

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 according to 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 according to 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). The sensor is factory-calibrated.

Protective tube (NL) **120 mm**



Protective tube (NL) **220 mm**



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 + max. ± 3% of final value (22°C, 50% RH, 1013 mbar)
Long-term stability:	± 0.5 % final value per year
Reproducibility:	± 1.0 % final value
Warm-up time:	< 2 min
Response time:	< 5 s
Start-up override:	0...120 s (adjustable via potentiometer)
Medium:	non-precipitating air free of harmful substances, without below- and/or above-pressure
Medium temperature:	0...+70 °C
TEMPERATURE KLGF(V)T	
Sensor:	NTC 10k
Measuring range:	0...+50 °C
Accuracy:	typical ± 0.5 K at +25 °C
Communication:	Modbus (RTU cable)
Bus interface:	RS 485, galvanically isolated
Baud rate:	9600, 19200, 38400 Baud
Bus protocol:	Modbus (RTU mode), address range 0... 247 selectable
Signal filtering:	0...30 values
Protective tube:	PLEUROFORM™ , material polyamide (PA6), with torsion protection, Ø 20 mm, NL = 120 mm / 220 mm, v _{max} = 30 m/s (air), optional on request made of stainless steel V2A (1.4301), Ø 16 mm
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 according to 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
Permitted humidity:	< 98 % RH, non-precipitating air
Protection class:	III (according to EN 60 730)
Protection type:	IP 65 (according to EN 60 529) housing; IP20 sensor technology
Standards:	CE conformity according to EMC Directive 2014 / 30 / EU
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

