



- Piezoresistive pressure sensor
- 22 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

ATEK BCT 22 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 22 series, which is not affected by electrical fluctuations and reverse connections due to over voltage and reverse polarity protection, has a long life.

BCT 22 TECHNICAL SPECIFICATIONS

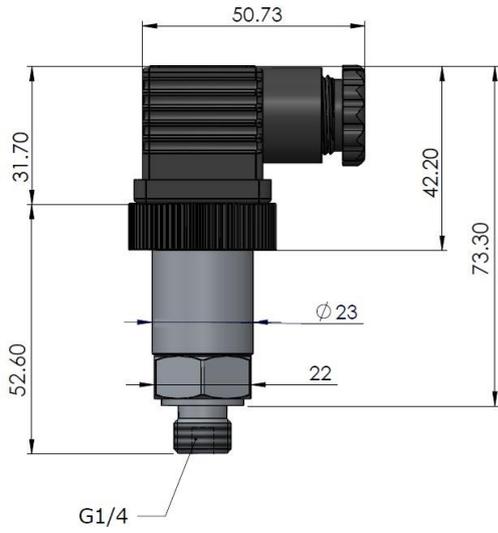
Measurement Range	Diffrent models from 0...100mbar to 0...600Bar Diffrent vacuum models from 0... -100mbar to 0...-1Bar
Measurement Type	Ambient pressure measurement as relative Air, Water, Oil, Non-explosive gases
Sensor / Diaphragm	Piezoresistive working principle Ceramic or Silicone Membrane
Maximum 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.
Mechanical Connection	G1/4, G1/8, G1/2, NPT1/4, NPT1/8, NPT1/2, M14, 7/16M, 7/16F
Supply Voltage	4-20 mA : 12 ... 30 V _{DC} 0-10 V : 12 ... 30 V _{DC} Ratiometric : 5 V _{DC}
Operating Current	Maximum 30mA
Accuracy	F.S ±%0,5 @25° (Ceramic) F.S ±%0,3 @25° (Silicon)
Long Term Stability	F.S ±%0,3/ year
Response Time	1ms %10...%90 nominal pressure
Protection Class	IP65 or IP67
Ambient Temperature	-40°C ... +85°C
Body	Stainless steel body - 1.4305 (AISI303) Optional stainless 316L or Titanium
Electrical Connection	Models with socket DIN43650-A, DIN43650-C, M12, Packard or PUR cable 3 x 0.14mm (4,9mm cable thickness)
Weight	65 ... 110 gram (except socket)
Mounting / Tightening Torque	15 ... 20 Nm

F.S : Full Scale (working pressure range)

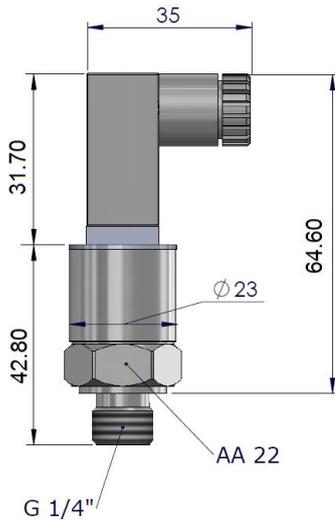
* Product life will be shortened when more pressure is given than working pressure
According to the product, it may be damaged at high pressure of 3-5 times.

