JUMO hydroTRANS S40

Humidity and temperature transmitter with optional CO_2 module, rod version

Operating Manual

90704400T90Z001K000

V2.00/EN/00767207/2024-07-01

Further information and downloads

qr-907044-en.jumo.info

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1 About this documentation

1.1 Purpose

This documentation is part of the device and includes all information to ensure that it is used safely and as intended across all phases of the product lifecycle.

If you do not follow the documentation and safety information, this may result in risk to life and damage to property due to improper use.

- Read and follow the documentation and the safety information and warnings.
- Store the document in its entirety, in an easily accessible location, and so that it can be read in full at all times.
- Contact the manufacturer if you have any questions about the device and documentation.

1.2 Target group

This documentation is intended to be used by personnel for plant mechanical systems for sanitary, heating and air-conditioning technology, electrical engineering or mechanical and plant engineering.

1.3 Definition of terms

Use in the documentation	**Definition**
Device, product	Humidity and temperature transmitter
CO_2 module, CO_2 sensor	Carbon dioxide (CO_2) as a measurand
End device	Smartphone, tablet, laptop, PC etc.
Measured value	Process value
Product lifecycle	Overall consideration of Product identification, acceptance of the goods, storage, mounting, connection, operation, troubleshooting, maintenance to disposal

1.4 Trademark information

All trademarks and trade and company names used are the property of their rightful owners or authors.

2 Safety

2.1 Intended use

The humidity and temperature transmitter monitors outside air that enters into buildings and production processes.

The device is suitable for mounting in weather-proofed ventilation ducts and lines.

The operating manual is part of the device. The device is only intended for use according to this operating manual.

2.2 Qualification of personnel

The personnel deployed must meet the following requirements in all phases of the product lifecycle:

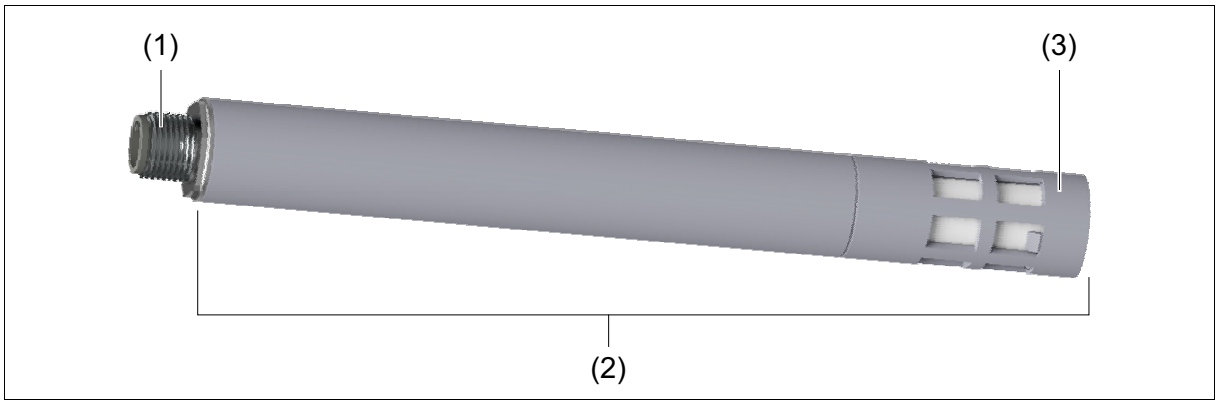
- Members of personnel have at least completed training in the field of plant mechanical systems for sanitary, heating, and air-conditioning technology or have completed a degree in electrical engineering or mechanical and plant engineering.
- Members of personnel are familiar with this documentation and the safety information and warnings it contains.

2.3 Transport and storage damage

The device can be damaged if it is insufficiently protected during transport and/or improperly stored.

- Transport the device protected from moisture and dirt in shockproof packaging.
- Protect all electrical and mechanical connections from damage.
- Observe the admissible storage temperature of the device.
- Store the device in a dry and dust-free environment.

3.1 Structure



1 M12 plug connection (5-pole)
2 Housing
3 Filter cap with plastic membrane filter (standard)

The filter cap with plastic membrane filter can be replaced with a plastic sinter filter.

