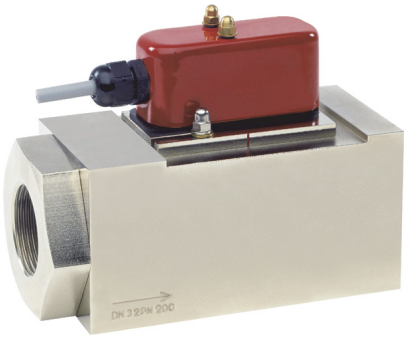
GHM GROUP - Honsberg | GHM Messtechnik GmbH
Tenter Weg 2-8 | 42897 Remscheid | GERMANY
Phone +49 2191 9672-0 | Fax +49 2191 9672-40
www.ghm-group.de | info@ghm-group.de

Flow Switch HR1MV

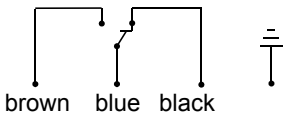


- **Viscosity stabilised from 30 to 200 mm²/s**
- **High switching power**
- **Solid construction**

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

Switch	reed switch	
Nominal width	DN 32..50	
Process connection	female thread G 1¹/₄..G 2 (further process connections available on request)	
Switching range	2..220 l/min	for details see table "Ranges"
$Q_{max.}$	to 250 l/min	
Tolerance	±5 % of the full scale value plus viscosity variation	
Pressure resistance	PN 200 bar	
Media temperature	-20..+120 °C with display Z -20..+70 °C	
Ambient temperature	-20..+70 °C	
Media	water, oils (gases and aggressive media available on request)	
Wiring	changeover No. 0.227 	
Switching voltage	max. 250 V AC	
Switching current	max. 1.5 A	
Switching capacity	max. 50 VA	
Protection class	2 - safety insulation	
Ingress protection	IP 65	
Electrical connection	cable 2.5 m, optionally plug DIN 43650-A / ISO 4400 or for round plug connector M12x1, 4-pole	
Materials medium-contact	*Brass construction*: CW614N nickelled, CW614N, 1.4310, hard ferrite *DN 32..40:* NBR	*Stainless steel construction*: 1.4571, 1.4404, 1.4310, hard ferrite PTFE-coated, *DN 32..40:* FKM
Non-medium-contact materials	steel coated with Rilsal, CW614N, NBR	

Weight	see table "Dimensions and weights"
Installation location	Standard: horizontal inwards flow from the left; other installation positions are possible; the installation position affects the switching point and range.

Ranges

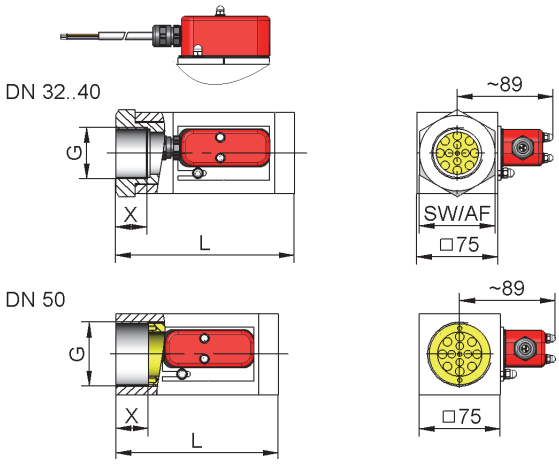
For switching ranges, the details in the table correspond to horizontal inwards flow and decreasing flow rate; for display ranges they correspond to horizontal inwards flow and increasing flow rate.

Switching range l/min H_2O or oil 30..200 mm²/s	**Display range** l/min H_2O or oil 30..200 mm²/s	**$Q_{max.}$** recommended
2 - 12	2 - 15	50
5 - 20	5 - 25	60
10 - 40	10 - 45	100
20 - 60	20 - 65	150
30 - 100	30 - 110	200
50 - 150	50 - 160	230
100 - 200	100 - 220	250

Special ranges are available.

Dimensions and weights

DN	G	Types	L	SW	X	Weight kg
32	G 1¹/₄	HR1MV-0032G.	165	70	29	6.0
40	G 1¹/₂	HR1MV-0040G.	165			5.7
50	G 2	HR1MV-0050G.	150	-	26	5.2



Additional weights for options

Display O	0.10 kg

GHM GROUP - Honsberg | GHM Messtechnik GmbH
Tenter Weg 2-8 | 42897 Remscheid | GERMANY
Phone +49 2191 9672-0 | Fax +49 2191 9672-40
www.ghm-group.de | info@ghm-group.de

HONSBERG
Member of GHM GROUP

Product Information

HR1MV-032..065GM / K

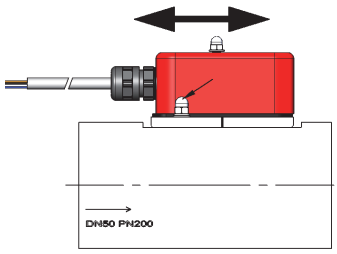
Handling and Operation

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 switch 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.

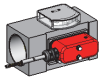


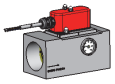
Ordering code

	1.	2.	3.	4.	5.	6.
HR1MV			**G**			

❍=Option

1.	**Display options**	
	-	no mechanical display
	O-	with measurement display at side O
2.	**Nominal width**	
	032	DN 32 - G $1^1/_4$
	040	DN 40 - G $1^1/_2$
	050	DN 50 - G 2
3.	**Process connection**	
	G	female thread
4.	**Connection material**	
	M	brass
	K ❍	stainless steel
5.	**Switching range H_2O or oil 30..200 mm^2/s for horizontal inwards flow**	
	012	2 - 12 l/min
	025	5 - 25 l/min
	040	10 - 40 l/min
	060	20 - 60 l/min
	100	30 - 100 l/min
	150	50 - 150 l/min
	200	100 - 200 l/min
6.	**Special switching head**	
	A	switching head ATEX A-H1.2 Please order the switching head for -use in a(Ex)ion.


HR1MVO


Temperature-display

Options

- Signal lamp red or red / green in the hood
- Rhodium contact (250 VAC, 0,5 A, 30 VA)
- Temperature display up to 120 °C
- Reinforced piston
- Additional switching head
- Plug DIN 43650-A / ISO 4400, Tuchel or Harting
- Connection for round plug connector M12x1
- Temperature monitoring
- Damping for gas monitoring
- Switching values for oil or gas
- Special values

Ordering information

- Specify direction of flow, medium, and switching range.
- For viscous media specify viscosity, temperature, and medium (e.g. ISO VG 68) (enquire about switching range).
- For gases, state pressure (relative or absolute), temperature and medium (e.g. air) (request switching range).