

Model 722F High Gauge Pressure Transmitters



Features

- metal strain gauge technology
- mono-block construction of the wetted parts
- Exia II CT6 explosive-proof
- high measuring ranges from 0~600 to 0~6,000 bar (gauge)
- conditioned output of 4~20 mA, 0.5~5 Vdc, or 0.5~10 Vdc
- measuring accuracy up to 0.25%fs
- 80% shunt calibration function available on request

Applications

- water jet cutting machines
- high gauge pressure applications



Description

722F-series pressure transmitters are designed for high gauge pressure applications and made of metal foil strain gauge technology. These transmitters are rugged in design and certified to be explosive proof (Exia II CT6).

The pressure ranges of 722F transmitters starts from 0~600 bar and ends at 0~6000 bar. A number of standard output signals, such as 4~20 mA current loop or voltage output of 0.5~4.5V or 0.5~5V (or 10V), are available when order. The measuring accuracy of 722F transmitters is 0.5%fs (fs=full scale). Thanks to BCM's advanced stain gauge technology, model 722FF transmitters provide good long-term stability (<0.2%fs/year), thermal characteristics (<0.005%fs/°C), and excellent shock and vibration resistance. 80% shunt calibration is available on request to ease the field applications.

The wetted parts of the 722F transmitters are of a mono-block construction. That is, the diaphragm and the wetted parts are made from one stainless steel block. As a result the pressure is completely stopped by the diaphragm in the wetted parts. No rubber O-ring is needed for sealing. This unique feature allows the 722F transmitters to have long service life with minimal maintenance. By means of an inner cavity, model 722F transmitter is designed to measure gauge pressures of gases or dilute liquids.

722F pressure transmitters are widely used in applications where high pressure needs to be measured. One of the typical applications of 722F pressure transmitters is to measure the pressure generated by water jet cutting machines.

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Technical Data

parameters	units	specifications
pressure medium		gases or dilute fluids compatible with the material of wetted parts
pressure range	barG	0~600, 0~1000, 0~1600, 0~2500, 0~4000, 0~6000
	barA	NA*
	barS	NA
overload pressure	%fs	120
burst pressure	%fs	150
output signal		4~20 mA (standard), 0.5~4.5 V (ratiometric), 0.5~5 V, 0.5~10 V
accuracy	%fs	± 0.5
long-term stability	%fs/year	< 0.15
power supply (V _{sup})	Vdc	15, ..., 36
response time (10...90%)	ms	<1
load resistance for current loop	Ω	≤(V _{sup} -12)V/0.02mA
load resistance for voltage output	kΩ	> 5
storage temperature range	°C	-20 ~ +125
operating temperature range	°C	-20 ~ +125
compensated temperature range	°C	-10 ~ +60
temp. coefficient of span	%fs/°C	± 0.05
temp. coefficient of zero	%fs/°C	± 0.05
vibration resistance (20, ..., 2000 Hz)	g	10
seal		mono-block wetted parts
filling fluid		NA
material of diaphragm		17-4PH for ranges ≤2,500 bar, mild steel for ranges >2,500 bar
material of wetted parts		17-4PH for ranges ≤2,500 bar, mild steel for ranges >2,500 bar
material of electronics housing		304 SS for range ≤2,500 bar, mild steel for range >2,500 bar
mechanical interface		refer to the drawings of mechanical interface
electrical interface		refer to the drawings of electrical interface
80%fs shunt calibration		available on request
explosive proof		Exia II CT 6
environment protection	IP rating	IP 65, IP 66
unit weight	g	~ 500

The listed specifications and dimensions are subject to change without prior notice.

