

**LPP-D
PUMP**

THE SOLUTION YOU'VE BEEN LOOKING FOR

LAROX PERISTALTIC PUMPS FOR DOSING

The innovative Larox Peristaltic Pumps for Dosing (LPP-D) set a new industry standard for peristaltic pump technology. Designed and manufactured for the industrial marketplace, they are ideal for pumping diverse slurries and dosing a wide range of media.

ONE COMPRESSION IS ALL YOU NEED

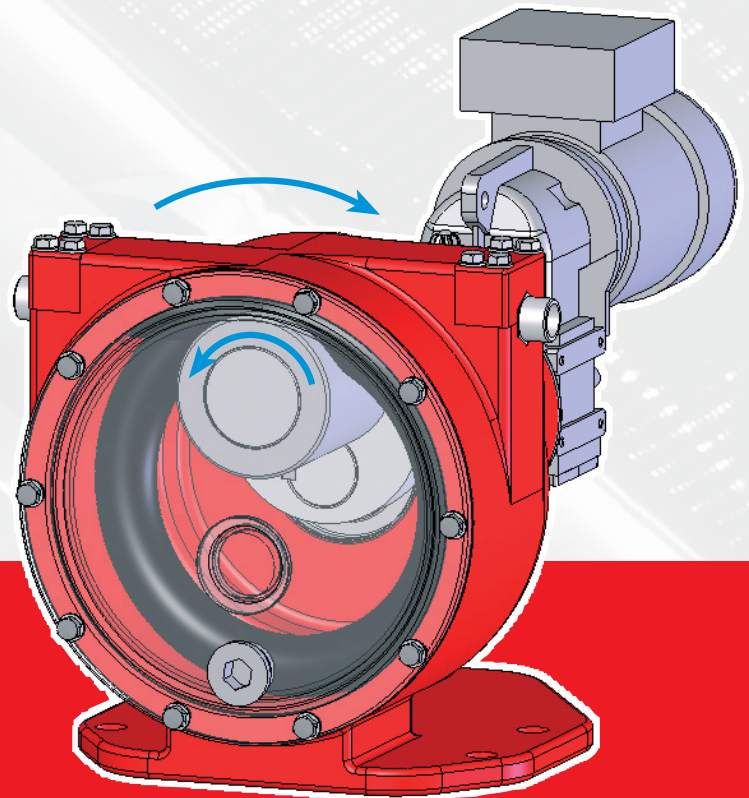
A single, bearing-mounted roller presses the hose only once per the 360 degree operating cycle, producing the maximum flow per revolution. Compared to conventional peristaltic pumps, the LPP-D doubles the flow per hose compression.

UNIQUE ROLLING DESIGN

LPP-D pumps incorporate advanced rolling design which eliminates friction and lowers energy consumption. The roller is mounted on a crankshaft creating eccentric rotation during the 360 degree operating cycle.

OPERATING PRINCIPLE

The operating principle of the LPP-D pump is based on the peristaltic effect. As the cylindrical rotor rotates along the hose, the process medium gets pushed forward through the hose. At the same time, the hose behind the compression point reverts to its original circular shape creating a suction effect at the pump inlet port. As a result, the hose bore gets filled with the medium. No backward flow can occur as the hose is squeezed tight by the roller.



The advanced LPP-D design

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TRAILBLAZING TECHNOLOGY

LPP-D pumps are manufactured using durable elastomers making them perfect for pumping and dosing a wide range of media. They provide substantial savings through improved process performance and efficiency, long service intervals and low maintenance costs.

Equipped with the standard technical features of a typical peristaltic pump such as dry run capability and self priming, the LPP-D pumps provide exact flow per revolution. Seal less pumps will not get damaged even if they run dry for longer periods of time. The LPP-D pumps are compact in design and require only a small footprint.

