

**GENERAL CHARACTERISTICS**

The EFKS... Flow Switch are compact screw-in submersible probes which incorporate the temperature sensors and the heater. They are intended for operation only with the appropriate EEFK... External Evaluation Units and are employed where application of sensors in the compact range would not be practicable (e.g. no access required or possible). The sensors are available with various lengths and thread connections.

- \* mounting largely independent of pipe diameter
- \* no moving parts in the medium being monitored
- \* mounting largely independent of pipe diameter

Male thread G1/4A bis G1/2A stainless steel



EFKS



EEFK

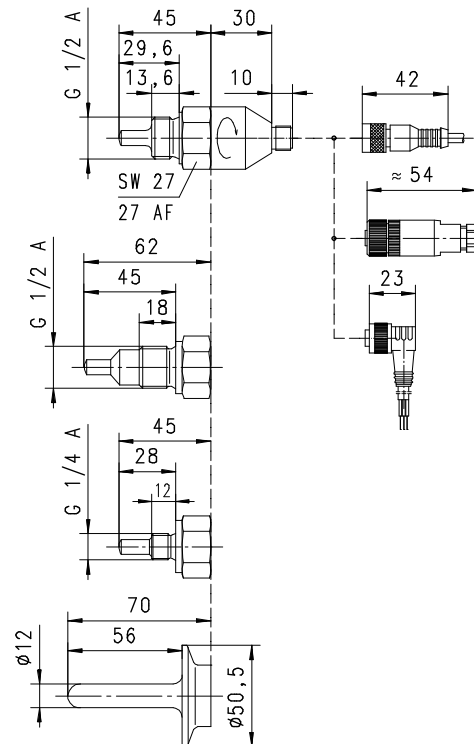
**TECHNICAL DATA**

operating ranges	water <b>20-50 cm/s</b> (1-150) oil (on request) standard values shown bold
operating pressure	max. 100 bar, option 200 bar foodstuffs sensor 60bar
operating temperature	15..70°C (other temperature on request)
temperature gradient	4°C/s
weight	0.12 kg EFKS 0.35 kg EEFK

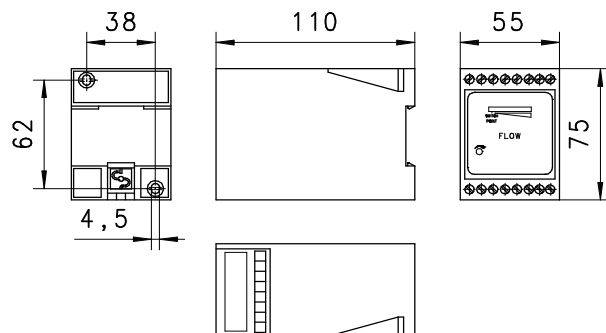
**MOUNTING**

If you would like to exploit the highest possible sensor sensitivity (for particularly low flow rates or for use in gases), orientate the cross on hexagonal body of probe(liquids) or the red dot (gases) into a position against flow direction ( flow meets cross or dot). See also the general description on calorimetric sensors.

EFKS



EEFK



**MATERIALS**

medium contact	stainless steel 1.4571
other	stainless steel 1.4305
electronic housing	polycarbonate / ABS / makrolon

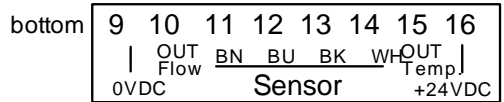
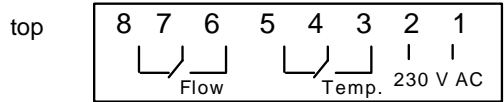
**ELEKTRISCHE DATEN**

display	red/green LED (red < limit value,
setting potentiometer	single-threaded
supply voltage	24 V DC ±20% / 70mA for unloaded output 230 VA / 7 VA
signal flow	PNP or NPN / 200mA add. change over contacts 230V AC 5A (only for 230 VDC types)
signal Temp. temperature (EEFKT)	PNP or NPN / 200mA add. change over contacts 230V AC 5A (only for 230VDC types)
housing mounting	floor mounting or clip fastening on mounting rails (DIN EN 50 022)
connection EFKS	at locking plug M12x1, 4-pole
connection EEFK	screw terminals
wire-core cross-section	< 1.5mm <sup>2</sup> with wire-end ferrules
short-circuit proof	yes
reverse polarity proof	yes
protection class	IP 67 EFKS IP 30 EEFK front

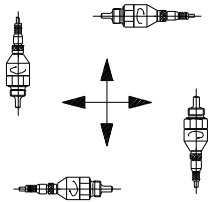
BK= black (yellow)      WH= white  
BN= brown                BU= blue (green)  
(only for DIN colours!)      Temp. outputs only with EEFK



(only for DIN colours!)



**MOUNTING POSITION**



**METERING SUBSTANCES**



**NOMENCLATURE**

EFKS-	015	H	K	029	S	basic type specification
EFKS-						● calorimetric Flow Switch
	008					● connection G1/4A
	015					● connection G1/2A
	038					○ connection footstuffs sensor ISO 2852 size 38
		H				● socket thread
		L				○ footstuffs sensor
			K			● stainless steel 1.4571
				029		● probe length 29.6mm
				028		● probe length 28mm
				045		● probe length 45mm
				056		○ probe length 56mm
					S	● Locking plug KPU-02SG - M12x1, 4-polr, cable 2 m, straight plug

EEFK-	015	H	basic type specification
EEFK-			● external evaluation units at calorimetric sensors
EEFKT-			● external evaluation units at calorimetric sensors with temperature switch
	024		● 24 V DC (only PNP or NPN)
	230		● 230 V AC (additional change-over contacts)
		P	● output PNP
		N	● output NPN

All technical changes reserved

●BASIC Standard ○BASIC Programme option □VARIO Special option ⊕ PLUS Accessories ✗ not recommendable