



OEM Ability!

RUSSIAN MANUFACTURER
OF PROCESS CONTROL INSTRUMENTS



EKM-1005, EKM-2005

Digital manometers with control functions



Digital manometers with control functions

- Data readout
- Local indication and output — 4...20 mA
- Control and alarm functions

All types of pressure

- Lower pressure range limit — 0,25 kPa
- Upper pressure range limit — 60 MPa

Accuracy — ±0,25 %

- Long term stability — 0,075 % / 3 years
- Temperature error — ±0,2 % / 10 °C
- Range scaling — 1:4



PTFE

Au

316L, hastelloy, tantal, monel

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
- Static pressure factor — down to 0,01 % / 1 MPa
- Long term stability — 0,075 % / 3 year



Two-sectional body

- Vibration proof aluminum case
- Easy access to output terminals
- Mains, control outputs, current output isolation



EMC immunity

- Radiated radio-frequency EM field
- Conducted radio-frequency EM field
- Electrostatic discharge
- Fast transient/burst
- Surge immunity

High EMC level/performance feature

EKM-1005

Area of use options:

- Ex (0ExIICT6 X)
- Exd (1ExdIICT6 X)

Operating temperature:

- -40 to 70 °C

Control outputs (alarms):

- 2 opto relays — **300 mA, 250 VDC/VAC**

Touch keypad

- Explosion hazardous area operation

Vibration proof:

- 150 Hz/2 g/0,35 mm



90°
180°
270°

LCD display with bar graph scale bright backlight

- Visual setpoint pointers
- Six engineering units: kPa, MPa; Bar, mBar, mmHg, psi
- 90°, 180°, 270° rotation

EKM-2005

Area of use options:

- Exd (1ExdIICT6 X)

Operating temperature:

- -50 to 80 °C

Control outputs (alarms):

- 2 electromagnetic relays — **5 A x 250 VAC**

Touch keypad

- Explosion hazardous area operation

Vibration proof:

- 2000 Hz / 10 g/0,75 mm



LCD display with bar graph scale bright backlight

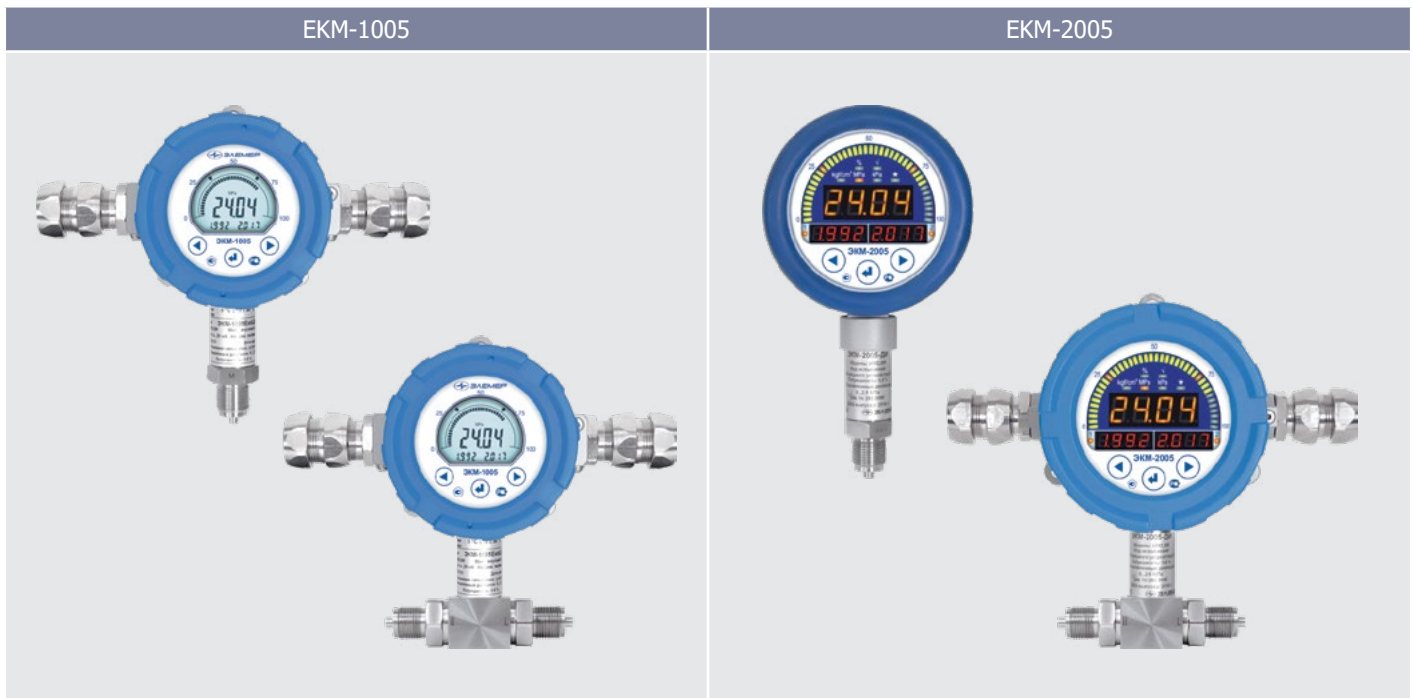
LED multicolour display down to -50 °C operating temperature

