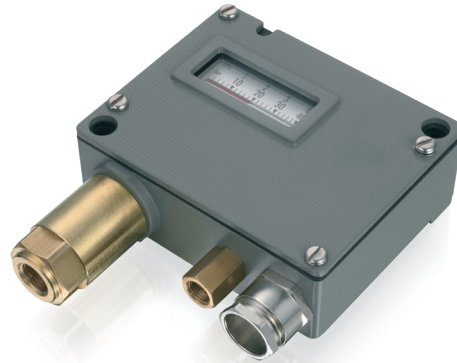


VARI PRESSOSTAT

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
- IP65-rated protection
- Diverse mounting positions

08/2024


Data sheet H72257t

Technical Data

Measuring principle	Bellow	Repeatability	± 1.0 % FS typ.
Measuring range	-0.9 ... 1.5 to 4 ... 40 bar	Media temperature	-40°C ... +150°C
Output signal	1 Floating change-over contact (SPDT)	Ambient temperature	-25°C ... +70°C
Switching differential	Adjustable	Approval / conformity	ABS, BV, CCS, DNV-GL, KRS, LRS, RINA EN60730-1/ EN60730-2-6: Type 2.B.H
Switching point	Calibration for decreasing pressure		




Subject to change

Ordering information/type code

		XXX	XX	XX	XXX	XX	XX
Custom build code	Large adjustable switching differential, with display and internal adjustment screw	903					
	Large adjustable switching differential, without display, with internal adjustment screw	907					
	Small adjustable switching differential, with display and internal adjustment screw	940					
	Small adjustable switching differential, without display, with internal adjustment screw	941					
Microswitch	Standard vibration resistance ^{1) 3)}		11				
	High vibration resistance ³⁾		12				
	Increased vibration resistance  ³⁾		23				

Range	Range [bar]	Over pressure [bar]	Burst pressure [bar]	Range [psi]	Over pressure [psi]	Burst pressure [psi]	
	-0.9 ... 1.5	10	13	-13.1 ... 21.8	145	188	72
	0.2 ... 1.6	10	13	2.9 ... 23.2	145	188	73
	0.2 ... 2.5	10	13	2.9 ... 36.3	145	188	75
	0 ... 4	12	26	0 ... 58	174	377	76
	0 ... 6	12	26	0 ... 87	174	377	77
	1 ... 10	24	36	14.5 ... 145	348	522	78
	1 ... 16	24	36	14.5 ... 232	348	522	79
	2 ... 25	40	75	29 ... 362	580	1087	80
	4 ... 40	40	75	58 ... 580	580	1087	81

