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HD 3604T.. HD36V4T.. RELATIVE PRESSURE TRANSMITTERS



The HD3604T... and HD36V4T... are pressure transmitters with microprocessor and current (4...20mA) or voltage (0...5V, 1...5V or 0...10V) output, respectively.

The sensor, piezoresistive, is insulated and allows gas and liquid pressure measurement over a wide range of temperatures.

The measured pressure is relative to atmosphere. The different models cover the scales from 6 to 600bar.

The case is in stainless steel diam. 20mm and encloses sensor and electronics: in order to connect it to a pressurized system, it is supplied with a .” BSP threaded connection with a 22mm hex fastening ring.

For electrical connections, three different solutions are provided:

- A male connector DIN 43650A,
- A male connector DIN 43650C,
- A circular male connector DIN 41524.

The connectors are fitted with a three or four pole free female socket with fairlead (according to the models).

All transmitters are factory calibrated at three points. The use of a microprocessor circuit allows memorizing the sensor response curve and correcting any possible non linearity.

No calibration is required by the user.

Installation and connections

The HD3604T... and HD36V4T... transmitters may be installed in any position.

Make the electrical connection to the free female connector as indicated in the diagrams of the following table.

TRANSMITTER MODEL	CONNECTION DIAGRAM OF THE TRANSMITTER PIN (FRONT VIEW)	NOTES
HD3604TxBG HD3604TAxBG		If the connection cable is shielded, connect the shield to pin
HD36V4TxBG... HD36V4TAxBG...		Use a shielded connection cable and connect the shield to the pin
HD3604TBxBG		If the connection cable is shielded, connect the shield to pin 2
HD36V4TBxBG...		Use a shielded connection cable. Connect shield and GND wire only on the measurement device (PLC, regulator,...) and not on the free female connector inserted on the transmitter

TECHNICAL CHARACTERISTICS

Output signal	4 ... 20mA	HD3604TxBG Models
	0 ... 5V	HD36V4TxBG1 Models
	1 ... 5V	HD36V4TxBG2 Models
	0 ... 10V	HD36V4TxBG3 Models
Bottom scale pressure range	6, 10, 16, 25, 40, 60, 100, 160, 250, 400 y 600 bar relative	
Overpressure limit	Twice the nominal value	
Sensor	Piezoresistive	
Surface contacting the measurement fluid	Steel 17-4PH	
Fluid contacting the membrane	Gas or liquid	
Operating temperature	-40 a 125 °C	
Power supply	10 a 30 Vcc	
	15 a 30 Vcc	HD36V4TxBG3 models with output 0...10Vdc
Absortion	< 4mA	In the models with voltage output
Accuracy	< ± 0,25 % F.S.	
Temperature effects	±1% span ±1% offset	For a variation of 100 °C
Mechanical stability	< 0.1%F.E.	after 10 ⁶ ciclos 0...F.S.
Response time	<5ms	
Connection to the system under pressure	¼"BSP male	
Electric connection	Male connector 3 or 4 poles DIN 43650A + female connector DIN 46350A	HD3604TxBG and HD36V4TxBG Models
	Male connector 3 or 4 poles DIN 43650C + female connector DIN 46350C	HD3604TxBG and HD36V4TxBG Models
	Male connector 3 or 4 poles DIN 41524 + female connector DIN 41524	HD3604TBxBG and HD36V4TBxBG Models
Casse material	Stainless steel AISI 304	
Dimensions	Ø 20 x 95mm	Conector included
Weight	80 g	
Load resistance	RLmax = 636. a 24Vdc RLmax = (Vcc - 10) / 22mA	For the models with current output 4...20mA HD3604T... (see fig.1)
	RL > 10KOhm	For the models with voltage output HD36V4T.
Protection degree	IP65	With connector correctly engaged.

