



ZEILFELDER
PUMPEN

english 

made in Germany


HIGH PERFORMANCE PUMPS

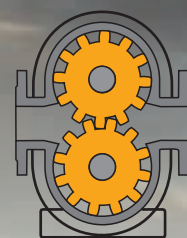
API, ATEX, TA-Luft
FDA, GOST-R & TR CU
Certifications

up to:
120 bar

up to:
1400 Pa.s

up to:
450 °C

up to:
 $\eta = 92\%$



GEAR PUMPS



ROTARY LOBE PUMPS

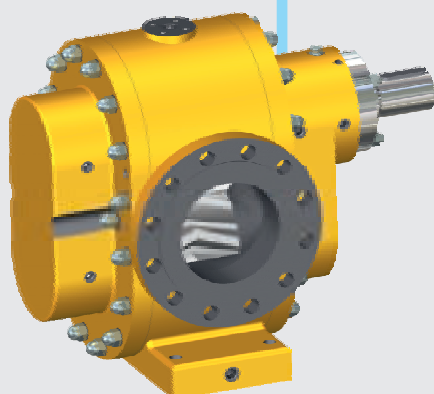


a trademark of



www.zeilfelder-pumpen.com

up to
120 bar



A trademark of
 **ASM**
DIMATEC

made in Germany

ZEILFELDER HIGH PERFORMANCE PUMPS

ADVANTAGES & HIGHLIGHTS

With our diverse high performance pumps we are able to serve all your needs and respond to any challenge.

API, ATEX, FDA, TA-Luft, GOST-R and TR CU compliant

Zeilfelder pumps are specially designed for*:

- complex and difficult challenges
- pressure up to **120 bar**
- suction lift up to **8 m**
- flow rates from **1,5l/h to 300m/h**
- viscosity up to **1,400,000 mPas**
- temperature from **-60°C to 450°C**
- dosing (repeat accuracy > **99 %**)
- explosive und toxic substances
- liquids containing solids (up to **90%**)
- liquids containing shear sensitive materials (for example fruits)
- polymerizing or coagulating liquids
- liquids containing crystals or fibers

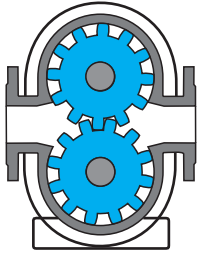
Advantages*:

- many possible material combinations
- high durability through high-end bearings and special coatings
- low energy consumption and high efficiency up to **$\eta = 92 \%$** through:
 - tight manufacturing tolerances
 - special design
- interchangeable thrust segments (axial bearings)
- dry running capability
- nearly pulsation free at varying viscosities
- high displacement/revolution
 - low rotational speed
 - gentle pumping
- revolution speed adapted to medium
- non-destructive pumping holding clipping under **5%**
- completely reversible flow
- vertical and horizontal flow
- low noise level
- no valves required

Optional:

- magnetic coupling
- packing
- single acting mechanical seal
- double acting mechanical seal
- hermetic capsuled with Magnetic drive (direct or indirect)
- explosion proof
- heating jacket (for water, steam or heating oil)
- heated sealing area
- fully ceramic pump

*depending on the pump type and series



**ZEILFELDER
HIGH PERFORMANCE**

GEAR PUMPS



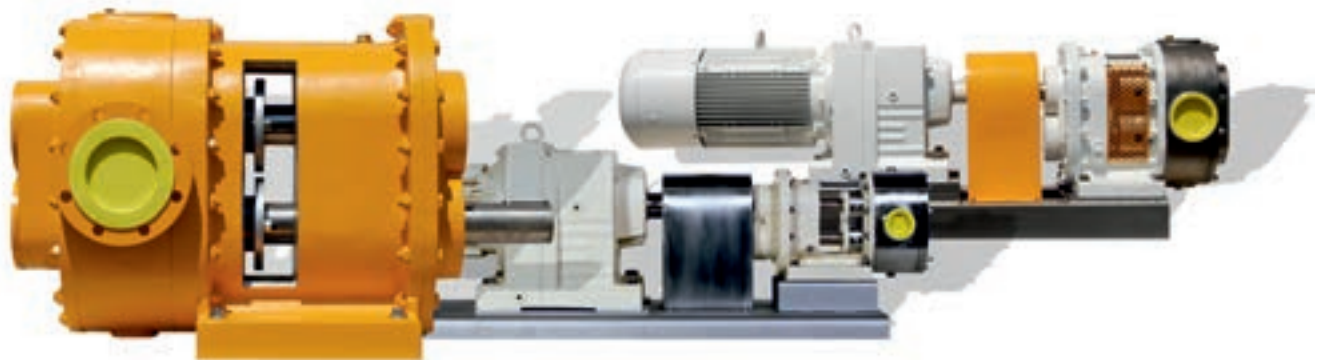
- pressure up to 120 bar
- flow rates up to 4,350 l/h
- flow rates up to 260 m³/h

- suction lift up to 6 m
- viscosity up to 150,000 mPa·s
- temperature from -60°C to 450°C



**ZEILFELDER
HIGH PERFORMANCE**

ROTARY LOBE PUMPS

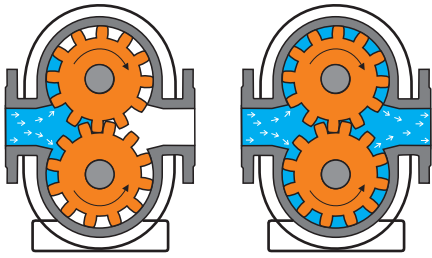


- pressure up to 64 bar
- flow rates up to 5,000 l/min
- flow rates up to 300 m³/h

- suction lift up to 8 m
- viscosity up to 1,400,000 mPa·s
- temperature from -60°C to 450°C

EXTERNAL GEAR PUMPS

Zeilfelder external gear pumps are self-priming, rotary positive displacement pumps. The gears are in direct contact – one gear is driven by the other. This design requires the pumped liquid to have at least minimal self-lubricating characteristics. The volume flow is easily reversible, simply by changing the rotational direction of the pump's drive. Due to the high number of meshing teeth, the pumps operate essentially pulsation-free. External gear pumps are suited for almost every fluid with varying viscosities, but are not recommended for fluids which contain abrasive solids.



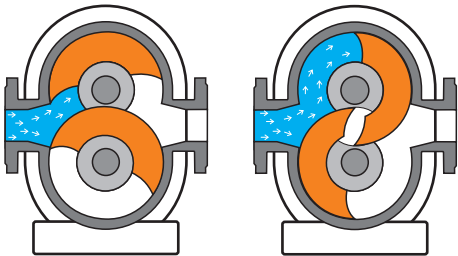
Function:

As the gears rotate, they separate on the intake side of the pump creating a low pressure void which is then filled by fluid. The casing wall and the space between the gear teeth form chambers in which the fluid is transported from the suction to the pressure side. The meshing of the gears at the discharge of the pump forces the fluid into the pipeline.

ROTARY PISTON PUMPS / ROTARY LOBE PUMPS

Rotary piston pumps (KE/KD) are self-priming, rotary positive displacement pumps. Unlike external gear pumps the pistons do not make contact and rotate around a fixed hub. This allows the pumps to run dry without damaging the lobes. The volume flow is easily reversible, simply by changing the rotational direction of the pump's drive. Due to solid construction, the pumps require very little maintenance, and enable trouble free running over a long life cycle. The combination of lobe design and slow rotational speed allows gentle handling of the product and prevents the fluid from foaming. Rotary piston pumps are suitable for polymerizing, coagulating, crystalizing and fibrous media as well as for media containing foreign material and additives. Two piston types are available: single piston or twin piston.

Rotary lobe pumps are – just like the rotary piston pumps – self-priming, rotary positive displacement pumps with either single or twin lobe design. The difference being that the lobe design of the KS/KDS-series has a rotating hub which seals against the opposite lobe. Due to the synchromesh gear, the lobes run without contact, and are especially suited for fluids of high viscosity, abrasive characteristics and high dry-solids content. The robust design enables this pump range to be well suited for high pressure applications.

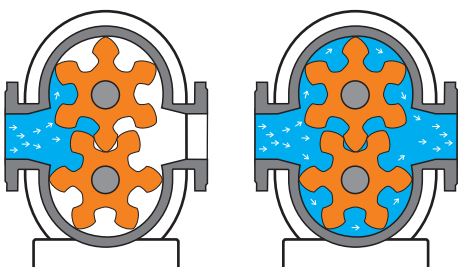


Function:

As the lobes chambers open, they create an area of expanding volume at the inlet side of the pump. Liquid flows into the low pressure cavity and is then trapped by the lobes as they rotate. Liquid travels around the interior of the casing in the chambers between the lobes and the casing before being forced out at the discharge by the lobes.

MULTI WING LOBE PUMPS

Multi wing lobe pumps are self-priming, rotary positive displacement pumps. The lobes, consisting of 3 to 12 wings, rotate against each other without direct contact by the means of a synchromesh gear. They are capable of running dry and are subject to minimum wearing. The versions with multiple wings are able to handle fluid flow at varying viscosities essentially pulsation-free. Rotary wing pumps are especially suitable for outgasing, abrasive, crystal containing fluids and products prone to foaming or to coagulation. Thanks to the synchromesh gear, this pump family can also handle small, abrasive solids.



Function:

As the lobes come out of mesh, they create an area of expanding volume on the inlet side of the pump. Liquid flows into the low pressure cavity and is trapped by the lobes as they rotate. Liquid travels around the interior of the casing in the chambers between the lobes and the casing before being forced out at the discharge by the lobes.

Product range



Gear pumps

ZK BLUE Series

For high end applications, high process efficiency and quality

- Up to 25 bar* (max. 120 bar)
- Viscosity from 0,5 mPa·s to 25.000 mPa·s*
- 0,4 – 300 l/min or 0,025 – 18 m³/h
- Materials: All available materials

Sealing: radial shaft seal, gland packing, single or double acting mechanical seal, magnetic coupling



Gear pumps

ZH/ZV BLUE Series

For high end applications, high process efficiency and quality

- Up to 25 bar* (max. 120 bar)
- Viscosity from 0,7 mPa·s to 150.000 mPa·s*
- 0,5 – 4350 l/min or 0,03 - 261 m³/h
- Materials: All available materials

Sealing: radial shaft seal, gland packing, single or double acting mechanical seal, magnetic coupling



Gear pumps

PQ GREEN Series

For standard applications

- Up to 20 bar
- Viscosity from 5 mPa·s to 140.000 mPa·s
- Von 0,14 – 2283 l/min or 0,008 – 137 m³/h
- Materials: Cast iron, Stainless steel

Sealing: radial shaft seal, gland packing, single or double acting mechanical seal



Rotary lobe pumps

KE/KD BLUE Series

For high end applications, high process efficiency and quality

- Up to 25 bar* (max. 64 bar)
- Viscosity from 1 mPa·s to 1.400.000 mPa·s
- 1 – 5000 l/min or 0,06 – 300 m³/h
- Materials: All available materials

Sealing: radial shaft seal, gland packing, single or double acting mechanical seal



Rotary lobe pumps

KS/KDS BLUE Series

For high end applications, high process efficiency and quality

- Up to 40 bar* (max. 64 bar)
- Viscosity from 10 mPa·s to 1.400.000 mPa·s
- 2 – 2474 l/min or 0,12 – 148 m³/h
- Materials: All available materials

Sealing: radial shaft seal, gland packing, single or double acting mechanical seal



