

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.

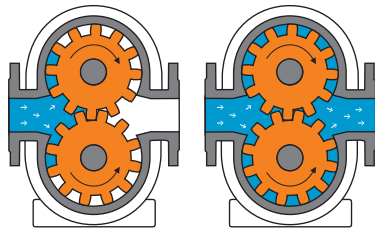
Positive displacement pumps are designed to handle large changes in pressure, viscosity and flow rate and are often used for highly viscous liquids with large percentages of solids.

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

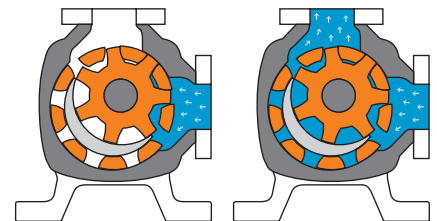
- For standard to high end applications
 - ZK and ZH/ZV Blue available in all materials
 - PQ Green available in cast iron and stainless steel
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INNER GEAR PUMPS

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
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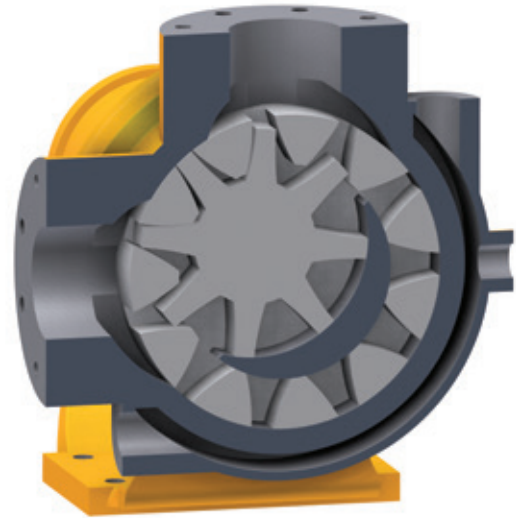
ZI GREEN SERIES

INTERNAL GEAR PUMP

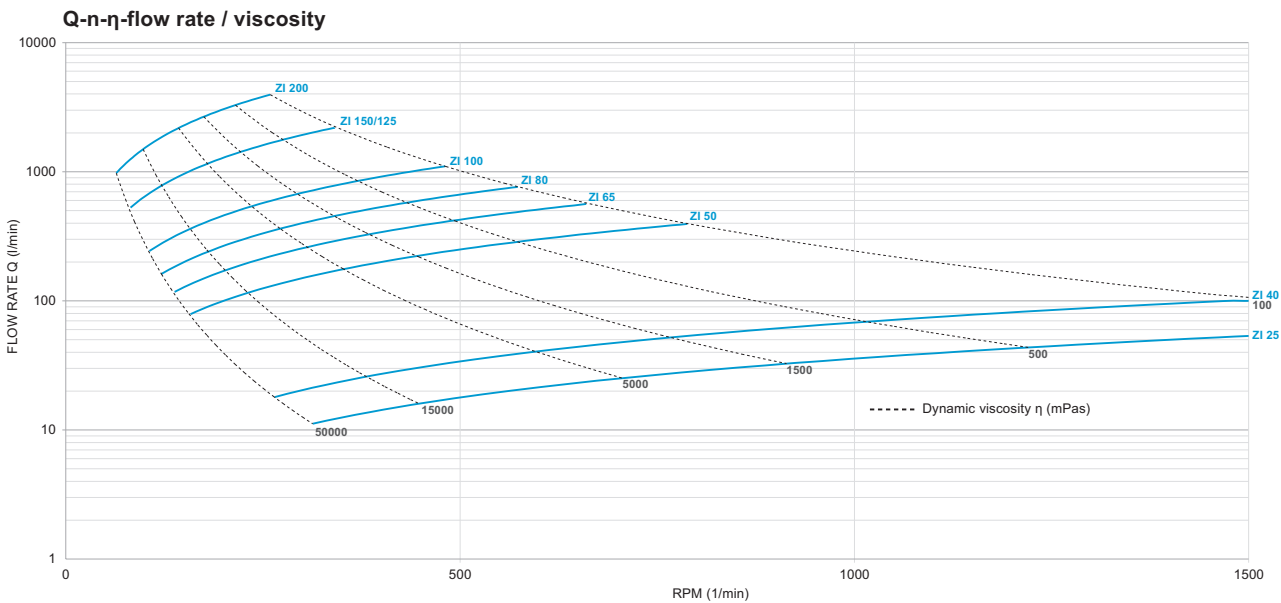
FEATURES

- **Pressure:** up to 14 bar
- **Suction lift:** 4 m
- **Flow rate:** 10 to 4120 l/min (0.1 to 250 m³/h)
- **RPM:** 1780 RPM
- **Efficiency:** up to 90%
- **Viscosity:** 1 to 55,000 mPas*
- **Temperature:** -40 to 300°C

