

PBC-Series

Miniature Pressure Sensor

Ref : 202

Rev : T



DESCRIPTION

These miniature pressure sensors are designed to make static measurements of pressure as well as dynamic in corrosive condition. Realized entirely with stainless steel or duplex in a fully welded design, these levelling membrane sensors are compatible with a great number of corrosive or conducting fluids. An integrated electronics makes it possible to deliver an analogical tension signal.

MEASURING RANGES

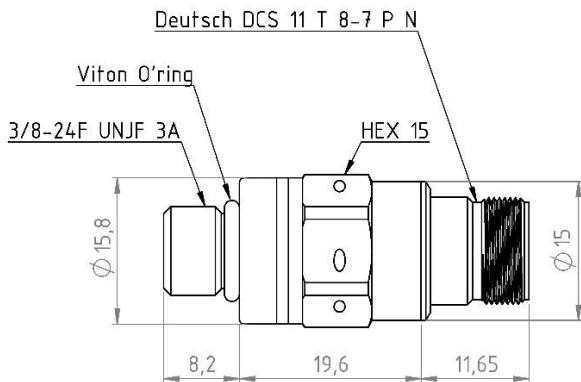
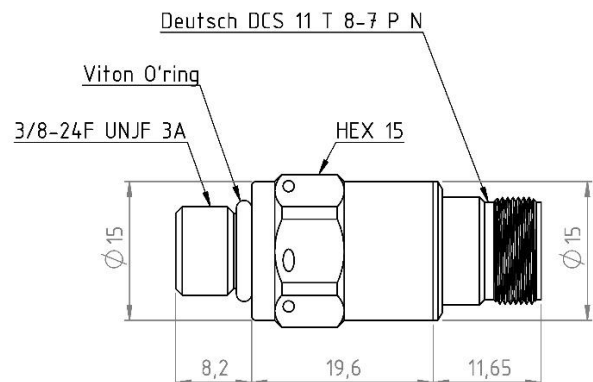
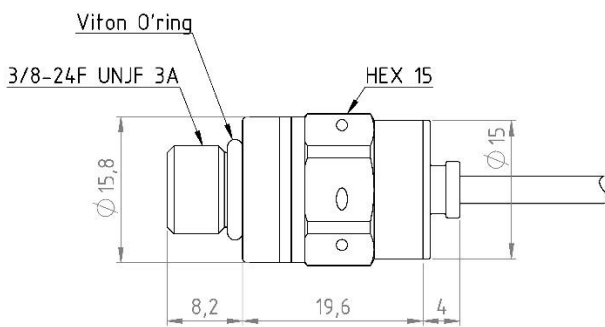
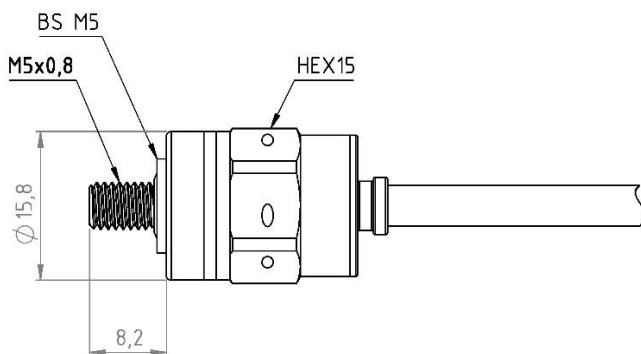
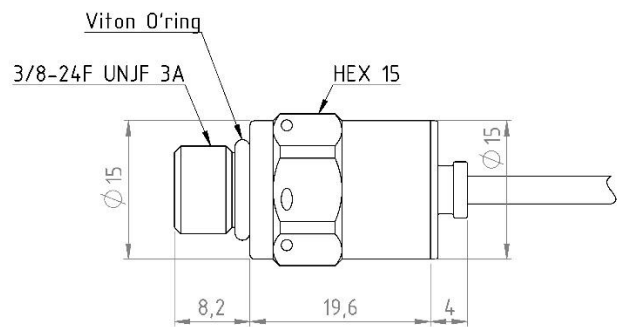
PRESSURE RANGE (FS in PSI)	PRESSURE RANGE (FS in BAR)	ZERO OFFSET AT 20°C	FULL SCALE OUTPUT (FS) *	Linearity & Hysteresis (%FS)	THERMAL ZERO SHIFT/60°C	THERMAL SENSITIVITY SHIFT/60°C
30	2	100 ± 50 mV	4900mV ± 50 mV	±0.5%	< ±1% FS	< ± 1%
50	3.5	100 ± 50 mV	4900mV ± 50 mV	±0.5%	< ±1% FS	< ± 1%
100	7	100 ± 50 mV	4900mV ± 50 mV	±0.5%	< ±1% FS	< ± 1%
200	15	100 ± 50 mV	4900mV ± 50 mV	±0.25%	< ±1% FS	< ± 1%
300	21	100 ± 50 mV	4900mV ± 50 mV	±0.25%	< ±1% FS	< ± 1%
500	35	100 ± 50 mV	4900mV ± 50 mV	±0.25%	< ±1% FS	< ± 1%
1000	70	100 ± 50 mV	4900mV ± 50 mV	±0.25%	< ±1% FS	< ± 1%
1500	100	100 ± 50 mV	4900mV ± 50 mV	±0.25%	< ±1% FS	< ± 1%
2000	140	100 ± 50 mV	4900mV ± 50 mV	±0.25%	< ±1% FS	< ± 1%
2500	170	100 ± 50 mV	4900mV ± 50 mV	±0.25%	< ±1% FS	< ± 1%
3000	200	100 ± 50 mV	4900mV ± 50 mV	±0.25%	< ±1% FS	< ± 1%
5000	350	100 ± 50 mV	4900mV ± 50 mV	±0.25%	< ±1% FS	< ± 1%
10000	700	100 ± 50 mV	4900mV ± 50 mV	±0.25%	< ±1% FS	< ± 1%