Multi-wing lobe pumps

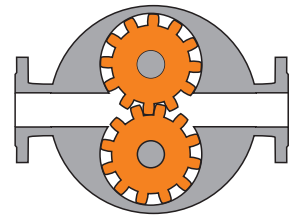
KM BLUE Series

For high end applications, high process efficiency and quality

- Up to 25 bar* (max. 64 bar)
- Viscosity from 1 mPa·s to 1.000.000 mPa·s
- 2 – 3300 l/min bzw. 0,15 – 198 m³/h
- Materials: All available materials

Sealing: radial shaft seal, gland packing, single or double acting mechanical seal

* Higher values on request



GEAR PUMP

ZK BLUE Series

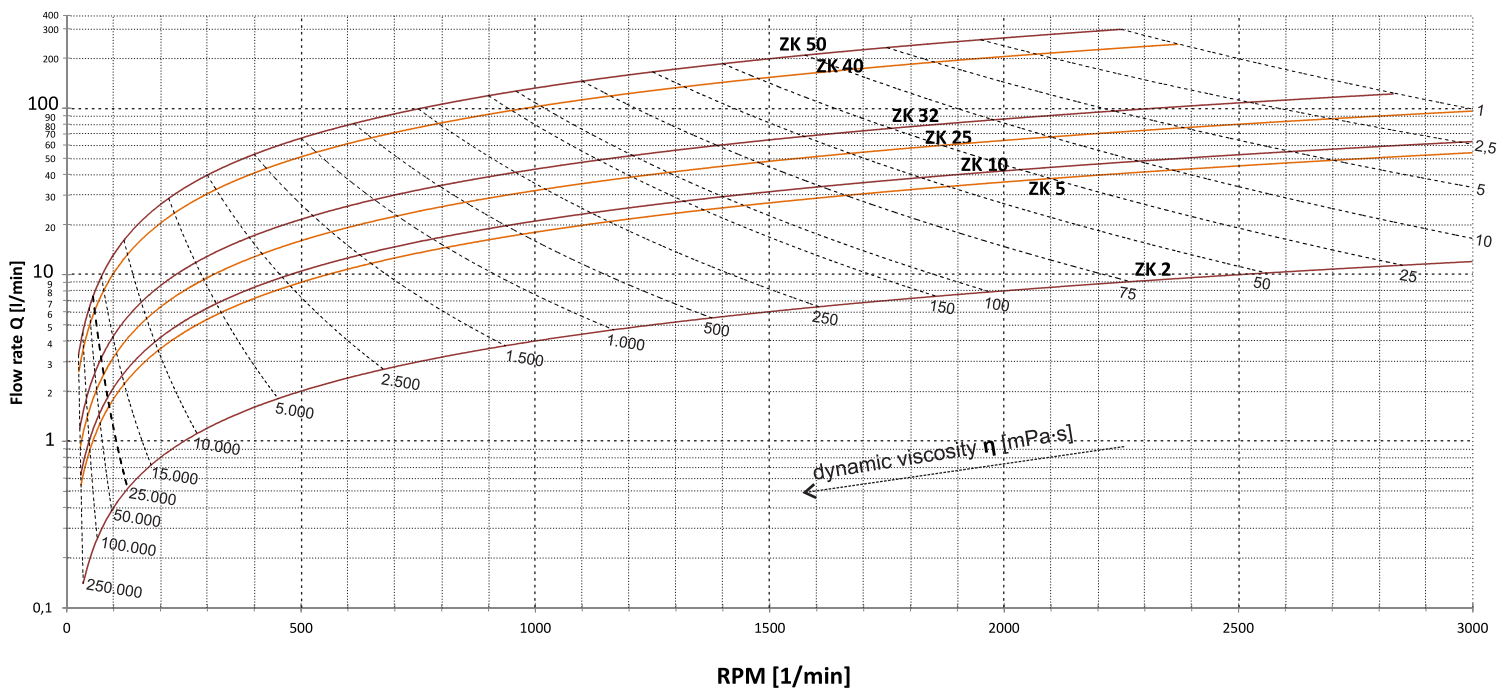
Model: ZK Series: BLUE

	from	to
System pressure		25 bar (max. 120 bar)
Suction lift		6m
RPM		3000 rpm*
Flow rate	0,4 l/min	300 l/min
	0,025 m ³ /h	18 m ³ /h
Efficiency	60%	92%
Viscosity	0,5 mPa·s	25,000 mPa·s
Temperature	-60°C	450°C

*Higher values on request



Q-n- η -flow rate / viscosity



Sizes and flow rates

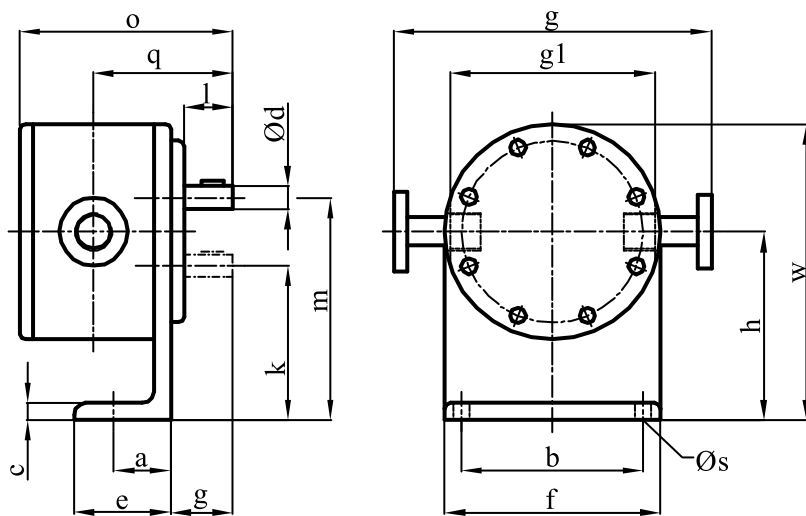
Pump size	Volume	Flow rates																			
		n=100 RPM		n=200 RPM		n=300 RPM		n=400 RPM		n=500 RPM		n=750 RPM		n=1000 RPM		n=1500 RPM		n=2000 RPM		n=3000 RPM	
	l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h	
2	0,004	0,4	0,03	0,8	0,05	1,3	0,1	1,7	0,1	2,1	0,13	3,2	0,2	4,2	0,25	6,3	0,4	8,4	0,5	12,6	0,8
5	0,018	1,8	0,11	3,5	0,212	5,3	0,3	7,1	0,4	8,82	0,53	13,2	0,8	17,64	1,06	26,46	1,6	35,28	2,1	52,92	3,2
10	0,021	2,1	0,13	4,2	0,252	6,3	0,4	8,4	0,5	10,5	0,63	15,8	0,9	21	1,26	31,5	1,9	42	2,5	63	3,8
25	0,032	3,2	0,19	6,4	0,383	9,6	0,6	12,8	0,8	15,96	0,96	23,9	1,4	31,92	1,92	47,88	2,9	63,84	3,8		
32	0,043	4,3	0,26	8,6	0,514	12,9	0,8	17,1	1,0	21,42	1,29	32,1	1,9	42,84	2,57	64,26	3,9	85,68	5,1		
40	0,102	10,2	0,61	20,3	1,22	30,5	1,8	40,7	2,4	50,82	3,05	76,2	4,6	101,64	6,10	152,46	9,1	203,28	12,2		
50	0,132	13,2	0,79	26,4	1,583	39,6	2,4	52,8	3,2	65,94	3,96	98,9	5,9	131,88	7,91	197,82	11,9	263,76	15,8		

Table: Flow rates

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



Pump dimensions

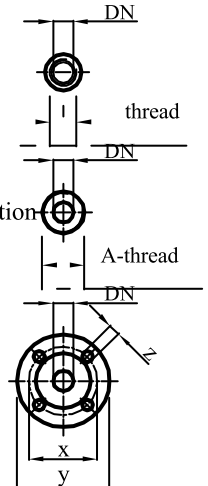


Connection options

threaded connection
DIN 259

round thread connection
DIN 11851

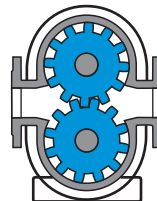
flange connection
DIN oder ANSI
bis PN 160



Pump sizes	ZK 2	ZK 5	ZK 10	ZK 25	ZK 32	ZK 40	ZK 50
a	40	50	50	55	55	55	55
b	70	80	80	160	160	150	150
c	12	15	15	20	20	20	20
Ød	8	14	14	19	19	28	28
e	60	80	80	90	90	90	90
f	99	125	125	190	190	230	230
g	55	58	58	58	58	80	80
g ₁	90	87	87	87	87	108	108
h	87,5	110	110	166	166	190	190
i	100	128	128	196	196	226	226
k	75	92	92	136	136	154	154
l	47	50	50	50	50	70	70
m	137	173	173	261	261	305	305
n	143	188	198	188	198	250	265
n ₁	178	217	227	217	227	278	293
o	100	123	128	123	128	165	173
o ₁	135	152	157	152	157	193	201
p*	93	120	119	180	180	218	218
Øs	12	14,5	14,5	14,5	14,5	14,5	14,5
T*	170	200	200	280	260	350	350
U*	170	200	200	280	280	350	350
DN	15	20	25	25	32	40	50
v	G 3/8	G 1/2	G 3/4	G 1	G 1 1/4	G 1 1/2	G 2
w	Rd.34 x 1/8"	Rd.44 x 1/6"	Rd.52 x 1/6"	Rd.52 x 1/6"	Rd.58 x 1/6"	Rd.65 x 1/6"	Rd.78 x 1/6"
x	65	75	85	85	100	110	125
y	95	105	115	115	140	150	165
z	4 x Ø14	4 x Ø14	4 x Ø14	4 x Ø14	4 x Ø18	4 x Ø18	4 x Ø18

in mm, subject to modifications

* Measures "p" = with threaded connection, "t" with round connection, "u" with flange connection



GEAR PUMP

ZH und ZV BLUE Series

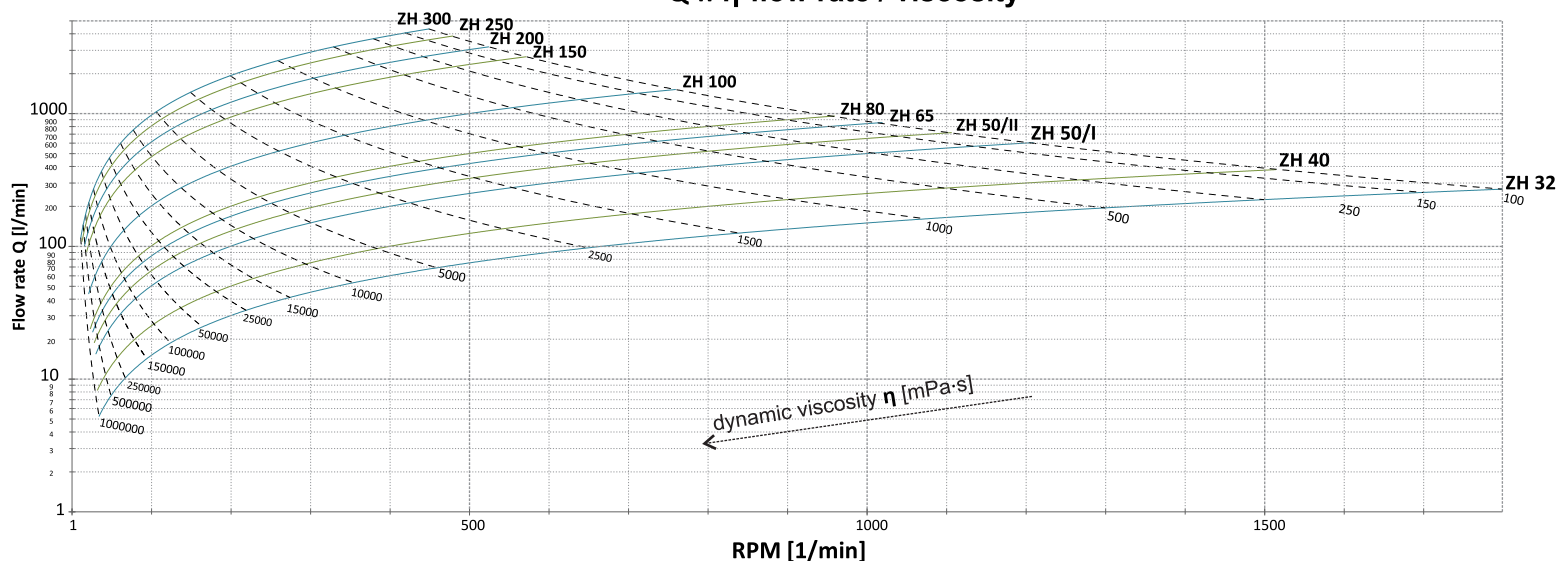


Model: ZH & ZV Series: BLUE

	from	to
System pressure		25 bar (max. 120bar)
Suction lift		6 m
RPM		1800 rpm*
Flow rate	0,5 l/min	4350 l/min
	0,03 m ³ /h	261 m ³ /h
Efficiency	60%	92%
Viscosity	0,7 mPa·s	150,000 mPa·s*
Temperature	-60°C	450°C

