

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

- 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	-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	ABS, BV, CCS, DNV, GL, KRS, LRS, RINA EN60730-1/ EN60730-2-6: Typ 2.B.H
Switching differential	Not adjustable		

02/2017

Data sheet H72253q

Subject to change

Ordering information/type code

		XXX	XX	XX	XXX	XX	XX
Custom build code	With display and adjusting screw	920					
	Without display, with adjusting screw	924					
	With display and adjusting knob	932					
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]	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	Range	Thread			
	Bellows: 1.4435, medium contact. parts 1.4435	Brass nickel plated	74	G1/4" female	830		
	Bellows: 1.4435, medium contact. parts 1.4435	Brass nickel plated	74	G1/8" female	831		
	Bellows: 1.4435, medium contact. parts 1.4435	Brass nickel plated	74	G1/2" male	832		
	Bellows: 1.4435, medium contact. parts 1.4435	Brass nickel plated	76, 77	G1/8" female	833		
	Bellows: 1.4435, medium contact. parts 1.4435	Brass nickel plated	76, 77	G1/2" male	834		
	Bellows: 1.4435, medium contact. parts 1.4435	Brass nickel plated	76, 77	G1/4" female	837		
	Bellows: 1.4435, medium contact. parts 1.4435	Brass nickel plated	78, 79	G1/8" female	835		
	Bellows: 1.4435, medium contact. parts 1.4435	Brass nickel plated	78, 79	G1/2" male	836		
	Bellows: 1.4435, medium contact. parts 1.4435	Brass nickel plated	78, 79	G1/4" female	838		
	Bronze	Brass	74	G1/4" female	930		
	Bronze	Brass	74	G1/8" female	931		
	Bronze	Brass	74	G1/2" male	932		
	Bronze	Brass	76, 77	G1/8" female	933		
	Bronze	Brass	76, 77	G1/2" male	934		
	Bronze	Brass	76, 77	G1/4" female	937		
	Bronze	Brass	78, 79	G1/8" female	935		
	Bronze	Brass	78, 79	G1/2" male	936		
	Bronze	Brass	78, 79	G1/4" female	938		
	Bronze	Brass chemically nickel plated	74	G1/4" female	980		
	Bronze	Brass chemically nickel plated	74	G1/8" female	981		
	Bronze	Brass chemically nickel plated	74	G1/2" male	982		
	Bronze	Brass chemically nickel plated	76, 77	G1/8" female	983		
	Bronze	Brass chemically nickel plated	76, 77	G1/2" male	984		
	Bronze	Brass chemically nickel plated	76, 77	G1/4" female	987		
	Bronze	Brass chemically nickel plated	78, 79	G1/8" female	985		
	Bronze	Brass chemically nickel plated	78, 79	G1/2" male	986		
	Bronze	Brass chemically nickel plated	78, 79	G1/4" female	988		
Fixing	Direct on sensor or housing				00		
	By mounting bracket				31		

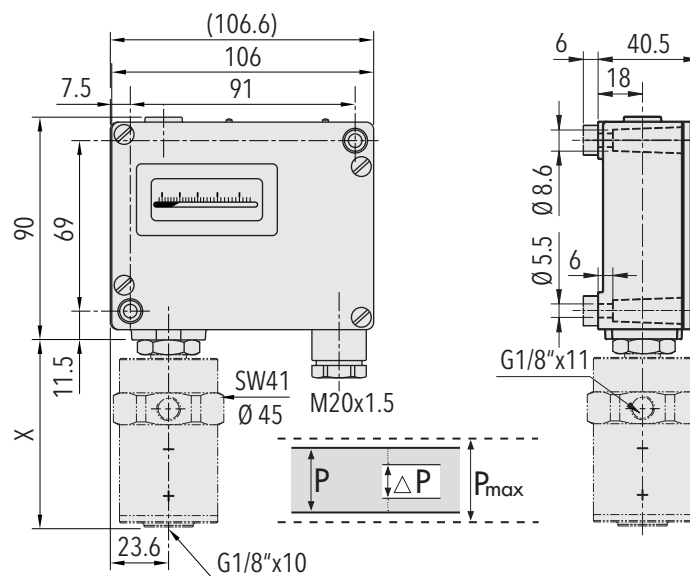
Accessories	Lead seal (manipulation protection)	16
	Screwed cable gland M20x1.5 (EN50262)	07
	Screwed cable gland M24x1.5 (DIN89280)	27
	Screwed cable gland M18x1.5 (DIN89280)	40
	Adapter G1/8" male - G1/2" male, Brass	A6
	Adapter G1/8" male - G1/2" male, Brass nickel plated	B6
	Adapter G1/8" male - 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	

