P201-O with V-D-2-24-050-K-P

DATASHEET

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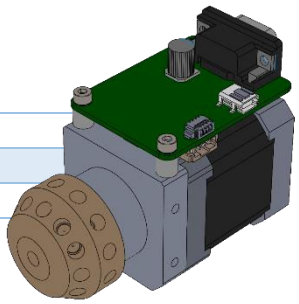


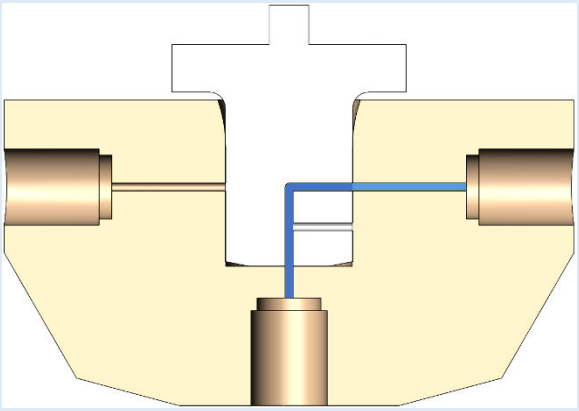
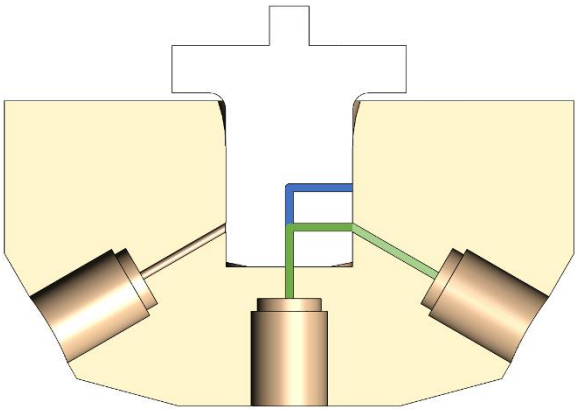
Environmental conditions

Operating temperature	15-45°C (59-113°F)
Humidity	20-80%, non-condensing
Max pressure	7 bars (102 psi)

Fluidic characteristics

Tube port fittings	10-32 UNF, flat bottom
Wetted materials	PTFE (rotor), PEEK (stator)
Channel diameter	0.5 mm (0.020 in) / other size available upon request

Mechanical characteristics

Series	LOW CARRYOVER VOLUME
Liquid path (stage 1)	
Liquid path (stage 2)	
Number of channels inside rotary part	2
Number of ports	24
Channel diameter	0.5 mm
Internal volume	3.6 µL
Carryover volume	2.2 µL

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Glossary reminder

Internal volume: Volume inside the system, from entrance to exit.