*Higher values on request

Q-n- η -flow rate / viscosity

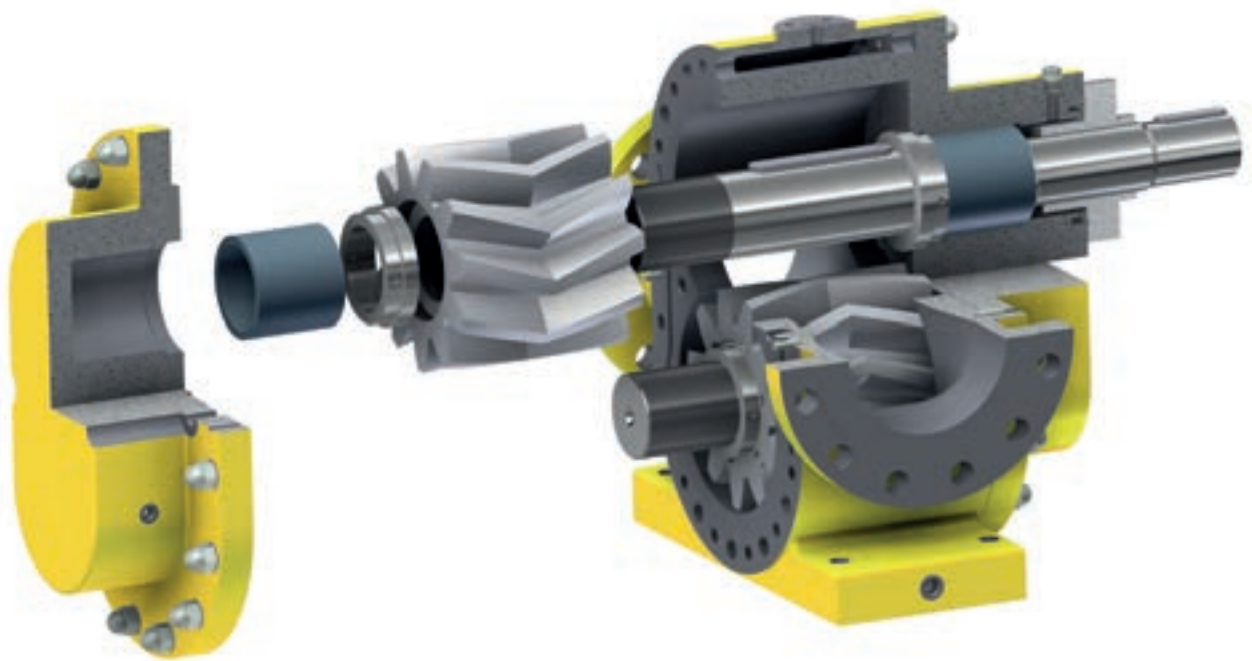


Sizes and flow rates

Pump size	Volume	Flow rates																			
		n=50 RPM		n=100 RPM		n=200 RPM		n=300 RPM		n=400 RPM		n=500 RPM		n=750 RPM		n=1000 RPM		n=1500 RPM		n=2000 RPM	
		l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h
32	0,15	7,5	0,45	15	0,9	30	1,8	45	2,7	60	3,6	75	4,5	112,5	6,75	150	9	225	13,5		
40	0,25	12,5	0,75	25	1,5	50	3	75	4,5	100	6	125	7,5	187,5	11,3	250	15	375	22,5		
50/I	0,5	25	1,5	50	3	100	6	150	9	200	12	250	15	375	22,5	500	30				
50/II	0,65	32,5	1,95	65	3,9	130	7,8	195	11,7	260	15,6	325	19,5	487,5	29,3	650	39				
65	0,84	42	2,52	84	5,04	168	10,1	252	15,1	336	20,2	420	25,2	630	37,8	840	50,4				
80	1	50	3	100	6	200	12	300	18	400	24	500	30	750	45						
100	2	100	6	200	12	400	24	600	36	800	48	1000	60	1500	90						
150	4,69	234	14	469	28,1	937	56,2	1406	84,4	1875	112	2344	141								
200	6,07	304	18,2	607	36,4	1215	72,9	1822	109	2429	146	3037	182								
250	8,01	400	24	801	48	1601	96	2402	144	3202	192										
300	9,66	483	29	966	58	1932	116	2898	174	3864	232										

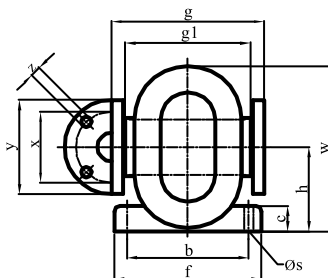
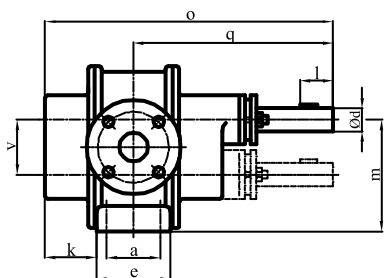
Table: Flow rates

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



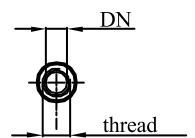
Pump dimensions

Type ZH: horizontal configuration

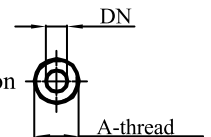


Connection options

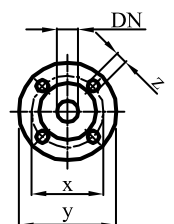
threaded connection
DIN 259



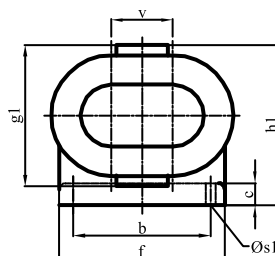
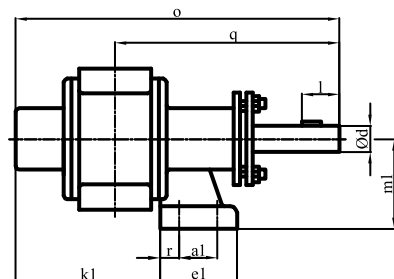
round thread connection
DIN 11851



flange connection
DIN o. ANSI
bis PN 160

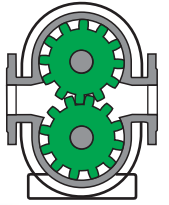


Typ ZV: vertical configuration



Pump sizes	32	40	50/I	50/II	65	80	100	150	200	250	300
a	45	-	60	94	50	80	130	190	190	305	305
a ₁	40	60	60	60	60	60	70	170	170	250	250
b	126	214	214	214	270	290	360	460	460	460	460
c	20	45	45	45	45	45	50	65	65	65	65
d	24	38	38	38	42	48	65	75	76	77	78
e	75	60	90	130	80	120	180	240	240	380	380
e ₁	85	120	120	120	130	135	150	220	220	320	320
f	150	258	258	258	320	350	430	550	550	550	550
g	220	258	258	258	350	360	450	560	560	560	560
g ₁	150	200	200	200	270	300	400	450	450	450	450
h	95,5	148	148	148	183	200	260	315	315	315	315
h ₁	175	240	240	240	300	320	410	540	540	540	540
k	48	85	85	85	75	85	110	150	150	150	150
k ₁	128	155	185	225	165	215	300	400	400	540	540
l	50	80	80	80	80	85	120	115	115	115	115
m	128	196	196	196	248	270	358	425	425	425	425
m ₁	100	140	140	140	165	170	220	315	315	315	315
o	280	400	430	505	445	495	680	806	806	946	946
q	195	320	335	350	330	350	480	520	520	660	660
r	30	35	35	35	45	50	50	50	50	50	50
Øs	4x11	4x12	4x16	4x16	4x16	4x18	4x18	4x24	4x24	4x24	4x24
Øs ₁	4x14	4x16	4x16	4x16	4x16	4x18	4x18	4x24	4x24	4x24	4x24
v	65	96	96	96	126	140	196	220	220	220	220
w	195	290	290	290	363	395	520	635	635	635	635
thread	R 1/4 "	R 1/2 "	R 2 "	R 2 "	R 2 1/2 "	R 3 "	R 4 "	-	-	-	-
DN	32	40	50	50	65	80	100	150	200	250	300
x	100	110	125	125	145	160	250	240	295	355	410
y	140	150	165	165	185	200	300	285	340	405	460
z	4x18	4x18	4x18	4x18	8x18	8x18	8x26	8x22	12x22	12x26	12x26

