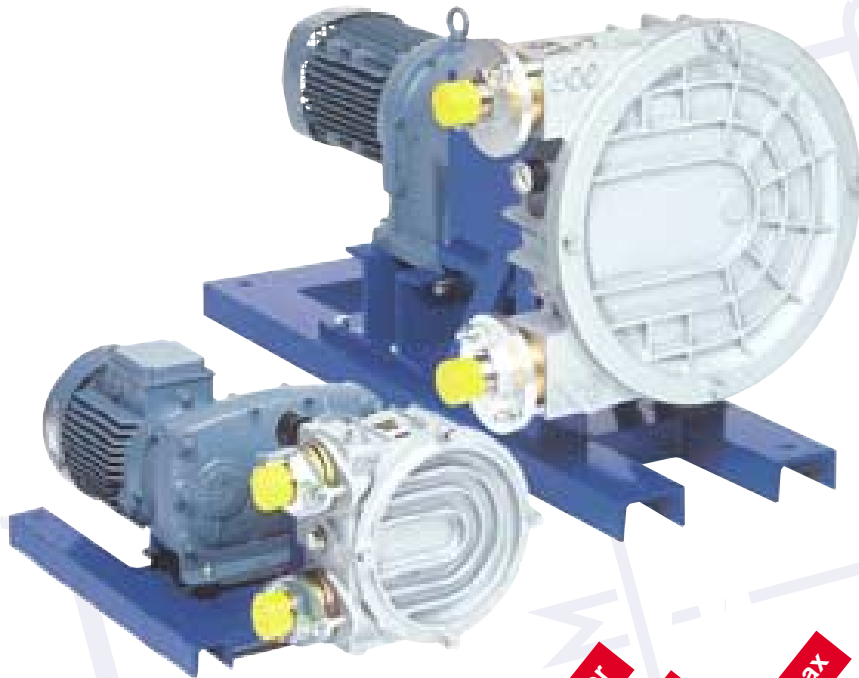


ELRO Peristaltic Pumps

Series IP

The IP series of ELRO peristaltic pumps distinguish themselves through a gentle transport of liquid or viscous media. Also capable of handling abrasive, shear-sensitive products with long fibres and solids. Over the years they have become an integral part in the pump pool of many operators.

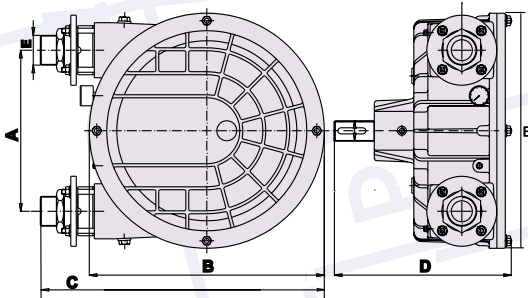
The 13 bar / 188 psi pump pressures of the standard versions make ELRO peristaltic pumps suitable for replacing other pump technologies. The seven pump sizes, various hose materials including food approved versions and the different port options allow individual adaptation to each application. This variety is further expanded by the frame and motor variants.



Type	Pump capacity	Inner hose diameter	Max. speed [rpm]	Drive output min/max	Weight without drive
	l/rev USGallon/rev	mm / inch	rpm	kW / HP	kg / lb
IP 100 (1")	0,07 0.018	15 0.59	142	0,37 – 1,1 0.50 – 1.5	12 26
IP 200 (1 1/4")	0,22 0.058	30 1.18	142	0,55 – 1,5 0.75 – 2.0	16 35
IP 300 (1 1/2")	0,85 0.224	35 1.38	70	1,10 – 4,0 1.50 – 7.5	48 106
IP 400 (2")	1,65 0.436	50 1.96	60	1,50 – 5,5 2.0 – 7.5	51 112
IP 500 (2")	2,9 0.766	52 2.0	60	2,2 – 7,5 3.0 – 10	110 242
IP 600 (2 1/2")	4,45 1.175	60 2.4	60	3,0 – 11 5.0 – 15	123 271
IP 800 (3")	7,8 2.06	70 2.76	60	5,5 – 18,5 7.5 – 25	248 546

