

# ALL STAINLESS STEEL PRESSURE GAUGE

The label *Trafag Industrial Components* extends the Trafag brand name to instruments manufactured by qualified partner companies.  
*Trafag Industrial Components* complement the genuine Trafag product range to offer customers a complete portfolio from one single source.

The TMP604 All Stainless Steel Pressure Gauge with diaphragm sensor allows the monitoring of low pressures down to 6 mbar with one or two micro switches.



## Applications

- Liquid & gaseous media
- Corrosive environments
- Oil & Gas applications
- Chemical & Petrochemical
- Machine building
- General plant construction

### Features

- All SS measuring system
- Socket-case, direct welded
- Threaded / Flanged connection
- Over-pressure safety up to 10 times FS max. 40 bar

### Reference

- EN 837-3

Standard parameters	
Accuracy	CL 1.6
Ambient temperature	-20 ... +60°C / -40 ... +60°C with silicon oil dampening
Service temperature	100°C max
Pressure limits	Over pressure up to 1.3 FS value Steady pressure up to FS value Fluctuating pressure up to 90% of FS value
Weld joint	TIG argon arc welding
Measuring range	0 ... 10 to 0 ... 250 mbar 0 ... 0,4 to 0 ... 40 bar

## Ordering code

		TMP604 - XX - XXX - XX - XXX - XX - XX - XX - XX - XX		
1. Dial size	100 mm / 4"	04		
	160 mm	07		
2. Range	Refer "Range Table"	XXX		
3. Mounting pattern	Direct, Bottom connection	B0		
4. Process connection <sup>1</sup>	1/4" BSP (M)	12B	1/4" NPT (M) 12N	
	3/8" BSP (M)	13B	1/2" BSP (M) 14B	
	M20 X 1.5 mm (M)	14M	1/2" NPT (M) 14N	
	1 1/2" RF 150# as per ANSI B 16.5	A25	DN40 PN25 as per EN 1092 - 1 D44	
	1 1/2" RF 300# as per ANSI B 16.5	A26	DN50 PN10 as per EN 1092 - 1 D52	
	2" RF 150# as per ANSI B 16.5	A31	DN50 PN25 as per EN 1092 - 1 D54	
	2" RF 300# as per ANSI B 16.5	A32		
	DN40 PN10 as per EN 1092 - 1	D42	* Other flange sizes available on request.	
5. Ingress protection	IP 65	ER		
6. Execution	Dry	EA		
	Dampening liquid filled, glycerine	EG		
	Dampening liquid filled, silicon oil <sup>2</sup>	EH		
7. Switch category	Precision contacts (magnetic)	RS		
8. Electric contact <sup>3</sup>	Break contact (1NC)	CD1		
	Make contact (1NO)	CD2		
	2 x Break contact (2NC)	CD3		
	2 x Make contact (2NO)	CD4		
	1 Break + 1Make (1NC + 1NO)	CD5		
	1 Make + 1 Break (1NO + 1NC)	CD6		
	SPDT	CD7		
	DPDT	CD8		
9. Other options	Case & Ring in AISI 316 SS (B0)	BA	Monel wetted parts PM	SS tag plate XF
	Vacuum safe up to -1 bar	EY	5 - point calibration certificate TA	Flushing plug on lower body XH
	Over-pressure up to 5 times of FS <sup>4</sup>	OQ	Material test certificate 3.1 TC	Custom designed dial XR
	Over-pressure up to 10 times of FS <sup>4</sup>	OR	Material test certificate 2.2 TM	Dial tag marking XT
	PTFE lining / coating on wetted parts	PC	Certification for Oxygen service TO	
	Hastelloy wetted parts	PK	Accuracy CL 1.0 XB	

<sup>1)</sup> For other connections, please contact factory.

<sup>2)</sup> Rubber parts shall be in Viton.

<sup>3)</sup> For electrical contact details, refer model TMP501.

<sup>4)</sup> Maximum pressure shall be 40 bar.

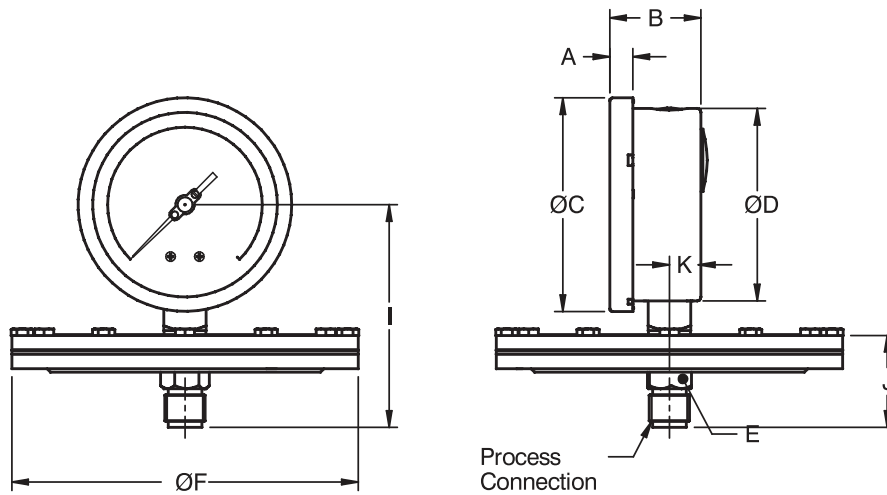
Specifications		
<b>Material of construction</b>	Sensing element	Diaphragm
	Case & Ring material	AISI 304 SS (Bayonet type)
	Diaphragm	≤ 16 bar - AISI 316L SS, > 16 bar Inconel 718
	Chamber	AISI 316 SS (lower and upper diaphragm housing)
	Shank	AISI 316L SS
	Movement mechanism	AISI 304 SS
	Chamber sealing gaskets	FPM / FKM
	Dial	Aluminum, black graduation on white background
	Pointer	Micro-adjustable, aluminum, black powder coated
	Gaskets, Blow off disc & filling plug	NBR
	Window	Shatterproof safety glass
<b>Standard specifications</b>	Dial size	DN100 / DN160
	Range	0 ... 10 to 0 ... 16 mbar (flange Ø 174 mm) 0 ... 25 to 0 ... 250 mbar (flange Ø 150 mm) 0 ... 0.4 to 0 ... 40 bar (flange Ø 100 mm)
	Mounting pattern	Direct, Bottom connection
	Process connection	½" NPT (M) / ½" BSP (M)
	Ingress protection	IP 65 - EN 60529 / IEC 529
	Execution	Dry
	<b>Standard specifications : dampening liquid filled, glycerin</b>	Window
Dampening liquid		Glycerin [Service temperature up to 65°C]
<b>Temperature effect</b>	When temperature of the measuring system deviates from reference temperature (+20°C) max error ±0.8% / 10K of true scale value.	

