

## BCT22

Transmetteur de pression économique  
Pression de 0...100 mbar à 0...600 bar



- 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

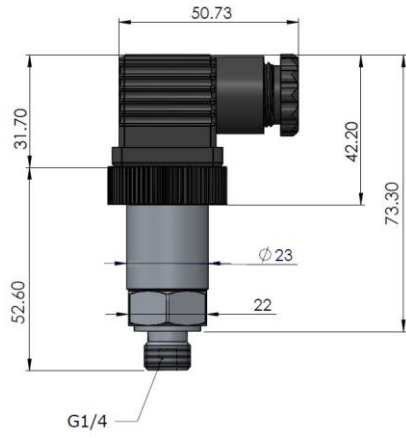
<b>Measurement Range</b>	Different models from 0...100mbar to 0...600Bar Different vacuum models from 0... -100mbar to 0...-1Bar
<b>Measurement Type</b>	Ambient pressure measurement as relative Air, Water, Oil, Non-explosive gases
<b>Working Principle</b>	Piezoresistive
<b>Maximum Compressive Strength</b>	300%T.S. ≤700mbar, 200%T.S. < 250Bar 150%T.S. ≥250Bar *Can be 3 or 5 times.
<b>Oring – Sealing</b>	Standard NBR, optional FKM(Viton) or EPDM
<b>Output Signal</b>	4...20mA (2 Wire) , 0...20mA (3 Wire) 0...10VDC, 1...6VDC, 0...5VDC, Ratiometric etc.
<b>Mechanical Connection</b>	G1/4, G1/8, G1/2, NPT1/4, NPT1/8, NPT1/2, M14, 7/16"-20 UNF
<b>Supply Voltage</b>	<b>4-20 mA</b> : 12 ... 30 V <sub>DC</sub> <b>0-10 V</b> : 12 ... 30 V <sub>DC</sub> <b>Ratiometric</b> : 5 V <sub>DC</sub>
<b>Operating Current</b>	Maximum 30mA
<b>Accuracy</b>	±%0,5 F.S or ±%0,3 F.S @25° C
<b>Long Term Stability</b>	F.S ±%0,3/ year
<b>Response Time</b>	1ms %10...%90 nominal pressure
<b>Protection Class</b>	IP65 or IP67
<b>Operating Temperature</b>	-40°C ... +85°C
<b>Ambient Temperature</b>	-40°C ... +85°C
<b>Body</b>	Stainless steel body - 1.4305 (AISI303) Optional stainless 316L or Titanium
<b>Electrical Connection</b>	Models with socket DIN43650-A, DIN43650-C, M12, Packard or 3 x 0.14mm <sup>2</sup> PVC cable (Optional PUR cable)
<b>Weight</b>	65 ... 110 grams (except socket)
<b>Mounting / Tightening Torque</b>	15 ... 20 Nm

F.S : Full Scale ( working pressure range )

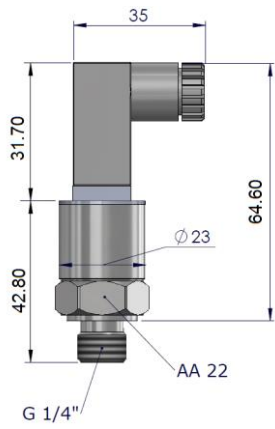
\* Product life will be shortened when more pressure is given than working pressure  
According to the product, it may be damaged at high pressure of 3-5 times.

