

Industrial rotary lobe pumps



Why choose industrial lobe pumps?

Operating principle

The operating principle of a rotary lobe pump is based on the accurate movement of its rotors, which in turn depends on the perfectly regulated synchronisation of a corresponding set of high precision gears.

The result is a positive-displacement volumetric pump with exceptional performance, which likewise allows the use of either rubberised or metallic lobe rotors, depending on the application concerned.

Our design offers you a pump of compact dimensions that are well out of proportion to its displacement flow volume, along with an ease of maintenance that really stands out with respect to other pump technologies.



Main features:

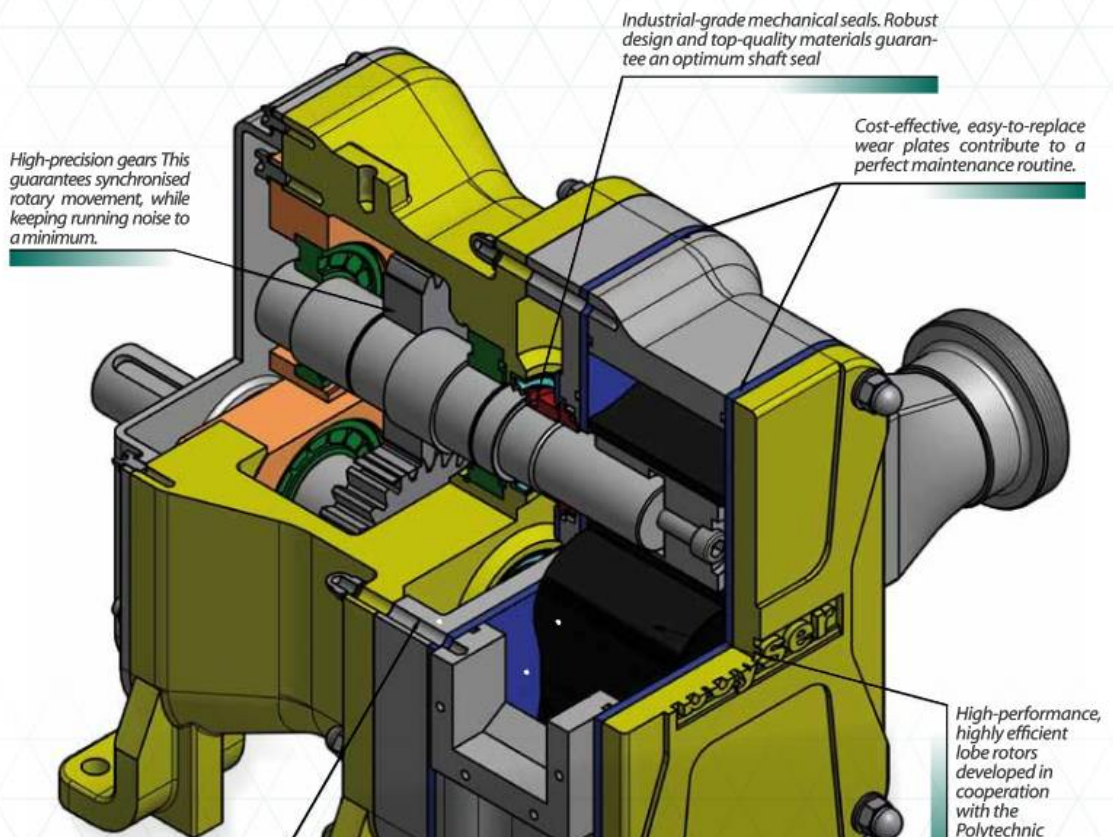
- Self-priming
- Reversible rotation
- Wear-resistant
- Continuous flow (non-pulsed)
- Low cost and easy maintenance
- Exclusive, high-performance rotor design
- Large solids pass
- Rubber coated or metallic rotors
- Very compact dimensions
- Lateral wear plates (easy to replace)
- Multiple connection configurations
- Available in stainless or special-grade steel

Examples of use:

- Mud, sludge, MBR filtration, slurries, sewage, marine spills, manures, polluted water, seawater, crude-oil residues, etc.
- Wine, olive oil, vegetable oils, molasses, pressed-olive waste, whole or fermented grapes, glucose, tomato concentrate, chocolate, etc.
- Detergents, surfactants, glycerine, glue, inks, crude-oil products, paints, fuel oil, bentonite, ceramic slip, calcium carbonate, etc.



