«Simple Apparatus» conformity to ATEX 947

PRESSOSTAT

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

Applications

- Potentially hazardous areas

Features

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

02/2017

Data sheet H72366f

Subject to change

Technical Data			
Measuring principle	Piston	Repeatability	± 1.0 % FS typ.
Measuring range	1 ... 10 to 60 ... 600 bar	Media temperature	O-Ring NBR: -30°C ... +100°C O-Ring FKM: -15°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

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trafag sensors controls

«Simple Apparatus» conformity to ATEX 947

Ordering information/type code

		XXX	XX	XX	XXX	XX	XX
Custom build code	Switch point indicator behind cover	**947**					
Microswitch	With gold plated contacts, switching differential not adjustable		**71**				

Range	Range [bar]	Over pressure [bar]	Burst pressure [bar]	
	1 ... 10	100	200	**78**
	4 ... 40	200	400	**81**
	6 ... 60	200	400	**82**
	10 ... 100	200	400	**83**
	16 ... 160	400	600	**84**
	25 ... 250	400	600	**85**
	40 ... 400	800	1000	**86**
	60 ... 600	800	1000	**87**

Sensor	Sensor material	Sensor housing material	Thread	Range	
	Stainless steel 1.4435 [2]	Stainless steel 1.4435	G1/4" female	78	**700**
	Stainless steel 1.4435 [2]	Stainless steel 1.4435	G1/4" female	81	**704**
	Stainless steel 1.4435 [2]	Stainless steel 1.4435	G1/4" female	82, 83	**708**
	Stainless steel 1.4435 [2]	Stainless steel 1.4435	G1/4" female	84, 85	**712**
	Stainless steel 1.4435 [2]	Stainless steel 1.4435	G1/4" female	86, 87	**722**
	Stainless steel 1.4435 [2]	Stainless steel 1.4435	G1/2" male	78	**702**
	Stainless steel 1.4435 [2]	Stainless steel 1.4435	G1/2" male	81	**706**
	Stainless steel 1.4435 [2]	Stainless steel 1.4435	G1/2" male	82, 83	**710**
	Stainless steel 1.4435 [2]	Stainless steel 1.4435	G1/2" male	84, 85	**714**
	Stainless steel 1.4435 [2]	Stainless steel 1.4435	G1/2" male	86, 87	**724**

Sensor material	Sensor housing material	Thread	Range	
Stainless steel 1.4435 [3]	Stainless steel 1.4435	G1/4" female	78	**701**
Stainless steel 1.4435 [3]	Stainless steel 1.4435	G1/4" female	81	**705**
Stainless steel 1.4435 [3]	Stainless steel 1.4435	G1/4" female	82, 83	**709**
Stainless steel 1.4435 [3]	Stainless steel 1.4435	G1/4" female	84, 85	**713**
Stainless steel 1.4435 [3]	Stainless steel 1.4435	G1/4" female	86, 87	**723**
Stainless steel 1.4435 [3]	Stainless steel 1.4435	G1/2" male	78	**703**
Stainless steel 1.4435 [3]	Stainless steel 1.4435	G1/2" male	81	**707**
Stainless steel 1.4435 [3]	Stainless steel 1.4435	G1/2" male	82, 83	**711**
Stainless steel 1.4435 [3]	Stainless steel 1.4435	G1/2" male	84, 85	**715**
Stainless steel 1.4435 [3]	Stainless steel 1.4435	G1/2" male	86, 87	**725**

Fixing	Direct on sensor or housing		**00**
	With mounting bracket		**31**
Accessories	Sealing switchpoint (manipulation protection)		**16**
	Damping elements and snubber see data sheet H72258		

[2] Seal NBR
[3] Seal FKM

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 V/ I_0 = 13 mA/ P_0 = 34 mW =	**ZEN24VDC**
Ex-i-barriers: 230 VAC U_0 = 10.6 V/ I_0 = 19.1 mA/ P_0 = 51 mW =	**ZEN230VAC**

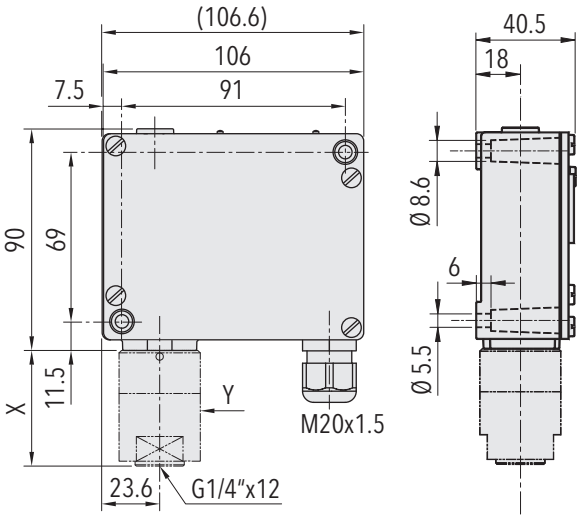
Pressostats, when combined with a certified Ex-barrier (see "optional accessories of third party supplier"), can be used as "simple electrical apparatus" in Zone 1 and 2, as well as in Zone 21 and 22, according to IEC/EN 60079-14. These pressostats are not suitable for Zone 0 and Zone 20. Use in safety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

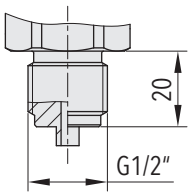
«Simple Apparatus» conformity to ATEX 947

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	O-Ring NBR: -30°C ... +100°C O-Ring FKM: -15°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: 4 g
	Shock	50 g / 11 ms
Mechanical Data	Sensor	1.4435
	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 mm²

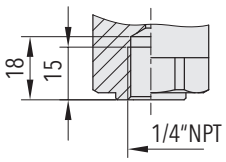
[1)] Other adjustment ranges upon request

Dimensions





G1/2" male



G1/4" female

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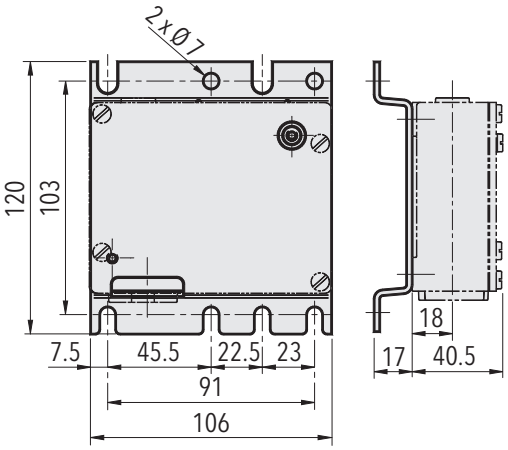
Dimension X and Y see data sheet H72271



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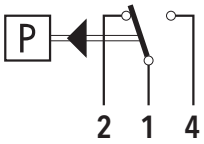
Switching differential typ. @ 25°C									
Measuring range of piston sensor	**[bar]**	1 ... 10	4 ... 40	6 ... 60	10 ... 100	16 ... 160	25 ... 250	40 ... 400	60 ... 600
Microswitch 71 Switching differential (not adjustable)	**[bar]**	0.45 ... 0.9	1.8 ... 3.4	2.3 ... 4.8	3.2 ... 7.5	4.1 ... 11	5.2 ... 16	6.5 ... 23	8 ... 32

Electrical data switch		
Type	**Features**	**Rating**
71	Gold plated contacts	U_0 = 24 V I_0 = 100 mA P_0 = 600 mW

Electrical connection



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Additional information		
Documents	Data sheet	www.trafag.com/H72366
	Instructions	www.trafag.com/H73175
	Flyer	www.trafag.com/H70921