

Gentle delivery and metering

Peristaltic pumps DULCO[®]flex for laboratory and industry applications



Simple operating principle compact, robust design



Peristaltic pumps of the DULCO®flex product range

Key features of ProMinent peristaltic pumps are their simple operation and compact, robust design. They are self-priming and operate without seals and valves. Suitable for low, medium and high pump capacities, peristaltic pumps of the DULCO®flex product range are suitable for use in nearly all metering and delivery tasks both in the laboratory and in industry because of their wide performance range and the large range of available hose materials. Whereas the pumps are fitted with roller technology for low pressures of up to 8 bar, they have shoes for higher pressures of up to 15 bar.

Because of its construction, the hose is the only wear part, and this is quick and easy to change.

Advantages of peristaltic pumps of the DULCO®flex product range

- Simple to operate
- Reversible discharge direction
- Hose materials suitable for various chemicals
- Simple and quick hose replacement
- Guaranteed not to run dry
- Self-priming
- Pump capacity up to 15,000 l/h
- Pressure up to 15 bar
- Ideal for transporting pasty, viscous, abrasive and gaseous media

Drive options

- Power end/drive without speed control
- Power end/drive with manually changeable speed
- Power end/drive for frequency converter operation

Type	Use	Pump capacity max. [l/h]	Pressure [bar]	Rollers/Shoes
DFAa	Laboratory	105	2	Rollers
DFBa	Industry	650	8	Rollers
DFCa	Industry	8,900	8	Rollers
DFDa	Industry	15,000	15	Shoes

For abrasive, viscous and sensitive media



Peristaltic pumps of the DULCO®flex product range

The feed chemical is transported by the rotor squeezing the hose in the direction of flow. No valves are needed. Therefore abrasive, viscous and sensitive media can be gently transported.

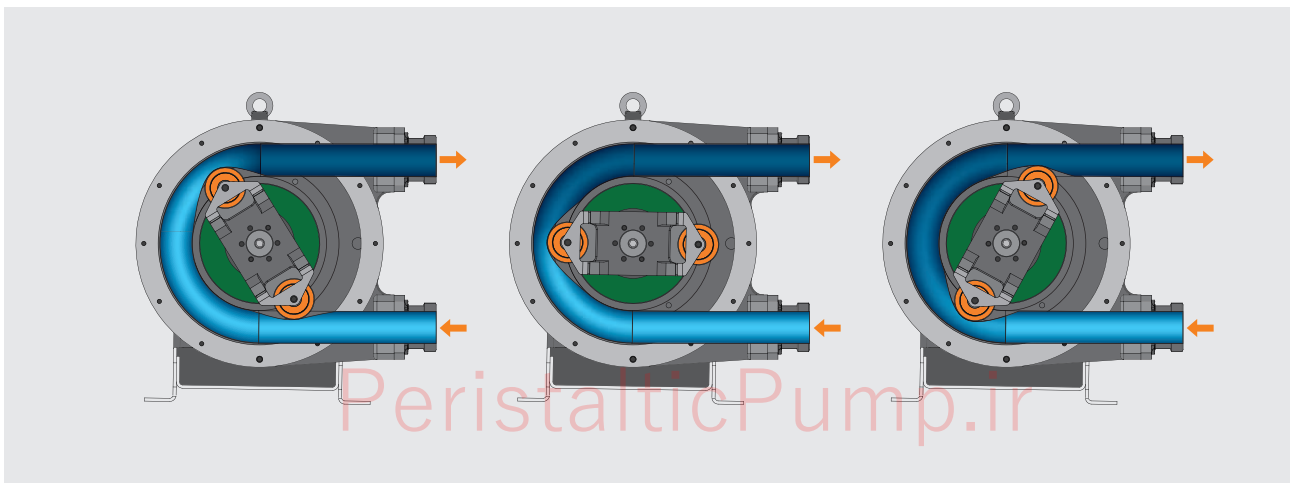
The pumping process is triggered by an elastomer hose, pressed by two rotating rollers or shoes against the pump housing. Once the rollers or shoes have passed by, the hose immediately returns to its original shape and creates

a vacuum at the pump inlet. Atmospheric pressure causes the medium to flow in. The feed rate is proportional to the pump speed.

