



OEM Ability!

RUSSIAN MANUFACTURER  
OF PROCESS CONTROL INSTRUMENTS



# AIR-20/M2-H

Pressure transmitters with HART protocol



Smart pressure transmitters AIR-20/M2-H with HART protocol, capable of working in explosion-hazardous areas and adverse operating conditions

### Types of measured pressure

Type of pressure	Full scale values
Absolute pressure (AP)	1 kPa to 16 MPa
Manometric pressure (MP)	0.16 kPa to 100 MPa
Negative pressure (NP)	0.4 kPa to 100 kPa
Manometric negative pressure (MNP)	±0.125 kPa to (-0.1 MPa to 2.4 MPa)
Differential pressure (DP)	0.063 kPa to 16 MPa
Hydrostatic pressure (HP)	1.6 kPa to 250 kPa

### Excellent metrological performance

Parameter	Value
Scaling range	1:60
Number of recalibratable ranges	10
Accuracy	±0,075 %
Long-term stability	±0.075 % / 3 years
Complementary temperature error	±0.08 % / 10 °C
Impact of static pressure	±0.007 % / 1 MPa

### Versions

Version	Code
Explosion-proof "intrinsically safe electrical circuit"	Ex (0ExIIBT6 X)
Explosion-proof "explosion-proof casing"	Exd (1ExdIICT6 X)
Explosion-proof "explosion-proof casing" and "intrinsically safe electrical circuit"	Exdia (1Exd [ia]IIC T6 Gb X)
Nuclear-industry grade (enhanced reliability)	A
Oxygen applications	K

### Features

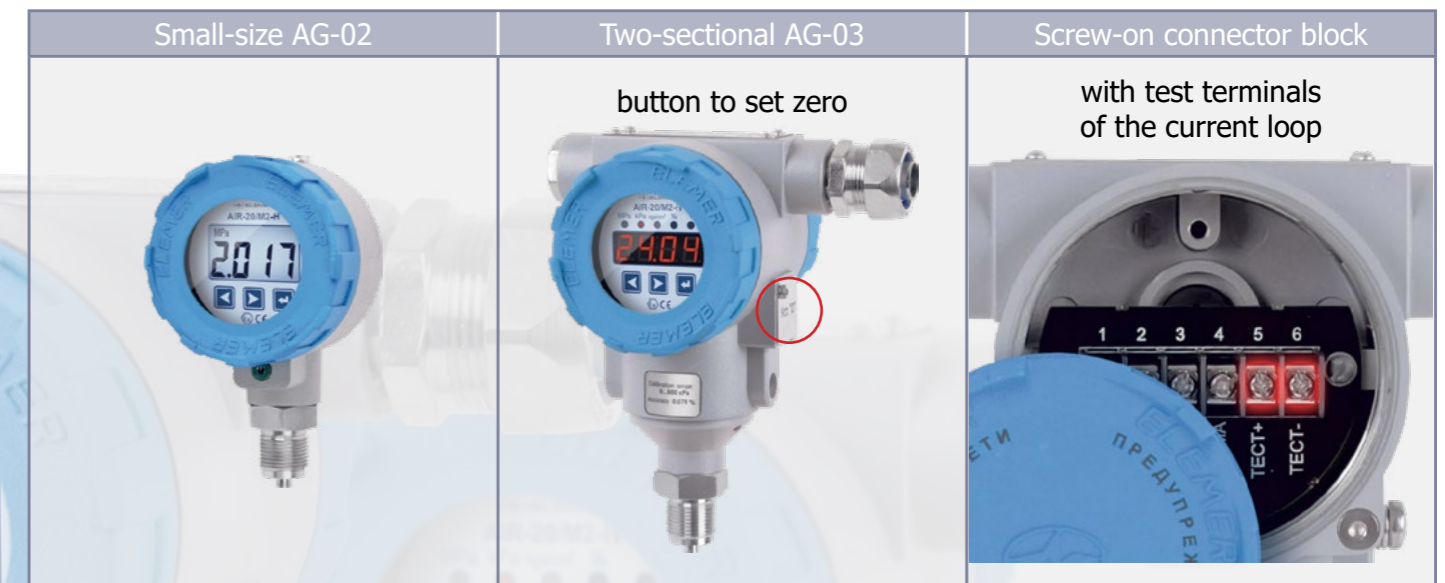
- Output signals — 4 to 20 mA, HART, Modbus RTU
- Device menu (English) — for parameter configuration and calibration
- DD (Device Description), FDT/DTM component for extensive diagnostics and process automation
- Functioning with a HART modem and HART communication device
- Reliable password protection

