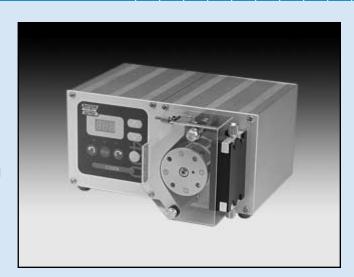


405U/R1, 405U/L and 405U/L2

Ultra Compact Single or Twin Channel Pump Auto/Manual Control

IP21 Wipedown Enclosure



Technical Information and Features

- Flow rates from 0.22 to 610 mL/min (0.003 – 9.67 gph)
- Operator friendly keypad offering digital manual control of:
 - Fwd/Stop/Rev
 - Speed control with LCD display of rpm
 - Max key for rapid priming
- 20:1 speed control range
- Four optional remote control interface cables available offering:
 - 400AC1: Remote speed control via 0-10VDC analog signal and fwd/stop/rev via dry contact closure
 - 400AC2: Remote speed control via 4-20mA analog signal and fwd/stop/rev via dry contact closure
 - 400AC3: Remote fwd/stop/rev via dry contact closure
 - 400AC4: Start/Stop with footswitch

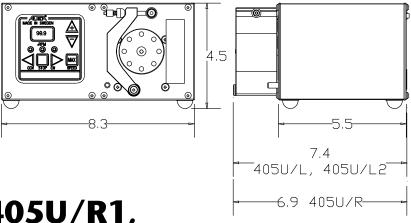
- IP21 wipedown enclosure for use in dry environments
- 405U/R1 fitted with 400R1 single channel pumphead with quick release spring-loaded track, four roller rotor, and adjustable occlusion lever
 - Accepts tube sizes such as # 112, 13, 14, 16,
 25 & 17 (0.5 6.4mm bore & 1.6 mm wall)
- 405U/L fitted with 400L pumphead designed with twin offset four roller rotors, spring loaded track, and adjustable occlusion lever for virtually pulsefree flow with double-Y tubing elements
 - Accepts Y elements from 0.5 4.8mm bore and 1.6 mm wall
- 405U/L2 fitted with 400L2 pumphead designed with twin four roller rotors, spring loaded track, and adjustable occlusion lever allowing two individual channels of flow
 - Accepts tube sizes such as # 112, 13, 14, & 16
 (0.5 64.8 mm bore & 1.6 mm wall)

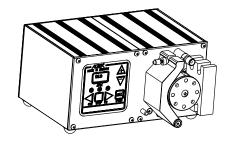
Flow Rate Ranges (ml/min*)

Trow hate hanges (iii) iiiii)									
1.6 mm Wall Tube # Tube Bore	112 0.5mm 1/50"	13 0.8mm 1/32"	14 1.6mm 1/16"	N/A 2.4mm 3/32"	16 3.2mm 1/8"	N/A 4.0mm 5/32"	25 4.8mm 3/16"	17 6.4mm 1/4"	
405U/R1 10 - 200 rpm 405U/L2 10 - 200 rpm Flow rates for 405U/L2 is	0.22-4.4 0.22-4.4 shown per ch	0.55-11 0.55-11 nannel	2.2-44 2.2-44	4.9-98 4.9-98	8.6-170 8.6-170	13-260 13-260	18-370 18-370	30-610	
1.6 mm Wall Y-Element Tube Bore	Гube #	112 0.5mm 1/50"	13 0.8mm 1/32"	14 1.6mm 1/16"	N/A 2.4mm 3/32"	16 3.2mm 1/8"	N/A 4.0mm 5/32"	25 4.8mm 3/16"	
405U/L 10 - 200 rpm		0.43-8.6	1.1-22	4.4-88	9.8-200	17-340	26-520	37-730	



Engineering and Technical Data





Dimensions in inches

405U/R1, 405U/L2

Ultra Compact Single or Twin Channel Pump Auto/Manual Control - IP21 Wipedown Enclosure

049.0071.000

Specifications

Shipping Weight: 7.7 lbs

Maximum Power Consumption: 30VA

Supply: 110-120VAC, 60 Hz **Maximum Rotor Speeds:** 200rpm

Operational Temperature Range: 5°C to 40°C (41°F

to 104°F)

Noise: <70dB at 1 meter

Enclosure: IP21 wipedown

Standards: Equipment complies with all applicable

CE directives

Product Codes

footswitch (10')

405U/R1	single channel pump	040.5S1R.01A
405U/L	Y-element pump	040.5S1L.01A
405U/L2	two channel pump	040.5S1L.02A

Accessory Auto Control Cables (5' pigtail)

Cable 400AC1: 0-10VDC, Fw	/d/Stop/Rev	049.0011.000
Cable 400AC2: 4-20mA, Fwo	l/Stop/Rev	049.0031.000
Cable 400AC3: Fwd/Stop/Re	v	049.0051.000
Cable 400AC4: Start/Stop wi	th	

The information contained in this document is believed to be correct, but Watson-Marlow Bredel Pumps accepts no liability for any errors it contains, and reserves the right to alter specifications without notice.

Tygon is a trademark of the Saint-Gobain Corporation. Fluorel is a trademark of 3M Corporation.

Watson-Marlow, Bioprene and Marprene are registered trademarks of Watson-Marlow Limited.

Materials of Construction

Pumphead

Track: Extruded anodized aluminum

Rollers: Stainless steel **Rotor:** Aluminum

Guard: Polyester resin (PET) **Tube Clamps:** Acetal

Drive

Housing: Extruded anodized aluminum **Front Plate:** Anodized aluminum

Available Tubing Materials

Tubing materials for 405U/R1 and 405U/L2

Marprene®

Bioprene® (excl. 2.4 & 4.0mm)

Silicone

Butyl (excl. 0.5, 0.8, 2.4, 4.0mm)

Tygon™ (excl. 0.5, 0.8, 2.4, 4.0mm)

Fluorel™ (excl. 0.5, 0.8, 2.4, 4.0mm)

Tubing Y element materials for 405U/L

Marprene® Silicone

Connectors: PVDF

Watson-Marlow Bredel Pumps

37 UPTON TECHNOLOGY PARK, WILMINGTON, MA 01887-1018 TEL: 978-658-6168 / FAX: 978-658-0041

www.watson-marlow.com support@wmbpumps.com

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