Sensor	Sensor material	Sensor housing material	Thread	Range		Sensor material	Sensor housing material	Thread	Range	
	Bronze bellows (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	72	900	Bronze bellows (CuSn6)	Brass chemically nickel plated	G1/2" male	72	959
	Bronze bellows (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	73, 75	901	Bronze bellows (CuSn6)	Brass chemically nickel plated	G1/2" male	73, 75	952
	Bronze bellows (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	76, 77	903	Bronze bellows (CuSn6)	Brass chemically nickel plated	G1/2" male	76, 77	954
	Bronze bellows (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	78, 79	905	Bronze bellows (CuSn6)	Brass chemically nickel plated	G1/2" male	78, 79	956
	Bronze bellows (CuSn6)	Brass (CuZn39Pb3)	G1/4" female	80, 81	907	Bronze bellows (CuSn6)	Brass chemically nickel plated	G1/2" male	80, 81	958
	Bellow stainless steel 1.4435	Brass (CuZn39Pb3)	G1/4" female	82, 83	940	Bellow stainless steel 1.4435 ²⁾	Brass, nickel-plated	G1/4" female	72	800
	Bronze bellows (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	72	909	Bellow stainless steel 1.4435 ²⁾	Brass, nickel-plated	G1/4" female	73, 75	801
	Bronze bellows (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	73, 75	902	Bellow stainless steel 1.4435 ²⁾	Brass, nickel-plated	G1/4" female	76, 77	803
	Bronze bellows (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	76, 77	904	Bellow stainless steel 1.4435 ²⁾	Brass, nickel-plated	G1/4" female	78, 79	805
	Bronze bellows (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	78, 79	906	Bellow stainless steel 1.4435 ²⁾	Brass, nickel-plated	G1/4" female	80, 81	807
	Bronze bellows (CuSn6)	Brass (CuZn39Pb3)	G1/2" male	80, 81	908	Bellow stainless steel 1.4435 ²⁾	Brass, nickel-plated	G1/4" female	82, 83	840
	Bellow stainless steel 1.4435	Brass (CuZn39Pb3)	G1/2" male	82, 83	941	Bellow stainless steel 1.4435 ²⁾	Brass, nickel-plated	G1/2" male	72	809
	Bronze bellows (CuSn6)	Brass chemically nickel plated	G1/4" female	72	950	Bellow stainless steel 1.4435 ²⁾	Brass, nickel-plated	G1/2" male	73, 75	802
	Bronze bellows (CuSn6)	Brass chemically nickel plated	G1/4" female	73, 75	951	Bellow stainless steel 1.4435 ²⁾	Brass, nickel-plated	G1/2" male	76, 77	804
	Bronze bellows (CuSn6)	Brass chemically nickel plated	G1/4" female	76, 77	953	Bellow stainless steel 1.4435 ²⁾	Brass, nickel-plated	G1/2" male	78, 79	806
	Bronze bellows (CuSn6)	Brass chemically nickel plated	G1/4" female	78, 79	955	Bellow stainless steel 1.4435 ²⁾	Brass, nickel-plated	G1/2" male	80, 81	808
	Bronze bellows (CuSn6)	Brass chemically nickel plated	G1/4" female	80, 81	957	Bellow stainless steel 1.4435 ²⁾	Brass, nickel-plated	G1/2" male	82, 83	841

		XXX	XX	XX	XXX	XX	XX
Fixing	Direct on sensor or housing						00
	With mounting bracket						31
Accessories	Lead seal (manipulation protection)						16
	Screwed cable gland M20x1.5 (EN 50262) 						07
	Screwed cable gland M24x1.5 (DIN89280) 						27
	Screwed cable gland M18x1.5 (DIN89280) 						40
	Damping elements and snubber see data sheet H72258						

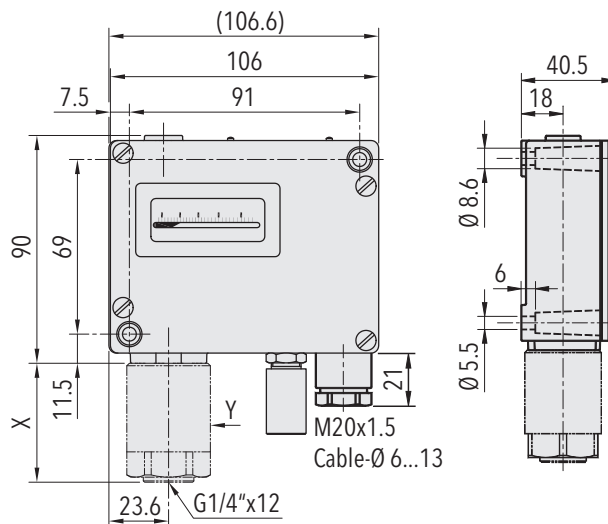
¹⁾ Switch 11 only with typ No. 940, 941

²⁾ Material with medium contact: 1.4435

³⁾ Switching differential adjustable

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]
PV6	903 2377 903	0 ... 6	12	0.4 ... 3.2 (adjustable)	33	47
PV16	903 2379 905	1 ... 16	24	1 ... 7.5 (adjustable)	27	42.5
PV40	903 2381 907	4 ... 40	40	3 ... 18 (adjustable)	27	42.5
PVF1.5	940 2372 900	-0.9 ... 1.5	10	0.06 ... 0.2 (adjustable)	45	56.5
PVF2.5	940 2375 901	0.2 ... 2.5	10	0.06 ... 0.2 (adjustable)	45	56.5
PVF6	940 2377 903	0 ... 6	12	0.2 ... 0.6 (adjustable)	33	47
PVF16	940 2379 905	1 ... 16	24	0.5 ... 1.6 (adjustable)	27	42.5