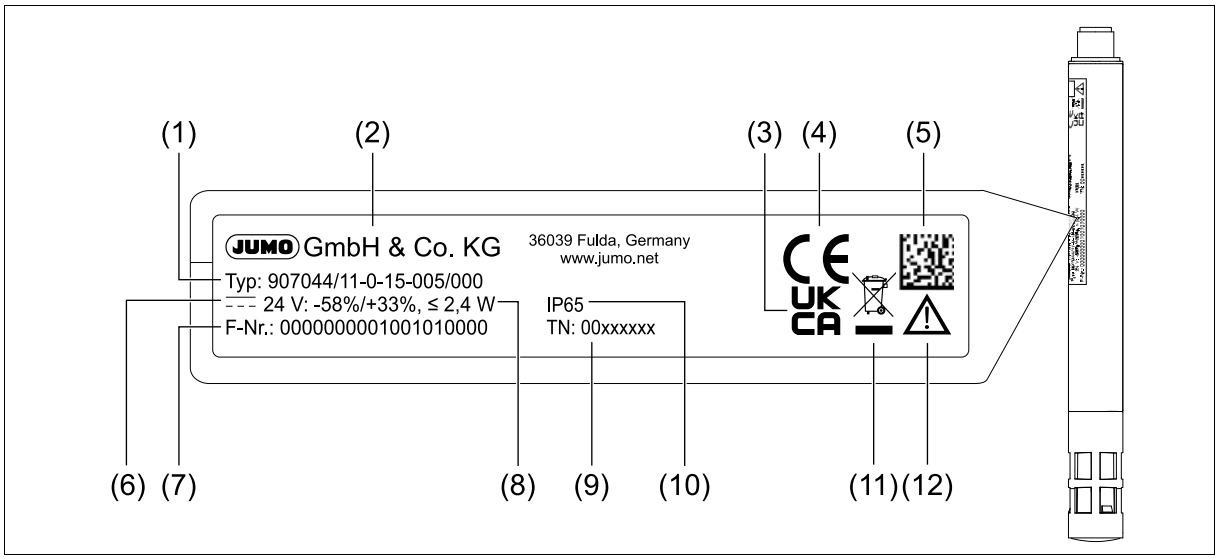
3.2 Function

Measurand	Function principle
Relative humidity	Capacitive measurement technology
Temperature	Semiconductor measurement technology
Carbon dioxide (CO_2)	Photoacoustic measurement technology

The process values of the measurands can be issued to a higher-level system via the interfaces or analog outputs.

3 Description

3.3 Nameplate



1	Order code	7	Fabrication number
2	Manufacturer and address	8	Power consumption
3	UKCA identification marking	9	Part no.
4	EU identification marking	10	Protection type according to DIN EN 60529
5	Data Matrix code	11	Disposal
6	Voltage supply (DC)	12	Observe device documentation!

4.1 Electrical safety

Requirements	DIN EN 61010-1 The device must be equipped with an electrical circuit that meets the requirements for "Limited-energy circuits".

4.2 Electrical data

Voltage supply	DC 24 V SELV, PELV
Analog output	
0 to 10 V	DC 24 V, -33 %/+33 %
4 to 20 mA	DC 24 V, -54 %/+33 %
RS485 interface	DC 24 V, -58 %/+33 %
Power consumption	≤ 2.4 W
Protection rating	DIN EN 61140, Class III (protective low voltage)
Electrical connection	
Connection elements	M12 plug connection
Connecting cable	
Temperature resistance	≥ 80 °C

4.3 Inputs

4.3.1 Measurands

Relative humidity

Measuring range	0 to 100 % RH
With CO_2 module	0 to 95 % RH
Accuracy	
Typical	±2.0 % RH
Max.	±2.5 % RH
Reference conditions	
Humidity	≥ 30 % RH
Sampling rate	1 s

Temperature

Measuring range	-40 to +80 °C
With CO_2 module	-10 to +60 °C
Accuracy	
Typical	±0.2 °C
Max.	±0.4 °C
Sampling rate	1 s

4 Technical data

Carbon dioxide (CO_2)

Measuring range	400 to 10000 ppm
Accuracy	±(50 ppm + 5 % of the measured value)
Reference conditions	
Ambient temperature	25 °C
Air pressure	1013 hPa
Humidity	50 % RH
Measuring range	400 to 1000 ppm
Sampling rate	30 s

4.4 Outputs

Device with analog output

Current output	
Signal rate	4 to 20 mA
Output signal limits	0 to 22 mA
Accuracy[a]	≤ ±0.1 % in relation to the end of the signal range (20 mA)
Temperature influence	50 ppm/K
Burden influence	≤ ±0.02 % per 100 Ω
Minimum burden	
Voltage supply U_V	
DC 11 to 25 V	0 Ω
DC 25 to 32 V	(U_V - 25 V) ÷ 0.02 A
Maximum burden	(U_V - 2.4 V) ÷ 0.0215 A
Voltage output	
Signal range	0 to 10 V
Output signal limits	0 to 11 V
Accuracy	≤ ±0.1 % in relation to the end of the signal range (10 V)
Temperature influence	50 ppm/K
Load influence	≤ ±15 mV
Load	≥ 10 kΩ

[a] Applies to operation with the lowest operating voltage possible according to the burden connected.