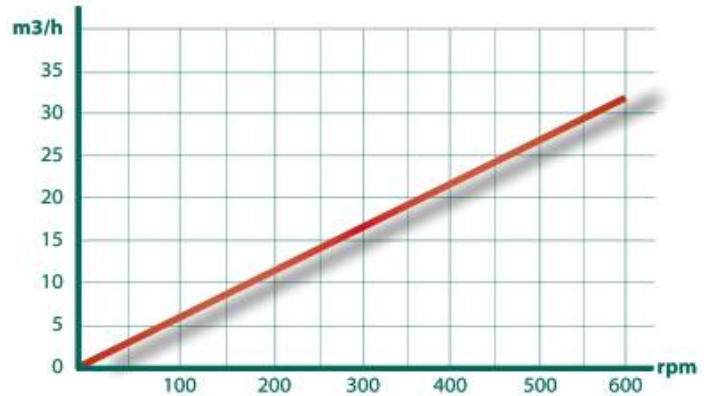
Operating principle and technical details



Boyser lobe pumps LB-S/70

Industrial pumps and fluid-handling equipment

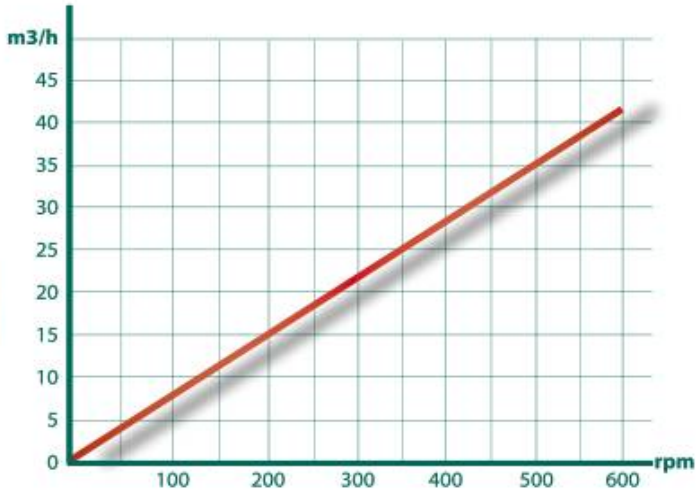
Performance table



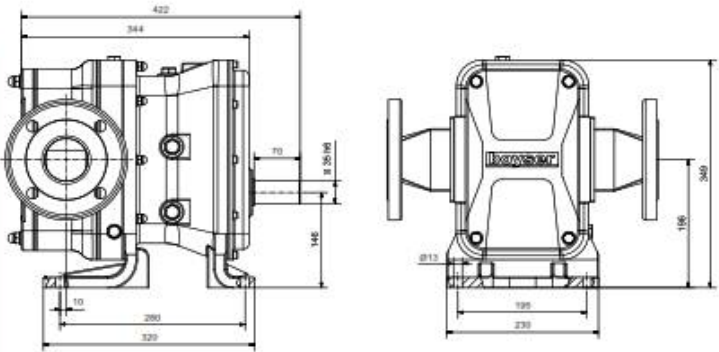
Boyser lobe pumps LB-S/90

Industrial pumps and fluid-handling equipment

Performance table



Technical data LB-S/90	
Capacity	1,17 l/rev
Operating pressure	<6 bar
Rubber coated rotors:	NBR, EPDM, FKM
Metallic rotors available:	AISI-316 , AISI-420
Pump-body material:	AISI-316, AISI-410
Mechanical seals:	Carb. Silicon / Carb. Tungsten, Graphite/Carb. Tungsten.
Standard connections	DIN DN-65 or DN-80 flanges.
Other connections available:	DIN 11851 NW, Tri-clamp, SMS, Fast adapters, ANSI flanges, etc.

