DATA

Type	4.36.1	4.36.2	4.46.1	4.46.2
Circuit diagram				
Protection class		IP 65		IP 65
Electrical data				
Switching voltage V max.		250	220	250
Frequency Hz max.		0-60	0-60	0-60
Switching current A max.		1,0	0,8	1,0
Switching capacity W/VA max.		60/60	40/60	60/60
Material	Die-cast Al.	Die-cast Al.	Die-cast Al.	Housing die-cast Al., inter-nals in contact with medium all austenitic steel
Operating data				
Operating pressure bar max.	100	100	160	160
Operating temperature °C max.	150	150	150	150
Differential pressure range $\Delta p$	0,5; 0,8; 1,2; 2,0; 3,0 bar (to be stipulated by purchaser)			



Type approval by: DNV, BV, RINA, LRS, GL

