

Relative and absolute pressure transmitter

Pressure range
0 – 60 bar

The product version compact by type 528 pressure transmitter, all the based upon the well proven ceramic technology developed by Huba Control .

These transmitters are suitable for applications across a broad spectrum of industries.

- Compact, rugged construction
- Negligible temperature influence on accuracy
- Saving time by quick cable mounting by the customer with swift connector
- Large selection of connections available



Type C528.S

Technical overview

Pressure range

Relative	-1 ... 0 – 60 bar
Absolute	0 ... 1 – 16 bar

Operating conditions

Medium		Liquids and gases
Temperature	Medium	FPM -15 ... +125 °C
		EPDM -40 ... +125 °C
		NBR -20 ... +100 °C
		MVQ -40 ... +125 °C
		Ambient -30 ... +85 °C
	Storage	-50 ... +100 °C
Tolerable overload / Rupture pressure	≤ 4 bar	3.0 x fs
	> 4 bar	2.5 x fs

Materials

Plug accommodation		Polyarylamide 50% GF VO
Materials in contact with medium	Pressure connection	Stainless steel 1.4404 / AISI 316L
	Sensor	PVDF
		Ceramic Al ₂ O ₃ (96%)
	Sealing material	FPM, EPDM, NBR, MVQ

Electrical connection

Swift connector with or without cable 1.5 / 2 / 3 / 5 m (PVC spec.)
Connector DIN EN 175301-803-A
Connector DIN EN 175301-803-C (mini DIN)
Metri Pack Serie 150
Connector M12x1
Braids
Connector RAST 2.5 (3 wire, only)

Protection class

Protection class III

Dynamic response

Response time	< 2 ms, 1 ms typ.
Load cycle	< 100 Hz

Electrical overview

	Output	Power supply	Load	Current consumption
2 wire	4 ... 20 mA	7 ... 33 VDC	$< \frac{\text{supply voltage} - 7 \text{ V}}{0.02 \text{ A}}$ [Ohm]	< 23 mA
2 wire (Ex)	4 ... 20 mA	10 ... 30 VDC	$< \frac{\text{supply voltage} - 10 \text{ V}}{0.02 \text{ A}}$ [Ohm]	< 23 mA
	0 ... 5 V	7 ... 33 VDC	>10 kOhm / < 100 nF	< 7 mA
	1 ... 6 V	8 ... 33 VDC	>10 kOhm / < 100 nF	< 7 mA
3 wire	0 ... 10 V	12 ... 33 VDC	>10 kOhm / < 100 nF	< 7 mA
	0 ... 10 V	24 VAC \pm 15%	>10 kOhm / < 100 nF	< 7 mA
	ration. 10 ... 90%	5 VDC \pm 10%	>10 kOhm / < 100 nF	< 7 mA
Polarity reversal protection	Short circuit proof and protected against polarity reversal. Each connection is protected against crossover up to max. supply voltage.			
Insulation voltage	500 VDC			

Protection standard

Connector DIN EN 175301-803, Braids	IP 65
Connector RAST 2.5	IP 00
Swift connector, Metri Pack, Connector M12x1	IP 67
Braids (for oxygen applications)	IP 30

Pressure connection

Inside thread	$\frac{7}{16}$ - 20 UNF	
	$\frac{1}{2}$ - 14 NPT	
	G $\frac{1}{4}$	with O-Ring seal FPM spec. (-30 ... +135 °C)
Outside thread	$\frac{7}{16}$ - 20 UNF	
	$\frac{1}{4}$ - 18 NPT	
	G $\frac{1}{4}$	sealed at back DIN 3852 form E with Profile seal ring in FPM spec. (-30 ... +135 °C)
	R $\frac{1}{4}$	DIN 2999
	G $\frac{1}{2}$	sealed at back and manometer (combi) with Profile seal ring in FPM spec. (-30 ... +135 °C)
	M20x1.5	
Option	G $\frac{1}{4}$	sealed at front
	G $\frac{1}{2}$	sealed at front
	Tri-Clamp	1 $\frac{1}{2}$ " or 2"
	Flange	Single or Double (with diaphragm) ANSI, JIS, DIN Size for customer (min. 2")
	Thread (Diaphragm)	1" or 1 $\frac{1}{2}$ " Plastic between with Teflon diaphragm

