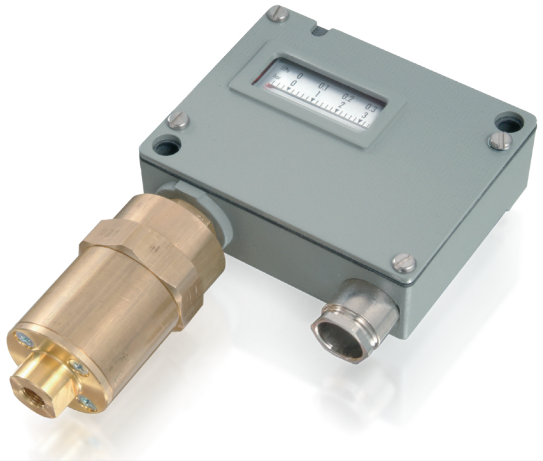
DIFFERENTIAL PRESSURE PRESSOSTAT

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

02/2017
Data sheet H72253q
Subject to change

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		

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trafag sensors controls

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**		

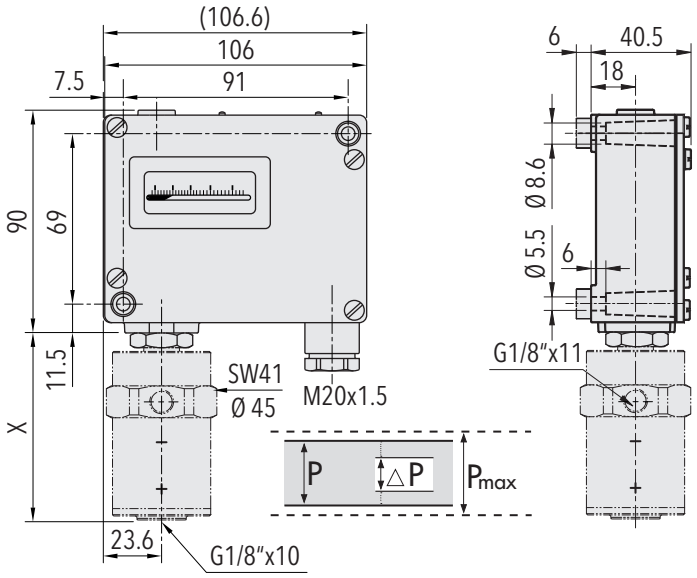
Fixing							**00**
	By mounting bracket						**31**

		XXX	XX	XX	XXX	XX	XX
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

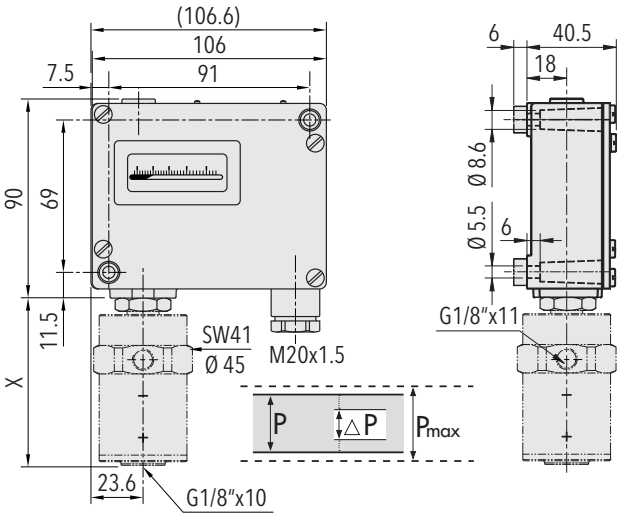
Accuracy	Repeatability	± 1.0 % FS typ.
	Scale accuracy typ.	± 2.0 % FS typ.
	Switching differential	See table
	Adjustment range switchpoint [1)]	10% ... 90% FS
Environmental conditions	Ambient temperature	-25°C ... +70°C
	Media temperature	-40°C ... +150°C
	Storage temperature	-25°C ... +85°C
	Protection	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 mm²

