

Legal information

The manufacturer reserves the right to upgrade products and make changes to documentation without prior notice. If you need information on EMIS equipment, please contact your regional representative of the company or the head office.

Any use of trademarks and material from this publication, in whole or in part, without the written permission of the copyright holder is prohibited.

ATTENTION!

Before starting work, you should carefully study this document. Before installing, using or servicing the device, make sure that you have fully read and understood the contents of the manual. This condition is mandatory to ensure safe operation and normal functioning of the equipment.

For consultations, contact the regional representative of EMIS JSC or the company's technical support service:

tel./fax: +7 (351) 729-99-12
e-mail: support@emis-kip.ru

Content

1 PRODUCT BASIC INFORMATION	5
2 MAIN TECHNICAL INFORMATION	6
3 TESTING	7
4 INFORMATION ABOUT ACCEPTANCE AND VERIFICATION	8
5 PRESERVATION	9
6 SUPPLY SCOPE AND PACKAGE	11
7 DISPOSAL	10
8 PARTS INSTALLATION AND REPLACEMENT	11
9 SERVICE LIFE. MANUFACTURER WARRANTY	12
10 CERTIFICATES	13

1 PRODUCT BASIC INFORMATION

1.1 Product purpose

The vortex flow converter "EMIS-VIKHR 200" modification EV-200-PPD (hereinafter referred to as the converter) is designed to measure the volume and volumetric flow rate of liquids at operating pressure and operating temperature in reservoir pressure maintenance systems, to measure Cenomanian water, as well as other liquids at elevated pressure.

1.2 Designation

EMIS-VIKHR 200-PPD

TY 4213-017-14145564-2009

1.3 Serial number

1.4 Date of manufacture

1.5 Manufacturing company

JSC «EMIS»
Komsomolsky prospect, 29, building
7, Chelyabinsk city, 454112, Russia
Tel./fax (351) 729-99-12
www.emis-kip.ru

2 MAIN TECHNICAL INFORMATION

Characteristic	Relevance
Explosion protection	
Accuracy class	
Flow measurement range	
Type of measured medium	
Placement of electronic unit	
Maximum pressure of measured medium	
Temperature of measured medium	
Ambient temperature	
Built-in indicator	
Design	
Protection from dust and moisture	
Supply voltage	24 B direct current

The converters do not contain precious metals.

Other technical characteristics are given in the appendix.

ATTENTION!

Medium pressure shall not exceed accepted value for flow transducer and installation kit.

ATTENTION!

General industrial converters are prohibited from being used in explosive conditions. In this case, explosion-proof converters should be used. The specifics of using explosion-proof converters are given in the operating manual.

ATTENTION!

The choice of materials for the flow part of the converter is based on the requirements of a specific technological process. The responsibility for the choice of material for the flow part of the converter lies with the consumer.

ATTENTION!

AST converters are designed to operate with a hydrogen sulfide content in the environment in normal mode of no more than 10 mg/m³, in an emergency situation - up to 100 mg/m³ for no more than 1 hour. The content of dissolved hydrogen sulfide in the liquid is up to 6% by volume.

3 TESTING

3.1 Strength and tightness test

The vortex flow converter EMIS-VIKHR 200 has been tested for strength and tightness in accordance with TU 4213-017-14145564-2009.

Test method in accordance with TU 4213-017-14145564-2009.

Measuring instruments and auxiliary equipment:

- non-standard hydraulic test bench.

The flow part of the converter is exposed to liquid under pressure exceeding the maximum allowable working pressure by 1.5 times (but not more than 35 MPa) for ten minutes. No liquid leaks on the converter body, as well as a pressure drop according to the control pressure gauge were recorded.

Test results: The converter meets the requirements of TU 4213-017-14145564-2009 for tightness.

Calculation result: The converter meets the requirements of TU 4213-017-14145564-2009, GOST 14249-89 for strength.

The vortex flow converter EMIS-VIKHR 200 has been tested to check the electrical insulation resistance in accordance with TU 4213-017-14145564-2009.

3.2 Insulation resistance test

Test method in accordance with TU 4213-017-14145564-2009.

Insulation resistance was measured:

- between the shorted contacts "U+" and "U-" of the flow meter power supply on the terminal block and the ground terminal of the flow meter;

- between the shorted contacts "F+" and "F-" of the frequency-pulse output on the terminal block and the ground terminal of the flow meter.

The rated voltage when checking the insulation resistance is 500 V.