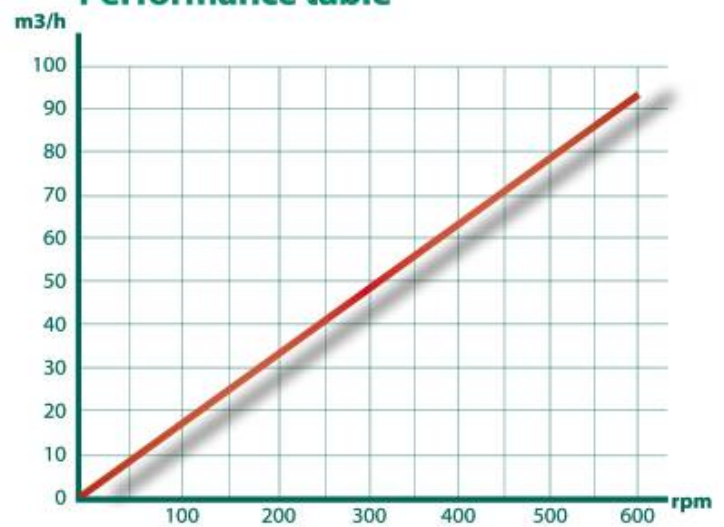


Boyser lobe pumps LB-M/100

Industrial pumps and fluid-handling equipment

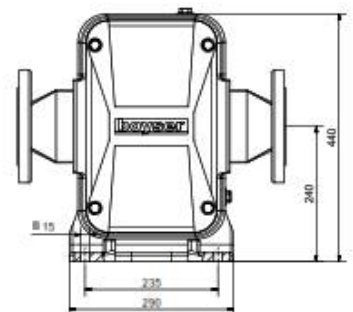
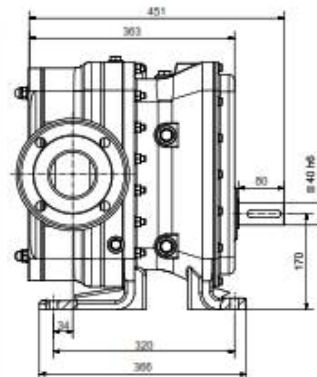


Performance table



Technical data LB-M/100

Capacity	2,79 l/rev
Operating pressure	<8 bar
Rubber coated rotors available:	NBR, EPDM, FKM
Metallic rotors available:	AISI-316 , AISI-420
Pump-body material:	AISI-316, AISI-410
Mechanical seals:	Carb. Silicon / Carb. Tungsten, Gra- phite/Carb. Tungsten.
Standard connections	DIN DN-80 or DN-100 flanges
Other connections available:	DIN 11851 NW, Tri-clamp, SMS, Fast adapters, ANSI flanges, etc.