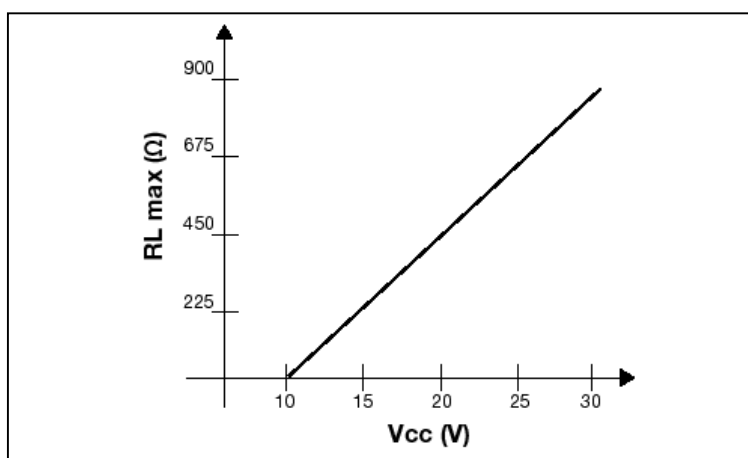
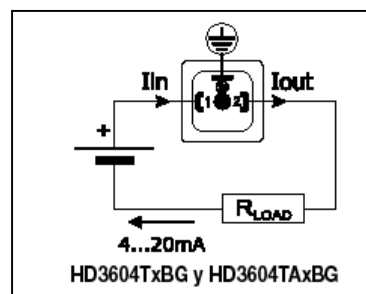
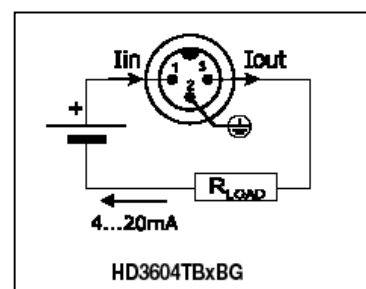


Fig. 1 - Load resistance for models with 4...20mA output according

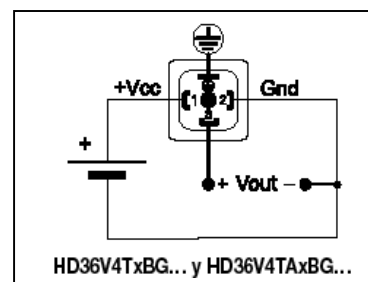
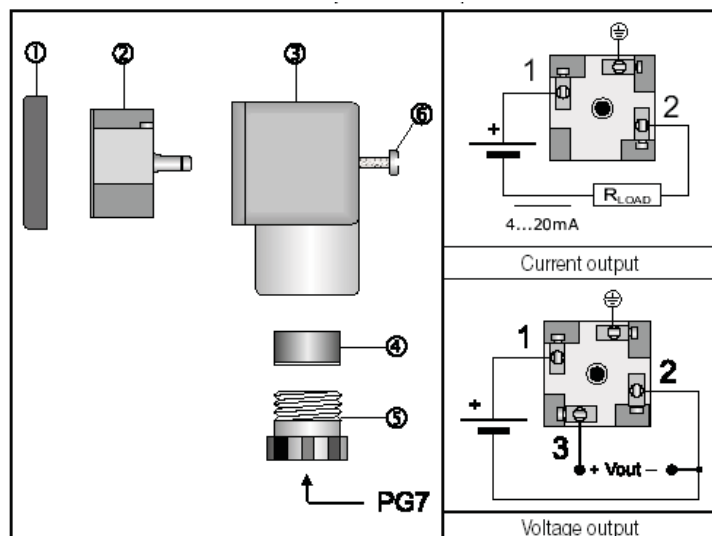


In the models with a 4...20mA current output, use the following connections

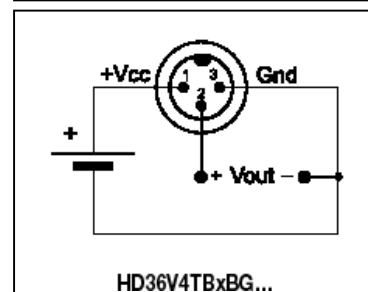


DIN 43650A and DIN 43650C connectors

To make the electrical connections you need to open the female



In the models with a voltage output, use the following connection



Remove the gasket . Unscrew the fairlead and take off the gasket .

Use a screwdriver to pry and take off the connecting terminal . Make the connections as shown in the figure: if present, the shielded cable braid must be connected to the earth terminal. Once the connections are made, close the connector.

Transmitter calibration

The transmitters are calibrated at three points; no calibration is required by the user.

Warnings

The pressure transmitter has a .” BSP threaded male connection. When mounting, pay careful attention to the connection pressure sealing. Use the proper gaskets.

Great attention must be paid while installing the transmitters in containers and tubes under pressure. Also pay attention to the bottom scale flow. Any error, in addition to the irreparable damage, can even cause serious physical damage to the operator. Always insert a key lock in the transmitter and ensure that the system is not subject to abnormal or unexpected fluctuations in the fluid under pressure.