- Visual setpoint pointers
- Six engineering units: kPa, MPa; Bar, mBar, mmHg, psi
- 90°, 180°, 270° rotation



90°
180°
270°

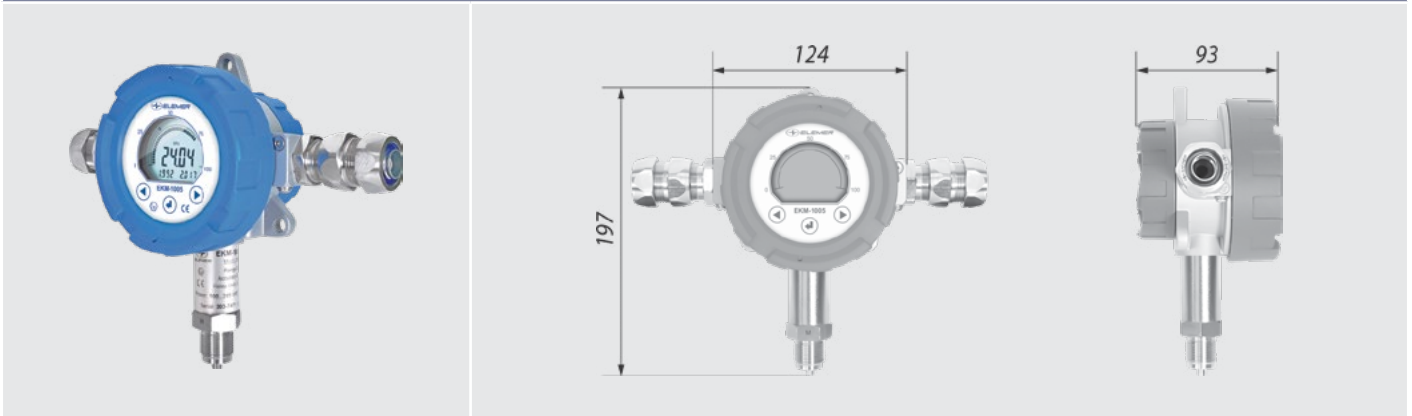
Technical features of EKM-1005, EKM-2005



