

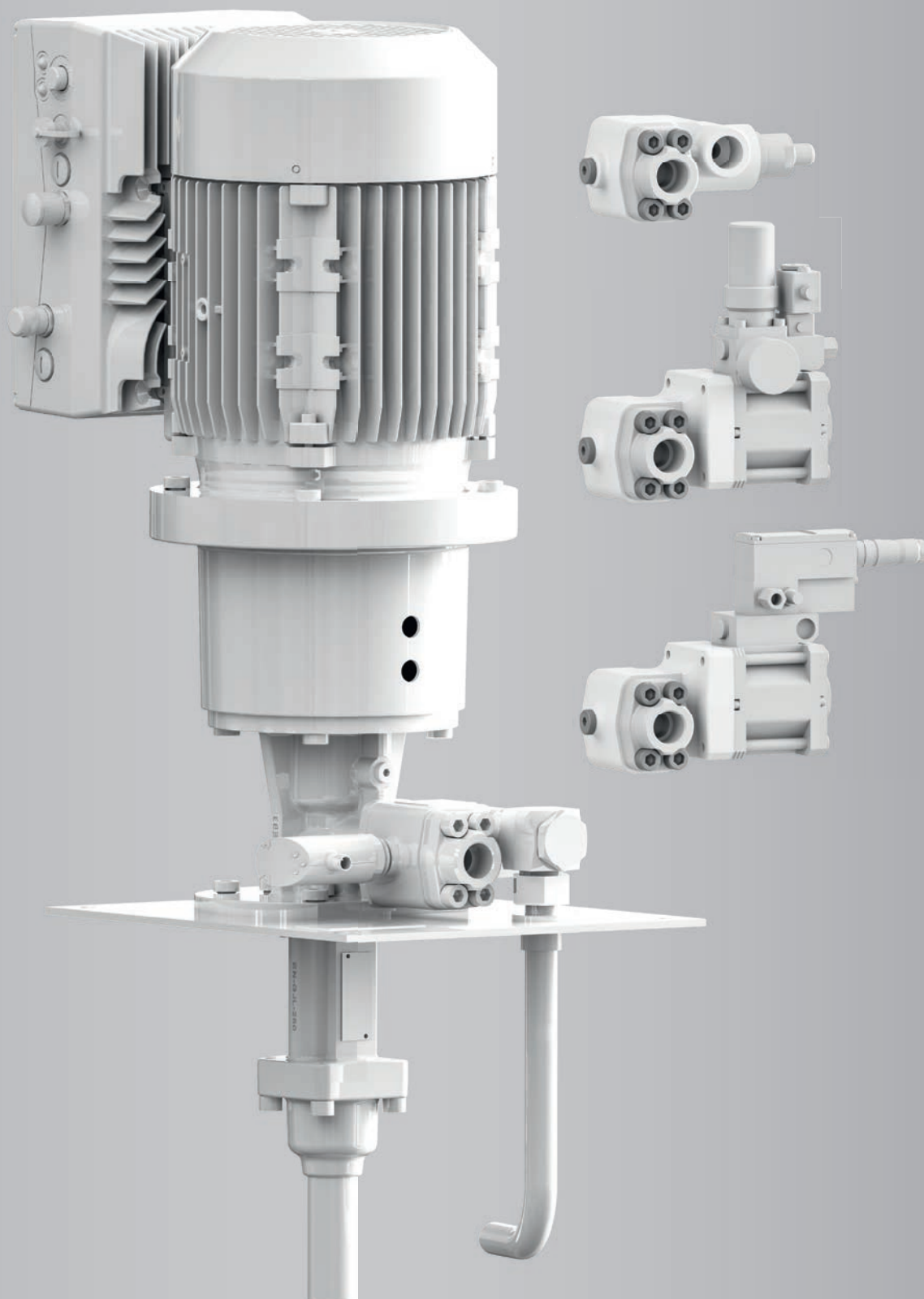
Screw spindle pump KTSL

KNOLL
.It works

KTSL

Issue 01-2022

**NEW FROM
01/2022**



Properties

- Fewer pipes required
- Compact design
- Easy to service
- Long service life
- Good price/performance ratio

Type designation code

KTSL 25-50-R-G

Configuration
 Overall size
 Spindle pitch
 Version R/S
 R = Suction casing pipe thread
 S = Suction casing SAE
 Mechanical seal G
 G = Supply pressure ≤ 8 bar

Layout

The KTSL screw spindle pump is a self-priming displacement pump for conveying lubricating, less abrasive media such as cooling lubricants. The pump comprises 3 main components: 1. Suction casing, 2. Running casing with drive spindle and two running spindles, 3. Pressure casing with throttling point, sealed shaft passage and main bearing.

