



Main Features

- Coarse Magnetic Autozero
- Fine Magnetic Autozero
- Calibration Signal 80% FS
- Magnetic Autospan
- Partial reset function
- Total reset function

Digital "Autozero & Span" option makes the pressure transmitter **TPSA Series** a product extremely innovative and versatile.

Designed thanks to the advanced electronics used by TPSA, this function allows zero and span adjustment in a simple, fast and reliable way, avoiding to use analogue trimmer, potential weak point and source of possible drifts or failures.

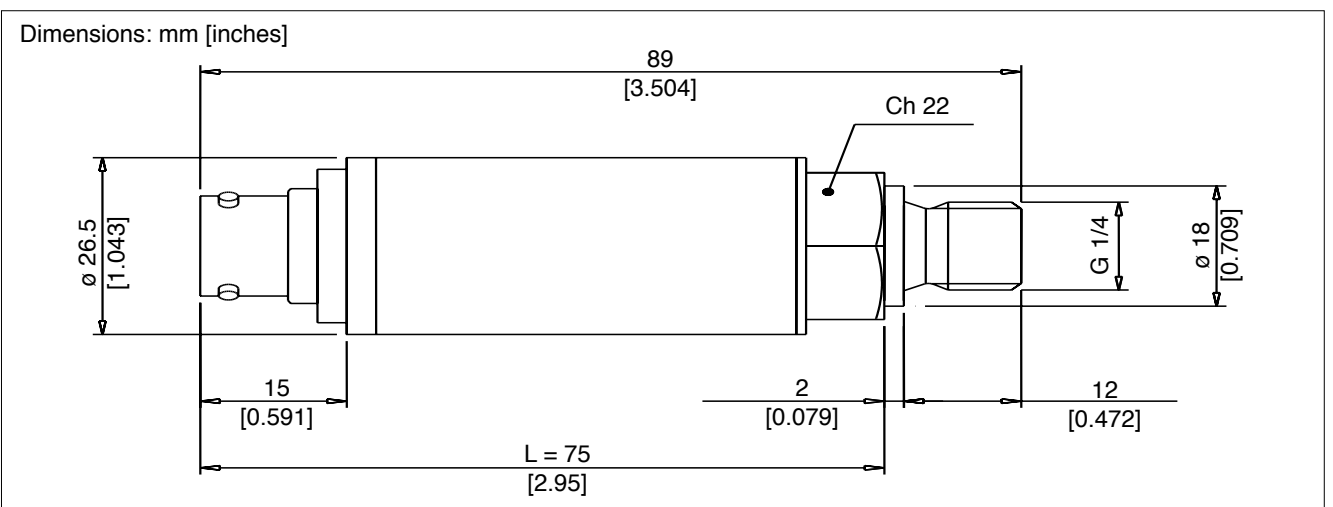
The starting is user friendly, simply touching the specific target marked on the sensor body with a pen with magnetic head (included as standard).

Within few seconds the operation is concluded, without the need to dismantle or to open the instrument.

TECHNICAL DATA

Autozero	±10%FS max with zero setting within the sensor accuracy class, @ °T Amb.
Autozero Setting Time	1...10 seconds
Fine Autozero Adjustment	Resolution 6 mV (voltage output); 12 µA (current output)
Fine Autozero Adjustment Amplitude	±100 mV (voltage output), ±0.16 mA (current output) by successive steps with maximum setting time 5 sec. per step
Calibration Function	Signal output generation of 80% FS @ °T Amb.
Calibration Function Setting Time	>1 sec. (by contacts closed in CAL position)
Autospan	±5%FS max with span setting within the sensor accuracy class, @ °T Amb.
Autospan Setting Time	1...10 sec. (by contacts closed in CAL position)
Partial Reset	Restore of zero factory setting
Partial Reset Setting Time	30...60 sec
Total Reset	Restore of complete factory setting
Total Reset Setting Time	>60 sec
Function Activation	By pen with magnetic head (PKIT 312)

INSTALLATION DRAWINGS



Dimensions: TPSADA, due to the autozero & span board, is 5 mm (0.197 in) longer, so dimension "L" on TK data sheet becomes 75 mm (2.95 in).