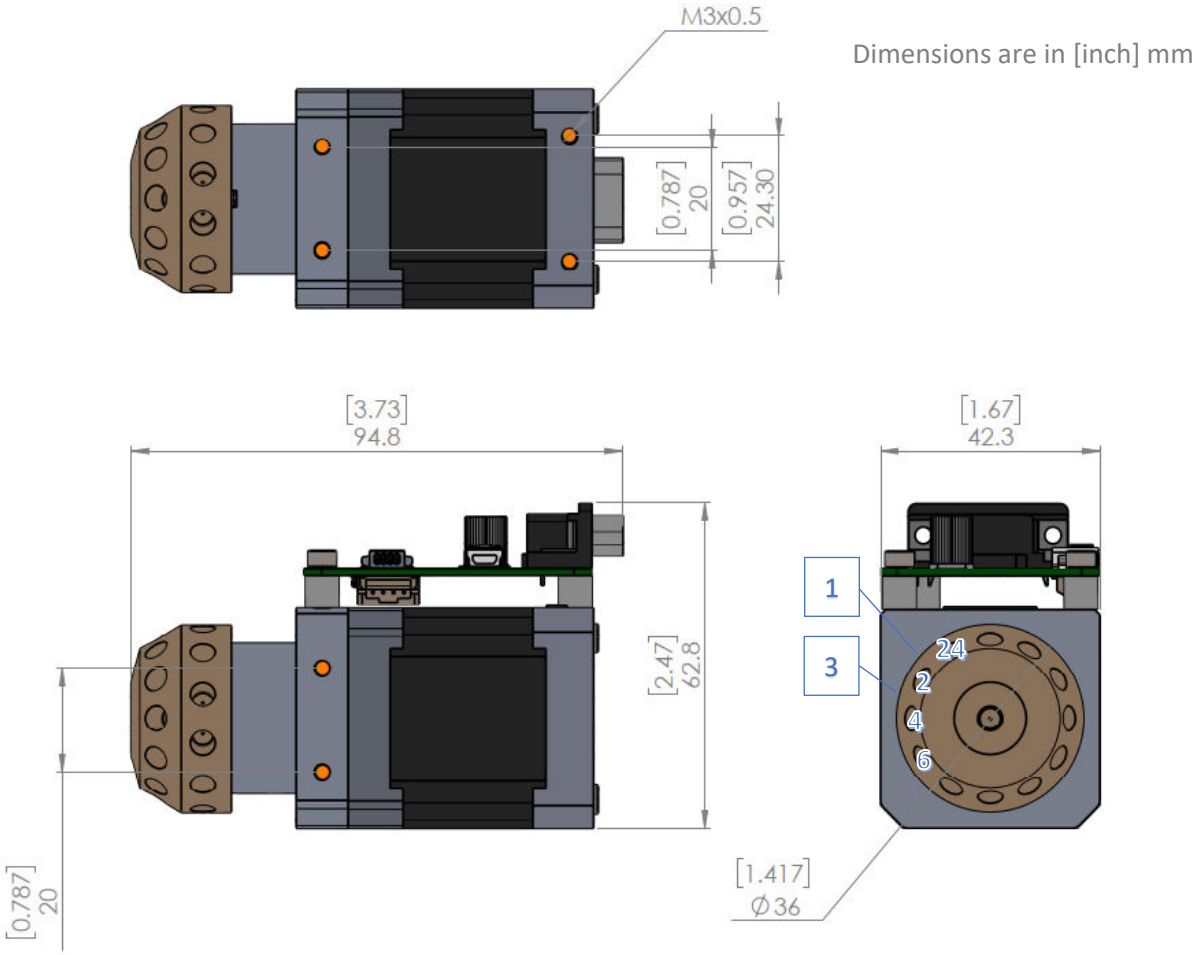
Dead volume: Volume that is "stuck" in the system (dead end), which is not cleanly swept and relies on diffusion to clear out.

Carryover volume: Volume of liquid that will be mixed with the next liquid. It is not stuck, but will be swept next time a liquid passes.

COMPLETE MODULE (Ref. P201-O with 24 port valve)

Dimensions	94.8 x 62.8 x 42.3 mm
Weight	0.45 Kg
External fixation system	8 x M3 screws (positions shown in orange below)
Switching time Port to Port	Down to 240 ms

Dimensions are in [inch] mm



Note: the 24-port valve is not available with P200-O module

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Electrical characteristics

Power	18-24 VDC, 2.2 A peak
Required cables for operation	USB mini-B male to USB A male or custom cable with PicoBlade™ 4 pos. male, and custom power cord

Communication and Hardware interface

Interface	USB mini-B, PicoBlade™ 4 pos., DB9
Communication type	Serial communication on USB mini I2C on PicoBlade™ RS232 on DB9 (RS485 on DB9 upon request) (other upon request)

The valve controller is seen as a virtual serial port. There is an on-board FTDI USB to serial chip, so the drivers are automatically installed on recent Windows 7 and above.

SERIAL COMMUNICATION PARAMETERS

Baud rate	9600
Data Bit	8
Parity	None
Stop Bit	1
Handshake	None
End line	<CR>

View the RVM operating manual for the extensive command set.

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Revisions

Version	Author	Release Date	Modifications	Revised By	Approved By
01.01	RRY	04/12/2023	Initial release	MGE	MGE
01.02	RRY	19/04/2024	Add numbering	MGE	MGE
01.03	MGE	10/09/2024	Correct technical data	RRY	RRY

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