

Duct air flow sensors / air flow monitors,
incl. mounting flange, electronic,
with active / switching output

Electronic duct air flow sensor **RHEASGARD® KLGF** with active output, housing made of impact-resistant plastic with quick-locking screws, with cable gland, with/without display, to determine the flow velocity (0.1...20 m/s). The measuring transducer converts the measurement signal into a standard signal of 0 - 10 V.

Electronic duct air flow sensor/monitor **RHEASGARD® KLGF** (without display) and **KLGFVT** (with display) with active and switching output, housing made of impact-resistant plastic with quick-locking screws, with cable gland, to determine the flow velocity (0.1...20 m/s) and temperature (0...+50 °C). For device type **KLGFVT**, the calculated volume flow parameter can be retrieved as an alternative to the flow (configurable on the display). The measuring transducer automatically detects the required output type and converts the measurands into the required standard signal of 0 - 10 V or 4...20 mA (**Automatic Output Switching**).

Electronic duct airflow monitor **RHEASREG® KLSW** with switching output, housing made of impact-resistant plastic with quick-locking screws, with cable gland, with/without display, to determine the flow velocity (0.1...20 m/s).

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.

TECHNICAL DATA

Power supply:	24 V AC / DC (± 10 %) (KLSW-W24, KLGFxx) 230V AC, 50 Hz (KLSW-W230)
Current consumption:	approx. 3VA (KLGF, KLSW-W24, KLSW-W230) approx. 4VA (KLGF, KLGFVT)
Data points:	flow velocity [m/s], volume flow [m³/h], temperature [°C]
Outputs:	KLGF 1x 0-10V (U variant) KLGF(V)T 2x 0-10V/4...20mA (via Automatic Output Switching – the unit recognises the required output type and automatically switches to U or I output); changeover contact 24V (max. 5A, cos φ = 1.0), switching hysteresis 2% final value, threshold can be adjusted via potentiometer KLSW-W24 changeover contact 24V (max. 5A, cos φ = 1.0), switching hysteresis 2% final value, threshold can be adjusted via potentiometer KLSW-W230 changeover contact 230V AC (max. 5A, cos φ = 1.0), switching hysteresis 2% final value, threshold can be adjusted via potentiometer

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 / 60 s (KLGF/KLSW without display), can be activated via DIP switch 0...120 s (KLGF/KLSW with display, KLGFVT/KLGFVT), can be adjusted via potentiometer

TEMPERATURE **KLGF(V)T**

Sensor:	NTC 10k
Measuring range:	0...+50 °C
Accuracy:	typical ± 0.5K at +25 °C
Protective tube:	PLEUROFORM™ , material polyamide (PA6), with torsion protection, Ø 20mm, NL = 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 , plastic (M16 x 1.5; with strain relief, exchangeable, max. inner diameter 10.4 mm)
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:	II (according to EN 60 730) with UB = 230 V (KLSW-W230) III (according to EN 60 730) with UB = 24 V (KLSW-W24, KLGFxx)
Protection type:	IP 65 (according to EN 60 529) housing; IP 20 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



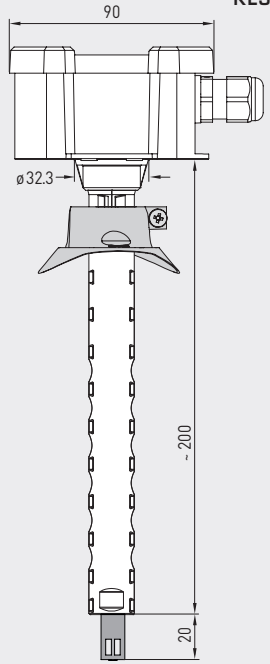
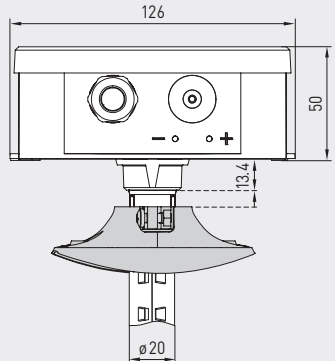
NEW

S+S REGELTECHNIK

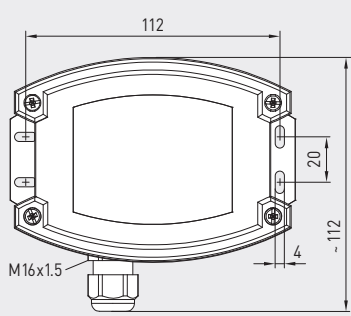
RHEASGARD® **KLGF xx**
RHEASREG® **KLSW xx**

Duct air flow sensors / air flow monitors,
incl. mounting flange, electronic,
with active / switching output

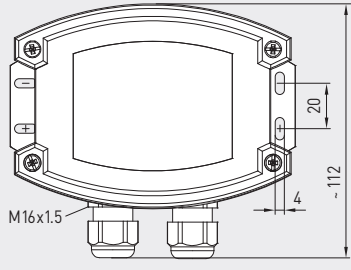
Dimensional drawing
[mm]



KLGF xx
KLSW xx

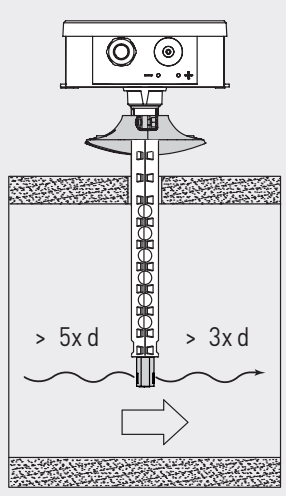


KLSW-W230



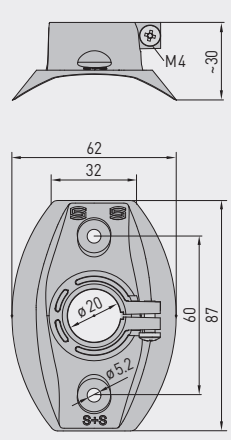
Installation diagram

KLGF xx
KLSW xx



Dimensional drawing

MFT-20-K
[mm]



MFT-20-K
Mounting flange
made of plastic



KLGF xx
KLSW xx
without display



KLSW-W230
without display



KLSW / KLGF
with display

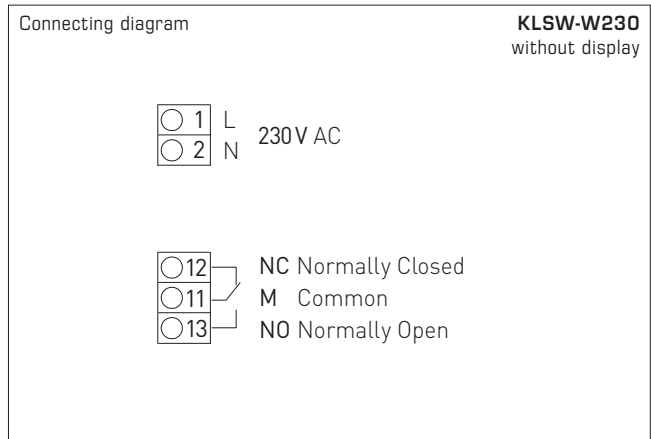
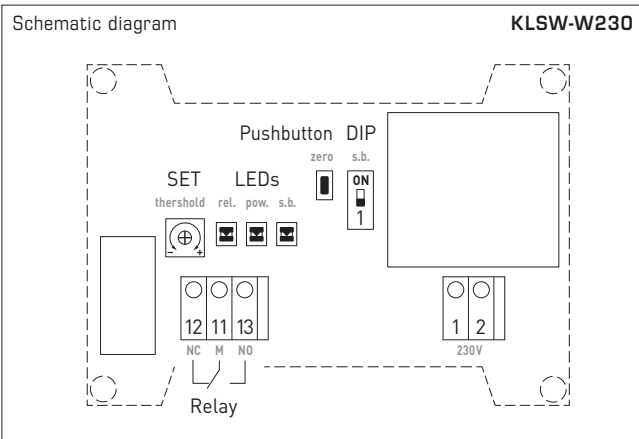
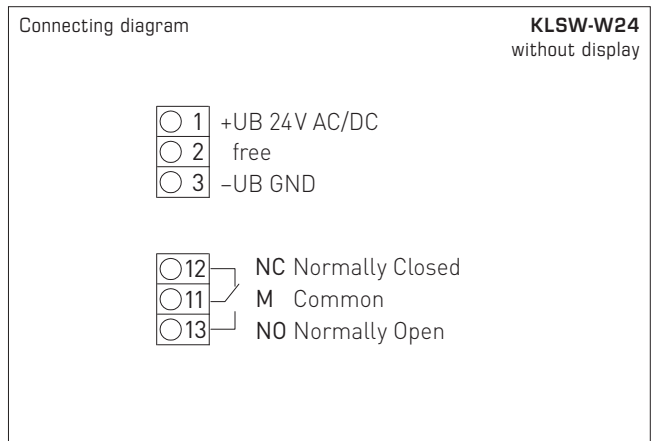
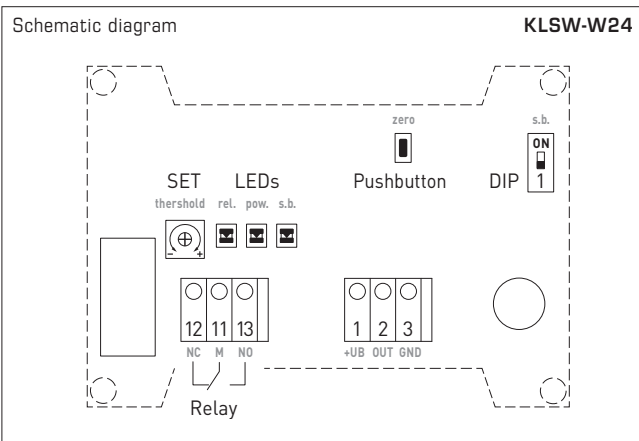
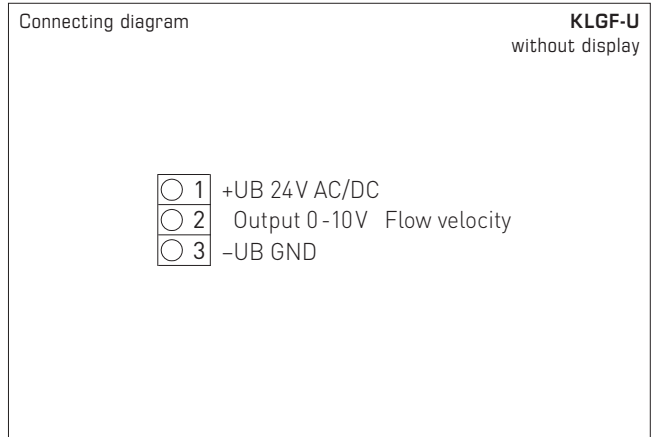
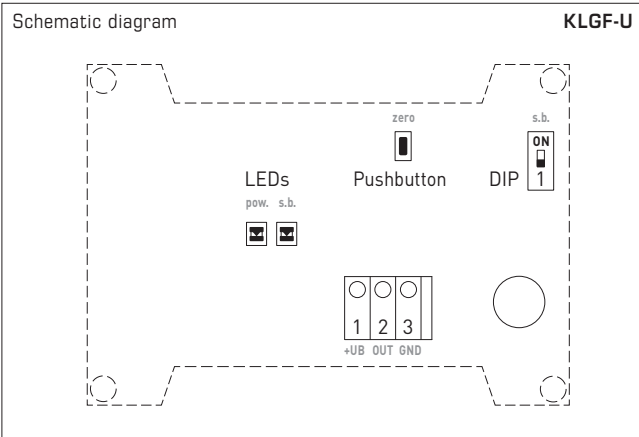


KLGFVT
with display

Automatic detection and switching
to standard signal 0...10V or 4...20mA

AOS-PATENTED
AUTOMATIC OUTPUT SWITCHING

Duct air flow sensors / air flow monitors,
incl. mounting flange, electronic,
with active / switching output



KLSW-W230
with changeover contact,
UB = 230 V

KLSW-W24
with changeover contact,
UB = 24 V

KLGF-U
with output 0-10V,
UB = 24 V



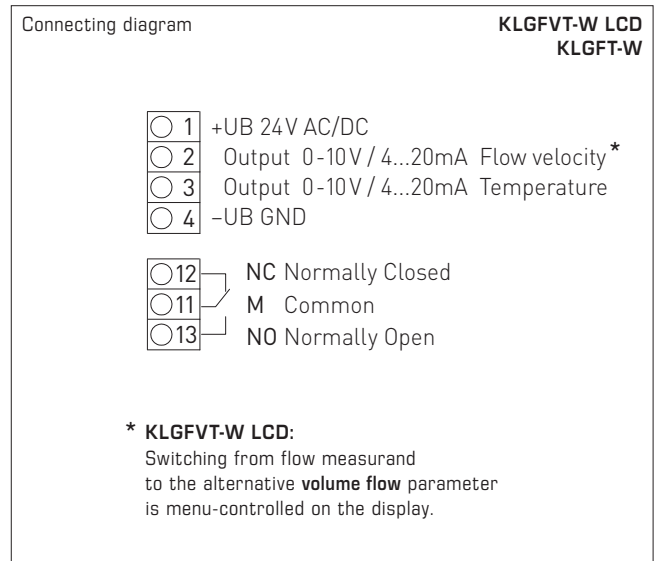
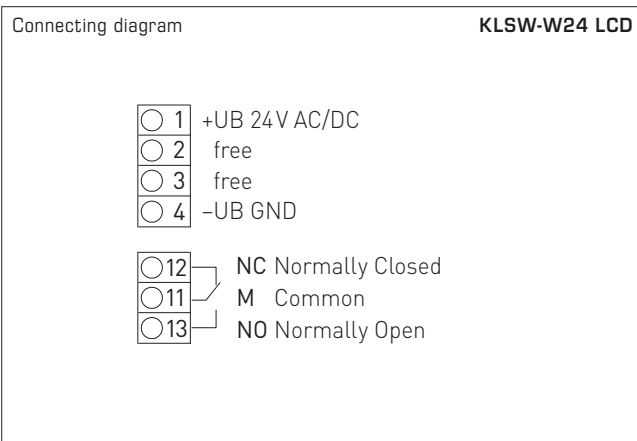
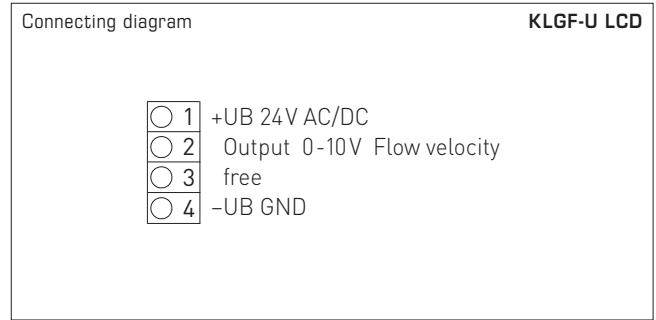
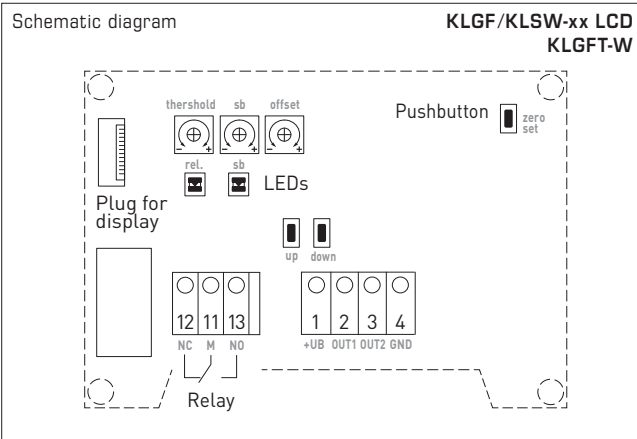


NEW

S+S REGELTECHNIK

RHEASGARD® **KLGF xx**
RHEASREG® **KLSWxx**

Duct air flow sensors / air flow monitors,
incl. mounting flange, electronic,
with active / switching output



RHEASGARD® **KLGF** Duct air flow sensor, electronic, with active output
 RHEASGARD® **KLGF(V)T** Duct air flow sensor, electronic, with active and switching output
 RHEASREG® **KLSW** Duct air flow monitor, electronic, with switching output

Type / WG01	Power supply	Output active	Output switching	other Parameters	Display	Item no.	Price
KLGF		U-Variante					
KLGF-U	24V AC / DC	1x 0-10V	-	-		1701-4111-0101-000	236,25 €
KLGF-U LCD	24V AC / DC	1x 0-10V	-	-	■	1701-4111-1101-000	297,15 €
Optional:	Cable connection with M12 connector as per DIN EN 61076-2-101					on request	
KLGF(V)T		AOS					
KLGF-T-W	24V AC / DC	2x 0-10V / 4...20mA	1 changeover contact	T		1701-4118-0201-001	299,25 €
KLGFVT-W LCD	24V AC / DC	2x 0-10V / 4...20mA	1 changeover contact	T V	■	1701-4118-1401-001	368,55 €
KLSW-W24							
KLSW-W24	24V AC / DC	-	1 changeover contact	-		1701-4113-0101-001	206,85 €
KLSW-W24 LCD	24V AC / DC	-	1 changeover contact	-	■	1701-4113-1101-001	257,25 €
KLSW-W230							
KLSW-W230	230V AC	-	1 changeover contact	-		1701-4133-0101-001	208,43 €

Note: **Changeover contact** with automatic reset (relay opens automatically when value falls below the threshold again)
AOS (Automatic Output Switching) = patented analogue interface (patent no. DE 10 2015 015 941 B4), the unit automatically detects the required output type 0 - 10 V or 4...20 mA
T = temperature (0...+50 °C) – additional measurand
V = volume flow (0...200,000 m³/h) – alternative parameter, can be configured via display!