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]	Differential pressure [bar]	Over pressure max. [bar]	Switching differential [bar]	Length X [mm]
PD3.4	920 2374 931	-1 ... +6	-0.6 ... +3.4	12	0.16 (fixed)	77
PD6	920 2377 933	-1 ... +8	0 ... 6	12	0.16 (fixed)	77
PD16	920 2379 935	-1 ... 18	1 ... 16	24	0.4 (fixed)	87

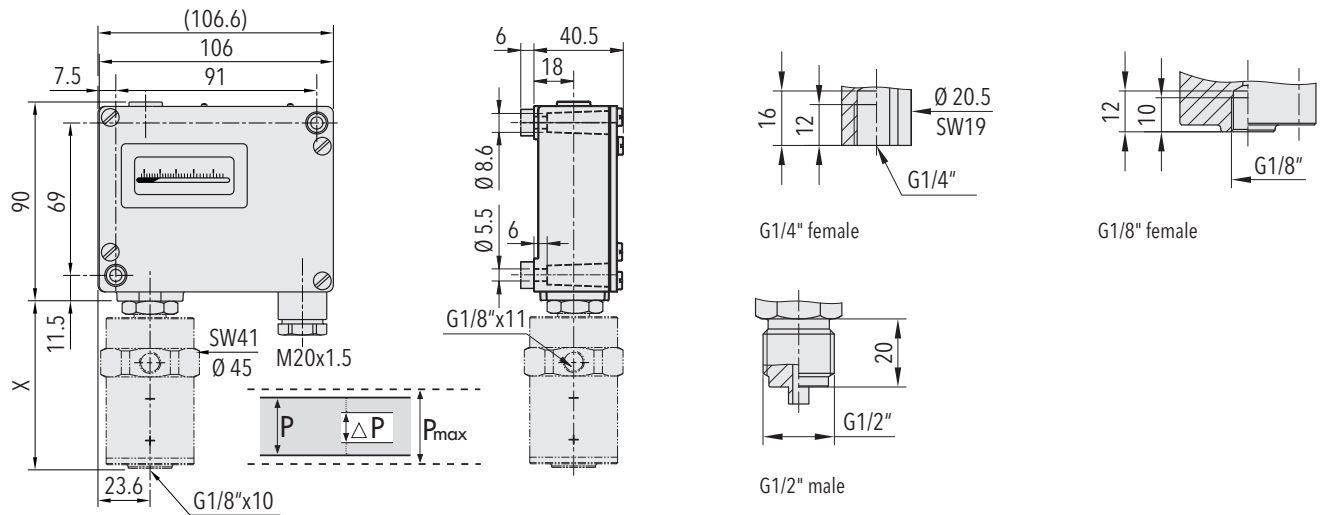


Specifications		
Accuracy	Repeatability	± 1.0 % FS typ.
	Scale accuracy typ.	± 2.0 % FS typ.
	Switching differential	See table
	Adjustment range switchpoint ¹⁾	10% ... 90% FS
Environmental conditions	Ambient temperature	-25°C ... +70°C
	Media temperature	-40°C ... +150°C
	Storage temperature	-25°C ... +85°C
	Protection	IP65
	Humidity	Max. 95 % relative
	Vibration	Switch 23/26: 5...25 Hz: ±1.6 mm 25...100 Hz: 4g
	Shock	50g/ 11ms
Mechanical Data	Sensor	See ordering information
	Housing	AlSi10Mg/ Epoxy coated
	Sealing	NBR
	Screwed cable gland	Brass nickel plated
	Mounting torque	Max. 25 Nm
	Installation	any position
	Weight	~ 610 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	Terminal screw
	Cable gland	M20x1.5 Cable-Ø 6...13 mm
	Terminal screw	3 x 1.5...4 mm ²

