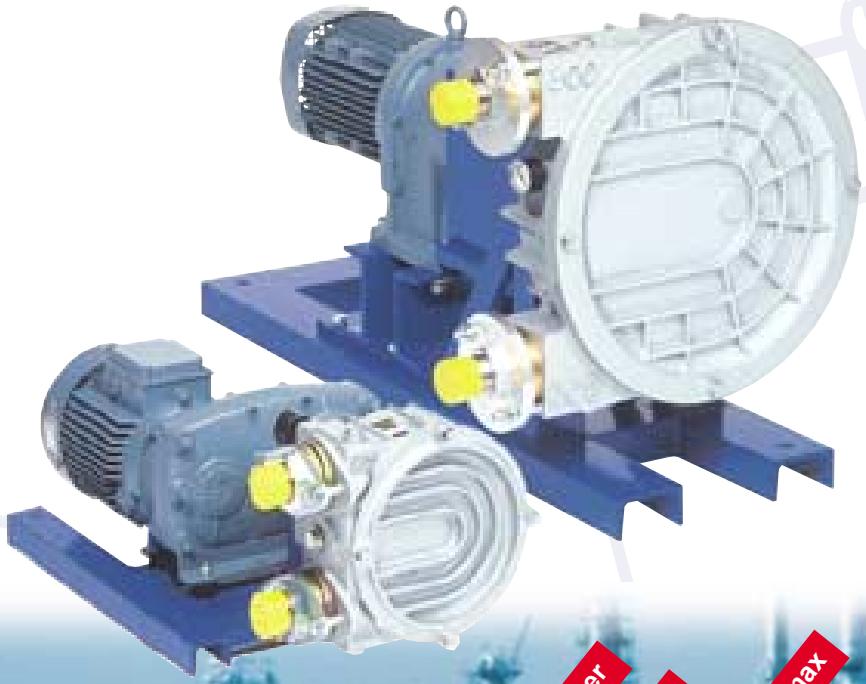
ELRO Peristaltic Pumps

Series IP

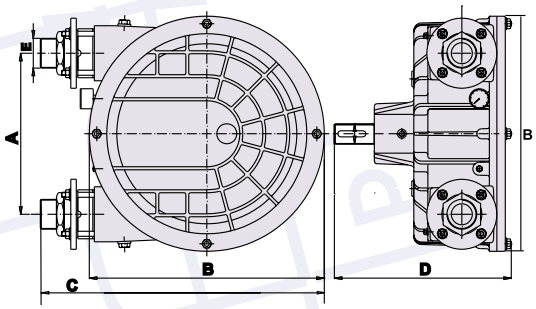


The IP series of ELRO peristaltic pumps distinguish themselves through a gentle transport of liquid or viscous media. Also capable of handling abrasive, shear-sensitive products with long fibres and solids.
Over the years they have become an integral part in the pump pool of many operators.

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 l/rev USGallon/rev	Inner hose diameter mm / inch	Max. speed [rpm] rpm	Drive output min/max kW / HP	Weight without drive 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 ¼")	0,22 0.058	30 1.18	142	0,55 – 1,5 0.75 – 2.0	16 35
IP 300 (1 ½")	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 ½")	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

Dimensions
mm / inches



Type	IP 100	IP 200	IP 300	IP 400	IP 500	IP600	IP 800
E	(1")	(1 1/4")	(1 1/2")	(2")	(2")	(2 1/2")	(3")
A	152/5.98	140/5.51	336/13.23	320/12.60	516/20.31	510/20.08	692/27.24
B	242/9.53	242/9.53	470/18.50	470/18.50	680/26.77	680/26.77	890/35.04
C	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

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

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

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 evaquated 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.