*Higher values upon request

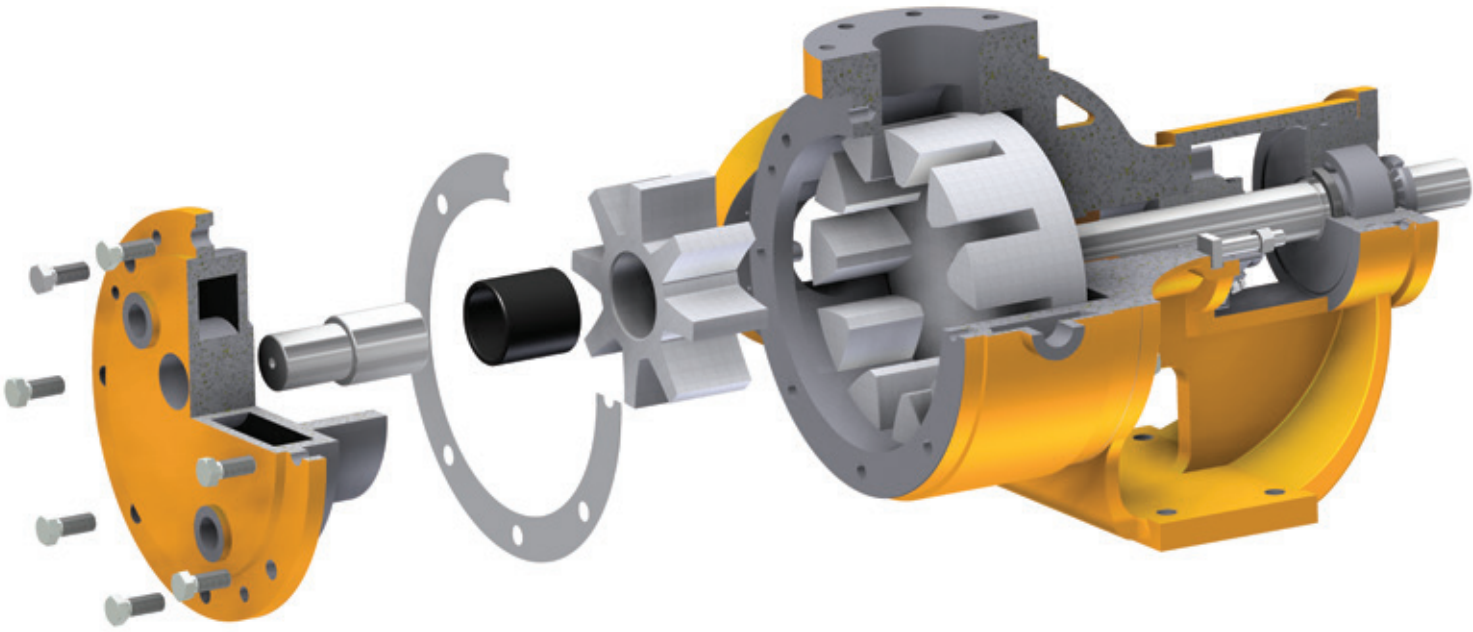


SIZES AND FLOW RATES

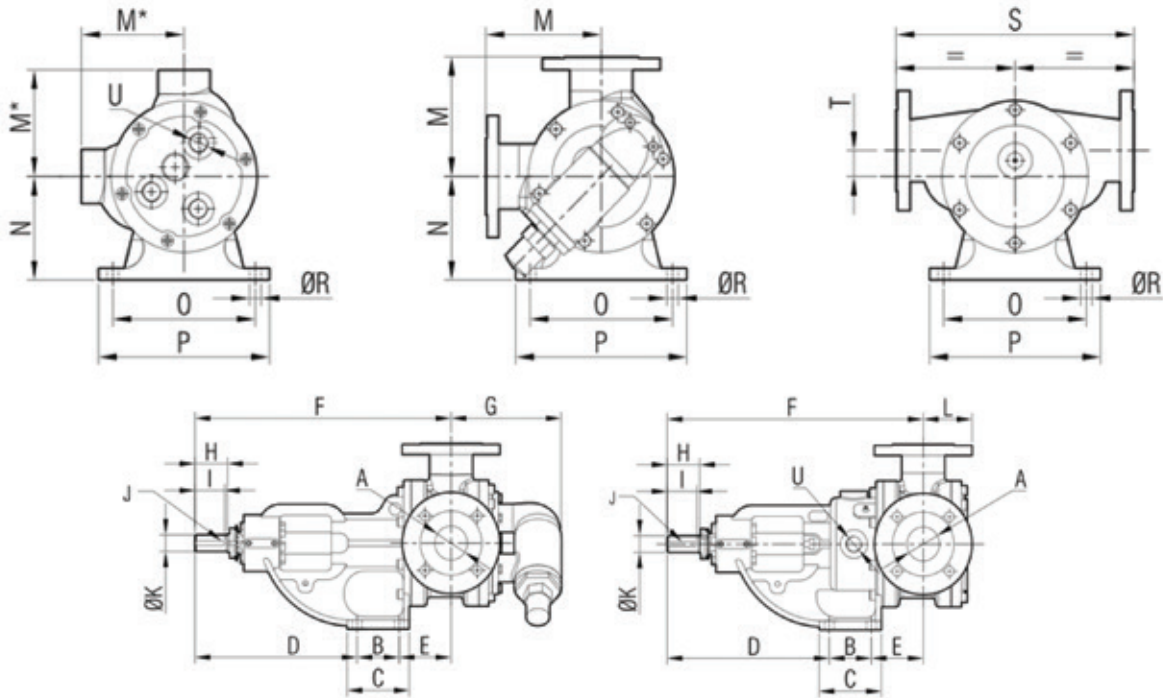


Pump size	Volume l/rev	Flow rates*															
		n = 100 min ⁻¹		n = 200 min ⁻¹		n = 300 min ⁻¹		n = 450 min ⁻¹		n = 700 min ⁻¹		n = 950 min ⁻¹		n = 1200 min ⁻¹		n = 1400 min ⁻¹	
		l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h
25	0.04	3.6	0.2	7.1	0.4	10.7	0.6	16	1	25	1	34	2	43	2.6	50	3
40	0.1	6.8	0.4	13.6	0.8	20.4	1.2	31	1.8	48	3	65	3.9	81	4.9	95	6
50	0.50	50	3	100	6	150	9	225	13.5	350	21						
65	0.85	85.2	5.1	170.4	10.2	256	15.3	383	23								
80	1.33	133	8	266.6	16	400	24	600	36								
100	2.29	229	13.8	458.3	27.5	688	41.3	1031	62								
125	6.43	643	38.6	1286	77.2	1929	116										
150	6.43	643	38.6	1286	77.2	1929	116										
200	15.26	1526	91.6	3052	183												

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



DIMENSIONS



