

**Duct air flow sensor or measuring transducer for flow velocity, volume flow and temperature, incl. mounting flange, calibratable, Modbus connector**

Calibratable duct air flow sensor **RHEASGARD® KLGF-Modbus** with Modbus connector, housing made of impact-resistant plastic with quick-locking screws, with cable gland (optional M12-connector as per DIN EN 61076-2-101) optionally with / without display, to determine the flow velocity (0.1...20 m/s).

Calibratable duct air flow sensor **RHEASGARD® KLGFVT-Modbus** with Modbus connector, housing made of impact-resistant plastic with quick-locking screws, with cable gland (optional M12-connector as per DIN EN 61076-2-101) optionally with/ without display, to determine the flow velocity (0.1...20 m/s) and temperature (0...+50 °C).

The following parameters can be retrieved from the Modbus:  
flow velocity, volume flow (calculated) and temperature.

The flow sensors are suitable for monitoring or controlling airflows in ducts, at fans and dampers, for flow-dependent monitoring of humidifiers and electric heating registers according to DIN 57100, Sect. 420, or for use in connection with DDC systems.

Innovative Modbus sensor with galvanically separated RS485 Modbus interface, selectable bus termination resistance, DIP switch for setting the bus parameters and bus address in current-free state, internal LEDs for telegram status display, two separate push-in terminals and large three-line display (illuminated; with customised programming in the 7-segment and dot-matrix range). The sensor is factory-calibrated.

#### TECHNICAL DATA

Power supply:	24 V AC / DC (± 10 %)
Current consumption:	approx. 4 VA
Data points:	Flow velocity [m/s], volume flow [m³/h], temperature [°C]

#### AIR FLOW

Sensor:	Calorimetric, temperature compensated, sensor breakage protection, with manual zero-point calibration (via button)
Measuring range:	0.1...20 m/s
Accuracy:	0.5 m/s + 3 % measured value
Long-term stability:	± 0.5 % final value per year
Reproducibility:	± 1.0 % final value
Warm-up time:	< 2 min
Response time:	< 60 s
Start-up override:	0...120 s (can be set via Modbus)

#### TEMPERATURE KLGF(V)T

Sensor:	NTC 10k
Measuring range:	0...+50 °C
Accuracy:	typical ± 0.5 K at +25 °C
Bus protocol:	Modbus (RTU mode), address range 0... <b>247</b> selectable
Signal filtering:	0...30 values

Protective tube: **PLEUROFORM™**, material polyamide (PA6), with torsion protection, Ø 20mm, NL = 221 mm,  $v_{max} = 30$  m/s (air), **stainless steel V2A** (1.4301), Ø 16 mm available upon request as an option

Housing: Plastic, UV-resistant, polyamide material, 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: 126 x 90 x 50 mm (Tyr 2)

Cable connection: **Cable gland** made of plastic (M 16 x 1.5; with strain relief, replaceable, max. inner diameter 10.4 mm), optionally with **M12 connector** as per DIN EN 61076-2-101

Electrical connection: 0.2 - 1.5 mm², via push-in terminal

Process connection: by means of plastic mounting flange (included in the scope of delivery)

Ambient temperature: Storage -20...+50 °C; operation 0...+50 °C

Medium temperature: 0...+70 °C

Permitted humidity: < 98 % RH, non-precipitating air free of harmful substances

Protection class: III (as per EN 60730)

Protection type: **IP 65** (as per EN 60529) housing; IP20 sensor technology

Standards: CE conformity according to EMC Directive 2014 / 30 / EU, according to EN 61326-1, according to EN 61326-2-3

Optional: **Display with illumination**, three-line, cutout approx. 70 x 40 mm (W x H), to display the flow velocity, volume flow and temperature (cyclical) or a selectable parameter (static)

