

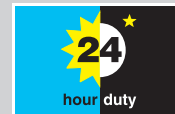
205S/CA and 205U/CA manual/ auto control multi-channel cassette pump

200 series

Watson-Marlow Pumps Group

FEATURES

- Flow rates from 0.6 microlitres to 22ml/min
- Analogue speed control, 0V or TTL remote control, tacho speed output and keypad manual control.
- Membrane keypad with controls for power, speed, direction, priming and standby
- Flow adjustment via 19 tube sizes and drive speed from 0.5rpm to 90rpm
- Precision cassettes with lockable 30 turn occlusion scale for fine tuning of flows
- 4, 8, 12 and 16 channel pumpheads, can be extended up to 32 channels
- Eight driven rollers on planetary gear drive for ultra low pulsation



Watson-Marlow...Innovation in Full Flow

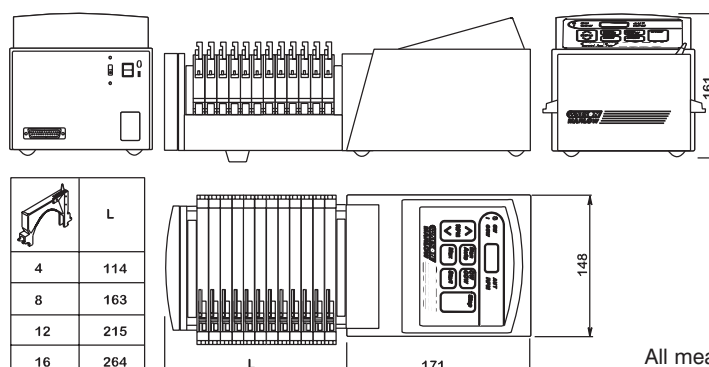
TECHNICAL DATA

Pump drives	205S/CA	205U/CA
Manual control		
Simple calibration to display flow in ml/min	•	•
Choice of flowrate or speed display	•	•
Remote control		
Run/stop, direction change, run/stop output		•
Analogue control		
Programmable analogue signal up to 30V or 32mA		•
Tacho frequency speed output: 0-5V		•
Security		
Keypad lock to protect set-up	•	•

PERFORMANCE

Flow rate ranges (ml/min)										
Tube code	Orange/ Black	Orange/ Red	Orange/ Blue	Orange/ Green	Orange/ Yellow	Orange/ White	Black/ Black	Orange/ Orange	White/ White	Red/ Red
Bore mm	0.13	0.19	0.25	0.38	0.5	0.63	0.76	0.88	1.02	1.14
0.5rpm	0.0006	0.0009	0.0013	0.0036	0.0056	0.0083	0.011	0.016	0.021	0.026
90rpm	0.099	0.15	0.23	0.65	1.01	1.49	2.02	2.92	3.76	4.68
Tube code	Grey/ Grey	Yellow/ Yellow	Yellow/ Blue	Blue/ Blue	Green/ Green	Purple/ Purple	Purple/ Black	Purple/ Orange	Purple/ White	
Bore mm	1.29	1.42	1.52	1.65	1.85	2.05	2.29	2.54	2.79	
0.5rpm	0.033	0.04	0.043	0.051	0.063	0.076	0.092	0.11	0.12	
90rpm	5.94	7.2	7.69	9.12	11.3	13.8	16.5	19.3	22	

DIMENSIONS



All measurements in mm.

SPECIFICATIONS

Weight	205S/CA4	6.4kg	205U/CA4	6.5kg
	205S/CA8	7.5kg	205U/CA8	7.6kg
	205S/CA12	8.7kg	205U/CA12	8.8kg
	205S/CA16	9.9kg	205U/CA16	10.0kg
	205S	4.0kg	205U	4.1kg
	205CA4	2.4kg	205CA4	2.4kg
	205CA8	3.5kg	205CA8	3.5kg
	205CA12	4.7kg	205CA12	4.7kg
	205CA16	5.9kg	205CA16	5.9kg
	205CAX12	4.7kg	205CAX12	4.7kg
	205CAX16	5.9kg	205CAX16	5.9kg
Operational temperature range	5°C to 40°C			
Supply	1ph, 100-120V, 200-240V 50/60Hz, 60VA			
Control ratio	180:1			
Standards	CE, BS EN 50082-1, BS EN 61010-1, BS EN (IP31)			