### High measurement stability sensors

- Piezoresistive sensors using silicone-on-ceramics technology
- Overload capacity — 500 % of maximum scale value
- Corrosion-resistant membranes: 316L, hastelloy, tantal, monel, PTFE, gold



### Types of bodies of pressure transmitters AIR-20/M2-H



### Reporting control panel

- LED indicator with red, green or bright white highlighting of the symbols (weatherproof to -60 °C)
- LCD display with bright bias lighting
- Three-button keypad to enter the device's menu
- Displaying the measurement units: kPa, MPa; kgf/cm<sup>2</sup>, %
- Discrete indicator rotation — 90°, 180°, 270°






### Operation in industrial interference conditions





- Lightning and electrostatic discharges
- Radiofrequency and conductive interference
- Safety Integrity Level — SIL2



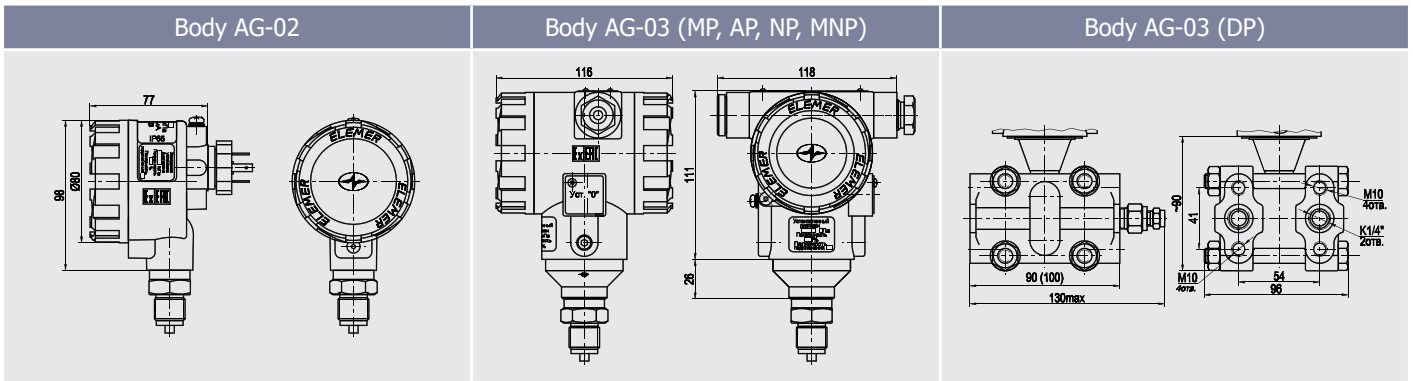
## Technical features of AIR-20/M2-H

Body AG-02		Body AG-03 (MP, AP, NP, MNP)	Body AG-03 (DP)
			
Full scale values	Absolute pressure (AP)	1 kPa to 16 MPa	
	Manometric pressure (MP)	0.16 kPa to 100 MPa	
	Negative pressure (NP)	0.4 kPa to 100 kPa	
	Manometric negative pressure (MNP)	±0.125 kPa to (-0.1 to 2.4) MPa	
	Differential pressure (DP)	0.063 kPa to 16 MPa	
	Hydrostatic pressure (HP)	1.6 kPa to 250 kPa	
Scaling range	1:60		
Number of rescalable ranges	10		
Output signal	4 to 20 mA / 0 to 5 mA; 4 to 20 mA / HART; Modbus RTU		
Configuring	Keypad on the indicator panel, HART protocol, Modbus protocol		
Square-rooting function	Configured by the user		
Accuracy	From ±0.075 %		
Climatic version	-60 to +80 °C		
Dust and moisture protection	IP65		
Versions	General industrial, Ex (ExiaIICT6 X), Exd (IExdIICT6 X), Exdia (Ex + Exd), for oxygen applications, A (nuclear industry grade enhanced reliability)		
Indication	<ul style="list-style-type: none"> <li>• LED indicator with red/green/white highlighting (to -60 °C)</li> <li>• LCD display with backlighting</li> </ul>		
Indicator rotation	Discrete, with increments of 90°, 180°, 270°		
Body rotation	±135°		
Sensors	Piezoresistive		
Overload capability from the maximum scale value (MP, AP, NP, MNP)	350 to 500 %		
Recalibration interval	5 years		
Warranty period	5 years		