** IP67 protection is provided if M12 socket models are equipped with press-printed sockets.

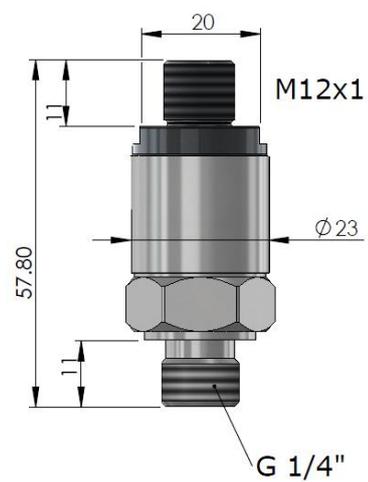
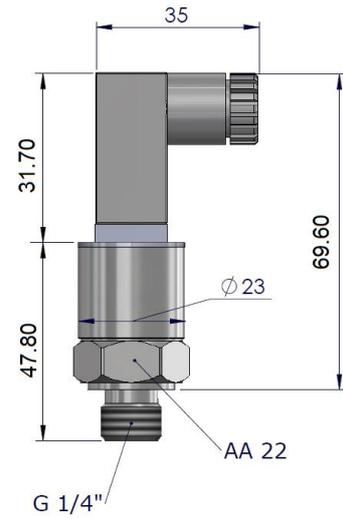
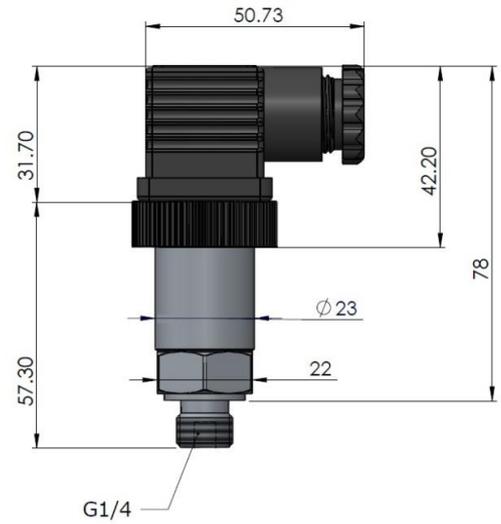
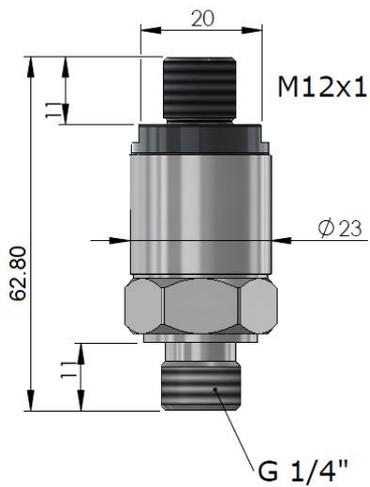
S30 SOCKET : DIN43650-A

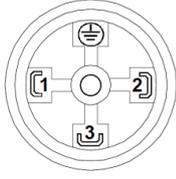
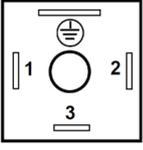
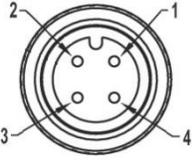
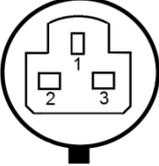
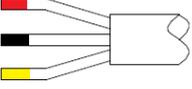


S31 SOCKET : DIN43650-C



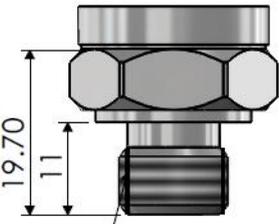
S12/S15 SOCKET : M12



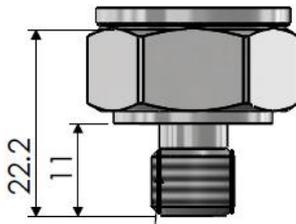
						
	DIN D43650-A	DIN D43650-C	M12	PACKARD	WIRED	
	S30	S31	S12 S15	S32		
	PIN NO	PIN NO	PIN NO	PIN NO	COLOR	
CURRENT OUTPUT	+Vcc	2	2	2 1	2	RED
	Analogue Output	1	1	1 3	1	YELLOW
VOLTAGE OUTPUT	+Vcc	2	2	2 1	2	RED
	GND	1	1	1 3	1	BLACK
	Analogue Output	3	3	3 2	3	YELLOW

- * For IP67 protection at model with M12 socket, press-printed cable should be used. Otherwise, it can not be used under IP67 conditions.
- ** There are PUR or PVC cable options in the cable model.
- *** On models with the PACKARD socket, the letter of pin numbers are 1(C), 2(B), 3(A).