Installation arrangement

Unrestricted

Tests / Admissions

Electromagnetic compatibility	CE conformity acc. EN 61326-2-3
Shock acc. IEC IEC 68-2-27	100 g, 11 ms half sine wave, all 6 directions, free fall from 1 m on concrete (6x)
Constant shock acc. IEC 68-2-29	40 g for 6 ms, 1000x all 3 directions
Vibration acc. IEC 68-2-6	20 g, 15 ... 2000 Hz, 15 ... 25 Hz with amplitude \pm 15 mm, 1 Octave/min. all 3 directions, 50 constant load
UL recognized component marks	acc. E325110

Protection against explosion

Intrinsic safety «i» (with current output only)	Ex II 1/2 G Ex ia IIC T4 Ga/Gb
EC type examination certificate	Ex II 1/2 D Ex ia IIC T125°C Da/Db
Connection to certified intrinsically safe resistive circuits with maximum values	SEV 10 ATEX 0145
Effective internal inductance and capacitance for versions with plugs complying with EN 175301-803 or M12x1	U _i = 30 VDC; I _i = 100 mA = P _i = 0.75 W L _i = 0 nH; C _i = 0 nF

Weight

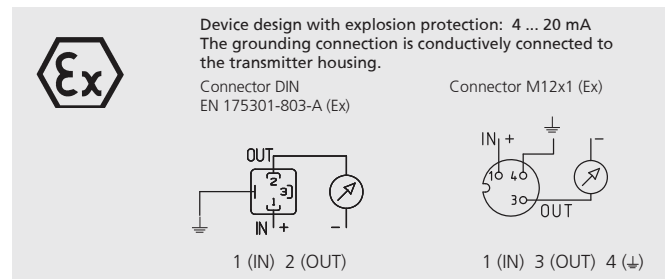
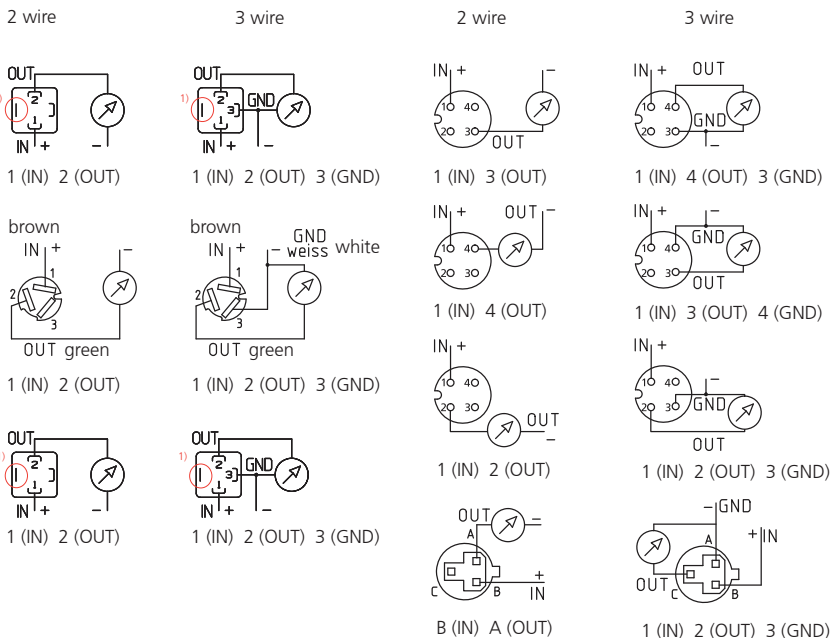
~ 90 g

