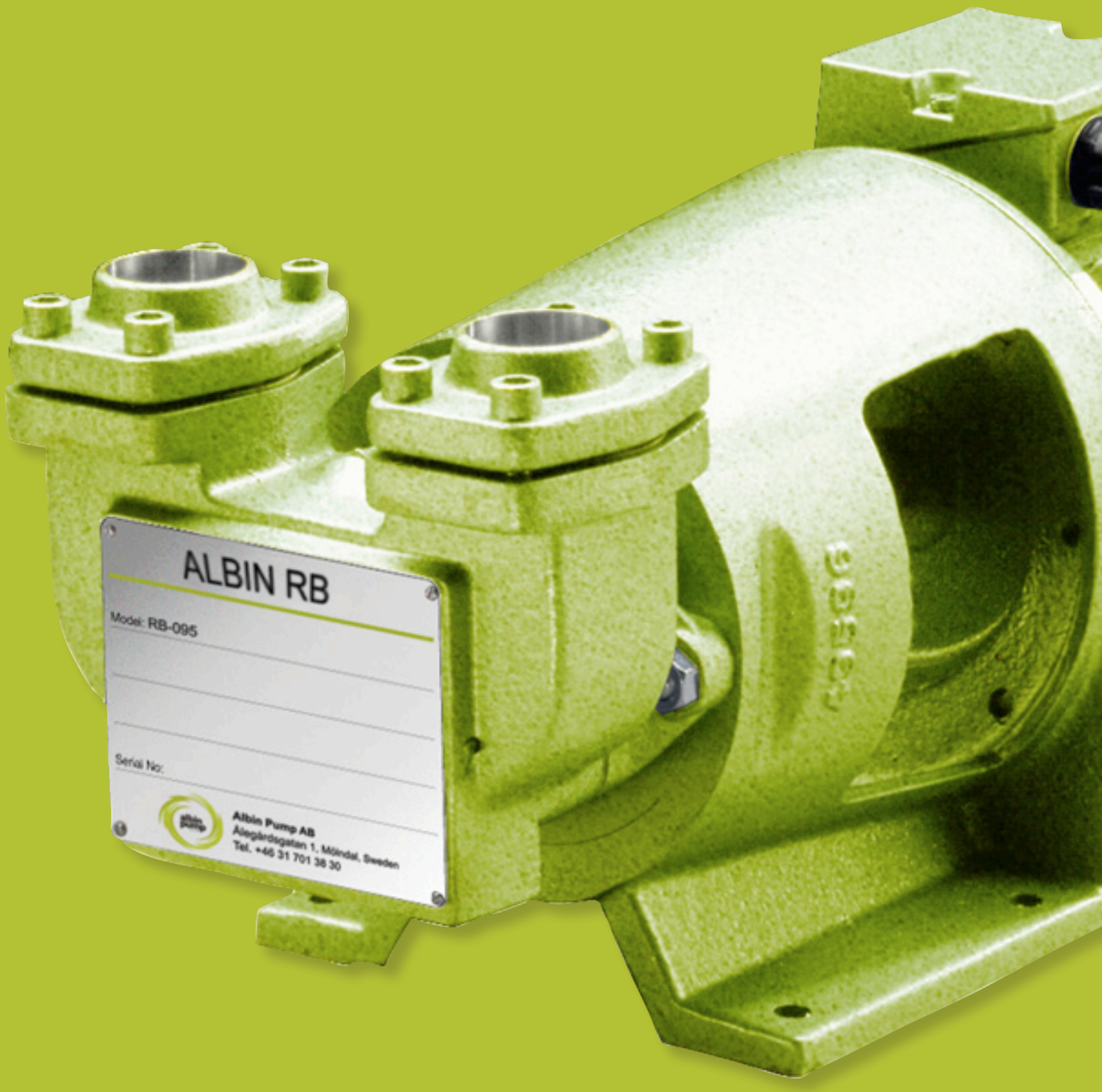
albin pump
since 1928

ALBIN PUMP RB

INTERNAL GEAR PUMP SERIES


ALBIN RB
Model: RB-095
Serial No:
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THE LEGEND

To come up with a really good product demands plenty of knowledge and fresh, innovative ideas. Yet most important of all is to listen to our customers needs and requirements. So that we can see what can be improved and identify things that are not working optimally. Only then can we create something new - and that actually makes a big difference for you, the customer.

