PRESSURE TRANSMITTER

"Piezoresistive Pressure Sensor – 26 mm Body Diameter" **BCT 26**



- Piezoresistive pressure sensor
- 26 mm body diameter
- Long-term excellent work
- Stainless steel case
- EMC and reverse polarity protection
- Analog 4 … 20mA / 0 ... 10VDC etc. different outputs
- Different models from 100 mBar to 600 Bar

Applications

- Pneumatic Systems
- Hydraulic Systems
- Machines Equipments
- Air Cooling – Heating Systems
- Water Technologies
- Automation Applications
- Textile sector
- Fabric dyeing machines

ATEK BCT 26 series Pressure transmitters offer high performance for demanding commercial and heavy industry applications.

Our products with piezoresistive working principle can be used in water, air, oil etc. applications.

The standard stainless steel housing with IP65 / IP67 protection can work in harsh environments.

The BCT 26 series, which is not affected by electrical fluctuations and reverse connections due to over voltage and reverse polarity protection, has a long life.

As pressure measurement, all models between 0… 100mbar and 0… 600BAR and all vacuum pressure models between 0… -100mbar and 0… -1BAR can be produced.

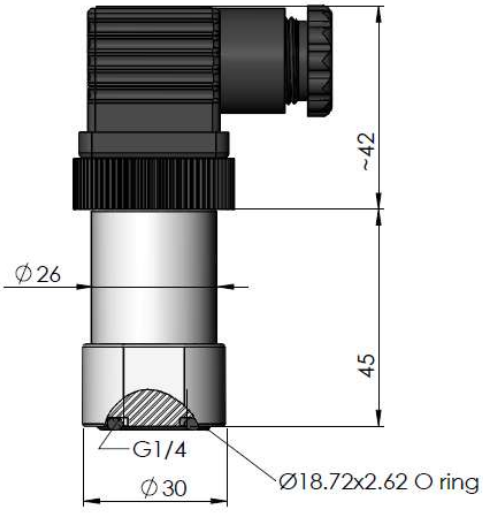
BCT 26 TECHNICAL SPECIFICATIONS	
Measurement Range	Diffrent models from 0…100mbar to 0…600Bar Different vacuum models from 0… -100mbar to 0…-1Bar
Measurement Type	Ambient pressure measurement as relative Air, Water, Oil, Non-explosive gases
Working Principle	Piezoresistive
Maximum Compressive Strength	300%T.S. ≤700mbar, 200%T.S. ＜250Bar 150%T.S ≥250Bar *Can be 3 or 5 times.
Oring – Sealing	Standard NBR, optional FKM(Viton) or EPDM
Output Signal	4...20mA (2 Wire), 0...20mA (3 Wire) 0...10VDC, 1...6VDC, 0...5VDC, Ratiometric etc.
Load	**4-20mA, 0-20mA** : 250Ω **0...5VDC, 1...5VDC** : ≥2.5K **0-10VDC** : ≥5K **Ratiometric** : ≥2.5K
Supply Voltage	**4-20 mA** : 8 ... 32 V_{DC} **0-20 mA** : 12 ... 30 V_{DC} **0-10 V** : 12 ... 30 V_{DC} **Ratiometric :** 5 V_{DC}
Operating Current	Maximum 30mA
Mechanical Connection	G1/4F
Resolution	12 bit
Accuracy	±%0,3 FS @25° C
Total Error Band	±0,5 %FS (ceramic) ±0,3 %FS (silicon) @-10...+70°C
Long Term Stability	±%0,3 FS/ year
Response Time	1ms %10...%90 nominal pressure
Protection Class	IP65 or IP67
Operating Temperature	-40°C ... +85°C
Ambient Temperature	-40°C ... +85°C
Body	Stainless steel body - 1.4305 (AISI303) Optional stainless 316L
Electrical Connection	Models with connector: DIN43650-A, DIN43650-C, M12 or 3 x 0.14mm² PVC cable (Optional PUR cable)
Weight	~125 grams (except connector)
Mounting / Tightening Torque	15 ... 20 Nm

FS : Full Scale (working pressure range)
* Product life will be shortened when more pressure is given than working pressure According to the product, it may be damaged at high pressure of 3-5 times.
** IP67 protection is provided if M12 socket models are equipped with press-printed sockets.