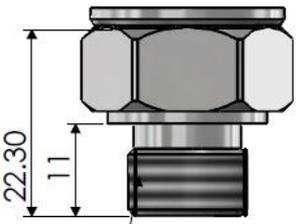
MECHANICAL CONNECTION



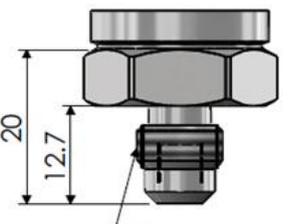
G1/4"



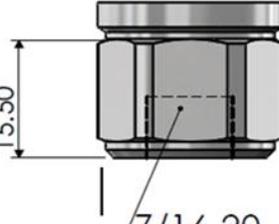
G1/8



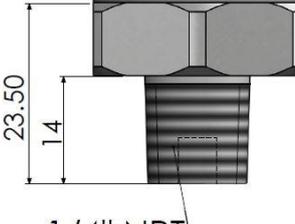
M14x1



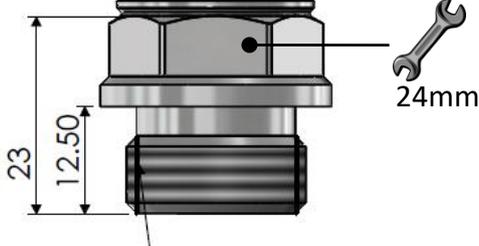
7/16-20



7/16-20



1/4" NPT



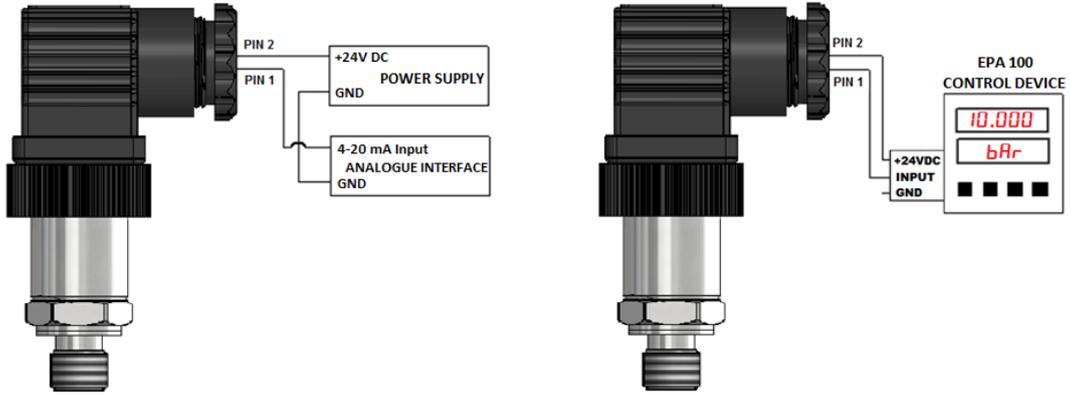
G1/2

* In the case of the G1/2 model, the dimension of key slot is 24mm. All other models are 22mm.

