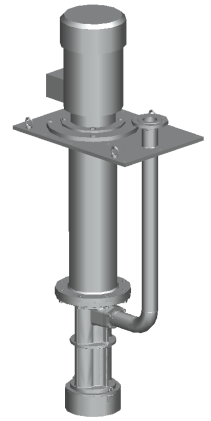


ALLUB

RUV + RUV-P SERIES



Vertical screw pump for lube-oil applications

Utilization

Used to pump mineral-based and synthetic lubrication and hydraulic oils. Pumped liquids may not contain any abrasive components nor chemically attack the material of the pump unit.

Main fields of application

The main field of application is to supply lubrication and hydraulic oil in all segments of industry

Design and installation

Three-screw, self-priming screw pump for vertical installation in an oil reservoir. The pump bracket contains attachment holes as well as centering rings for installation on a reservoir covering plate. Pump size and motor determine the dimensions and arrangement of attachment screws on the covering plate. Other dimensions adapted to the tank opening can be provided at additional cost upon request.

Shaft sealing

The pump has no shaft seal. This eliminates the need for costly and high-maintenance work on sealing elements that are subject to wear. The liquid that leaks out will flow through the leak hole in the pump bracket or connection piece and into the tank.

Bearing and bearing lubrication

Bearing is provided by an internal groove ball bearing (receives lubrication from the pumped liquid) for stabilization of the drive screw.

Performance data

Capacity at 50 Hz	Q	30 up to	1300 l/min or 880 l/min ①
Discharge pressure	p _d	up to	16 bar
Temperature of pumped liquid	t	max.	100 °C ②
Viscosity of pumped liquid	v	3 up to	760 mm ² /s ③
Speed	n	up to	3500 1/min ④
① version with suction pipe connection		③ Depends on speed and temperature	
② Design temperature		④ Depends on size	

Immersion depth

Immersion depths depend on the sizes and pump brackets. Several different immersion depths are available (see overview table with main measurements).

Branch connection

Suction opening: axial, facing downward
A suction strainer built directly into the rotor housing (up to size 280) or an attachment strainer (size 660 and larger) prevent suction of large pieces of dirt.
Size 440 is available as a version with a suction-pipe connection option without a cover plate (as version RUV-P).

Discharge branch

Version without pressure pipe (up to size 440): Discharge branch with threaded pipe connection.

Version with pressure pipe: vertical, facing upward, above the covering plate. Flange-mounted according to DIN EN 1092-1/B1/PN16; or optionally according to ASME/B16.5.

Overload protection

Note: An external safety valve must be provided in the pipe!

Check valve

Pump versions with a pressure pipe can be provided (at additional cost) with a check valve and additional counter flange (according to DIN EN 1092-1/B1/PN16 or optionally ASME/B16.5), both above the cover plate.

Drive

The standard pump drives are surface-cooled rotary-current cage-induction motors according to the IEC standard as well as direct-current motors; type of construction IMV1.

Note: Use motors with locating bearing on the drive side.

Shaft coupling

An elastic coupling connects the motor end of the shaft to the pump shaft. Centering of the motor and pump in the pump bracket ensure precise alignment of the shaft ends, eliminating the need for fine adjustment of the coupling! On pump versions with an extended shaft, the motor and pump ends of the shaft are rigidly connected to each other via a plug-in shaft and coupling sleeve, respectively.

Model Code

	RUV(-P)	210	R	40	Q	- 1000	- 132S
Series	_____	_____	_____	_____	_____	_____	_____
Size	_____	_____	_____	_____	_____	_____	_____
Screw pitch direction (R = right)	_____	_____	_____	_____	_____	_____	_____
Screw pitch angle in degrees	_____	_____	_____	_____	_____	_____	_____
Internal antifriction bearing, without shaft seal	_____	_____	_____	_____	_____	_____	_____
Immersion depth in mm	_____	_____	_____	_____	_____	_____	_____
Motor size	_____	_____	_____	_____	_____	_____	_____