#### ACCESSORIES

see last chapter

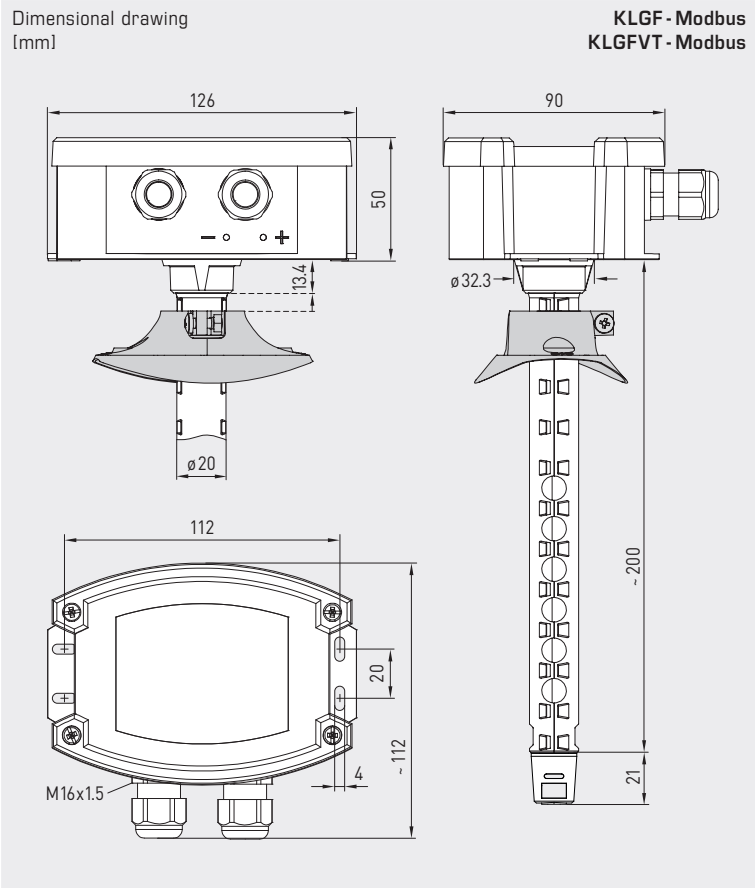


**NEW**

S+S REGELTECHNIK

# RHEASGARD® KLGf-Modbus RHEASGARD® KLGfVt-Modbus

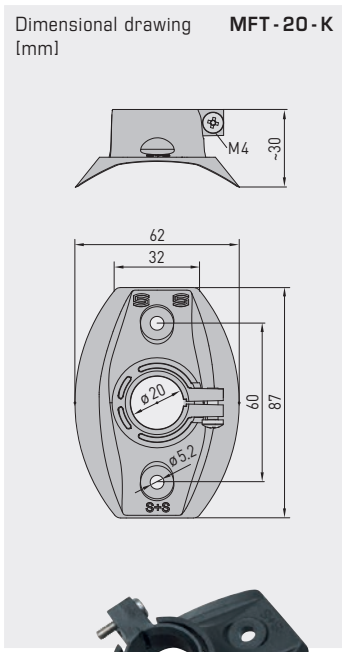
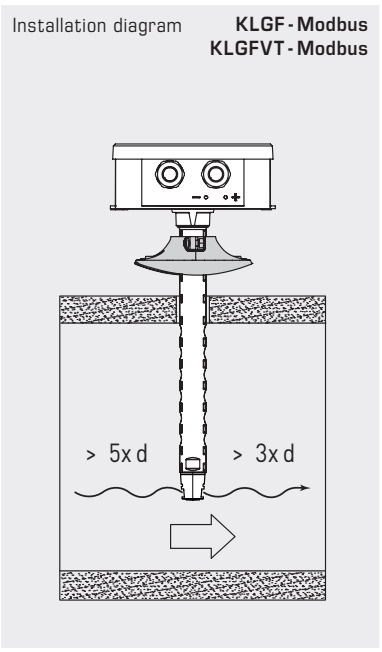
Duct air flow sensor or measuring transducer for flow velocity, volume flow and temperature, incl. mounting flange, calibratable, Modbus connector



