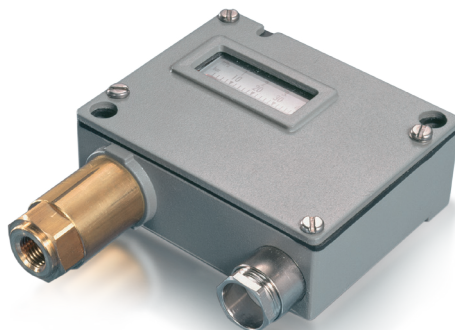


INDUSTRIAL PRESSURE SWITCH

P/PS 900/904/912



Applications

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

Features

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

Technical Data

Measuring principle	Bellow	Media temperature	-40 ... +150°C
Measuring range	-0.9...1.5 to 10...100 bar	Repeatability	± 1.0 % FS typ.
Output signal	Floating change-over contact	Approval	ABS, BV, CCS, DNV, GL, KRS, LRS, RINA EN60730-1/ EN60730-2-6: Typ 2.B.H
Switching differential	Not adjustable		

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Ordering information/type code

		XXX	XX	XX	XXX	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⁾	10								
	Average switching differential, standard vibration resistance	11								
	Average switching differential, improved vibration resistance 	23								
	Large switching differential, high vibration resistance 	26								
	With gold plated contacts, standard vibration resistance	21								
Range	Range [bar]	Over pressure [bar]	Burst pressure [bar]		Range [bar]	Over pressure [bar]	Burst pressure [bar]			
	-0.9 ... 1.5	10	13	72	1 ... 16	24	36			
	0.2 ... 1.6	10	13	73	2 ... 25	40	75			
	0.2 ... 2.5	10	13	75	4 ... 40	40	75			
	0 ... 4	12	26	76	6 ... 60	100	160			
	0 ... 6	12	26	77	10 ... 100	100	160			
	1 ... 10	24	36	78						
Sensor	Sensor material	Sensor housing material	Thread	Range		Sensor material	Sensor housing material	Thread	Range	
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	72	900	Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/2" male	72	
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	73, 75	901	Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/2" male	73, 75	
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	76, 77	903	Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/2" male	76, 77	
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	78, 79	905	Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/2" male	78, 79	
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	80, 81	907	Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/2" male	80, 81	
	Stainless steel 1.4435	Brass (CuZn39Pb3)	G1/4" female	82, 83	940	Stainless steel 1.4435	Brass nickel plated	G1/4" female	72	
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	72	909	Stainless steel 1.4435	Brass nickel plated	G1/4" female	73, 75	
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	73, 75	902	Stainless steel 1.4435	Brass nickel plated	G1/4" female	76, 77	
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	76, 77	904	Stainless steel 1.4435	Brass nickel plated	G1/4" female	78, 79	
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	78, 79	906	Stainless steel 1.4435	Brass nickel plated	G1/4" female	80, 81	
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	80, 81	908	Stainless steel 1.4435	Brass nickel plated	G1/4" female	82, 83	
	Stainless steel 1.4435	Brass	G1/2" male	82, 83	941	Stainless steel 1.4435	Brass nickel plated	G1/2" male	72	
	Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/4" female	72	950	Stainless steel 1.4435	Brass nickel plated	G1/2" male	73, 75	
	Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/4" female	73, 75	951	Stainless steel 1.4435	Brass nickel plated	G1/2" male	76, 77	
	Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/4" female	76, 77	953	Stainless steel 1.4435	Brass nickel plated	G1/2" male	78, 79	
	Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/4" female	78, 79	955	Stainless steel 1.4435	Brass nickel plated	G1/2" male	80, 81	
	Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/4" female	80, 81	957	Stainless steel 1.4435	Brass nickel plated	G1/2" male	82, 83	