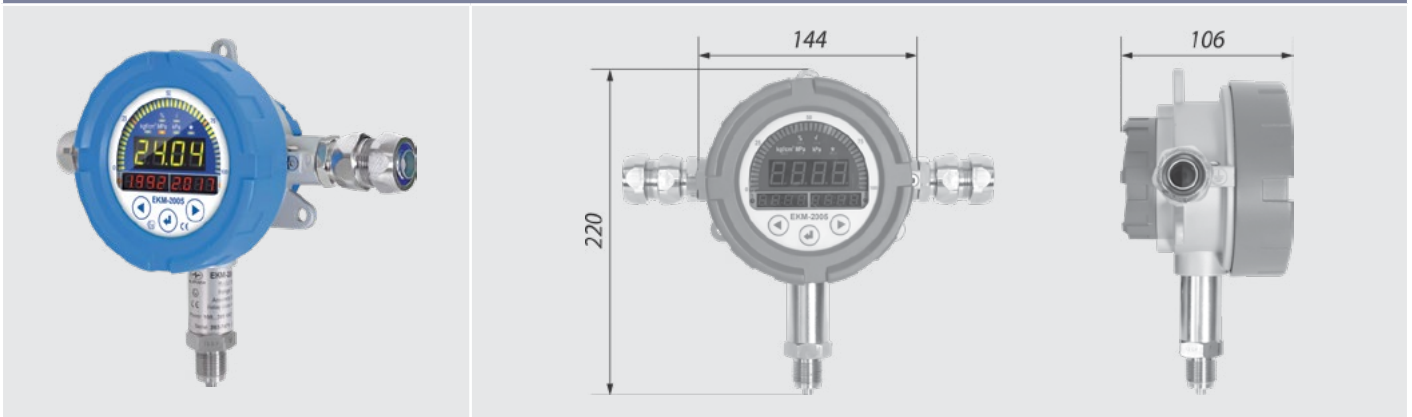
Feature	EKM-1005	EKM-2005
Nominal pressure ranges	Absolute pressure — 60 кPa...2,5 MPa	
	Gauge pressure — 4 кPa...60 MPa	
	Compound pressure — $\pm 0,3$ кPa...(-0,1...2,4) MPa	
	Differential pressure — 0,6 кPa...2,5 MPa	
	Differential pressure — 0,6 кPa...2,5 MPa	
Accuracy	down to $\pm 0,25$ %	
Temperature accuracy	$\pm 0,2$ %/10 °C	
Range scaling	1:4	
Output	4...20 mA	
Programmable relay delay	0...255 sec	
Damping	0...255 sec	
Operating temperature	-40 to +70 °C	-50 to +80 °C
Versions	Ex (0ExIICT6 X), Exd (1ExdIICT6 X)	Exd (1ExdIICT6 X)
Mains	15...42 VDC	110...249 VAC, 20...40 VDC
Environmental protection	IP65	
Display	<ul style="list-style-type: none"> • LCD indicator • 10 mm character size 	<ul style="list-style-type: none"> • LCD indicator • LED multicolour indicator • 14 mm character size
	Bar graph indicator (40 segments)	
	Two additional 4-digit indicators	
	90°, 180°, 270° rotatable	
Control outputs	2 opto relays	2 electromagnetic relays
	300 mA x 250 VDC/VAC	5 A x 250 V AC; 0,1 A x 250 V DC; 2 A x 36 V DC
Body	Two-sectional	Monoblock
		Two-sectional
Size	110 mm	130 mm
Vibration proof	150 Hz / 2 g / 0.35 mm	2000 Hz / 10 g / 0.75 mm
Warranty period	5 years	