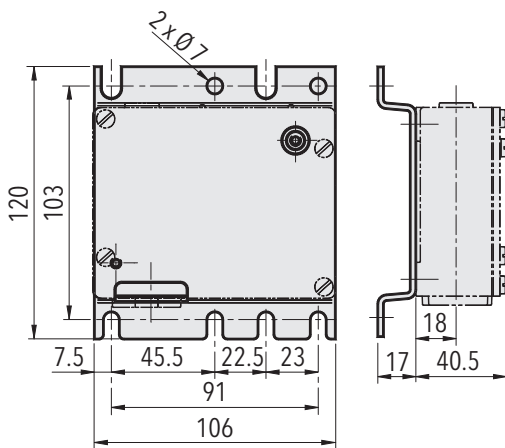
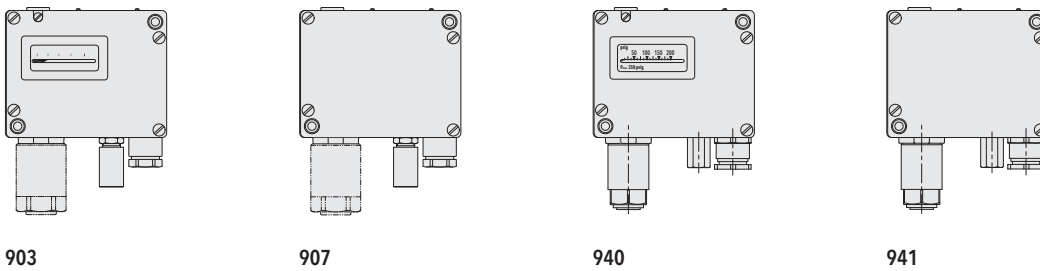
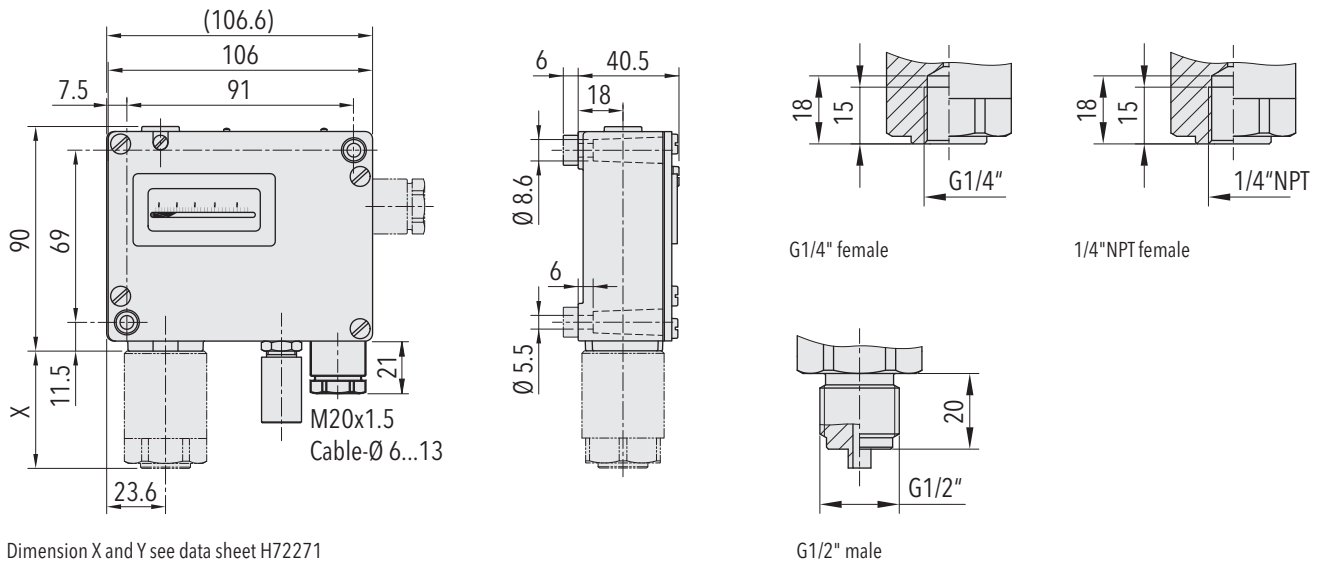


