

GENERAL CHARACTERISTICS

Mechanical Flow Switch for liquids media, with spring-supported piston and magnetic triggering of a reed switch. Rugged construction in brass or stainless steel with additional viscosity compensation.

- * viscosity compensation 30-330mm²/s
- * good repeatability
- * high switch capability
- * hermetic separation of mechanical and electrical component
- * exact setting of switch via scale + gear

Female thread G1/4 to G1 brass or stainless steel



HD2K-020GM040

TECHNICAL DATA

	G	Type	PN bar	minimum reachable adjusting range l/min oil 30-330mm ² /s					SW mm	X mm	weight kg
brass	G 1/4	HD2K-008GM...	200	0.5 - 8					40	15	1.3
	G 3/8	HD2K-010GM...	200	0.5 - 8	1.5 - 15				40	15	1.3
	G 1/2	HD2K-015GM...	200	0.5 - 8	1.5 - 15	2.5 - 25			40	15	1.2
	G 3/4	HD2K-020GM...	200	0.5 - 8	1.5 - 15	2.5 - 25	6 - 40		40	18	1.2
	G 1	HD2K-025GM...	200	0.5 - 8	1.5 - 15	2.5 - 25	6 - 40	12 - 60	40	18	1.1
stainless steel	G 1/4	HD2K-008GK...	200	0.5 - 8					41	15	1.3
	G 3/8	HD2K-010GK...	200	0.5 - 8	1.5 - 15				41	15	1.3
	G 1/2	HD2K-015GK...	200	0.5 - 8	1.5 - 15	2.5 - 25			41	15	1.2
	G 3/4	HD2K-020GK...	200	0.5 - 8	1.5 - 15	2.5 - 25	6 - 40		41	18	1.2
	G 1	HD2K-025GK...	200	0.5 - 8	1.5 - 15	2.5 - 25	6 - 40	12 - 60	41	18	1.1

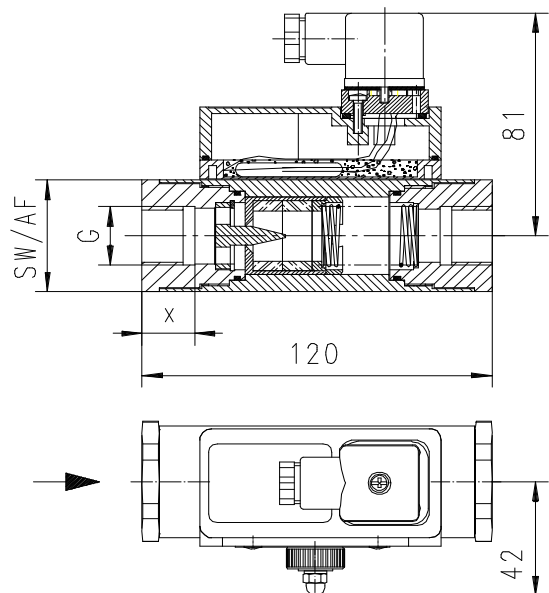
Adjustable range is indicated for horizontally decreasing flow. Calibration with oil ISO VG100.

adjustable range	Q _{max.}	viscosity stability	pressure loss [bar] at Q _{max.}				
			30	60	100	205	330
0,5 - 8	12	±8%, min. ±0,3 l/min	1.1	1.4	1.6	2.8	3.5
1,5 - 15	22	±8%, min. ±0,5 l/min	2.2	2.3	2.4	2.8	3.5
2,5 - 25	35	±8%, min. ±0,8 l/min	1.9	2.0	2.1	2.3	2.9
6 - 40	60	±8%, min. ±2,7 l/min	1.9	2.0	2.1	2.3	2.6
12 - 60	80	±8%, min. ±3,0 l/min	2.1	2.3	2.4	2.6	2.8

tolerance ±5% of full scale
media temperature max. 120°C
hysteresis depending on switch value
value minimum 0.5 l/min.

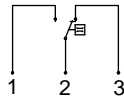
MATERIALS

	HD2K-...GM	HD2K-...GK
body	brass Ms58 nickel plated	stainless steel 1.4571
piston	brass Ms58	stainless steel 1.4404
spring	stainless steel 1.4310	stainless steel 1.4310
magnet	bariumferrite	bariumferrite
		PTFE plated
seal	NBR	viton
switch head	PC	PC



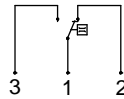
ELECTRICAL DATA

reed switch - wiring 0.213 change over
250 V AC 1.5 A 50 VA
plug DIN 43650-A
protection class 2
protection class IP 65

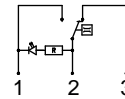


OBASIC
Programme-
options

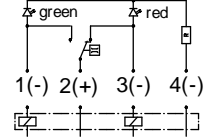
wiring 0.282



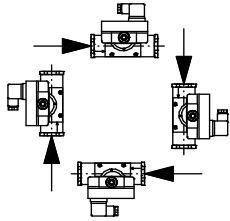
diode red
wiring 0.208



diode red/green
wiring 0.347



MOUNTING POSITION



Installation position may influence switch value.