Dimensions

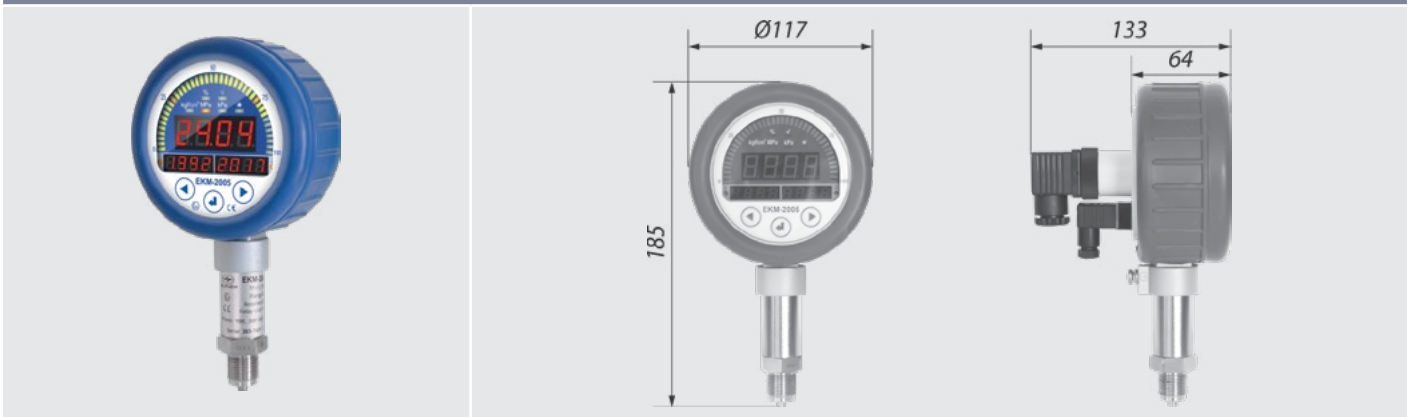
EKM-1005 — two-sectional enclosure



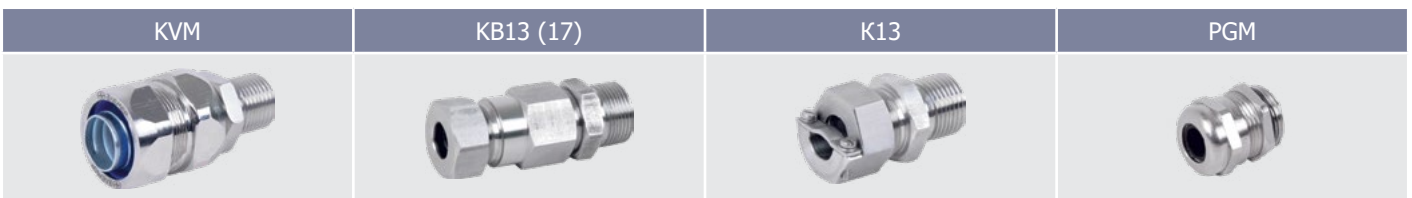
EKM-2005 — two-sectional enclosure



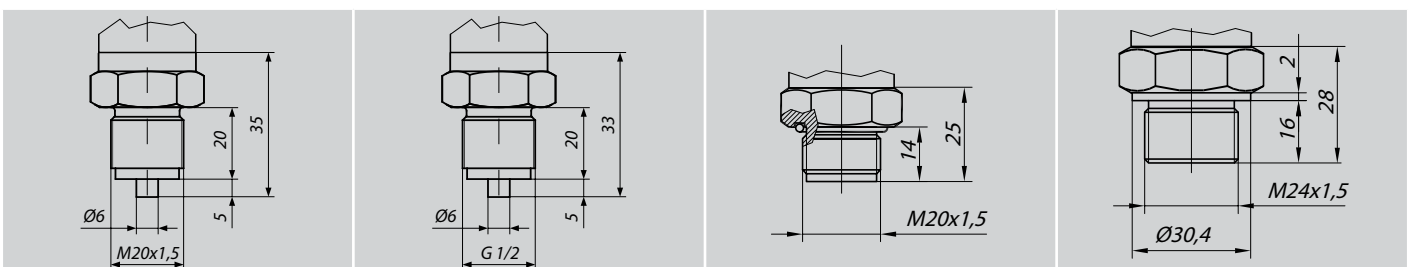
EKM-2005 — monoblock enclosure



Electrical connections



Process connections





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