



The secret of piston flushing

Lutz-Jesco FEDOS piston motor pumps
for maximum operating safety



safety is our concern

No risk of slippage – FEDOS piston motor pumps with piston flushing

FEDOS series piston motor pumps from Lutz-Jesco reliably dose industrial liquids at pressures up to 100 bar and with delivery capacities of up to 28.5 l/h. An integrated piston flushing system available in all models ensures maximum operating safety.

Your advantages at a glance:

- **Minimized leakage risk**
- **Greater operating safety thanks to reduced slip and fire hazards**
- **Protection of system parts against corrosion**
- **Extended service life of seals**

The operating principle in three steps

The FEDOS safety flushing system dilutes liquids at the piston and removes them in a controlled manner.

- Connection of water lines (inlet and discharge)
- The system flushes the piston ring groove continuously with fresh water
- The liquid is diluted and immediately drained



"Controlled flushing on the piston prevents leaks, protects our system from damage, and noticeably increases operating safety."





All-rounder for high pressures

FEDOS series piston motor pumps are versatile units when it comes to precise dosing at high pressures.

Areas of application

- Oil and gas industry
- Concrete and construction industry
- Paints and coatings industry
- General process industry
- Process chemistry
- Water and wastewater treatment
- Power plants

Suitable pumping liquids

Thanks to their robust design, the pumps of the FEDOS series are suitable for a wide range of liquids, from aggressive to viscous:

- **Chemically aggressive liquids:**
acids, alkalis, disinfectants
- **Viscous liquids:** syrups, oils, emulsions
- **Flocculants and coagulants:**
polymers, iron(III) chloride



Your advantages at a glance

You get a well-engineered system that combines safety, efficiency, and sustainability:

- **Dimensional accuracy:** A solution that is precisely tailored to your requirements, neither over- nor under-dimensioned
- **Safety:** Pumps liquids at high pressure with controlled leakage drain
- **Versatility:** Suitable for acids, alkalis, disinfectants, polymers, and many other liquids
- **Reliability:** Over 70 years of experience from Lutz-Jesco ensure low-maintenance, robust pumps and fast service
- **Future-proof design:** Industry 4.0-capable, easy integration into production processes



FEDOS LB – the perfect solution for standard applications

When it comes to reliable dosing tasks without complex control systems, the FEDOS LB stands out with robust engineering, simple handling, and longevity. Ideal for operations that rely on consistent dosing quantities. Day in, day out.

Technical features:

- Capacity range: 0.55 – 28.5 l/h, up to 100 bar
- Material: Stainless steel
- Actuation: mechanical/frequency controlled, no external control
- Robust tappet drive for reliable dosing
- Optional heatable piston for optimum viscosity and electrical remote adjustment of the stroke length



"Since we started using the FEDOS LB, our dosing has been operating reliably. And we only pay for the functions we actually need. That is exactly what we were looking for!"





LA

FEDOS LA – for maximum control in automated processes

FEDOS LA is suitable for applications where precision, process integration, and flexibility are required. It can be seamlessly integrated into existing control systems and ensures consistently precise dosing quantities. Even with complex liquids.

Technical features:

- Capacity range: 0.55 – 28.5 l/h, up to 100 bar
- Material: Stainless steel
- Actuation: 0/4 – 20 mA, digital inputs/outputs
- Integration into standard control systems
- Robust tappet drive for precise dosing
- Optional heatable piston



"The FEDOS LA has made our automated processes significantly more stable – precise, reliable, and easy to integrate."





FEDOS LP – autonomous, automatic system

The FEDOS LP is the only piston pump on the market with an LCD display, making it a fully autonomous dosing system. Ideal for processes that do not require constant manual control. With the option for subsequent integration into control systems.

Technical features:

- Capacity range: 0.55 – 28.5 l/h, up to 100 bar
- Material: Stainless steel
- LCD display
- Actuation: 0/4 – 20 mA, digital signals, optional MODBUS/Ethernet
- Standalone operation or integration into control systems
- Robust tappet drive
- Optional heatable piston



*“With the FEDOS LP, our automatic dosing system runs like clockwork.”
Reliable, efficient, and fully autonomous.”*







