

### GENERAL CHARACTERISTICS

The differential pressure measurement cell is manufactured with two separate ceramic sensors in thick-film technology. The bridge signals are compensated for the relevant cell and are converted by an integrated signal converter to a 4..20 mA signal which is linear to the differential pressure. The values from the separate cells are accepted by a 14-bit converter and microcontroller and converted into the difference of the pressures. The microcontroller also permits special output signals to be employed (please inquire). Only high quality materials are exposed to the liquid. ( s.s,Viton,Al<sub>2</sub>O<sub>3</sub>)

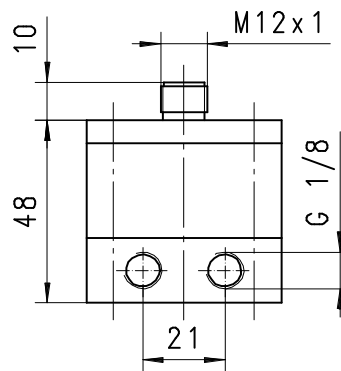
- \* two-wire model for industrial applications
- \* ideally suitable for liquid/liquid applications
- \* can also be used for high differential pressures
- \* high chemical resistance through the use of high quality materials

female thread G1/8 stainless steel



### TECHNICAL DATA

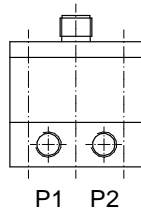
<b>measurement ranges</b>	range	burst
<b>relative pressure</b>	0 - 1	4
	0 - 2	6
	0 - 5	15
<b>burst pressure (bar)</b>	0 - 10	40
	0 - 20	60
	0 - 50	150
	0 - 100	280
<b>differential pressure range</b>	to be specified by customer minimum: 10% of operating range maximum: operating range	
<b>accuracy</b>	±1% of full scale	
<b>temp.-coefficient</b>	<0.05% / K	
<b>operating temperature</b>	-40..85°C	
<b>weight</b>	0.5 kg	



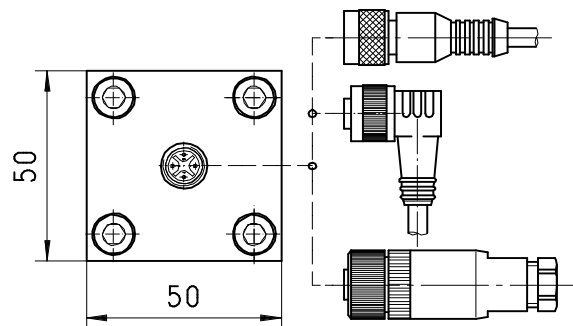
### MOUNTING

Join your pipework to P1 and P2 (see also Accessories).  
When sealing, ensure cleanliness during assembly

The standard version is designed for P1>P2 (a defect does not occur if the connections are interchanged).



If you need to clean the pressure cells from the wetted side, you only have to undo the screws of the connector block, the electronic part is not involved. Cleaning is effected by soft cotton buds making sure that there are no residues left on the metering cell.

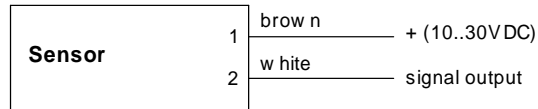


### MATERIALS

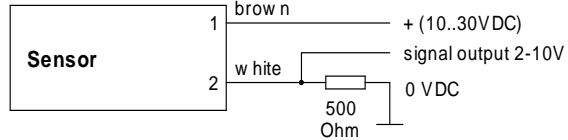
connection	stainless steel 1.4571
ceramics cell	Al <sub>2</sub> O <sub>3</sub>
seal	Viton
other materials	anodised aluminium, stainless steel 1.4305

**ELECTRICAL DATA**

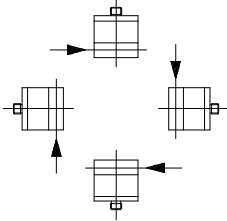
output signal	4..20 mA (two-wire)
supply voltage	10..30 V DC
connection	for locking plug M12x1, 4pole
short-circuit proof	yes
polarised	yes
protection class	IP 67



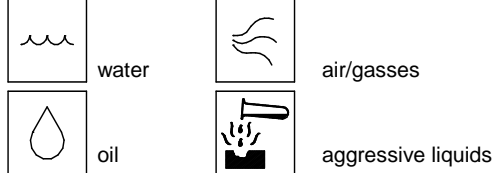
Do you want to adapt a voltage input:



**MOUNTING POSITION**



**METERING SUBSTANCES**



**NOMENCLATURE**

EDP1-	001	R	0050	K	004	S	basic type specification	
	001					●	range of the individual cell. 0 - 1 bar	
	002					●		0 - 2 bar
	005					●		0 - 5 bar
	010					●		0 - 10 bar
	020					●		0 - 20 bar
	050					●		0 - 50 bar
	100					●		0 - 100 bar
		R				●		Relativdruck
			0001			●		Differential pressure range - example 0055 = 5.5 bar (min. 10%, max. 100% of nominal pressure range)
			...			●		
			1000			●		
				K		●	material parts in contact with the medium stainless steel 1.4571	
					004	●	connection G1/8	
						S ●	connection for locking plug M12x1, 4pole	

**ACCESSORY**

Locking plug M12x1

K	PU-	02	S	G	basic type specification
K					● ready-made cable
KB04					● self makable cable 4-pole
	PU-				● material PUR
		02			● length 2 m
		05			● length 5 m
		10			● length 10 m
			S		● moulded-on plug
				G	● straight plug
				W	● angled plug 90°



**COMBINATIONS**

omni-DP1

local electronic unit,  
2xNPN and PNP switch  
4(0)...20mA output  
graphical LCD display  
with flashing LED  
program ring



All technical changes reserved

●BASIC Standard ○BASIC Programme option □VARIO Special option ⊕ PLUS Accessories ✗ not recommendable