Pump size	cc/r	PN	Flange	B	C	D	E	F	G	H	I	J	K	L	M	M*	N	O	P	R	S	T	U
25	35.7	16	1"	50	75	127	73	250	110	42	30	6x6	Ø18	69	95	78	75	110	140	10	-	-	R 1/2"
40	67.9	16	1 1/2"	58	90	165	97	320	115	50	45	6x6	Ø20	72	93	78	90	137	170	12	184	16	R 1/2"
50	500	16	2"	70	105	275	88	432	186	55	50	8x7	Ø27	89	162	140	140	200	240	14	334	35	R 3/4"
65	851.9	16	2 1/2"	100	133	274	93	467	206	60	50	8x7	Ø30	107	185	165	180	180	220	14	377	30	R 1"
80	1333.3	16	3"	100	133	274	119	492	206	60	50	8x7	Ø30	107	185	170	180	180	220	14	385	30	R 1"
100	2291.7	16	4"	110	160	261	163	534	249	271	60	12x8	Ø42	123	215	-	237	220	280	18	-	-	R 1"
125	6428.6	16	5"	160	240	355	130	685	319	90	85	16x10	Ø55	152	245	245	250	250	320	18	-	-	R 1 1/4"
150	6428.6	16	6"	150	225	648	166	705	330	90	85	16x10	Ø55	166	265	241	250	250	315	23	530	-	R 1 1/4"
200	15,263.2	16	8"	178	263	706	204	820	480	125	120	18x11	Ø60	204	362	337	337	350	406	23	724	-	R 1 1/4"

in mm, subject to modifications