PRESSOSTAT

Applications

- Shipbuilding
- Engine manufacturing
- Railways
- Machine tools
- Hydraulics

Features

- Rugged aluminium housing
- Protection IP65
- Any mounting position possible

Technical Data			
Measuring principle	Bellow	Repeatability	± 1.0 % FS typ.
Measuring range	-0.9 ... 1.5 to 10 ... 100 bar 5 ... 50 to 125 ... 1500 psi	Media temperature	-40°C ... +150°C
Output signal	1 Floating change-over contact (SPDT)	Ambient temperature	-25°C ... +70°C
Switching differential	Not adjustable	Approval / conformity	ABS, BV, CCS, DNV-GL, KRS, LRS, RINA EN60730-1/ EN60730-2-6: Typ 2.B.H

Ordering information/type code

		XXX	XX	XX	XXXXXX	XX	XX
Custom build code	With display and adjusting screw	**900**					
	Without display, with adjusting screw	**904**					
	With display and adjusting knob	**912**					

Microswitch	Small switching differential, standard vibration resistance [1) 2)]	**10**
	Average switching differential, standard vibration resistance [1)]	**11**
	Average switching differential, increased vibration resistance [1)]	**23**
	Large switching differential, high vibration resistance [1)]	**26**
	With gold plated contacts, standard vibration resistance [1)]	**21**

Range

Range [bar]	Over pressure [bar]	Burst pressure [bar]	
-0.9 ... 1.5	10	13	**72**
0.2 ... 1.6	10	13	**73**
0.2 ... 2.5	10	13	**75**
0 ... 4	12	26	**76**
0 ... 6	12	26	**77**
1 ... 10	24	36	**78**
1 ... 16	24	36	**79**
2 ... 25	40	75	**80**
4 ... 40	40	75	**81**
6 ... 60	100	160	**82**
10 ... 100	100	160	**83**

Range [psi]	Over pressure [psi]	Burst pressure [psi]	
5 ... 50	175	350	**G6**
10 ... 100	350	500	**G8**
25 ... 200	350	500	**G9**
50 ... 500	500	1000	**H1**
125 ... 1500	1500	2300	**H3**

Sensor

Sensor material	Sensor housing material	Thread	Range	
Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	72	**900**
Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	73, 75	**901**
Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	76 ,77	**903**
Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	78, 79	**905**
Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	80, 81	**907**
Stainless steel 1.4435	Brass (CuZn39Pb3)	G1/4" female	82, 83	**940**
Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	72	**909**
Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	73, 75	**902**
Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	76, 77	**904**
Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	78, 79	**906**
Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	80, 81	**908**
Stainless steel 1.4435	Brass	G1/2" male	82, 83	**941**
Bronze bellows (CuSn6)	Brass (CuZn39Pb3)	1/4"NPT female	G6	**G6.I03**
Bronze bellows (CuSn6)	Brass (CuZn39Pb3)	1/4"NPT female	G8	**G8.I05**
Bronze bellows (CuSn6)	Brass (CuZn39Pb3)	1/4"NPT female	G9	**G9.I05**
Bronze bellows (CuSn6)	Brass (CuZn39Pb3)	1/4"NPT female	H1	**H1.I07**
Bronze bellows (CuSn6)	Brass (CuZn39Pb3)	1/4"NPT female	H3	**H3.I40**
Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/4" female	72	**950**
Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/4" female	73, 75	**951**
Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/4" female	76 ,77	**953**

