

POSITIVE DISPLACEMENT PUMPS

Zeilfelder pumps work by using two rotating elements, unmeshing at the suction side of the pump, to create a vacuum that fills the spaces created between the elements and the suction casing. These spaces then transport the fluid along the outer casing to the discharge side where the gears re-mesh and discharge the fluid.

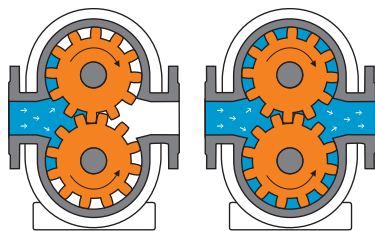
Positive displacement pumps are designed to handle large changes in pressure, viscosity and flow rate and are often used for highly viscous liquids with large percentages of solids.

EXTERNAL GEAR PUMPS

are self-priming, non-pulsating and reversible pumps that work best on clean, lubricating fluids with a viscosity thicker than water. Two gear teeth, one idler and one driver, mesh together to transfer the liquid.

Because of the balanced construction and bearings on both sides of the shafts, the pumps are capable of non-pulsating flow and high pressures.

SERIES
ZK BLUE
ZH/ZV BLUE
PQ GREEN



OVERVIEW

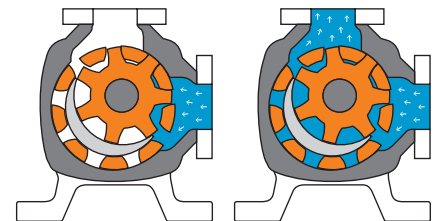
- For standard to high end applications
- ZK and ZH/ZV Blue available in all materials
- PQ Green available in cast iron and stainless steel

INNER GEAR PUMPS

are self-priming, non-pulsating and reversible pumps that work best on clean, lubricating fluids with a viscosity thicker than water. Two gear teeth, one idler and one driver, mesh together around a crescent divider to transfer the liquid.

Because of the simple one shaft construction, inner gear pumps are less expensive than comparable pumps and are very easy to maintain.