THE LEGENDARY GEAR PUMP

The Albin RB offers a combination of strong design with small or large clearances, unique gear tooth profile and options such as electrical heating and built-on safety relief valves.

Sometimes the fluid are explosive, sometimes poisonous. They can be free-flowing or extremely viscous. Albin Pump has the experience and knowledge to meet the demands of these different characteristics. Together with our customers we select the right material and choose the right seal options to help you reach the optimal lifetime for the pump in various applications. Albin RB pumps are used in various industries and enviroments, which have thousands of liquids that need to be pumped. Gear pumps are used in all types of manufacturing industries for the transportation of both thin and thick liquids, from chocolate to diesel fuel.

INGENIOUS

Highly reliable, long service life, high vacuum and pressure ability, suited to a wide range of applications. These are just some of the characteristics of the Albin gear pump range, available in six sizes with a capacity range from 0 - 150 l/min. The design is compact and robust, based on well known and proven techniques, with just two moving parts - the rotor and the driven gear. Flow is smooth without pulsation, enabling a wide range of high or low viscosity products to be easily handled. Oil, paint, asphalt, cooking oil, polyester, tar, isocyanate, polyol and adhesives are typical of the products which can be efficiently transferred, circulated, pressurised or dosed with Albin RB gear pumps.

APPLICATION AREAS

· Liquids with excellent lubrication max 1400 rpm at full pressure	-	Machine oil, Motor oil, Hydraulic oil, Turbine oil, Glycerine
· Liquids with good lubrication max 900 rpm at 50 % of pressure	-	Formalin, Fuel oils, Crude oil, Cellulose glue, Polyol, Asphalt
· Liquids with good lubrication max 900 rpm at 50 % of pressure	-	Isocyanate, Freon, Calcium hydroxide, White spirit, Methanol
· Liquids with good lubrication max 900 rpm at 50 % of pressure	-	Honey, Syrup, Rubber solution, Epoxy resin, Latex (synthetic)

Reduced down time for service

Wide range of materials

Robust and reliable operation

High and low viscous products

Smooth flow

High efficiency

Conforms to API 676

Easy maintenance

Simple design - only two moving parts

BENEFITS

- Constant flow - pulsation free and accurate
- High volumetric efficiency and low NPSHreq
- Low and high viscous liquids
- Extremely good priming capability
- Bi-directional operation
- Few parts - easy maintenance
- Compact unit easy to install secures correct alignment
- Only two moving parts with long lifetime

MODEL NUMBER	BODY	PUMP VERSIONS				SHAFT	
		01 Standard max. 140C	02 Heat treated (tufftrided)	03 Increased clearences for 140-300C	11 Heated treated Hard metal pin	V Standard mech.seal	F Packed gland PTFE
RB1	Cast iron Connections: Welding flange 30 mm / Threaded flange BSP1"	O	O	O		O	O
RB2		O	O	O		O	O
RB3	Cast iron Connections: Welding flange 38 mm / Threaded flange BSP1.1/4"	O	O	O	O	O	O
RB4		O	O	O	O	O	O
RB5	Cast iron Connections: Welding flange 44,5 mm / Threaded flange BSP1.1/2"	O	O	O	O	O	O
RB6		O	O	O	O	O	O

PUMP VERSIONS

01
Standard pump version for lubricating liquids e.g. oils, most paints and glues.

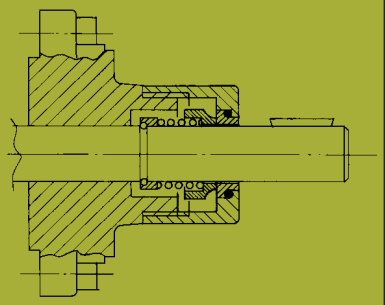
02
Heat treated interior for non-lubricating liquids, e.g. petrol, kerosene, solvents, at low pressures.

03
Pump with increased radial and axial clearances for temperatures up to 300˚C and for liquids sensitive to temperature increases, e.g. heat transfer oils, polyester, glue, bitumen, sugar solutions.

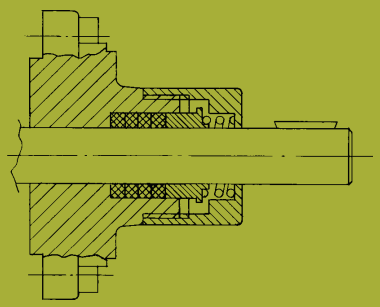
11
Hard metal pin and heat treated interior. Extra lubricating groove. Suitable for low viscosity liquids at high pressures.