*: NA = not available or not applicable

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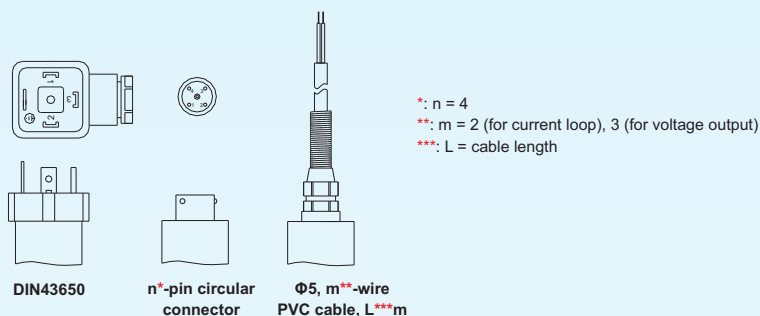
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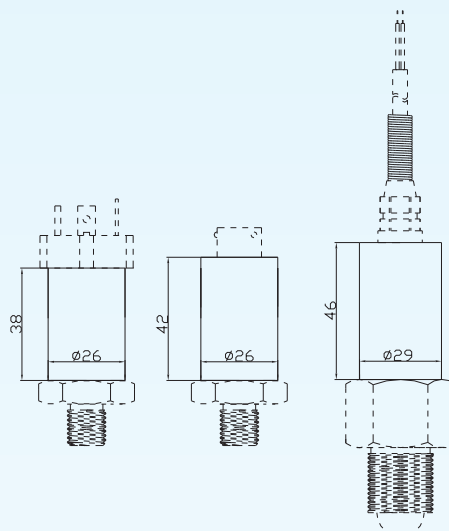
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Dimensions

electrical interface#

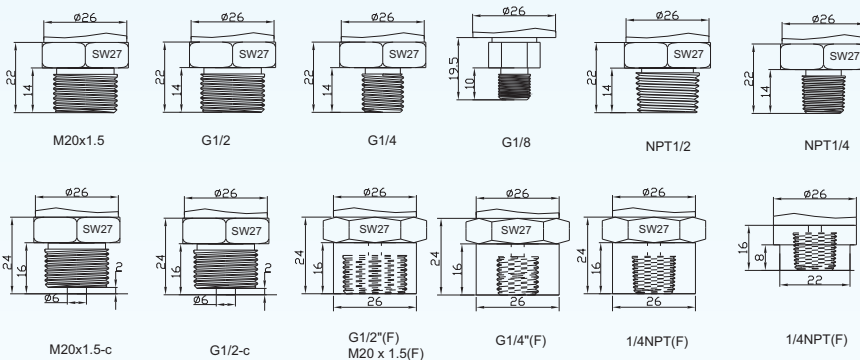


electronics housing (case)



mechanical interface##

for pressure range ≤ 1600 bar



for pressure range > 1600 bar



#: The mechanical interfaces and the electrical interfaces listed below can be combined freely.

##: Other types of interfaces are available on request and to be confirmed in case of order.

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Model 722F High Gauge Pressure Transmitters

Ordering Information

position (pos.) 1: model											
722F											
pos. 2: ranges and types											
600 bar, G		4000 bar, G		G: gauge pressure							
1000 bar, G		6000 bar, G									
1600 bar, G											
2500 bar, G											
pos. 3: output signal											
4~20 mA			0.5~4.5 V (ratiometric)			0.5~5 V		0.5~10 V			
pos. 4: accuracy											
0.5 %fs											
pos. 5: supply power											
24 V (15,...., 36 Vdc)			5 V (for o/p = 0.5~4.5 V)								
pos. 6: filling fluid											
NA*. In case of "NA", pos.6 can be omitted from the ordering code.											
pos. 7: material (wetted parts)											
17-4PH: 17-4PH stainless steel (ranges ≤ 2500 bar)											
mildSS: mild steel (ranges >2,500 bar)											
pos. 8: mechanical interface											
Refer to drawings of mechanical interface for available options.											
pos. 9: electrical interface											
For available connections, refer to drawings of electrical interface.											
For cable, code = diameter(Φ)/number of conductors/cable jacket											
/cable length											
5.7/4/PVC/L** = Φ5.7 mm,4-conductors shielded, PVC, L m											
pos. 10: environment protection											
IP 65											
IP 66											
pos. 11: customized spec's											
When any customized spec's are required, the customer needs to add "C" as the last parameter in the ordering code, and specifies the wished spec's on his order clearly.											
The customized spec's needs to be confirmed in advance by BCM's sales representative.											
Code "C" can be omitted if no customized spec's are required.											
pos.1	pos. 2	pos. 3	pos. 4	pos. 5	pos. 6	pos. 7	pos. 8	pos. 9	pos. 10	pos. 11	

*: NA = not available or not applicable;

** : L = cable length. This value is a customized value.

example: 722F-4000barG-4/20mA-0.5%fs-mildSS-M22x1.5-DIN43650-IP65-C



ISO9001 Certified Company

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