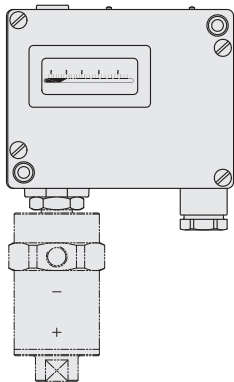
¹⁾ Other adjustment ranges upon request

Additional information		
Documents	Data sheet	www.trafag.com/H72253
	Instructions	www.trafag.com/H73256
	Flyer	www.trafag.com/H70914

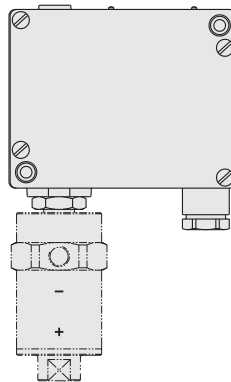
Dimensions



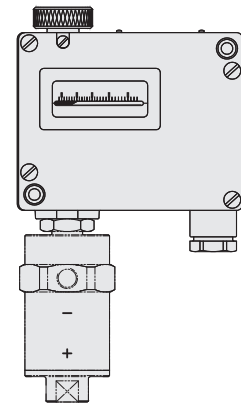
Dimension X and Y see data sheet H72271



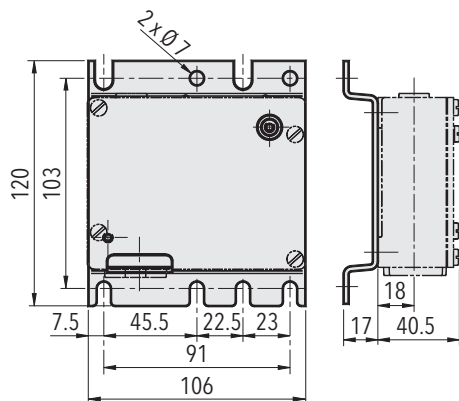
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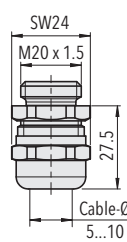
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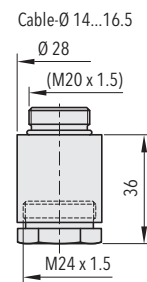
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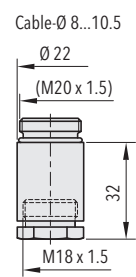
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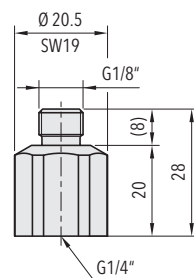
9XX.XX.XX.XXX.XX.07
M20x1.5



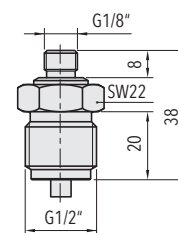
9XX.XX.XX.XXX.XX.27
M24x1.5



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



A5 / B5 / D5



A6 / B6 / D6

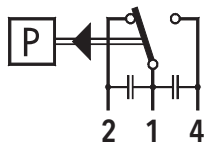
Switching differential typ. @ 25°C

Range of piston sensor	[bar]	-1 ... 6 -1 ... 8	-1 ... 12 -1 ... 18
Microswitch 10 Switching differential (not adjustable)	[bar]	0.08	0.2
Microswitch 11/21/23 Switching differential (not adjustable)	[bar]	0.16	0.4
Microswitch 26 Switching differential (not adjustable)	[bar]	0.25	0.5

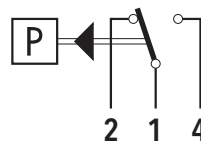
Electrical data switch

Type	Features	Rating Resistive Load (Inductive Load)	
		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