in mm, subject to modifications



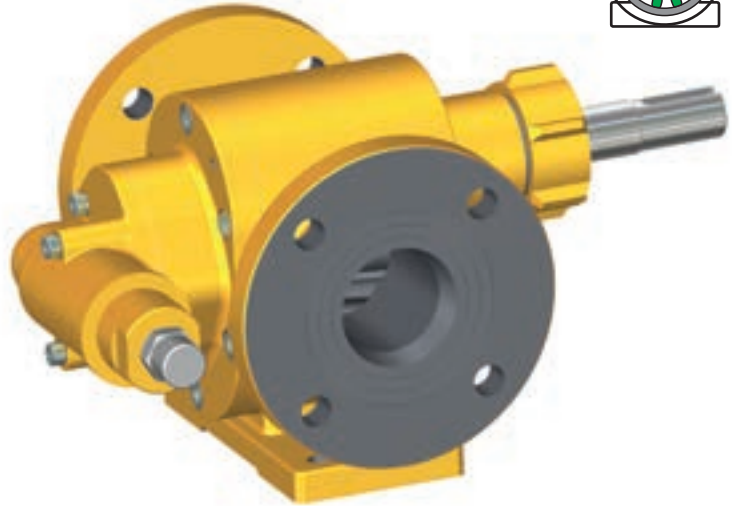
GEAR PUMP

PQ GREEN Series

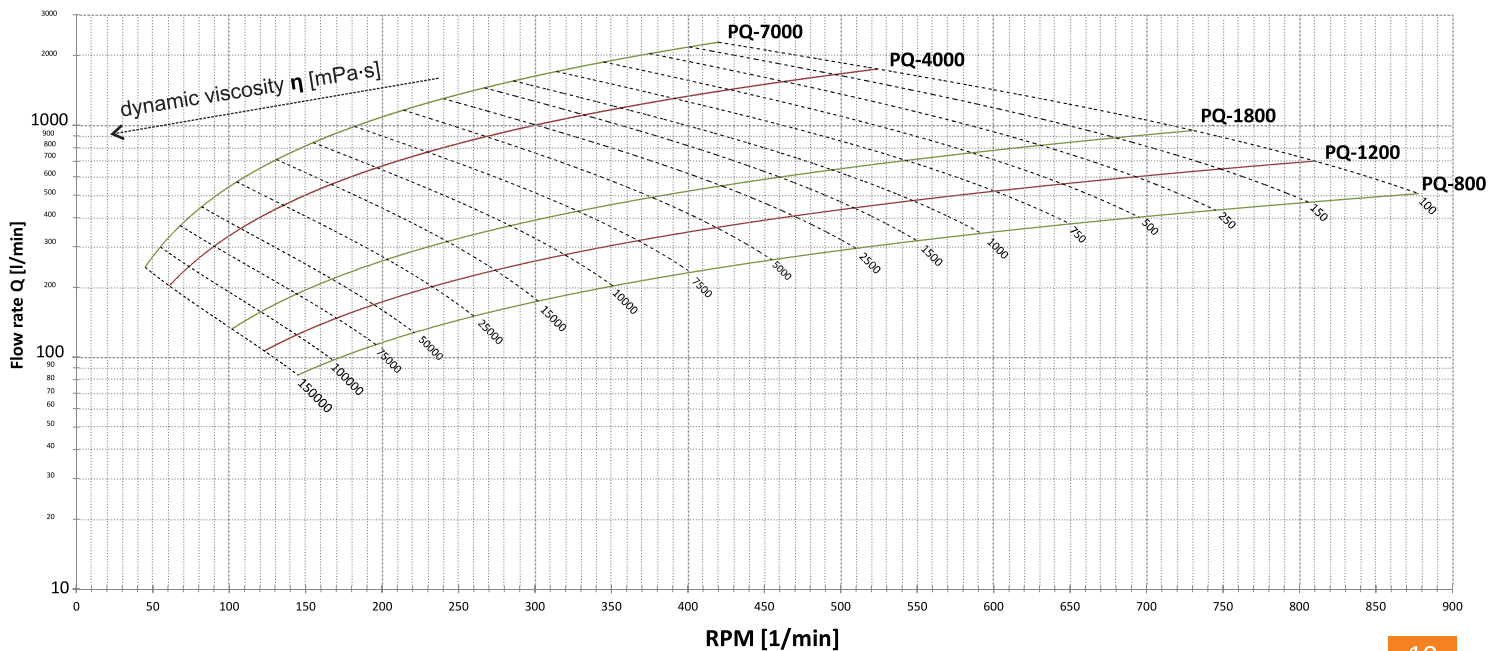
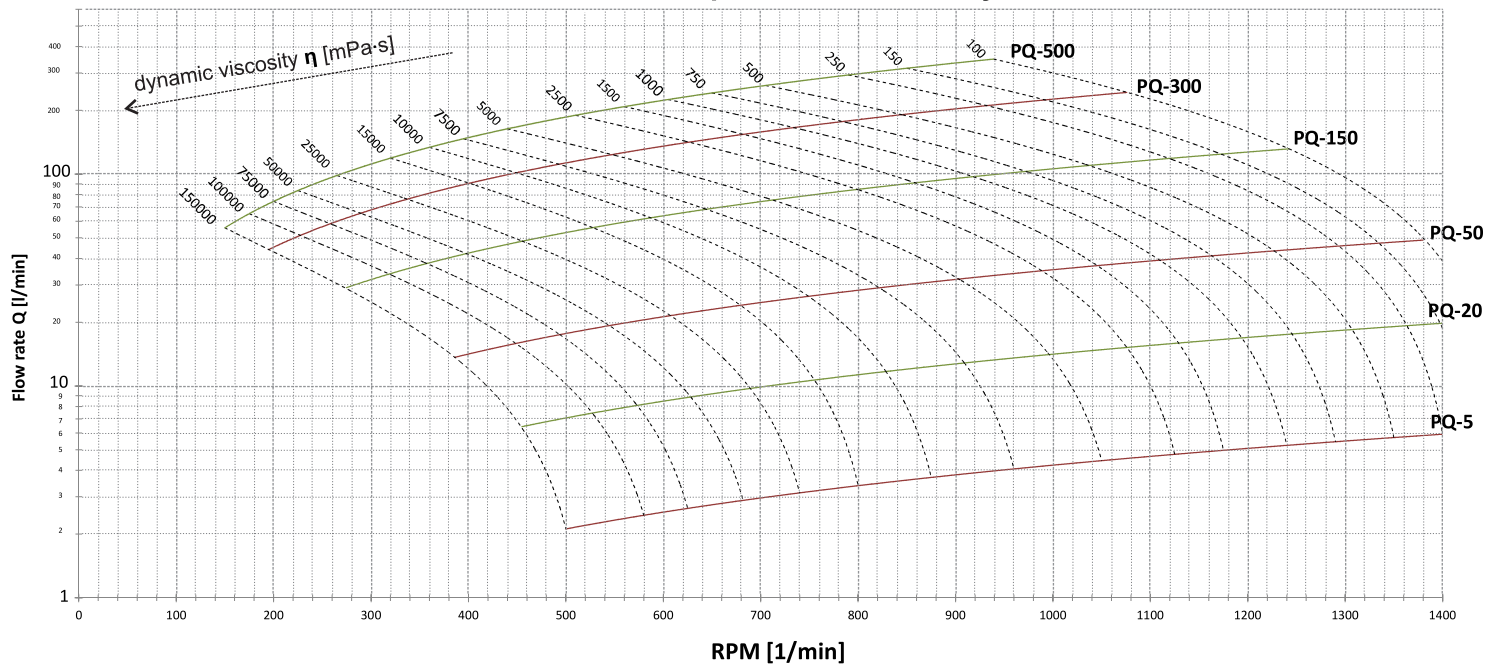
Model: PQ Series: GREEN

	from	to
System pressure		20 bar
Suction lift		4 m
RPM		1500 rpm*
Flow rate	0,14 l/min	2283 l/min
	0,008 m ³ /h	137 m ³ /h
Efficiency	60 %	74 %
Viscosity	5 mPa·s	140,000 mPa·s
Temperature	-20°C	120°C (300°C)

*Higher values on request



Q-n- η -flow rate / viscosity

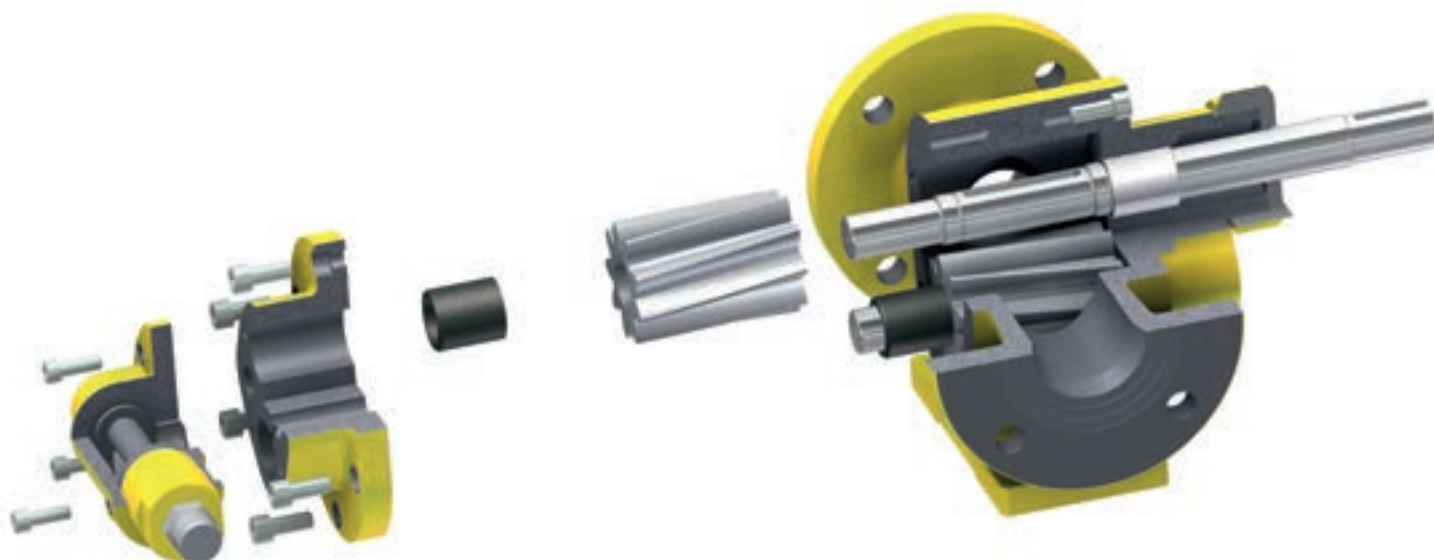


Sizes and flow rates

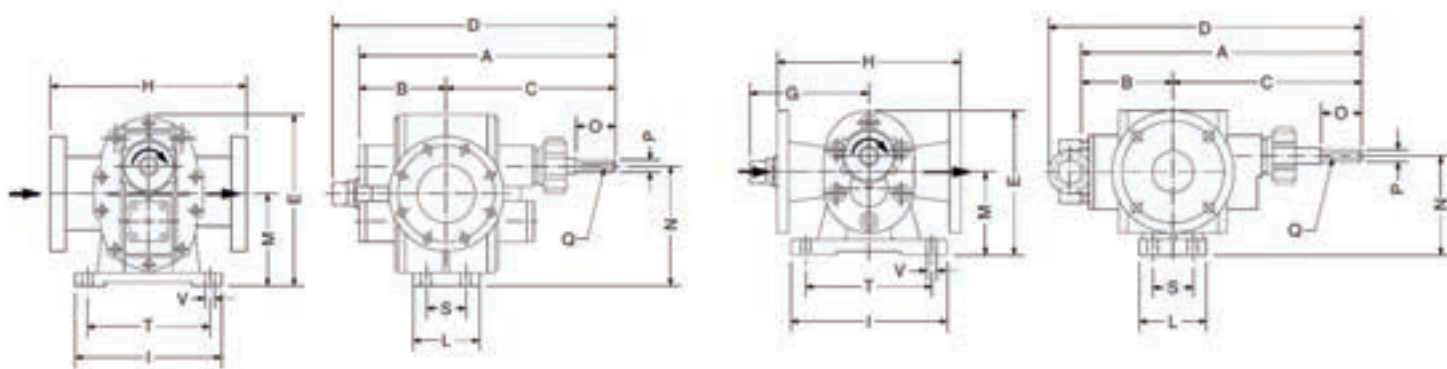
Size	Volume l/rev	Flow rates															
		n=100 RPM		n=200 RPM		n=300 RPM		n=450 RPM		n=700 RPM		n=950 RPM		n=1200 RPM		n=1400 RPM	
		l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h	l/min	m³/h
5	0,004	0,423	0,02538	0,8	0,05076	1,3	0,07614	1,9035	0,1	3,0	0,2	4,0185	0,24	5,1	0,30456	5,9	0,4
20	0,014	1,4	0,08478	2,8	0,2	4,2	0,3	6,4	0,4	10	0,6	13,4235	0,8	17	1	19,8	1,2
50	0,035	3,5	0,2	7,1	0,4	10,6	0,6	15,9255	1	24,8	1,5	33,6205	2	42,5	2,5		
150	0,11	10,6	0,6	21,2	1,3	31,8	1,9	47,7	2,9	74	4,5	100,7	6	127	7,6		
300	0,23	22,6	1,4	45,2	2,7	67,8	4,1	101,7	6,1	158,2	9,5	214,7	12,882				
500	0,37	37,2	2,2	74,4	4,5	111,6	6,7	167,4	10	260,4	15,624						
800	0,58	58	3,5	115,6	6,9	173,4	10,404	260,1	15,6	404,6	24,276						
1200	0,87	86,6	5,2	173,2	10,392	259,8	15,588	389,7	23,382	606,2	36,372						
1800	1,3	130	7,8	260	15,6	390	23,4	585	35,1	910	54,6						
4000	3,34	333,8	20,028	667,6	40,056	1001,4	60,084	1502,1	90,126								
7000	5,44	544	33	1087	65	1631	98										