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

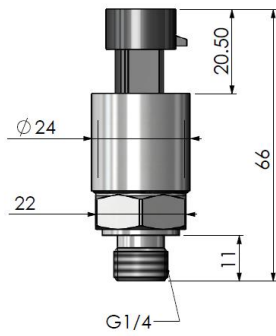
S30 SOCKET : DIN43650-A



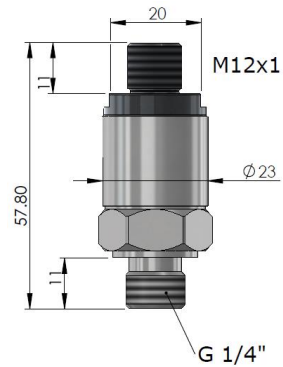
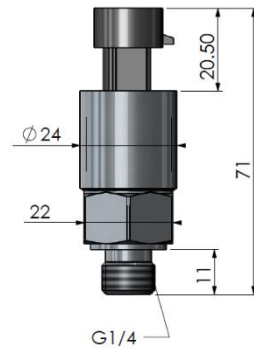
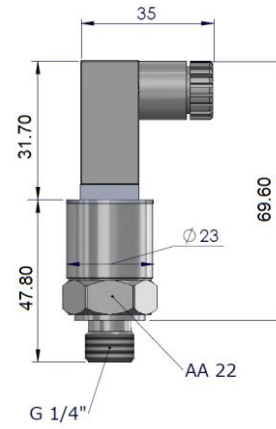
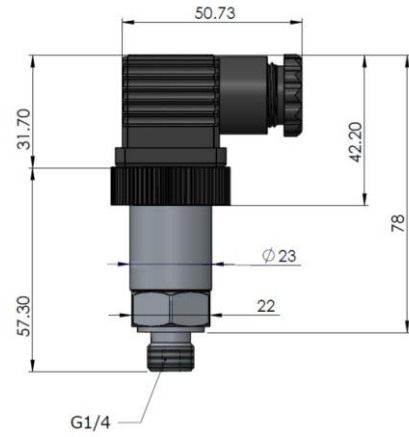
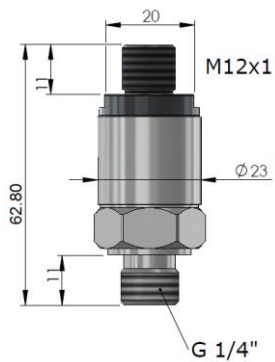
S31 SOCKET : DIN43650-C

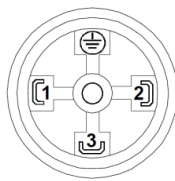
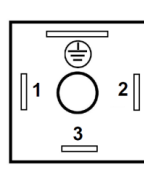
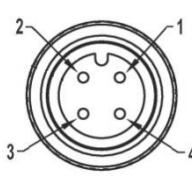
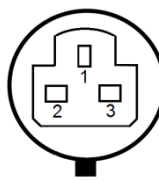
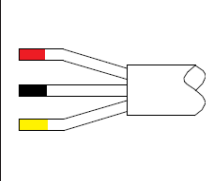