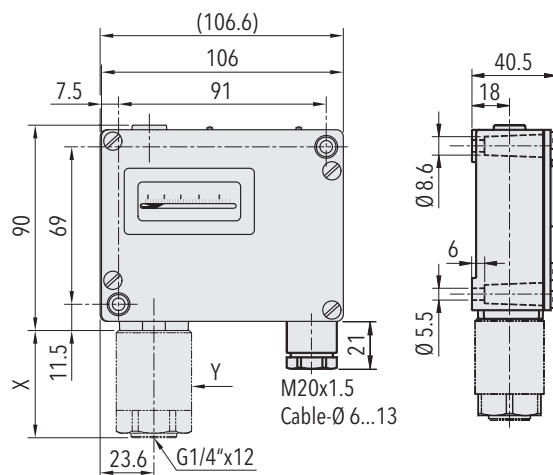
P/PS 900/904/912

	XXX	XX	XX	XXX	XX	XX
Fixing						
Direct on sensor or housing					00	
With mounting bracket					31	
Accessories						
Lead seal (manipulation protection)						16
Screwed cable gland M20x1.5 (EN50262)						07
Screwed cable gland M24x1.5 (DIN89280)						27
Screwed cable gland M18x1.5 (DIN89280)						40
Without screwed cable gland						33
Railway safety version						28

¹⁾ 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	45	56.5
P2.5	900 2675 901	0.2 ... 2.5	10	0.1	45	56.5
P4	900 2376 903	0 ... 4	12	0.2	33	47
P6	900 2377 903	0 ... 6	12	0.2	33	47
P10	900 2378 905	1 ... 10	24	0.4	27	42.5
P16	900 2379 905	1 ... 16	24	0.4	27	42.5
P25	900 2380 907	2 ... 25	40	1	33	47
P40	900 2381 907	4 ... 40	40	1	33	47
PS1.5	904 2672 900	-0.9 ... 1.5	10	0.1	45	56.5
PS2.5	904 2675 901	0.2 ... 2.5	10	0.1	45	56.5
PS6	904 2377 903	0 ... 6	12	0.2	33	47
PS16	904 2379 905	1 ... 16	24	0.4	27	42.5
PS40	904 2381 907	4 ... 40	40	1	27	42.5

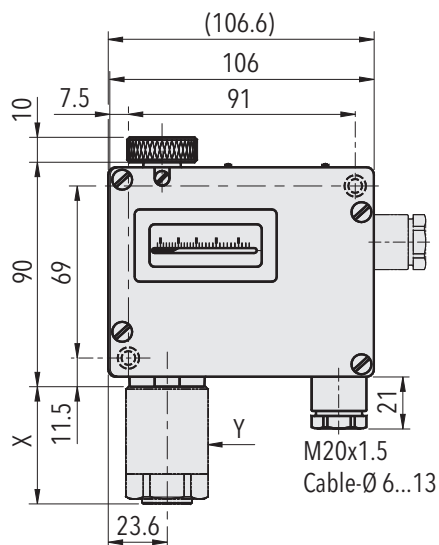


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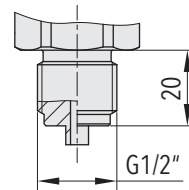
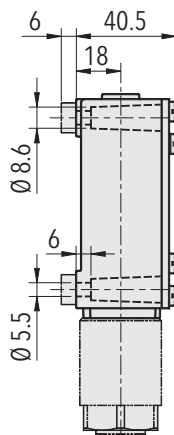
Specifications		
Accuracy	Repeatability	± 1.0 % FS typ.
	Scale accuracy typ.	± 2.0 % FS typ.
	Switching differential	See table
Environmental Conditions	Ambient temperature	-25 ... +70°C
	Media temperature	-40 ... +150°C
	Storage temperature	-25 ... +85°C
	Protection	IP65
	Humidity	Max. 95% relative
	Vibration	Switch 23/26, 5...25 Hz: ±1.6 mm 25...100 Hz: 4g Ranges 72, 73, 75, 5...50 Hz: 20 mm/sec.
	Shock	50g/ 11ms
Mechanical Data	Sensor	See ordering information
	Housing / Pressure connection	AlSi10Mg/ Epoxy coated
	Sealing	NBR
	Housing seal	EPDM 75 Sh
	Screwed cable gland	Brass nickel plated
	Male electrical plug	PA, Polyamid
	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 connection	EN175301-803-A (DIN43650-A)
	Cable gland	M20x1.5 Cable-Ø 6...13 mm
	Terminal screw	3 x 1.5...4 mm ²