ELRO peristaltic pumps are equipped as a standard with a patented vacuum system. It leads to many economic and technical advantages such as:

- very good suction properties up to 9.5 m / 31 feet lift (no additional suction equipment required)
- constant pump capacity during the entire hose life
- enables the hose to reform to its full cross section
- low reduction in capacity when handling very viscous media
- use as early warning system for a just in time hose exchange



Type	IP 100 (1")	IP 200 (1 1/4")	IP 300 (1 1/2")	IP 400 (2")	IP 500 (2")	IP600 (2 1/2")	IP 800 (3")
E	152/5.98	140/5.51	336/13.23	320/12.60	516/20.31	510/20.08	692/27.24
A	242/9.53	242/9.53	470/18.50	470/18.50	680/26.77	680/26.77	890/35.04
B	316/12.44	316/12.44	585/23.03	570/22.40	840/33.07	800/31.50	1020/40.16
D	290/11.42	290/11.42	380/14.96	355/13.98	480/18.90	500/19.68	680/26.77

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Main application:

- Chemical industry
- Ceramic and porcelain industry
- Building industry
- Food and beverage industry
- Breweries
- Cosmetic and pharmaceutical industry
- Power stations
- Colour and painting industry
- Waste and disposal industry

Applications



Waste disposal industry



Breweries



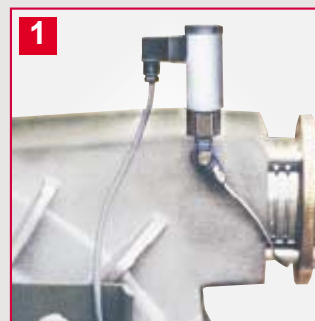
Chemical industry

The patented early warning system (see illustration right **2**, **3**) works as follows: Each hose is provided with a small additional channel through which the air in the upper section of the pumping chamber is evacuated from the pump housing. Therefore, a vacuum is formed in the sealed aluminium housing. In the case of damage or normal wear of the hose, the vacuum will drop.

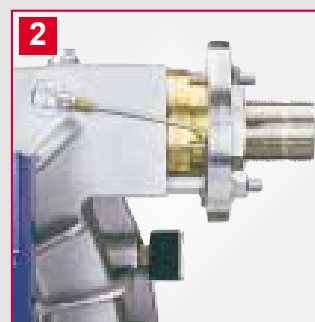
The early warning can be seen through the installed vacuum gauge. An acoustic or optical signal can be activated by using the vacuum switch **1**.

By this, the hose condition is monitored for optimum service planning.

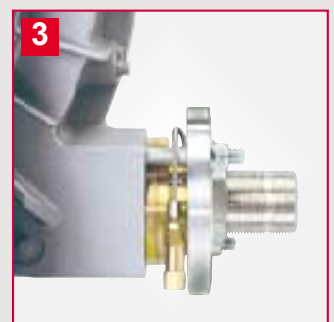
Downtimes through normal wear can be predicted.



Early warning system switch



Early warning system suction side



Early warning system discharge side

ELRO Peristaltic Pumps

Selection, Pump Capacity

For the selection of the mobile ELRO Peristaltic pumps series M300, the following factors are to be considered:

- pumping medium
- pumping capacity
- suction and discharge conditions
- operation time per day
- location of use
- accessories with suitable couplings

