

# Pressure transmitter



For general industrial applications

PT-F

## Applications

- Machine building
- Hydraulics and pneumatics
- Pumps and compressors
- Service tasks

## Special features

- Measuring ranges from -1 ... 5 to 0~25kg/cm<sup>2</sup>
- Accuracy  $\leq \pm 0.5\%$  or  $\pm 0.25\%$
- Can be corrected
- Output 4 ... 20 mA, DC 0 ... 10 V, DC 0 ... 5 V and others
- Electrical connection: Angular connector form A and C, circular connector M12 x 1, cable outlet 2 m
- Process connection G 1/4 A DIN 3852-E, 1/4 NPT and others

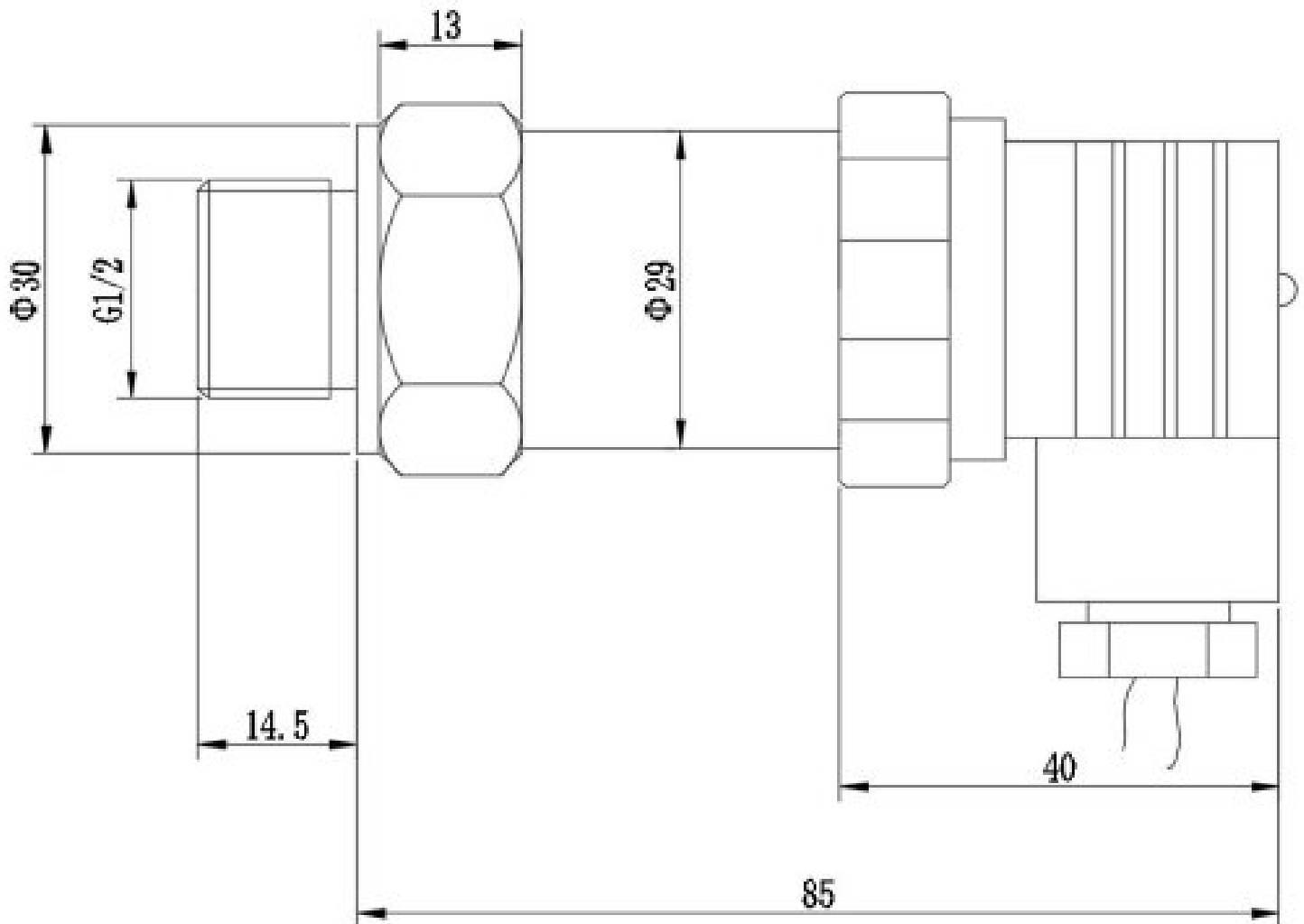


Accuracy	: $\pm 0.5\%$ Of F.S. $\pm 0.25\%$ Of F.S.
Ambient & Medium	: $-10 \sim 80\text{ }^{\circ}\text{C}$
Storage	: $-40 \sim 70\text{ }^{\circ}\text{C}$
Reverse polarity protection	: UB vs. 0V no reverse polarity protection with ratiometric output signal
Insulation voltage	: DC 500 V

