

# ProMinent® DULCOFLEX Series Peristaltic Metering Pumps

## Overview: DULCOFLEX - DFYa

The **DULCOFLEX- DFYa** metering pump adds an intelligent peristaltic offering to our established line of ProMinent pumps

This new design of peristaltic pump is controlled electronically via an HMI controller thus allowing for greater turndown in our DulcoFlex pump series. All the benefits of a peristaltic pump are retained including off-gassing fluids, high viscosity and abrasive media, and shear-sensitive liquids.

Like the DFx, the DFYa offers simple and easy hose replacement via the HMI controller. When the hose needs replaced, the pump displays instructions for the user to step-through the replacement process.

### Your benefits

- Contact, batch, manual or analog modes
- Adjustment of the metering rate directly in gph or l/h
- Connection to process control systems via a BUS interface, such as PROFIBUS®, Profinet or CANbus
- Large illuminated display
- Pump is available as an FDA design
- No problems with very gaseous media or air locks
- Reverse flow is possible
- Viscosities to 20,000 cPs



# ProMinent® DULCOFLEX Series Peristaltic Metering Pumps

## Capacity Data

### Capacity data: DULCOFLEX - DFYa

Pump Version	Capacity at Maximum Backpressure				Max. speed rpm	Connector size in	Pre-primed suct. lift		Shipping weight	
	GPH $\pm 10\%$	(L/h) $\pm 10\%$	PSIG	(bar)			ft	(m)	lbs	(kg)
04410	108.3	(410)	58	(4)	80	3/4"	26.25	(8)	66	(30)
06410	108.3	(410)	87	(6)	80	3/4"	26.25	(8)	66	(30)
08410	108.3	(410)	116	(8)	80	3/4"	26.25	(8)	66	(30)

### Tube material:

NR (Natural rubber)

NBR (Nitrile rubber), NBR-A (Nitrile rubber FDA approved)

EPDM

HYPALON®

**Adjustable feed rate:** between 1.1 gph and 90.1 gph (5.1 l/h and 410 l/h)

**Pre-primed suction lift:** 26.25 ft (8 m)

**Rollers/ shoes:** Rollers

**Metering reproducibility:**  $\pm 2\%$  with retracted tube (after approx. 500 revolutions)

**Electrical connection:** 100 - 230 V  $\pm 10\%$ , 50/60 Hz

**Power consumption:** Max. 400 W

**Degree of protection:** IP 55

**Permissible ambient temperature:** 32 - 113 °F (0 - 45 °C)

### Optional relay modules:

Fault indicating relay - 230 V AC - 8 A

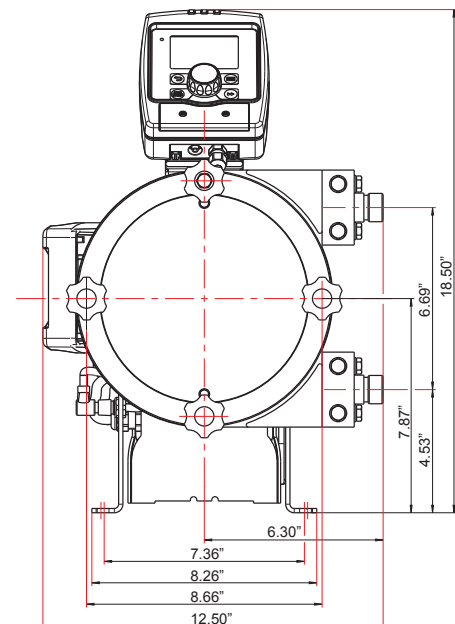
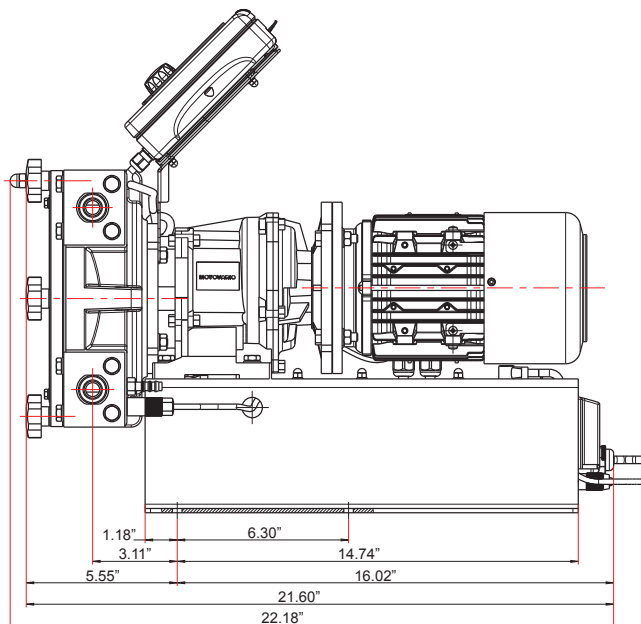
Fault indicating relay + Pacing relay - 24 V DC - 100 mA

