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

Flow Switch UM3K-...G / A



- Threaded connection
- Micro switch
- Low pressure loss
- Compact design
- Threaded connection
- Plug DIN 43650-A / ISO 4400

Characteristics

The devices function via the principle of a spring-supported paddle, and the magnetic triggering of a micro switch.

Technical data			
Switch/sensor	micro switch		
Nominal width	DN 1050		
Process connection	female thread G ³ / ₈ G 1 (further process connections available on request)		
Switching range	493 l/min	for details see	
Q _{max} .	to 150 l/min	table "Ranges"	
Tolerance	±15 % of full scale value		
Pressure resistance	PN 25 bar		
Medium temperature	-20+110 °C		
Ambient temperature	-20+70 °C		
Media	water (oils, gases and aggressive media available on request)		
Wiring	changeover no. 0.371	1 2 3	
	optionally changeover no. 0.282	3 1 2	
	optionally red or red / green diode in the DIN 43650-A plug		
Switching voltage	max. 250 V AC		
Switching current	max. 5 A (round plug connector max. 4 A)		
Protection class	2 - safety insulation		
Ingress protection	IP 65		
Electrical connection	plug DIN 43650-A / ISO 4400, optionally for round plug connector M12x1, 4-pole		

UM3K-010..050G / A M / K / P

Materials medium-contact	Brass construction: CW617N nickelled, CW614N nickelled, 1.4310, 1.4301, hard ferrite, NBR	Stainless steel construction: 1.4305, 1.4571, 1.4301, 1.4310, hard ferrite PTFE-coated, FKM	
Non-medium contact materials	ABS, PA, NBR		
Weight	see table "Dimensions and weights"		
Installation location	Standard: horizontal inwards flow; switching head not recommended underneath; other installation positions are possible; the installation position affects the switching point and range.		

Ranges

Details in the table correspond to horizontal inwards flow with decreasing flow rate

G	DN	Switching range I/min H ₂ O	Types	Q _{max.} recommended
G 3/8	DN 10	4.0 - 5.5	UM3K-010G.055	10
G ¹ / ₂	DN 15	5.5 - 7.0	UM3K-015G.070	20
G 3/4	DN 20	7.5 - 10.0	UM3K-020G.100	40
G 1	DN 25	14.0 - 18.0	UM3K-025G.180	60
G 1 ¹ / ₄	DN 32	22.0 - 30.0	UM3K-032G.300	80
G 1 ¹ / ₂	DN 40	37.0 - 50.0	UM3K-040G.500	100
G 2	DN 50	67.0 - 93.0	UM3K-050G.930	150

Special ranges are available. Dimensions and weights

G	Types	Н	L	Х	Weight kg	
G 3/8	UM3K-010GM	87	50	10	0.45	
	UM3K-010GK				0.50	
G ¹ / ₂	UM3K-015GM		50	10	0.40	
	UM3K-015GK				0.45	
G 3/4	UM3K-020GM	88		12		
	UM3K-020GK					
G 1	UM3K-025GM	92				
	UM3K-025GK				0.50	
G 1 ¹ / ₄	UM3K-032GM	96				
	UM3K-032GK				0.60	
G 1 ¹ / ₂	G 1 ¹ / ₂ UM3K-040GM 9 UM3K-040GK	99				
					0.75	
G 2	UM3K-050GM	108			0.85	
	UM3K-050GK				1.05	

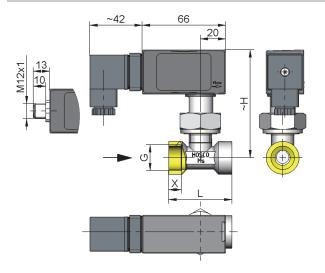
Members of the GHM GROUP: GREISINGER I HONSBERG I Martens I IMTRON I Seltacem

pi-ho_fpa-um3k-g_e V1.02-00

HONSBERG O Member of GHM GROUP

UM3K-010..050G / A M / K / P

Product Information



Handling and operation

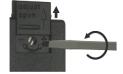
Note

- Include straight calming section of 5 x DN in inlet and outlet
- When tightening the union nut, the connection piece must be countered using an open-ended spanner (SW 19).
- 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 and inductive loads must be operated using a protective circuit.

Adjustment

2

To adjust, open the slider. Adjustment is made using the adjustment screw with a lengthways slot; this is located under the valve.



Turn clockwise for a lower switching point; turn anticlockwise for a higher switching point.

After adjustment, close the slider again.

Example: The adjustment range 20 to 27 l/min corresponds to 7 l/min Adjustment option in 7 revolutions. Adjustment is therefore 1 l/min for each revolution.

Ordering code 1. 2. 3. 4. UM3K - G

1.	Nominal	width
	010	DN 10 - G ³ / ₈
	015	DN 15 - G ¹ / ₂
	020	DN 20 - G ³ / ₄
	025	DN 25 - G 1
	032	DN 32 - G 1 ¹ / ₄
	040	DN 40 - G 1 ¹ / ₂
	050	DN 50 - G 2
2.	. Process connection	
	G	female thread
3.	3. Connection material	
	M	brass
	K	stainless steel
4.	Switching range H₂O for horizontal inwards flow	
	055	4.0 - 5.5 l/min
	070	5.5 - 7.0 l/min
	100	7.5 - 10.0 l/min
	180	14.0 - 18.0 l/min
	300	22.0 - 30.0 l/min
	500	37.0 - 50.0 I/min
	930	67.0 - 93.0 I/min

Options

- · Connection for round plug-in connector
- Signal lamp red or red/green in the plug DIN 43650-A
- Gold contact 125 V AC / 30 V DC, 100 mA
- Protective bellows
- Switching ranges for oil or gas
- Special values
- Soldered copper fitting
- Adhesive PVC fitting
- Male thread G ¹/₂ A brass

Ordering information

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