Materials

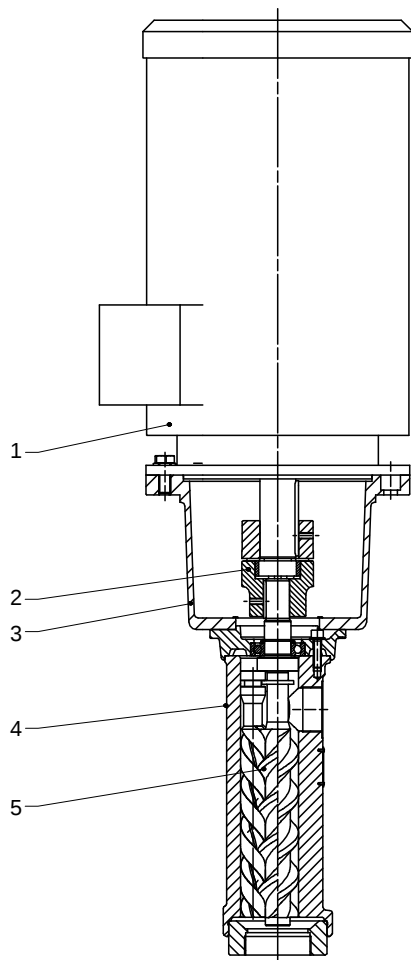
Description	Materials	
Sizes	40 up to 440	660 up to 1300
Pump casing	aluminium	EN-GJL-250
Drive spindle	steel	steel
Pump bracket or connection piece	aluminium or steel	steel
Pipe	steel	steel

Coating

Primered and coated above covering plate according to ALLWEILER standard. Without primer and coating below covering plate. Preserved according to ALLWEILER standard.

Design and main dimensions 1

Pump with Suction pipe connection (up to size 440), Version RUV-P



Designation	Item No.
Motor	1
Coupling (optional)	2
Pump bracket (optional)	3
Casing	4
Screw set	5

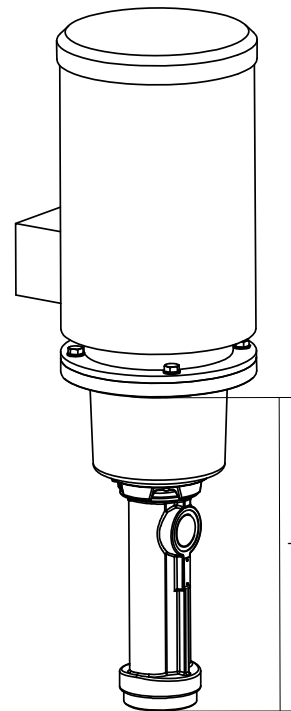
Suction pipe and Screen depending on construction
max. Suction pipe length depending on inflow conditions
(NPSH_{Pump} -Value in Data sheet)

Special coatings and long-term preservation available at additional cost upon request and agreement with the factory.

Explosion protection

The pump fulfills the requirements according to EU explosion-protection directive 2014/34/EU (ATEX 100a) for devices in device class II, category 2 G. Classification into temperature classes according to DIN EN 13463-1 depends on temperature of the pumped liquid. Refer to proposal or order documentation for the maximum permissible temperature of pumped liquid for the respective temperature classes.

Note: When operating the pump in category 2, suitable measures must be provided to prevent impermissible warming of the pump surfaces during disturbance.

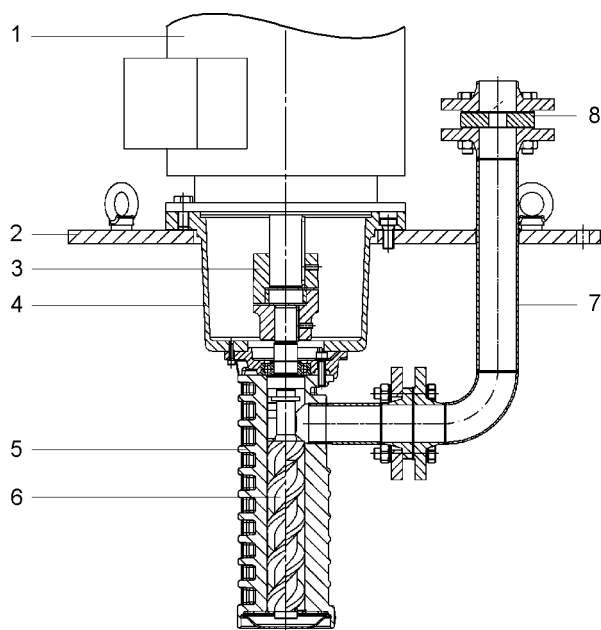


Size	Motor size	T	Connection suction pipe
40	90L – 112M	386	2,5"
80	90L – 112M	422	2,5"
80	132S	446	
140	100 – 112M	514	3"
140	132S	533	
140	160M	563	
210	112M	560	3"
210	132S – 132M	579	
210	160M – 160L	609	
280	112M	591	3"
280	132S – 132M	610	
280	160M – 180M	640	
440	132M	728	4"
440	160M – 180M	736	
440	200L	760	

