Küppers Elektromechanik GmbH
Durchflussmessgeräte • Flow Meters
Liebigstraße 2 • D-85757 Karlsfeld • Tel. 0 81 31/5 93 91-0 • Fax 0 81 31/9 26 04 + 5 88 70

ZHM ** KL.*.* Series
Stainless Steel Gear Flow Meters

Technical Data

type	measuring range (ltr./min)	K-factor* (pulses/ltr.)	max. pressure bar	Weight kg
ZHM 01/2 KL	0.02–3	14,000	630	1.3
ZHM 02 KL	0.1–7	4,200	630	2.2
ZHM 03 KL	0.5–25	1,740	630	2.9
ZHM 04 KL	0.5–70	475	630	8.5
ZHM 05 KL	5–150	134	400	23.0
ZHM 06/1 KL	5–250	106	400	27.0
ZHM 06 KL	20–500	53	400	52.0
ZHM 07 KL	50–1,000	24	400	66.5

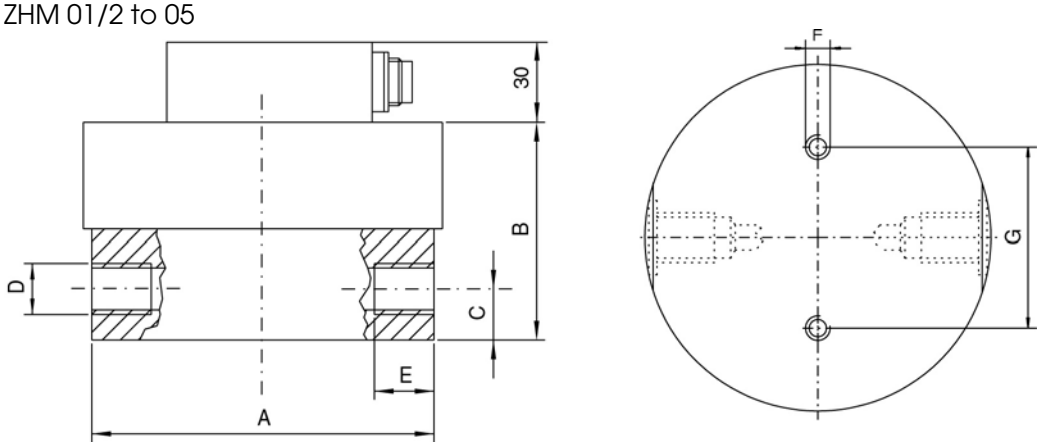
- Mean figures with single pickup type VTE*/P. A new centre pickup is available to improve the resolution. All pickups may be supplied in IS-approved design complete off intrinsically safe power supply and separation amplifier type EWS.

Materials

housing: ..... stainless steel as per DIN 1.4305 (cf. AISI 303)
gears: ..... stainless steel as per DIN 1.4122 (cf. AISI 303)
seals: ..... O-rings: viton or teflon
bearings: ..... ball bearings

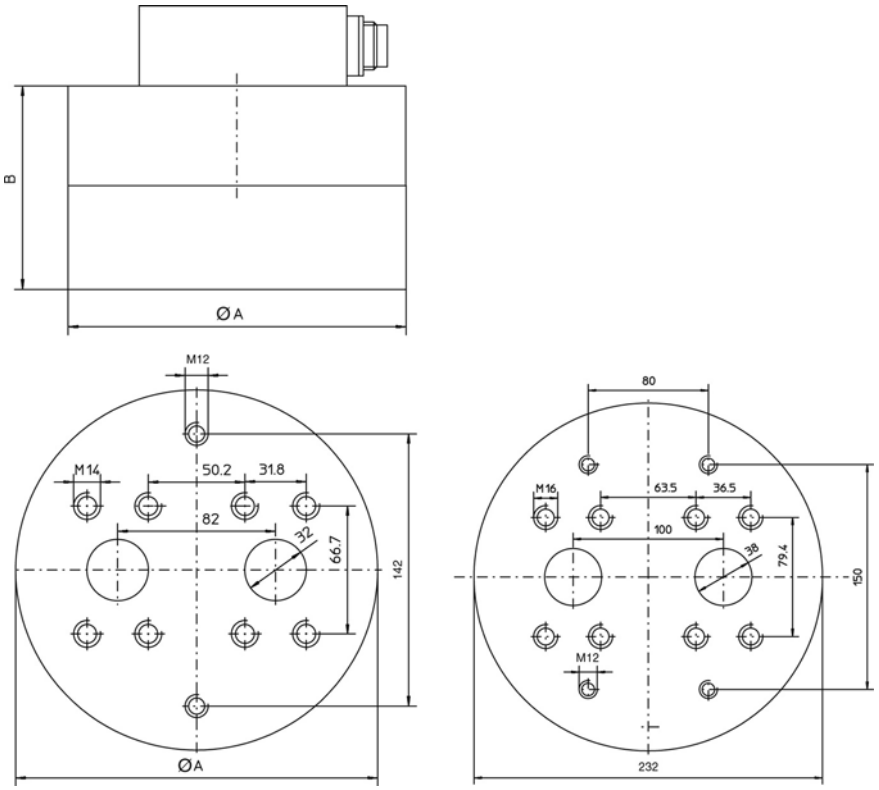
Dimensions (mm)

ZHM 01/2 to 05



Type	A ∅	B	C	D	E	F
ZHM 01/2 KL	72.0	50	12	G ¼"	44	M6
ZHM 02 KL	80.5	55	12	G ¼"	44	M6
ZHM 03 KL	80.5	67	12	G ¼"	44	M6
ZHM 04 KL	121.0	96	17	G ½"	60	M6
ZHM 05 KL	170.0	133	22,5	G 1"	100	M8

ZHM 06/1 to 07



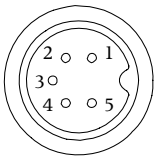
Type	A ∅	B	142
ZHM 06/1 KL*	188	180	142
ZHM 06 KL*	188	200	142
ZHM 07 KL*	232	220	142

* Bottom in- and outlet.

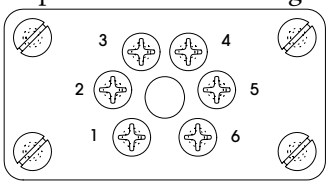
Sensors

	VTE*/P EX ATEX Sensor	**VTM Local Display EX ATEX**
Supply Voltage:	8.5 to 29 VDC, controlled	14 to 30 VDC, controlled
Frequency range:	2 up to 4,000 Hz	2 up to 4,000 Hz
Output:	Square wave signal, push pull or open collector passive	4 to 20 mA and frequency output
Ambient temperature:	–40 up to +50°C	–40 up to +60°C
Fluid temperature:	max. +120/150°C (as per height)	max. +120°C
Ex approval as per ATEX:	EX II 2 G EEx ia IIC T4	EX II 2 G EEx ia IIC T4
Electrical connection:	5-pin plug 1 = Supply voltage 2 = Output signal push pull 3 = 0V/GND 4 = OC Collector 5 = OC Emitter	6-pin junction box 1 = Supply voltage 2 = Frequency Output 3 = 0V/GND 4 = –IA 5 = +IA 6 = Shield

Top view VTE*/P sensor



Top view after removing box



Subject to change without notice, Zi Rev. 001/02/08