

**On-wall hygrostats and humidity sensors ($\pm 2.0\%$),
electronic, one-step,
with switching outputs**

Electronic hygrostat and humidity sensor **HYGRASREG® AH-40** with one switching output, adjustable switching threshold and display for displaying ACTUAL humidity (accuracy class $\pm 2.0\%$ RH) and for setting the target humidity.

It is suitable for controlling and monitoring the relative air humidity, e.g. in laboratories, production rooms, climatic exposure test cabinets, swimming pools, greenhouses etc., for controlling humidifying and dehumidifying facilities. The measuring transducers are designed for exact detection of humidity. The AH-40 uses a digital, long-term stable sensor as a measuring element for measuring humidity. It is used in dust-free, unpolluted, non-aggressive air.

TECHNICAL DATA

Power supply:	24 V AC ($\pm 20\%$) 15...36 V DC
Power consumption:	< 1.1 VA / 24 V DC < 2.2 VA / 24 V AC
Sensors:	digital humidity sensor , small hysteresis, high long-term stability
Sensor protection:	plastic sinter filter, \varnothing 16 mm, L = 35 mm, exchangeable (optional metal sinter filter, \varnothing 16 mm, L = 32 mm)
Setting range:	5...95 % RH
Output:	potential-free changeover contact (24 V), 1 A ohmic load
Accuracy, humidity:	typically $\pm 2.0\%$ (20...80 % RH) at +25 °C, otherwise $\pm 3.0\%$
Ambient temperature:	storage $-35\ldots+85\text{ °C}$; operation $-30\ldots+75\text{ °C}$, non-precipitating
Long-term stability:	$\pm 1\%$ per year
Housing:	plastic, UV-resistant, material polyamide, 30 % glass-globe reinforced, with quick-locking screws (slotted / Phillips head combination), colour traffic white (similar to RAL 9016), housing cover for display is transparent!
Housing dimensions:	72 x 64 x 43.3 mm (Tyr 1 with display)
Electrical connection:	0.14 - 1.5 mm ² , via terminal screws
Cable connection:	cable gland , plastic (M 16 x 1.5; with strain relief, exchangeable, max. inner diameter 10.4 mm) or M12 connector according to DIN EN 61076-2-101 (optional on request)
Protective tube:	stainless steel V2A (1.4301), \varnothing 16 mm, NL = 55 mm
Prozessanschluss:	by screws
Protection class:	III (according to EN 60730)
Protection type:	IP65 (according to EN 60529) Housing tested, TÜV SÜD, Report No. 713139052 (Tyr 1)
Standards:	CE conformity according to EMC directive 2014 / 30 / EU
Display:	two-line display with illumination , cutout approx. 36 x 15 mm (W x H), for displaying actual humidity and for setting the target humidity
Displaying:	The 1 st line of the display shows the relative humidity . The 2 nd line shows on the left side the information regarding the switching status of the relay (as a circuit), as well as the switching value readout in % RH on the right side (adjustable using the set potentiometer). ○ Circuit, empty = relay in idle state ● Circuit, full = relay energised
FUNCTION	actual humidity < switching value contact 11-12 closed (LED OFF) actual humidity > switching value contact 11-13 closed (LED ON)

AH-40
with display and
metal sinter filter
(optional)



Display
standard

AH-40





S+S REGELTECHNIK

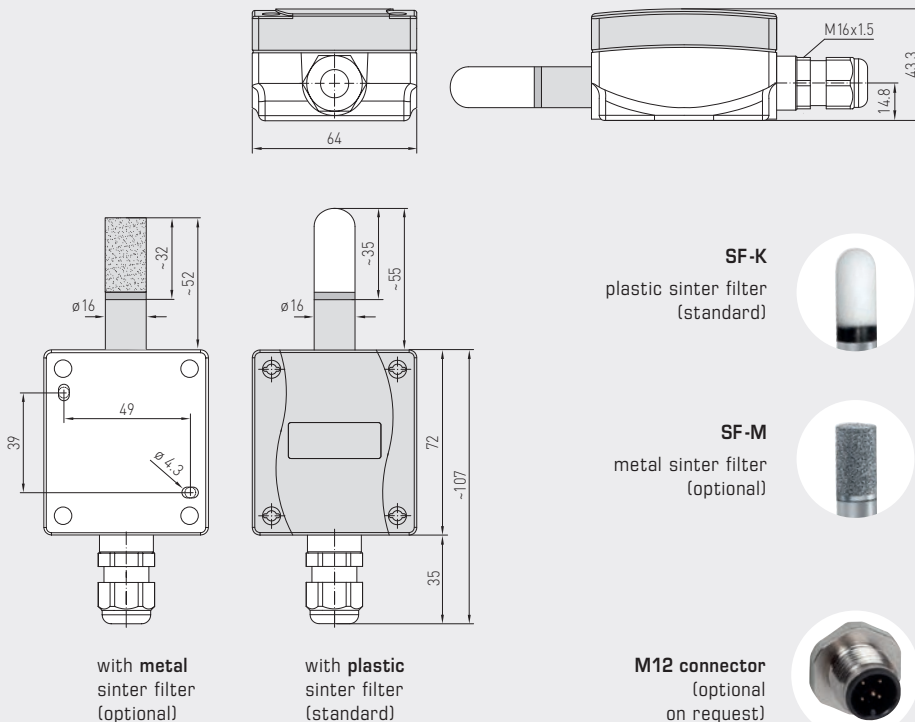
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Dimensional drawing

AH-40

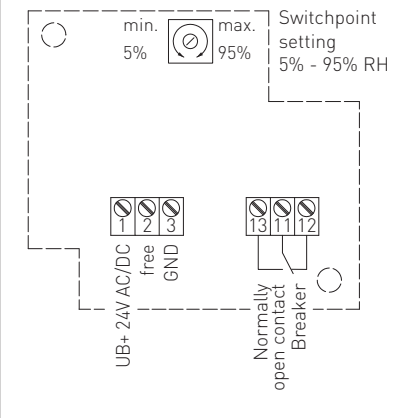


AH-40
with display and
plastic sinter filter
(standard)



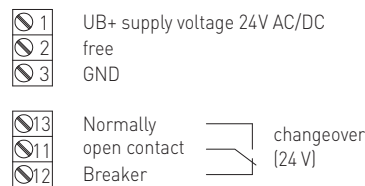
Schematic diagram

AH-40



Connecting diagram

AH-40



HYGRASREG® AH-40 On-wall hygrometers and humidity sensors ($\pm 2.0\%$), Premium

Type / WG01	Setting Range Humidity	Output	Steps	Display	Item No.	Price
AH-40-U						
AH-40W LCD	5...95% RH	1 x Changeover contact	one-step	■	1202-1065-0221-000	194,32 €
Optional:	Cable connection with M12 connector according to DIN EN 61076-2-101					on request

ACCESSORIES

SF-M	Metal sinter filter, \varnothing 16 mm, L = 32 mm, exchangeable stainless steel V4A (1.4404)	7000-0050-2200-100	45,34 €
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