

ProMinent® DULCO Flex Control Peristaltic Metering Pumps

Overview: DULCO flex Control

The new DULCO flex Control is an intelligent peristaltic metering pump that is valve-free and has the accuracy of a diaphragm pump. Applications include gaseous, highly viscous, abrasive, shear-sensitive and chemically aggressive fluids.

The liquid end of the pump is designed for a quick and simple replacement of the tubing, utilizing a unique exchange process. The pump display provides precise instructions on the steps required for the tube replacement. High-performance tubing consists of a TPV (Santoprene) or PUR (Polyurethane) material that provides excellent chemical resistance and a long service life.

The DULCO flex Control is powered by a DC motor and will provide continuous metering from 0.048 GPD (0.18 L/D) to 7.92 GPH (30 L/H). Additional features such as communication protocol includes PROFIBUS, CANbus, Modbus and PROFINET will be available early 2020.

Your benefits

- Volume adjustment in GPH or LPH
- Manual, Analog, Contact and Batch modes optional
- High visibility of LED-indicator lights
- Large illuminated display
- New configurable input/output port
- CIP (cleaning in place) enabled system
- Turn down ratio up to 3,000:1
- Reverse flow is possible
- Dosing head can be aligned in four directions:
Left, Right, Up and Down
- Integrated 7-day timer
- Viscosities to 10,000 cPs
- DULCOneX-enabled



ProMinent® DULCO flex Control Peristaltic Metering Pumps

Capacity Data

Capacity data: DULCO flex Control

Pump Version	Capacity at Maximum Backpressure				Max. speed rpm	Connector size in	Pre-primed suct. lift		Shipping weight	
	GPH	(L/h)	PSIG	(bar)			ft	(m)	lbs	(kg)
0730	7.92	(30)	101.5	(7)	100	1/2" x 3/8"	16.4	(5)	12.8	5.8
0530	7.92	(30)	72.5	(5)	100	1/2" x 3/8"	16.4	(5)	12.8	5.8

Tube material:

TPV (Santoprene): **available with pump versions 0730 and 0530**

PUR (Polyurethane): **available with pump version 0530 only**

Tube connectors: PVDF/PTFE

Metering reproducibility: ± 2% with retracted tube (after approx. 200 revolutions)

Turndown: 3,000:1

Electrical connection: 100 - 230 V ± 10%, 50/60 Hz

Nominal power: approx. 45 W

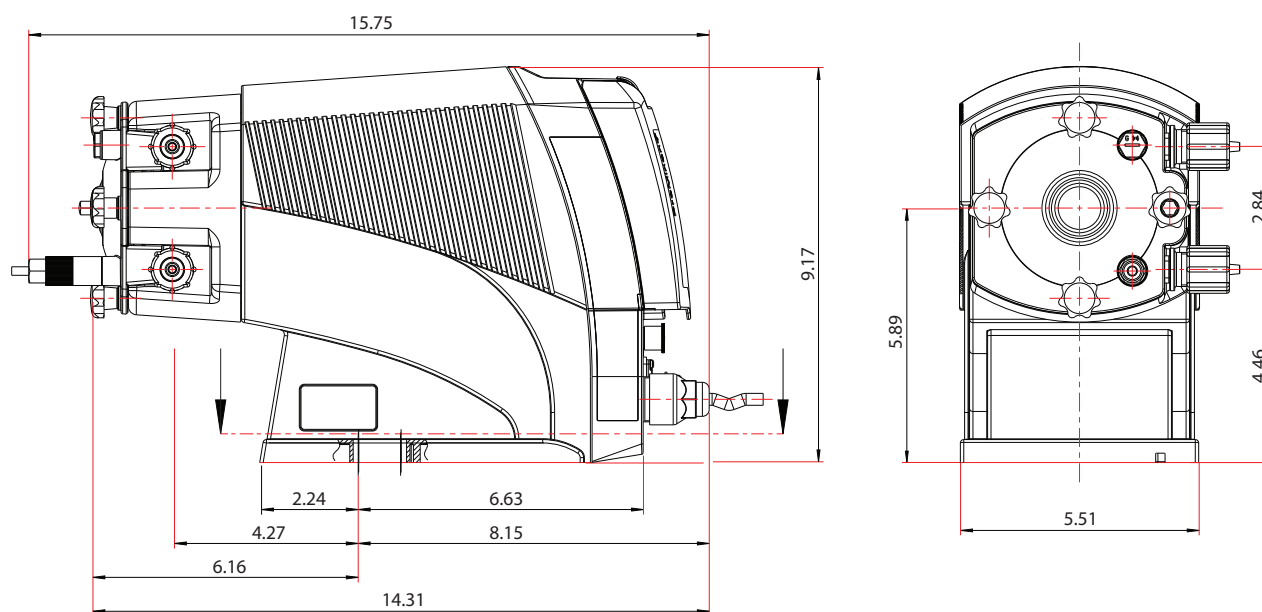
Degree of protection: IP 66, NEMA 4X Indoor

Permissible ambient temperature: 14 - 113 °F

Optional relay modules: 1 x switch over contact, 230 V - 8 A or 2 x On, 24 V - 100 mA

Capacity data represents minimum values, tested using water at 68 °F (room temperature)

Dimensional Drawings



Note: All above measurements are in inches

ProMinent® DULCO flex Control Peristaltic Metering Pumps

Specifications

Materials of construction:

Housing	PPE (Polyphenylene Ether) + 20% Glass fiber
Dosing head	PA6 50% Glass bead
Rotor	PPS 40% Glass fiber
Pump hose	PTFE faced EPDM with plastic core
Hose Connection	PVDF
O-rings (wetted)	PTFE
Enclosure rating	IP 66, NEMA 4X Indoor
Electrical:	
Power supply	100 – 230 VAC 1 Phase 50 / 60 Hz ± 10%
Check valves:	Double ball suction / discharge (PVT4 with spring loaded single ball)
Power cord:	6ft
Relay cable (optional):	6ft
Relay Options	
Identcode Option 1:	1 x changeover contact 230 V AC - 6 A, Fault indicating relay (N/C)
Identcode Option 4:	1 x N/O 24 V DC -1 A - 1 x N/O 24 V - 1 ma, As 1 + pacing relay
Identcode Option C:	1 x N/O 24 V DC - 100 mA and 1 x 4-20 mA output, As 1 + 4-20 mA output

Ambient temperature range:

In operation	14 °F to 113 °F (-10 °C to 45 °C)
Storage & Transport	14 °F to 122 °F (-10 °C to 50 °C)
Feed chemical	14 °F to 122 °F (-10 °C to 50 °C)

Climate:	95% Relative humidity – non-condensing
Sound pressure level:	LpA < 70 dB according to EN ISO 20361
Warranty:	2 years on pump drive, 1 year on liquid end
Valve threads:	NP / PVT M20 x 1.5 (provided with adapters for tubing)
Standard production test:	All pumps are tested for capacity at maximum pressure prior to shipment
Contact input	
Minimum pulse duration:	20 ms
Maximum pulse input:	25 pulses / second
Analog Input Impedance:	120 Ohms