4.5 Interfaces

4.5.1 RS485

Function	Transfer of process data, configuration data, and device information
Communication	Via Modbus master
Galvanic isolation	Functional
Data transmission	Serial
Transmission protocol	Modbus RTU
Data format	8-1-none[a] 8-1-odd 8-1-even 8-2-none
Data transfer rate	9600 baud 19200 baud 38400 baud[a] 57600 baud 115200 baud
Minimum response time	0 to 500 ms
Device address	1 to 254

[a] Default setting

4.6 Environmental influences

Admissible ambient temperature	-40 to +80 °C
With CO_2 module	-10 to +60 °C
Admissible storage temperature	-40 to +80 °C
With CO_2 module	-30 to +70 °C
Protection type	DIN EN 60529 IP65 (with connected M12 plug connector)
Max. site altitude.	5300 m above sea level
Climatic conditions	DIN EN IEC 60721-3-3
Climate class	3K24
Relative humidity	≤ 100 % (95 % with CO_2 module), non-condensing
Electromagnetic compatibility (EMC)	DIN EN 61326-1:2022
Interference emission	Class B[a]
Interference immunity	Industrial requirement
Oscillation[b]	DIN EN 60068-2-6
Amplitude	0.15 mm at 10 to 58.1 Hz
Acceleration	20 m/s^2 at 58.1 to 150 Hz
Shock[b]	DIN EN 60068-2-27
Peak acceleration	150 m/s^2
Shock duration	11 ms

[a] The product is suitable for industrial use as well as for households and small businesses.

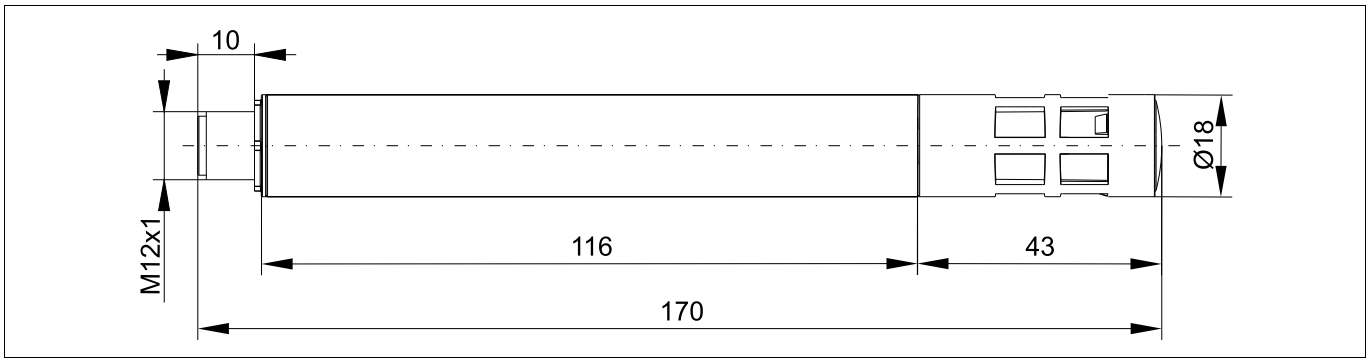
[b] The CO_2 module is sensitive to vibrations. In the event of vibrations, the measurement results could change on account of the design.

4 Technical data

4.7 Mechanical features

Materials	
Case	PC
M12 plug connector	CuZn
Weight	Approx. 40 g

4.8 Dimensions



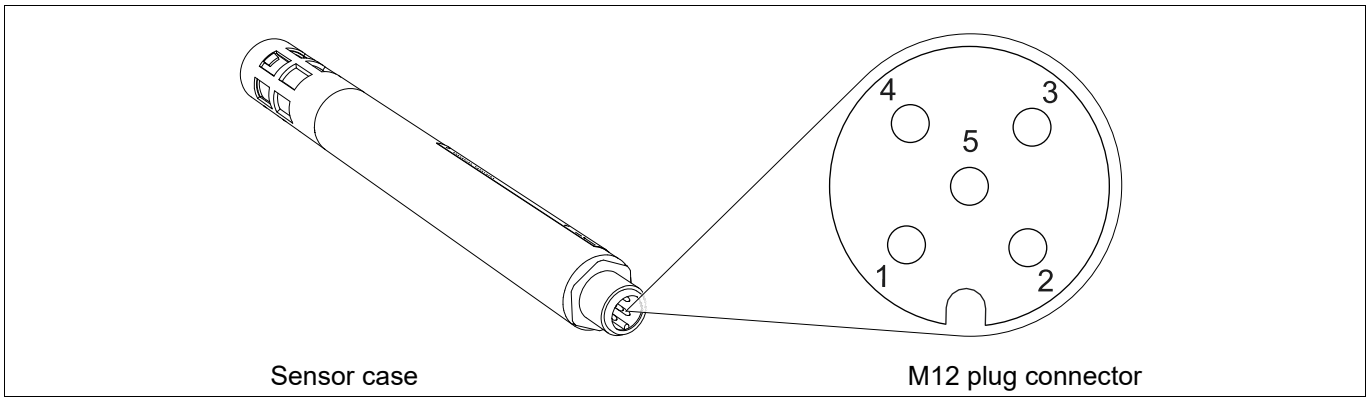
5 Mounting

The device is mounted according to the customer's specific specifications.

The outside air to be monitored must completely flow round the filter cap after mounting.