**KLGF - Modbus  
KLGfVt - Modbus**



**KLGF - Modbus  
with display**



**MFT - 20 - K**  
Mounting flange  
made of plastic



**KLGfVt - Modbus  
with display**

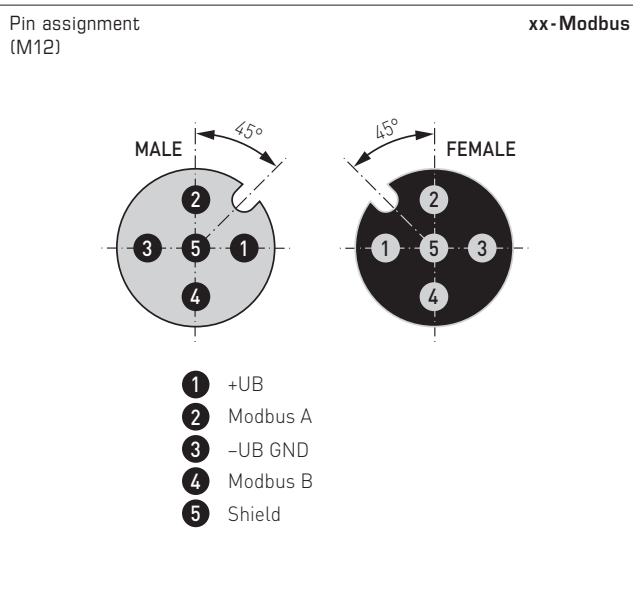
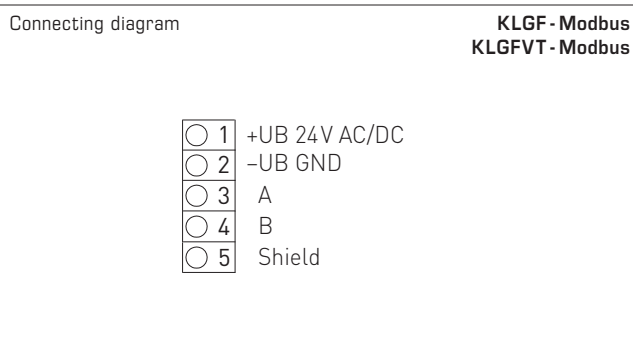
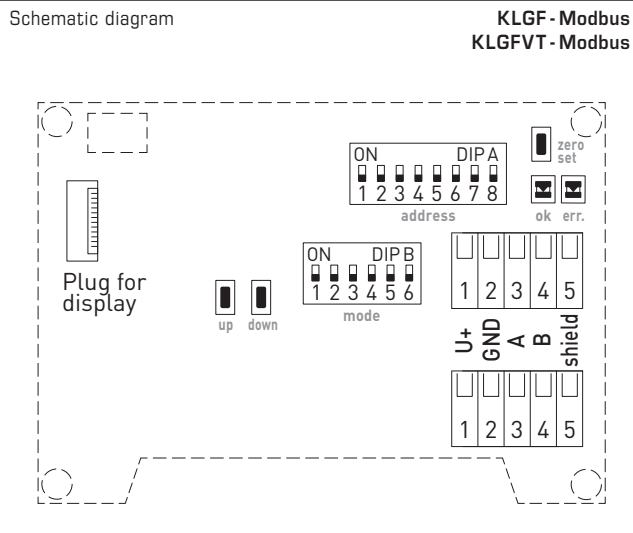
RHEASGARD® **KLGF-Modbus**  
 RHEASGARD® **KLGFVT-Modbus**

Duct air flow sensor or measuring transducer for  
 flow velocity, volume flow and temperature,  
 incl. mounting flange, calibratable, Modbus connector

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# RHEASGARD® KLGf-Modbus RHEASGARD® KLGfVt-Modbus

Duct air flow sensor or measuring transducer for flow velocity, volume flow and temperature, incl. mounting flange, calibratable, Modbus connector

KLGfVt-Modbus  
with display

KLGf-Modbus  
with display



## RHEASGARD® KLGf-Modbus KLGfVt-Modbus

Duct air flow sensor or measuring transducer, *Deluxe*  
Duct air flow sensor or measuring transducer  
for flow velocity, volume flow and temperature, *Deluxe*

Type / WG01	Measuring ranges			Output	Item no.	Price
	Flow velocity	Volume flow	Temperature			
<b>KLGf-Modbus</b>						
KLGf-Modbus	0,1...20 m/s	–	–	Modbus	1701-4216-0101-000	292,00 €
KLGf-Modbus <b>LCD</b>	0,1...20 m/s	–	–	Modbus	■ 1701-4216-1101-000	354,00 €
<b>KLGfVt-Modbus</b>						
KLGfVt-Modbus	0,1...20 m/s	0...200.000 m³/h	0...+50 °C	Modbus	1701-4216-0401-000	309,00 €
KLGfVt-Modbus <b>LCD</b>	0,1...20 m/s	0...200.000 m³/h	0...+50 °C	Modbus	■ 1701-4216-1401-000	378,00 €
Optional:	Cable connection with <b>M12 connector</b> as per DIN EN 61076-2-101				on request	
<b>ACCESSORIES</b>						
<b>KA2-Modbus</b>	<b>Communication adapter</b> (USB/RS485) for system connection				1906-1200-0000-100	213,99 €
<b>LA-Modbus</b>	<b>Line termination device</b> (with terminating resistor) as an active bus termination				1906-1300-0000-100	79,81 €
<b>MFT-20-K</b>	<b>Mounting flange</b> , plastic (included in the scope of delivery)				7000-0031-0000-000	9,56 €

For further information see last chapter!