Dimensions

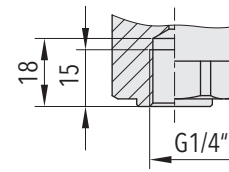
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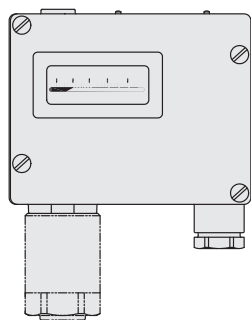
Dimension X and Y see data sheet H72271



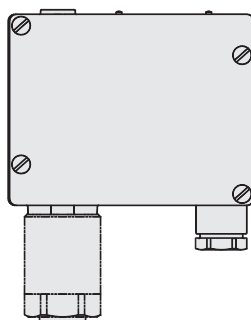
G1/2" male



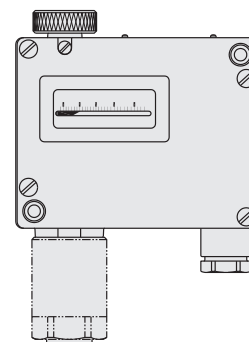
G1/4" female



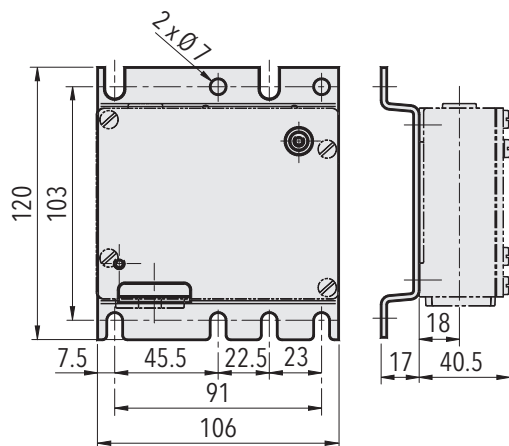
900.XX.XX.XXX.XX.XX



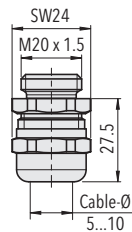
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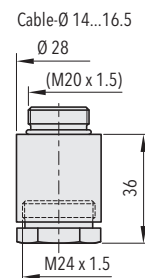
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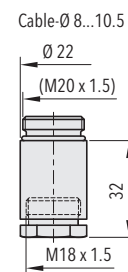
9XX.XX.XX.XXX.31.XX



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



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



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



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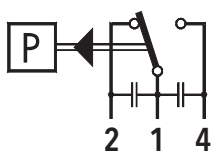
Switching differential typ.

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
P max.	[bar]	10	12	24	40	100
Microswitch 10 Switching differential fixed value, not adjustable	[bar]	0.03	0.08	0.2	0.5	1.5
Microswitch 11/21/23 Switching differential fixed value, not adjustable	[bar]	0.1	0.2	0.4	1.0	3.0
Microswitch 26 Switching differential fixed value, not adjustable	[bar]	0.1	0.3	0.8	2.0	5.0

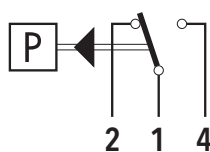
Electrical data switch

		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	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 (2.5) A
23 	Improved vibration resistance; average switching differential	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 0.75 (0.1) A 30 V 15 (1.5) A 14 V 15 (1.5) A
26 	High vibration resistance; average switching differential	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	Gold plated contacts	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