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EMIS-VIHR
ЭВ-200.000.000.
000.00 PS

№

VORTEX FLOW METER
EMIS-VIHR 200

Data sheet

Technical parameters

Adjustment parameters

Supply set

Initial and periodical inspection

Manufacturer warranty

EMIS
Russia,
Chelyabinsk

Legal information

Manufacturer has the right to update the product and documents without prior notice. For any information about EMIS equipment please contact your local dealer or EMIS head office.

ATTENTION!

Before start working, you should carefully study this document. Before start installing, using or maintaining the device, you should ensure that you have completely read and understood the contents of this manual. This condition is mandatory to ensure safe operation and normal functioning of the equipment.

For consultations please contact your regional representative of JSC “EMIS” or company technical service:

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e-mail: support@emis-kip.ru

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1 PRODUCT BASIC INFORMATION

1.1Product purpose Vortex flowmeter «EMIS-VIHR 200» (EV-200) (further - flowmeter) is used for measuring the volume and volumetric flow rate of liquids, gases (natural gas, associated gas, air, oxygen and other gases) and steam at operating pressure and operating temperature in various areas of industry and in commercial metering systems as part of heat meters and gas and steam meters.

1.2 Designation

EMIS-VIHR 200

TU 4213-017-14145564-2009

1.3 Serial number

1.4 Date of manufacture

1.5 Manufacturer

JSC «EMIS»
Komsomolsky prospect, 29, building 7,
Chelyabinsk city, 454112, Russia
Tel./fax (351) 729-99-12
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2 MAIN TECHNICAL INFORMATION

Characteristic	Value
Explosion protection	
Accuracy class	
Flow range	
Measured medium	
Installation of electronic unit	
Max. pressure of measured medium	
Temperature of the medium	
Ambient temperature	
In-build indicator	
IP	
Voltage	24 V DC

The flowmeters do not contain any precious metals.

The other technical specifications are given in the appendix.

ATTENTION!

The pressure of the measured medium shall not exceed the permissible values for the flowmeter and mounting kit (Set of mounting accessories).

ATTENTION!

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

ATTENTION!

The choice of materials for the flow part of the flowmeter is based on the requirements of a specific technological process. The consumer is responsible for the choice of material for the flow part of the flowmeter.

ATTENTION!

The H2S flowmeters are designed to work with hydrogen sulfide in the environment at a normal rate of no more than 10 mg/m3, in an emergency situation - up to 100 mg/m3 for no more than 1 hour. Dissolved hydrogen sulfide content in the liquid is up to 6% by volume.

3 TESTS

3.1 Tests for strength and tightness

Vortex flowmeter EMIS-VIHR 200 was tested for strength and tightness according to TU 4213-017-14145564-2009.

Test method according to TU 4213-017-14145564-2009.
Measuring equipment and auxiliary equipment:
- hydraulic non-standard stand test.

Flow tube was tested under pressurized fluid 1.5 times higher than working pressure during 10 minutes. Leakage on the flow transducer body or pressure decrease were not detected.
Test results:
Flowmeter meets tightness requirements of TU 4213-017-14145564-2009.
Calculation result:
Transducer complies with the endurance requirements of TU 4213-017-14145564-2009, GOST 14249-89.

3.2 Insulation resistance test

Flow transducer EMIS-VIHR 200 was tested for insulation resistance according to TU 4213-017-14145564-2009.

Testing procedure in accordance with TU 4213-017-14145564-2009.
The insulation resistance was measured:

- between the interlocked contacts «U+» and «U-» of the power supply of the flowmeter on the terminal block and the grounding terminal of the flowmeter;
- between the interlocked contacts «F+» and «F-» or «P+» and «P-» of the frequency pulse output on the terminal block and the flowmeter grounding terminal.

Rated voltage when testing the insulation resistance was 500 V. The insulation resistance of the flowmeter was at least 10 MOhm.
Test results:
Flowmeter meets the electrical resistance of the insulation requirements TU 4213-017-14145564-2009.

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 4213-017-14145564-2009 and approved for operation .

Serial number

Signature of QC

signature Full 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)

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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 CONSERVATION AND DEGREASING FOR OXYGEN PROCESSING

5.1 Degreasing data

Vortex flow transducer EMIS-VIHR 200

Serial Number

Cleaned and degreased in accordance with the requirements of OST 26-04-312. No fat contamination was found.

signature	full name

date

Stamp here

5.2 Preservation data

Date	Work name	Validity period, years	Position, surname and signature

6 SUPPLY SCOPE AND PACKAGE

6.1 Supply scope Supply scope of transducer

Designation	Explanation
EMIS-VIHR 200	Flow transducer EMIS-VIHR 200 designed according to the customer order
EMIS-VIHR EV-200.000.000.000.00 PS	Data sheet for EMIS-VIHR 200

Additional equipment is specified in packing list.

6.2 Packing Vortex flowmeter EMIS-VIHR 200 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 according to groups of materials: plastic elements, metal elements of the housing and fastening elements.

8 PARTS INSTALLATION AND REPLACEMENT

8.1 Replacement info

During operation the following part were replaced

Name	Version	Serial No

Company

Name | Position

Date | Signature

Name	Version	Serial No

Company

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

_____ _____
Name Position

_____ _____
Date Signature

ATTENTION!

The manufacturer may refuse warranty repair in case of failure of the appliance if the requirements described in section 5 of the operating manual were broken.

ATTENTION!

The service life of the flowmeter EMIS-VIHR 200 while measuring chemically aggressive media is not normalized by the manufacturer.

ATTENTION!

The repair of the flowmeter EMIS-VIHR 200 is carried out only in the manufacturer's factory or in authorized service centers.
Repair of the flowmeters is allowed only with the application of JSC "EMIS" spare parts. The manufacturer is not liable for warranty in case of repair of the flowmeters with a third party's spare parts.

10 SERTIFICATES

1. Certificate of approval of the type of measuring instruments №42775-14. Issued by: Federal Agency for Technical Regulation and Metrology. Valid until: June 17, 2029.

2. Certificate of Conformity TR CU 012/2011 No. ЕАЭС RU C-RU.АЖ58.В.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. ЕАЭС N RU Д-RU.РА10.В.48609/24. Valid from 14.11.2024 until 08.12.2027.

Special marks

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