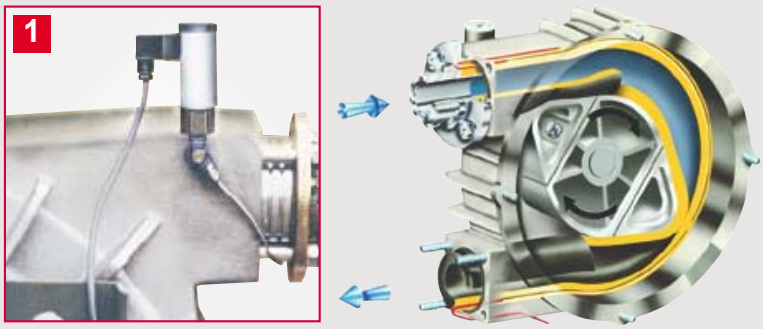
Downtimes through normal wear can be predicted.

Applications

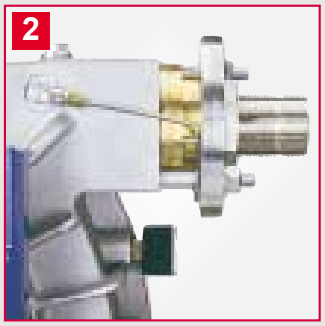
Waste disposal industry

Breweries

Chemical industry



Early warning system switch



Early warning system suction side

Early warning system discharge side

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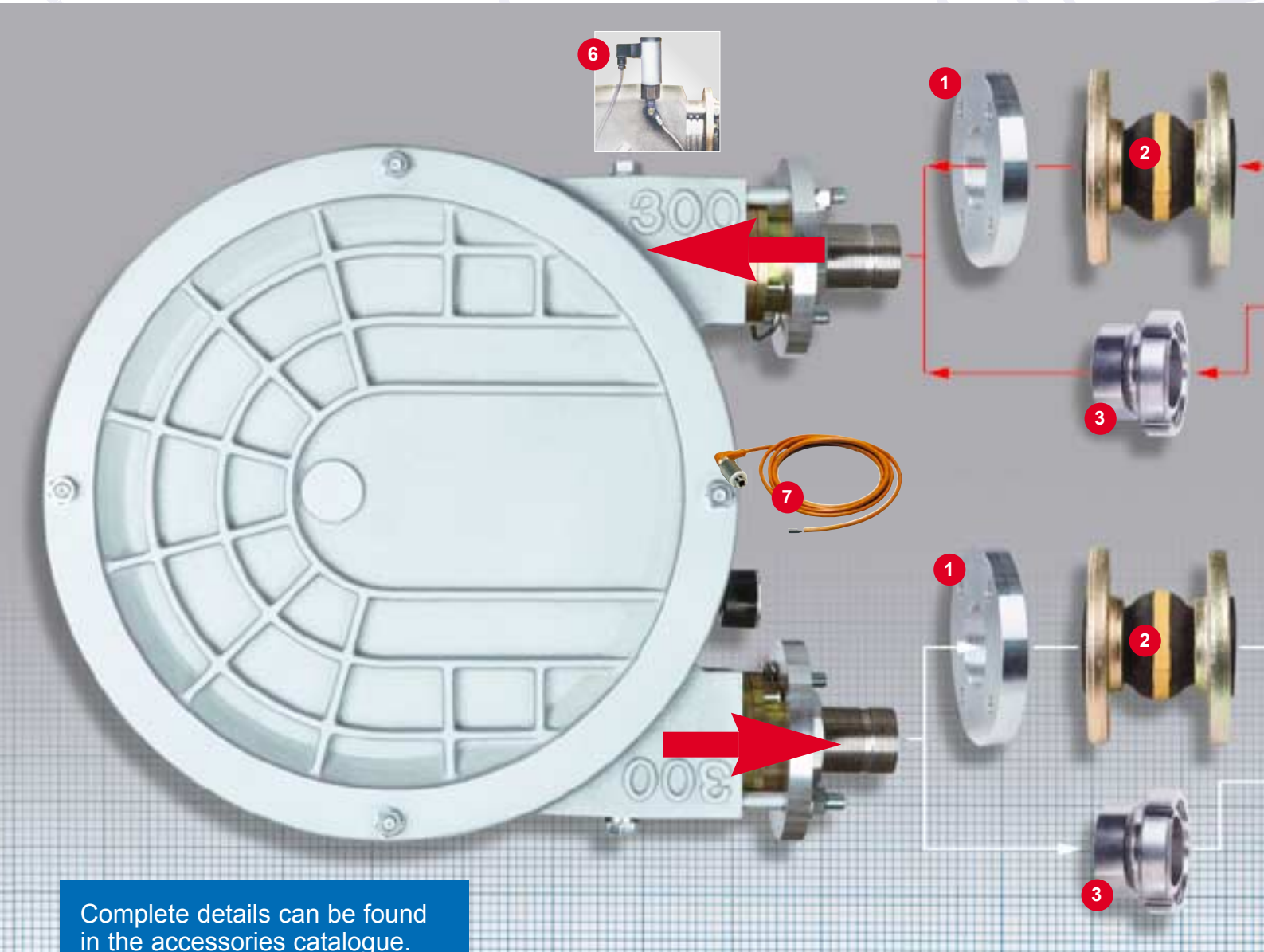
Series IP