** Do not turn the product by holding from socket during installation. Otherwise, the product may be damaged.

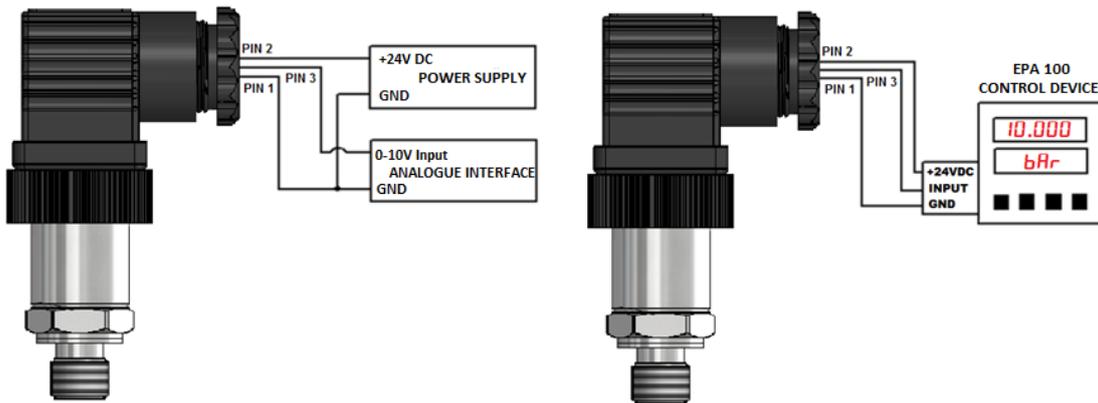
2 Wire 4-20mA Connection Socket Pin No	Signal
1	4...20mA Analogue Output
2	+12...30 VDC (Supply)

Sample Connection:



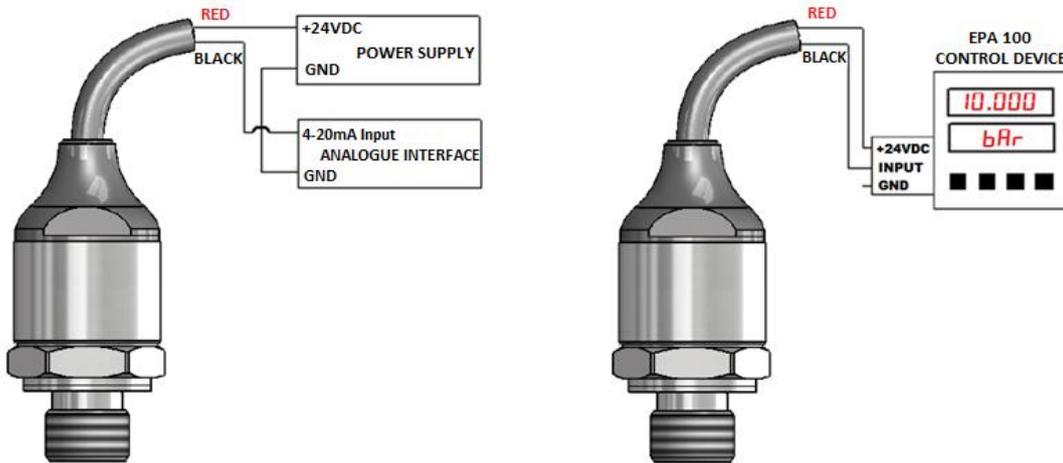
3 Wire 0-10VDC Connection Socket Pin No	Signal
1	GND
2	+12...30 VDC (Supply)
3	0...10VDC Analogue Output

Sample Connection:



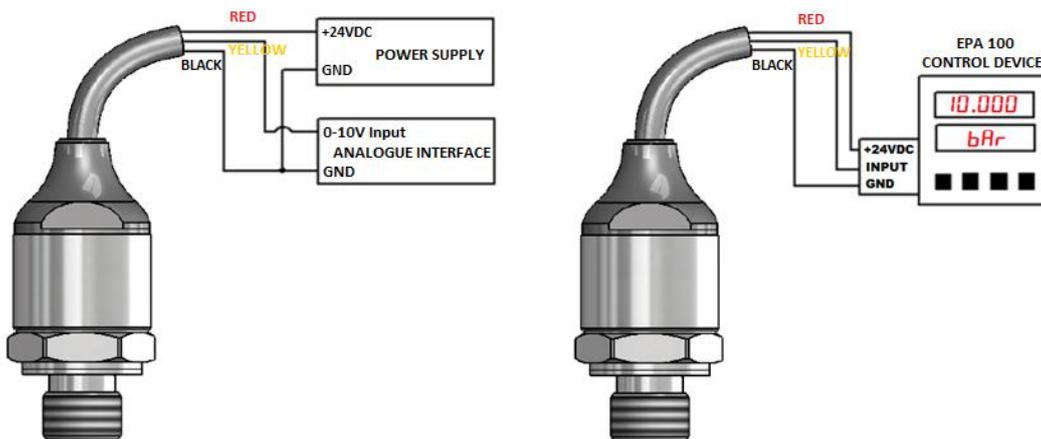
2 Wire 4-20mA Connection Cable Color	Signal
BLACK	4...20mA Analogue Output
RED	+12...30 VDC (Supply)