ORDER CODES

HD36 X 4T X X BG X

1 = Voltage analog output 0...5Vdc
2 = Voltage analog output 1...5Vdc
3 = Voltage analog output 0...10Vdc

B = Bar

G = Gauge (relative pressure)

Electrical Connection

No sign = Male connector DIN 43650A

A = Male connector DIN 43650C

B = Male connector DIN 41524

Nominal bottom scale (bar)

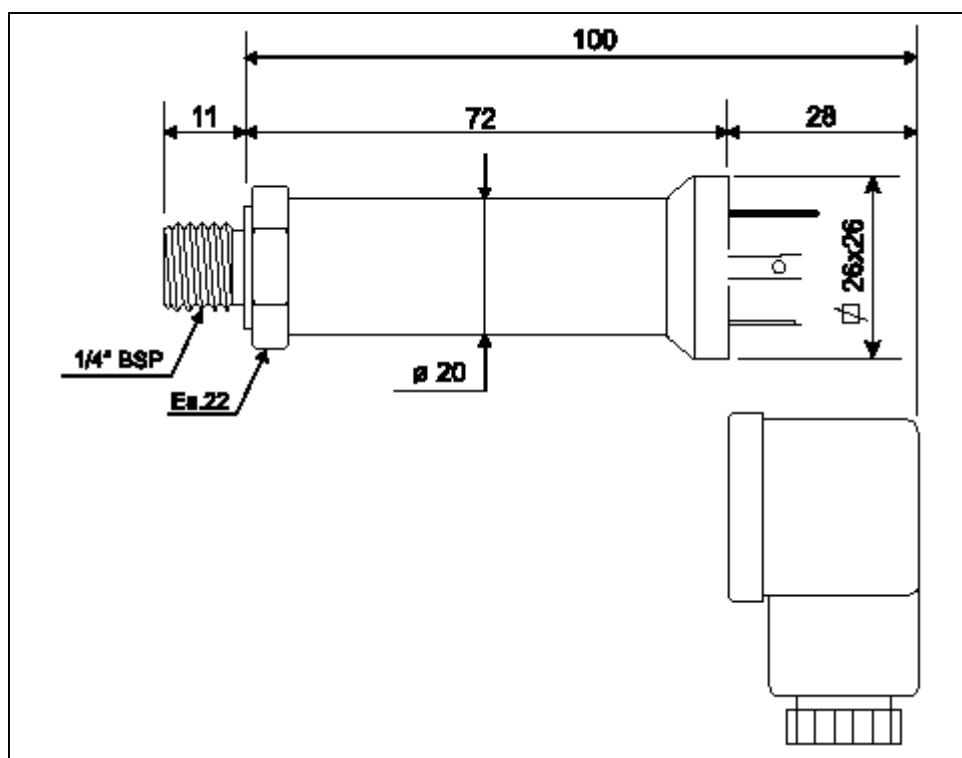
6 - 10 - 16 - 25 - 40 - 60 - 100 - 160 - 250 400
600 relative bar

0 = Analog output 4...20mA

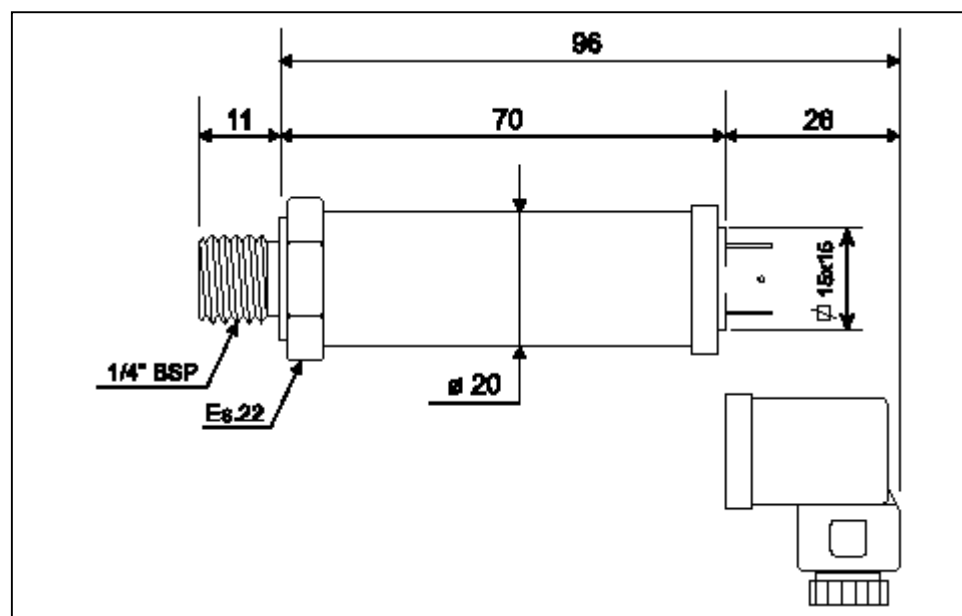
V = Voltage analog output

DIMENSIONS

HD3604TxBG
HD36V4TxBG
Models
With DIN43650A
connector



HD3604TAxBG
HD36V4AtxBG
Models
With DIN43650C
connector



HD3604TBxBG
HD36V4TBxBG
Models
With DIN41524
connector