[1)] Other adjustment ranges upon request

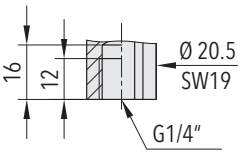
Additional information

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

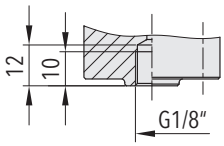
Dimensions



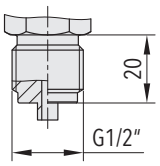
Dimension X and Y see data sheet H72271



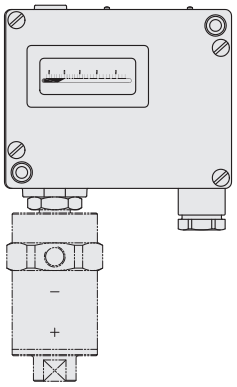
G1/4" female



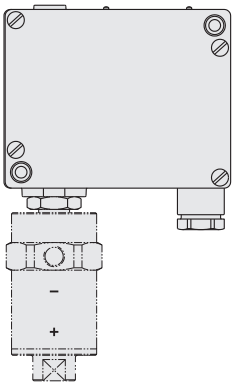
G1/8" female



G1/2" male



920.XX.XX.XXX.XX.XX



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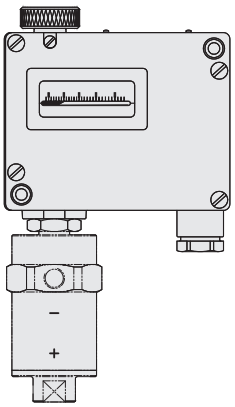

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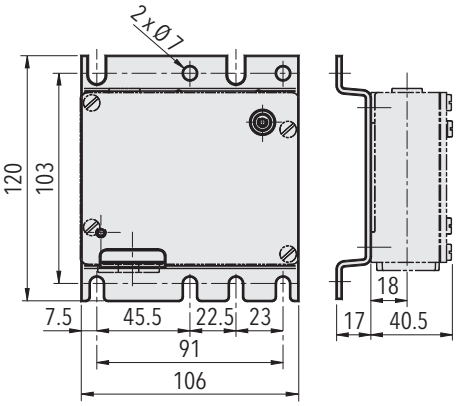
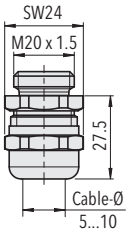
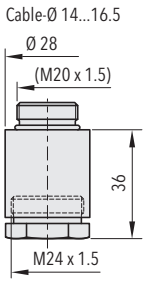


9XX.XX.XX.XXX.**31**.XX



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



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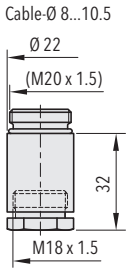
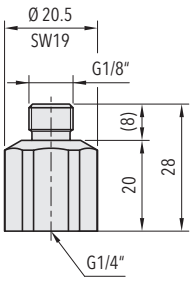
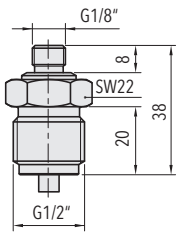
M24x1.5



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



A5 / B5 / D5

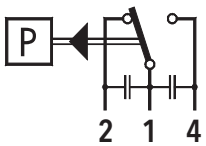


A6 / B6 / D6

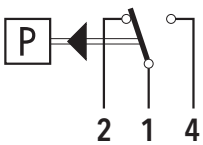
Switching differential typ. @ 25°C			
Range of piston sensor	**[bar]**	**-1 ... 6 -1 ... 8**	**-1 ... 12 -1 ... 18**
Microswitch 10 Switching differential (not adjustable)	**[bar]**	0.08	0.2
Microswitch 11/21/23 Switching differential (not adjustable)	**[bar]**	0.16	0.4
Microswitch 26 Switching differential (not adjustable)	**[bar]**	0.25	0.5

Electrical data switch			
		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, 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