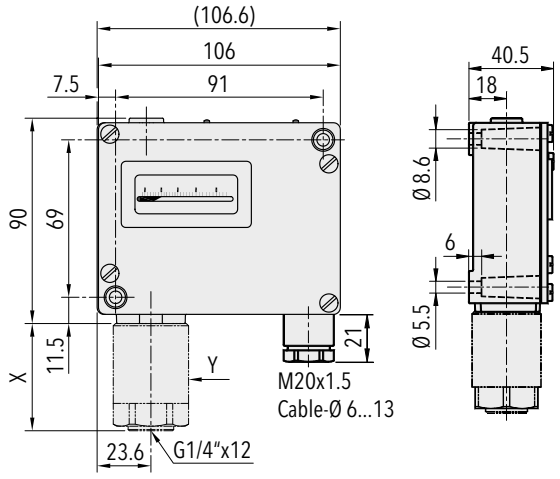
Sensor material	Sensor housing material	Thread	Range	
Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/4" female	78, 79	**955**
Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/4" female	80, 81	**957**
Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/2" male	72	**959**
Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/2" male	73, 75	**952**
Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/2" male	76, 77	**954**
Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/2" male	78, 79	**956**
Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/2" male	80, 81	**958**
Stainless steel 1.4435	Brass nickel plated	G1/4" female	72	**800**
Stainless steel 1.4435	Brass nickel plated	G1/4" female	73, 75	**801**
Stainless steel 1.4435	Brass nickel plated	G1/4" female	76 ,77	**803**
Stainless steel 1.4435	Brass nickel plated	G1/4" female	78, 79	**805**
Stainless steel 1.4435	Brass nickel plated	G1/4" female	80, 81	**807**
Stainless steel 1.4435	Brass nickel plated	G1/4" female	82, 83	**840**
Stainless steel 1.4435	Brass nickel plated	G1/2" male	72	**809**
Stainless steel 1.4435	Brass nickel plated	G1/2" male	73, 75	**802**
Stainless steel 1.4435	Brass nickel plated	G1/2" male	76 ,77	**804**
Stainless steel 1.4435	Brass nickel plated	G1/2" male	78, 79	**806**
Stainless steel 1.4435	Brass nickel plated	G1/2" male	80, 81	**808**
Stainless steel 1.4435	Brass nickel plated	G1/2" male	82, 83	**841**

		XXX	XX	XX	XXXXXX	XX	XX
Fixing	Direct on sensor or housing					00	
	With mounting bracket					31	
Accessories	Lead seal (manipulation protection)						16
	Screwed cable gland M20x1.5 (EN 50262)						07
	Screwed cable gland M24x1.5 (DIN89280)						27
	Screwed cable gland M18x1.5 (DIN89280)						40
	Without screwed cable gland						33
	Railway version IEC 61373, category 2						28
	Damping elements and snubber see data sheet H72258						

[1] Switching differential not adjustable
[2] Not suitable for applications under vibration

Standard products (extra short lead time)

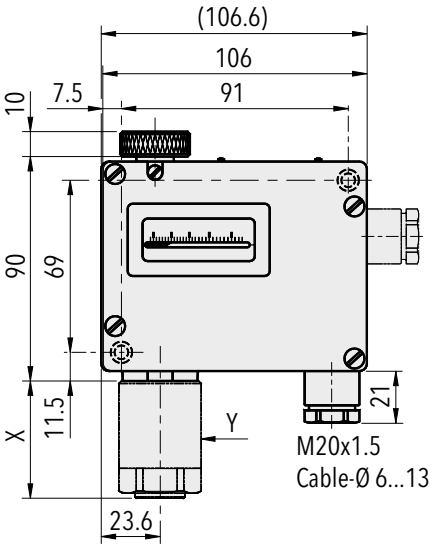
Product No.	Type Code	Pressure range [bar]	Over pressure max. [bar]	Switching differential [bar]	Diameter Y [mm]	Length X [mm]
P1.5	900 2672 900	-0.9 ... 1.5	10	0.1 (fixed)	45	56.5
P2.5	900 2675 901	0.2 ... 2.5	10	0.1 (fixed)	45	56.5
P4	900 2376 903	0 ... 4	12	0.2 (fixed)	33	47
P6	900 2377 903	0 ... 6	12	0.2 (fixed)	33	47
P10	900 2378 905	1 ... 10	24	0.4 (fixed)	27	42.5
P16	900 2379 905	1 ... 16	24	0.4 (fixed)	27	42.5
P25	900 2380 907	2 ... 25	40	1 (fixed)	33	47
P40	900 2381 907	4 ... 40	40	1 (fixed)	33	47
PS1.5	904 2672 900	-0.9 ... 1.5	10	0.1 (fixed)	45	56.5
PS2.5	904 2675 901	0.2 ... 2.5	10	0.1 (fixed)	45	56.5
PS6	904 2377 903	0 ... 6	12	0.2 (fixed)	33	47
PS16	904 2379 905	1 ... 16	24	0.4 (fixed)	27	42.5
PS40	904 2381 907	4 ... 40	40	1 (fixed)	27	42.5



