

«Simple Apparatus» conformity to ATEX 904

PRESSOSTAT

Swiss based Trafag is a leading international supplier of high quality sensors and monitoring instruments for measurement of pressure and temperature.



Applications

- Potentially explosive atmosphere

Features

- Compact design
- Rugged housing
- Protection IP65
- Any mounting position possible
- May be used as „simple apparatus“ in zones at risk of explosions

Technical Data			
Measuring principle	Bellow	Repeatability	± 1.0 % FS typ.
Measuring range	-0.9 ... 1.5 to 10 ... 100 bar	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	EN60730-1/ EN60730-2-6: Typ 2.B.H EN60079-0, EN60079-11 Zone 1 and 2, 21 and 22

02/2017

Data sheet H72364e

Subject to change

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Ordering information/type code

		XXX	XX	XX	XXX	XX	XX			
Custom build code	Switch point indicator behind cover	904								
Microswitch	With gold plated contacts, switching differential not adjustable		71							
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	79		
	0.2 ... 1.6	10	13	73	2 ... 25	40	75	80		
	0.2 ... 2.5	10	13	75	4 ... 40	40	75	81		
	0 ... 4	12	26	76	6 ... 60	100	160	82		
	0 ... 6	12	26	77	10 ... 100	100	160	83		
	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	959
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	73, 75	901	Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/2" male	73, 75	952
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	76, 77	903	Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/2" male	76, 77	954
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	78, 79	905	Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/2" male	78, 79	956
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	80, 81	907	Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/2" male	80, 81	958
	Stainless steel 1.4435	Brass (CuZn39Pb3)	G1/4" female	82, 83	940	Stainless steel 1.4435	Brass nickel plated	G1/4" female	72	800
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	72	909	Stainless steel 1.4435	Brass nickel plated	G1/4" female	73, 75	801
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	73, 75	902	Stainless steel 1.4435	Brass nickel plated	G1/4" female	76, 77	803
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	76, 77	904	Stainless steel 1.4435	Brass nickel plated	G1/4" female	78, 79	805
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	78, 79	906	Stainless steel 1.4435	Brass nickel plated	G1/4" female	80, 81	807
	Bronze bellow (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	80, 81	908	Stainless steel 1.4435	Brass nickel plated	G1/4" female	82, 83	840
	Stainless steel 1.4435	Brass (CuZn39Pb3)	G1/2" male	82, 83	941	Stainless steel 1.4435	Brass nickel plated	G1/2" male	72	809
	Bronze bellow (CuSn6)	Brass chemically nickel plated	G1/4" female	72	950	Stainless steel 1.4435	Brass nickel plated	G1/2" male	73, 75	802
	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	804
	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	806
	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	808
	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	841
Fixation	Direct on sensor or housing								00	
	With mounting bracket								31	
Accessories	Sealing switchpoint (manipulation protection)								16	
	Damping elements and snubber see data sheet H72258									

Optional accessories of third party supplier

Ex-i barriers are suitable for intrinsically safe applications. The device transmits binary signals from the hazardous area into the safe area.

Ex-i-barriers: 24 VDC $U_0 = 10.5 \text{ V} / I_0 = 13 \text{ mA} / P_0 = 34 \text{ mW} =$	ZEN24VDC
Ex-i-barriers: 230 VAC $U_0 = 10.6 \text{ V} / I_0 = 19.1 \text{ mA} / P_0 = 51 \text{ mW} =$	ZEN230VAC

i Pressostats, when combined with a certified Ex-barrier (see "optional accessories of third party supplier"), can be used as "simple electrical apparatus" in Zone 1 and 2, as well as in Zone 21 and 22, according to IEC/EN 60079-14. These pressostats are not suitable for Zone 0 and Zone 20. Use in safety relevant applications (approved electrical apparatus) is not permitted.

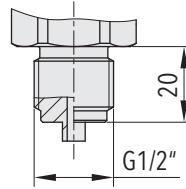
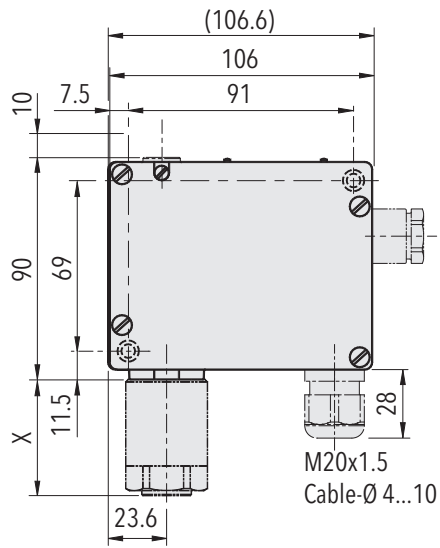
«Simple Apparatus» conformity to ATEX 904

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	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	AlSi10Mg/ Epoxy coated
	Sealing	NBR
	Screwed cable gland	Polyamide (PA), light blue
	Mounting torque	Max. 25 Nm
	Installation	any position
	Weight	~ 710 g
Microswitch	Rating	See table
	Resistance of insulation	> 2 MΩ
	Dielectric strength	1.25 kV terminal ground
	Life time (mechanical)	1 Mio. cycles
Electrical connection	Cable gland	M20x1.5 Cable-Ø 4...10 mm, max. cable length according to EN 60079-11
	Terminal screw	3 x 1.5...4 mm ²

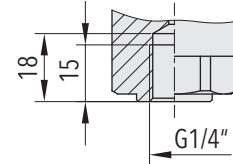
¹⁾ Other adjustment ranges upon request

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Dimensions



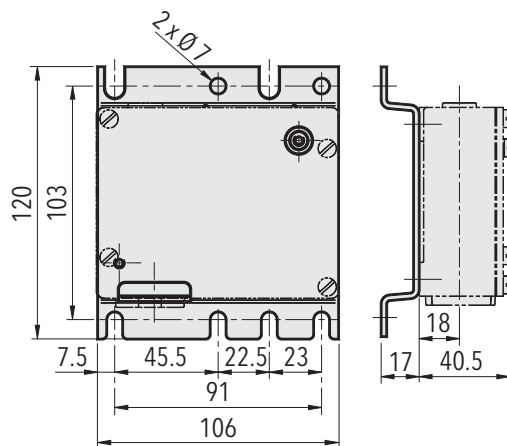
G1/2" male



G1/4" female

904.71.XX.XXX.XX.XX

Dimension X see data sheet H72271



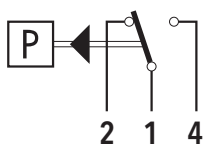
904.XX.XX.XXX.31.XX

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Switching differential typ. @ 25°C						
Measuring range bellows sensor	[bar]	-0.9 ... 1.5	0 ... 4	1 ... 10	2 ... 25	6 ... 60
		0.2 ... 1.6	0 ... 6	1 ... 16	4 ... 40	10 ... 100
		0.2 ... 2.5				
Microswitch 71: Switching differential not adjustable	[bar]	0.1	0.2	0.4	1.0	3.0

Electrical data switch		
Type	Features	Rating
71	Gold plated contacts	$U_0 = 24\text{ V}$ $I_0 = 100\text{ mA}$ $P_0 = 600\text{ mW}$

Electrical connection



904

Additional information		
Documents	Data sheet	www.trafag.com/H72364
	Instructions	www.trafag.com/H73175
	Flyer	www.trafag.com/H70919