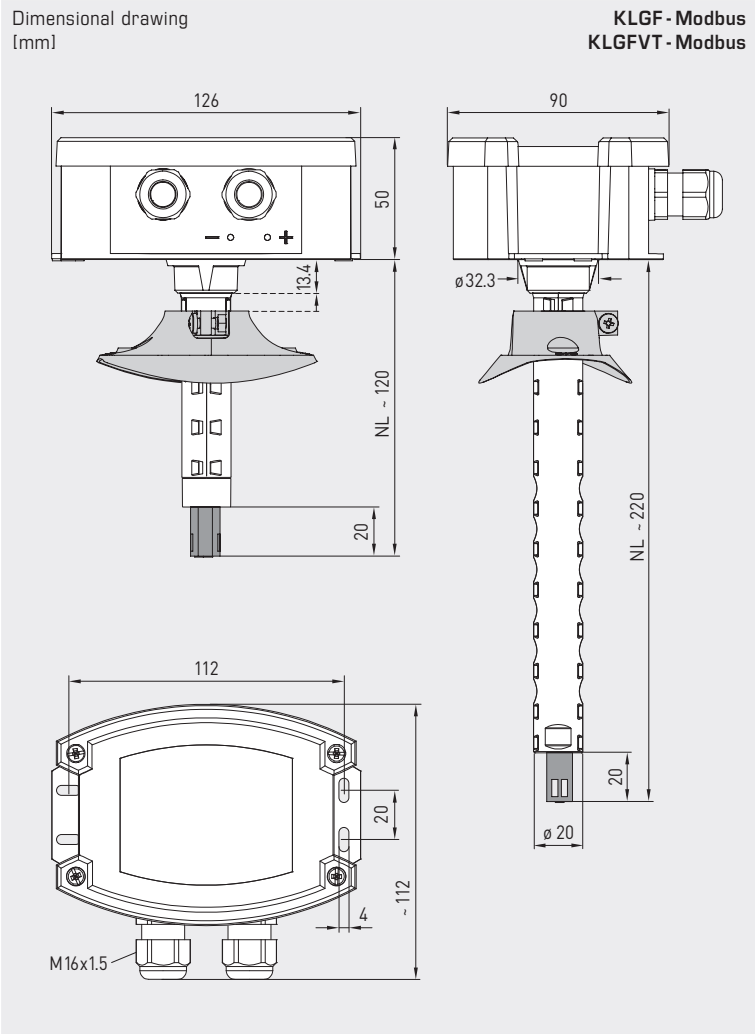


NEW

S+S REGELTECHNIK

RHEASGARD® KLGF-Modbus RHEASGARD® KLGFTV-Modbus

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



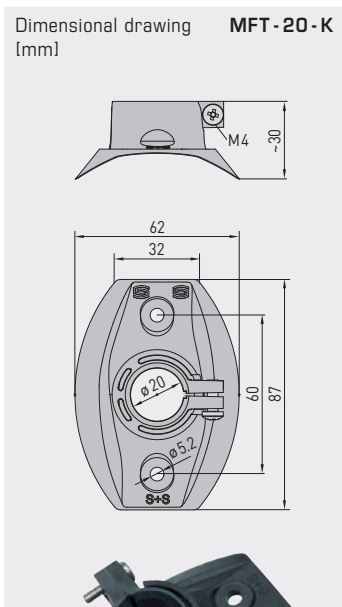
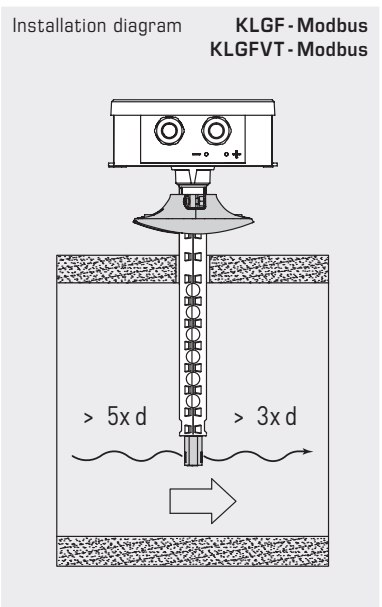
**KLGF - Modbus
KLGFTV - Modbus**



**KLGF - Modbus
with display**



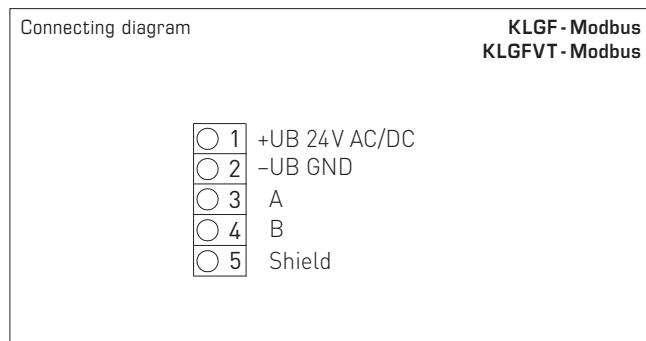
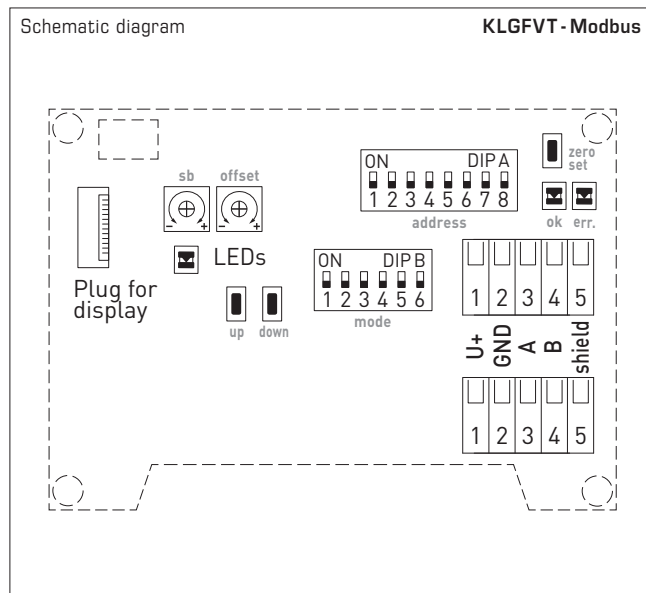
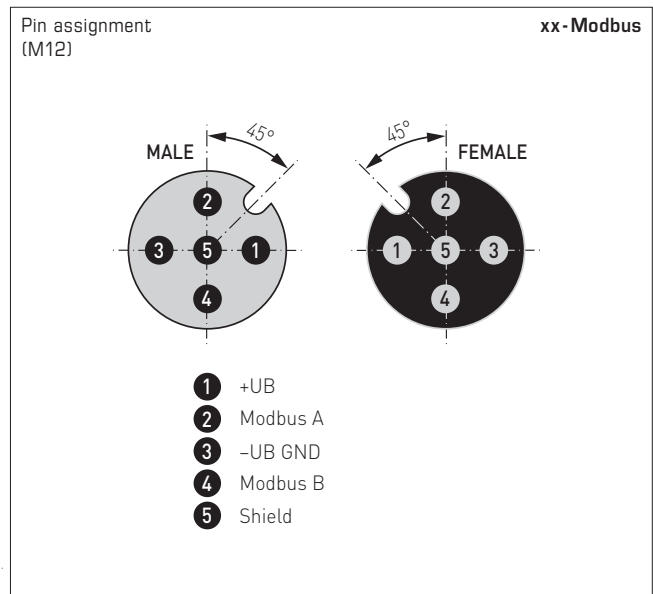
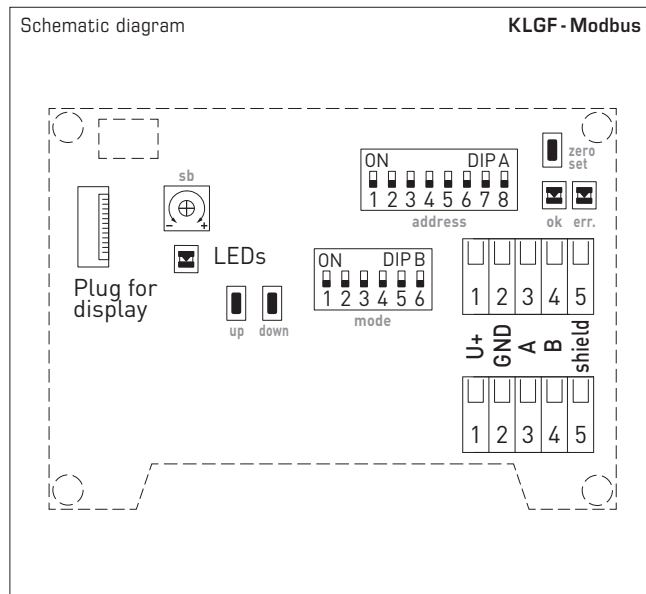
**KLGFTV - Modbus
with display**



