

EMIS-VIHR  
ЭВ-200.000.100.  
000.00 PS

## VORTEX FLOW METER EMIS-VIHR 200

Data sheet

№ \_\_\_\_\_

Technical  
parameters

Adjustment  
parameters

Supply set

Initial and  
periodical  
inspection

Manufacturer  
warranty





**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.

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**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:

tel./fax: +7 (351) 729-99-12

e-mail: [support@emis-kip.ru](mailto:support@emis-kip.ru)

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## 1 PRODUCT BASIC INFORMATION

**1.1 Product purpose** Vortex flow transducer "EMIS-VIHR 200" (EV-200) (hereinafter referred to as the transducer) is designed for measuring volume (mass) and volumetric (mass) flow of liquids, gases, saturated and overheated steam, as well as volume and volumetric flow of gases converted to standard conditions.

**1.2 Designation**

EMIS-VIHR 200

TU 26.51.52.094-14145564-2021

**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  
[www.emis-kip.ru](http://www.emis-kip.ru)

## 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	

Does not contain precious metals.

Other technical specifications are given in Annex.

### ATTENTION!

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

### ATTENTION!

General industrial flow meters are prohibited from being used in explosive conditions. In this case, explosion-proof flow meters should be used. The specifics of using explosion-proof flow meters 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 flow meters are designed to operate with a hydrogen sulfide content in the environment in normal mode of no more than 10 mg/m<sup>3</sup>, in an emergency situation - up to 100 mg/m<sup>3</sup> for no more than 1 hour. The content of dissolved hydrogen sulfide in the liquid is up to 6% by volume.

### 3 TESTS

#### 3.1 Pressure and leakage test

Flow transducer EMIS-VIHR 200 was tested for endurance and leakage according to TU 26.51.52.094-14145564-2021.

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Testing procedure in accordance with TU 26.51.52.094-14145564-2021.

Measuring and auxiliary equipment:

- non-standard hydraulic test bench..

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:

Transducer comply with the sealing requirements of TU 26.51.52.094-14145564-2021.

Calculation results:

Transducer complies with the endurance requirements of TU 26.51.52.094-14145564-2021, GOST 14249-89.

Flow transducer EMIS-VIHR 200 was tested for insulation resistance according to TU 26.51.52.094-14145564-2021.

#### 3.2 Insulation resistance test

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Testing method in accordance with TU 26.51.52.094-14145564-2021.

Insulation resistance measured:

- between inter-shortened "U+" and "U-" inputs of the terminal block and ground terminal of the flow transducer;

- between inter-shortened "F+" и "F-" inputs of the terminal block and ground terminal of the flow transducer.

Rated voltage during insulation resistance test is 500V. Insulation resistance is min. 10 MOhm.

Test results:

Transducer comply with the insulation resistance requirements of TU 26.51.52.094-14145564-2021.

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signature

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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 5 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

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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 AND DEGREASING FOR OXYGEN APPLICATION

### 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 grease contamination found.

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\_\_\_\_\_ Signature

\_\_\_\_\_ Name

\_\_\_\_\_ Date

**Stamp here**

## 5.2 Preservation data

Date	Description of activities	Validity, years	Position, Surname and Signature

## 6 SUPPLY SCOPE AND PACKAGE

### 6.1 Supply scope

Supply scope of transducer

Name	Description
EMIS-VIHR 200	Flow transducer EMIS-VIHR 200 designed according to the customer order
EMIS-VIHR EV-200.000.100.000.00 PS	Data sheet for EMIS-VIHR 200

Additional equipment is specified in packing list.

### 6.2 Packing

Flow transducer EMIS-VIHR 200 is packed according to the requirements of the customer and technical documents.

## 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 20 years, provided the operation conditions are observed. Rated service life is 20 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 manufacturer does not specify the service life of EMIS-VIHR 200 used for corrosive medium measurement.

#### ATTENTION!

Repair of EMIS-VIHR 200 flow meter is carried out only at the manufacturer or at authorized service centers.  
 Repair of flow meters is allowed only with the use of spare parts manufactured by JSC «EMIS».  
 The manufacturer does not bear warranty obligations in case of repair of flow meters using spare parts from a third-party manufacturer.

## 10 CERTIFICATES

1. Type approval certificate of measuring instruments No. 86309-22. Issued by: Federal Agency for Technical Regulation and Metrology. Validity: until July 29, 2032.

2. Certificate of conformity TR CU 012/2011 No EAЭC RU C-RU.AЖ58.B.05206/24. Issued by: Certification Body of the Limited Liability Company "PROMMASH TEST Engineering". Validity period: from 04.09.2024 to 04.23.2028.

3. Declaration of conformity TR CU 020/2011 No. EAЭC N RU Д-RU.PA10.B.48609/24. Validity period: from 11.11.2024 to 08.12.2027.





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