

OEM

400F/A single channel precision pump

WATSON
MARLOW
Alitea

Technical information and features

- Instrument quality in previously unseen size 31 x 48 mm (1.2" x 1.9")
- Flow rates from 30 µl/min to 30 ml/min
- Precision dispenses down to one microliter
- Combines easy tube loading with safe closed design
- Spring loaded track for precision and extended tube life
- Connects to virtually any drive
- For 0.85-0.9 mm tube wall thickness
- Tube holder for continuous tubing or for use with tube elements



400F/A The smallest peristaltic pump!

Flow Rates (ml/min) Santoprene, 0.85mm wall, zero pressure and no suction height

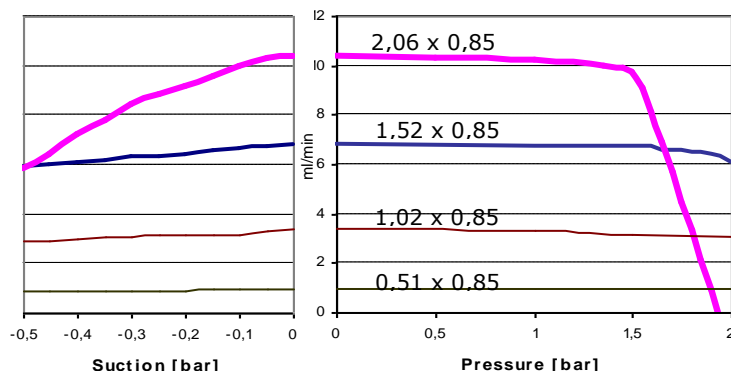
Tube bore [mm]	(ml/rev)	Speed [rpm]							
		13	26	35	47	74	155	290	
0,25	0,0025	0,03	0,07	0,09	0,12	0,19	0,39	0,73	
0,51	0,0097	0,13	0,25	0,34	0,46	0,72	1,5	2,8	
0,76	0,020	0,26	0,52	0,70	0,94	1,5	3,1	5,8	
1,02	0,034	0,44	0,88	1,2	1,6	2,5	5,3	9,9	
1,22	0,046	0,60	1,2	1,6	2,2	3,4	7,1	13	
1,52	0,068	0,88	1,8	2,4	3,2	5,0	11	20	
2,06	0,104	1,4	2,7	3,6	4,9	7,7	16	30	

20 tube sizes between 0.25 and 2.06 mm are available

Note: reduced tube life with tube sizes from 1,65 up to 2,06 mm

All flow figures are nominal and may vary about ±10% due to tube tolerances

Pressure Chart Santoprene tubing @100 rpm



400F/A

Materials of Construction

Pump house	Acetal (black)
Rotor	Acetal (black)
Window	PET
Rollers (4 ea)	Acetal (black)
Track	Acetal (black)
Shafts	Stainless steel
Springs	Stainless steel

Product Codes

400FD/A1 Brush DC motor 12V

Motor type	Speed nominal [rpm]	Current nominal [mA]	Track	Pumps for Continuous tubing	Pumps for Tube elements
L	13	<30	standard	040.K91A.B1C	040.K91A.T1C
			+pressure	040.K91A.B15	040.K91A.T15
L	26	~35	standard	040.KC1A.B1C	040.KC1A.T1C
			+pressure	040.KC1A.B15	040.KC1A.T15
L	47	~55	standard	040.KK1A.B1C	040.KK1A.T1C
			+pressure	040.KK1A.B15	040.KK1A.T15
HL	74	~120	standard	040.KN1A.B1C	040.KN1A.T1C
			+pressure	040.KN1A.B15	040.KN1A.T15
HV	155	~180	standard	040.QR1A.B1C	040.QR1A.T1C
			+pressure	040.QR1A.B15	040.QR1A.T15
HV	290	~250	standard	040.QT1A.B1C	040.QT1A.T1C
			+pressure	040.QT1A.B15	040.QT1A.T15