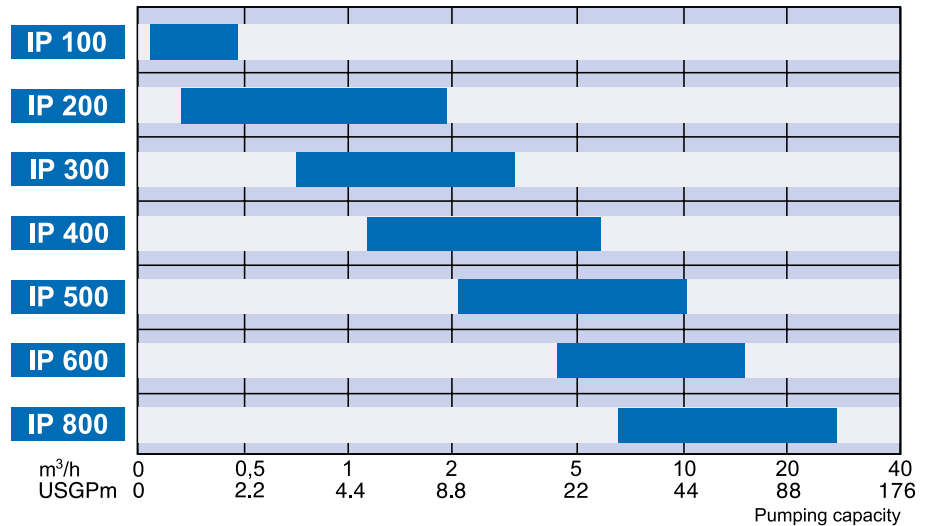
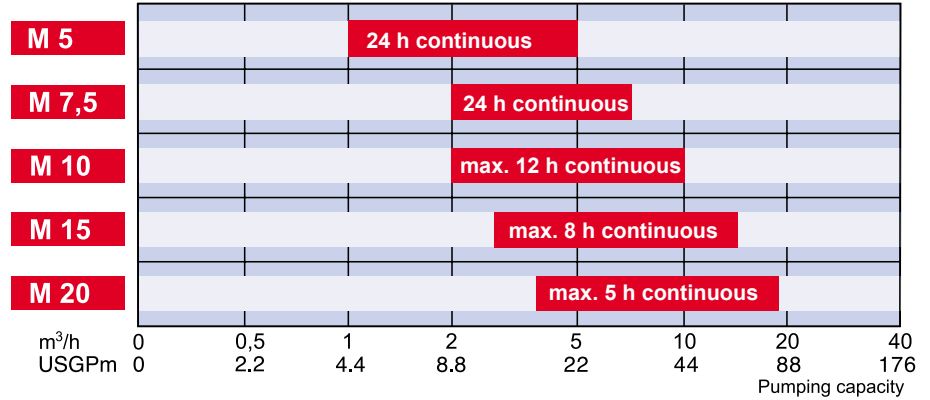
The essential items for a low-wear operation of the peristaltic pumps are dependant on:

- pumping media \Leftrightarrow speed
- media temp. \Leftrightarrow hose compression
- discharge pressure \Leftrightarrow Consider larger diameter discharge lines
- operation time per day \Leftrightarrow continuous intermittent short time

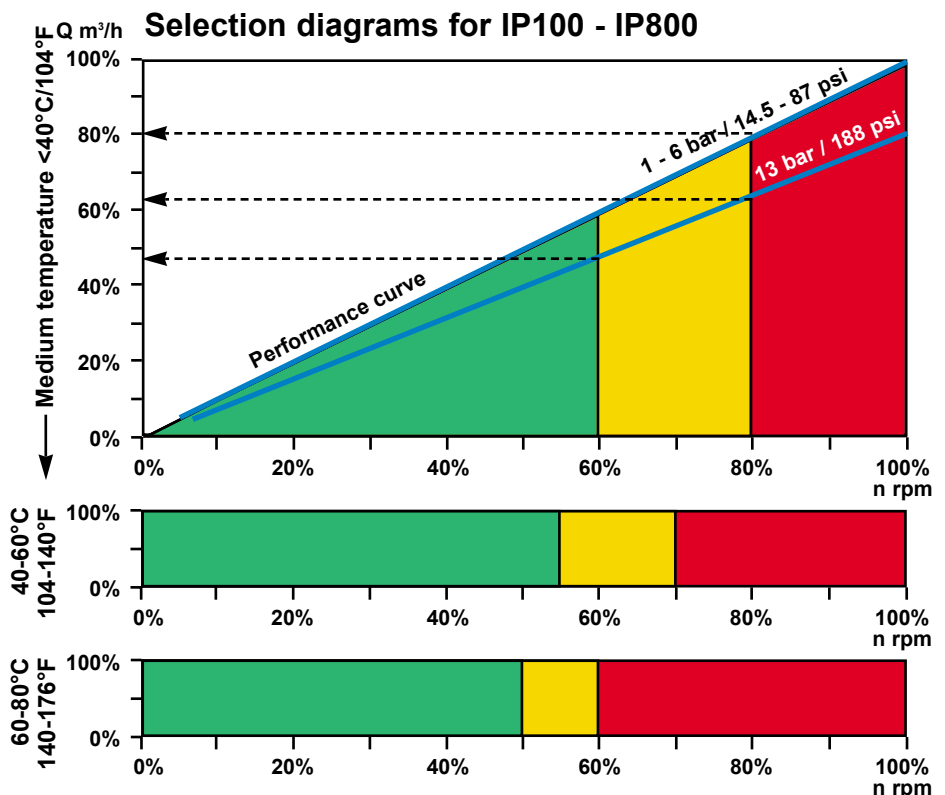
After fixing the operation point, depending on the above parameters, an exact specification of the pump can be made using the individual data sheets. Using the selection diagram, adjustments may be necessary after consideration of the factors "Operation time/day and media temperature".