Table: Flow rates

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



Pump dimensions



Type PQ	cc/g cc/r	PN	Connection	H	A	B	C	D	E	I	L	M	N	O	P	Q	S	T	V
5	4,23	-	1/2"	96	146	47	99	167	107	112	42	56	70	25	12	4	-	80	10
20	14,13	-	3/4"	112	176	58	118	202	107	112	50	56	70	25	12	4	-	80	10
50	35,39	-	1"	114	240	81	159	284	145	160	58	84	100	40	15	5	-	130	13
150	106	-	1 1/2"	155	307	112	195	362	175	180	74	100	122	40	18	6	-	130	13
300	226	16	DN 65	260	365	120	245	420	209	190	100	117	147	50	28	8	60	159	13
500	372	10	DN 80	295	417	138	279	458	249	220	80	130	171,5	75	35	10	50	180	13
800	578	10	DN 80	295	467	163	304	508	249	220	100	130	171,5	75	35	10	60	180	13
1200	866	16	DN 100	386	491	152	339	562	350	300	110	190	248	80	40	12	70	250	13
1800	1300	16	DN 100	386	551	182	369	622	350	300	110	190	248	80	40	12	70	250	13
7000	5435	16	DN 125	390/450	855	290	565	928	465	320	200	230	315	100	70	20	140	270	19

in mm, subject to modifications

ROTARY LOBE PUMP

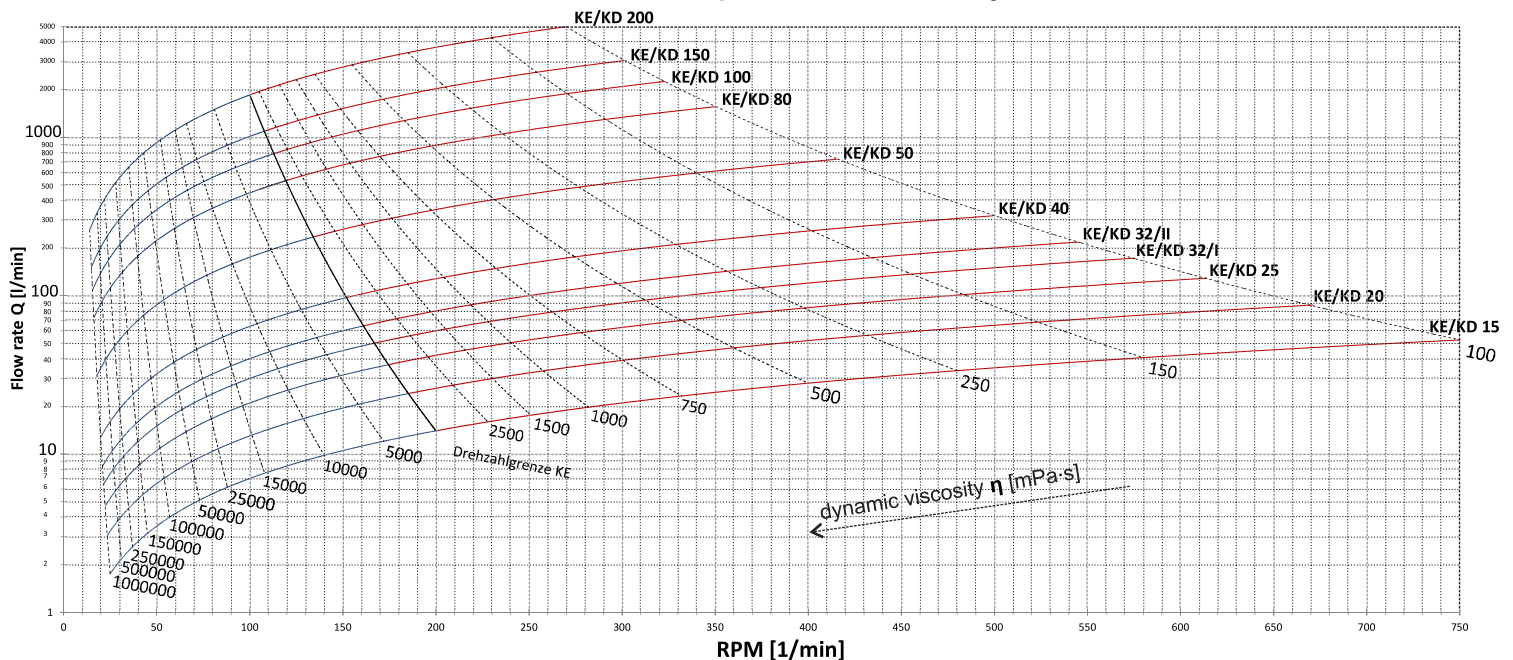
KE and KD BLUE Series

	from	to
System pressure		25 bar* (max. 64)
Suction lift		8 m
RPM		750 rpm
Flow rate	1 l/min	5000 l/min
	0.06 m³/h	300 m³/h
Efficiency	75 %	92 %
Particle size		max. 80mm (KE200)
Viscosity	1 mPa·s	1,400,000 mPa·s
Temperature	-60°C	+450°C

*Higher values on request



Q-n-η-flow rate / viscosity



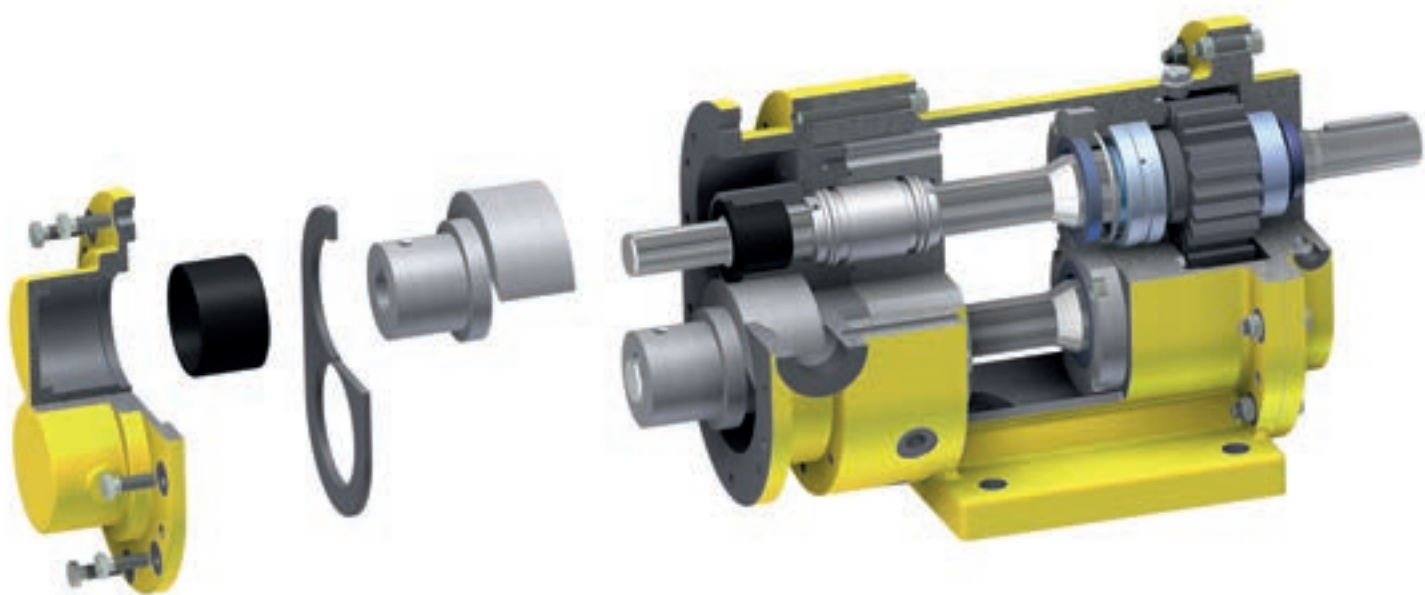
Sizes and flow rates

Pump size	Volume l/rev	Flow rates																	
		n = 15 min ⁻¹		n = 30 min ⁻¹		n = 60 min ⁻¹		n = 90 min ⁻¹		n = 160 min ⁻¹		n = 200 min ⁻¹		n = 300 min ⁻¹		n = 400 min ⁻¹		n = 600 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	l/min	m ³ /h
15	0,07	1,1	0,06	2,1	0,13	4,2	0,3	6,3	0,4	11,2	0,7	14	0,8	21	1,3	28	1,7	42	2,5
20	0,13	2	0,12	3,9	0,23	7,8	0,5	11,7	0,7	20,8	1,2	26	1,6	39	2,3	52	3,1	78	4,7
25	0,21	3,2	0,19	6,3	0,38	12,6	0,8	18,9	1,1	33,6	2	42	2,5	63	3,8	84	5	126	7,6
32/I	0,3	4,5	0,3	9	0,54	18	1,1	27	1,6	48	2,9	60	3,6	90	5,4	120	7,2		
32/II	0,4	6	0,4	12	0,7	24	1,4	36	2,2	64	3,8	80	4,8	120	7,2	160	9,6		
40	0,64	9,6	0,6	19,2	1,2	38,4	2,3	57,6	3,5	102	6,1	128	7,7	192	11,5	256	15,4		
50	1,75	26,3	1,6	52,5	3,2	105	6,3	158	9,5	280	16,8	350	21	525	31,5	700	42		
80	4,46	66,9	4	134	8	268	16,1	401	24,1	714	42,8	892	53,5	1338	80,3				
100	6,98	105	6,3	209	12,6	419	25,1	628	37,7	1117	67	1396	83,8	2094	126				
150	10,14	152	9,1	304	18,3	608	36,5	913	54,8	1622	97,3	2028	122	3042	183				
200	18,53	278	16,7	556	33,4	1112	66,7	1668	100	2965	178	3706	222						

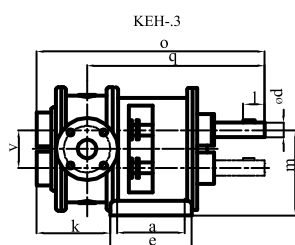
Table: Flow rates

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

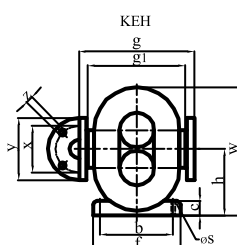
only KD



Pump dimensions



Type KEH

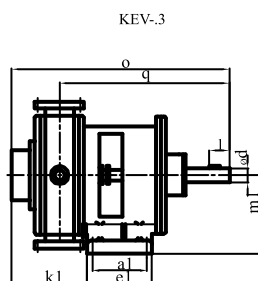
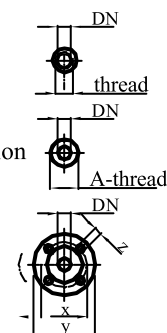