STANDARD TECHNICAL FEATURES FOR PERISTALTIC PUMPS INCLUDE:

- Only the hose is in contact with the medium
- No gland water or packing
- Full vacuum capability
- No backward flow
- Positive displacement

PROCESS BENEFITS

- No wear and corrosion
- Accurate flow for dosing and metering
- Exact flow per revolution irrespective of the pipeline pressure
- Dry run capability
- Self-priming
- No mixing or shearing of the medium

IDEAL FOR DOSING

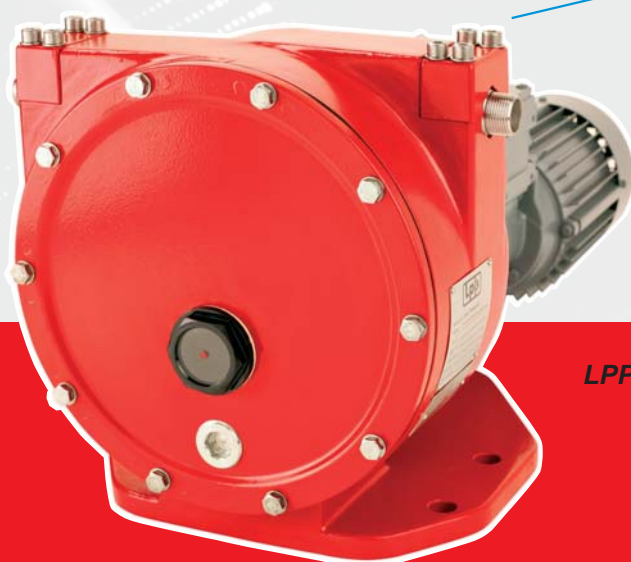
The trailblazing LPP-D pumps have a high turndown ratio making them ideal dosing and flow control. They provide accurate dosing in all process conditions as the pump discharge flow does not depend on the pipeline pressure.

Incorporating an advanced design, the Larox LPP-D pumps can offer unbeatable **additional features** including

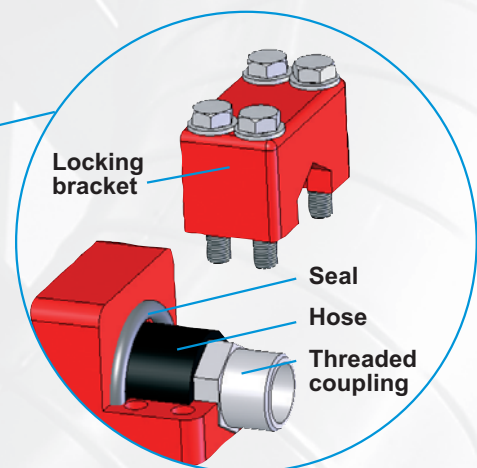
- 360 degree operating cycle
- Only one compression per revolution
- Rolling hose contact
- In-line pipe connection
- Reliable hose connection
- Low lubrication need

and process **benefits** such as

- Higher flow per compression than any other peristaltic pump
- Extended hose life
- High pressure capability
- No overheating at continuous maximum flow rate



LPP-D15



A simple and reliable hose connection. Locking, sealing and securing with a one piece locking bracket.

OPTIMAL HOSE FOR EACH MEDIA

With decades of experience in developing innovative flow control solutions and elastomer technology, Larox Flowsys has a wide selection of superior elastomers for diverse media and process conditions. The correct mechanical design and material selection are essential for optimal hose lifetime.

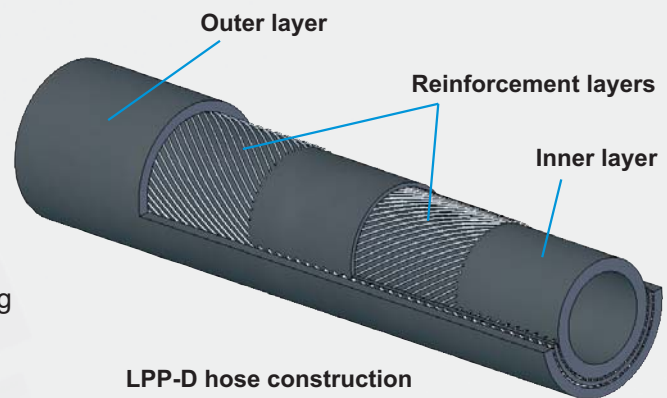
The LPP-D hose includes three sets of layers: the inner layer, the reinforcement layers and the outer layer.

- The inner layer which is the only part of the hose in contact with the medium is resistant to abrasive wear or chemicals
- The reinforcement layers give the hose its pressure retaining capability
- The protecting outer layer enables the hose to return to shape after compression creating a suction effect

All stages of the LPP-D pump and hose design and manufacturing are covered by ISO 9001:2000.

HOSE QUALITY YOU CAN RELY ON

The high-grade, clearly colour coded LPP-D hoses are available in chemical resistant ethylene propylene, oil and fat resistant nitrile rubber and extremely abrasive natural rubber. All these hose materials are ideal for heavy wearing applications. To guarantee the best possible mechanical characteristics, the hose cover is always made of natural rubber.