* Output Voltage = 100 to 5000 mV / other full-scale output in option

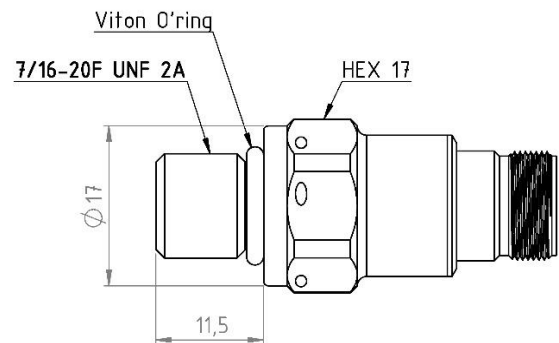
TECHNICAL DATA

PARAMETERS	VALUES	NOTES
Supply voltage	13 to 32 Vdc	
Pressure type	From 50 psi to 500 psi From 1K psi to 10K psi	Absolute, Relative Absolute, Sealed
Proof pressure	1.5x FS	
Burst pressure	3x FS or 20 000 psi, whichever is less	
Electrical input	< 20 mA	
Output resistance	1KΩ	
Insulation	> 100MΩ	At 50 Vdc
Operating temperature	-40°C to +125°C	
Compensated Temperature	0° to +60°C	
Repeatability	± 0.2% FS	
Bandwidth	> 1KHz	± 1dB
Mechanical connection	3/8-24F UNJF 3A	7/16-20F UNF 2A (option – 1000 psi and above) M5 (option)
Connector output	Deutsch DCS 11 T 8-7 P N (based on MIL-C-38999 Series II)	
Cable output	Shielded cable	4 Teflon wire (AWG 26). 3m standard Other length in option
Seal	Viton O'ring	See options for other seal
Index of protection	IP 65	IP 67 in option
Material	Duplex	See options
Weight	< 35g	
Mechanical Characteristics	Test structure and membrane laser welded	
Other options	Consult technician	

SIZE

P-BCDC—5V (From 50P to 500P)**P-BCDC—5V (From 1KP to 10KP)****P-BCC—5V (From 50P to 500P)****P-BCC—5V (From 1KP to 10KP)**

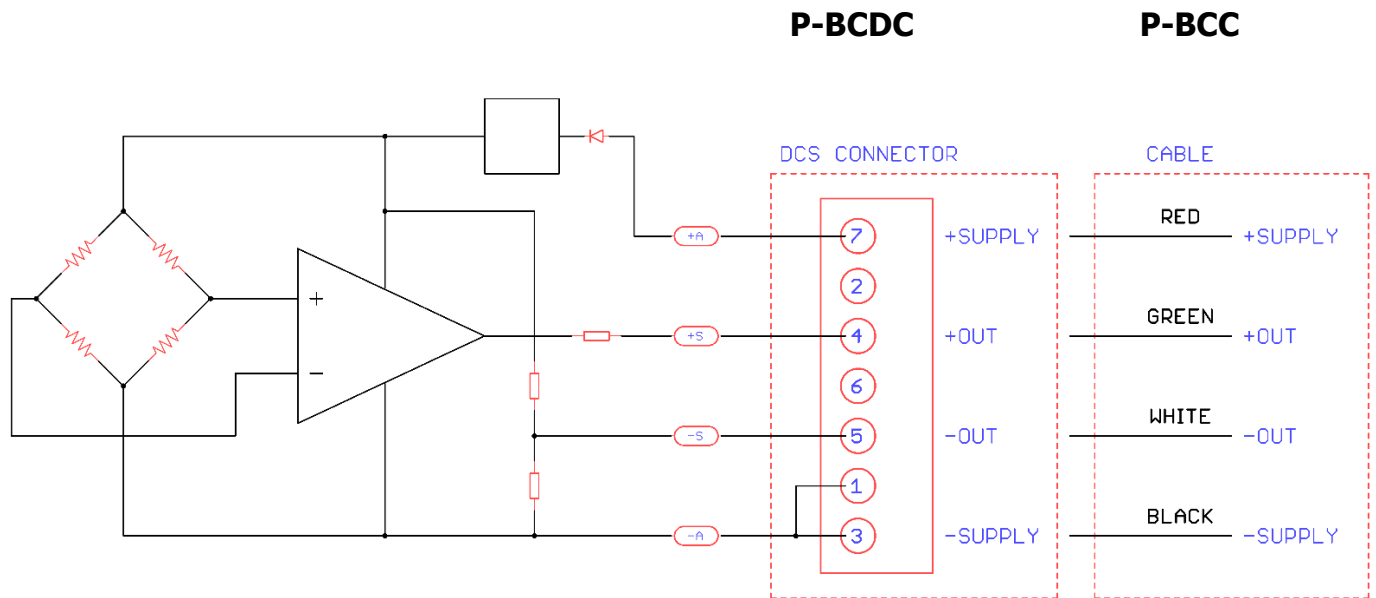
M5x0,8 thread option :
Example of PABCC –5V
(From 50P to 500P)