0/4-20 mA output + fault indicating/ pacing relay - 24 V DC - 100 mA

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

*HYPALON® is a registered trade mark of DuPont Performance Elastomers*

## Dimensional Drawings



Note: All above measurements are in inches

# ProMinent® DULCOFLEX Series Peristaltic Metering Pumps

## Identcode Ordering System

DFYa	DULCOFLEX																	
Regional design:																		
US	USA																	
Version Capacity:																		
04410	108.3 gph ±10% (410 l/h), 58.0 psi (4 bar)																	
06410	108.3 gph ±10% (410 l/h), 87.0 psi (6 bar)																	
08410	108.3 gph ±10% (410 l/h), 116.0 psi (8 bar)																	
Tube material:																		
0	NR (Natural rubber)	A	NBR-A (Nitrile rubber FDA approved)															
B	NBR (Nitrile rubber)	H	Hypalon															
E	EPDM																	
Dosing head orientation:																		
R	Right (standard)																	
L	Left																	
Hydraulic connector:																		
A	VA, BSP 3/4"	E	PVDF, NPT 3/4"															
B	VA, NPT 3/4"	F	PVC, NPT 3/4"															
C	PP, BSP 3/4"	G	Tri-clamp, VA, 1"															
D	PVDF, BSP 3/4"	H	DIN 11851, VA NW20															
Tube rupture alarm:																		
0	Without hose rupture indicator																	
1	With diaphragm rupture indicator																	
Design:																		
P	ProMinent version																	
M	Modified																	
Special version:																		
0	Standard																	
H	Chemically high-resistance version (Halar-coated)																	
Logo:																		
0	With ProMinent logo																	
1	With out logo																	
M	Modified																	
Power connection:																		
U	Universal 100 - 240 V ± 10%, 50/60 Hz																	
Cable and plug:																		
D	USA 115 V - 6 ft. (2m)																	
Relay:																		
0	No relay																	
1	Fault indicating relay 230 V AC, 8 A																	
3	Fault indicating relay 24 V AC, 100 mA + Pacing relay 24 V AC, 100 mA																	
8	4-20 mA output + Fault indicating / Pacing relay 24 V AC, 100 mA																	
Accessories:																		
0	No accessories																	
Control Variants:																		
0	Manual + external contact with pulse control																	
1	Manual + external contact with pulse control + analog 4-20 mA																	
6	PROFIBUS® M12 plug																	
7	CANopen																	
Operating unit (HMI):																		
0	HMI + 1.64' (0.5m) cable																	
4	HMI + 6.5' (2.0 m) cable																	
5	HMI + 16.4' (5.0 m) cable																	
6	HMI + 32.8' (10.0 m) cable																	
Access code:																		
0	Access code																	
1	No access code																	
Communication:																		
0	None																	
Documentation:																		
EN	English																	
EN																		
DFYa	US	04410	0	R	A	0	P	0	0	U	D	0	0	0	0	0	0	EN

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