SERIES
ZI GREEN



OVERVIEW

- For standard applications
- Available in cast iron and stainless steel

ZH & ZV BLUE SERIES

GEAR PUMP

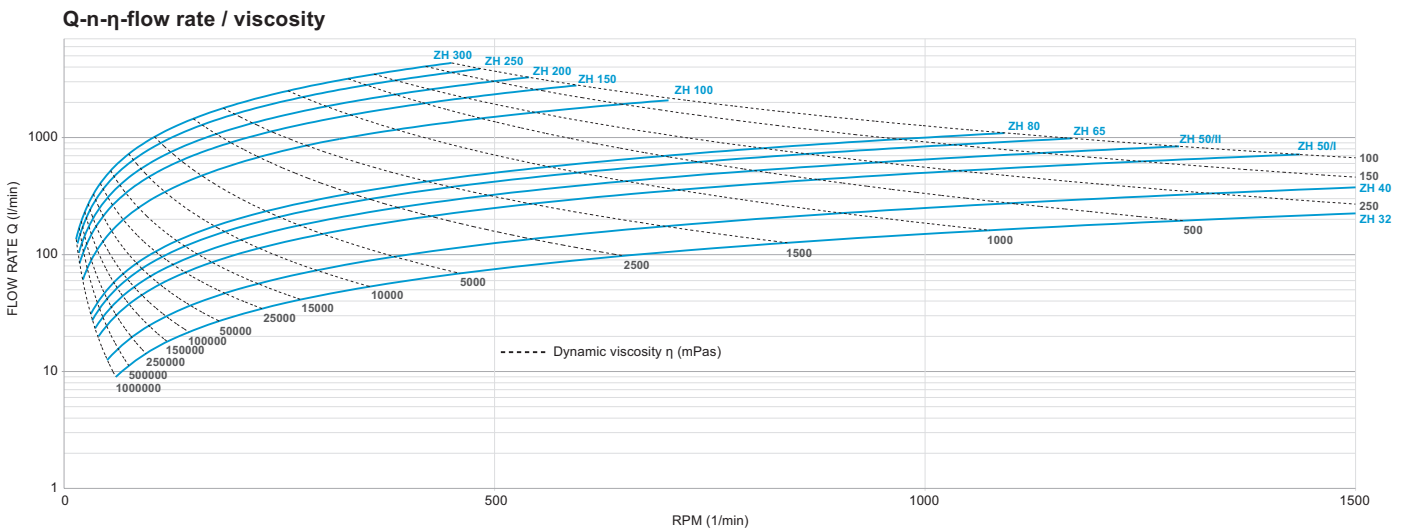
FEATURES

- **Pressure:** 120 bar
- **Suction lift:** 6 m
- **Flow rate:** 0.5 to 5,000 l/min (0.03 to 300 m³/h)
- **RPM:** 1,500 RPM
- **Efficiency:** 60 to 92%
- **Viscosity:** 0.7 to 150,000 mPas*
- **Temperature:** -60 to 450°C

