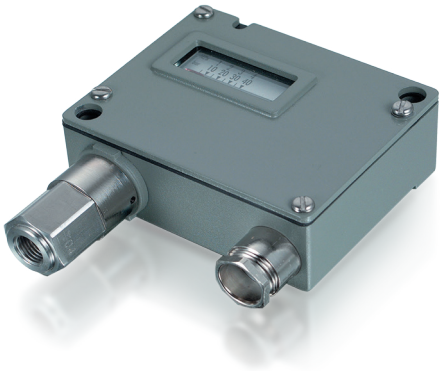
PRESSOSTAT

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 H72259s
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	-20°C ... +70°C
Switching differential	Not adjustable	Approval / conformity	ABS, BV, CCS, DNV, GL, KRS, LRS, RINA EN60730-1/ EN60730-2-6: Typ 2.B.H

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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	944					
	Without display, with adjusting screw	947					

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]	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

Range [bar]	Over pressure [bar]	Burst pressure [bar]	
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	
1.4435, O-ring NBR	1.4435	G1/4" female	78	700
1.4435, O-ring FKM	1.4435	G1/4" female	78	701
1.4435, O-ring NBR	1.4435	G1/2" male	78	702
1.4435, O-ring FKM	1.4435	G1/2" male	78	703
1.4435, O-ring NBR	1.4435	G1/4" female	81	704
1.4435, O-ring FKM	1.4435	G1/4" female	81	705
1.4435, O-ring NBR	1.4435	G1/2" male	81	706
1.4435, O-ring FKM	1.4435	G1/2" male	81	707
1.4435, O-ring NBR	1.4435	G1/4" female	82, 83	708
1.4435, O-ring FKM	1.4435	G1/4" female	82, 83	709

Sensor material	Sensor housing material	Thread	Range	
1.4435, O-ring NBR	1.4435	G1/2" male	82, 83	710
1.4435, O-ring FKM	1.4435	G1/2" male	82, 83	711
1.4435, O-ring NBR	1.4435	G1/4" female	84, 85	712
1.4435, O-ring FKM	1.4435	G1/4" female	84, 85	713
1.4435, O-ring NBR	1.4435	G1/2" male	84, 85	714
1.4435, O-ring FKM	1.4435	G1/2" male	84, 85	715
1.4435, O-ring NBR	1.4435	G1/4" female	86, 87	722
1.4435, O-ring FKM	1.4435	G1/4" female	86, 87	723
1.4435, O-ring NBR	1.4435	G1/2" male	86, 87	724
1.4435, O-ring FKM	1.4435	G1/2" male	86, 87	725

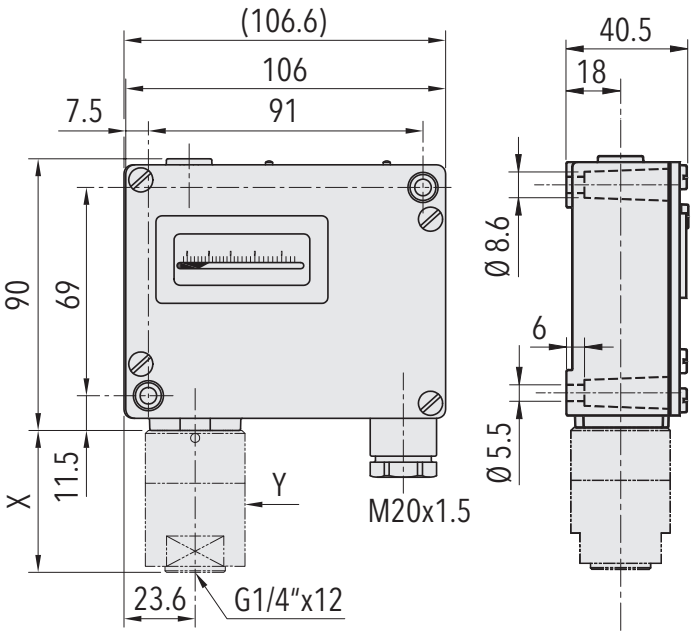
Fixing		
	Direct on sensor or housing	00
	With mounting bracket	31

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
	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]	Over pressure max. [bar]	Switching differential [bar]	Diameter Y [mm]	Length X [mm]
PK10	944 2378 700	1 ... 10	100	0.45 ... 0.9 (fix)	33	47
PK40	944 2381 704	4 ... 40	200	1.8 ... 3.4 (fix)	27	42.5
PK100	944 2383 708	10 ... 100	200	3.2 ... 7.5 (fix)	27	42.5
PK250	944 2385 712	25 ... 250	400	5.2 ... 16 (fix)	27	42.5