MECHANICAL DIMENSIONS

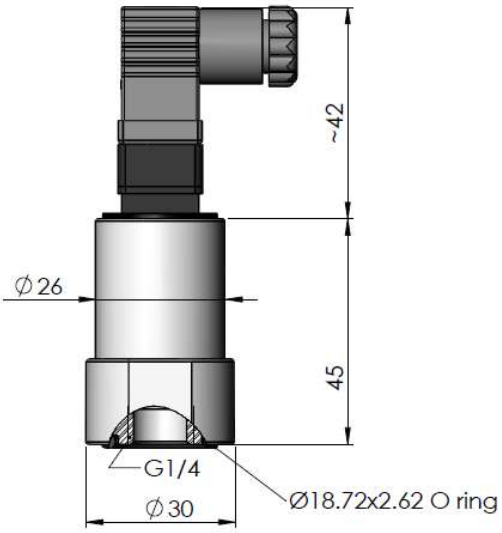
DIN43650-A Connector (S30)





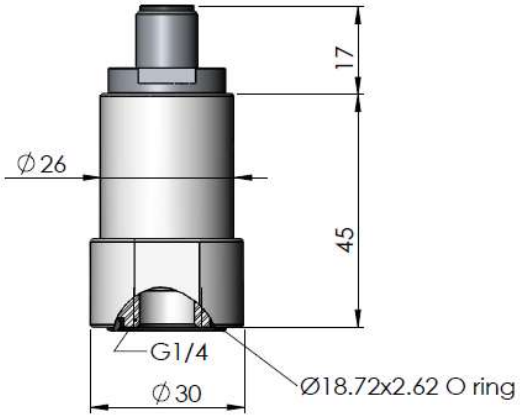
DIN43650-C Connector (S31)



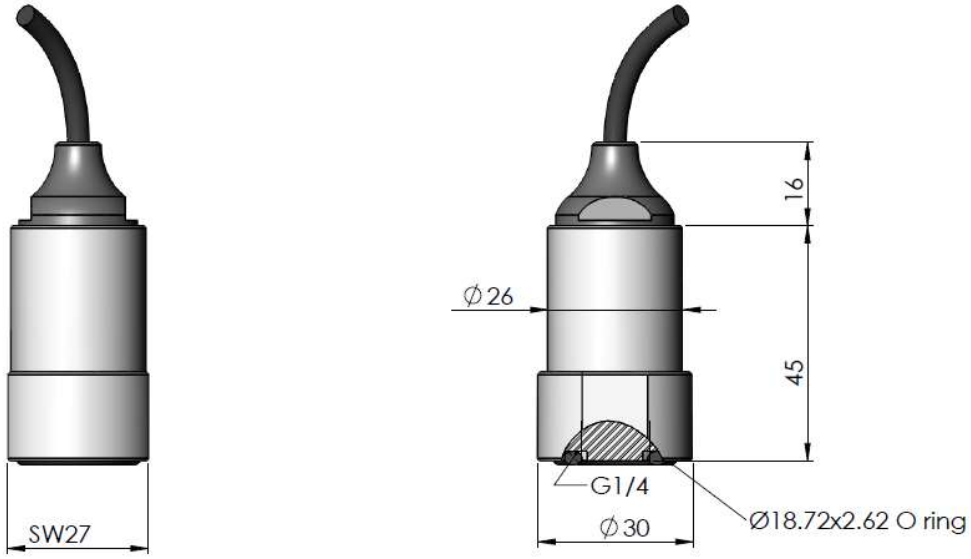


M12 Connector (S12/S15)