6 Electrical connection

6.1 Connection elements



6.1.1 Terminal assignment

M12 plug connector

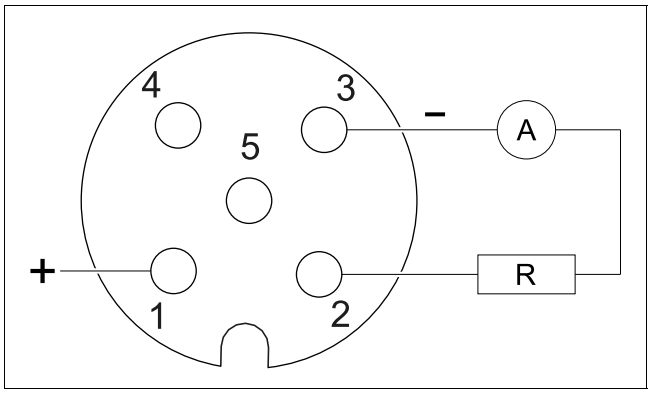
Designation	Description	Assignment
Analog output	DC 24 V	1 BN (Brown)
	Relative humidity	2 WH (White)
	GND	3 BU (Blue)
	Temperature	4 BK (Black)
	Carbon dioxide (CO_2)	5 GN/YE (Green/Yellow)
RS485 interface	NC	1 BN (Brown)
	DC 24 V	2 WH (White)
	GND	3 BU (Blue)
	B-RS485 (Data -)	4 BK (Black)
	A-RS485 (Data +)	5 GN/YE (Green/Yellow)

6.2 Connection diagram

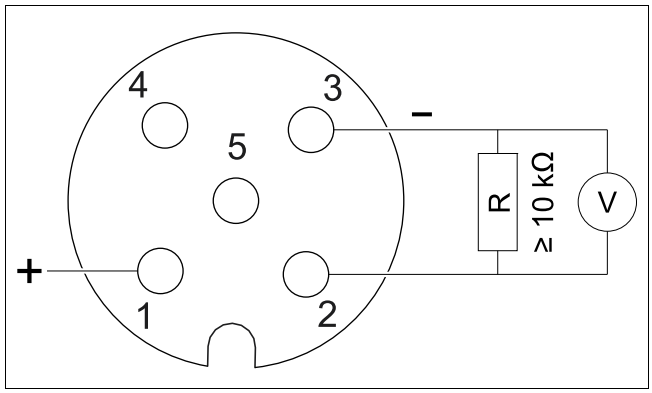
Analog outputs

The connection examples for relative humidity (2) also apply to temperature (4) and CO_2 (5).

Current output



Voltage output



All outputs have to be connected.

6.3 Connecting the device

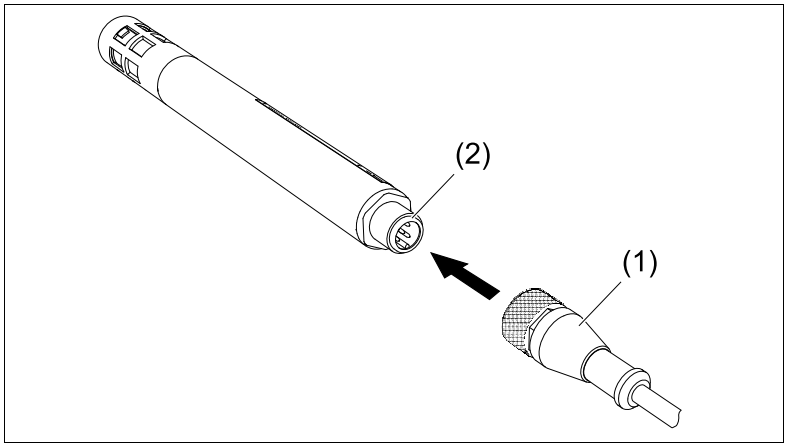
Material	Connecting cable, ⇨ "Electrical data ", Page 9

Requirements:

- The system has been de-energized and secured against being switched on again.
- The connections for the voltage supply and signal processing have been correctly prepared.

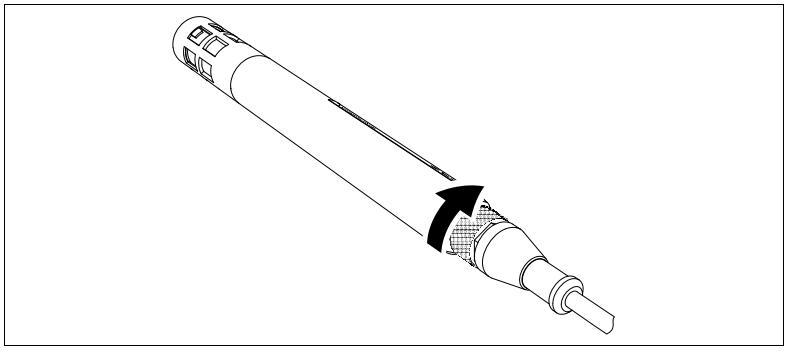
Procedure:

1. Insert the connecting cable (1) into the M12 plug connection (2).



2. Screw the union nut of the connecting cable onto the M12 plug connection on the device.

   Tightening torque: < 0.5 Nm



3. Connect the connecting cable to the device that is processing the signals and to the voltage supply. Route the cable so that it is protected against mechanical strain.