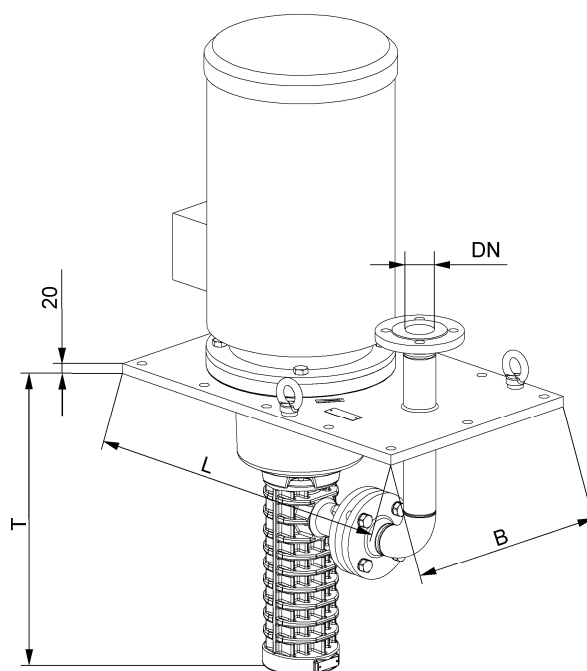
All dimensions in mm

Design and main dimensions 1

Pump with pump bracket (up to size 440)



Version with pump bracket and coupling

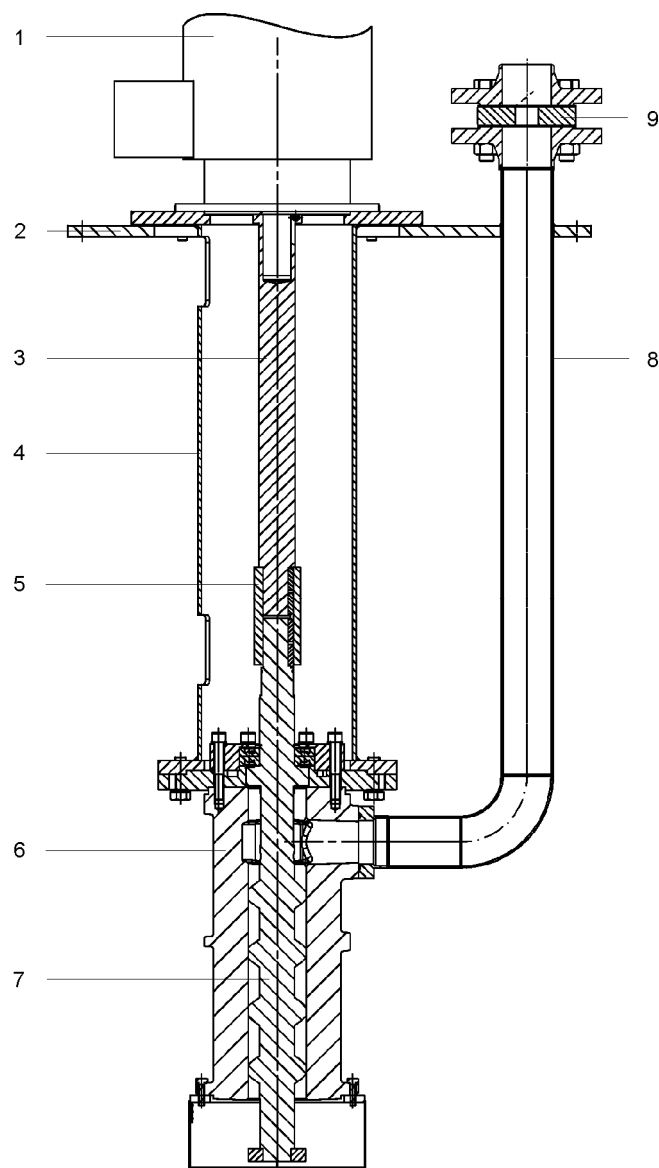


Designation	Item No.
Motor	1
Covering plate (optional)	2
Coupling	3
Pump bracket	4
Casing	5
Screw set	6
Stand pipe (optional)	7
Check valve with counter flange (optional)	8

