BASI

PROGRAMMABLE HUMIDITY TRANSMITTER   BRHV100

- **Excellent price-to-performance ratio**
- **2- or 3-wire analog output**
- **RH/T programmable conversion modes**
- **Serial interface available**
- **IP65 all-stainless-steel case**
- **Optional stainless steel sintered filter**
- **M12 circular connector**

DESCRIPTION

BRHV100 probe is designed to replace the old BRHS model for HVAC applications. Using thin-film sensor, whose capacitance varies proportionally to medium relative humidity, and a thin-film temperature sensor, the probe measures relative humidity and temperature of air and non-aggressive gases at atmospheric pressure, and transforms it into standard current or voltage output signal. The BRHV100 transducer allows external control of the input/output conversion (RH or temperature) through a special programming input. Depending on the output wiring, 2 variants – 2-wire and 3-wire – are available, as both may have serial interface. The probe has a 4-pin M12 circular connector with IP65 mounted and can be optionally equipped with a stainless steel sintered filter for sensor protection. Thanks to its robust stainless steel case, flexible communication potential, and attractive price, the BRHV100 transmitter can be widely used in HVAC and food industry control systems.

TECHNICAL SPECIFICATIONS

Casing material	: Stainless steel
Humidity range	: 0-100% Capacitive sensor
Output	: 0 (4)-20mA or 0-10VDC
Output load	: 800 ohm mA and min 1Mohm V
Temperature sensor:	Pt-100 -10-80C
Interface	: RS232 ASCII cable K9 or K9U
Sensor protection	: plastic cap with stainless mesh
Sintered filter	: stainless steel, 75 um
Mounting	: Free
Wiring	: 4-pin M12 connector type 'C1' (incl. female part)
Dimensions	: case 'S': ø17x120 mm; case 'L': ø17x300 mm
Weight	: max. 200 g (250 g for 'L')
Protection class	: IP65

INSTALLATION

Supply	: 8-36VDC (9 - 40 VDC)
Ambient temp	: -10 to 60°C
Mounting	: Field mount to IP65
Dimension	: Refer to drawing

PERFORMANCE

Accuracy	: ±0.2%(Temp) ±1% (Humidity)
Response time	: 5 sec
EMC	: EN 50081-1, EN 50082-2 73/23/EEC & 89/336/EEC

ORDER INFORMATION

BRHV100-X-X-X-X

TYPE	CASE	INTERFACE	OUTPUT
2 2-wire	S 120mm	X None.	E 0-20mA
3 3-wire	L 300mm	A RS232	F 4-20mA
			K 0-10V
			Z Specify

CONNECTOR	SINTERED FILTER
C1A M12 Angled	X None
C1S M12 Straight	S Sintered filter mounted

CE

PROGRAMMABLE HUMIDITY TRANSMITTER BRHV100 | No. **DS12 :3-E** Issue: **5** 5/05/10