The device is ready for operation as soon as the voltage supply is established.

7 Configuration

The default settings are shown in **bold** in the following tables.

7.1 File info

In the **File info** menu you can enter information about the configuration file.

7.2 Device version

The **Device version** menu provides an overview of the device hardware installed.

7.3 System data

Parameter	Value	Description
Language	**German**, English, French, Spanish	National language for the device texts of the process display.
Temperature	**°C**, °F	System units of the process values shown in the process value display.
Absolute humidity	**g/m³**, g/ft³	
Mixing ratio	**g/kg**, gr/lb	
Partial water vapor pressure	**mbar**, psi	
Specific enthalpy	**kJ/kg**, BTU/lb	
TAG number	–	For categorization purposes, e.g. to identify the installation location.
Altitude 📖	**0** m	Refers to standard elevation zero (NHN).

Altitude

The parameter is used to calculate the ambient pressure based on the barometric formula and affects the calculation of the CO_2 concentration, mixing ratio, and specific enthalpy.

7.4 Display

Value 1st, 2nd, 3rd line > Analog selector

Parameter	Value	Description
No selection	–	The process value is not shown.
Measured values	Relative humidity (RH), Temperature (T), Carbon dioxide (CO2)	Process values
Calculated values	Dew point (Td), Mixing ratio (x), Absolute humidity (a), Specific enthalpy (h), Wet-bulb temperature (Tw), Frost point (Tf), Partial water vapor pressure (Pw)	Process values
Brightness	0 to 10 (**5**)	Brightness of the process display backlight.

7.5 Measurand correction

Parameter	Value	Description
Relative humidity	Offset	–
Temperature	Offset	–
Carbon dioxide	Offset, Automatic self-calibration	–

Relative humidity

Parameter	Value	Description
Offset	Input range: -15 to 15 % (**0.0**)	Process value correction, also affects the calculated values.

Temperature

Parameter	Value	Description
Offset	Input range: -15 to 15 °C (**0.0**)	Process value correction, also affects the calculated values.

Carbon dioxide

Parameter	Value	Description
Offset	Input range: -500 to +500 ppm (**0**)	Process value correction, also affects the calculated values.
Automatic self-calibration 📖	**Active**, inactive	–

Automatic self-calibration

Long-term accuracy is guaranteed if the CO_2 sensor is exposed to fresh air with an atmospheric CO_2 concentration of 400 ppm at least once a week.

If the application does not allow this:

- Set automatic self-calibration to inactive.
- Correct the offset manually.

7 Configuration

7.6 Analog outputs

Analog output 1/2/3 > Source > Analog selector

Parameter	Value	Description
No selection	–	Analog output 3
Measured values	**Relative humidity (RH)**	Analog output 1
	Temperature (T)	Analog output 2
	Carbon dioxide (CO2)	–
Calculated values	Dew point (Td), Mixing ratio (x), Absolute humidity (a), Specific enthalpy (h), Wet-bulb temperature (Tw), Frost point (Tf), Partial water vapor pressure (Pw)	–

Analog output 1/2/3 > Source > Analog selector > Measured values > Relative humidity (RH)

Parameter	Value	Description
Signal type	**4 to 20 mA**, 0 to 10 V	–
Scale start	Input range: -99999 to 99999 % (**0**)	–
Scale end	Input range: -99999 to 99999 % (**100**)	–
Response at error	**Replacement value**, High, Low	–
Replacement value	Input range: **3.4** to 22 mA, 0 to 11 V	

Analog output 1/2/3 > Source > Analog selector > Measured values > Temperature (T)

Parameter	Value	Description
Signal type	**4 to 20 mA**, 0 to 10 V	–
Scale start	Input range: -99999 to 99999 °C (**-40**)	–
Scale end	Input range: -99999 to 99999 °C (**80**)	–
Response at error	**Replacement value**, High, Low	–
Replacement value	Input range: **3.4** to 22 mA, 0 to 11 V	–

Analog output 1/2/3 > Source > Analog selector > Measured values > Carbon dioxide (CO_2)

Parameter	Value	Description
Signal type	**4 to 20 mA**, 0 to 10 V	–
Scale start	Input range: -99999 to 99999 ppm (**400**)	–
Scale end	Input range: -99999 to 99999 ppm (**5000**)	–
Response at error	**Replacement value**, High, Low	–
Replacement value	Input range: **3.4** to 22 mA, 0 to 11 V	–

Analog output 1/2/3 > Source > Analog selector > Calculated values > Dew point (Td)

Parameter	Value	Description
Signal type	**4 to 20 mA**, 0 to 10 V	–
Scale start	Input range: -99999 to 99999 °C (**-40**)	–
Scale end	Input range: -99999 to 99999 °C (**60**)	–
Response at error	**Replacement value**, High, Low	–
Replacement value	Input range: **3.4** to 22 mA, 0 to 11 V	–