Case	: Teflon
Wetted parts	: Teflon
Sensor	: Diffusion Silicon
Sensor element	: PH grade steel
Pressure transmission medium	: Synthetic oil
Service life	: 10 million load cycles

Protection	: IP 67
Power Supply	: 12~30VDC
Control Signal	: 4~20mA , DC0~10V , DC0~5V
Non-repeatability	: $\leq 0.1\%$ of span
Signal noise	: $\leq \pm 0.3\%$ of span
Long-term drift	: $\leq \pm 0.1\%$ of span

Dimensions mm



## Measuring ranges

Gauge pressure								
KG/CM2	<b>Measuring range</b>	<b>0 ... 0.05</b>	<b>0 ... 0.1</b>	<b>0 ... 0.16</b>	<b>0 ... 0.25</b>	<b>0 ... 0.4</b>	<b>0 ... 0.6</b>	<b>0 ... 1</b>
	Overload safety	0.2	0.2	1	1	1	3	3
	<b>Measuring range</b>	<b>0 ... 1.6</b>	<b>0 ... 2.5</b>	<b>0 ... 4</b>	<b>0 ... 6</b>	<b>0 ... 10<sup>1)</sup></b>	<b>0 ... 16<sup>1)</sup></b>	<b>0 ... 25<sup>1)</sup></b>
	Overload safety	3.2	5	8	12	20	32	50
	<b>Measuring range</b>	<b>0 ... 25</b>						
	Overload safety	50						
	<b>Measuring range</b>							
inWC	<b>Measuring range</b>	<b>0 ... 20</b>	<b>0 ... 40</b>	<b>0 ... 60</b>	<b>0 ... 80</b>	<b>0 ... 100</b>	<b>0 ... 120</b>	<b>0 ... 150</b>
	Overload safety	84	84	400	400	400	400	400
	<b>Measuring range</b>	<b>0 ... 200</b>	<b>0 ... 250</b>	<b>0 ... 400</b>				
	Overload safety	400	1,200	1,200				
psi	<b>Measuring range</b>	<b>0 ... 1</b>	<b>0 ... 5</b>	<b>0 ... 15</b>	<b>0 ... 25</b>	<b>0 ... 30</b>	<b>0 ... 50</b>	<b>0 ... 100</b>
	Overload safety	3	14.5	45	60	60	100	200
	<b>Measuring range</b>	<b>0 ... 160<sup>1)</sup></b>	<b>0 ... 200<sup>1)</sup></b>	<b>0 ... 300<sup>1)</sup></b>				
	Overload safety	290	400	600				
	<b>Measuring range</b>							
	Overload safety							

1) If the medium water is measured, a higher overload safety is recommended.

Absolute pressure								
KG/CM2	<b>Measuring range</b>	<b>0 ... 0.1</b>	<b>0 ... 0.16</b>	<b>0 ... 0.25</b>	<b>0 ... 0.4</b>	<b>0 ... 0.6</b>	<b>0 ... 1</b>	<b>0 ... 1.6</b>
	Overload safety	1	1	1	1	3	3	3.2
	<b>Measuring range</b>	<b>0 ... 2.5</b>	<b>0 ... 4</b>	<b>0 ... 6</b>	<b>0 ... 10</b>	<b>0 ... 16</b>	<b>0 ... 25</b>	
	Overload safety	5	8	12	20	32	50	
inWC	<b>Measuring range</b>	<b>0 ... 40</b>	<b>0 ... 60</b>	<b>0 ... 80</b>	<b>0 ... 100</b>	<b>0 ... 120</b>	<b>0 ... 150</b>	<b>0 ... 200</b>
	Overload safety	400	400	400	400	400	400	400
	<b>Measuring range</b>	<b>0 ... 250</b>	<b>0 ... 400</b>					
	Overload safety	1,200	1,200					
psi	<b>Measuring range</b>	<b>0 ... 5</b>	<b>0 ... 15</b>	<b>0 ... 25</b>	<b>0 ... 30</b>	<b>0 ... 50</b>	<b>0 ... 100</b>	<b>0 ... 150</b>
	Overload safety	14.5	45	60	60	100	200	290
	<b>Measuring range</b>	<b>0 ... 200</b>	<b>0 ... 300</b>					
	Overload safety	400	600					