Design features

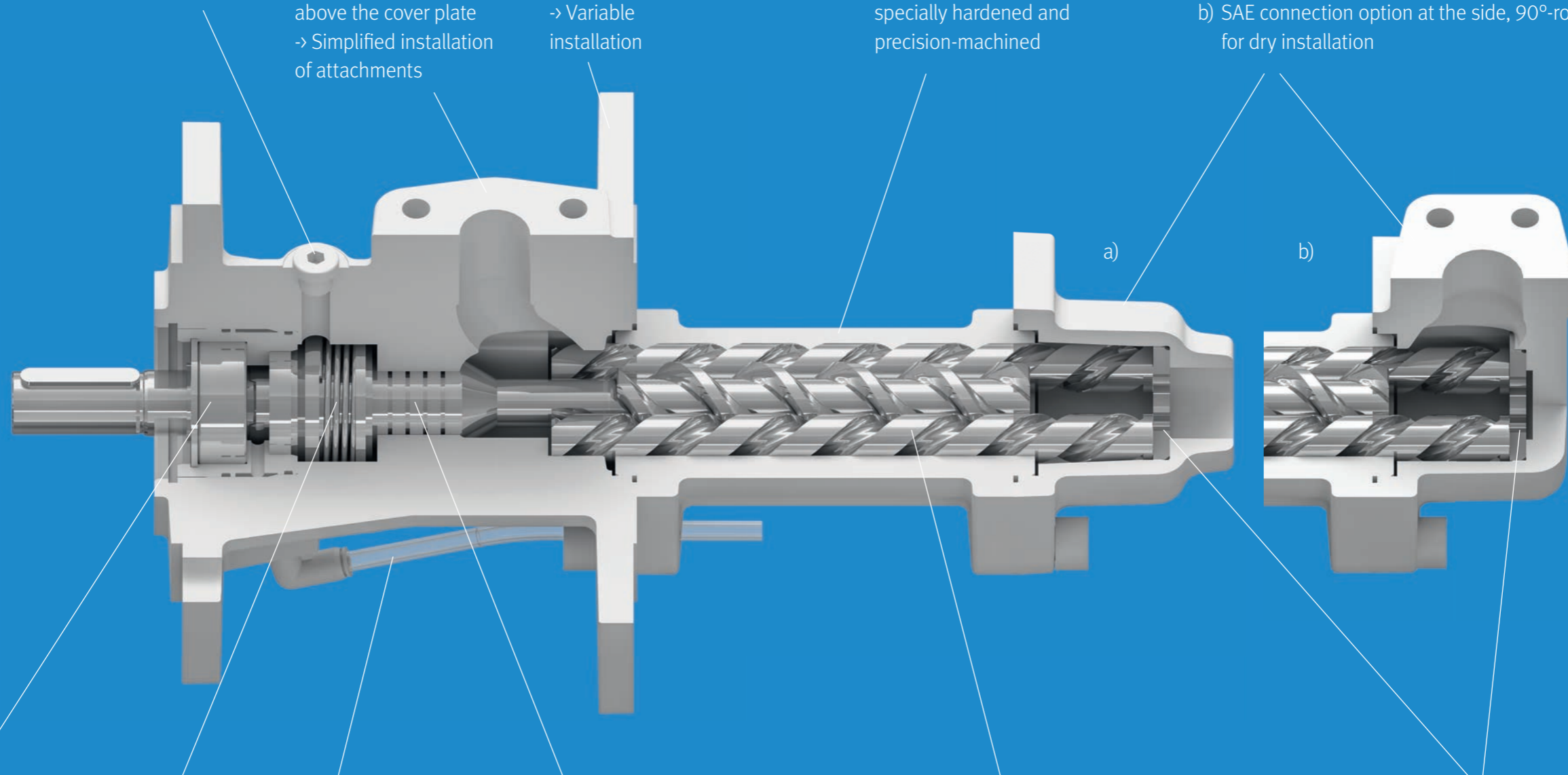
Opening for ventilation, filling and emptying

SAE connection option on the pressure side above the cover plate
 -> Simplified installation of attachments

Integrated mounting flange
 -> Variable installation

Single-part running casing made of grey cast iron, specially hardened and precision-machined

Suction casing with
 a) axial suction option for tank installation
 b) SAE connection option at the side, 90°-rotatable, for dry installation



External main bearing
 -> Long service life

Wear-resistant mechanical seal
 -> Long service life

Visual inspection for leak

Labyrinth for effective pressure reduction
 -> High efficiency

Screw spindles made of tool steel, specially hardened and precision-machined
 -> Long service life and high efficiency