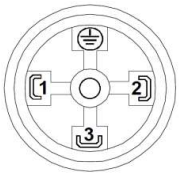


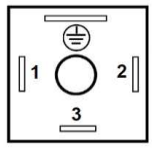


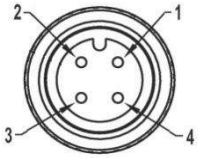
Cable

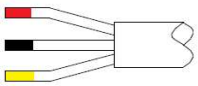


ELECTRICAL CONNECTION









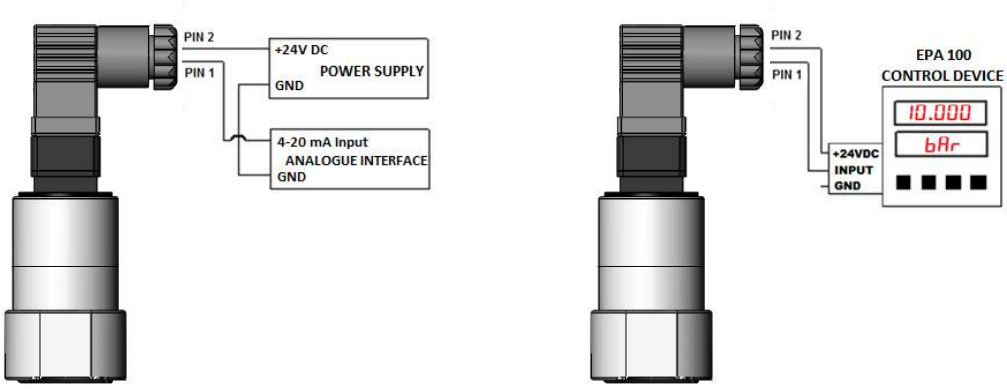
		DIN D43650-A	DIN D43650-C	M12		WIRE
		S30	S31	S12	S15	
		PIN NO	PIN NO	PIN NO		COLOR
CURRENT OUTPUT	+Vcc	2	2	2	1	RED
	Analogue Output	1	1	1	3	YELLOW
VOLTAGE OUTPUT	+Vcc	2	2	2	1	RED
	GND	1	1	1	3	BLACK
	Analogue Output	3	3	3	2	YELLOW

* For IP67 protection at model with M12 connector, press-printed cable should beused. Otherwise, it can not be used under IP67 conditions.

** There are PVC (standard) or PUR (optional) cable options in the model with cable.

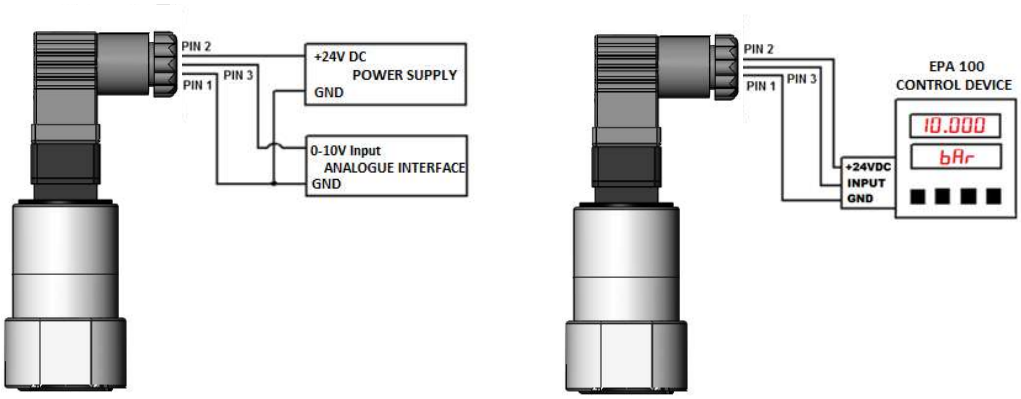
2 Wire 4-20mA Connection Connector Pin No	Signal
1	4…20mA Analogue Output
2	+8...32 VDC (Supply)

Sample Connection:



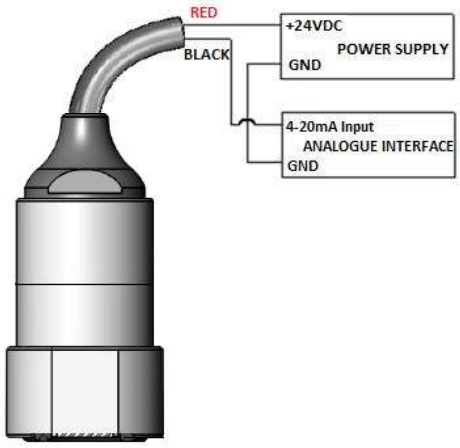
3 Wire 0-10VDC or 0-20 mA Connection Connector Pin No	Signal
1	GND
2	+12...30 VDC (Supply)
3	0…10VDC or 0-20 mA Output

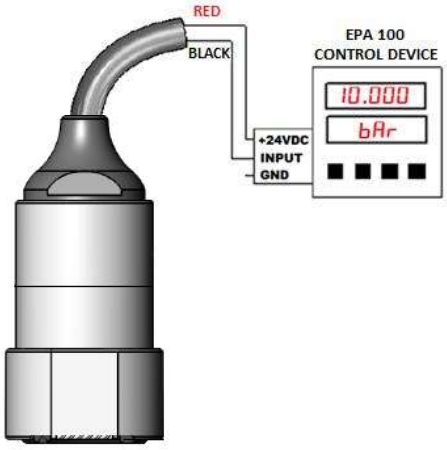
Sample Connection:



