

«Simple Apparatus» conformity to ATEX 924

DIFFERENTIAL PRESSURE 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	-1 ... 6 to -1 ... 18 bar	Media temperature	-40°C ... +150°C
Differential pressure	-0.6 ... 3.4 to 1 ... 16 bar	Ambient temperature	-25°C ... +70°C
Output signal	1 Floating change-over contact (SPDT)	Approval / conformity	EN60730-1/ EN60730-2-6: Typ 2.B.H EN60079-0, EN60079-11 Zone 1 and 2, 21 and 22
Switching differential	Not adjustable		

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Ordering information/type code

		XXX	XX	XX	XXX	XX	XX	
Custom build code	Switch point indicator behind cover	924						
Microswitch	With gold plated contacts, switching differential not adjustable		71					
Range	Range [bar]	Differential pressure [bar]	Over pressure [bar]	Burst pressure [bar]				
	-1 ... 6	-0.6 ... 3.4	12	26		74		
	-1 ... 6	0 ... 4	12	26		76		
	-1 ... 8	0 ... 6	12	26		77		
	-1 ... 12	1 ... 10	24	36		78		
	-1 ... 18	1 ... 16	24	36		79		
Sensor	Sensor material	Sensor housing material	Thread	Range	Sensor material	Sensor housing material	Thread	Range
	Bronze	Brass	G1/8" female	74	Bronze	Brass chemically nickel plated	G1/4" female	78, 79
				931				988
	Bronze	Brass	G1/8" female	76, 77	Bronze	Brass chemically nickel plated	G1/2" male	74
				933				982
	Bronze	Brass	G1/8" female	78, 79	Bronze	Brass chemically nickel plated	G1/2" male	76, 77
				935				984
	Bronze	Brass	G1/4" female	74	Bronze	Brass chemically nickel plated	G1/2" male	78, 79
				930				986
	Bronze	Brass	G1/4" female	76, 77	Stainless steel, 1.4435	Brass nickel plated	G1/8" female	74
				937				831
	Bronze	Brass	G1/4" female	78, 79	Stainless steel, 1.4435	Brass nickel plated	G1/8" female	76, 77
				938				833
	Bronze	Brass	G1/2" male	74	Stainless steel, 1.4435	Brass nickel plated	G1/8" female	78, 79
				932				835
	Bronze	Brass	G1/2" male	76, 77	Stainless steel, 1.4435	Brass nickel plated	G1/4" female	74
				934				830
	Bronze	Brass	G1/2" male	78, 79	Stainless steel, 1.4435	Brass nickel plated	G1/4" female	76, 77
				936				837
	Bronze	Brass chemically nickel plated	G1/8" female	74	Stainless steel, 1.4435	Brass nickel plated	G1/4" female	78, 79
				981				838
	Bronze	Brass chemically nickel plated	G1/8" female	76, 77	Stainless steel, 1.4435	Brass nickel plated	G1/2" male	74
				983				832
	Bronze	Brass chemically nickel plated	G1/8" female	78, 79	Stainless steel, 1.4435	Brass nickel plated	G1/2" male	76, 77
				985				834
	Bronze	Brass chemically nickel plated	G1/4" female	74	Stainless steel, 1.4435	Brass nickel plated	G1/2" male	78, 79
				980				836
	Bronze	Brass chemically nickel plated	G1/4" female	76, 77				987
Fixation	Direct on sensor or housing							00
	With mounting bracket							31
Accessories	Lead seal (manipulation protection)							16
	Adapter G1/8" male - G1/2" male, Brass							A6
	Adapter G1/8" male - G1/2" male, Brass nickel plated							B6
	Adapter G1/8" male - G1/2" male, Stainless steel 1.4435							D6
	Adapter G1/8" male - G1/4" female, Brass							A5
	Adapter G1/8" male - G1/4" female, Brass nickel plated							B5
	Adapter G1/8" male - G1/4" female, Stainless steel 1.4435							D5
	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.

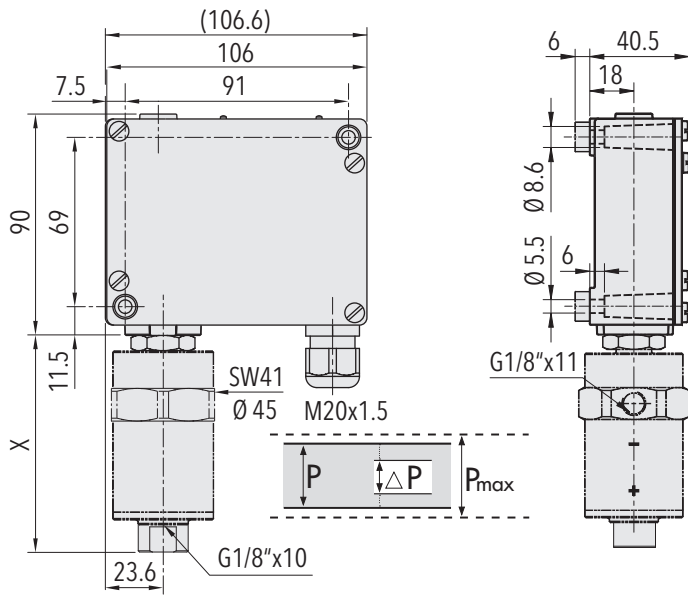
«Simple Apparatus» conformity to ATEX 924

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
	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	~ 610 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

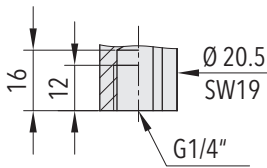
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Dimensions

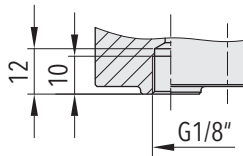


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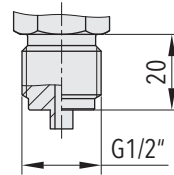
Dimension X see data sheet H72271



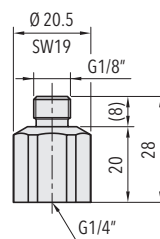
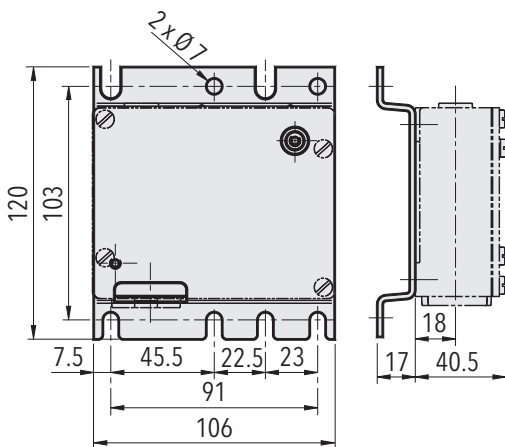
G1/4" female



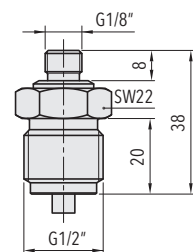
G1/8" female



G1/2" male



A5/B5/D5



A6/B6/D6

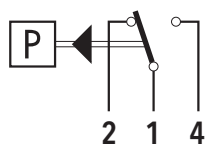
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Switching differential typ. @ 25°C			
Measuring range bellows sensor	[bar]	-1 ... 6 -1 ... 8	-1 ... 12 -1 ... 18
Microswitch 71: Switching differential not adjustable	[bar]	0.16	0.4

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



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Additional information		
Documents	Data sheet	www.trafag.com/H72365
	Instructions	www.trafag.com/H73175
	Flyer	www.trafag.com/H70920