Specifications		
Accuracy	Repeatability	± 1.0 % FS typ.
	Scale accuracy typ.	± 2.0 % FS typ.
	Switching differential	See table
	Adjustment range switchpoint ¹⁾	10% ... 90% FS
Environmental conditions	Ambient temperature	-25°C ... +70°C
	Media temperature	-40°C ... +150°C
	Storage temperature	-25°C ... +85°C
	Protection	IP65
	Humidity	Max.95 % relative
	Vibration	5...25 Hz: ±1.6 mm 25...100 Hz: 4g Ranges 72, 73, 75 5...50 Hz: 20 mm/sec.
	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	~ 710 g
Microswitch	Rating	See table
	Resistance of insulation	500 VDC/100 MΩ
	Dielectric strength	2 kV terminal ground
	Life time (mechanical)	Microswitch 11: 20 Mio. cycles Microswitch 12/23: 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

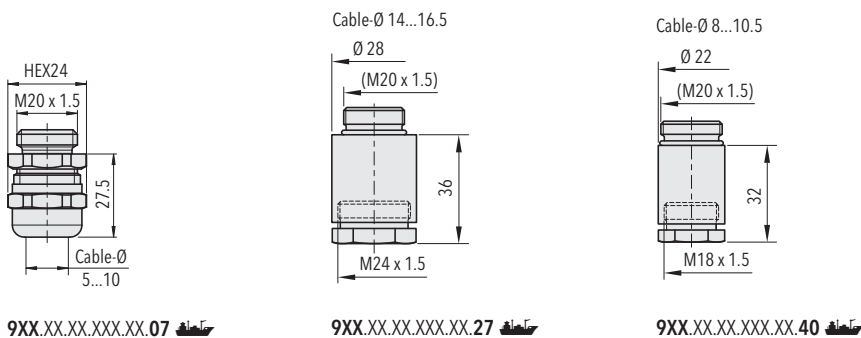
¹⁾ Other adjustment ranges upon request

Additional information		
Documents	Data sheet	www.trafag.com/H72257
	Instructions	www.trafag.com/H71261

Dimensions



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



Switching differential typ. @ 25°C

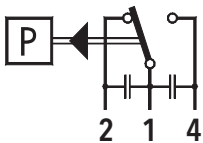
Measuring range bellows sensor	[bar]	-0.9 ... 1.5 0.2 ... 1.6 0.2 ... 2.5	0 ... 4 0 ... 6	1 ... 10 1 ... 16	2 ... 25 4 ... 40
Adjustable range of switching differential Microswitch 12/23 (Type 903/907)	[bar]	0.1 ... 1.3	0.4 ... 3.2	1 ... 7.5	3 ... 18
Adjustable range of switching differential Microswitch 11/12/23 (Type 940/941)	[bar]	0.06 ... 0.2	0.2 ... 0.6	0.5 ... 1.6	1 ... 4

Electrical data switch

Type	Features	Rating Resistive Load (Inductive Load)	
		AC	DC
11*)	Average switching differential	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
12	High vibration resistance; average switching differential	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
23	Increased vibration resistance; average switching differential	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, 0.6 (0.4) A 30 V, 15 (1.5) A 14 V, 15 (1.5) A

*1) Switch 11 only with type No. 940, 941

Electrical Connection



Switch 11/12/23