SHAFT SEALS

Mechanical seals should be selected for viscosities up to 1.500 cP. Packed gland seals are choosen for the thicker fluids which adhere or crystallize. In special cases other seals such as double PTFE lip seals must be used. Various types of seals are indicated.



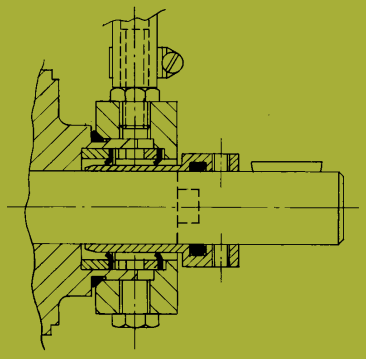
V
Mechanical seal for oils, emulsions, detergents and similar fluids.
Max viscosity 1.500 cP
Max. temp. 175˚C
Materials: Carbon / hardened steel, Viton O-rings



F
Universal PTFE impregnated packing for both low and high viscous duties.
Max. temp. 200˚C

R
Packed gland of pure graphite. Chemically very good durability.
Max. temp. 300˚C

L
Flushed PTFE double lip seals. For hazardous and difficult liquids e.g. icocyanate, solvents, paints and to prevent crystallization.
Max. temp. 170˚C

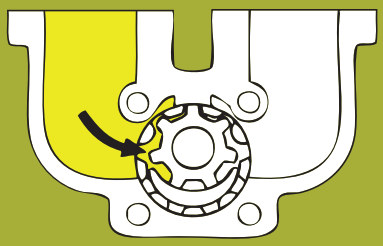


SEALS		OPTIONS		MOUNTING		MAX. PRESSURE		MAX. CAPACITY
L Flushed lip seal	R Packed gland graphite	V Built-on relief valve	K Support bearing bracket	Flange	Foot	Bar	MPa	l/min
O	O	O		O	O	30	3	6
O	O	O		O	O	30	3	12
O	O	O		O	O	30	3	25
O	O	O		O	O	30	3	50
O	O	O		O	O	20	2	75
O	O	O	O	O	O	20	2	150

OPERATING PRINCIPLE

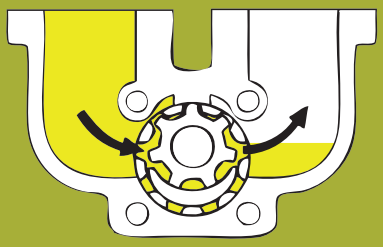
A

As the rotor shaft is turned the volume of the pockets between the rotor and the gear is increased and a vacuum is created. Liquid enters the suction



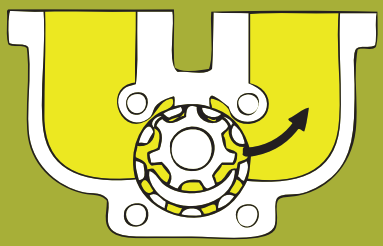
B

Observe the progress of the liquid through the pump and how the crescent shape on the head divides the liquid and acts as a seal between the suction and discharge ports. The gear design of the idler and the rotor form locked pockets for the liquid which guarantees absolute volume control.

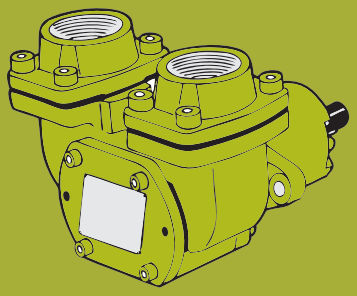


C

Pump in a completely flooded condition in the process of discharging the liquid through the discharge port.



RBS4 STAINLESS STEEL PUMP



The RBS4 gear pump is available in AISI 316 stainless steel. This model has a capacity up to 25 l/min against a maximum discharge pressure of 6 bars.

The materials of constructions enable compatible corrosive fluids to be handled.

Many thousands of these units are successfully handling textile printing inks, whilst others are used for dosing glue hardeners and acids.

Please contact Albin Pump for further information at:

WWW.ALBINPUMP.COM

Specifications subject to changes without prior notice.

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For more information about our worldwide locations, approvals, certifications, and local representatives, please visit www.albinpump.com.

Albin Pump reserves the right to incorporate our latest design and material changes without notice or obligation. Design features, materials of construction and dimensional data, as described in this bulletin, are provided for your information only and should not be relied upon unless confirmed in writing. Certified drawings are available upon request.

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