7/16-20F UNF 2A thread option :
Same dimensions except the
dimensions shown here
(Only applicable for pressure above 500 psi)

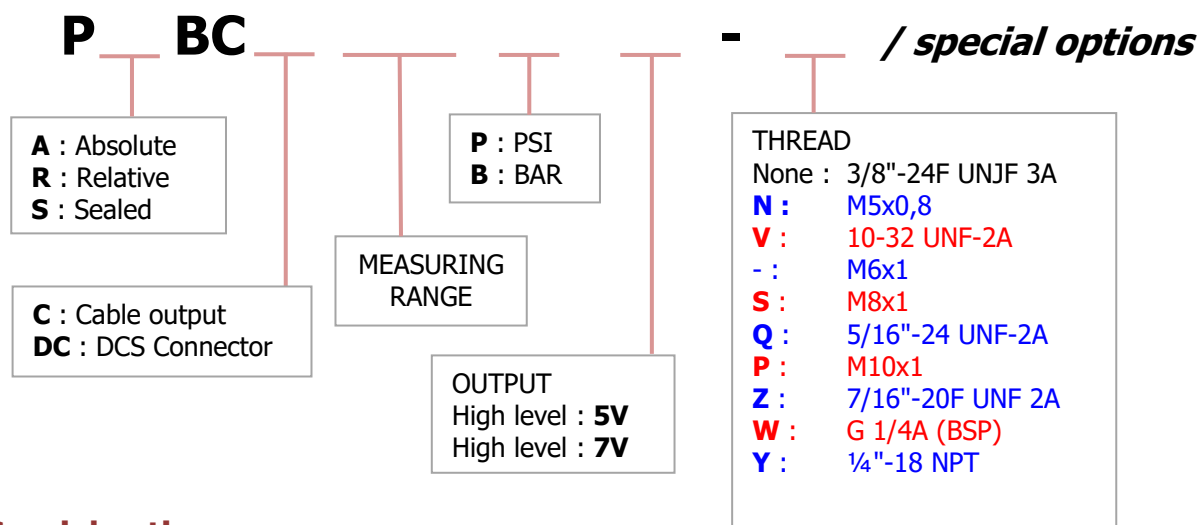
Installation torque: 10 Nm

WIRING



Note: +2 V nom, common mode output voltage referred to – SUPPLY
Pin 2 and 6 is not connected

ORDERING INFORMATION



- Special options**

OPTION	REFERENCE	FEATURES
Cable Length (3m standard)	LxxM	xx = Length in meters (M)
Material	None SS	DUPLEX (standard) 316L
Sealing	None BS	Viton O'ring (BS-ring for M5 thread) BS-ring Hutchinson (ref 206261)
Index of protection	None 67	IP 65 (Standard) IP 67

Example:

PABCDC 5KP 5V

- Absolute
- Deutsch DCS 11 T 8-7 P N
- 5000 psi
- Output: 100 to 5000 mV
- Thread: 3/8-24F UNJF 3A

PABCC 1KP 5V

- Absolute
- Cable output 3m
- 1000 psi
- Output: 100 to 5000 mV
- Thread: 3/8-24F UNJF 3A

PABCC 2B 7V-B/L2M

- Absolute
- Cable output 2m
- 2 bar
- Output: 100 to 7500 mV
- Thread: M5x0,8

CONTACT

MESUREX

13 Rue des Corroyés
78730 Saint Arnoult en Yvelines

Tel : +33 (0) 1 30 41 23 62

Fax : +33 (0) 1 30 41 23 80

Mail : measurex@measurex.fr