2 Wire 4-20mA Connection Cable Color	Signal
BLACK	4...20mA Analogue Output
RED	+8...32 VDC (Supply)

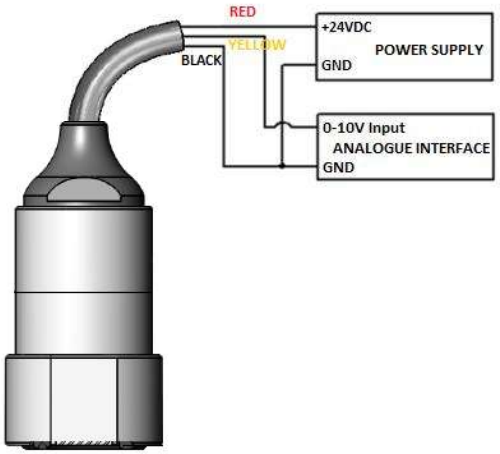
Sample Connection:

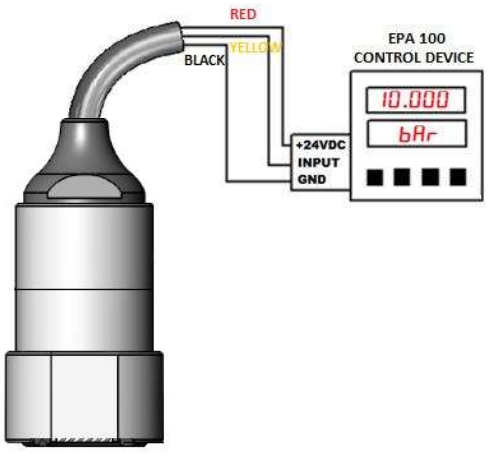




3 Wire 0-10VDC or 0-20 mA Connection Cable Color	Signal
BLACK	GND
RED	+12...30 VDC (Supply)
YELLOW	0...10VDC or 0-20 mA Output

Sample Connection:





WARNING

Wrong connections disrupt the sensor.

ORDEL DETAILS

Output Signal

Voltage Output Product
V : 0-10VDC (standard)
V1 : 0-5VDC
V2 : 1-6VDC
V3 : 0,5-4,5VDC
V4 : 0,5-5,5VDC
V5 : 1-5VDC
V6 : 1-10VDC

Ratiometric Products
V8 : Ratiometric 0.5-4.5VDC
V9 : Ratiometric 0-5VDC

Current Output Products
A : 4-20mA (2-wire) (standard)
A0 : 0-20mA (3-wire)

* Ask for other options.

Electrical Connection

S30 : DIN43650-A type large type connector
S31 : DIN43650-C type small type connector
S12 : M12x1 4 pin
S15 : M12x1 4 pin (1 supply, 3 output)
2M : 2 meters cable

* Ask for other options.

Model

BCT 26 – 10Bar – A – G1/4F – S31 – -

Working Pressure Range

0...-100mBar : Vacuum 0....-100mbar
-1...0Bar : Vacuum -1...0BAR
0...-1Bar : Vacuum (Reverse Calibration)

100mBar : 0...100mbar
250mBar : 0...250mbar
400mBar : 0...400mbar
600mBar : 0...600mbar

1Bar : 0...1BAR
10Bar : 0...10BAR
16Bar : 0...16BAR
25Bar : 0...25BAR
100Bar : 0...100BAR
160Bar : 0...160BAR
250Bar : 0...250BAR
400Bar : 0...400BAR
600Bar : 0...600BAR

* Ask for other options.

Mechanical Connection

G1/4F : G1/4 female connection

* Ask for other options.

Body Material/ Custom Coding

Empty : Stainless 303
E316 : Stainless 316L

* Ask for other options.

Sample Code :

BCT 26 100mBar A G1/4F S31
Features: 0...100mbar working range, 4-20mA analogue output (2 wire connection), G1/4F connection, DIN43650-C connector, stainless 303 body

BCT 26 10Bar A G1/4F S30 E316
Features: 0...10BAR working range, 4-20mA analogue output (2 wire connection), G1/4F connection, DIN43650-A connector, stainless 316L body

RECOMMENDED PRODUCTS

BSS Series Pressure Transmitter Coolers
Max. 300 °C

EPA Series Process Control Devices
48x48mm model EPA 100
74x74mm model EPA 200
96x48mm model EPA 300









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