

TED50 Digital Pressure Switch

Measures absolute or relative vacuum or pressure,
Two galvanic insulated outputs
Modular electrical and hydraulic connections
Totally stainless steel, rugged build for severe industrial environments
Optional 4-20 mA output
CE compliant

The TED50 digital pressure switch is designed to control pressure in industrial hydraulic or pneumatic processes such as level regulation or jack operation.
The TED50 is based on microprocessor technology and is entirely programmable on site via protected digital keys.



Specifications (20 °C)

Measurement range	Absolute pressure : 0 + 1 ... 0 + 60 bar Relative pressure : -1 + 0 ... 0 + 400 bar
Display	-1999 to +9999 points. 4 digit red LEDs (8 mm high)
Power supply voltage	18 to 32 VDC, unregulated. Polarity reversion protection.
Power consumption	50 mA for a power supply voltage of 24 VDC
Switching capacity	400 mA without polarity up to 60 VDC or 40 VAC
Output signal (option)	4 - 20 mA
Electromagnetic compatibility	Standards EN50082-1 and -2 (immunity) Standards EN50081-1 and -2 (emission)
Global accuracy	± 0.5% of measurement range (based on best straight line)
Repeatability	± 0.2% of F.S.
Operating temperature	Ambient temperature : - 20 ... + 80°C Fluid temperature : - 20 ... + 100°C Storage temperature : - 30 ... + 85°C
Thermal drift	± 0.015% measurement range/°C max.
Materials in contact with the fluid	Ceramic, stainless steel 1.4404 (316L), NBR seal (standard)
Connections	Electrical : connector M12-8 pins + cable length 2m (standard) Hydraulic : G 1/2 (standard) G 1/4 DIN 16288, G1/4 Female, 1/2 NPT, 1/4 NPT
IP rating (EN 60 529)	IP 65
Typically response time of the threshold outputs	≤ 10 ms
Resistance to vibrations (EN 60068-2-6)	1.5 mm (10 Hz ... 55 Hz) / 20 g (55 Hz ... 2 kHz)
Resistance to shocks (EN 60028-2-32)	25 drops from 1 meter onto concrete floor

Options

Uncoded options (to be specified in words after code)

Different electrical connections (M23, ...)
Different hydraulic connections: flush diaphragm for viscous fluids, hydraulic connections G 1/4 DIN 3852, aseptic connections
4-20 mA analog output, 3 wires
Delay time on thresholds trigger point adjustable from 10 ms to 2 s
Contact us for other possibilities (RS 485 digital output, ...)

Configuration

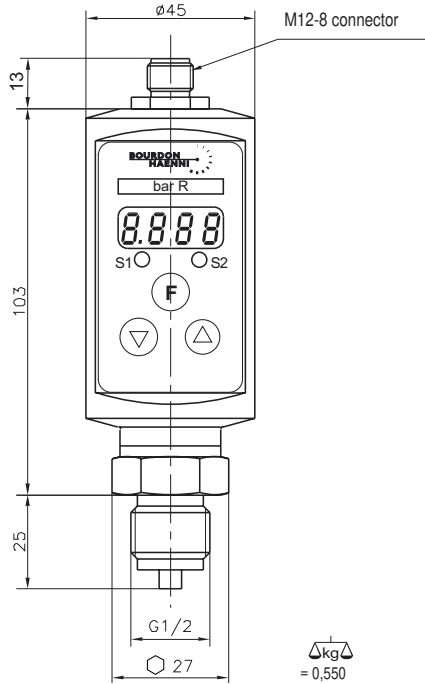
The three keys on the front panel are used to configure the following operating parameters:
Trigger point of 2 independent thresholds
Hysteresis value of each adjustable threshold
Threshold active state (NO or NC for alarm configuration)
Zero setting
Parameter selftest and protection by 4-digit code

**BOURDON
HAENNI**

made to measure



Dimensions (mm), Connections



M12-8 connector



1	(+) Power supply	
2	(-) Power supply	(-) 4-20 mA
3	} Threshold 1	
4		
5	} Threshold 2	
6		
7	(+) 4-20 mA	
8	Ground	

Measurement range (bar)

Ranges	Absolute	—	—	0+1	0+2.5	0+4	0+6	0+10	0+16	0+25	0+40	0+60	—	—	—
	Gauge	-1+0	-1+0.6	0+1	0+2.5	0+4	0+6	0+10	0+16	0+25	0+40	0+60	0+100	0+250	0+400
	Max. over pressure	3	3	3	4	8	12	20	32	50	80	120	200	500	600
	Burst pressure	7	7	7	7	12	18	30	48	75	120	180	300	600	800
	Display at Max. range	-1.000/0	-1.000/0.600	0/1.000	0/2.500	0/4.000	0/6.000	0/10.00	0/16.00	0/25.00	0/40.00	0/60.00	0/100.0	0/250.0	0/400.0

Codification - TED50

Type	1'...4' digit	TED5xxxxxx
Digital pressure switch	TED5	
Hydraulic connection	5' digit	
G1/4 DIN 16288	2	
G1/2 (standard)	3	
1/4 NPT	5	
1/2 NPT	6	
G 1/4 Female	H	
Sensor seal	6' digit	
NBR (nitrile) standard	3	
EPDM	5	
Kalrez®	7	
FKM (Viton®)	9	
Pressure range	7'...9' digit	
See codes in table	xxx	
Pressure mode	10' digit	
Absolute	A	
Gauge	R	

code	Ranges in Bar	code	Ranges in psi	A or R
B59	-1 + 0	H59	-30"Hg + 0	- R
B72	-1 + 0.6			
B15	0 + 1	H15	0 + 15	A R
B18	0 + 2.5	H17	0 + 30	A R
B19	0 + 4	H19	0 + 60	A R
B20	0 + 6	H21	0 + 100	A R
B22	0 + 10	H22	0 + 160	A R
B24	0 + 16	H23	0 + 200	A R
B26	0 + 25	H26	0 + 400	A R
B27	0 + 40	H27	0 + 600	A R
B29	0 + 60	H29	0 + 800	A R
B31	0 + 100	H31	0 + 1500	- R
B35	0 + 250	H34	0 + 3000	- R
B38	0 + 400	H38	0 6000	- R

UK/06-2003 This data sheet may only be reproduced in full