S32 SOCKET : PACKARD



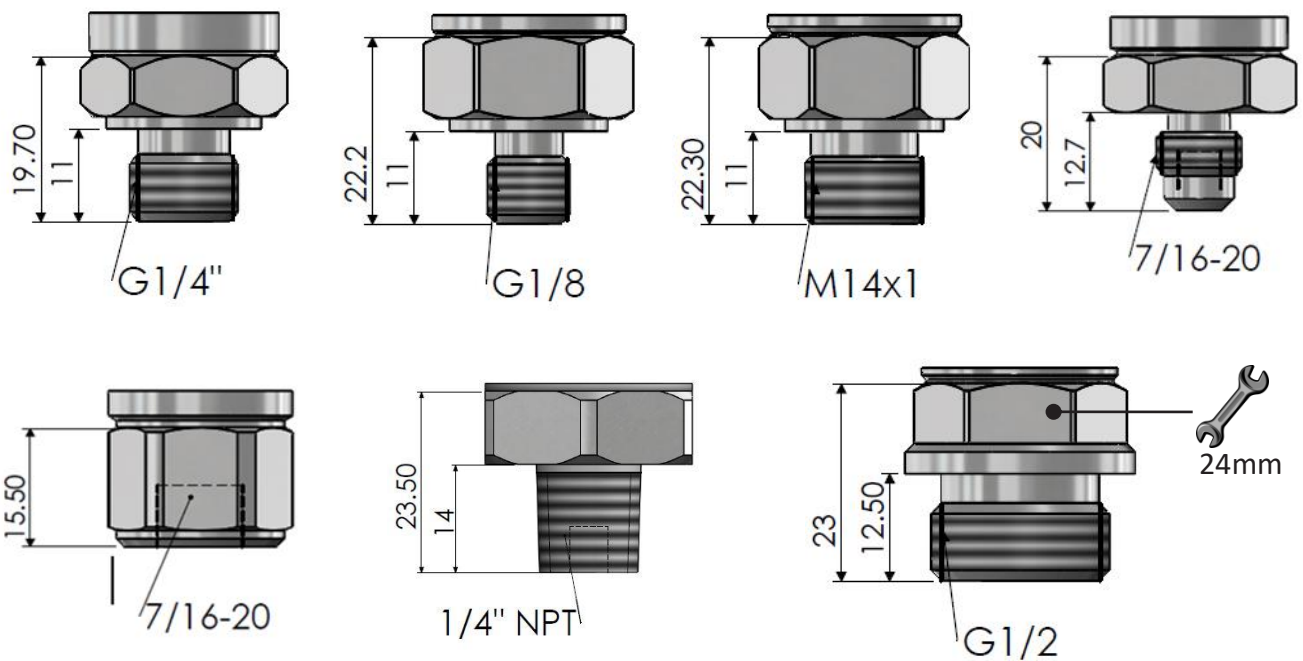
S12/S15 SOCKET : M12



							
		<b>DIN D43650-A</b>	<b>DIN D43650-C</b>	<b>M12</b>	<b>PACKARD</b>	<b>WIRED</b>	
		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 PVC (standard) or PUR (optional) cable options in the model with cable.
- \*\*\* On models with the PACKARD socket, the letter of pin numbers are 1(C), 2(B), 3(A).

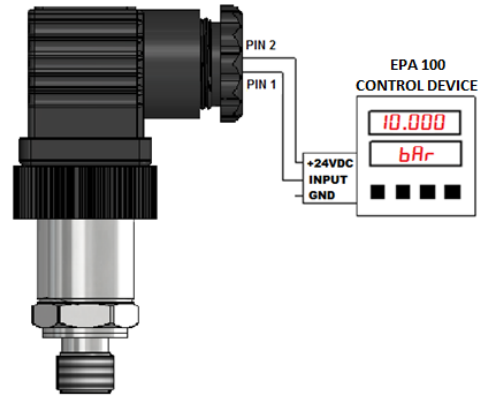
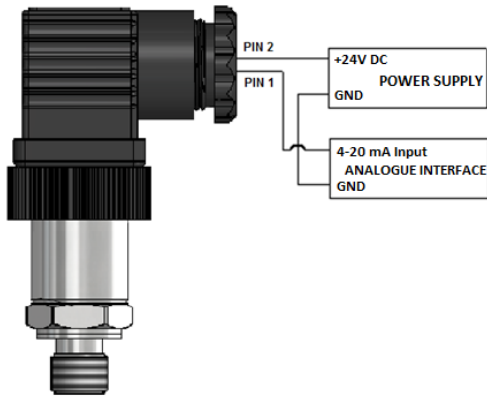
## MECHANICAL CONNECTION



- \* 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.

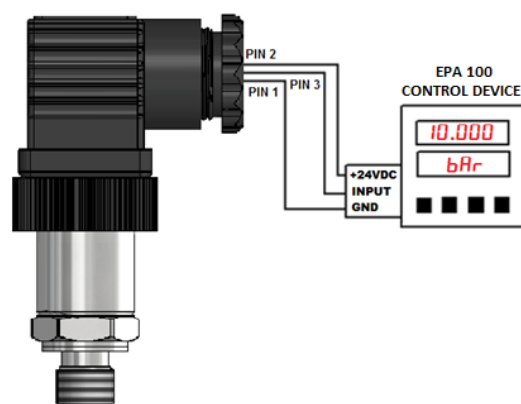
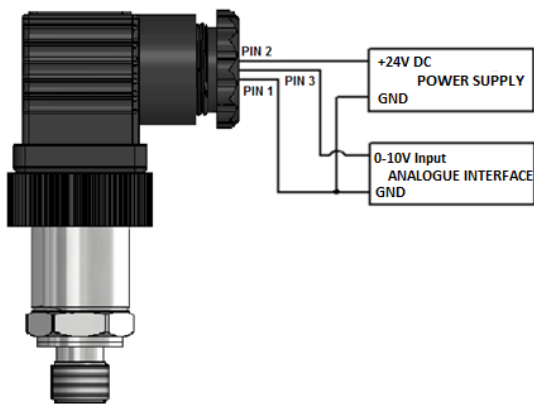
2 Wire 4-20mA Connection Socket Pin No	Signal
1	4...20mA Analogue Output
2	+12...30 VDC (Supply)