MATERIALS OF CONSTRUCTION

Component	Material
Drive external	Aluminium case upper, painted steel base, polyester keypad
Cassette	Verton* body, Kematal track and leg (standard) Verton body/PVDF track and leg (optional) Stainless steel pins
Pumphead body	Aluminium chassis, brass sun gear, Acetal planetary gear
Rotor	Stainless steel rollers, aluminium end plates
Guard	Verton gear guards and end cover

* Verton is a glass filled polypropylene with excellent chemical resistance

ORDER INFORMATION

Pump and pumphead product codes		
Description	Partcode	
205S/CA4 205S + 4 channel CA pumphead	020.3704.00U	
205S/CA8 205S + 8 channel CA pumphead	020.3708.00U	
205S/CA12 205S + 12 channel CA pumphead	020.3712.00U	
205S/CA16 205S + 16 channel CA pumphead	020.3716.00U	
205S 205 manual control drive only	026.3001.00U	
205CA4 4 channel CA pumphead	023.1101.000	
205CA8 8 channel CA pumphead	023.1201.000	
205CA12 12 channel CA pumphead	023.1301.000	
205CA16 16 channel CA pumphead	023.1401.000	
205CAX12 12 channel extension CA pumphead	053.3442.000	
205CAX16 16 channel extension CA pumphead	053.3462.000	
205U/CA4 205U + 4 channel CA pumphead	020.5704.00U	
205U/CA8 205U + 8 channel CA pumphead	020.5708.00U	
205U/CA12 205U + 12 channel CA pumphead	020.5712.00U	
205U/CA16 205U + 16 channel CA pumphead	020.5716.00U	
205U 205 auto control drive only	026.5001.00U	
205CA4 4 channel CA pumphead	023.1101.000	
205CA8 8 channel CA pumphead	023.1201.000	
205CA12 12 channel CA pumphead	023.1301.000	
205CA16 16 channel CA pumphead	023.1401.000	
205CAX12 12 channel extension CA pumphead	053.3442.000	
205CAX16 16 channel extension CA pumphead	053.3462.000	

Tube ordering codes							
Manifold pump tubing for 205CA							
Colour code	Tube	Marpene	Autoclavable Marpene	PVC	Silicone	Solvent-resistant	Acid-resistant
Orange/black	0.13			980.0013.000		984.0013.000	
Orange/red	0.19			980.0019.000		984.0019.000	
Orange/blue	0.25	978.0025.000	978.0025.00+	980.0025.000		984.0025.000	
Orange/green	0.38	978.0038.000	978.0038.00+	980.0038.000		984.0038.000	
Orange/yellow	0.5	978.0050.000	978.0050.00+	980.0050.000		984.0050.000	986.0050.000
Orange/white	0.63	978.0063.000	978.0063.00+	980.0063.000	982.0063.000	984.0063.000	986.0063.000
Black/black	0.76	978.0076.000	978.0076.00+	980.0076.000	982.0076.000	984.0076.000	986.0076.000
Orange/orange	0.88	978.0088.000	978.0088.00+	980.0088.000	982.0088.000	984.0088.000	986.0088.000
White/white	1.02	978.0102.000	978.0102.00+	980.0102.000	982.0102.000	984.0102.000	986.0102.000
Red/red	1.14	978.0114.000	978.0114.00+	980.0114.000	982.0114.000	984.0114.000	986.0114.000
Grey/grey	1.29	978.0129.000	978.0129.00+	980.0129.000	982.0129.000	984.0129.000	986.0129.000
Yellow/yellow	1.42	978.0142.000	978.0142.00+	980.0142.000	982.0142.000	984.0142.000	986.0142.000
Yellow/blue	1.52	978.0152.000	978.0152.00+	980.0152.000	982.0152.000	984.0152.000	986.0152.000
Blue/blue	1.65	978.0165.000	978.0165.00+	980.0165.000	982.0165.000	984.0165.000	986.0165.000
Green/green	1.85	978.0185.000	978.0182.00+	980.0185.000	982.0185.000	984.0185.000	986.0185.000
Purple/purple	2.05	978.0205.000	978.0205.00+	980.0205.000	982.0205.000	984.0205.000	986.0205.000
Purple/black	2.29	978.0229.000	978.0229.00+	980.0229.000	982.0229.000	984.0229.000	986.0229.000
Purple/orange	2.54	978.0254.000	978.0254.00+	980.0254.000	982.0254.000	984.0254.000	986.0254.000
Purple/white	2.79	978.0279.000	978.0279.00+	980.0279.000	982.0279.000	984.0279.000	986.0279.000

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