


Technical Features

- › Pressure switch with two adjustable pressure switch points
- › Simple switch point setting by means of two setting rings allowing optimum reading
- › High long-term stability thanks to robust stainless-steel measuring cell with high permissible pressure rating
- › Mechanical locking prevents inadvertent switch point manipulation
- › High vibration and shock resistance
- › Service-life more than 50 million pressure cycles
- › For use in hydraulics, pneumatics, air-conditioning and refrigeration
- › UL approval and certification acc. to PED direction

Functional Description

Pressure switch with a stainless-steel measuring cell and two adjustable pressure switch points. Two adjusting rings are provided with scale and their position is protected with a mechanical lock. adjusted pressure value. The stainless-steel body is provided with connecting thread G 1/4 with FKM sealing ring. An electric connection is realized by four-pin connector M12 x 1. The pressure switch is suitable for industrial usage thanks to robust design, vibration and shock resistance. Outputs: two switching contacts (pin 2 and pin 4)

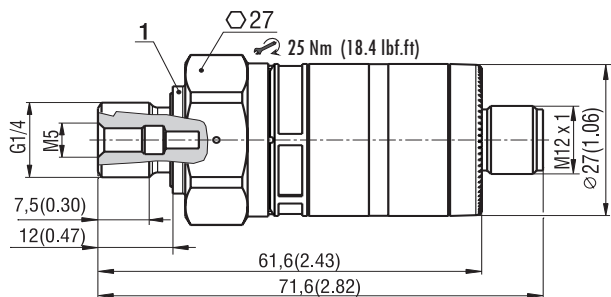
Technical Data

Application		TS52-100	TS52-250	TS52-400
Type				
Measuring range	bar (PSI)	0 ... 100 (0 ... 1450)	0 ... 250 (0 ... 3630)	0 ... 400 (0 ... 5800)
Set point SP	bar (PSI)	5 ... 100 (70 ... 1450)	12.5 ... 250 (181 ... 3630)	20 ... 400 (290 ... 5800)
Reset point rP	bar (PSI)	3 ... 98 (45 ... 1420)	7.5 ... 245 (109 ... 3553)	12 ... 392 (74 ... 5685)
Pressure range	bar (PSI)	200 (2900)	400 (5800)	600 (8700)
Min. bursting pressure	bar (PSI)	1000 (14500)	1000 (14500)	1600 (23200)
Media		Liquids		
Medium temperature	°C (°F)	-25 ... +80 (-13 ... +176)		
Ambient temperature	°C (°F)	-25 ... +80 (-13 ... +176)		
Storage temperature	°C (°F)	-40 ... +100 (-40 ... +212)		
Electrical parameters				
Supply voltage	V DC	9.6 ... 32		
Current consumption	mA	< 25		
Min. insulation resistance	MΩ	100 (500 V DC)		
Protection class		III		
IP protection		IP67		
Protection		Reverse polarity protection		
Outputs				
Two digital outputs		Switching signal; PNP switcher		
Max. voltage drop switching output DC	V	2		
Permanent current rating of switching output DC	mA	500		
Switching frequency DC	Hz	< 100		
Electric protection		Pulsed short-circuit and overload protection		
Accuracy / deviations				
Switch point accuracy	%	< ± 2.5 (of the final value), setting accuracy		
Repeatability	%	< ± 0.5 (of the final value); with temperature fluctuations < 10 K		
Characteristics deviation	%	< ± 1.5 (of the final value) Best fit straight line (BFSL) < ± 2.5 (of the final value) Limit value setting (LS)		
Temperature drift per 10 K	%	< ± 0.5		
Adjusting				
Adjustment of the switch point		Setting rings with a mechanical lock		
Tests / approvals				
EMC		DIN EN 61000-4-2 ESD EN 61000-4-3 HF radiated EN 61000-4-4 Burst EN 61000-4-5 Surge EN 61000-4-6 HF conducted	4 kV CD / 8 kV AD 10 V/m 2 kV 1 kV signal for DC elements 10 V	

Shock resistance		DIN IEC 68-2-27	50 g (11 ms)	
Vibration resistance		DIN IEC 68-2-6	20 g (10 ...2000 Hz)	
MTTF	years	713	500	641
Mechanical parameters				
Weight	kg (lbs)	0.094 (0.21)	0.095 (0.21)	0.095 (0.21)
Materials		Stainless steel (1.4404/316L); PBT; PC; FKM		
Materials (wetted parts)		Stainless steel (1.4404/316L); FKM		
Min. pressure cycles		50 million		
Tightening torque	Nm (lbf.ft)	25 (18.4)		
Circuit connection		External thread G 1/4 (DIN EN ISO 1179-2); Internal thread M5 for restrictor		
Sealing ring		FKM (DIN 3869)		
Display, operating elements				
Display		Operation – LED green Switching status – LED yellow		
Electrical connection				
Connector		4-pin, M12 x 1		

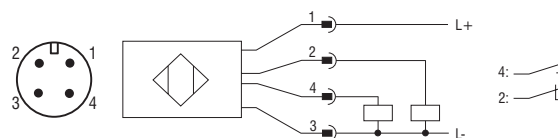
Dimensions in millimeters (in)

TS52

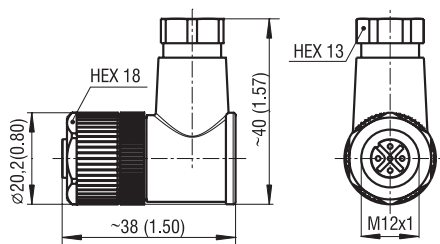


Pos.	Name	Typ
1	Square ring	16.5x1.5 VITON

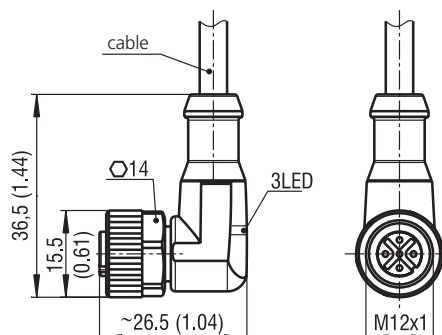
Electrical connection



Connector without cable



Connector with cable



Connector type	Ordering code
without cable	41349600
2m cable	41582300
5m cable	41825200

Connector **is not included** in order of any pressure switch or sensor and has to be ordered separately.

Ordering Code

