

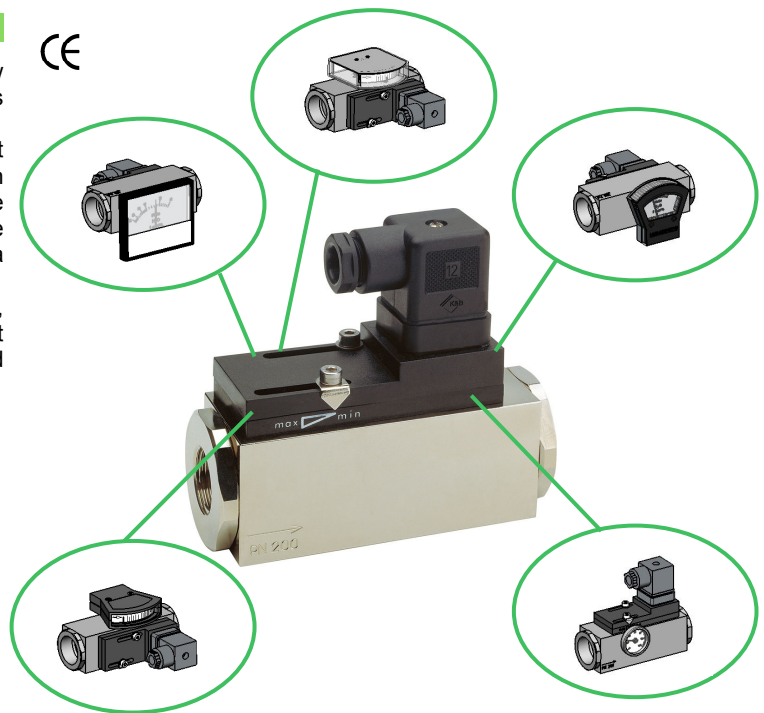
GENERAL CHARACTERISTICS

This flow switch introduces, as regards the detection of the flow rate through the floating piston system, a series of improvements that increase the reliability.

In the HD2F version the flow chamber and the sensing element have been redesigned to obtain a better stability to changes in viscosity and a greater insensitivity to possible impurities of the fluid. The new calibration system, with safety lock, allows accurate adjustment of the set value. The electrical connection is made via DIN 43650 plug and PG9 cable gland.

In addition, a series of options of indication instruments, in fact, make it a versatile flow meter able to satisfy the most different requirements. The display of the flow rate is on a magnetic coupled dry scale with analog indication in % or l / min.

- Hermetic separation between flow chamber and electric head.
- No restrictions on mounting position.
- High operating pressure and temperature.
- Calibration adjustment.
- Indication of the flow rate on a dry scale, on request
- Built-in thermometer, on request.



TECHNICAL DATA

Tab.1

HD1F

DN	Type	P max Bar	T max °C	Code Setting ranges				
008	1/4"	HD1F – 008	200	-20 / +120	001	005	-	-
010	3/8"	HD1F – 010	200	-20 / +120	001	005	010	020
015	1/2"	HD1F – 015	200	-20 / +120	005	010	020	030
020	3/4"	HD1F – 020	200	-20 / +120	010	020	030	040
025	1"	HD1F – 025	200	-20 / +120	030	040	060	080

Setting ranges for horizontal mounting and decreasing flow

Setting ranges l/min H ₂ O		Q max l/min	ΔP bar at Q max
001	0,1 – 1,0	6	0,4
005	0,5 – 5,0	10	0,5
010	1,0 – 10,0	20	0,6
020	2,0 – 20,0	30	0,4
030	3,0 – 30,0	40	0,4
040	4,0 – 40,0	60	0,8
060	6,0 – 60,0	80	1,4
080	20,0 – 80,0	100	1,6

Special ranges on request

HD2F <30.....300 Cst>

DN	Type	P max Bar	T max °C	Code Setting ranges			
008	1/4"	HD2F – 008	200	-20 / +120	008	015	-
010	3/8"	HD2F – 010	200	-20 / +120	008	015	025
015	1/2"	HD2F – 015	200	-20 / +120	015	025	040
020	3/4"	HD2F – 020	200	-20 / +120	015	025	040
025	1"	HD2F – 025	200	-20 / +120	025	040	060

