



ROTARY LOBE PUMP

KKPE, KKPS and KKPDE GREEN Series

	from	to
system pressure	0 bar	25 bar
pressure head	0 m	4 m
RPM	1 RPM	750 RPM
flow rate	0.023 l/min	351 l/min
	0.0014 m ³ /h	21 m ³ /h
efficiency	60%	78%
liquid viscosity	1 mPas	1.400.000 mPas
temperature	-20°C	+120°C

Design and options

Materials:

- steel
- stainless steel
- hastelloy
- bronze
- copper-aluminium-based bronze

Mounting and bearings:

- standard roller bearings
- plain bearing: bronze
- plain bearing: multi component

Heating/cooling jacket

- Electric heating jacket
- Liquid or steam heating or/and cooling jacket

Pump drives:

- gearmotor
- DC motor
- hydraulic motor
- air motor
- combustion engine
- multistage reduction gears

Shapes:

- horizontal delivery direction
- vertical delivery direction
- clockwise & counterclockwise direction of rotation

Sealing:

- sealing ring

Shaft:

- shaft: standard coating

Relief valve

- Adjustable relief valve (TA-Luft compliant) hermetic capsuled:
 - by-pass mounted
 - integrated on the pump

Fittings & connections:

- flange connections (DIN, ANSI or SAE)
- threaded connections (DIN or UNS)
- round thread connections (DIN 11851)
- clamping connections (DIN or ISO)
- aseptic fittings (DIN 11864-1. DIN 11853-2)

Power transmission:

- flexible coupling
- disassembling coupling
- slip clutch with torque limiter

Control and monitoring:

- frequency inverter
- flow sensor
- temperature sensor
- pressure sensor

Sizes and flow rates

Size	Volume l/U	theoretical flow rate l/min.															
		10 RPM		30 RPM		60 RPM		90 RPM		160 RPM		200 RPM		400 RPM		750 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
10	0,030	0,234	0,014	0,702	0,042	1,40	0,084	2,106	0,126	3,744	0,225	4,68	0,281	9,36	0,562	17,55	1,05
25	0,075	0,585	0,035	1,755	0,105	3,51	0,211	5,265	0,316	9,36	0,562	11,7	0,702	23,4	1,40	43,88	2,63
32	0,150	1,17	0,070	3,51	0,211	7,02	0,421	10,53	0,632	18,72	1,123	23,4	1,40	46,8	2,808	87,75	5,26
40	0,300	2,34	0,140	7,02	0,421	14,0	0,842	21,06	1,264	37,44	2,246	46,8	2,81	93,6	5,616	175,5	10,53
50	0,600	4,68	0,281	14,0	0,842	28,1	1,685	42,12	2,527	74,88	4,493	93,6	5,62	187,2	11,23	351	21,06

Table: flow rates. Application specific flow rates will depend on working pressure, viscosity and temperature and will vary from the theoretical flow rates.

Characteristic curve

QH-Diagram

Exemplary: viscosity $\eta = 300 \text{ mPas}$, density $\delta = 1 \text{ g.cm}^{-3}$, temperature $T = 20^\circ\text{C}$, RPM = 200 min^{-1} .

Please be aware that Zeilfelder pumps are not serial pumps. Each pump is produced in accordance with the requirements of your application and has its own characteristic curve.

