Kjaerulf Pedersen a/s

Sheet No.
1-XX

Humidity, temperature and dewpoint sensor.
4-20mA output.
M12 Connection.

Application:

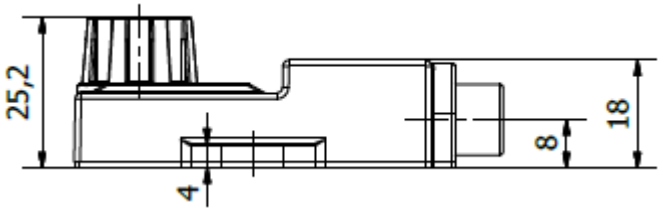
- For measuring Humidity. Dewpoint and Temperature.
- 4-20 mA@13,5-30V supply.
- Selectable output.

Properties:

- Electrical connection: M12 Connector. (degree of protection IP 67)
- Ambient temperature min/max: -40/+80°C
- Withstands vibrations.
- For Harsh environments.
- Extended EMC protection.
- For indoor and outdoor use.

MECHANICAL SPECIFICATIONS:

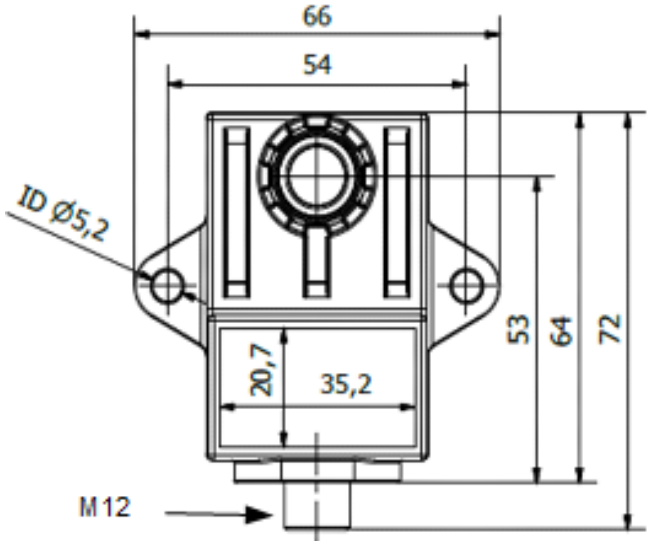
Mounting holes for M5.
Two holes (diameter 5,2mm) with 54mm from centre to centre.
Dimensions:
W,L,H: 40,72,25 mm



ELECTRICAL SPECIFICATIONS:

Supply:
13,5-30 VDC.

Output:
4-20mA, current limited to max 20mA.



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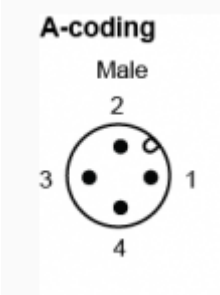
M12 connector coding: “A” .



M12 connector pin-out:
- o Pin 1: Operating voltage
- o Pin 2: Pin 4 output selector, see table below. Internally tied Low.
- o Pin 3: Pin 4 output selector, see table below. Internally tied Low.
- o Pin 4: Signal output 4…20 mA. Output value, see table below

PIN 2	PIN 3	Output value on PIN 4
Low	Low	0 – 100% Rh
High	Low	Temperature -40 - +80°C
Low	High	Dew point -20 - +80°C.
High	High	3,5mA out

Accuracy:
Burden: 50 Ohm

Measuring accuracy at 23-25 °C and 20 - 28 VDC:

Humidity:
0…90 % Rh: +/- 3,5 % Rh
90…100 % Rh: +/- 5,0 % Rh

Temperature:
±2°C.

Dewpoint:
±1°C.

Yearly drift: <= 0,5 % Rh per year

ENVIRONMENTAL:
Temperatures:
Ambient Temperature: -40°C to 80°C.
Protection degree according to EN 60529: >= IP65

EMC:
Emission: Industrial, EN 61000-6-4
Immunity: Industrial, EN 61000-6-2

Vibration:
Random 5g 50Hz – 1kHz. EN 60068-2-34
Shock 30g EN 60068-2-27

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