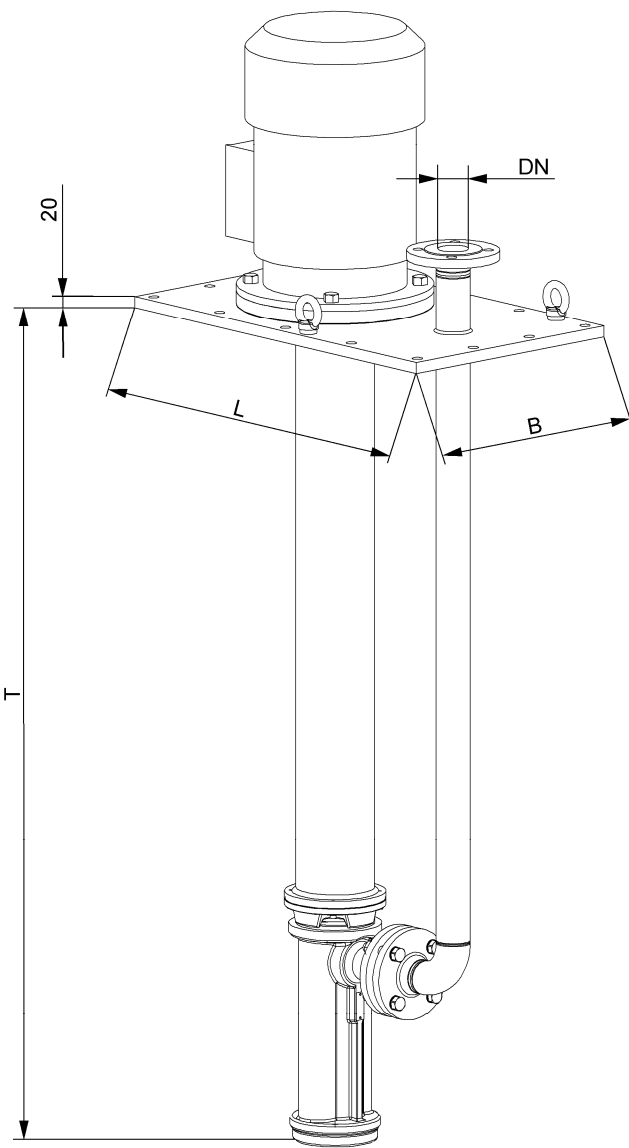
Size	Motor size	L	B	T	DN
40	90L – 112M	650	400	354	50
80	90L – 112M			390	
	132S			414	
140	100 – 112M	740	450	469	
	132S			488	
	160M			518	
210	112M	650	400	515	80
	132S – 132M	740	450	534	
	160M – 160L			564	
280	112M	650	400	546	
	132S – 132M	740	450	565	
	160M – 180M			595	
440	132M	900	600	727	80
	160M – 180M			735	
	200L			759	

All dimensions in mm

Pump with shaft extension (stub shaft)



Version with connection piece and stub shaft



Designation	Item No.
Motor	1
Covering plate	2
Stub shaft	3
Connection piece	4
Coupling sleeve	5
Casing	6
Screw set	7
Stand pipe	8
Check valve with counter flange (optional)	9

Size	Motor size	L	B	T _{min} ①	T _{max} ①	DN
40	90L – 112M	650	400	600	1100	50
80	90L – 132S				1200	
140	100 - 132S			740		
	160M					
210	112M – 132M	650	400	800	1300	80
	160M – 160L	740	450			
280	112M – 132M	650				
	160M – 180M	740				
440	132M – 200L	900	600	900	1500	100
660	160M – 200L			1000		
940	160L – 225S			1100		
1300	180M – 200L		650	1200	1600	
	225S – 250M					

