

## Product Information

HR2K1-032..050

# Flow switch HR2K1



- Optimized for use with water
- Low pressure loss
- Solid construction

### Characteristics

Mechanical flow switch for fluid media, with spring-supported piston and magnetic triggering of a reed switch. Robust construction in brass or stainless steel.

### Technical data

<b>Switch</b>	reed switch	
<b>Nominal width</b>	DN 32 / 40 / 50	
<b>Process connection</b>	female thread G 1 1/4..G 2 (further process connections available on request)	
<b>Switching range</b>	10..150 l/min	for details see table "Ranges"
<b>Pressure loss</b>	~ 1 bar at Q <sub>max</sub>	
<b>Q<sub>max.</sub></b>	up to 300 l/min	
<b>Tolerance</b>	±10 % of full scale value	
<b>Pressure resistance</b>	PS 200 bar	
<b>Media temperature</b>	-20..+120 °C	
<b>Ambient temperature</b>	-20..+70 °C	
<b>Media</b>	water	
<b>Wiring</b>	transformer No. 0.213	
	optionally transformer No. 0.282	
	optionally red or red/green signal lamp in the plug DIN 43650-A / ISO 4400	
<b>Switching voltage</b>	max. 250 V AC	
<b>Switching current</b>	max. 1.5 A	
<b>Switch performance</b>	max. 50 VA	
<b>Protection class</b>	2 - Safety insulation	
<b>Ingress protection</b>	IP 65	

<b>Electrical connection</b>	plug DIN 43650-A / ISO 44000, optionally round plug connector M12x1, 4-pole	
<b>Materials medium-contact</b>	<i>Brass construction:</i> CW614N nickelled, CW614N, 1.4305, 1.4310, hard ferrite	<i>Stainless steel construction:</i> 1.4571, 1.4310, hard ferrite
<b>Non-medium-contact materials</b>	CW614N nickelled, PC, PA, NBR, 1.4301, CW508L nickelled,	
<b>Weight</b>	see table "Dimensions and weights"	
<b>Installation location</b>	Standard: horizontal inwards flow from the left; other installation positions are possible; the installation position affects the switching point and range.	

### Ranges

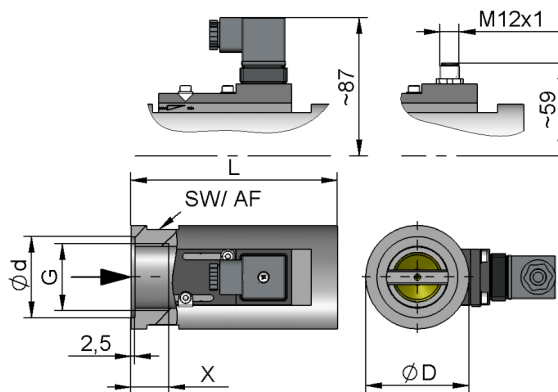
For switching ranges, the details in the table correspond to horizontal inwards flow and decreasing flow rate; for display ranges they correspond to horizontal inwards flow and increasing flow rate.

Switching range l/min H <sub>2</sub> O	Display range l/min H <sub>2</sub> O	Q <sub>max.</sub> recommended
10 - 40	10 - 60	300
15 - 60	15 -100	300
20 - 90	20 -200	300
25 -150	30 -300	300

Special ranges are available.

### Dimensions and weights

DN	G	Types	L	ØD	SW	Ød	X	Weight kg
32	G 1 1/4	HR2K1-032GM	130	65	60	51	23	2.6
40	G 1 1/2	HR2K1-040GM	170			56	24	3.2
50	G 2	HR2K1-050GM	185	80	75	70	26	5.3



### additional weights for options

Display O1 / Z1 0.05 kg

**Product Information**

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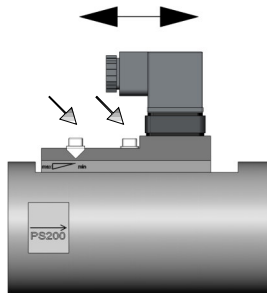
**Handling and Operation**

**Note**

- Include straight calming section of 5 x DN in inlet and outlet
- If the media are dirty, install a filter (use magnetic filter for ferritic components).
- It must be ensured that the values given for voltage, current, and power are not exceeded.
- When switched on, a load must be connected in series.
- The electrical details apply to ohmic loads. Capacitive, inductive and lamp loads must be operated using a protective circuit.

**Adjustment**

If it is necessary to set the switching value, the switching head can be adjusted lengthways. When the switching value is reached, the switching unit is fixed in place by fastening bolts.



**Ordering code**

HR2K1  1.  2.  3.  4.  5.  
 HR2K1    **G**

<b>1. Display options</b>	
-	no mechanical display
O1-	with measurement display at side O1
Z1-	with frontal measurement display Z1
<b>2. Nominal width</b>	
032	DN 32 - G 1 <sup>1</sup> / <sub>4</sub>
040	DN 40 - G 1 <sup>1</sup> / <sub>2</sub>
050	DN 50 - G 2
<b>3. Process connection</b>	
G	female thread
<b>4. Connection material</b>	
M	brass
K	stainless steel
<b>5. Switching range H<sub>2</sub>O for horizontal inwards flow</b>	
040	10 - 40 l/min
060	15 - 60 l/min
090	20 - 90 l/min
150	25 - 150 l/min



HR2K101-



HR2K1Z1-

**Options**

- Special values
- Signal lamp red or red/green
- Connection for round plug connector M12x1
- Rhodium contact 250 V AC, 0.5 A, 30 VA
- Two to four switching heads
- ATEX switching heads A-H4.1 and A-H4.2

**Ordering information**

- Specify direction of flow, medium, and switching range.