Senseca Germany GmbH
Tenter Weg 2-8 | 42897 Remscheid | GERMANY
Phone +49 2191 9672-0 | Fax +49 2191 9672-40
www.senseca.com | info@senseca.com | WEEE Reg. No. DE 93889386

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 10..50	
Process connection	female thread G $^3/_8$..G 1 (further process connections available on request)	
Switching range	4..93 l/min	for details see table "Ranges"
$Q_{max.}$	to 150 l/min	
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	

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 l/min H_2O	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.

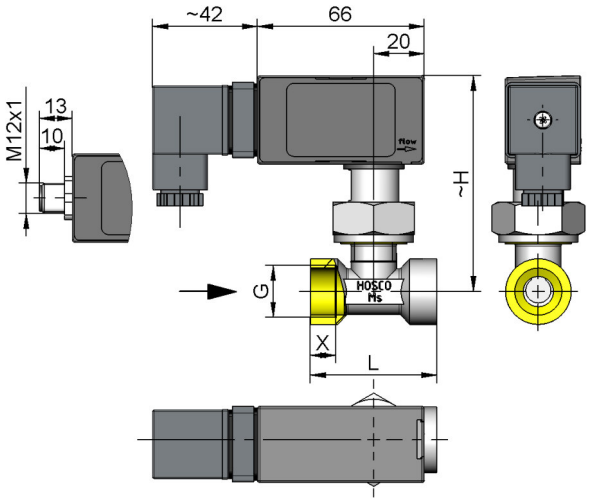
Dimensions and weights

G	Types	H	L	X	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 $^1/_2$	UM3K-040GM	99			
	UM3K-040GK				0.75
G 2	UM3K-050GM	108			0.85
	UM3K-050GK				1.05

Senseca Germany GmbH
Tenter Weg 2-8 | 42897 Remscheid | GERMANY
Phone +49 2191 9672-0 | Fax +49 2191 9672-40
www.senseca.com | info@senseca.com | WEEE Reg. No. DE 93889386

Product Information

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



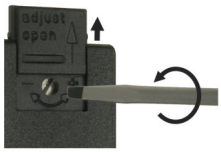
Handling and operation

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

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

UM3K - [1.] [**G**] [2.] [3.] [4.]

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.	**Connection material**								
	M	brass							
	K	stainless steel							
4.	**Switching range H_2O 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 l/min		●					
	930	67.0 - 93.0 l/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).