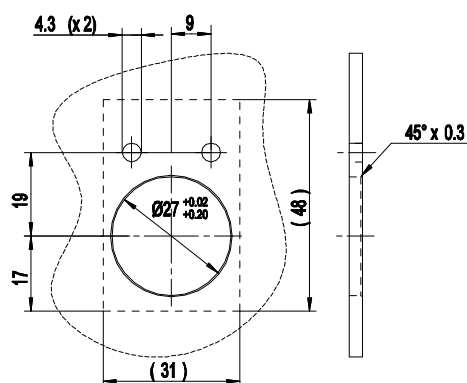
400FD/A1 Brush DC motor 24V

Motor type	Speed nominal [rpm]	Current nominal [mA]	Track	Pumps for Continuous tubing	Pumps for Tube elements
HL	35	<50	standard	040.PG1A.B1C	040.PG1A.T1C
			+pressure	040.PG1A.B15	040.PG1A.T15
HL	74	~60	standard	040.PN1A.B1C	040.PN1A.T1C
			+pressure	040.PN1A.B15	040.PN1A.T15
HV	155	~90	standard	040.PR1A.B1C	040.PR1A.T1C
			+pressure	040.PR1A.B15	040.PR1A.T15
HV	290	~125	standard	040.PT1A.B1C	040.PT1A.T1C
			+pressure	040.PT1A.B15	040.PT1A.T15

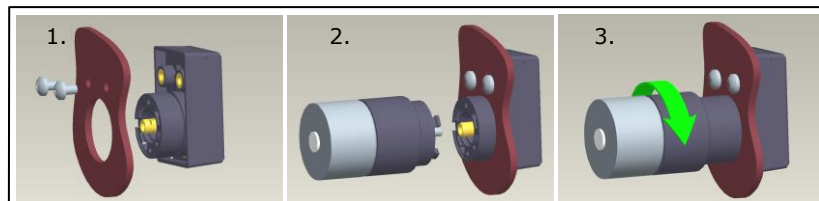
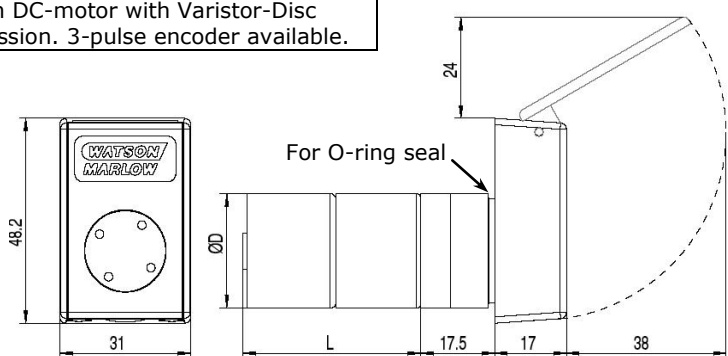
+pressure track recommended with PVC-tubing and with >Ø1,5mm Santoprene and Silicone tubing

Motors

Motor	ØD	L	Description
L	27	13rpm: 47mm	Small metal brush DC-motor with Varistor-Disc noise suppression.
		26, 47rpm: 42mm	
HL	30	35, 74rpm: 71mm	Carbon brush DC-motor with Varistor-Disc noise suppression. 3-pulse encoder available.
HV	30	155rpm: 71mm	Carbon brush DC-motor with Varistor-Disc noise suppression. 3-pulse encoder available.
		290rpm: 66mm	



Panel Cutout



Assembly made easy with bayonet motor adaptor

Customised Solutions

If you don't find exactly what you are looking for in this data sheet a customised product could be the solution.

These pumps could be supplied without a drive or with alternative drives and gear ratios, for alternative tube sizes, in alternative colours or materials, fitted on a customised mounting panel and more.

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W-M Alitea reserves the right to alter specifications without notice