The insulation resistance of the flow meter was at least 10 MOhm.

Test results:

The flow meter meets the requirements of TU 4213-017-14145564-2009 for the value of electrical insulation resistance.

signature

full name

date

Stamp here

4 INFORMATION ABOUT ACCEPTANCE AND VERIFICATION

4.1 Acceptance

Flow transducer EMIS-VIHR 200 complies with technical requirements of TU 26.51.52.094-14145564-2021 and approved for operation.

Serial number

Signature of QC

Signature

Name

Date

Stamp here

4.2 Verification

The parameters for verification of the meter are specified in the appendix.
Interval between periodic verifications is 4 years

Primary verification (after manufacture)

date

signature and full name of the verifier

verification sign

Verification (initial / periodic)

date

signature and full name of the verifier

verification sign

Verification (initial / periodic)

date

signature and full name of the verifier

verification sign

Verification (initial / periodic)

date

signature and full name of the verifier

verification sign

Verification (initial / periodic)

date

signature and full name of the verifier

verification sign

Verification (initial / periodic)

date

signature and full name of the verifier

verification sign

Verification (initial / periodic)

date

signature and full name of the verifier

verification sign

Verification (initial / periodic)

date

signature and full name of the verifier

verification sign

Verification (initial / periodic)

date

signature and full name of the verifier

verification sign

Verification (initial / periodic)

date

signature and full name of the verifier

verification sign

5 PRESERVATION

5.1 Preservation data

Date	Job title	Duration, years	Position, surname and signature

6 SUPPLY SCOPE AND PACKAGE

6.1 Supply scope Supply scope of transducer:

Designation	Explanation
EMIS-VIKHR 200	Flow converter "EMIS-VIKHR 200" in the design according to the order
EMIS-VIKHR EV-200.000.000.000.00 ПС	Passport for the flow converter "EMIS-VIKHR 200"

Additional equipment according to the packing list.

6.2 Packaging The vortex flow meter EMIS-VIKHR 200 is packed according to the customer's order and the requirements of the technical documentation.

7 DISPOSAL

Flow meters do not contain harmful substances and components that pose a danger to human health and the environment during and after the end of their service life and during disposal. Disposal of the flow meter is carried out separately by groups of materials: plastic elements, metal elements of the housing and fasteners.

8 PARTS INSTALLATION AND REPLACEMENT

8.1 Replacement info

During operation, modules were replaced (installed)

Name	Version	Serial №

organization

full name

position

date

signature

Name	Version	Serial №

organization

full name

position

date

signature

9 SERVICE LIFE. MANUFACTURER WARRANTY

9.1 Service life Service life of EMIS-VIHR 200 is not less than 15 years, provided the operation conditions are observed. Rated service life is 15 years.

9.2 Manufacturer warranty

Warranty period:

- Standard warranty - Warranty period is 12 months from the commissioning of the transducer, but not more than 18 months from the date of shipment.
- Extended warranty - _____ months from the commissioning of the transducer, but not more than _____ months from the date of shipment.
- Special warranty -

Warranty period for replaced parts after maintenance at manufacturer is 6 month.

9.3 Commissioning mark

_____		Company
_____	_____	Position
_____	_____	Signature
Date		

ATTENTION!

The manufacturer has the right to refuse warranty repairs in the event of failure of the device if the requirements described in Section 5 of the Operating Manual are violated.

ATTENTION!

The service life of the EMIS-VIKHR 200 flow converter when measuring chemically aggressive environments is not standardized by the manufacturer.

ATTENTION!

Repair of EMIS-VIKHR 200 flow converters is carried out only at the manufacturer's plant or in authorized service centers. Repair of converters is allowed only with the use of spare parts kits manufactured by EMIS JSC. The manufacturer does not bear warranty obligations in case of repair of converters using spare parts kits from a third-party manufacturer.

10 CERTIFICATES

1. Certificate of approval of the type of measuring instruments №86309-22. Issued by: Federal Agency for Technical Regulation and Metrology. Valid until: July 29, 2032.

2. Certificate of Conformity TR CU 012/2011 No. EAЭC RU C-RU.AЖ58.B.05206/24. Issued by: Certification Authority of "PROMMASH TEST Engineering" Limited Liability Company. Valid from 09.04.2024 until 23.04.2028.

3. Declaration of conformity TR CU 020/2011 No. EAЭC N RU Д-RU.PA10.B.48609/24. Valid from 14.11.2024 until 08.12.2027.

