



DS 6

Electronic OEM Pressure Switch

Applications:

- ▶ mechanical engineering / hydraulics
- ▶ measuring, control and process technology

Characteristics:

- ▶ nominal pressure ranges from 0 ... 2 bar up to 0 ... 400 bar
- ▶ 1 or 2 contacts
- ▶ configurable via PC or programming device P6
- ▶ optional:
oil- and fat free version



Input pressure range									
Nominal pressure gauge	[bar]	2	5	10	20	50	100	200	400
Nominal pressure abs.	[bar]	2	5	10	20	50	100	200	400
Overpressure	[bar]	7	12	25	50	120	250	400	600
Supply									
Supply voltage V_s		12 ... 30 V _{DC}							
Current consumption		max. 14 mA (without contacts)							
Contacts									
Number		standard: 1				optional: 2			
Type		PNP							
Switching performance		max. 300 mA, short-circuit proof							
Accuracy of contacts		IEC 60770: $\leq \pm 1\%$ FSO							
Repeatability		$\leq \pm 0.2\%$ FSO							
Minimum hysteresis of contacts		$\leq \pm 0.5\%$ FSO							
Status indication		SP 1: green				SP 2: yellow			
Switching function ¹		standard: n/o				optional: n/c			
Switching mode ¹		standard: hysteresis mode				optional: window mode			
Switch on point ¹		standard: factory setting 80 % FSO others: specify on order; adjustable range 5 ... 100 % FSO							
Switch off point ¹		standard: factory setting 75 % FSO others: specify on order; adjustable range 5 ... 100 % FSO							
Switch on / switch off delay ¹		standard: off others: specify on order, adjustable range from 10 msec up to 90 sec (step 10 msec)							
Switching frequency		200 Hz (without switching delay)							
Switching cycles		$> 100 \times 10^6$							
¹ Parameters can be programmed by customer either with the programming kit CIS-G or with the programming device P6 (available as accessories).									
Thermal effects (Offset and Span) / Permissible temperatures									
Thermal error		$\leq \pm 0.3\%$ FSO / 10 K				in compensated range -25 ... 85 °C			
Permissible temperatures		medium / electronics / environment: -25 ... 85 °C				storage: -40 ... 85 °C			

Electrical protection	
Short-circuit protection	permanent
Reverse polarity protection	no damage, but also no function
Electromagnetic compatibility	emission and immunity according to EN 61326
Mechanical stability	
Vibration	10 g RMS (20 ... 2000 Hz)
Shock	100 g / 11 msec
Materials	
Pressure port	stainless steel 1.4301 (304)
Housing	stainless steel 1.4305 (303)
Seals (media wetted)	standard: FKM option: EPDM
Diaphragm	ceramic Al_2O_3 96 %
Media wetted parts	pressure port, seals, diaphragm
Miscellaneous	
Weight	approx. 90 g
Installation position	any
Ingress protection	IP 67
CE-conformity	EMC Directive: 2014/30/EU Pressure Equipment Directive: 2014/68/EU (module A) ²
² This directive is only valid for devices with maximum permissible overpressure > 200 bar	
Wiring diagrams	
<p>1 contact</p>	<p>2 contacts</p>
Pin configuration	
Electrical connection	M12x1 (4-pin), metal
Supply +	1
Supply -	3
Contact 1	4
Contact 2	2
Shield	plug housing
Dimensions (mm / in)	
<p style="text-align: center;">G1/4" DIN 3852</p>	

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Messgröße	Pressure	gauge		absolute															
	relativ	6	8	5															
	absolut	6	8	6															
Eingang	[bar] Input	[bar]																	
	2	2	0	0	1														
	5	5	0	0	1														
	10	10	1	0	2														
	20	20	2	0	2														
	50	50	5	0	2														
	100	100	1	0	3														
	200	200	2	0	3														
	400	400	4	0	3														
	Sondermessbereiche	customer	9	9	9													auf Anfrage	consult
Anzahl Schaltausgänge	Number of contacts																		
	1 Schaltausgang																		
	2 Schaltausgänge																		
Analogausgang	Analogue output																		
	ohne Analogausgang																		
	andere																		
Elektrischer Anschluss	Electrical connection																		
	M12x1 (4-polig), Metall																		
	andere																		
Mechanischer Anschluss	Mechanical connection																		
	G1/4" DIN 3852																		
	andere																		
Dichtung	Seals																		
	FKM																		
	EPDM																		
	andere																		
Einstellungscode	Setting code																		
	LEITENBERGER Standard																		
	nach Kundenvorgabe																		
Sonderausführungen	Special version																		
	Standard																		
	öl- und fettfrei																		
	andere																		

¹ Die Parameter können kundenseitig durch die Programmier-Kits CIS-G oder durch das Programmiergerät P6 eingestellt werden (als Zubehör erhältlich). Parameters can be programmed by customer either with the programming kit CIS-G or with the programming device P6 (available as accessories).

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