## Electrical contact details

Switch type	Contacts	Action	Rating	Code
Normally closed (1NC)	Single	Break contact	230VAC/1A; 48VDC/0.5A	CD1
Normally open (1NO)	Single	Make contact	230VAC/1A; 48VDC/0.5A	CD2
Normally closed (2NC)	Double	Break contact	230VAC/1A; 48VDC/0.5A	CD3
Normally open (2NO)	Double	Make contact	230VAC/1A; 48VDC/0.5A	CD4
Normally closed + Normally open (1NC+1NO)	Double	Break contact + Make contact	230VAC/1A; 48VDC/0.5A	CD5
Normally open + Normally closed (1NO+1NC)	Double	Make contact + Break contact	230VAC/1A; 48VDC/0.5A	CD6
SPDT	Single		230VAC/1A; 48VDC/0.5A	CD7
DPDT	Double		230VAC/1A; 48VDC/0.5A	CD8

## Dimensions - All dimensions are in mm

Type B0



Range	DN	d	a	b	D2	t	h±2	y	Weight (Kg)
mbar 0/10 to 0/16	100	174	17	52	100	1/2" BSP or 1/2" NPT	130	50	2,6
	160		17	52	150		150	50	3,2
mbar 0/25 to 0/250	100	150	17	52	100	1/2" BSP or 1/2" NPT	130	55	2,6
	160		17	52	150		155	55	3,2
mbar 0/0,4 to 0/40	100	98	17	52	100	1/2" BSP or 1/2" NPT	130	55	1,8
	160		17	52	150		155	55	2,2

Standard Ranges				Standard Ranges		Standard Ranges		Standard Ranges		Standard Ranges	
RANGE	bar	Kg/cm <sup>2</sup>	bar/psi	RANGE	psi	RANGE	kPa	RANGE	MPa	RANGE	mbar
0 ... 0.6	B01	K01	N01	0 ... 10	S01	0 ... 60	E01	-	-		
0 ... 1	B02	K02	N02	0 ... 15	S02	0 ... 100	E02	0 ... 0.1	M02	0 ... 10	A02
0 ... 1.6	B03	K03	N03	0 ... 25	S03	0 ... 160	E03	0 ... 0.16	M03	0 ... 16	A03
0 ... 2.5	B05	K05	N05	0 ... 35	S05	0 ... 250	E05	0 ... 0.25	M05	0 ... 25	A04
0 ... 4	B06	K06	N06	0 ... 60	S06	0 ... 600	E06	0 ... 0.4	M06	0 ... 40	A05
0 ... 6	B07	K07	N07	0 ... 90	S07	0 ... 600	E07	0 ... 0.6	M07	0 ... 60	A06
0 ... 7	B08	K08	N08	0 ... 100	S08	0 ... 700	E08	0 ... 0.7	M08	0 ... 100	A07
0 ... 10	B09	K09	N09	0 ... 150	S09	0 ... 1000	E09	0 ... 1	M09	0 ... 160	A08
0 ... 16	B11	K11	N11	0 ... 235	S11	0 ... 1600	E11	0 ... 1.6	M11	0 ... 250	A09
0 ... 25	B13	K13	N13	0 ... 365	S13	0 ... 2500	E13	0 ... 2.5	M13	0 ... 400	A10
0 ... 40	B16	K16	N16	0 ... 600	S16	0 ... 4000	E16	0 ... 4	M16	-	-

### General notes

- Other scales & measurement units are available.
- Equivalent scales available in kg/cm<sup>2</sup>, psi, kPa, MPa, bar/psi, kPa/bar, kPa/psi or any other special scales.
- Primary scales shall be in "BLACK" and secondary scales shall be "RED".
- Special scales, custom dial designs, OEM/private logo printing is available, details contact our marketing team.
- Any other range codes which are not available in the list shall be confirmed by factory.

### Additional information

Documents	Data sheet	H20016	<a href="http://www.trafag.com/H20016">www.trafag.com/H20016</a>
	Instructions	H21016	<a href="http://www.trafag.com/H21016">www.trafag.com/H21016</a>

## Modification

Index	Date	Description
a	05/2017	New Datasheet
b	12/2017	Page 2: Dial size Point 1 _ Code 06 adjusted with code 07