Connection options

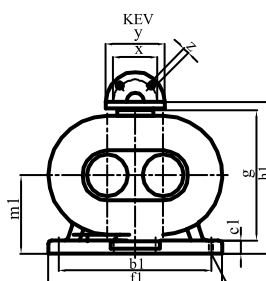
threaded connection
DIN 259

round thread connection
DIN 11851

flange connection
DIN, ANSI, SAE



Type KEV

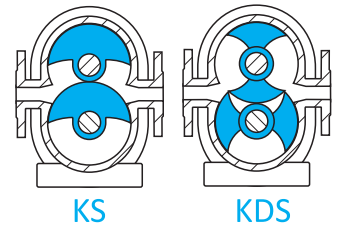


Pump sizes	15	20	25	32/I	32/II	40	50	80	100	150	200
a	145	145	145	145	145	140	185	210	200	370	425
a ₁	150	150	150	150	150	90	165	200	200	370	380
b	145	145	145	145	145	190	310	350	380	460	460
b ₁	150	150	150	150	150	200	310	320	380	460	470
c	25	25	25	25	25	35	40	46	50	80	90
c ₁	20	20	20	20	20	35	40	46	50	70	75
Ød	28	28	28	28	28	32	48	55	60	75	90
e	195	195	195	195	195	194	225	264	290	460	515
e ₁	195	195	195	195	195	140	205	240	290	460	490
f	180	180	180	180	180	240	350	400	430	550	550
f ₁	180	180	180	180	180	240	350	380	430	550	540
g	180	166	180	190	190	300	360	450	550	600	700
h	128	128	128	128	128	150	205	260	313	365	420
h ₁	210	203	210	215	215	330	380	485	558	630	730
k	103	108	123	148	168	173	210	256	310	345	465
k ₁	103	108	123	148	168	200	230	278	310	345	490
l	55	55	55	55	55	50	80	102	125	140	140
m	90	90	90	90	90	110	145	185	225	260	300
m ₁	120	120	120	120	120	180	200	260	283	330	380
o	465	470	485	510	530	540	660	760	875	1140	1310
q	382	385	392	405	415	420	515	583	657	900	992
Øs	16	16	16	16	16	16	20	20	24	24	26
v	76	76	76	76	76	80	120	150	175	210	240
w	251	251	251	251	251	295	405	510	620	710	815
DN	1/2 "	3/4 "	1 "	1 1/4 "	1 1/4 "	40	50	80	100	150	200
x	with threaded connection					110	125	160	180	240	295
y						150	165	200	220	285	340
z						4x18	4x18	8x18	8x18	8x22	12x22

in mm, subject to modifications

ROTARY LOBE PUMP

KS and KDS BLUE Series



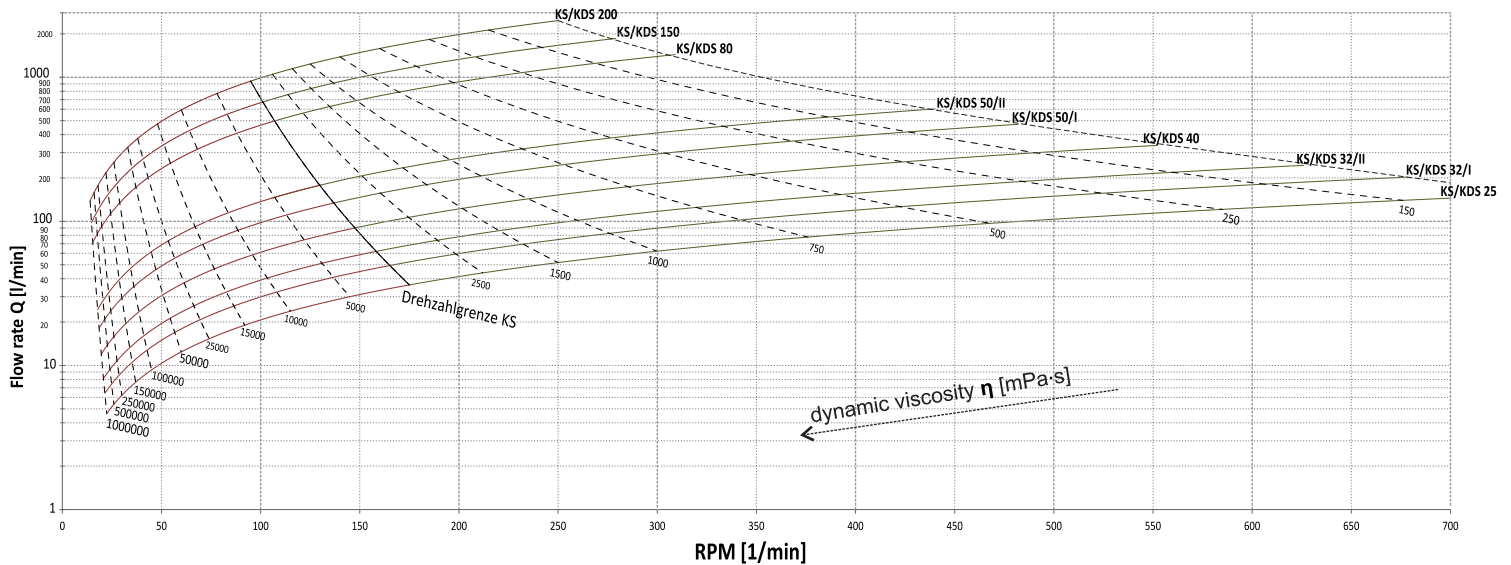
Model: KE/KD Series: BLUE

	from	to
System pressure		40 bar* (max. 64)
Suction lift		4 m
RPM		750 rpm
Flow rate	2 l/min	2474 l/min
	0.12 m ³ /h	148 m ³ /h
Efficiency	75 %	92 %
Particle size		max. 50mm (KS200)
Viscosity	10 mPa·s	1,400,000 mPa·s
Temperature	-60°C	+450°C

*Higher values on request



Q-n-η-Flowrate / Viscosity



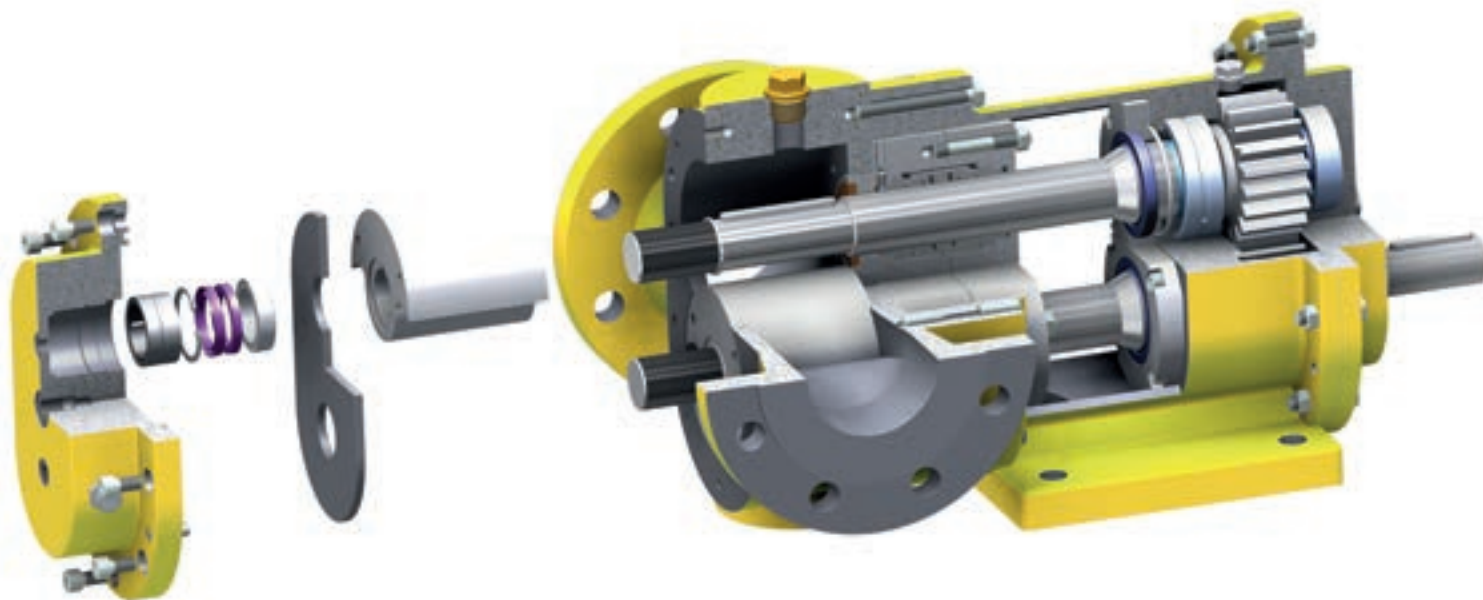
Sizes and flow rates

Pump size	Volume	Flow rates																			
		n = 10 min ⁻¹		n = 30 min ⁻¹		n = 60 min ⁻¹		n = 90 min ⁻¹		n = 160 min ⁻¹		n = 200 min ⁻¹		n = 300 min ⁻¹		n = 400 min ⁻¹		n = 500 min ⁻¹		n = 600 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	l/min	m ³ /h		
25	0,21	2,1	0,1	6,2	0,4	12,4	0,7	19	1,1	33	2	41	2,5	62	3,7	83	5	104	6,2	124	7,5
32/I	0,3	3	0,2	9,0	0,5	17,9	1,1	27	1,6	48	3	60	3,6	90	5,4	120	7	150	9	179	10,8
32/II	0,39	3,9	0,2	11,7	0,7	23,5	1,4	35	2,1	63	4	78	4,7	117	7	156	9	196	11,7	235	14,1
40	0,61	6,1	0,4	18,3	1,1	36,6	2,2	55	3,3	98	6	122	7,3	183	11	244	15	305	18,3		
50/I	0,98	9,8	0,6	29,4	1,8	58,7	3,5	88	5,3	157	9	196	11,7	294	17,6	392	23				
50 /II	1,37	13,7	0,8	41,1	2,5	82,2	4,9	123	7,4	219	13	274	16,4	411	24,7	548	33				
80	4,65	46,5	2,8	139	8,4	279	16,7	418	25,1	743	45	929	55,8	1394	83,6						
150	6,66	66,6	4	200	12	400	24	599	36	1066	64	1332	79,9								
200	9,9	99	5,9	297	17,8	594	35,6	891	53,4	1583	95	1979	119								

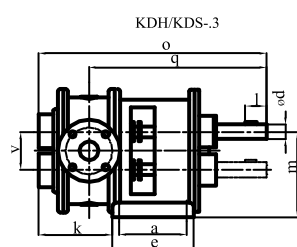
Table: Flow rates

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

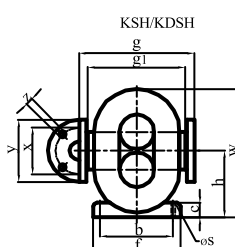
only KDS



Pump dimensions



Type KSH/KDSH

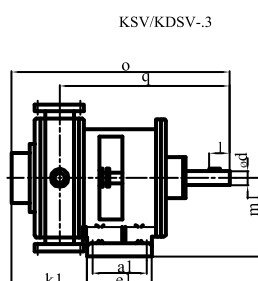
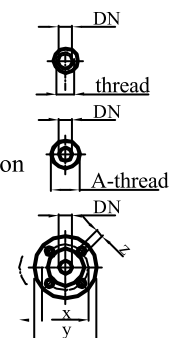