Specifications

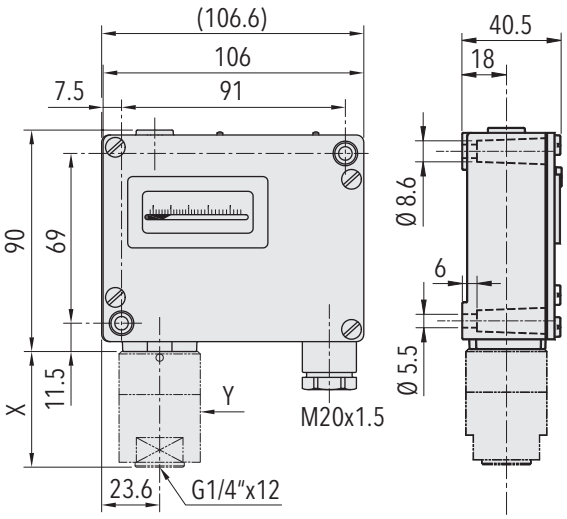
Accuracy	Repeatability	± 1.0 % FS typ.
	Scale accuracy typ.	± 2.0 % FS typ.
	Switching differential	See table
	Adjustment range switchpoint [1)]	10% ... 90% FS
Environmental conditions	Ambient temperature	-20°C ... +70°C
	Media temperature	O-Ring NBR: -30°C ... +100°C O-Ring FKM: -15°C ... +150°C
	Storage temperature	-25°C ... +85°C
	Protection	IP65
	Humidity	Max.95 % relative
	Vibration	Switch 23/26: 5...25 Hz: ±1.6 mm 25...100 Hz: 4g
	Shock	50g/ 11ms
Mechanical Data	Sensor	1.4435
	Housing	AlSi10Mg/ Epoxy coated
	Sealing	NBR/FKM
	Screwed cable gland	Brass nickel plated
	Mounting torque	Max. 25 Nm
	Installation	any position
	Weight	~ 710 g
Microswitch	Rating	See table
	Resistance of insulation	500 VDC / 100 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

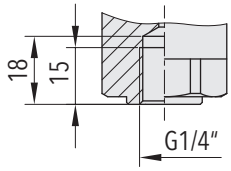
Additional information

Documents	Data sheet	www.trafag.com/H72259
	Instructions	www.trafag.com/H71261
	Flyer	www.trafag.com/H70912

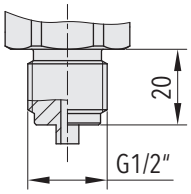
Dimensions



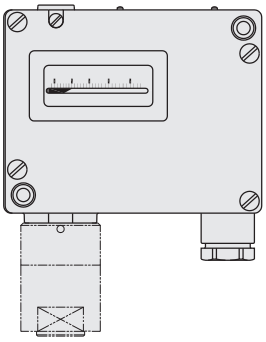
Dimension X and Y see data sheet H72271



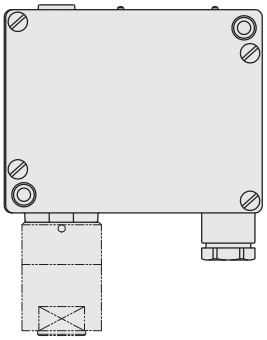
G1/4" female



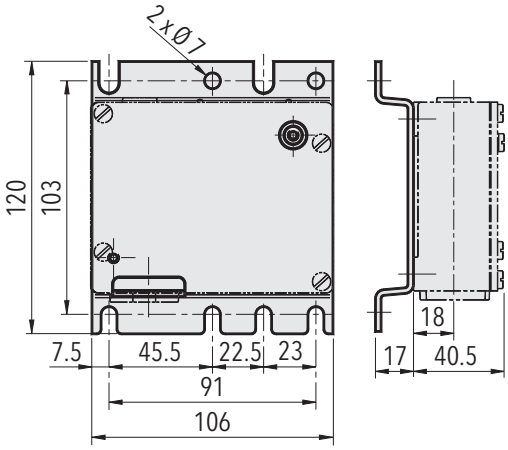
G1/2" male



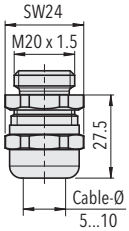
944.XX.XX.XXX.XX.XX



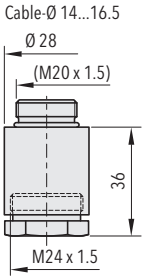
947.XX.XX.XXX.XX.XX



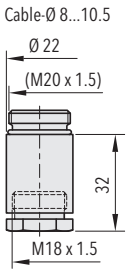
94X.XX.XX.XXX.**31**.XX



94X.XX.XX.XXX.XX.**07**
M20x1.5



94X.XX.XX.XXX.XX.**27**
M24x1.5

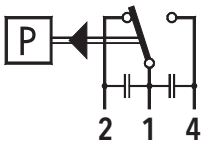


94X.XX.XX.XXX.XX.**40**
M18x1.5

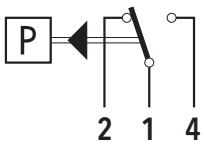
Switching differential typ. @ 25°C									
Measuring range of piston sensor	**[bar]**	1 ... 10	4 ... 40	6 ... 60	10 ... 100	16 ... 160	25 ... 250	40 ... 400	60 ... 600
Microswitch 10 Switching differential (not adjustable, variable according to set point)	**[bar]**	0.4 ... 0.8	1.5 ... 2.5	2.0 ... 3.7	2.6 ... 5.5	3.4 ... 8.0	4.3 ... 11	5.3 ... 16	6.5 ... 21
Microswitch 11, 21, 23 Switching differential (not adjustable, variable according to set point)	**[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	8.0 ... 32
Microswitch 26 Switching differential (not adjustable, variable according to set point)	**[bar]**	0.55 ... 1.1	2.0 ... 4.0	2.7 ... 5.7	3.7 ... 9.0	4.7 ... 13	6.0 ... 19	7.5 ... 28	9.0 ... 38

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 (1.0) A 5 V, 2 (2.0) A	24 V, 0.1 (0.1) A 12 V, 1 (1.0) A 5 V, 2 (2.0) A

Electrical Connection



Switch 11/12/23



Switch 26