The IP series of ELRO peristaltic pumps are available with a variety of accessories for each application.

1. Flanges in steel, stainless steel and plastic according to different standards
2. Compensators in steel, stainless steel with matched elastomer materials
3. Quick action couplings and fittings, e.g. coupling in stainless steel, brass and aluminium, DIN and triclamps
4. Suction/discharge hoses are available with nominal sizes between 1” and 4” and equipped with suitable coupling systems, completely pressure-tested. Standard spiral hoses with plastic and steel reinforcement, chemical hoses or suction/discharge hoses approved for food applications.
5. Pulsation dampers made of different housing materials: lacquered steel, polypropylene or stainless steel. Depending on the type of design and size with an inner membrane complete with fittings and pressure gauge.
6. Vacuum switch for checking the vacuum in the pump housing. Pressure drop = Alarm.
7. Conductivity sensors for the conductivity measurement. If conductivity fluid is mixed with the medium = Alarm.



Complete details can be found in the accessories catalogue.

Pump coding

I	10	E	A	A	–	–	B	A	□	□	□

Motor and gear-box choice

Type

I

Size

10	IP100
20	IP200
30	IP300
40	IP400
50	IP500
60	IP600
80	IP800

Connections

E	Stainless steel NPT
R	Stainless steel RJT
S	Stainless steel BSP
K	Polypropylene BSP
T	Polypropylene NPT

Hose / lubricant

A	NBR electric conductive + silicon
B	NBR + silicon
C	CSM + silicon
D	NBR + glycerine
E	EPDM + silicon
F	EPDM + glycerine
G	NR + glycerine
H	CSM + silicon
J	IIR + silicon
K	IIR + silicon
N	NR + silicon
W	NR full fabric + silicon
Y	NR full fabric + glycerine

Pump pressure

A	0 - 2 bar
	0 - 29 psi
B	2 - 4 bar
	29 - 58 psi
C	4 - 6 bar
	58 - 87 psi
D	6 - 8 bar
	87 - 116 psi
E	8 - 10 bar
	116 - 145 psi
F	10 - 13 bar
	145 - 188 psi

