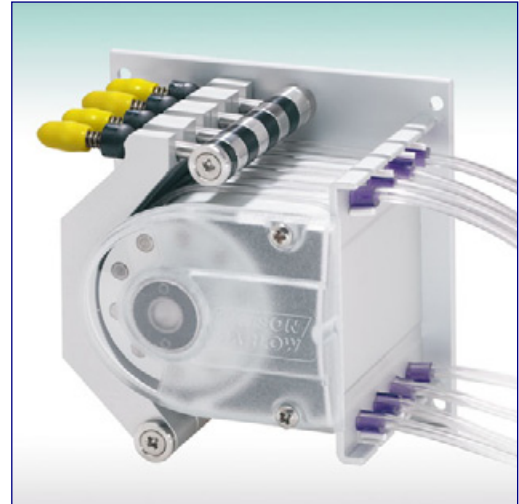


400/VM2-F, VM3-F, VM4-F Precision instrument quality multi-channel pumps

Technical information and features

- 2, 3, and 4 channel manifold tubing pumps
- Very low pulsation pumping and dosing provided with 10 rollers in C-Teflon® low-friction material
- Flow rates down to micro litres per minute
- Individual spring loaded tracks for flexibility and maximised performance
- Occlusion pre-set to optimised pressure performance and tube life
- Standard 2-bridged colour-coded tube elements available in 19 sizes and 5 different materials



400/VM4 Just lift the yellow arms for easy tube loading or pressure relief.

Flow Rates

Santoprene tubing, zero pressure and no suction height

Tube Code	TubeBore	ml/rev	ml/min @ nominal rpm				
			12	25	30	60	100
Orange / Black	0,13 mm	0,001	0,012	0,025	0,030	0,060	0,10
Orange / Red	0,19 mm	0,003	0,036	0,075	0,090	0,18	0,30
Orange / Blue	0,25 mm	0,004	0,048	0,10	0,12	0,24	0,40
Orange / Green	0,38 mm	0,010	0,12	0,25	0,30	0,60	1,0
Orange / Yellow	0,50 mm	0,018	0,22	0,45	0,54	1,1	1,8
Orange / White	0,63 mm	0,028	0,34	0,70	0,84	1,7	2,8
Black / Black	0,76 mm	0,038	0,46	0,95	1,1	2,3	3,8
Orange / Orange	0,88 mm	0,053	0,64	1,3	1,6	3,2	5,3
White / White	1,02 mm	0,068	0,82	1,7	2,0	4,1	6,8
Red / Red	1,14 mm	0,085	1,0	2,1	2,6	5,1	8,5
Grey / Grey	1,29 mm	0,11	1,3	2,8	3,3	6,6	11
Yellow / Yellow	1,42 mm	0,13	1,6	3,3	3,9	7,8	13
Yellow / Blue	1,52 mm	0,14	1,7	3,5	4,2	8,4	14
Blue / Blue	1,65 mm	0,17	2,0	4,3	5,1	10,2	17
Green / Green	1,85 mm	0,20	2,4	5,0	6,0	12,0	20
Purple / Purple	2,05 mm	0,24	2,9	6,0	7,2	14,4	24
Purple / Black	2,29 mm	0,27	3,2	6,8	8,1	16,2	27
Purple / Orange	2,54 mm	0,31	3,7	7,8	9,3	18,6	31
Purple / White	2,79 mm	0,34	4,1	8,5	10,2	20,4	34

Pressure and Suction height capability

Max pressure (bar)		Max suction (mmH ₂ O)	
Santoprene	Silicone	Santoprene	Silicone
>4	>4	5000	5000
>4	>4	5000	5000
4	4	5000	5000
3	3	5000	5000
3	3	5000	5000
3	3	5000	5000
3	3	5000	5000
2	2	5000	5000
2	2	5000	5000
2	2	5000	5000
2	2	5000	5000
2	2	5000	5000
2	2	5000	5000
1,5	1,5	4000	4000
1,5	1,5	4000	4000
1,5	1,5	3500	3500
1,2	1,5	3500	3500
1,2	1,5	3000	3000
1	1,2	2500	2500
1	1,2	2500	2500