**Sample Connection:**



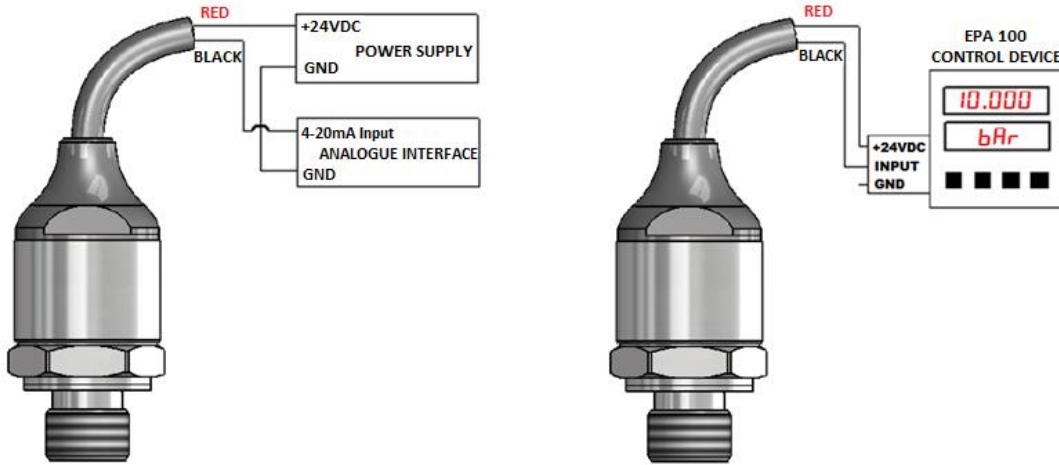
3 Wire 0-10VDC or 0-20 mA Connection Socket Pin No	Signal
1	GND
2	+12...30 VDC (Supply)
3	0...10VDC or 0-20 mA Output

**Sample Connection:**



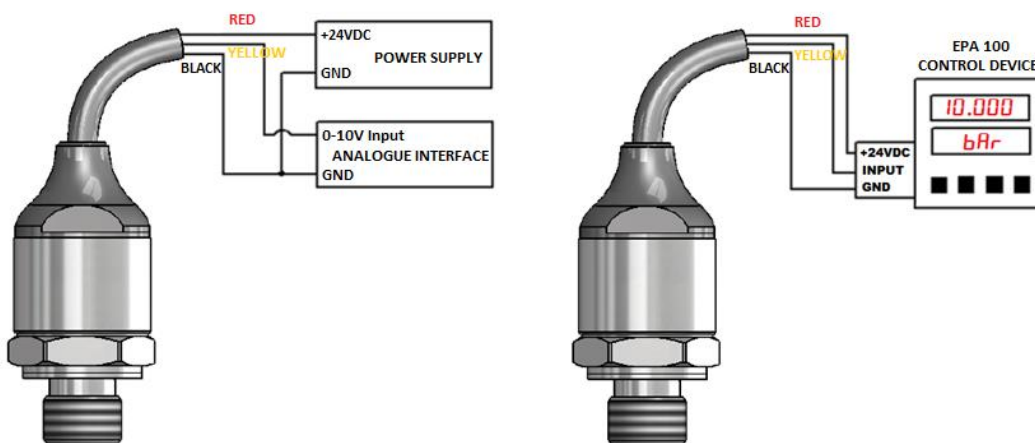
2 Wire 4-20mA Connection Cable Color	Signal
BLACK	4...20mA Analogue Output
RED	+12...30 VDC (Supply)

**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.

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

## ORDER CODING

### Model

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

#### 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.

#### 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.

#### 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 : 7/16"-20 UNF (male) Connection  
 7/16F : 7/16"-20 UNF (female) Connection

\* Ask for other options.

#### Body Material/ Custom Coding

Empty : Stainless 303  
 E316 : Stainless 316L

\* Ask for other options.

#### Sample Code :

BCT 22 100mBar A G1/4 S30

Features: 0...100mbar working range, 4-20mA analogue output ( 2 wire connection ), G1/4 connection, DIN43650-A socket, stainless 303 body

BCT 22 10Bar A G1/4 S30 E316

Features: 0...10Bar working range, 4-20mA analogue output ( 2 wire connection ), G1/4 connection, DIN43650-A socket, stainless 316L body