FLOW VD

Flow switch

GENERAL CHARACTERISTICS

The flow VD is an adjustable device, of high accuracy due to the wide calibration scale 0-180 ° and to the flow chart on board the instrument. The sensitive element is a piston, the flow speed in the measurement chamber determines the movement. The displacement of the piston is directly proportional to the flow, its location is detected by the electrical contact magnetically. The calibration is obtained by the positioning of the electrical contact driven by the regulation system of the electric head. The electric head is hermetically separated from the mechanics of the flow and can be replaced without removing the instrument from the pipeline.

- Hermetic separation between flow chamber and electric head.
- Good repeatability.
- Good insensitivity to impurities.
- Large-scale calibration.
- Microswitch output contact .
- ATEX construction on request

VD..GR

VD..GK

TECHNICAL DATA Tab.1

DN	Type	P max Bar GR	GK	T max °C	Flow rate setting ranges l/min		Q max l/min		ΔP Q max Bar	Code Setting ranges	
1/4"	VD-008	25		120	1 – 10	-	15	-	0,5	1 — 10	**010**
3/8"	VD-010	25		120	1 – 10	-	15	15	0,5	4 — 20	**020**
1/2"	VD-015	25	100	120	1 – 10	4 – 20	20	30	0,5	10 — 40	**040**
3/4"	VD-020	25	100	120	4 – 20	10 – 40	30	60	0,5	20 — 60	**060**
1"	VD-025	25	100	120	10 – 40	20 – 60	60	85	0,5	30 — 100	**100**
1.1/4"	VD-032	16	100	120	20 – 60	30 – 100	100	145	0,5	50 — 150	**150**
1.1/2"	VD-040	16	100	120	30 – 100	50 – 150	150	220	0,5	100 — 200	**200**
2"	VD-050	16	100	120	50 – 150	100 – 200	250	290	0,5	180 — 330	**330**
2.1/2"	VD-065	16		120	100 – 200	180 – 330	400	475	0,5	300 — 600	**600**
3"	VD-080	16		120	180 – 330	300 – 600	600	720	0,5		

Setting ranges for horizontal mounting and decreasing flow

DN	Thread	Cylindrical UNI 228/1

Precision	± 5% F.S.
Hysteresis (*)	10-15% - minimum 0,3 l/min.

(*) Depending from set point value

MATERIALS Tab.2

Description	Code GR	Code GK
Body	Bronze Rg5/Rg6	St. steel 1.4305
Piston	Brass	St. steel 1.4571
Piston guide	Brass	St. steel 1.4571
Spring	St. steel 1.4310	St. steel 1.4310
Sealing gasket	NBR	Viton
Magnet	Barium-Ferrite	Barium-Ferrite PTFE coated
Electrical head	ABS	ABS

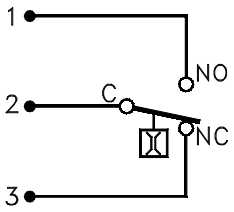
ELECTRICAL DATA Tab.3

Description	Characteristics			
Contact	Reed	SPDT	250Vac	6A
Electrical output	Plug		DIN 43650A	
Protection	**IP44**		**IP65**	
			On request	

Options							
Diode	LED	Red color integrated in the plug cap					
Voltage	Vac	230	110	48	24	12	To be specified

WIRING Tab.4

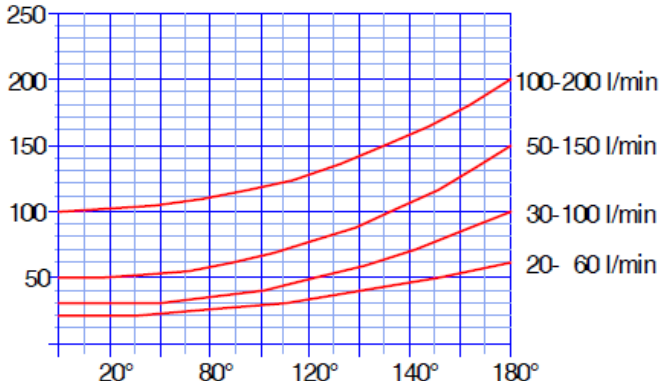
Description		Code
DIN 43650A Plug	Screw terminals Cable gland PG9	0213



SETTINGS

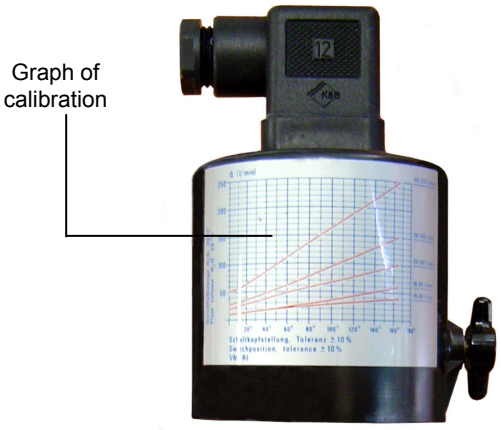
Adjustable in the field by means of the calibration graph and the large-scale graduated in mechanical degrees.

Flow volume H2O, 20°C
Q l/min.



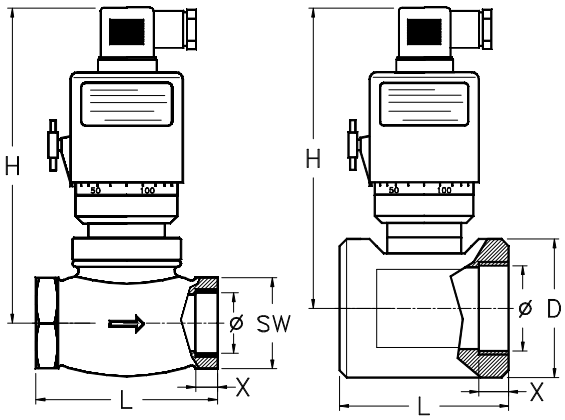
Switch position, tolerance ± 10%

Graph of calibration



DIMENSIONS

GR						GK				
∅	H mm	L mm	SW mm	X mm	Kg	H mm	L mm	D mm	X mm	Kg
1/4	188	65	29	12	1.0	-				-
3/8	188	65	29	12	1,0					
1/2	188	65	29	14	1,0	204	80	68	15	2,8
3/4	188	80	32	16	1,1	204	80	68	16	2,6
1	188	80	41	18	1,3	204	80	68	18	2,5
1-1/4	194	98	52	13	2,1	218	95	78	24	3,7
1-1/2	194	113	59	14	2,8	224	105	88	25	4,8
2	194	137	72	17	4,0	232	120	102	27	7,0
2-1/2	194	160	85	26	4,0	-				-
3	194	148	100	23	7,0					



GR GK

NOMENCLATURE

VD	025	GR	060	IP44	0213		
•						-	Name - Type
	•					Tab.1	Process connection thread and dimension
		•				Tab.2	Material
			•			Tab.1	Measuring range
				•		Tab.3	Degree of protection
					•	Tab.4	Wiring