Analog output 1/2/3 > Source > Analog selector > Calculated values > Mixing ratio (x)

Parameter	Value	Description
Signal type	**4 to 20 mA**, 0 to 10 V	–
Scale start	Input range: -99999 to 99999 g/kg (**0**)	–
Scale end	Input range: -99999 to 99999 g/kg (**160**)	–
Response at error	**Replacement value**, High, Low	–
Replacement value	Input range: **3.4** to 22 mA, 0 to 11 V	–

Analog output 1/2/3 > Source > Analog selector > Calculated values > Absolute humidity (a)

Parameter	Value	Description
Signal type	**4 to 20 mA**, 0 to 10 V	–
Scale start	Input range: -99999 to 99999 g/m^3 (**0**)	–
Scale end	Input range: -99999 to 99999 g/m^3 (**150**)	–
Response at error	**Replacement value**, High, Low	–
Replacement value	Input range: **3.4** to 22 mA, 0 to 11 V	–

Analog output 1/2/3 > Source > Analog selector > Calculated values > Specific enthalpy (h)

Parameter	Value	Description
Signal type	**4 to 20 mA**, 0 to 10 V	–
Scale start	Input range: -99999 to 99999 kJ/kg (**-40**)	–
Scale end	Input range: -99999 to 99999 kJ/kg (**500**)	–
Response at error	**Replacement value**, High, Low	–
Replacement value	Input range: **3.4** to 22 mA, 0 to 11 V	

Analog output 1/2/3 > Source > Analog selector > Calculated values > Wet-bulb temperature (Tw)

Parameter	Value	Description
Signal type	**4 to 20 mA**, 0 to 10 V	–
Scale start	Input range: -99999 to 99999 °C (**0**)	–
Scale end	Input range: -99999 to 99999 °C (**60**)	–
Response at error	**Replacement value**, High, Low	–
Replacement value	Input range: **3.4** to 22 mA, 0 to 11 V	–

Analog output 1/2/3 > Source > Analog selector > Calculated values > Frost point (Tf)

Parameter	Value	Description
Signal type	**4 to 20 mA**, 0 to 10 V	–
Scale start	Input range: -99999 to 99999 °C (**-40**)	–
Scale end	Input range: -99999 to 99999 °C (**0**)	–
Response at error	**Replacement value**, High, Low	–
Replacement value	Input range: **3.4** to 22 mA, 0 to 11 V	–

Analog output 1/2/3 > Source > Analog selector > Calculated values > Partial water vapor pressure (Pw)

Parameter	Value	Description
Signal type	**4 to 20 mA**, 0 to 10 V	–
Scale start	Input range: -99999 to 99999 mbar (**0**)	–
Scale end	Input range: -99999 to 99999 mbar (**200**)	–
Response at error	**Replacement value**, High, Low	–
Replacement value	Input range: **3.4** to 22 mA, 0 to 11 V	–

7.7 Serial interface

Parameter	Value	Description
Baud rate	9600, 19200, **38400**, 57600, 115200	–
Data format	**8-1-none**, 8-1-odd, 8-1-even, 8-2-none	–
Minimum response time	0 to 500 ms (**0**)	–

Modbus slave

Parameter	Value	Description
Device address	Input range: 1 to 254 (**1**)	–
Temperature	**°C**, °F	System units of the process values transferred via the Modbus interface.
Absolute humidity	**g/m³**, g/ft³	
Mixing ratio	**g/kg**, gr/lb	
Partial water vapor pressure	**mbar**, psi	
Specific enthalpy	**kJ/kg**, BTU/lb	

7.8 Online parameters

This function requires an active connection between the setup program and device.

Parameter	Description
Hardware/software	Version of the device hardware and software
Measurands	Test of sensor functions
Display	Test of color reproduction
Calibration constants	Calibration constants of analog outputs
Analog outputs	Test of analog outputs Measure the signal at the relevant output.

8 Modbus address tables

8.1 Version and fabrication number

Modbus PDU address		Data type	Number of Modbus registers	Access[a]	Data	Coding
Dec.	Hex					
21	0x0015	String	19	r	Software version number	–
54	0x0036	String	11	r	Hardware version number	–
94	0x005E	String	10	r	Fabrication number	–

[a] r: Read access

8.2 Configuration

8.2.1 System data

Modbus PDU address		Data type	Number of Modbus registers	Access[a]	Data	Coding
Dec.	Hex					
1000	0x03E8	Selection	1	r/w	Language	German Englich French Spanish
1001	0x03E9	Selection	1	r/w	Temperature	°C °F
1002	0x03EA	Selection	1	r/w	Absolute humidity	g/m³ g/ft³
1003	0x03EB	Selection	1	r/w	Mixing ration	g/kg g/lbs
1004	0x03EC	Selection	1	r/w	Pressure	mbar psi bar
1005	003ED	Selection	1	r/w	Enthalpy	kJ/kg BTU/lbs
1006	0x03EE	String	10	r/w	Measuring point identifier	–
1016	0x03F8	Integer	2	r/w	Altitude	0 to 3.000 m