Paint finish

A	Silver
B	Acid-proof paint
C	Customer-specific

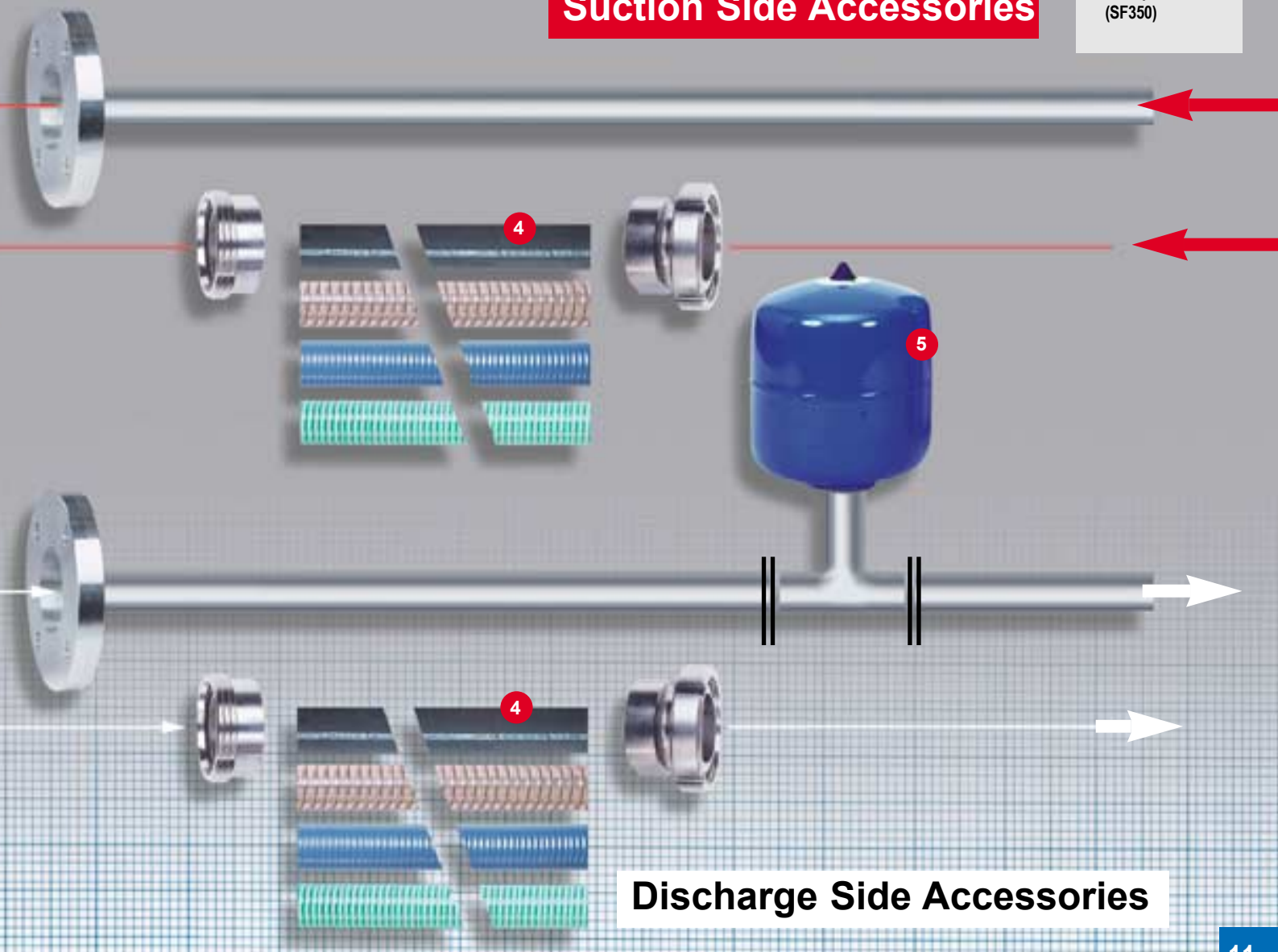
Connecting position with regard to suction side viewed from front

–	left/top (standard)
A	left/bottom
B	right/top
C	right/bottom
D	top/left
E	top/right
X	left/full fabric coating
Y	right/full fabric coating
Z	top/full fabric coating

Base frame

A	steel painted (150-180)
B	steel painted (110-140)
C	Stainless steel
D	Steel painted movable
E	Stainless steel movable
F	Stainless steel specified
G	Stainless steel painted
H	steel painted (150-180)
J	steel painted (SF350)

Suction Side Accessories



Discharge Side Accessories