CAL function pin: The activation of CAL function (Calibration and Autospan) is made by closing the contact between the following pin:
 - 6 pole connector version (V) pin E-F
 - 7 pole connector version (P) pin 5-6

Please refer to the standard data sheet for all the remaining mechanical and electrical specifications.

ORDERING INFORMATION

Pressure transmitter TPSADA

OUTPUT SIGNAL	
Standard	
0.1 ... 10.1 Vdc	C
4...20 mA	E
0...10 Vdc	N
On request	
0.1 ... 5.1 Vdc	B
0 ... 5 Vdc	M
1 ... 5 Vdc	P
1 ... 10 Vdc	Q
1 ... 6 Vdc	R

PRESSURE CONNECTION	
Standard	
G 1/4 gas male (DIN 3852-A)	1
On request	
7/16-20 UNF-2A male (SAE 4 per AS4395-E)	2
G 1/2A (DIN 16288)	3
G 1/4 gas female	4
1/8-27 NPT female	5
1/4 - 18 NPT female	6
1/4 - 18 NPT male	7
M14 x 1.5 male	8
1/8 - 27 NPT male	9
G 1/4 gas male (DIN 3852-E)	E
M12 x 1.5 male	R
7/16-20 UNF-2A male (SAE 4for J1926-2) (*)	K
7/16-20 UNF-2A female (SAE 4)	F

(*) Max. working pressure: 630 bar (9137 psi)

ELECTRICAL CONNECTION	
EN 175301-803 type A (P 18 mm)	E (*)
Shielded cable	F (*)
4-pole connector M12 x 1	Z (*)
EN 175301-803 type C (P 9.5 mm)	M (*)
7 pole connector M16x0.75	P
6 pole bayonet connector	V

(*) With this kind of connector is available the "Autozero" function only. For special request contact Gefran.

Mechanical and/or electrical characteristics differing from standard may be arranged on request.

RESPONSE TIME

V Fast (< 1 msec)

ACCURACY

T ± 0.1% FS typical
≥100bar/1500psi
±0.15% FS typical
<100bar/1500psi

MEASUREMENT RANGE

	bar		psi
B04U	0..4	P06D	0..60
B05U	0..5	P75U	0..75
B06U	0..6	P01C	0..100
B07U	0..7	P15D	0..150
B01D	0..10	P25D	0..250
B16U	0..16	P03C	0..300
B02D	0..20	P05C	0..500
B25U	0..25	P75D	0..750
B03D	0..30	P15C	0..1500
B04D	0..40	P02M	0..2000
B05D	0..50	P25C	0..2500
B01C	0..100	P03M	0..3000
B16D	0..160	P04M	0..4000
B02C	0..200	P75D	0..750
B25D	0..250	P15C	0..1500
B35D	0..350	P20C	0..2000
B04C	0..400	P25C	0..2500
B05C	0..500	P03M	0..3000
B06C	0..600	P05M	0..5000
B07C	0..700	P75C	0..7500
B01M	0..1000	P10M	0..10000
		P15M	0..15000

CALIBRATION STANDARDS

Instruments manufactured by Gefran are calibrated against precision pressure calibration equipment which is traceable to International Standards.

Ex.: TPSADA - N - 1 - P - B35D - T - V

Pressure transmitter TPSADA digital autozero & span, 0...10Vdc output signal, G 1/4 male pressure connection, 7 pole connector, 0...350 bar measurement range, ± 0.1% FS accuracy, 1msec response time.

Sensors are manufactured in compliance with:

- EMC 2014/30/EU compatibility directive
- RoHS 2011/65/EU directive

Electrical installation requirements and Conformity certificate are available on our web site: www.gefran.com

GEFRAN spa reserves the right to make any kind of design or functional modification at any moment without prior notice

GEFRAN spa
via Sebina, 74
25050 PROVAGLIO D'ISEO (BS) - ITALIA
tel. 0309888.1 - fax. 0309839063
Internet: <http://www.gefran.com>

GEFRAN

DTS_TPSADA_08-2019_ENG