[a] r/w: Read/write access

8.2.2 Measurand correction

Modbus PDU address		Data type	Number of Modbus registers	Access[a]	Data	Coding
Dec.	Hex					
1200	0x04B0	Float	2	r/w	Offset Temperature	-15 to 15 °C -27 to 27 °F
1202	0x04B2	Float	2	r/w	Offset Relative humidity	-15 to 15 %
1204	0x04B4	Float	2	r/w	Offset Carbon dioxide	-500 to 500 ppm
1206	0x04B6	Selection	1	r/w	Automatic self-calibration	Off On

[a] r/w: Read/write access

8.2.3 Serial interface

Modbus PDU address		Data type	Number of Modbus registers	Access[a]	Data	Coding
Dec.	Hex					
1500	0x05DC	Selection	1	r/w	Baud rate	9k6 19k2 38k4 57k6 115k2
1501	0x05DD	Selection	1	r/w	Data format	8N1 8O1 8E1 8N2
1502	0x05DE	Integer	2	r/w	Device address	1 to 254
1504	0x05E0	Selection	1	r/w	Temperature	°C °F
1505	0x05E1	Selection	1	r/w	Absolute humidity	g/m³ g/ft³
1506	0x05E2	Selection	1	r/w	Mixing ration	g/kg gr/lbs
1507	0x05E3	Selection	1	r/w	Pressure	mbar psi bar
1508	0x05E4	Selection	1	r/w	Enthalpy	kJ/kg BTU/lbs
1509	0x05E5	Integer	2	r/w	Minimum response time	0 to 500

[a] r/w: Read/write access

8.2.4 Analog inputs

Modbus PDU address		Data type	Number of Modbus registers	Access[a]	Data	Coding
Dec.	Hex					
6000	0x1770	Float	2	r	Humidity	–
6002	0x1772	Float	2	r	Temperature	–
6004	0x1774	Float	2	r	Carbon dioxide	–

[a] r: Read access

8 Modbus address tables

8.2.5 Calculated values

Modbus PDU address		Data type	Number of Modbus registers	Access[a]	Data	Coding
Dec.	Hex					
6006	0x1776	Float	2	r	Dew point	–
6008	0x1778	Float	2	r	Mixing ration	–
6010	0x177A	Float	2	r	Absolute humidity	–
6012	0x177C	Float	2	r	Specific enthalpy	–
6014	0x177E	Float	2	r	Wet-bulb temperature	–
6016	0x1780	Float	2	r	Frost point	–
6018	0x1782	Float	2	r	Partial water vapor pressure	–

[a] r: Read access

8.2.6 Error messages Modbus

Modbus PDU address		Data type	Number of Modbus registers	Access[a]	Data	Coding
Dec.	Hex					
6400	0x1900	Boolean	1	r	General error	–
6401	0x1901	Boolean	1	r	Configuration faulty	–
6402	0x1902	Boolean	1	r	Calibration faulty	–
6403	0x1903	Boolean	1	r	Device not calibrated	–
6404	0x1904	Boolean	1	r	Humidity sensor faulty	–
6405	0x1905	Boolean	1	r	CO2 sensor faulty	–
6450	0x1932	Boolean	1	r	Device restart required	–

[a] r/w: Read access

Error messages for invalid values

For measured values in the floating-point format, the error is displayed in the value itself, i.e. it contains the error code instead of the measured value.

Error message	Possible cause
1.0×10^{37}	Measuring range underflow
2.0×10^{37}	Measuring range overflow
3.0×10^{37}	Value invalid

9.1 Maintenance

9.1.1 Replacing filter cap

Material	Plastic membrane filter or plastic sinter filter

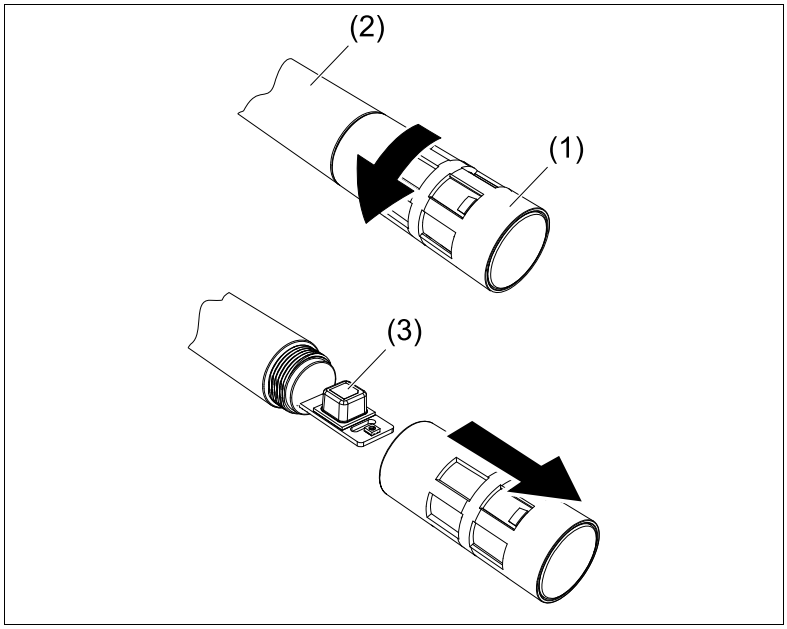
Requirements:

- The system has been de-energized and secured against being switched on again.
- A clean and dry storage location has been prepared.

