

BHV 5355M - DIFFERENTIAL PRESSURE TRANSDUCER

- measuring ranges from 0 .. 0,1 bar up to 0 .. 6 bar
- static pressure up to 200 bar
- long-time stability
- shock resistance
- suitable for oxygen applications
- possibility to select the output signal
- digital output Modbus



The BHV 5355M transducers are designed to detect over-pressure, under-pressure and pressure difference of non-aggressive gases and liquids. These sensors are especially suitable for measuring pressure differences in air conditioning, environmental technology and heating and air conditioning technology. There is a wide range of applications in measuring the volume of liquids or compressed liquefied gases in pressure tanks.

They are also used, for example, to measure volume flows using speed probes, to detect chimney draft and to indicate operating conditions in extraction and filtration systems. It is a product that can be used both in industrial automation systems and in laboratory measurements.

The transducer is standardly manufactured in an industrial version in an aluminium or plastic box, designed for vertical mounting. The sensor allows the user to easily adjust using two buttons. The buttons are accessible after removing the top cover of the device.

There are a number of other benefits in the display variant. Not only can units be selected for display (not possible for LED displays), we also have the option to adjust the range of the analogue output (password protected) or use a relay contacts, which can also be easily set.

If the device finds application in laboratories, there is the possibility of a table design with a display.



Table design

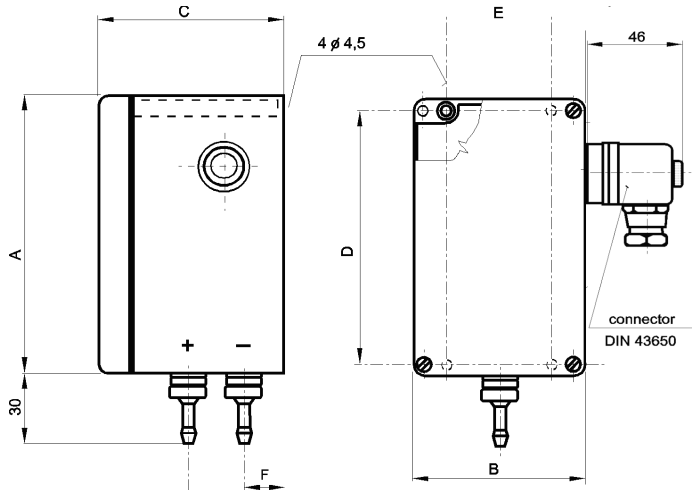


Version with display

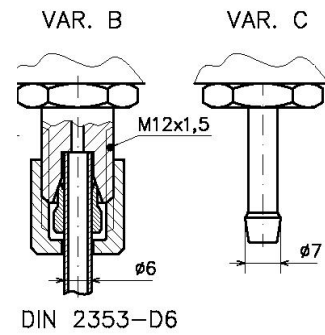
BHV 5355M

Specification:		BHV 5355M	Options
Nominal range (FS)	bar	0,1 ... 6	custom range
Overpressure limit		1,5 x FS	
Static pressure limit	bar	≤ 200	
Non-linearity	%FS	≤ 0,5	≤ 0.25
Hysteresis	%FS	≤ 0.05	
Reproducibility	%FS	≤ 0.05	
Temperature effect	%FS / 10°C	on sensitivity: ≤ ± 0.3 on zero shift: ≤ ± 0.3	
Output signal (2-wire)		Analogue: 4 ... 20 mA Supply voltage: 24 V DC (8 ... 36 V DC)	
Output signal (3-wire)		Analogue: 4 ... 20 mA, 0 ... 20 mA, 0 ... 1 (5; 10) V Digital: RS485 Modbus RTU, RS232 (max. 115 kBd) Supply voltage: 24 V DC (15 ... 36 V DC)	
Display	(optional)	LCD display (2-wire, 3-wire), LED display (3-wire)	
Relay output	(optional)	1 to 4 relay contact only by 3-wire version and with display rating: 5 A / 250 V AC, 5 A / 30 V DC, max. 150 V DC/ 1 A (consumption of every relay ≤ 40 mA)	
Response-time	ms	≥ 10	
Operating temperature range	°C	-20 ... +60, (medium: -40 ... +125, storage: -25 ... +80)	
Electrical connection		DIN 43650 Amphenol CA 6 (optional) relay output: Amphenol CA 6 RS232/RS485: Amphenol CA 3, Canon 9M	
Process connection		var. B: M12x1,5 DIN2353-D6 var. C: socket 7 mm for hose	
Sealing		Cu, Viton®	
Wetted parts material		SS 316L, Cu, Viton®	
Seal rating		IP 65	
Version		standard degreased design for oxygen application (optional) table design (optional)	
Material of housing		AL, ABS	
Weight	kg	approx. 0,95 (ABS), 1,25 (AL)	

Dimensions of housing



Process connection



Material / Entry [mm]	A	B	C	D	E	F
ABS	120	80	85	108	50	25
Al	100	100	81	66	85	22

Electrical connection

Analogue output DIN 43650			Relay output Amphenol CA6		Digital output	
					Amphenol CA3	Canon 9M
pin	2-wire	3-wire	pin	relay	RS232 / RS485	
1	Supply +	Supply +	1	relay contact 1	1	Supply +
2	Supply -	Supply -	2	relay contact 1	2	RxD
3		Analogue output	3	relay contact 2	3	TxD
4	GND	GND	4	relay contact 4	4	GND
			5	relay contact 4	5	GND
			6	relay contact 3		
			7	common relay contact 2 a 3		
view from outside DIN 43650 (male)			view from outside Amphenol CA6 (male)		view from outside Amphenol CA3 (male)	
			Relay connection:		Canon 9M (male)	
			relay L1			
			relay L4			
			relay L2			
			relay L3			