MFT - 20 - K
Mounting flange
made of plastic



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



Protective tube (NL) 120 mm

Protective tube (NL) 220 mm





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

KLGFVT-Modbus
with display



KLGF-Modbus
with display



KLGF-Modbus
KLGFVT-Modbus



RHEASGARD®
KLGF-Modbus Duct air flow sensor or measuring transducer, *Deluxe*
KLGFVT-Modbus Duct air flow sensor or measuring transducer for flow velocity, volume flow and temperature, *Deluxe*

Type / WG01	Measuring ranges			Output	Display (NL)	Item no.	Price
	Flow velocity	Volume flow	Temperature				
KLGF-Modbus							
KLGF-Modbus 120mm	0.1...20 m/s	–	–	Modbus	120 mm	1701-4216-0102-000	338,73 €
KLGF-Modbus LCD 120mm	0.1...20 m/s	–	–	Modbus	120 mm	1701-4216-1102-000	407,13 €
KLGF-Modbus	0.1...20 m/s	–	–	Modbus	220 mm	1701-4216-0101-000	322,17 €
KLGF-Modbus LCD	0.1...20 m/s	–	–	Modbus	220 mm	■ 1701-4216-1101-000	390,58 €
KLGFVT-Modbus							
KLGFVT-Modbus	0.1...20 m/s	0...200 000 m³/h	0...+50 °C	Modbus	220 mm	1701-4216-0401-000	351,16 €
KLGFVT-Modbus LCD	0.1...20 m/s	0...200 000 m³/h	0...+50 °C	Modbus	220 mm	■ 1701-4216-1401-000	417,06 €
Optional:	Cable connection with M12 connector according to DIN EN 61076-2-101					on request	
ACCESSORIES							
KA2-Modbus	Communication adapter (USB/RS485) for system connection					1906-1200-0000-100	236,11 €
LA-Modbus	Line termination device (with terminating resistor) as an active bus termination					1906-1300-0000-100	88,05 €
MFT-20-K	Mounting flange , plastic (included in the scope of delivery)					7000-0031-0000-000	10,55 €
For further information see last chapter!							