A vacuum unit can optionally be used to help the hose to return to its original shape with pumps of the DFCa and DFDa product ranges. This improves the suction behaviour and ensures the uniform transport of viscous media.

Transport of media with the following properties

- Pasty and containing solids
- Viscous
- Abrasive
- Sensitive to shear
- Gaseous
- Corrosive



DULCO[®]flex DFAa

Precise metering of minute quantities

The peristaltic pump DULCO[®]flex DFAa is designed as a low-pressure pump suitable for lab use. It can be used for precise metering of low feed rates of up to 105 l/h at 2 bar. To reduce pulsation, the rotor is equipped with 3 rollers. A quick-release connector helps achieve a speedy hose replacement.

Options

- Stainless steel base plate
- Single phase motor
- Two pump heads



Technical data	
Hose diameter	3.2 to 8 mm
Feed rates	1.6 to 10 ml/rev
Hose materials	SOLVA, silicone, Norprene A60G, Norprene A60F
Self-priming	up to 8 m
back pressure	up to 2.0 bar

Pumps Type	Feed rate/revolution [ml/rev]	Max. pressure [bar]	Pump capacity at max. pressure [l/h]	Rollers/Shoes	Ø hose (inside) [mm]
DFAa 003	1.66	2	17.5	Rollen	3.2
DFAa 008	10	2	105	Rollen	8.0

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DULCO®flex DFBa

Low and medium pump capacities

The peristaltic pump DULCO®flex DFBa is designed for low and medium pump capacities of up to 649 l/h at 8 bar. With rollers and fabric-reinforced hoses, it is ideal for heavy-duty industrial use.

For use in the chemical industry, pumps can be manufactured with a Halar coated pump housing.

Options

- Stainless steel base plate
- Mobile unit
- Various connectors such as BSP, NPT, Tri-Clamp and DIN 11851
- Pulsation damper
- Leakage sensor
- Housing with Halar coating
- Food approval EU 1935/2004



Technical data	
Connector sizes	3/8 - 1"
Feed rates	0.023 - 0.24 l/rev
Hose materials	NR, NBR, EPDM, NR-A, Norprene, NBR-A, Hypalon, Tygon
Self-priming	up to 8 m
back pressure	up to 8 bar

Pumps Type	Feed rate/revolution [l/rev]	Pressure max. [bar]	Pump capacity at max. pressure [l/h]	Rollers/Shoes	Rollers/Shoes	Solids max. [mm]	Weight without power end/drive [kg]	Connector DN
DFBa 010	0.023	8	60	Rollers	10	2.5	6	3/8"
DFBa 013	0.039	8	100	Rollers	13	3.3	6	3/8"
DFBa 016	0.092	8	188	Rollers	16	4.0	13	3/4"
DFBa 019	0.12	2	671	Rollers	19	4.8	13	1"
DFBa 022	0.24	8	649	Rollers	22	5.5	22	1"

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DULCO®flex DFCa

High pump capacities and long service life

The peristaltic pump DULCO®flex DFCa is equipped with rollers and fabric-reinforced hoses. It is ideal for heavy-duty industrial applications and pump capacities of up to 8,900 l/h at 8 bar back pressure.

A ball-bearing mounted rotor ensures extremely smooth running and a long service life. With DFCa product range pumps a vacuum unit can optionally be used to help the hose to return to its original shape. This improves the suction behaviour and ensures the uniform transport of viscous media.

For use in the chemical industry, pumps can be manufactured with a Halar coated pump housing.

