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-preformance 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
- DULCOnneX-enabled



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Capacity Data

Capacity data: DULCO flex Control

Pump	C	Capacity at Maximum Backpressure Max. speed Connector size Pre-primed suct. lift Shipping weight													
Version	Capacity	at iviaximum	васкрressure		Max. speed	Connector size	Pre-prim	ed suct. lift	Shipping weight						
	GPH	(L/h)	PSIG	(bar)	rpm	in	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

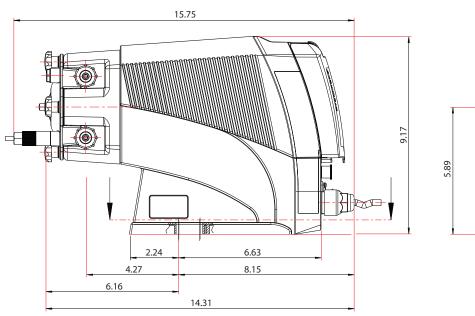
Electrical connection:100 -230 V ± 10%, 50/60 Hz

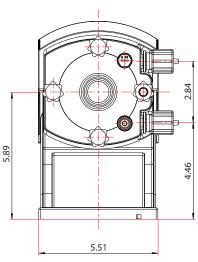
Nominal power: approx. 45 W

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 $68 \, ^{\circ}F$ (room temperature)

Dimensional Drawings





Note: All above measurements are in inches

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Specifications

Materials of construction:

Housing PPE (Polyphenylene Ether) + 20% Glass fiber

Dosing headPA6 50% Glass beadRotorPPS 40% Glass fiber

Pump hose PTFE faced EPDM with plastic core

Hose ConnectionPVDFO-rings (wetted)PTFE

Enclosure rating IP 66, NEMA 4X Indoor

Electrical:

Power supply $100 - 230 \text{ VAC 1 Phase } 50 / 60 \text{ Hz} \pm 10\%$

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

Maxiumum pulse input: 25 pulses / second

Analog Input Impedance: 120 Ohms

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Identcode Ordering System

DFXa	DULCO	flex Control																			
_	Regiona	al design:																			
	US	USA	JSA																		
		Version	rsion Capacity: 1730 7.92 gph (30 l/h), 101.5 psi (7 bar)																		
		0730																			
		0530		.92 gph (30 l/h), 72.5 psi (5 bar)																	
				e material:																	
			SP	Santopr	antoprene (TPV) Note: Version 0730 is only available with Santoprene (TPV) option. olyurethane (PUR)																
			VP	Polyuret																	
				Seal material:																	
				F FDA-compliant (PTFE)																	
				T PTFE																	
					Dosing head orientation:																
					R	Right (view from behind)															
					L	Left (view from behind)															
					0	Top															
					U	Bottom															
					Hydraulic connector:																
						0			tor (12x9)											
						Q			3/8" (US												
						Q		pture ala		,,,,											
							1		iphragm r	unture in	dicator o	ntical ser	nsor								
							'	Design		aptare in	dioditor, o	ptiour sor	1001								
								0		. P ΔI 500	03 / cover	- PAL 200	าว								
								U	Logo:	11012 001	707 00101	1012 200	,,,								
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									0		connection	_									
										IJ		al 100 - 2	40 V								
												nd plug:									
											D		g: 15 V - 6 ft. (2m)								
												Relay:									
												0	No relay	,							
												1	1x changeover contact 230 V - 8A, fault indicating relay N/C								
												4	2x N/O 24 V - 100 mA, fault indicating relay N/C + pacing relay								
												C	1x N/O 24 V - 100 mA, fault indicating relay N/C + pacing relay 1x N/O 24 V - 100 mA, fault indicating relay N/C + 4-20 mA output								
									Accessories:												
													0 None								
													1 Injection valve 1/2" and foot valve								
													Control Variants:								
													Manual + Contact with PulseControl								
														3					l + Analog		
														3		inication		360011110	1 - Analog		
															0	None	•				
															0						
																Langua	i .				
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DFXa	US	730	SP	Т	R	0	1	0	0	U	D	0	0	0	0	EN	01	EN			