Connection options

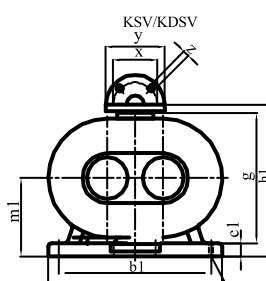
threaded connection
DIN 259

round thread connection
DIN 11851

flange connection
DIN, ANSI, SAE

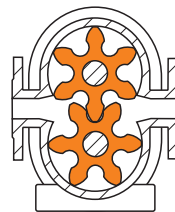


Type KSV/KDSV



Pump sizes	25	32/I	32/II	40	50/ I	50/ II	80	150	200
a	145	145	145	140	185	259	210	370	425
a ₁	150	150	150	90	165	231	200	370	380
b	145	145	145	190	310	310	350	460	460
b ₁	150	150	150	200	310	310	320	460	470
c	25	25	25	35	40	40	46	80	90
c ₁	20	20	20	35	40	40	46	70	75
Ød	28	28	28	32	48	48	55	90	90
e	195	195	195	194	225	315	264	460	515
e ₁	195	195	195	140	205	287	240	460	490
f	180	180	180	240	350	350	400	550	550
f ₁	180	180	180	240	350	350	380	550	540
g	180	190	190	300	360	360	450	600	700
h	128	128	128	150	205	205	260	365	420
h ₁	210	215	215	330	380	380	485	630	730
k	123	148	168	173	210	294	256	345	465
k ₁	123	148	168	200	230	322	278	345	490
l	55	55	55	50	80	80	102	140	140
m	90	90	90	110	145	145	185	260	300
m ₁	120	120	120	180	200	200	260	330	380
o	485	510	530	540	660	924	760	1140	1310
q	392	405	415	420	515	721	583	900	992
Øs	16	16	16	16	20	20	20	24	26
v	76	76	76	80	120	120	150	210	240
w	251	251	251	295	405	405	510	710	815
DN	1 "	1 1/4 "	1 1/4 "	40	50	50	80	150	200
x	with threaded connection			110	125	125	160	240	295
y				150	165	165	200	285	340
z				4x18	4x18	4x18	8x18	8x22	12x22

in mm, subject to modifications



MULTI-WING LOBE PUMP

KM BLUE Series

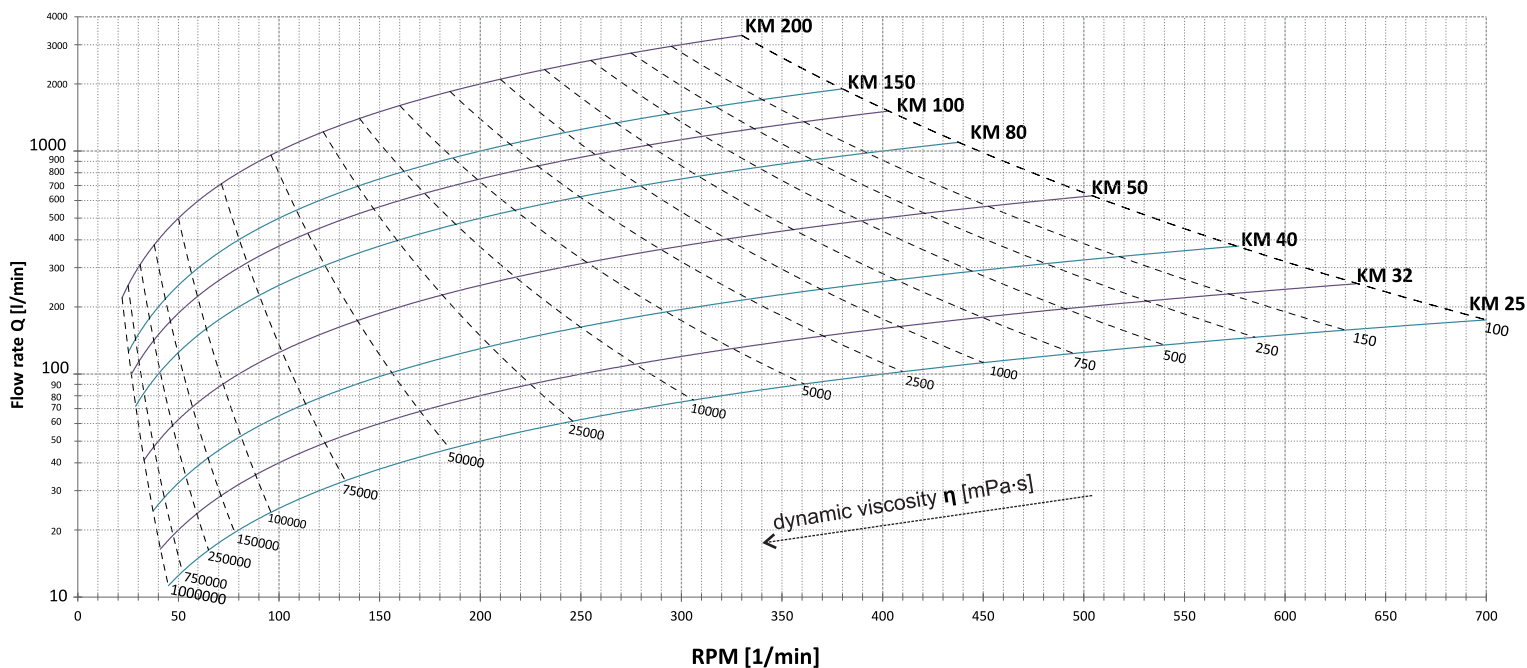
Model: KM Series: BLUE

	from	to
System pressure		25 bar* (max. 64)
Suction lift		6 m
RPM		750 rpm
Flow rate	2 l/min	3300 l/min198
	0.15 m ³ /h	198 m ³ /h
Efficiency	75 %	92 %
Particle size		max. 1mm
Viscosity	1 mPa·s	1,000,000 mPa·s
Temperature	-60°C	+450°C

*Higher values on request



Q-n-η-flow rate / viscosity

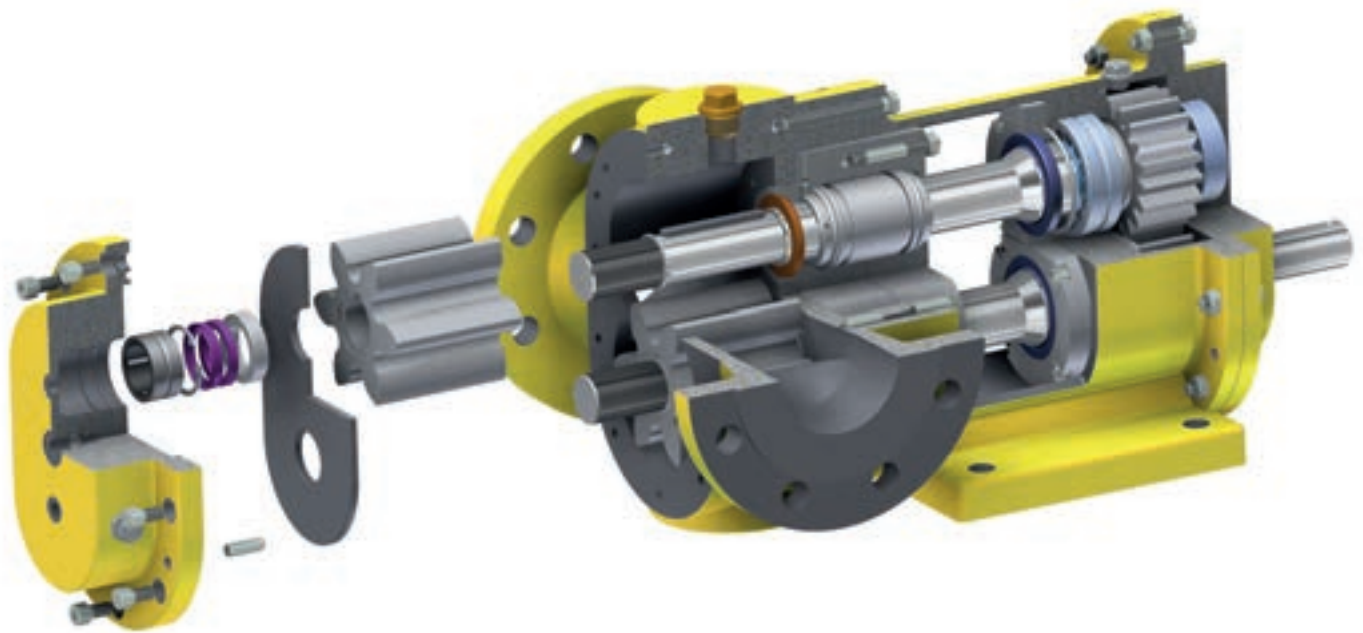


Sizes and flow rates

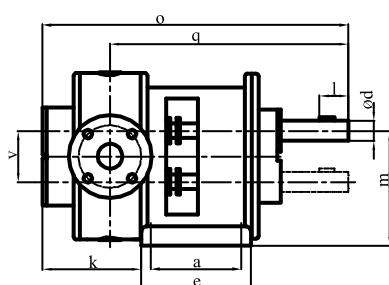
Pump size	Volume l/rev	Flow rates															
		n = 10 min ⁻¹		n = 30 min ⁻¹		n = 60 min ⁻¹		n = 90 min ⁻¹		n = 160 min ⁻¹		n = 200 min ⁻¹		n = 300 min ⁻¹		n = 400 min ⁻¹	
		l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h	l/min	m ³ /h
25	0,25	2,5	0,15	7,5	0,5	15	0,9	22,5	1,4	40	2,4	50	3	75	4,5	100	6
32	0,4	4	0,24	12	0,7	24	1,4	36	2,2	64	3,8	80	4,8	120	7,2	160	9,6
40	0,65	6,5	0,4	19,5	1,2	39	2,3	58,5	3,5	104	6,2	130	7,8	195	11,7	260	15,6
50	1,25	12,5	0,75	37,5	2,3	75	4,5	112,5	6,8	200	12	250	15	375	22,5	500	30
80	2,5	25	1,5	75	4,5	150	9	225	13,5	400	24	500	30	750	45	1000	60
100	3,75	37,5	2,3	112,5	6,8	225	13,5	337,5	20,3	600	36	750	45	1125	67,5	1500	90
150	5	50	3	150	9	300	18	450	27	800	48	1000	60	1500	90		
200	10	100	6	300	18	600	36	900	54	1600	96	2000	120	3000	180		

Table: Flow rates

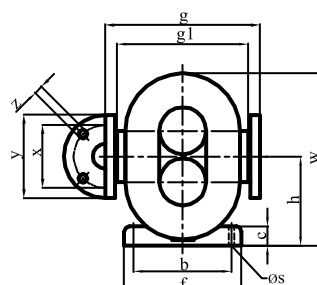
The exact flow rate depends on rotation speed (RPM), liquid viscosity, working pressure, pressure head and characteristics of the working liquid.