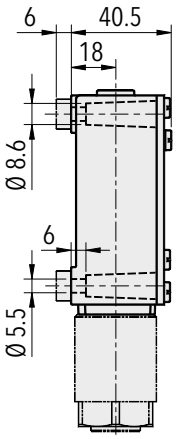
Specifications		
Accuracy	Repeatability	± 1.0 % FS typ.
	Scale accuracy typ.	± 2.0 % FS typ.
	Switching differential	See table
	Adjustment range switchpoint [1)]	10 % ... 90 % FS
Environmental conditions	Ambient temperature	-25°C ... +70°C
	Media temperature	-40°C ... +150°C
	Storage temperature	-25°C ... +85°C
	Protection	IP65
	Humidity	Max. 95% relative
	Vibration	Switch 23/26: 5...25 Hz: ±1.6 mm 25...100 Hz: 4 g Ranges 72, 73, 75, 5...50 Hz: 20 mm/sec.
	Shock	50 g / 11 ms
Mechanical Data	Sensor	See ordering information
	Housing	AlSi10Mg/ Epoxy coated
	Sealing	NBR
	Housing seal	EPDM 75 Sh
	Screwed cable gland	Brass nickel plated
	Male electrical plug	Polyamide (PA)
	Mounting torque	max. 25 Nm
	Installation	any position
	Weight	~ 710 g
Microswitch	Rating	See table
	Resistance of insulation	> 2 MΩ
	Dielectric strength	U ≤ 250V: 1.45 kV / U ≤ 500V: 2 kV terminal ground
	Life time (mechanical)	Microswitch 10/11: 20 Mio. cycles Microswitch 21: 0.5 Mio. cycles Microswitch 23/26: 0.3 Mio. cycles
Electrical connection	Electrical connections	Screw terminal
	Cable gland	M20x1.5 Cable-Ø 6...13 mm
	Terminal screw	3 x 1.5...4 mm²

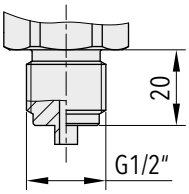
[1)] Other adjustment ranges upon request

Dimensions

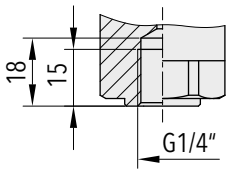


Dimension X and Y see data sheet H72271

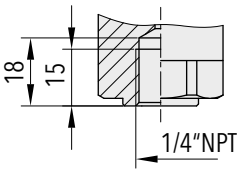




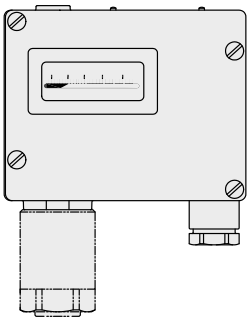
G1/2" male



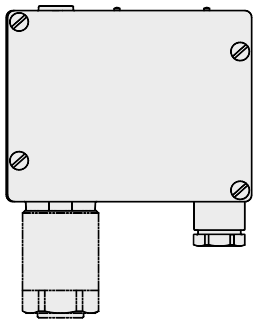
G1/4" female



1/4"NPT female



900.XX.XX.XXX.XX.XX



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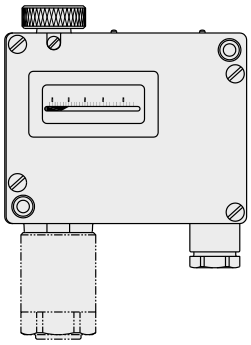

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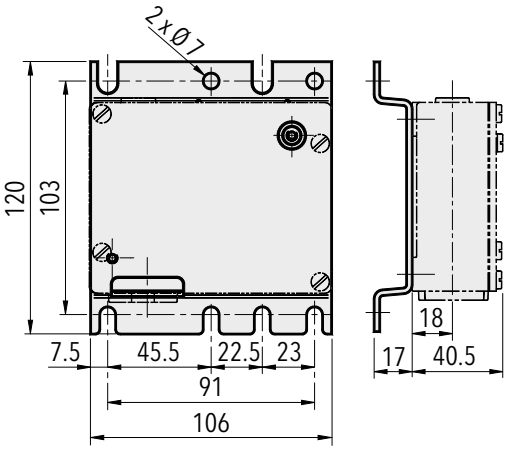
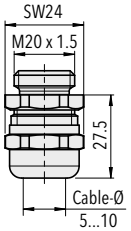
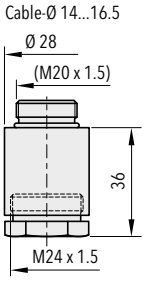


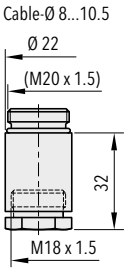
9XX.XX.XX.XXX.**31**.XX



9XX.XX.XX.XXX.XX.**07**
M20x1.5



9XX.XX.XX.XXX.XX.**27**
M24x1.5

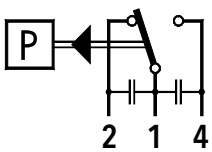


9XX.XX.XX.XXX.XX.**40**
M18x1.5

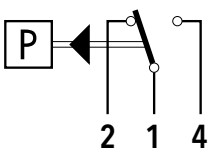
Switching differential typ. @ 25°C						
Measuring range of bellows sensor	**[bar]**	**-0.9 ... 1.5 0.2 ... 1.6 0.2 ... 2.5**	**0 ... 4 0 ... 6**	**1 ... 10 1 ... 16**	**2 ... 25 4 ... 40**	**6 ... 60 10 ... 100**
Microswitch 10 Switching differential (not adjustable)	**[bar]**	0.03	0.08	0.2	0.5	1.5
Microswitch 11/21/23 Switching differential (not adjustable)	**[bar]**	0.1	0.2	0.4	1.0	3.0
Microswitch 26 Switching differential (not adjustable)	**[bar]**	0.1	0.3	0.8	2.0	5.0
Measuring range of bellows sensor	**[psi]**	**5 ... 50**	**10 ... 100 25 ... 200**	**50 ... 500**	**125 ... 1500**	
Microswitch 10 Switching differential (not adjustable)	**[psi]**	1.2	3	7.5	22	
Microswitch 11/21/23 Switching differential (not adjustable)	**[psi]**	3	6	14.5	44	
Microswitch 26 Switching differential (not adjustable)	**[psi]**	4.4	12	30	72.5	

Electrical data switch			
		Rating Resistive Load (Inductive Load)	
Type	**Features**	AC	DC
10	Small switching differential (not recommended for applications under vibrations)	125 V 10 (1.5) A 250 V 10 (1.25) A	250 V 0.2 (0.02) A 125 V 0.4 (0.03) A 30 V 2 (1) A 14 V 15 (2.5) A
11	Average switching differential, standard vibration resistance	125 V 15 (1.5) A 250 V 15 (1.25) A 500 V 10 (0.75) A	250 V 0.25 (0.03) A 125 V 0.5 (0.05) A 30 V 6 (1.5) A 14 V 15 (1.5) A
23	Average switching differential, increased vibration resistance	125 V 15 (1.5) A 250 V 15 (1.25) A 500 V 10 (0.75) A	250 V 0.3 (0.05) A 125 V 0.6 (0.1) A 30 V 15 (1.5) A 14 V 15 (1.5) A
26	Large switching differential, high vibration resistance	125 V 15 (1.5) A 250 V 15 (1.25) A 500 V 10 (0.75) A	250 V 0.3 (0.2) A 125 V 0.75 (0.4) A 30 V 15 (1.5) A 14 V 15 (1.5) A
21	With gold plated contacts, standard vibration resistance	24 V 0.1 (0.1) A 12 V 1.0 (1.0) A 5 V 2.0 (2.0) A	24 V 0.1 (0.1) A 12 V 1.0 (1.0) A 5 V 2.0 (2.0) A

Electrical connection



Switch 10/11/23



Switch 21/26