Data Sheet **SDD-30 and SDD-40**

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Differential pressure- Pressure sensor with internal diaphragm

Accuracy: 1.0 %

Standard output: or

put: 4...20 mA; 3-wire system or 0...10 VDC; 3-wire system or / and with 2 alarm contacts

Characteristics

Cost savings, because of the connection of positive and negative pressurized connection by wire. Highly resistant to shock and vibration. Contact element and dead spot programmable with storage of min/max values Plus- / Minus-pressure connection interchangeable by programming.

Application

Used for all gaseous and liquid pressure media, which do not tend to crystallize, highly viscous or attack the measuring material.

Winner of the Innovation award 2006! Patent-no.: 10 2005 043 752



Instrument range

Environmental engineering, filter monitoring Mechanical / plant engineering

	internal diaphragm	front flush diaphragm
Model	SDD-30	SDD-40
Accuracy	1.0 % of full scale value	
Connection thread	2 x G 1/2, stainless steel 316L	2 x G 1/2 B front flush
Display	LCD blue-white, two-line with backlighting	
Display ranges in mbar	0 40, 60, 100, 160, 250, 400, 600	
Display ranges in bar	0 1, 1,6, 2,5, 4, 6, 10, 16, 25, 40,	60, 100, 160, 250, 400
Max. static pressure	10 x full scale value	
Sensor element	Sensor element Stainless steel measuring cell piezoresistive or in thin-film technology	
	(depending on measuring range)	
Housing	Aluminum anodized	
Wetted parts	CrNi-steel 316L,, O-ring Viton (FKM)	
Pressure connection	2 x SW 27, CrNi-steel 316L	
Electrical connection	via circular plug M 12x1, 4-pole	
Power supply	1430 VDC , max. 70 mA	
Contact output	2 relays as change-over contact, 6 A 250 V AC, but min. 12 V 10 mA via cable junction box	
Permissible load	current 2-wire: $R_{max} = ((UB-UB_{min}) / 0,02)$ Ohm, voltage: $R_{min} = 10$ K ohms	
Short circuit strength	S + against U -	
Reverse polarity protection	U + against U -	
CE-conformity	Pressure equipment directive - 97/23 / EC	
	EMC Directive - Emissivity and immunity (industrial area) according to EN 61 326	
Service life	> 50 million load cycles	
Temp. comp. Range	-2080 °C	
Protection class	IP 65 according to EN 60529 / IEC 529	
Temperatures	Medium: -30°C to 100°C, ambient: -20°C to 80°C	
Weight	0.8 kg	



Model SDD-30

Standard version Circular connector M 12 x 1, 4-pin



3-wire system 4...20 mA and 0...5/10 V





3-wire system 4...20 mA and 0...5/10 V







Model SDD-30

Standard version Male plug M 12 x 1, 4-pin optionally with one or two switching contacts



3-wire system 4...20 mA and 0...5/10 V



Connection of the switch contacts



1. contact 2. contact





Model SDD-40

Standard version Male plug M 12 x 1, 4-pin



3-wire system 4...20 mA and 0...5/10 V



optional Cable outlet with 2 meter PVC-cable, shielded

3-wire system 4...20 mA and 0...5/10 V





Model SDD-40

Standard version Male plug M 12 x 1, 4-pin optionally with one or two switching contacts



3-wire system 4...20 mA and 0...5/10 V



Connection of the switch contacts





Model SDD-40

optionally with one or two switching contacts optional DIN flange connection DN 25, PN 40



3-wire system 4...20 mA and 0...5/10 V



Connection of the switch contacts



1. contact 2. contact



Model SDD-30 and SDD-40

optional with two external pressure sensors and back flange



3-wire system 4...20 mA and 0...5/10 V



Connection of the switch contacts



1. contact 2. contact

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