



ELEMER

OEM Ability!

RUSSIAN MANUFACTURER
OF PROCESS CONTROL INSTRUMENTS



ELEMER-AIR-30M

Pressure transmitters with **HART** and **FOUNDATION fieldbus**



Smart pressure transmitters ELEMER-AIR-30M
with HART-Protocol and with integrated alarm relay

Types of measured pressure

Type of pressure	Full scale values
Absolute pressure (AP)	1 kPa to 16 MPa
Manometric pressure (MP)	0.025 kPa to 100 MPa
Manometric negative pressure (MNP)	±0.03 kPa to (-0.1 MPa to 2.4 MPa)
Differential pressure (DP)	0.025 kPa to 16 MPa
Hydrostatic pressure (HP)	1 kPa to 250 kPa

Excellent metrological performance

Parameter	Value
Scaling range	1:100
Number of recalibratable ranges	11
Accuracy	±0.075 %
Long-term stability	±0.075 % / 3 years
Complementary temperature error	±0.03 % / 10 °C
Impact of static pressure (zero error)	±0.007 % / 1 MPa
Impact of static pressure (span error)	±0.015 % / 1 MPa

Versions

Versions	Code
Explosion-proof "intrinsically safe electrical circuit"	Ex (0ExiallBT6 X)
Explosion-proof "explosion-proof casing"	Exd (1ExdIICt6 X)
Explosion-proof "intrinsically safe electrical circuit" and "Explosion-proof casing"	Exdia (1Exd [ia]IIC T6 Gb X)
Nuclear-industry grade (enhanced reliability)	A
Oxygen applications	K



Features

- Output signals — 4 to 20 mA; 4 to 20 mA/0 to 5 mA (optional); 8 to 3.2 V; 0.5 to 4.5 V; 1 to 5 V; HART, FOUNDATION fieldbus
- DD (Device Description), FDT/DTM component for extensive diagnostics and process automation
- 2 alarm devices — optorelay (~250 V × 100 mA); electromechanical relay (~250 V × 3 A)
- Device menu (English) — for parameter configuration and calibration
- Internal and external hermetic keyboard
- 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 — 1500 % of maximum scale value
- Corrosion-resistant membranes: 316L, hastelloy, tantalum, monel, PTFE, gold

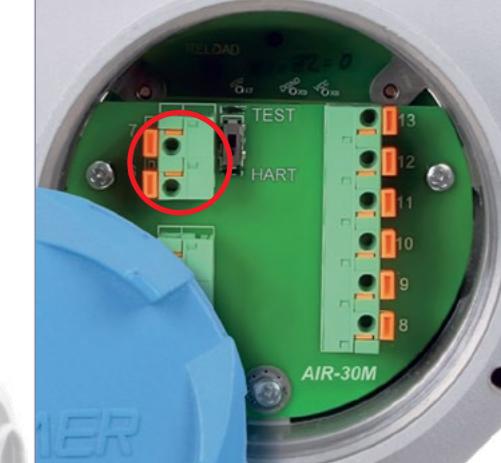
ELEMER-AIR-30
in the body of AG-19
with an external keyboard



ELEMER-AIR-30
in the body of AG-30
with an external reset button



Terminal for current testing
and HART interface



Rotation
90°, 180°, 270°

Reporting control panel

- Digital-graphic LCD display with bright bias lighting
- Three-button keypad to enter the device's menu
- Displaying the measurement units: kPa, MPa; kgf/cm², %
- Discrete indicator rotation — 90°, 180°, 270°



Operation in industrial interference conditions

- Electromagnetic compatibility (EMC): radiofrequency, conductive, electrostatic, nanosecond, microsecond interference
- High resistance to lightning discharges
- Safety Integrity Level — SIL2