① Immersion depth T selectable in 100-mm steps
All dimensions in mm

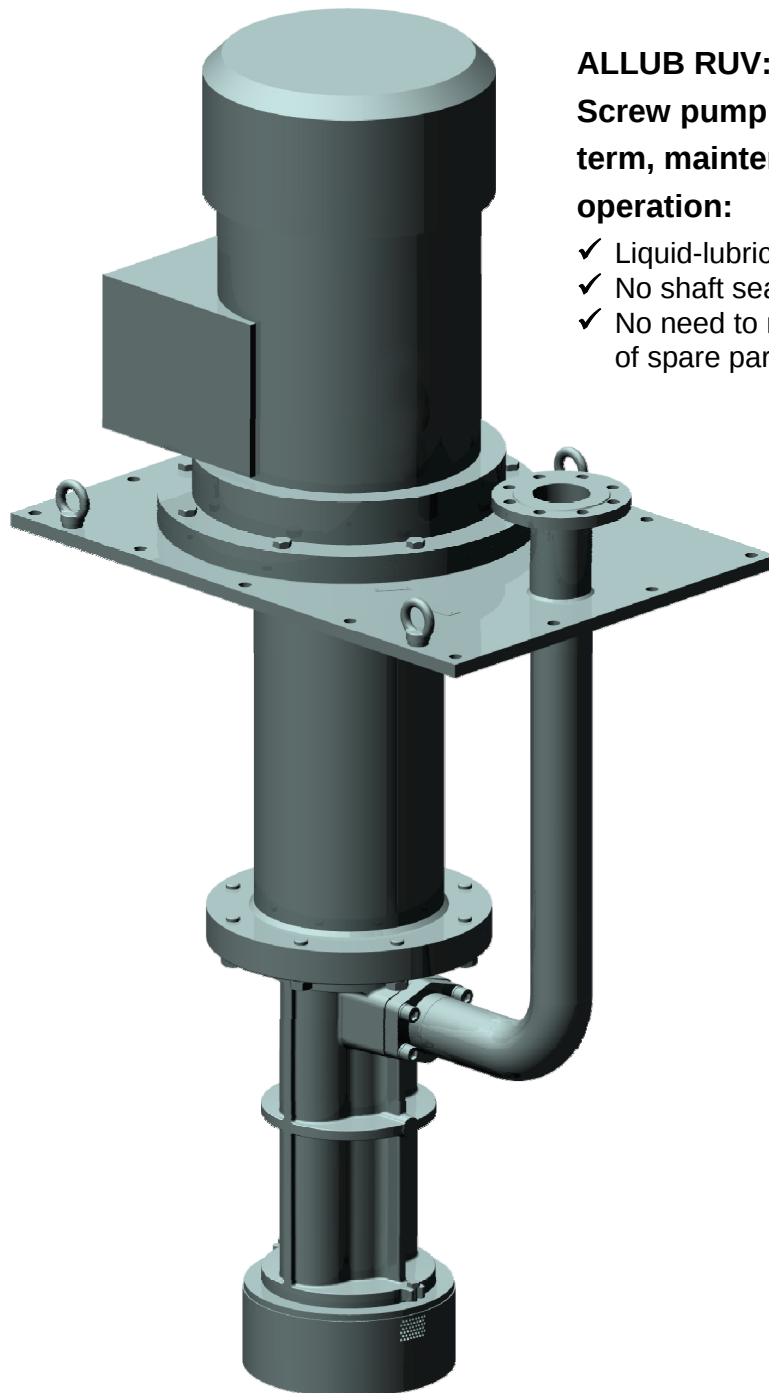
Description Strainer and Perforated basket

Pump size	Type	Description
40 / 80	Strainer	Mesh size 0,6 mm, Wire diameter 0,4 mm
140 / 210 / 280	Strainer	Mesh size 0,8 mm, Wire diameter 0,5 mm
440	Perforated basket	Mesh size 0,8 mm, Wire diameter 0,5 mm
660 / 940 / 1300	Perforated basket with perforated plate	Hole diameter 4 mm, Hole spacing 5,5 mm, Perforated Surface Area A0 = 48%

Worthwhile characteristics in long-term operation

**ALLUB RUV:**
Screw pump for long-term, maintenance-free operation:

- ✓ Liquid-lubricated bearing
- ✓ No shaft seal
- ✓ No need to maintain stock of spare parts



- ✓ **Long service life**
thanks to hydraulically balanced screws (no loads on screws, casing, and antifriction bearings)
- ✓ **Installation in tank saves space**
- ✓ **Economical**
thanks to fine adjustment of flow rate
- ✓ **No piping oscillation**
thanks to screw type with virtually pulsation-free pumping

Subject to technical alterations.



ALLWEILER GmbH
Postfach 1140 • 78301 Radolfzell
Allweilerstr. 1 • 78315 Radolfzell
Germany
Tel. +49 (0)7732 86-0
Fax. +49 (0)7732 86-436
E-Mail: service@allweiler.de
Internet: <http://www.allweiler.com>

The mentioned performance data and additionally all standard references are to be considered as a product and performance abstract only. The particular operating limits can be taken from the quotation or order acknowledgement.