### Vacuum and +/- measuring range

KG/CM2	<b>Measuring range</b>	<b>-0.025 ... +0.025</b>	<b>-0.05 ... 0</b>	<b>-0.05 ... +0.05</b>	<b>-0.05 ... +0.15</b>	<b>-0.05 ... +0.2</b>
	Overload safety	±0.2	±0.2	±0.2	1	1
	<b>Measuring range</b>	<b>-0.05 ... +0.25</b>	<b>-0.1 ... 0</b>	<b>-0.1 ... +0.1</b>	<b>-0.15 ... +0.15</b>	<b>-0.16 ... 0</b>
	Overload safety	1	±0.2	1	1	1
	<b>Measuring range</b>	<b>-0.2 ... +0.2</b>	<b>-0.25 ... 0</b>	<b>-0.25 ... +0.25</b>	<b>-0.3 ... +0.3</b>	<b>-0.4 ... 0</b>
	Overload safety	1	1	1	3	1
	<b>Measuring range</b>	<b>-0.5 ... +0.5</b>	<b>-0.6 ... 0</b>	<b>-1 ... 0</b>	<b>-1 ... +0.6</b>	<b>-1 ... +1.5</b>
	Overload safety	3	3	3	3.2	5
inWC	<b>Measuring range</b>	<b>-1 ... +3</b>	<b>-1 ... +5</b>	<b>-1 ... +9<sup>1)</sup></b>	<b>-1 ... +15<sup>1)</sup></b>	<b>-1 ... +24<sup>1)</sup></b>
	Overload safety	8	12	20	32	50
	<b>Measuring range</b>	<b>-10 ... +10</b>	<b>-20 ... 0</b>	<b>-20 ... +20</b>	<b>-40 ... 0</b>	<b>-40 ... +40</b>
	Overload safety	±80	±80	±80	±80	±80
	<b>Measuring range</b>	<b>-50 ... +50</b>	<b>-60 ... 0</b>	<b>-75 ... +75</b>	<b>-80 ... 0</b>	<b>-100 ... 0</b>
	Overload safety	400	400	400	400	400
	<b>Measuring range</b>	<b>-100 ... +100</b>	<b>-120 ... 0</b>	<b>-125 ... +125</b>	<b>-150 ... 0</b>	<b>-200 ... +200</b>
	Overload safety	400	400	1,200	400	1,200
psi	<b>Measuring range</b>	<b>-250 ... 0</b>				
	Overload safety	1,200				
	<b>Measuring range</b>	<b>-1 ... 0</b>	<b>-30 inHg ... 0</b>	<b>-30 inHg ... +15</b>	<b>-30 inHg ... +30</b>	<b>-30 inHg ... +60</b>
	Overload safety	±3	45	60	60	150
	<b>Measuring range</b>	<b>-30 inHg ... +100</b>	<b>-30 inHg ... +160<sup>1)</sup></b>	<b>-30 inHg ... +200<sup>1)</sup></b>	<b>-30 inHg ... +300<sup>1)</sup></b>	
	Overload safety	250	350	450	600	

1) If the medium water is measured, a higher overload safety is recommended.

The given measuring ranges are also available in mbar, kg/cm<sup>2</sup>, MPa and kPa.

Other measuring ranges available on request.

3-fold overload safety available on request.

### Vacuum tightness

Yes (for restrictions see overload safety)

## HOW TO ORDER

### BASIC MODEL

DPG-T1

<b>CODE</b>	A
<b>NOMINAL SIZE(mm)</b>	100

C

### Electrical connections

A4

A1:Angular connector DIN 175301-803 A  
 A2:Angular connector DIN 175301-803 A (with moulded cable 1M)  
 A6:with cable outlet OEM version, unshielded

### GAUGE CONNECTION

B7

B7	1/2"BSP(M)
B8	1/2"NPT(M)
B5	1/4"NPT(M)STANDARD
B4	1/4"BSP(M)STANDARD
B1	According to order

Note:Connections like PT/PF/Flairde /UNF/G/R eac.can be orivuded on request.  
 Non standard connections can be provided through adaptors.

### RANGE

0-10

REFER TABLES

### PRESSURE UNITS

D4

D1 bar	D4 kg/cm <sup>2</sup>	D7 According to order
D2 psi	D5 mmH <sub>2</sub> O	
D3 Mpa	D6 mH <sub>2</sub> O	

### Output

E1

E1 4~20mA E2 DC 0~10V E3 DC 0~5V E4 Others

### OPTIONS

C19

FOR NON STANDARD PRODUCTS/OPTIONAL ITEMS, PLEASE CONTACT FACTORY FOR DELNERY AND MINMUM QUANTITY OF ORDER.

<b>C3</b> CUSTOM DESIGNED PANEL	<b>C9</b> SSTAG PLATE
<b>C7</b> OXYGEN SERVICE(WITHOUT DAMPENING LIQUIDS)	<b>C20</b> HELIUM LEAK TEST
<b>C12</b> AISI 316 SS CASE & BEZEL	<b>C24</b> TRIANGLE TYPE SURFACE MOUNTING PLATE
<b>C1</b> FIVE POINT CALIBRATION CERTIFICATE	<b>C6</b> CASE WITH ROLLING TYPE BEZEL
<b>C13</b> FIVE POINT CALIBRATION CERTIFICATE (LABORATORY)	<b>C18</b> ACCURACY $\pm 0.25\%$ OF FS.
	<b>C19</b> 4-wire system

\* GASKET, BOD &amp; FILLING PLUG OF VITON/NBR

### Ordering Example:

PT-A-C-A1-B7-0/10kg/cm<sup>2</sup>-D7-E1-C19