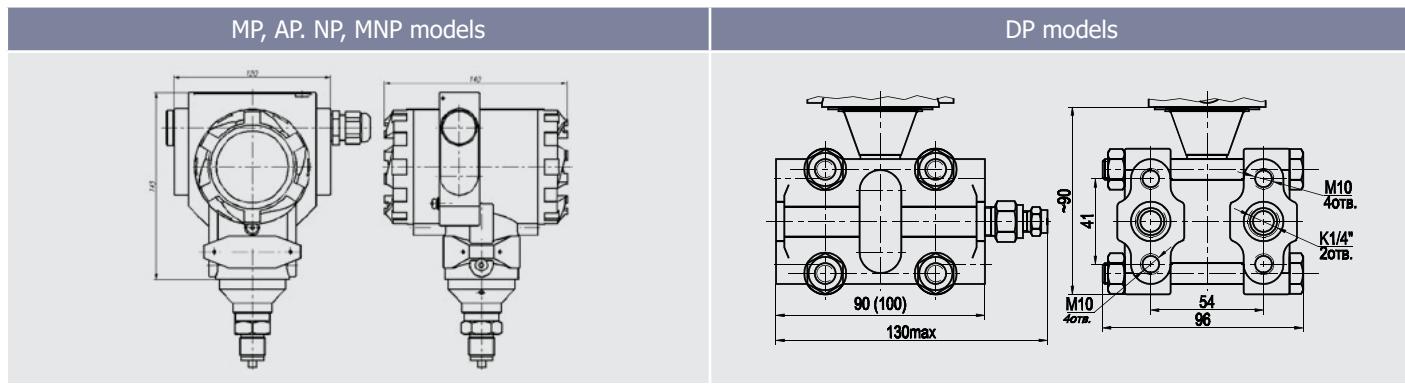
Technical features of ELEMER-AIR-30M

MP, AP, NP, MNP models	DP models	HP flanged models
		
Absolute pressure (AP)	1 kPa to 16 MPa	
Manometric pressure (MP)	0.025 kPa to 100 MPa	
Manometric negative pressure (MNP)	±0.03 kPa to (-0.1 to 2.4) MPa	
Differential pressure (DP)	0.025 kPa to 16 MPa	
Hydrostatic pressure (HP)	1 kPa to 250 kPa	
Scaling range	1:100	
Number of rescalable ranges	11	
Output signal	4 to 20 mA; 4 to 20 mA / 0 to 5 mA (optional); 8 to 3.2 V; 0.5 to 4.5 V; 1 to 5 V; HART, FOUNDATION fieldbus	
Configuring	Keypad (internal or external), HART protocol	
Square-rooting function	Configured by the user	
Accuracy	From ±0.075 %	
Climatic version	-55 to +80 °C	
Dust and moisture protection	IP65, IP67	
Versions	General industrial, Ex (ExiaIIC T6 X), Exd (IExdIIC T6 X), Exdia (Ex ± Exd), for oxygen applications, A (nuclear industry grade (enhanced reliability))	
Indication	Liquid-crystal display (LCD) with backlighting and graphic scale (2 × 39 segments)	
Indicator rotation	Discrete, with increments of 90°, 180°, 270°	
Body rotation	±135°	
Sensors	Piezoresistive; corrosion-resistant membranes (316L, hastelloy, tantal, monel, PTFE, gold)	
Overload capability from the maximum scale value (MP, AP, NP, MNP)	350 to 1500 %	
Recalibration interval	5 years	
Warranty period	5 years	