Inserted carbide disc

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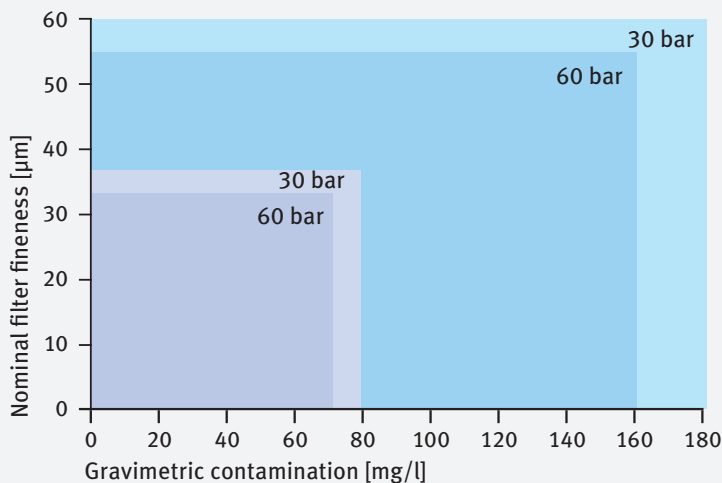
KTSL

Performance data

Pressure [bar]	Motor 2-pole			Motor 2-pole			Motor 2-pole			Motor 2-pole		
	Rot. speed 2,900 rpm 50 Hz			Rot. speed 3,500 rpm 60 Hz			Rot. speed 2,900 rpm 50 Hz			Rot. speed 3,500 rpm 60 Hz		
	Flow rate with viscosity [l/min]		Power demand [kW]	Flow rate with viscosity [l/min]		Power demand [kW]	Flow rate with viscosity [l/min]		Power demand [kW]	Flow rate with viscosity [l/min]		Power demand [kW]
	1 mm ² /s	20 mm ² /s	1-20 mm ² /s	1 mm ² /s	20 mm ² /s	1-20 mm ² /s	1 mm ² /s	20 mm ² /s	1-20 mm ² /s	1 mm ² /s	20 mm ² /s	1-20 mm ² /s
	KTSL 25-34						KTSL 25-38					
10	26.6	27.5	0.7	32.6	33.5	0.8	29.7	30.4	0.7	36.1	36.8	0.8
20	25.4	26.6	1.2	31.4	32.6	1.5	28.7	29.8	1.3	35.1	36.3	1.6
30	24.2	25.7	1.8	30.2	31.7	2.1	27.7	29.3	1.9	34.1	35.8	2.3
40	23.1	24.9	2.3	29.0	30.9	2.7	26.8	28.9	2.5	33.2	35.3	3.0
50	22.0	24.2	2.8	27.9	30.1	3.4	25.9	28.4	3.1	32.3	34.8	3.7
60	21.0	23.5	3.4	26.9	29.4	4.0	25.0	28.0	3.7	31.4	34.4	4.5
70	20.1	22.9	3.9	25.9	28.8	4.7	24.2	27.6	4.3	30.6	34.0	5.2
80	19.2	22.3	4.5	25.0	28.2	5.3	23.4	27.2	4.9	29.8	33.6	5.9
	KTSL 25-50						KTSL 25-60					
10	38.5	39.7	1.0	47.0	48.1	1.1	45.2	47.1	1.1	55.4	57.2	1.3
20	37.2	39.0	1.7	45.7	47.4	2.1	43.8	46.3	2.0	53.9	56.5	2.5
30	36.0	38.4	2.5	44.4	46.8	3.0	42.3	45.6	3.0	52.5	55.8	3.6
40	34.8	37.8	3.3	43.2	46.2	3.9	41.0	45.0	4.0	51.1	55.1	4.8
50	33.7	37.2	4.0	42.1	45.7	4.9	39.8	44.3	5.0	49.9	54.5	6.0
60	32.6	36.7	4.8	41.0	45.1	5.8	39.6	43.8	5.9	48.7	53.9	7.1
70	31.6	36.2	5.6	40.0	44.6	6.7	37.5	43.2	6.9	47.6	53.3	8.3
80	30.6	35.7	6.3	39.1	44.1	7.7	36.4	42.7	7.9	46.6	52.8	9.5

4-pole on request

Recommended filter quality



The specifications relate to the determination of the gravimetric contamination with a 5 µm cellulose membrane in 100 ml sample quantity.

- Hard particles
500 – 1.000 HV
- Soft particles <
500 HV