


## E-MEFS-KT

### Calorimetric Flow Sensor for Gases

### S-MEFS-KT

#### ● Characteristics

1 - MODULAR - ECONOMIC - METER

	- Input:	0...10 m/s up to 0...30 m/s
	- Output:	4...20 mA
	- Supply:	24 VDC VDC
	- Accuracy:	see technical data
	- Process connection:	several options
	- Electrical connection:	several plugs
	- Temperature range:	0...+60 °C (ambient)
	- Limit value contacts:	without
	- Adjustment:	in factory
	- Material sensor:	see technical data
	- Protection:	at least IP65

#### ● Technical Data

##### Input

Flow: 10 m/s / 20 m/s / 30 m/s  
 Reference conditions: 20 °C, 1013 hPa  
 Medium: Air, non-corrosive gases  
 Measuring principle: Calorimetric

##### Output

Current signal: 4...20 mA  
 Load: 500 Ω maximum

##### Performance

Sensor unit: Measurement uncertainty: ±5% of final value, dependent on construction (within range 10...100%)  
 Reference section: 10x Ø for inflow and outflow  
 Repeating accuracy: ±2  
 Reaction time: approx. 2 s  
 Dependence on temperature: ±0,01% / 1K  
 Transient response: linear to flow velocity

#### ● Applications

For use in air-conditioning and ventilating plants, heating installations and the whole range of industrial facilities. With its numerous electrical connections, the flow sensor is also suitable for applications with higher requirements.



Erich Westendarp@pixelio.de



Dirk Schadow@pixelio.de

# E-MEFS-KT

## ● Technical Data (Continued)

### Supply

Voltage: 24 VDC,  $\pm 10\%$

### Environmental Conditions

Temperature: Operating range: 0...+60 °C  
 Storage: -20...+80 °C  
 Medium: -20...+70 °C

Condensation: uncritical

### Mechanics

Dimensions: see page 3  
 Process connection: without / 1/2" / 3/4" / 1" / 1,5" / 1/2NPT  
 Fitting, Nominal length: 80...400 mm  
 System pressure: 10 bar with screwed connection  
 Electrical connection: see page 3









Material:

Sensor:	Process connection:	stainless steel
	Sensor tube:	stainless steel
	Sensor element:	Al <sub>2</sub> O <sub>3</sub> with glassivation
	Sensor retainer:	FKM
	Potting:	epoxy resin
	Body:	PBT GF30
	all parts:	

Weight: approx. 170 g (1/2", 100 mm, M12)  
 Fitting position: any  
 Protection class: Sensor: IP67  
 Electronics: at least degree IP65 (when electrical connection is plugged)

## E-MEFS-KT

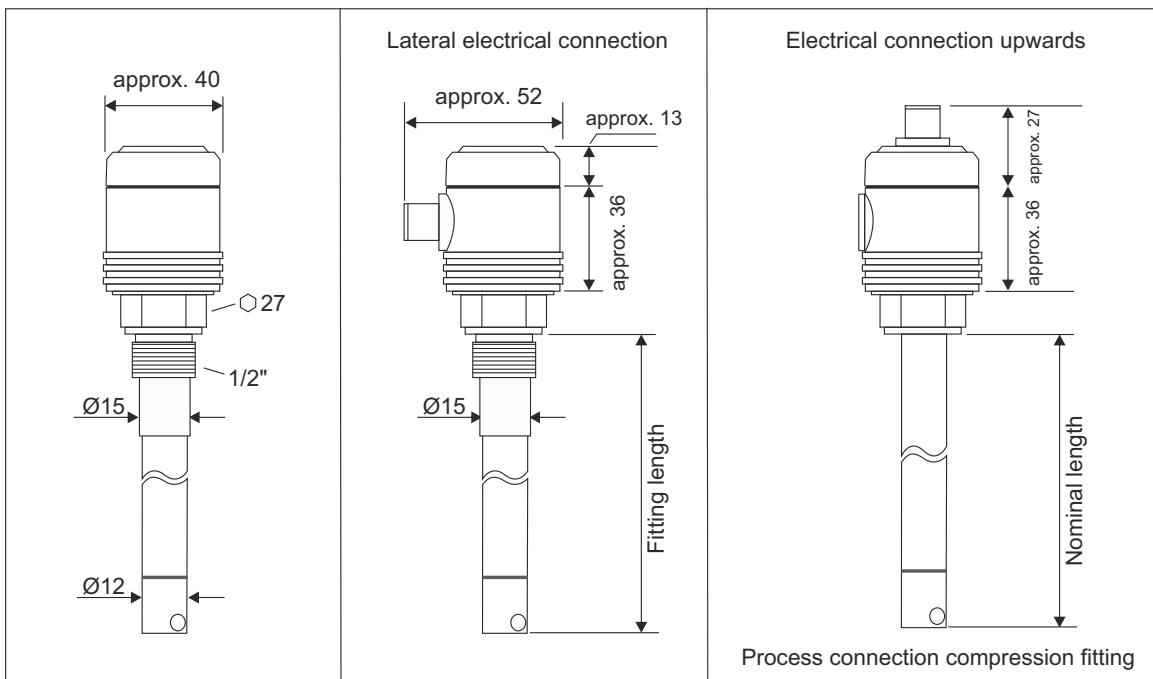
### ● Electrical Connection

M12x1	Super Seal	Deutsch	Deutsch	Bayonet	Valve	MIL	Cable
							
5-, 8-pole	3-pole	3-pole	4-pole	4-pole	4-pole	6-pole	4-pole

Connection	Supply		Out	Programming
	U+	U-	+	
M12, 5-pole	1	3	2	5
M12, 8-pole	1	3	6	
Super Seal, 3-pole*	1	3	2	
Deutsch DT04, 3-pole*	A	B	C	4
Deutsch DT04, 4-pole	1	3	2	4
Bayonet DIN, 4-pole	1	2	3	GND
Valve (L-plug), 4-pole	1	2	3	
Cable, 4-pole	yellow	white	green	
Cable, 6-pole	yellow	white	pink	
MIL, 6-pole	A	C	F	

\* When using 3-pole connectors it is not possible to change the measuring range after assembling of the sensor.

### ● Dimensions (in mm)



# E-MEFS-KT

● **Order Code**

		O	J	X	X	X	X	X	-	X	-	X	X
<b>Input flow:</b>	0...10 m/s	0											
	0...20 m/s	1											
	0...30 m/s	2											
<b>Output:</b>	4...20 mA		1										
<b>Process connection:</b>	Without (for compression fitting)	0											
	1/2"	3											
	3/4"	4											
	1"	5											
	1,5"	6											
	1/2"NPT	9											
<b>Electrical connection:</b>	Lateral (standard)	0											
	Upwards	1											
<b>Electr. connection:</b>	M12, 5-pole		2										
	M12, 8-pole		3										
	Deutsch DT04, 3-pole		4										
	Deutsch DT04, 4-pole		5										
	Super Seal 1.5, 3-pole		6										
	Bayonet (DIN), 4-pole		7										
	Valve plug, 4-pole		8										
MIL, 6-pole		A											
<b>Nominal, Fitting length:</b>	100 mm											100	
	150 mm											150	
	200 mm											200	
	250 mm											250	
	300 mm											300	
	350 mm											350	
	400 mm											400	
Other length (please specify, at least 80 mm)											Y		
<b>Configuration:</b>	Factory set											0	
<b>Special model:</b>	Non												0
	Yes (to specify)												1

Accessories: Compression fitting G1/2"