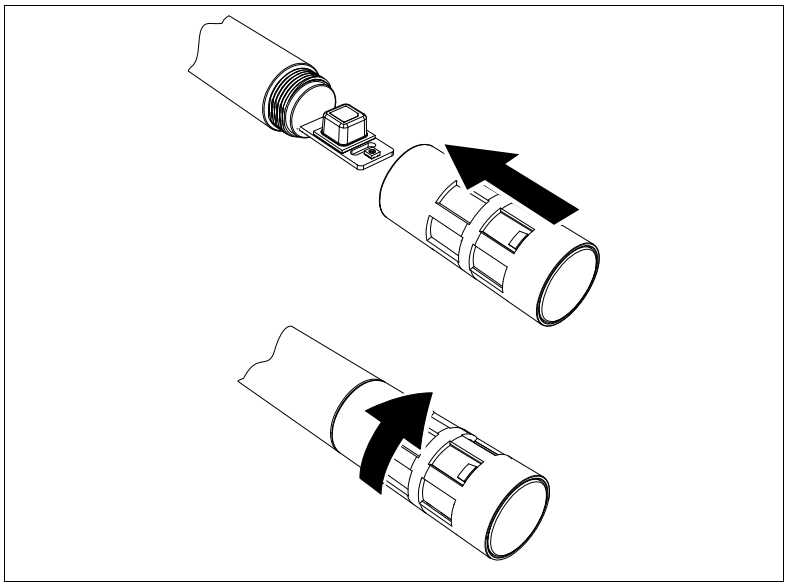
Procedure:

1. ***CAUTION!* Exposed sensor board (3). Destruction of the device electronics possible**
   ▶ Do not touch the sensor board.

   Manually loosen the filter cap (1) and remove from the housing (2).



2. Guide the new filter cap over the sensor board and manually screw onto the housing.



9.2 Cleaning

Clean the device with a cloth dampened with water.

10 Shutdown

10.1 Dismounting

Requirements:

- The system has been de-energized and secured against being switched on again.

Procedure:

1. Disconnect the connecting cable from the device that is processing the signals and the voltage supply.
2. Loosen the union nut of the connecting cable from the M12 plug connection.
3. Pull the connecting cable out of the M12 plug connection.

10.2 Returns

Procedure:

1. The supplementary sheet for product returns must first be completed correctly and signed. Then enclose it with the shipping documents and attach it to the packaging, ideally on the outside.
2. Use the original packaging or a suitably secure container for sending the device.

10.3 Disposal

- Do not dispose of the device or replaced parts in the trash after use.
- Delete programs and data stored on the device.
- Remove batteries, if any, if this can be done without damaging the device.
- Dispose of the device and the packaging material in a responsible and environmentally friendly manner.
- Observe the country-specific laws and regulations for waste treatment and disposal.

In accordance with Directive 2012/19/EU on Waste from Electrical and Electronic Equipment, manufacturers are obliged to offer the option of returning waste equipment. Request the return from the manufacturer.

11.1 Accessories

Designation	Part no.
Plastic sinter filter (Ø = 18 mm)	00754581
Plastic membrane filter (Ø = 18 mm)	30048149
JUMO hydroTRANS setup program	00775170
M12 digiLine master connection cable, 5-pin, 1.5 m	00638333
M12 digiLine master connection cable, 5-pin, 5 m	00638337
M12 digiLine master connection cable, 5-pin, 10 m	00638341
M12 connection cable, 5-pin, 0.5 m	00638312
M12 connection cable, 5-pin, 1.5 m	00638313
M12 connection cable, 5-pin, 5 m	00638315
M12 connection cable, 5-pin, 10 m	00638322
M12 connection cable, 5-pin, 15 m	00638324
M12 connection cable, 5-pin, 25 m	00720063
Y-splitter, 5-pin	00638327
JUMO digiLine hub	00646871
Pipe-mounted kit JUMO digiLine hub	00648759
Terminating resistor for CAN-Bus/digiLine, M12 × 1	00461591

12 Open-source software

The device software and/or device components were developed using open-source software.

Insofar as the respectively applicable license terms justify a claim on the provision of source code or other information, JUMO GmbH & Co. KG will provide the source code and the license texts on a conventional data carrier at the cost incurred for the provision of the data carrier.

This offer is valid for three years after the software is made available. This offer is valid beyond that time to the extent specified in the license terms.

For questions related to open-source software, please contact:

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