Options

- Stainless steel base plate
- Available as mobile unit
- Various connectors such as BSP, NPT, Tri-Clamp, DIN 11851 and flange
- Pulsation damper
- Leakage sensor
- Vacuum system
- Housing with Halar coating
- Food approval EU 1935/2004



Technical data	
Connector sizes	1 ¼"- DN 80
Feed rates	0.43 - 13.44 l/rev
Hose materials	NR, NBR, EPDM, Norprene, NR-A, NBR-A
Self-priming	up to 8 m
back pressure	up to 8 bar

Pumps Type	Feed rate/ revolution [l/rev]	Pressure max. [bar]	Pump capacity at max. pressure [l/h]	Rollers/ Shoes	Ø hose (inside) [mm]	Solids max. [mm]	Weight without power end/drive [kg]	Connector DN
DFCa 030	0.43	8	727	Rollers	28	7.0	62	1 1/4"
DFCa 040	0.86	8	1,495	Rollers	35	8.8	89	1 1/2"
DFCa 050	1.47	8	1,852	Rollers	40	10.0	140	DN40
DFCa 060	3.16	8	5,100	Rollers	55	13.8	235	DN50
DFCa 070	6.72	8	8,900	Rollers	65	16.3	440	DN65

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DULCO®flex DFDa

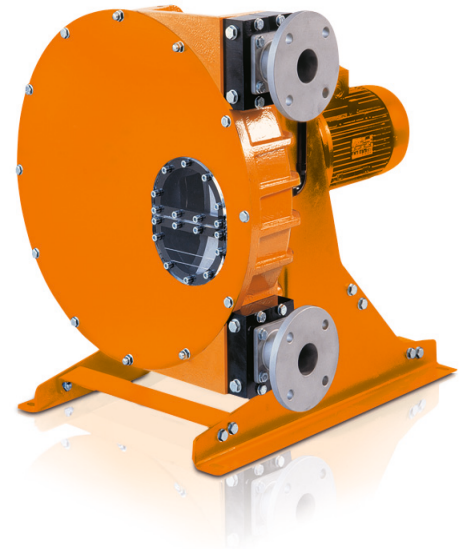
Maximum pump capacities and high pressures

The peristaltic pump DULCO®flex DFDa is designed for maximum pump capacities and high pressures. It is fitted with shoes and fabric-reinforced hoses. To reduce friction, the pump housing is filled with glycerine. A ball-bearing mounted rotor ensures extremely smooth running and a long service life. In harsh industrial use, the DFDa achieves rates of up to 15,000 l/h with back pressures of up to 15 bar.

With DFDa product range pumps, a vacuum unit can optionally be used to help the hose to return to its original shape. This improves the suction behaviour and ensures the uniform transport of viscous media.

Options

- Stainless steel base plate
- Available as mobile unit
- Various connectors such as
- Tri-Clamp, DIN 11851 and flange
- Pulsation damper
- Leakage sensor
- Vacuum system



Technical data	
Connector sizes	DN25 - DN100
Feed rates	0.3 - 20.0 l/rev
Hose materials	NR, NBR, EPDM
Self-priming	up to 8 m
back pressure	up to 15 bar

Pumps Type	Feed rate/ revolution [l/rev]	Pressure max. [bar]	Pump capacity at max. pressure [l/h]	Rollers/ Shoes	Ø hose (inside) [mm]	Solids max. [mm]	Weight without power end/drive [kg]	Connector DN
DFDa 025	0.3	15	504	Shoes	25	6.3	57	DN25
DFDa 032	0.62	15	1,125	Shoes	32	8.0	89	DN32
DFDa 040	1.33	15	2,075	Shoes	40	10.0	150	DN40
DFDa 060	3.16	15	4,200	Shoes	57	14.3	252	DN50
DFDa 070	6.7	15	7,200	Shoes	65	16.3	530	DN65
DFDa 080	11.70	15	8,700	Shoes	80	20.0	900	DN80
DFDa 100	20.00	15	15,000	Shoes	100	25.0	1,100	DN100

Contact worldwide



Experts in Chemical Feed and Water Treatment

ProMinent is at home in over 100 countries worldwide. This guarantees worldwide availability of our products and close proximity to the customer. We offer the same high quality standards for

our products and services worldwide. Exactly where you need us. We provide experience, knowledge and expertise in water treatment and metering technology the world over.