Sample Connection:



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

Sample Connection:



WARNING

Wrong connections disrupt the sensor.

If water pressure measurement is used, insert M5 valve to the transmitter. Otherwise, the pressure peaks of water pump disrupts the transmitter.

ORDER CODING

Output Signal

Voltage Output Product (12...30VDC)

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 (5VDC Supply)

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

Current Output Products (12...30VDC)

A : 4-20mA (standard)
 A0 : 0-20mA (3 wire connection)

* Ask for other options.

Sensor

C : Ceramic (standard NBR Oring)
 S : Silicon

*All mBar up to 1 Bar, Vacuum models and 600BAR models are Silicone, other pressure models are produced in ceramics.

WARNING: Silicone model is recommended for water applications. The ceramic model can be used in all other applications.

CF : Viton=FKM Oring
 CE : EPDM Oring
 SF : Silicon Viton = FKM Oring
 SE : Silicon EPDM Oring

Body Material/ Custom Coding

Empty : Stainless 303
 E316 : Stainless z 316L

* Ask for other options.

Model

BCT 22 - **10Bar** - **A** - **G1/4** - **C** - **S30** - **-**

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

G1/4 : G1/4 Connection
 G1/8 : G1/8 Connection
 G1/2 : G1/2 Connection
 NPT1/4 : NPT1/4 Connection
 NPT1/8 : NPT1/8 Connection
 NPT1/2 : NPT1/2 Connection
 M14 : M14x1 Connection
 7/16M : UNF7/16x20M Connection
 7/16F : UNF7/16x20F Connection

* Ask for other options.

Electrical Connection

S30 : DIN43650-A type large type socket
 S31 : DIN43650-C type small type socket
 S12 : M12x1 4 pin
 S15 : M12x1 4 pin (1 supply, 3 output)
 S32 : Packard socket
 2M : 2 Meter Cable

* Ask for other options.

Sample Code :

BCT 22 100mBar A G1/4 S S30

Features: 0...100mbar working range, 4-20mA analogue output (2 wire connection), G1/4 connection, socketed , Silicon membrane, stainless 303 body

BCT 22 10Bar A G1/4 C S30

Features: 0...10BAR working range, 4-20mA analogue output (2 wire connection), G1/4 connection, socketed, Ceramic membrane, stainless 303 body

***Viton (FKM-Flourel)** : It is resistant to all types of grease, oil and solvent between -30 ° C and 225 ° C. It is resistant to many chemicals. When low gas permeability is requested and vacuum systems, it gives very good results.

***Ethylene Propylene Rubber (EPDM)** : Can be used between -40°C and 145°C. Its resistance to phosphate, ester fluids, automotive brake oils and steam is very good.

BY-PRODUCTS

Pressure Transmitter Coolers

180 °C and 250 °C

Signal Cables

PUR ve PVC 3x0,14 / 5x0,14 / 8x,14mm

EPA Series Measurement and Control Devices

[48x48mm modeli EPA 100](#)

[74x74mm modeli EPA 200](#)

[96x48mm modeli EPA 300](#)



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