At a media temperature $>40^{\circ}\text{C}/140^{\circ}\text{F}$, hose life is shortened and a speed reduction should be considered.

- Short-time operation (max. 4 hours)
- Intermittent operation (max. 12 hours)
- Continuous operation (24 hours)



The graphical presentation serves as reference. Exact details can be obtained from the respective data sheets.



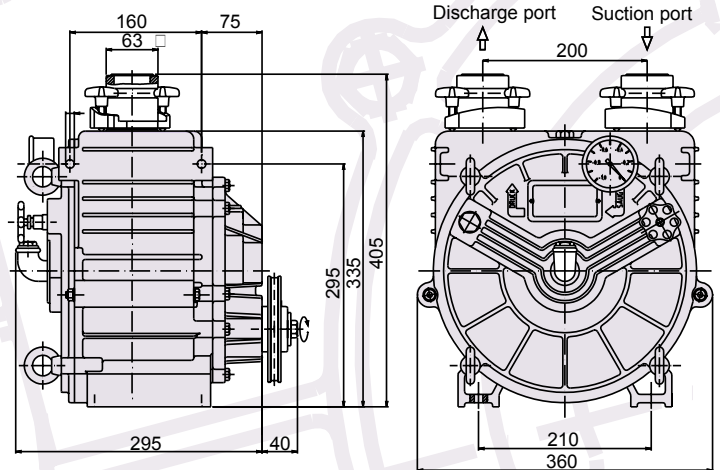
ELRO Peristaltic Pumps

Series M300



ELRO M300 series Peristaltic Pumps were designed for safe, quick and mobile applications in the most varied industrial operating conditions. Over many years this unique, patented pump system has been and is successfully used world-wide for more and more new applications.

The basic idea during the development of the mobile peristaltic pumps was to integrate the advantages of standard peristaltic pumps and to achieve a compact, portable and flexible design. This idea was realised through a special, patented concept in the pump housing design.



Main Application:

- Environmental technology
- Tank cleaning
- Building industry
- Chemical industry
- Forwarders
- Power stations, disposal technology
- Ships, port facilities and skimmer

Type / drive		Weight
M 5 E(X) – M 20 E(X)	Electric motor 230-400 V + EX	55-65 kg 121-143 lb
M 15 / 7,5 E(X) – M 20 / 10 E(X)	Two-stage electric motor 400 V + EX	62-65 kg 136-143 lb
M 20 B	Petrol engine 4,0 kW / 4000 rpm 5.4 HP	52 kg 115 lb
M 20 D	Diesel engine 4,15 kW / 3600 rpm 5.6 HP	75 kg 165 lb
M 20 H	Hydraulic drive	55 kg/121 lb
M 20 L	Pneumatic motor	58 kg/128 lb
M 20 WT	Water turbine	56 kg/123 lb
M 20 FU	Electric motor with integrated frequency converter	66 kg/145 lb

The peristaltic pumps can be equipped with different hose materials depending on applications as well as with couplings on the suction and discharge side in different materials and designs.

The M300 series can be selected with a variety of different motors.

For special applications, the pump is also available in a reversible design. Therefore it is possible to pump in the opposite direction with the same performance features - a decisive criterion when pumping out and pumping over media which are harmful to the environment.

The design of all pumps enables changing of pumping hose and all components within shortest period of time without any additional special tools.