Setting ranges for horizontal mounting and decreasing flow

Setting ranges Oil 30...300 Cst		Q max l/min	ΔP bar – Cst				
			30	60	100	205	330
008	0,5 – 8,0	12	1,1	1,4	1,6	2,8	3,5
015	1,5 – 15,0	22	2,2	2,3	2,4	2,8	3,5
025	2,5 – 25,0	35	1,9	2,0	2,1	2,3	2,9
040	6,0 – 40,0	60	1,9	2,0	2,1	2,3	2,6
060	12,0 – 60,0	80	2,1	2,3	2,4	2,6	2,8

Special ranges on request

DN	Thread	Parallel UNI 228/1
Precision	± 5% F.S.	
Hysteresis	10% - minimum 0,3 l/min.	

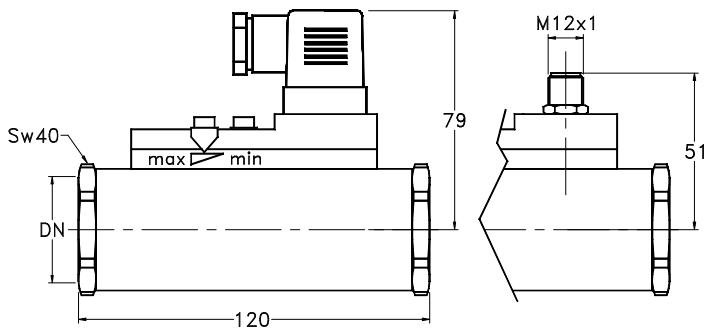
MATERIALS Tab.2

Description	Code GM	Code GK
Body	Nickel plated brass	Stainless steel 1.4571
Piston	Brass	Stainless steel 1.4404
Spring	Stainless steel 1.4310	Stainless steel 1.4310
Magnet	Ferrite	Ferrite PTFE coated
Electric head	Polycarbonate	Polycarbonate

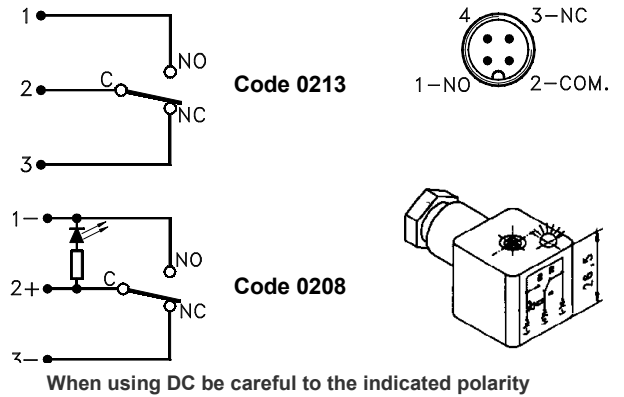
ELECTRICAL DATA Tab.3

Description	Characteristics				
Contact	REED	SPDT	250Vac	0,5A	30VA
Electrical output	DIN 43650A plug		S1	M12x1– 4 poles	S3
Protection	IP65				
Options with DIN 43650A plug					
Diode	LED	Red color integrated in the plug cap			
Voltage	Vac/dc	230	110	48	24 12 To be specified

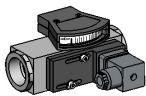
DIMENSIONS



WIRING Tab.4



OPTIONS

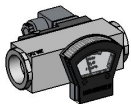


HD..FO1

Side analog display – Plastic housing – Graduated scale in % o l/min
Degree of protection IP60

HD..FO

Side analog display – Metal housing – Graduated scale in % o l/min
Degree of protection IP60

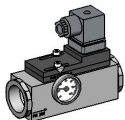


HD..FZ1

Front analog display – Plastic housing – Graduated scale in % o l/min
Degree of protection IP60

HD..KZ

Front analog display – Plastic housing – Graduated scale in l/min
Degree of protection IP40



HD..FA

Bimetallic thermometer built into the body of the instrument - Display 0 .. 120 °C

NOMENCLATURE

HD1F	025	GM	060	S1	IP65	0213
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Name – Type - Option
Tab.1 Process connection dimension and thread
Tab.2 Material
Tab.1 Setting range
Tab.3 Electrical output
Tab.3 Degree of protection
Tab.4 Wiring