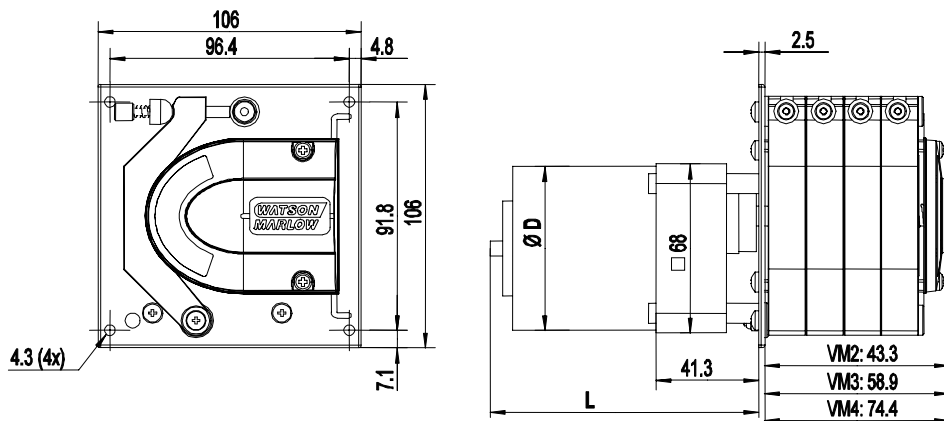
Customised Solutions

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

The factory adjusted tracks can be replaced by individual adjustable tracks. These pumps could also be supplied with alternative drives and gear ratios, with alternative roller material, fitted on a customised mounting panel and more.



400/VM3-F 10 precision machined low friction C-Teflon® rollers for low pulsation pumping



	Motor type:	Length L behind mounting surface	Motor diameter D
400FDC/VM	Coreless DC 30W	L= 120 mm	D= 68 mm
	Coreless DC 5W	L= 90 mm	D= 40 mm
400VDL/VM	Brushless DC 35W	L= 105 mm	D= 68 mm

400/VM

Materials of Construction

Rotor	Anodised Aluminium
Rollers	C-Teflon®
Tracks	Anodised Aluminium
Tube holder	Anodised Aluminium
Shafts	Acid resistant stainless steel
Mounting panel	Anodised aluminium
Springs & screws	Stainless steel
Front cover	Polycarbonate

Motor descriptions

The **coreless DC 30W** motor is a powerful instrument quality motor for higher speed applications. This motor features low electrical and audible noise, long brush life and excellent speed regulation with our controllers (optional). The 24 V version accepts voltage up to 30 VDC. An optional 3ppr encoder is available.

The **coreless DC 5W** motor is a compact instrument quality motor for use at speeds up to 60 rpm. This motor features low electrical and audible noise, long brush life and excellent speed regulation with our controllers (optional). The 12 V version accepts voltage up to 15 VDC and the 24 V version accepts voltage up to 30 VDC. An optional 3ppr encoder is available for the 12 V version.

The **brushless DC 35W** motor is powerful and precise with built in controller. No brushes yields an extremely long life with no maintenance required. The built in controller features excellent speed regulation via an external 0-5 V signal, CW / CCW switching and a frequency (36 ppr) tachometer output.

Product codes

400FDC/VM

Motor type	Voltage	Nominal Speed*	VM2-F 2 channel	VM3-F 3 channel	VM4-F 4 channel
Coreless DC 30W	12 VDC	100 rpm	040.MPFV.M2T	040.MPFV.M3T	040.MPFV.M4T
Coreless DC 30W	24 VDC	100 rpm	040.LPFV.M2T	040.LPFV.M3T	040.LPFV.M4T
Coreless DC 5W	12 VDC	60 rpm	040.CMFV.M2T	040.CMFV.M3T	040.CMFV.M4T
Coreless DC 5W	24 VDC	60 rpm	040.EMFV.M2T	040.EMFV.M3T	040.EMFV.M4T
Coreless DC 5W	12 VDC	25 rpm	040.CCFV.M2T	040.CCFV.M3T	040.CCFV.M4T
Coreless DC 5W	24 VDC	25 rpm	040.ECFV.M2T	040.ECFV.M3T	040.ECFV.M4T
Coreless DC 5W	12 VDC	12 rpm	040.C8FV.M2T	040.C8FV.M3T	040.C8FV.M4T
Coreless DC 5W	24 VDC	12 rpm	040.E8FV.M2T	040.E8FV.M3T	040.E8FV.M4T

* @ nominal voltage and nominal load. Speed is load dependent and can be adjusted by altering the voltage.

400VDL/VM

Motor type	Voltage	Nominal Speed	VM2-F 2 channel	VM3-F 3 channel	VM4-F 4 channel
Brushless DC 35W	24 VDC	100 rpm	040.NPFV.M2T	040.NPFV.M3T	040.NPFV.M4T
Brushless DC 35W	24 VDC	30 rpm	040.NEFV.M2T	040.NEFV.M3T	040.NEFV.M4T

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