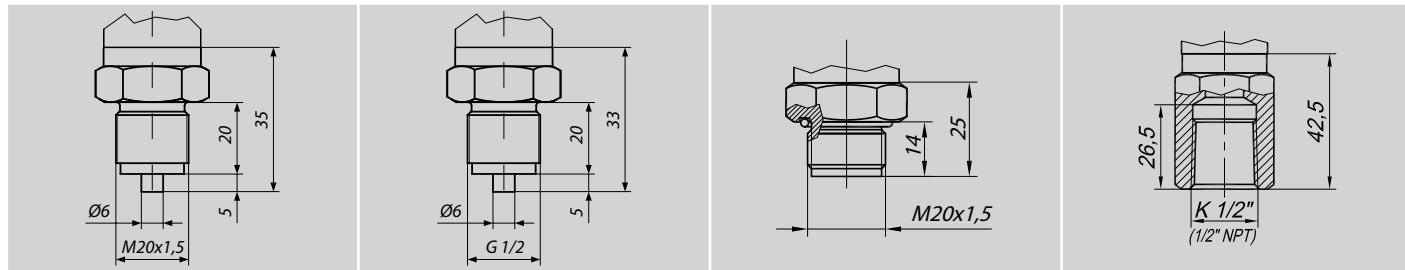
Electric connection

KVM	KB13 (17)	K13	PGM
			

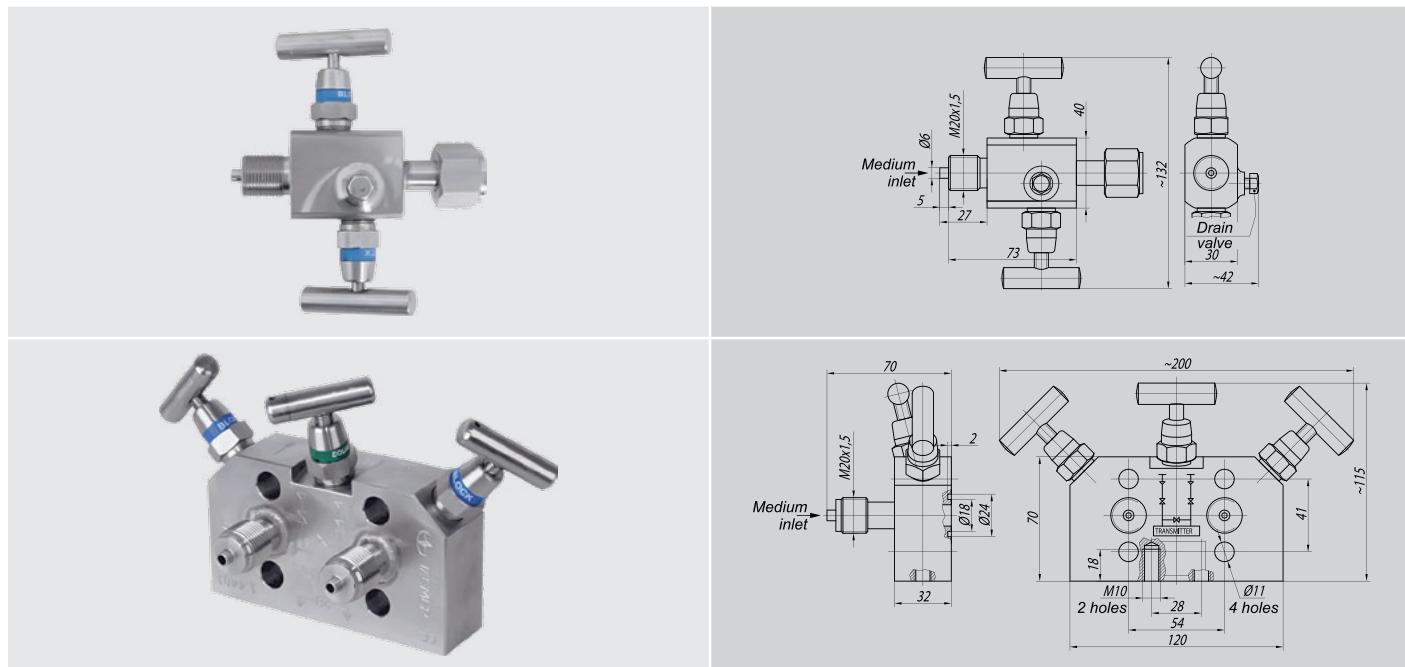
Dimensions



Process connection



Pressure testing with a valve assembly (check valves)



HART communication means

HART modem HM-20/U1 (USB)	HART modem HM-10B (Bluetooth)	HART communication device



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