*Higher values upon request

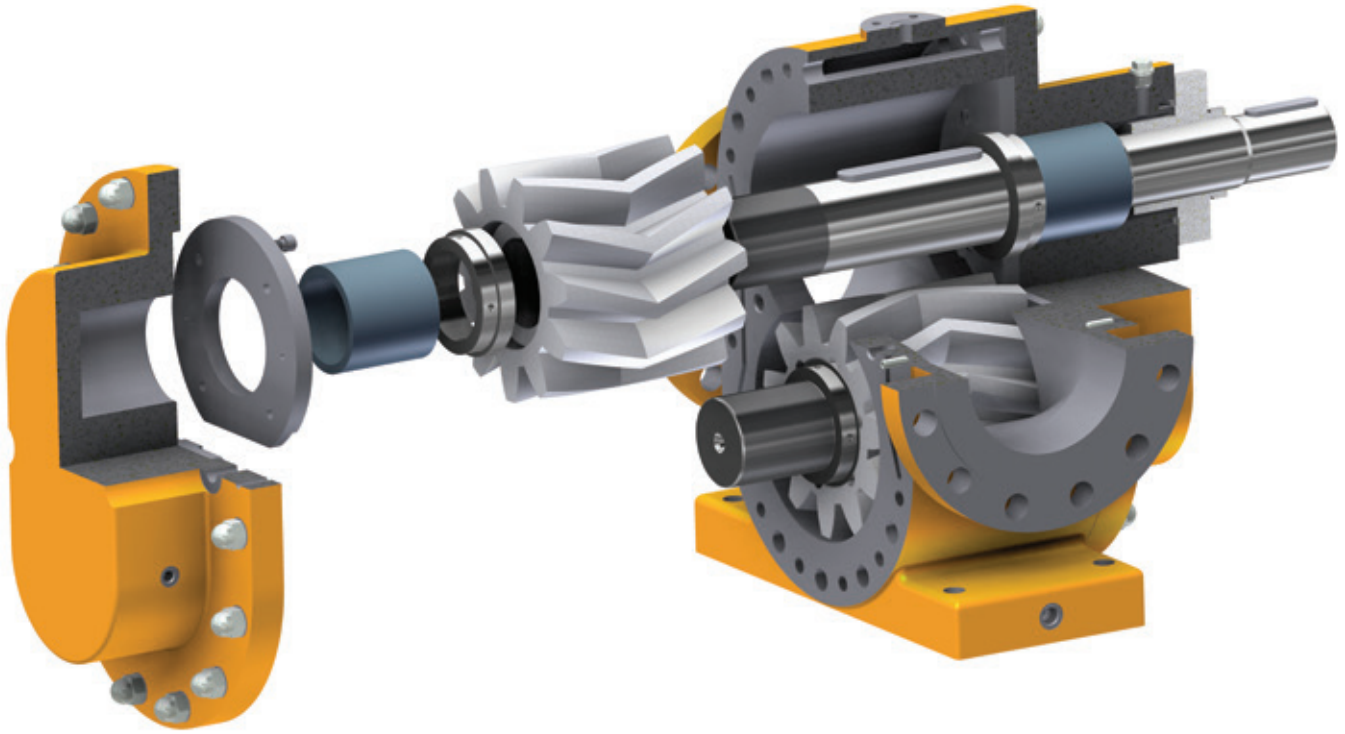


SIZES AND FLOW RATES



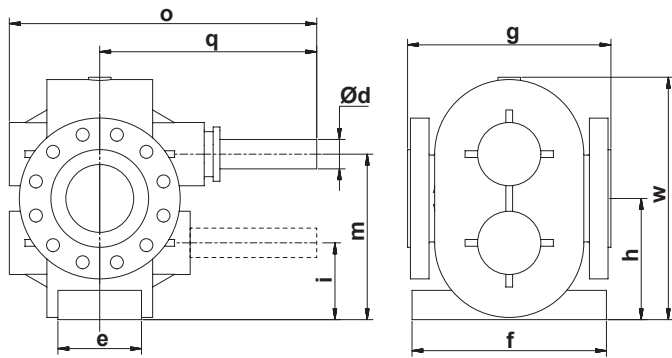
Pump size	Volume l/rev	Flow rates*															
		n=50 RPM		n=100 RPM		n=200 RPM		n=300 RPM		n=500 RPM		n=750 RPM		n=1000 RPM		n=1500 RPM	
		l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h
32	0.15	7.5	0.5	15	0.9	30	1.8	45	2.7	75	4.5	113	6.8	150	9	225	14
40	0.25	12.5	0.8	25	1.5	50	3	75	4.5	125	7.5	188	11	250	15	375	23
50/I	0.5	25	1.5	50	3	100	6	150	9	250	15	375	23	500	30		
50/II	0.65	33	2	65	3.9	130	8	195	12	325	20	488	29	650	39		
65	0.84	42	2.5	84	5	168	10	252	15	420	25	630	38	840	50		
80	1	50	3	100	6	200	12	300	18	500	30	750	45	1000	60		
100	3	150	9	300	18	600	36	900	54	1500	90						
150	4.69	234	14	469	28	937	56	1406	84	2344	141						
200	6.07	304	18	607	36	1215	73	1822	109	3037	182						
250	8.01	400	24	801	48	1601	96	2402	144								
300	9.66	483	29	966	58	1932	116	2898	174								

*The exact flow rate depends on the rotation speed (RPM), liquid viscosity, working pressure, pressure head and characteristics of the working liquid.

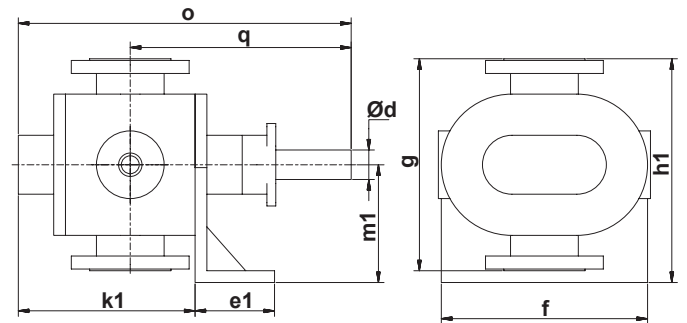


DIMENSIONS

ZH: horizontal configuration



ZV: vertical configuration



Pump size	32	40	50/I	50/II	65	80	100	150	200	250	300
Ød	24	38	38	38	42	48	65	75	76	77	78
e	75	60	90	130	80	120	180	240	240	380	380
e1	85	120	120	120	130	135	150	220	220	320	320
f	150	258	258	258	320	350	430	550	550	550	550
w	195	290	290	290	363	395	52	635	635	635	635
g	220	258	258	258	350	360	450	560	560	560	560
h	95,5	148	148	148	183	200	260	315	315	315	315
h1	175	240	240	240	300	320	410	540	540	540	540
k1	128	155	185	225	165	215	300	400	400	540	540
m	128	196	196	196	248	270	358	425	425	425	425
m1	100	140	140	140	165	170	220	315	315	315	315
i	63	100	100	100	122	160	162	205	205	205	205
o	280	400	430	505	445	495	680	806	806	946	946
q	195	320	335	350	330	350	480	520	520	660	660
DN	32	40	50	50	65	80	100	150	200	250	300

in mm, subject to modifications