

Flow Monitor

SPKR



Operation

The flow monitors type SPKR are paddle switches with magnetic triggering of a reed contact.

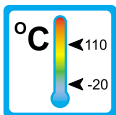


Application

The flow monitors type SPKR are used for monitoring volumeflow of liquid media in pipe constructions and open ducts.

Areas of application:

- Coolingsystems and cooling-circuits
- Heating and air-conditioning systems
- Research and development



Features

The SPKR series proves itself through reliable function and easy handling. The electrical and the wetted part are hermetically separated.

Further characteristics of this sturdy type are:

- low sensitivity to dirt
- high repeatability
- low pressure drop
- easy switchpoint adjustment
- threaded connection

Installation hints

The flow monitor can be installed horizontally or vertically in the system. The instrument must not be installed upside down. The flow direction must be observed.

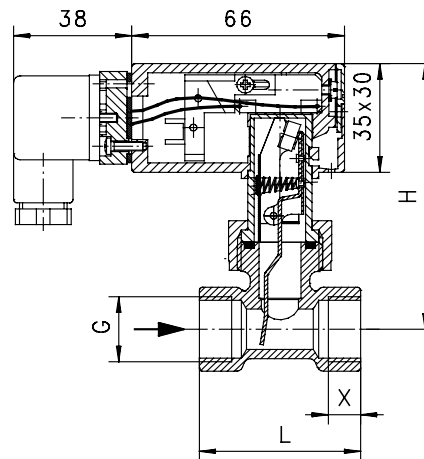
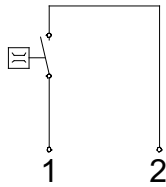
Flow straightening sections of at least 5x the pipe diameter should be considered up- and down-stream of the SPKR. The switchpoint must be re-adjusted for vertical installation to compensate the paddle weight.

The flow monitor must not be used as a supporting part in a pipe construction!



Measuring Ranges, Technical Data

Connection diagram



SPKR

Summary of types SPKR

Type	Switch range* (H ₂ O) [l/min]	Qmax. (H ₂ O) [l/min]	DN	G	PN [bar]	H [mm]	L [mm]	X [mm]	Weight Brass [kg]	Weight Stainless Steel [kg]
SPKR-10	3 — 4,5	10	10	3/8"	25	87	50	10	0,35	0,40
SPKR-15	5 — 6,5	20	15	1/2"	25	87	50	10	0,35	0,41
SPKR-20	6 — 8,5	40	20	3/4"	25	88	50	12	0,35	0,35
SPKR-25	12 — 16	60	25	1"	25	92	50	12	0,40	0,45
SPKR-32	20 — 27	80	32	1 1/4"	25	96	50	12	0,55	0,55
SPKR-40	34 — 44	100	40	1 1/2"	25	99	50	12	0,60	0,70
SPKR-50	54 — 69	150	50	2"	25	108	50	12	1,00	1,00

*The stated values are switch-off points for horizontal installation. Measuring ranges for other flow media on request!

Operating data	SPKR	
Operating pressure max. Brass-Version:	25 bar	
Operating pressure max. Stainless Steel-Version:	25 bar	
Average pressure drop at Qmax.:	0,01 bar	
Maximum temperature:	110 °C	
Measuring accuracy:	±15% of full scale	
Hysteresis:	Depending on switch value, at least 0,7 l/min	
Electrical data:		
Normally open:	max. 250 V AC • 1 A • 50 VA	
Ingress protection:	IP65 (plug connection DIN 43650 Form A)	
Output signal:	The contact opens, when the flow falls below the set point.	
Power supply:	Not required (potentialfree reed contacts)	
Other plug types on request!		
Material:	Brass-Version	Stainless Steel-Version
Housing (wetted part):	MS 58 nickel-plated	1.4305
Body (wetted part):	MS 58	1.4571
Paddle parts (wetted part):	1.4301 ; 1.4571	1.4301 ; 1.4571
Spring (wetted part):	1.4310	1.4310
Magnet (wetted part):	Oxyd 300	Oxyd 300
Gaskets (wetted part):	NBR	Viton

SPKR 2 0001 12-04 E M

Please indicate flow direction, flow medium and switch range with your order!