AI

FEDOS LB, LA, LB piston dosing pump

Technical data

FEDOS		0.5	1	2	5	8	16	30
Delivery capacity 50 Hz	l/h	0.55	1.52	2.1	4.6	7.7	15.5	28.5
Delivery capacity 60 Hz	l/h	0.67	1.82	2.47	5.5	9.2	18.6	34.2
Gear transmission ratio		55	20			12		
Maximum stroke frequency	rpm	26	72			120		
Stroke length	mm	7.5		10				
Suction lift for outgassing liquids	mWC	8						
Piston diameter	mm	8			12		17	23
Stroke volume	ml/stroke	0.35		0.49	1.07		2.15	3.96
Max. pressure, standard version	bar	40						25
Max. pressure, high-pressure version	bar	100				80	40	25
Weight (without motor)	kg	9						10

Operating conditions and limits

FEDOS		0.5	1	2	5	8	16	30
Permissible ambient temperature	°C	5 – 40*						
Permissible liquids temperature	°C	0 – 80						
Relative air humidity	%	max. 90						
Maximum sound pressure level	dB(A)	57 – 65						
Maximum inlet pressure	mbar	500						
Viscosity limit	mPas	300**/1,000***						
Adjustable dosing range	%	0 – 100						

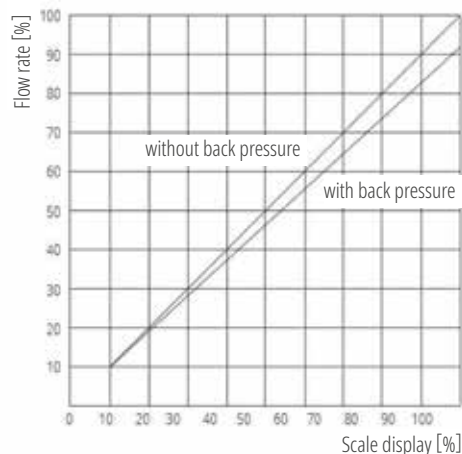
* Using the dosing pump at ambient temperatures below 5 °C must be evaluated on an individual basis. Please contact the manufacturer.

** For viscosities from ~300 mPas and above, spring-loaded valves must be used.

*** If the viscosity is above 1,000 mPas (empty), this must be assessed on an individual basis. The stroke frequency should be between 50 and 100 strokes/min.

Delivery characteristic curves

These delivery capacities were determined on the manufacturer's test benches. They apply to water at 20 °C (68 °F). The medium (density and viscosity) and the temperature affect the delivery capacity. Since these conditions differ at each installation site, the dosing pump should be calibrated.





Lutz-Jesco and Lutz Pumpen – your partners for conveying and dosing from a single source

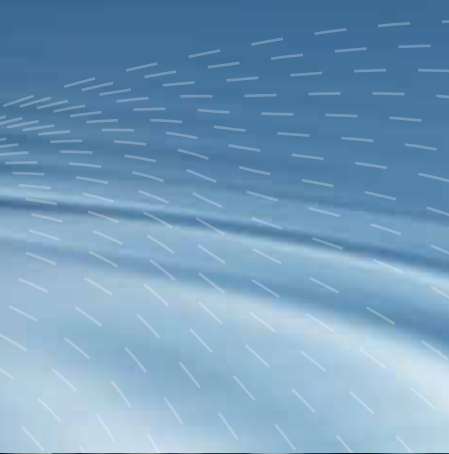
Increase process stability and reduce downtime in the transfer and dosing of liquids – with system solutions from Lutz-Jesco and Lutz Pumpen, two companies of Lutz Holding.

The shared portfolio includes precise dosing pumps, eccentric screw pumps, drum pumps, hose and chemical centrifugal pumps as well as modular conveying systems for various viscosities, chemical resistances, and temperature ranges.

The product range also includes dosing pumps as well as measurement and control technology for water treatment. Upon request, Lutz-Jesco supplies these components pre-assembled on a mounting plate, ready for wall mounting. This reduces the amount of on-site installation work and shortens project timelines.

These systems are used in industries such as chemicals, food, pharmaceuticals, environmental technology, water treatment, electroplating, and mechanical engineering. A worldwide service and sales network guarantees rapid commissioning, maintenance, and support. This ensures that your systems always work and your processes run smoothly.

With Lutz-Jesco and Lutz Pumpen, you can rely on complete solutions that meet high quality and environmental standards. The systems are designed for a long service life and short downtimes – all from a single source.





Are you ready to optimize your dosing processes?

Get a no-obligation consultation and work with our experts to find the ideal FEDOS piston pump for your application.

Contact us now:

- Phone +49 5130 5802-0
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- Web: www.lutz-jesco.com

Lutz-Jesco – your partner for precise dosing.
Reliable. Safe. For more than 70 years.



Find out more about our
FEDOS range

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