Accuracy

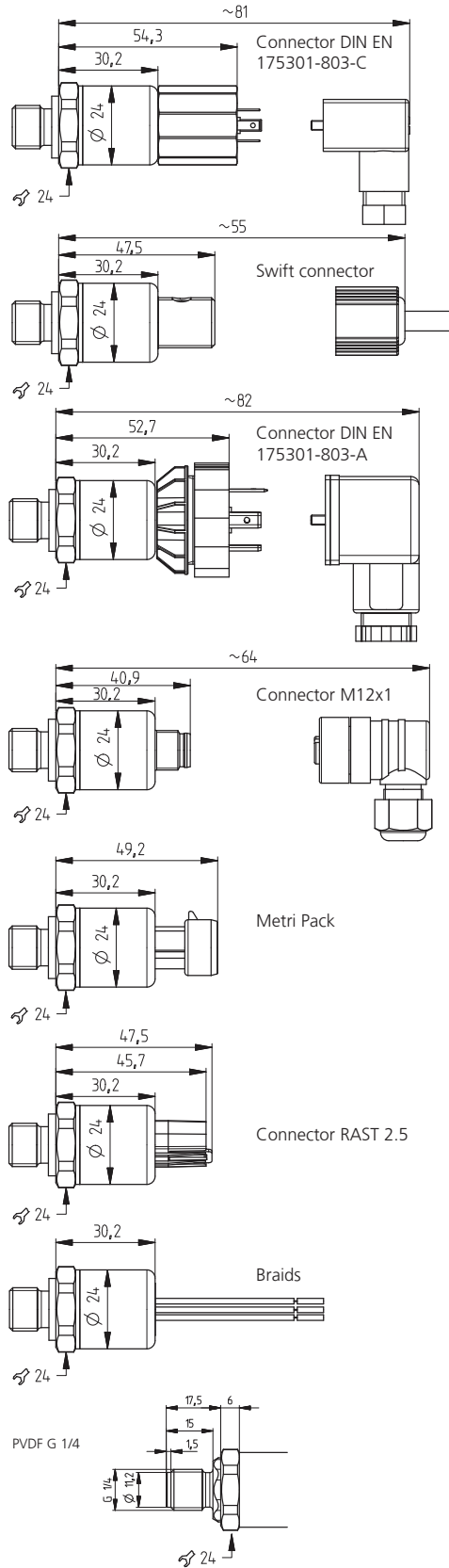
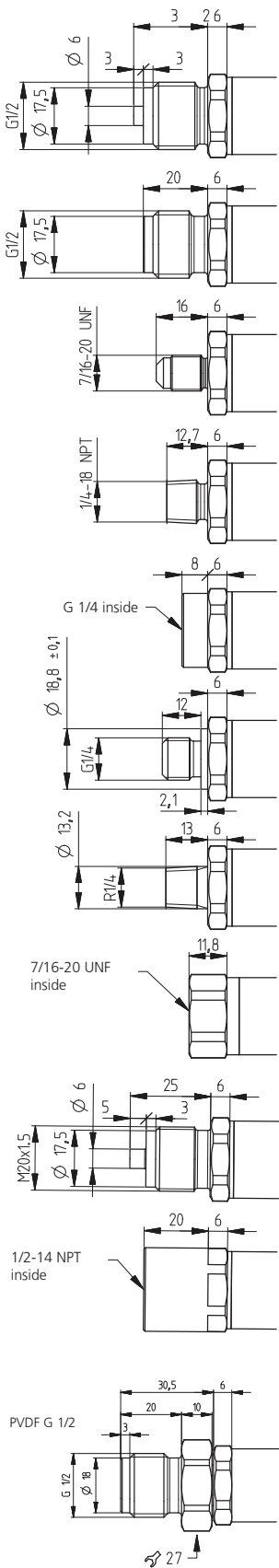
Parameter Test conditions: 25 °C, 45% RH, power supply 24 VDC

	Unit	
Characteristic line ¹⁾	% fs	\pm 0.3
Resolution	% fs	0.1
Thermal characteristic ²⁾	max. % fs/10K	\pm 0.2
Long term stability acc. IEC EN 60770-1	% fs	\pm 0.25

Electrical connections

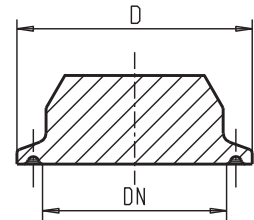


Dimensions in mm



Option

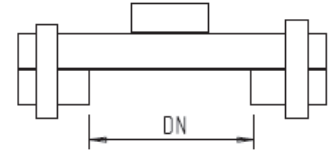
clamp



Nominal diameter	DN	D (mm)
Tri-clamp	1 1/2 "	50
	2 "	64
DIN 32676	DN 32	50
	DN 40	50
	DN 50	64
ISO 2852	DN 33,7	50
	DN 38	50
	DN 40	64

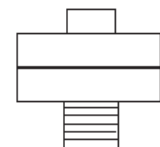
Flange

Single or Double Type



diameter and Material customer option
Min.size : 2" (50A)

Thread Plastic



diameter 1" or 1 1/2"
PT , FPT , NPT , FNPT
With Teflon Diaphragm

1) Not connected with transmitter housing