Pump dimensions

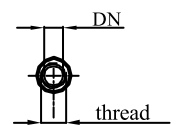


Type KMH

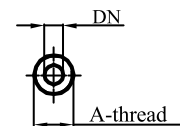


Connection options

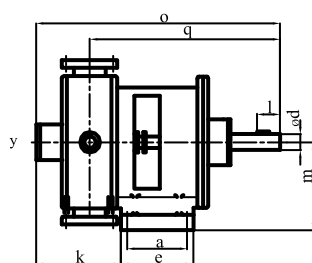
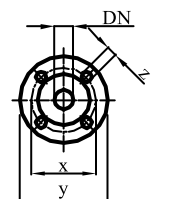
threaded connection
DIN 259



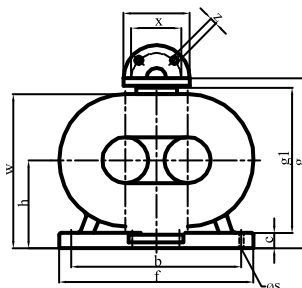
round thread connection
DIN 11851



flange connection
DIN, ANSI, SAE



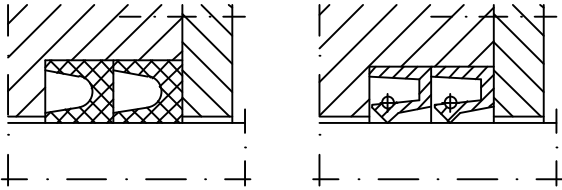
Type KMV



Pump sizes	25	32	40	50	80	100	150	200
a	145	145	140	185	175	210	200	200
a ₁	150	150	90	165	160	200	200	200
b	145	145	190	310	290	350	380	380
b ₁	150	150	200	310	300	320	380	380
c	25	25	35	40	50	46	50	50
c ₁	20	20	35	40	50	46	50	50
Ød	28	28	32	48	55	60	90	90
e	195	195	194	225	225	264	290	290
e ₁	195	195	140	205	205	240	290	290
f	180	180	240	350	340	400	430	430
f ₁	180	180	240	350	360	380	430	430
g	255	255	300	360	450	450	550	550
h	128	128	150	205	225	260	313	313
h ₁	248	248	330	380	445	485	558	558
k	140	175	176	210	245	251	275	385
k ₁	140	175	203	230	265	273	270	385
l	56	56	60	80	102	115	125	140
m	92	92	108	145	153	179	223	223
m ₁	120	120	180	200	240	260	283	283
o	505	538	543	660	697	768	835	950
q	400	415	420	515	537	596	647	720
Øs	16	16	16	20	20	20	24	24
v	72	72	84	120	144	162	180	180
w	251	251	295	405	445	510	620	620
NW	25	32	40	50	80	100	150	200
x	85	100	110	125	160	190	250	320
y	115	140	150	165	200	235	300	375
z	4x14	4x18	4x18	4x18	8x18	8x22	8x26	12x30

in mm, subject to modifications

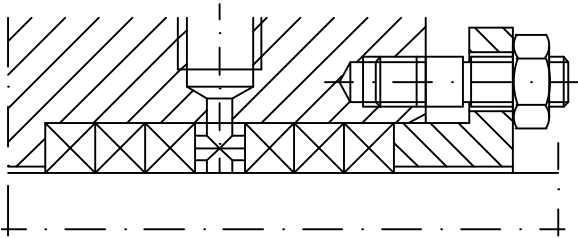
SEALING OPTIONS



Sealing ring

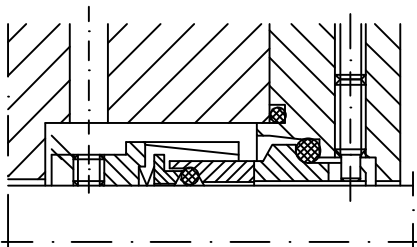
Max. Pressure: 16 bar

PVDF or PTFE sealing rings available depending on temperature, pressure and RPM



Packing

Max. Pressure: 16 bar

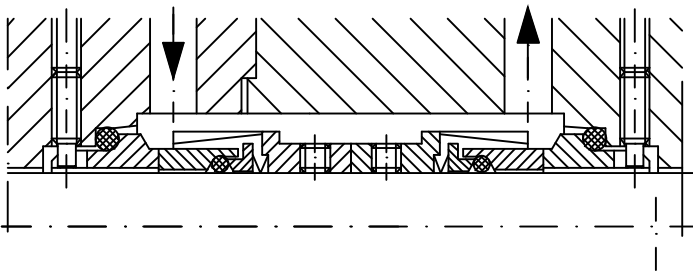


Single acting mechanical seal

Max. Pressure: unbalanced up to 10 bar

Max. Pressure: balanced up to 25 bar

The pump can be sealed with single acting mechanical seal according to DIN 24960 (dependent on direction of rotation).



Double acting mechanical seal

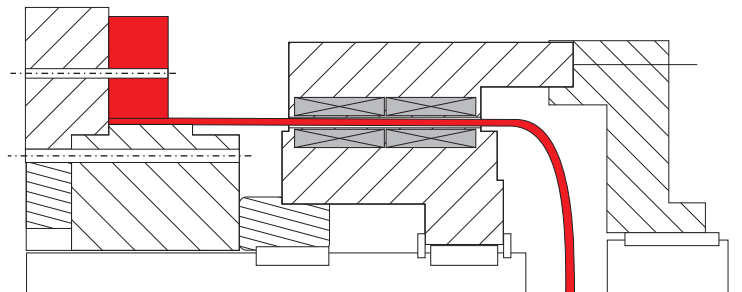
Max. Pressure: component, single acting, unbalanced, back to back seals up to 10 bar.

Component (or cartridge), single acting, balanced, back to back seals up to 50 bar.

Max Pressure: Special seals up to 120 bar.

Toxic, explosive or environmentally hazardous substances require double acting mechanical seals.

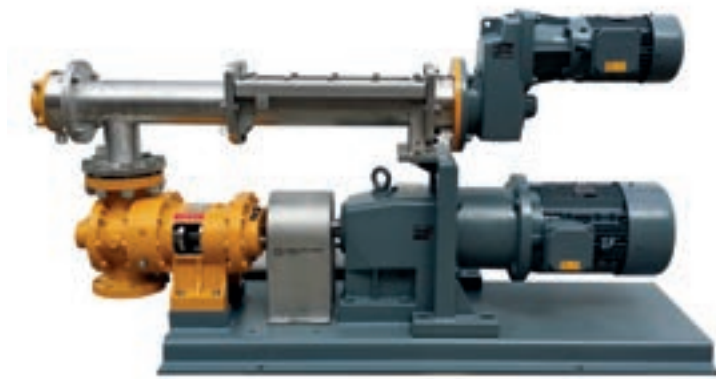
Note: Barrier fluid pressure must be at least 2 bar over pump pressure.



Magnetic coupling

Available for the gear pump ranges (ZH/ZK/PQ). Hermetically sealed gear pumps use a stationary containment casing for product sealing. According to the material requirements the casing is produced in either Stainless Steel, Hastelloy or Ceramic. This sealing system guarantees leakage-free pumping and offers the safest way to move toxic and dangerous fluids. Because the pump and motor are not mechanically connected, this option has an built-in safety factor against motor overloading.

Custom solutions

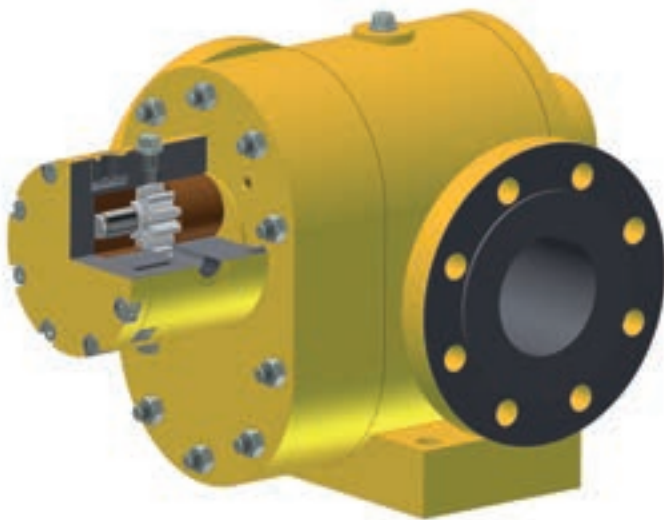


Heavy duty rotary lobe pump (KS)

With vertical product flow for minimal abrasion in the pump casing. Screw feeder mounted before the pump inlet to ensure product flow even at high solid concentrations.

API high pressure gear pump (ZH)

Bearing and mechanical seal temperature monitoring
(for flammable liquids)

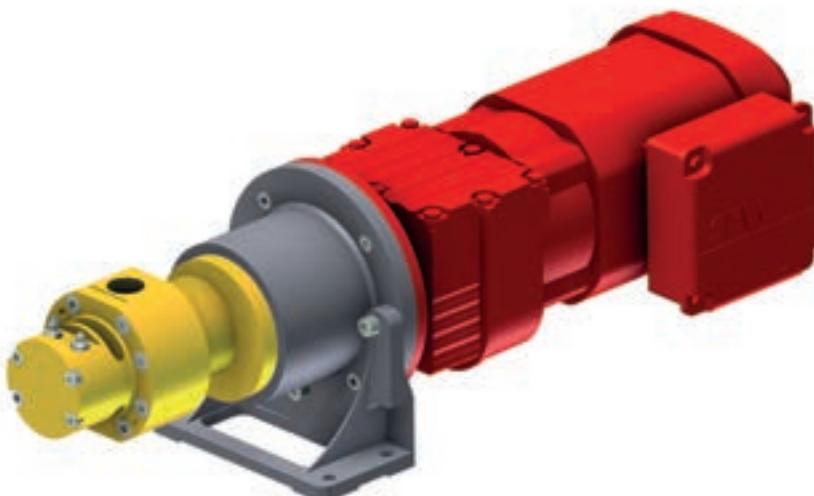
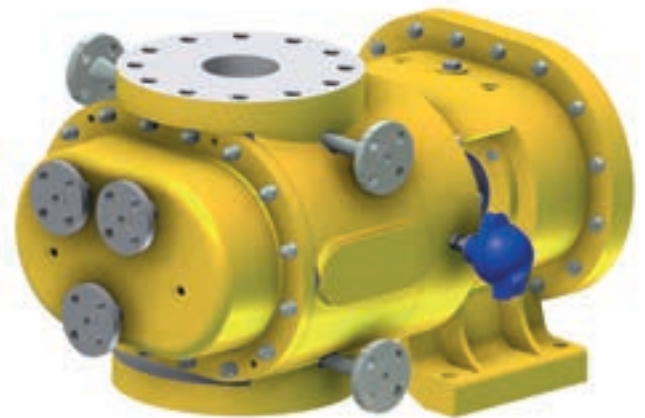


Tandem gear pump (ZH / ZK)

ZH gear pump with directly coupled heated ZK gear pump (e.g. dosing of a second fluid with fixed flowrate ratio)

Fully heated rotary lobe pump (KS)

Suited for pumping conditions near the melting point of the fluid (e.g. liquid polymer with solids). Mechanical seal temperature monitoring.



Gear pump with external bearings (ZK AU)

Directly coupled to the Motor and suitable for non lubricating fluids.

SPECIAL PUMPS

Information about our special pumps can be found
at zeilfelder-pumpen.com

Pumps liquids
with solids



Heavy-duty applications

For all steps of
the Cracking process



Petrochemical

Safe pumping and
dosing without blowoff



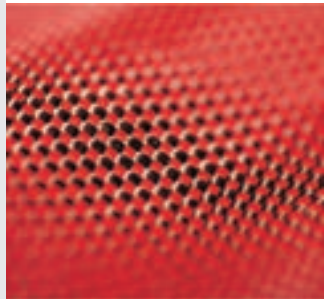
Chemical Industry

Your strawberries stay
intact with us



Food Industry

For plastics and
synthetic fibers



Plastic Industry

Zeilfelder T-Rex
Pumps biomass
at high pressure



Renewable Energy



**ZEILFELDER
PUMPEN**

www.zeilfelder-pumpen.com

a trademark of



ASM DIMATEC reserves the right to make changes at any time, without prior notification.

Headquarters:
ASM DIMATEC Deutschland GmbH
Fachbereich: ZEILFELDER PUMPEN
Lehmkuhlenfeld 2
D-38444 Wolfsburg
Germany
Tel.: +49 (5308) 69 38 0
Fax: +49 (5308) 69 38 118
E-Mail: info@zeilfelder-pumpen.com

Represented by: