

Certified according to DIN EN ISO 9001

Technical Datasheet



ZHA Series Aluminium Gear Flow Meters

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Technical Data

ZHA Type	Measuring range, ltr./min			K-factor, pulses/ltr.	Pressure, bar	Weight, kg
ZHA 01/2	0.02	to	3	28,000	315	0.30
ZHA 02	0.1	to	7	8,400	315	0.38
ZHA 03	0.5	to	25	3,480	315	0.50
ZHA 04	0.5	to	70	950	315	4.00
ZHA 05	5	to	150	268	250	12.7
ZHA 06	20	to	500	106	250	16.8

* Complete part no. depends on pickup and O-ring.

Materials

- Housing: high-strength aluminium ALCuMgPb
- Gears: stainless steel as per DIN 1.4122/AISI 303 or
 1.4460/AISI 329 (special)
- Shafts, bearings: stainless steel
- O-ring: viton or teflon



Pickups

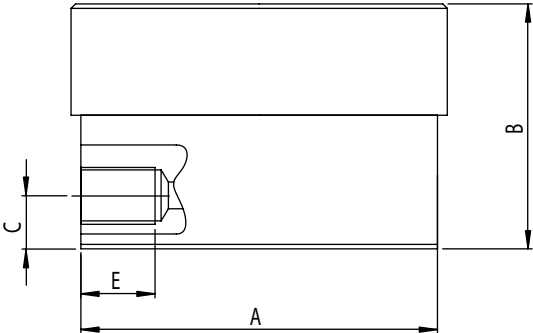
VHE and VHD for ZHA 01/2 to ZHA 04		
	VHE Single Hall Effect Sensor	VHD Dual Hall Effect Sensor
Supply voltage	12 to 30 VDC, max. 10 mA	12 to 30 VDC, max. 10 mA
Frequency range	1 to 3,000 Hz	1 to 3,000 Hz
Output	Square wave signal	Square wave signal double measuring frequency and reverse-flow detection
Output impedance	approx. 470 Ω	approx. 470 Ω
Temperature range	0 up to +70°C	0 up to +70°C
Electrical connection	5-pin plug 1 = Supply voltage 2 = Output signal 3 = 0V/GND 4 = nc 5 = nc	5-pin plug 1 = Supply voltage 2 = Output signal 1 3 = 0V/GND 4 = Output signal 2 5 = nc

IG 03 H for ZHA 05 to ZHA 06	
Minimum frequency	1 Hz
Maximum frequency	1 kHz
Output signal	squarewave pulses positive, 0.8 V below supply voltage
Pin connection	<p>A = 12-24 V B = 0 V C = signal</p>
Output impedance	approx. 470 Ω
Supply voltage	12-24 DC, max. 10 mA
Ambient temperature	0 to +75 °C during operation, -30 to +90 °C during storage

Dimensional Drawings (mm)

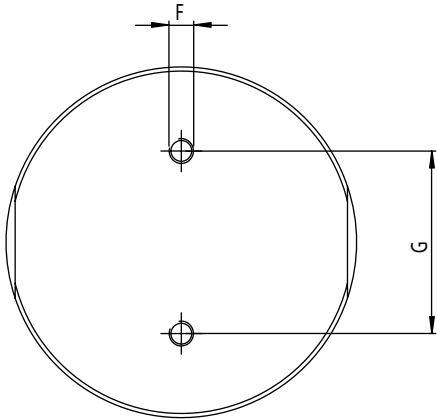
ZHA 01/2 to ZHA 05

Side view



Type	A	B	C	D	E
ZHA 01/2	72	55 KN/KL 49.7 81/DX	12	G 1/4"; 1/4" NPT KN	16; 13 KN
ZHA 02	80.5	55	12	G 1/4"; 1/4" NPT KN	16; 13 KN
ZHA 03	80.5	67	13	G 1/2"; 1/2" NPT KN	16; 17 KN
ZHA 04	121	107	19	G 1/2"; 3/4" NPT KN; G 3/4" A5	16
ZHA 05	170	133	22.5	G 1"	18

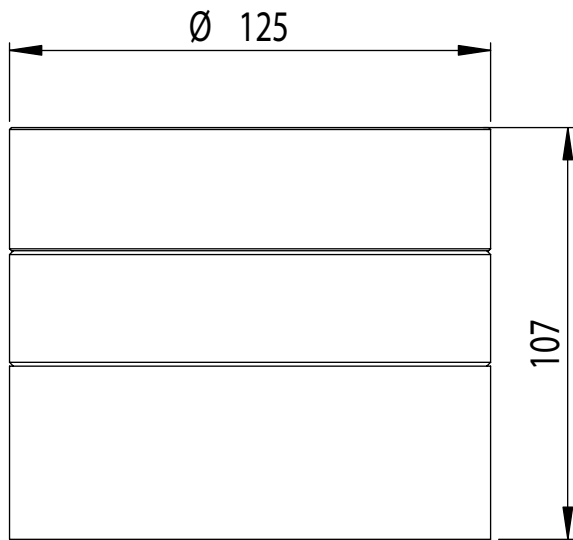
Bottom view



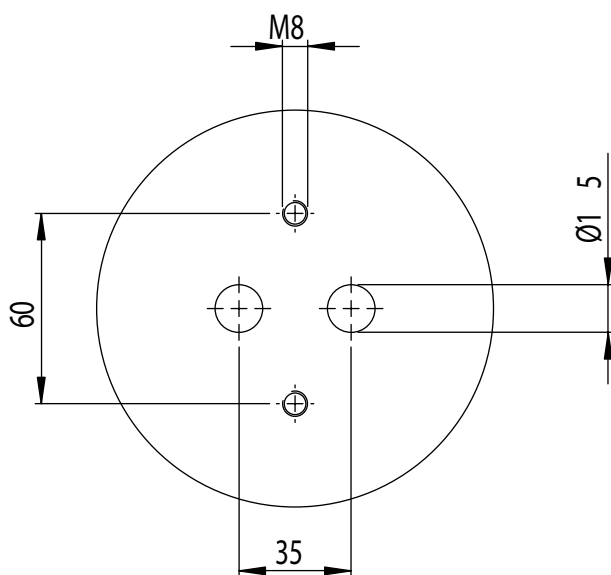
Type	G	F
ZHA 01/2	44	M6
ZHA 02	44	M6
ZHA 03	44	M6
ZHA 04	60	M8
ZHA 05	100	M8

ZHA 04 KB

Side view

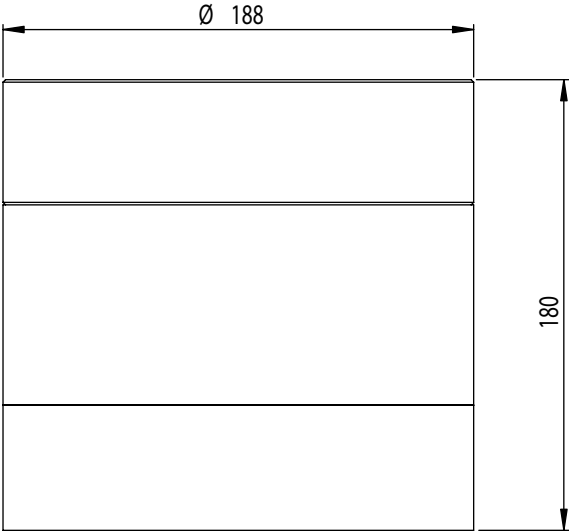


Bottom view

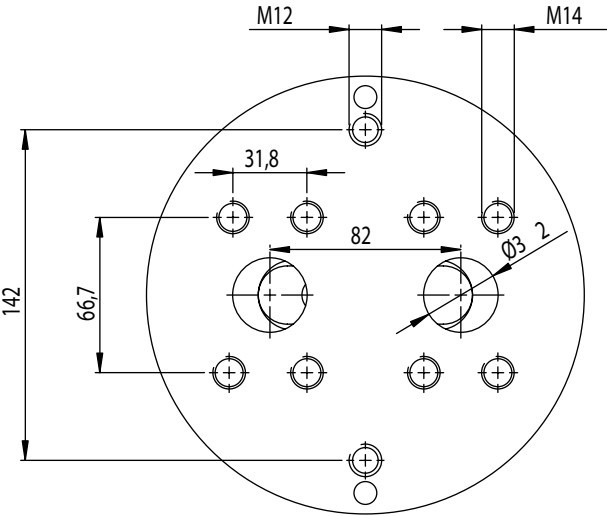


ZHA 06

Side view



Bottom view
bottom in- and outlet only



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