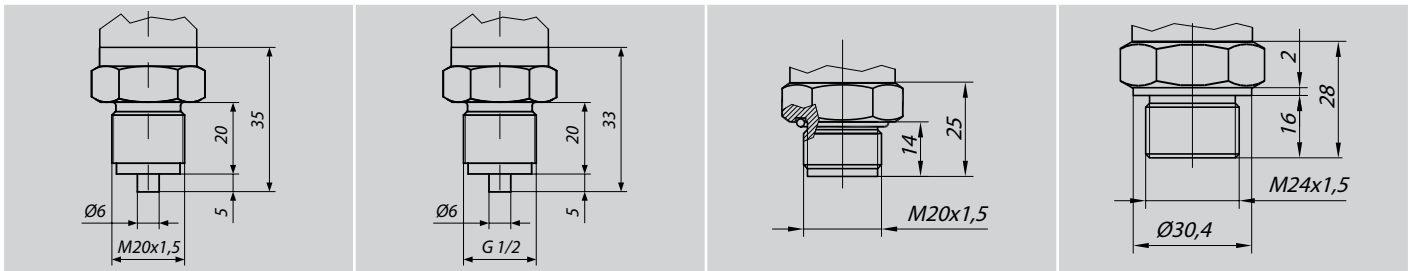
### Electric connection

KVM	Kb13 (17)	K13	PGM
			

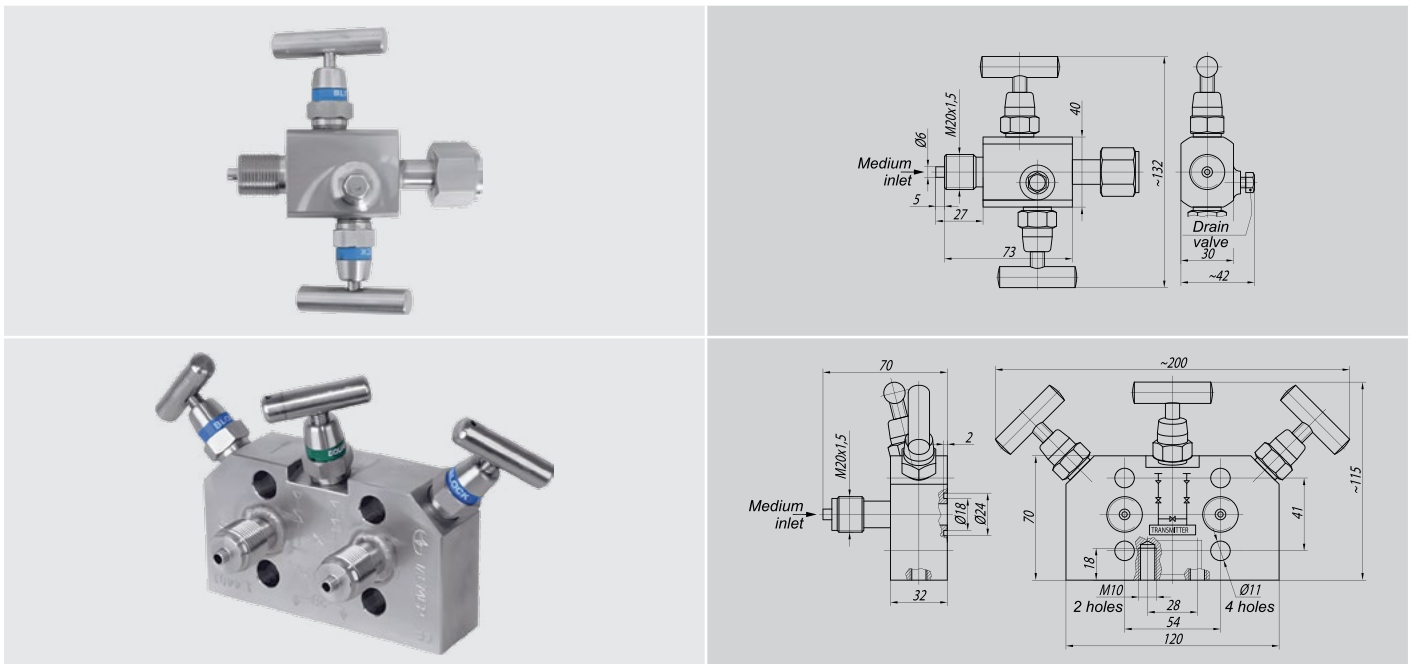
## Dimensions



## Process connection



## Pressure test with a valve device assembly (stop valves)



## HART communication tools





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