GIEBEL SENSE Analog
(prototype)

Ventilation dryers are indispensable to prevent the occurrence of condensation water damage. However, the effective and predictive maintenance of these filters is only possible if the monitoring of the filter loading is signaled in such a way that the filter change does not cause any unplanned downtime.

The GS24-A monitors the loading status of the filter. The saturation levels are output via an analog signal.

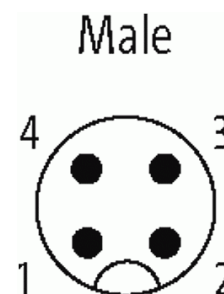| |
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| Continuous saturation monitoring of the adsorber |
| 4 fixed switching outputs for 0% / 50% / 75% / 100% Loading |
| Analog signal (4-20ma) |
| Error corrections for unusual deployment changes |
| Easy to mount, to any adsorber |

Function of GIEBEL Sense

The desiccant reduces the relative humidity in its ambient air and does so independently of the temperature. The more the gel is loaded, the less water it can remove from the air. The air surrounding the desiccant has a certain amount of %RH that correlates with the saturation state of the desiccant. This is how the sensor can measure the level of saturation of the Adsorber.

Technical data

Temperature	-40°C to +70°C
Housing	PA
Size	60 x 74 x 33 mm
Weight	200 g
Input variable	Humidity 0-100% rF
Operating voltage	24V DC
Protection class	IP 67
Output	4-20ma analog signal

Module plug pinout

Model	GS A
Plug	M12 a-coding, 4-pin
Pin 1	+24 V DC (brown)
Pin 2	4-20ma (white)
Pin 3	GND (blue)
Pin 4	--- none --- (black)

Male

Sensor output (4-20ma analog on pin 2)

Description	Values
Sensor output Adsorber saturation	~4.4ma (= INITIALIZING) ~5.6ma (= OK, 0-49%) ~7.4ma (= MEDIUM, 50-74%) ~9.2ma (= WARNING, 75-99%) ~11,0ma (= FULL, 100%)

Sensor readings every minute.

On startup, the sensor goes into setup state, where the first value of saturation is being measured. This takes about 5-7mins, then the current saturation level is sent on the output according to the description above.