METERING SUBSTANCES



oil



design stainless steel HD2K-...GK for aggressive liquids



water

NOMENCLATURE

For combination see table "technical data"

HD2K	-	008	G	M	005			basic type specification
HD2K						●		Flow Switch
H2						○		Flow Indicator
	-					●		without metering unit
	O-					○		with lateral flow metering unit
	Z-					○		with front flow metering unit
		008				●	nominal diameter	DN 8 - G1/4
		010				●		DN 10 - G3/8
		015				●		DN 15 - G1/2
		020				●		DN 20 - G3/4
		025				●		DN 25 - G1
			G			●		female thread
				M		●		brass
				K		●		stainless steel
					008	●	adjustable range Øi horizontal	0.5 - 8 l/min
					015	●		1.5 - 15 l/min
					025	●		2.5 - 25 l/min
					040	●		6 - 40 l/min
					060	●		12 - 60 l/min
						A	○	switch ATEX (produkt information 92.1.H1-1)
						E	○	connection by local electronic (e.g. omni-HD2K)
Programme option							○	wiring 0.342
BASIC								wiring 0.208 - diode red integrated in plug DIN 43650-A
								wiring 0.347 - diode red/green integrated in plug DIN 43650-A
Special option							□	high pressure PN 500 bar
VARIO								incremented scale
								switch head metal / flat switch head plastic
								selected hysteresis / vibration-proof
								rhodium contact
								contact for locking plug M 12x1, 4-pole
								two to four independent switch heads
								temperature control 30-95°C / temperature indication 0-120°C
								special range / adjustable

IMPORTANT FOR YOUR ORDER

- Please indicate flow direction, metering substance and adjustable range with your order.
- With viscous liquids please indicate viscosity, temperature and type of liquid (e.g. ISO VG 68! Range upon request)

All technical changes reserved

●BASIC Standard ○BASIC Programme option □VARIO Special option ⊕ PLUS Accessories

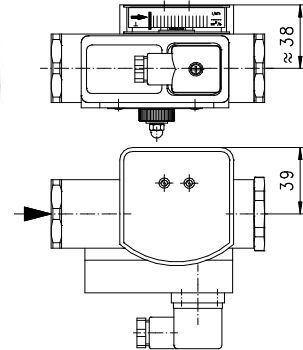
not recommendable

○ **HD2KO-** Flow Switch with lateral flow metering unit

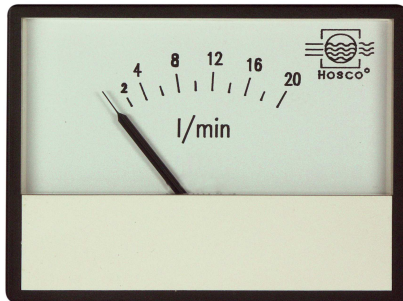


adjustable range l/min	metering range l/min
0.5 - 8	0.5 - 10
1.5 - 15	2 - 20
2.5 - 25	2.5 - 30
6 - 40	7.5 - 50
12 - 60	15 - 70

The metering range is indicated for horizontally increasing flow
 protection class IP 60
 additional weight 0.1kg

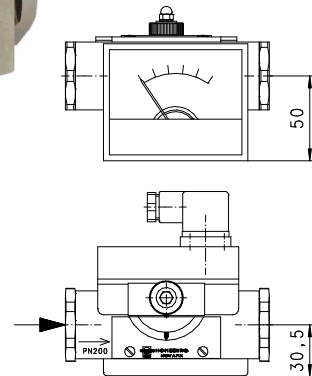
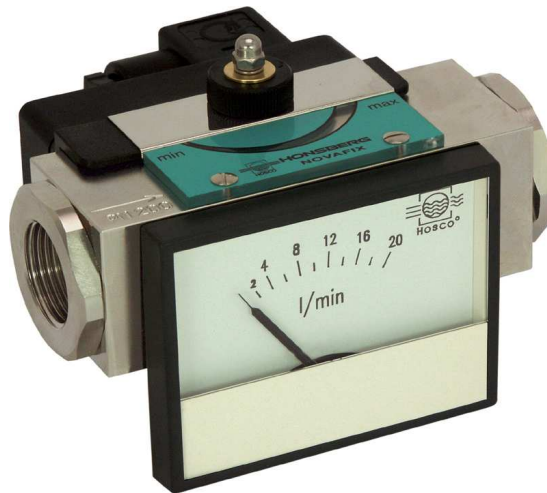


○ **HD2KZ-** Flow Switch with front flow metering unit

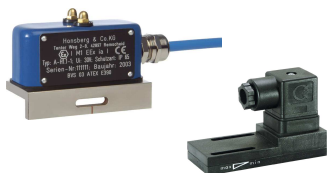


adjustable range l/min	metering range l/min
0.5 - 8	0.5 - 10
1.5 - 15	2 - 20
2.5 - 25	2.5 - 30
6 - 40	7.5 - 50
12 - 60	15 - 70

The metering range is indicated for horizontally increasing flow
 media temperature
 protection class IP 4C max. 70°C
 additional weight 0.1kg



EXAMPLES FOR FURTHER OPTIONS



switch head metal or flat switch head plastic, switch head ATEX



media temperaturer 150°C combinably with all Honsberg-electronics sensors or electronics heads



Flex-K-HD2K switch- or frequency output 0..10V or 4..20mA PNP, NPN



omni-HD2K 2xNPN and PNP switch point 4(0)..20mA ouput graphical LCD display with flashing LED, program ring

All technical changes reserved

IBASIC Standard ○BASIC Programme option □VARIO Special option ⊕ PLUS Accessories

✗ not recommendable