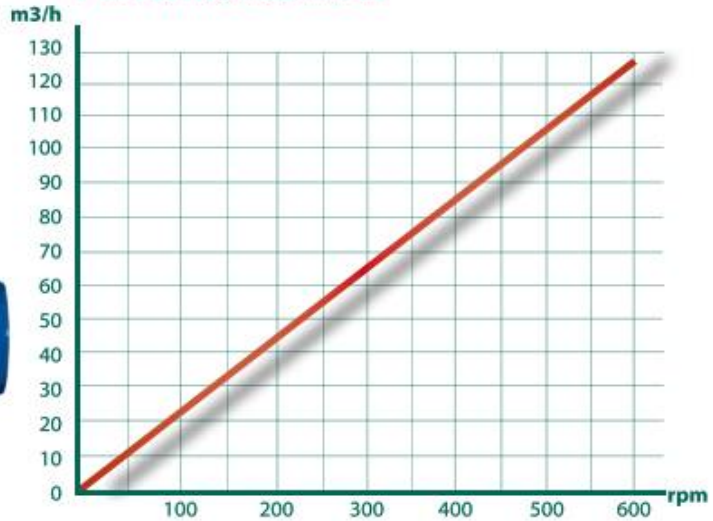


Boyser lobe pumps LB-M/125

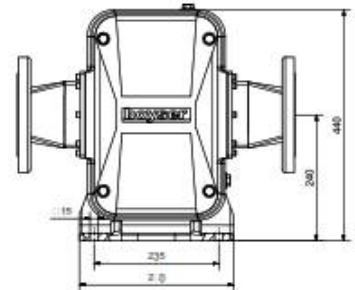
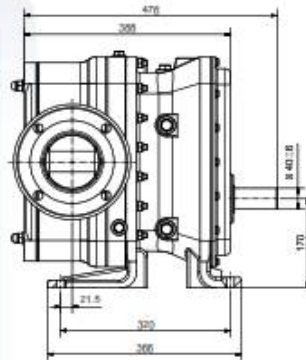
Industrial pumps and fluid-handling equipment



Performance table



Technical data LB-M/125	
Capacity	3,49 l/rev
Operating pressure	<4 bar
Rubber coated rotors available:	NBR, EPDM, FKM
Metallic rotors available:	AISI-316 , AISI-420
Pump-body material:	AISI-316, AISI-410
Mechanical seals:	Carb. Silicon / Carb. Tungsten, Graphite/Carb. Tungsten.
Standard connections	DIN DN-100 or DN-125 flanges.
Other connections available:	DIN 11851 NW, Tri-clamp, SMS, Fast adapters, ANSI flanges, etc.



FEED SCREW HOPPER

The optional feed screw hopper is recommended (and also necessary) when pumping heterogeneous substances that normally contain a high quantities of suspended solid matter likely to form an obstructive mass, which then lacks the required fluidity – thereby making it difficult to ensure its entry into the pump.

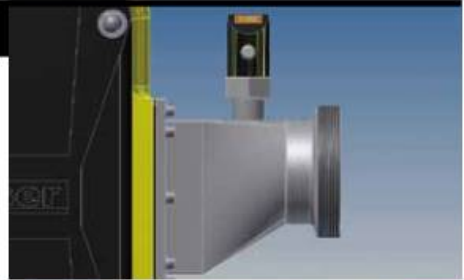
This option allows us to ensure that the pump is kept properly supplied in such cases, which in turn means that the substances concerned can be pumped in a reliable and efficient way.



PRESSURE SAFETY SWITCH

The fitting of a pressure safety switch to a volumetric pump of this type prevents the accidental accumulations of excess pressure in the pump and its connected system that are likely to result from incorrectly-shut valves, pipework blockages, etc.

Excess pressure of this type, which can also cause a mechanical or electrical fault, likewise supposes a general risk for the installation as a whole. The pressure safety switch is designed to shut down the pump whenever it reaches a predetermined operating pressure.



SAFETY BY-PASS VALVE

The by-pass valve is designed, along the same lines as the pressure-activated safety switch, to protect the pump in the event of excess pressure.

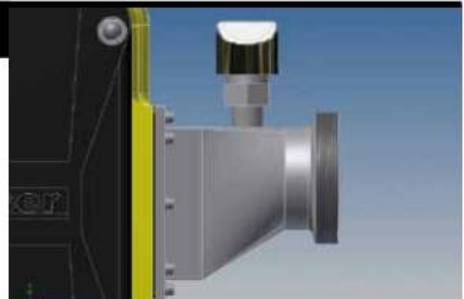
Protection is provided mechanically in this case, by recirculation of the substance being pumped. The safety valve can be installed either on the front cover of the pump or between its inlet and discharge connections.



FLOW DETECTOR

The design of the pump is such that it can only run "dry" for a short time before the lack of substance being pumped reduces lubrication and increases the temperature, which could affect the proper functioning of certain pump components.

The flow detector is an optional component designed to protect the pump from possible "dry" running due to a lack of pumped substance. It can also be used to automate the shutdown function at the end of a transfer or dosing operation.



MECHANICAL OR ELECTRONIC TORQUE LIMITER

Given that the device is a positive displacement volumetric pump, the ability to control its operating torque also allows us to prevent incidents caused by increases in pressure or mechanical blockage of the pump.

Electronic and mechanical units are both available. The electronic version can also be used to prevent the pump from dry running.