LPP-D hose construction

CSM

- Chloro-sulphone-polyethylene
- Medium: corrosive chemical
- Colour code: green

NBRF

- Nitrile rubber, food grade
- Medium: foodstuff
- Colour code: white

NR

- Natural rubber
- Medium: extremely abrasive
- Colour code: light blue

EPDM

- Ethylene propylene
- Medium: chemicals
- Colour code: violet

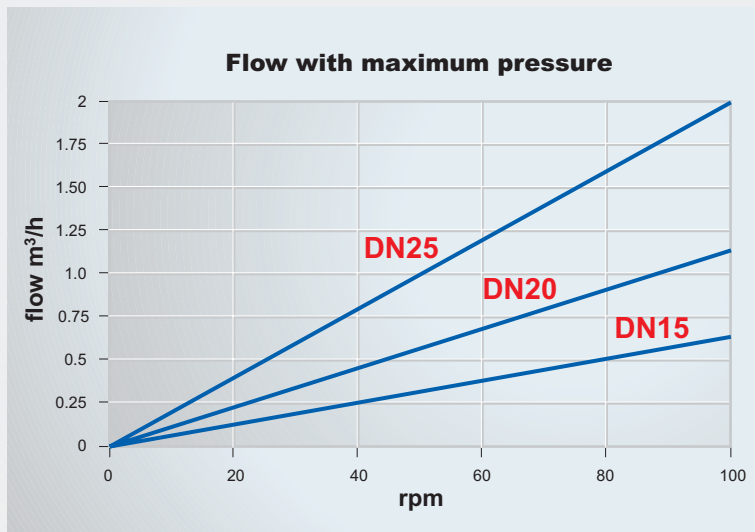
NBR

- Nitrile rubber
- Medium: oil and fat
- Colour code: yellow



LPP-D20

FLOW RANGES



PRODUCT SPECIFICATIONS

- Size range: LPP-D15, LPP-D20, LPP-D25
- Flow capacity: up to 2 m³/h
- Maximum operating pressure: 7.5 bar
- Standard drive unit: parallel shaft geared motor
- Auxiliaries: revolution detector, hose leakage detector, integrated frequency inverter
- The pump can also be equipped with a helical bevel geared motor

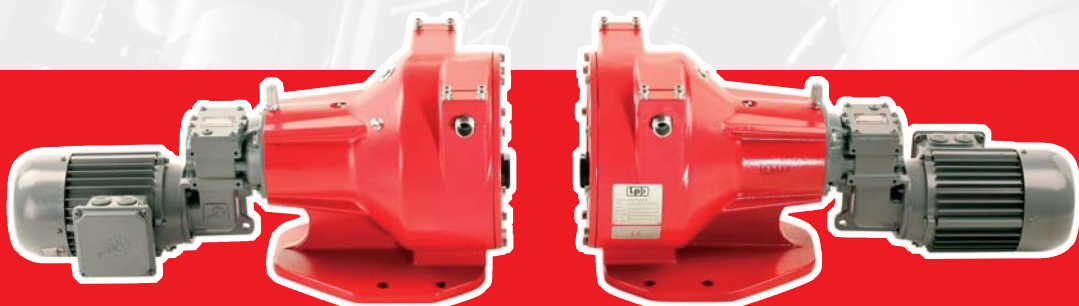
A MULTITUDE OF APPLICATIONS

Larox peristaltic pumps have proven their suitability for a wide range of industries and applications. The LPP-D hose pump is a perfect solution for industrial pumping, dosing and


diverse slurry duties. Designed for industrial pumping, the LPP-D pump is ideal for slurries with high solid content, abrasive, corrosive, viscous and crystallizing media.

TYPICAL APPLICATIONS

INDUSTRY	APPLICATION/MEDIA
Mining and Metal Industry	Metal concentrates and mineral slurries, flocculants
Chemical Process Industries	Paints, acids, resins
Water and Effluent Treatment	Slurries, sludge, mud, additives
Pulp & Paper Industry	Paper coatings, glues, additives
Pigments and Fillers	GCC, PCC, talc, kaolin, TiO ₂
Energy Production	Lime, waste slurries, gypsum
Food and Beverage Industry	Filtering and filtration aids, diatomaceous earth, starch
Construction Industry	Mortars, plasters, bentonite, cement
Oil and Offshore	Drilling mud, waste sludge



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ISO 9001