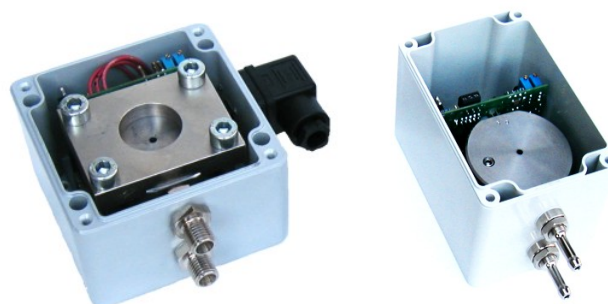


BHV 5355 - DIFFERENCE PRESSURE TRANSDUCER

- measuring ranges
from 0 .. 2 mbar up to 0 .. 6 bar
- static pressure up to 40 bar
- high overpressure resistance
- long-term stability
- inductance sensing system



The basic element of the transducer is a metal deformation diaphragm, which is fixed between two parts of sensor body. The deflection of diaphragm is recorded by an induction sensing system based on two coils compounded in a half-bridge connection. This sensing system is connected with a 5kHz carrier frequency amplifier.

The space on both sides of diaphragm is very small, so maximal deflection is hardly limited; this aspect brings a good overpressure resistance.

Both parts of sensor body as well as diaphragm are made with stainless steel ISO 683/13-74 type 8 (DIN 17440-85 X8Cr17) and fixed together by welding.

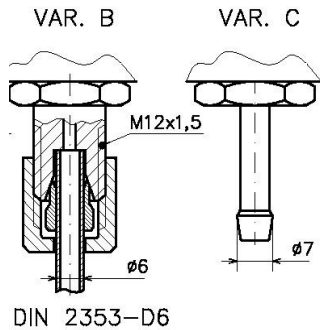
In order to increase the shape stability, the sensor is reinforced with additional jacket with four strong bolts. This option is used when the pressure more than 6 bar is to come into the sensor.

Thanks a good mechanical endurance, this sensor is mostly used for level measurement in liquid gas tanks, as well as a basic part of leakage detecting devices.

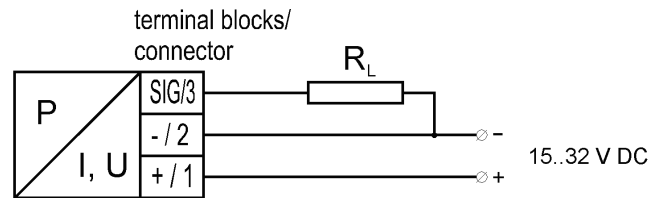
The whole transducer is built in a plastic case of ABS material, or in an aluminum alloy case. The case is fitted with cable sealing outlets or with the cable connector (see Picture 1). Basic variants for pressure input are showed in Picture 2.

Specification:			options
Nominal range	0 ...	mbar	2, 5, 10, 20, 50, 100, 200, 500, 1000, 6000
Overpressure limit			200x, max. to 6 bar
Static pressure limit		bar	≤ 6 bar
Nonlinearity		%FS	≤ 0.5
Hysteresis		%FS	≤ 0.15
Reproducibility		%FS	≤ 0.1
Response temp. effect	%FS / 10°C		≤ ± 0.3, (≤ ± 0.5 - for range < 10 mbar)
On zero shift temp. effect	%FS / 10°C		≤ ± 0.3, (≤ ± 0.5 - for range < 10 mbar)
Supply voltage		V	+15 .. +36 / max. 70 mA
Output signal		mA	4 ... 20 mA, 0 ... 20 mA, 0 ... 1 (5; 10) V, 3 wire
Load driving capability			Rz = (Usup – 3V) / Iout Rz - load resistance [kΩ], Usup - power supply voltage [V], Iout - output current [mA]
Response-time		ms	500
Seal rating			IP65
Operating temp. range		°C	-5 +50 (storage -20 ... +80)
Electrical connection			connector according to DIN 43650 cable sleeve PG9 and terminal screw
Process connection			- M12x1,5 DIN2353-D6 - socket 7 mm for a hose

BHV 5355

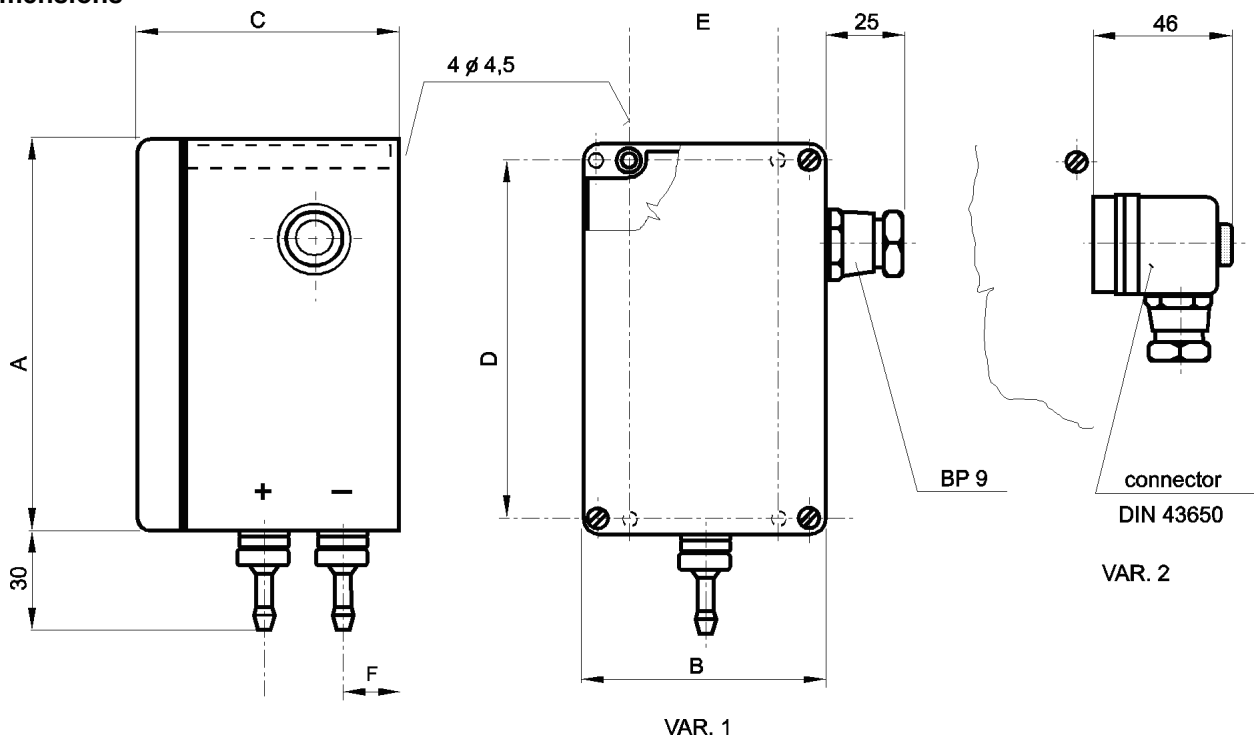


Picture 2 - Detail of process connection



Picture 3 - Wiring diagram

Dimensions



Mater. / Entry	A	B	C	D	E	F
ABS	120	80	85	108	50	25
Al	100	100	81	66	85	22

Picture 1 - Outside dimensions of the transducer BHV 5355

BHV 5355