

ProMinent® DULCOFLEX Series Peristaltic Metering Pumps

Overview: DULCOFLEX - DFXa

The **DULCOFLEX - DFXa** 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 **DULCOFLEX - DFXa** is powered by a DC motor and will provide continuous metering from **0.038 GPD (6 ml/h) to 17.17 GPH (65 l/h)** and pressures up to **100 PSIG (7bar)**. Additional features such as communication protocol includes PROFIBUS, CANbus, Modbus and PROFINET are available.

Your benefits

- NSF61 Approved!
- 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
- 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



Certified to
NSF/ANSI 61



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Capacity Data

Capacity data: DULCOFLEX - DFXa

Pump Version	Capacity at Maximum Backpressure				Max. speed rpm	Connector size in	Pre-primed suct. lift		Shipping weight	
	PSIG	(bar)	GPH	(l/h)			ft	(m)	lbs	(kg)
0518	73	(5)	4.75	(18)	100	1/2" x 3/8"	16.4	(5)	12.8	5.8
0530	73	(5)	8.00	(30)	100	1/2" x 3/8"	16.4	(5)	12.8	5.8
0730	100	(7)	8.00	(30)	100	1/2" x 3/8"	16.4	(5)	12.8	5.8
0565	73	(5)	17.17	(65)	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 0518, 0530 and 0565 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

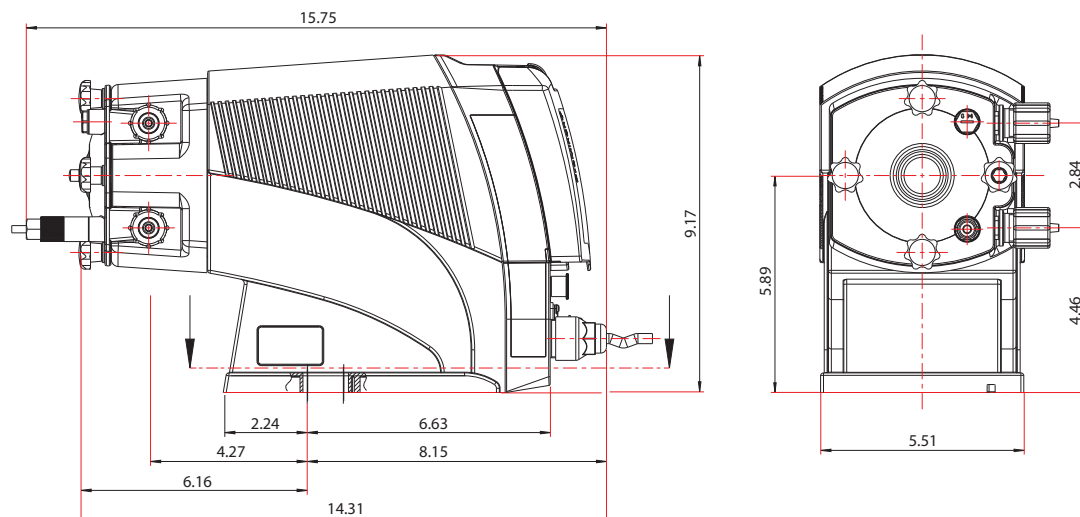
Spare Parts

Tube assembly:	Part Number
TPV (Santoprene) 101.5 PSIG (7 bar), Version 0730	1102991
TPV (Santoprene) 72.5 PSIG (5 bar), Version 0530	1102907
PUR (Polyurethane) 72.5 PSIG (5 bar), Versions 0518, 0530 and 0565	1104951

Tube assembly & 1/2" x 3/8" Connection set:	Part Number
0530 TPV (Santoprene) FDA	1108974
0530 TPV (Santoprene)	1108975
0530 PUR (Polyurethane) FDA	1110172
0530 PUR (Polyurethane)	1110171
0730 TPV (Santoprene) FDA	1108951
0730 SPT (Santoprene)	1108952

Dosing head parts:	Part Number
Dosing head	1094919
Dosing head cover	1104727
Spare star knob set	1104952
Rotor Complete	1103249

Dimensional Drawings



Note: All above measurements are in inches

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Specifications

Materials of construction:

Housing	Fiberglass reinforced PPE (Polyphenylene Ether)
Dosing head	Glass reinforced PA6 (Polyamide)
Rotor	Fiberglass reinforced PPS (Polyphenylensulphide)
Pump hose	TPV (Santoprene) available with pump versions 0730 and 0530 PUR (Polyurethane) available with pump version 0518,0530 and 0565 only

Connections:

Hose Connection	PVDF
O-rings (wetted)	PTFE

Electrical:

Enclosure rating	IP 66, NEMA 4X Indoor
Power supply	100 – 230 VAC 1 Phase 50 / 60 Hz ± 10%
Power cord	6ft

Relay Options:

Relay cable (optional)	6ft
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)

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
Hose insert 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

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Identcode Ordering System

DFXa	DULCOFLEX																			
	Regional design:																			
	US	USA																		
		Version Capacity:																		
		0518	4.75 gph (18 l/h), 73 psi (5 bar)																	
		0530	7.92 gph (30 l/h), 73 psi (5 bar)																	
		0730	7.92 gph (30 l/h), 100 psi (7 bar)																	
		0565	17.17 gph (65 l/h), 73 psi (5 bar)																	
		Tube material:																		
		SP	Santoprene (TPV)																Note: Available with pump versions 0730 and 0530	
		VP	Polyurethane (PUR)																Note: Available with pump versions 0518, 0430 and 0565 only	
		Seal material:																		
		F	FDA-compliant (PTFE)																	
		T	PTFE																	
		Dosing head orientation:																		
		R	Right (view from behind)																	
		L	Left (view from behind)																	
		O	Top																	
		U	Bottom																	
		Hydraulic connector:																		
		Q	connection 1/2" x 3/8" (USA)																	
		Tube rupture alarm:																		
		1	With diaphragm rupture indicator, optical sensor																	
		Design:																		
		0	Housing RAL 5003 / cover RAL 2003																	
		Logo:																		
		0	with ProMinent logo																	
		Power connection:																		
		U	Universal 100 - 240 V																	
		Cable and plug:																		
		D	USA 115 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 + 4-20 mA output																	
		Accessories:																		
		0	None																	
		1	Injection valve 1/2" and foot valve																	
		Control Variants:																		
		0	Manual + Contact with PulseControl																	
		3	Manual + Contact with PulseControl + Analog																	
		C	CANopen																	
		P	ProfiNet																	
		R	ProfiBus																	
		Communication:																		
		0	None																	
		Language:																		
		EN	English																	
		Certification:																		
		01	CE																	
		Documentation:																		
		EN	English																	
DFXa	US	0730	SP	F	R	Q	1	0	0	U	D	0	0	0	0	0	0	EN	01	EN

- product overview
- solenoid-driven metering pumps
- motor-driven metering pumps
- pump spare parts & accessories
- DULCOMETER® instrumentation
- DULCOTEST® sensors
- polymer blending & dry feed solutions