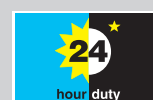


FEATURES AND BENEFITS

Watson-Marlow Pumps

- All the benefits of a peristaltic pump with the life of a diaphragm pump
- Flow rates 0.1–500ml/min (0.001–7.93USGPH) and up to 7 bar (100psi) RMS pressure
- ReNu CWT pumphead provides accurate, linear and repeatable flow
- Process uptime is maximised with no gas-locking, no valve blocking and rapid no-tools pumphead replacement
- Fluid recovery ensures operator safety and avoids chemical waste
- Flow control up to 5000:1 with $\pm 1\%$ accuracy
- Manual, analogue, PROFIBUS or contact mode functionality available
- 3 year warranty



Watson-Marlow...Innovation in Full Flow

PERFORMANCE

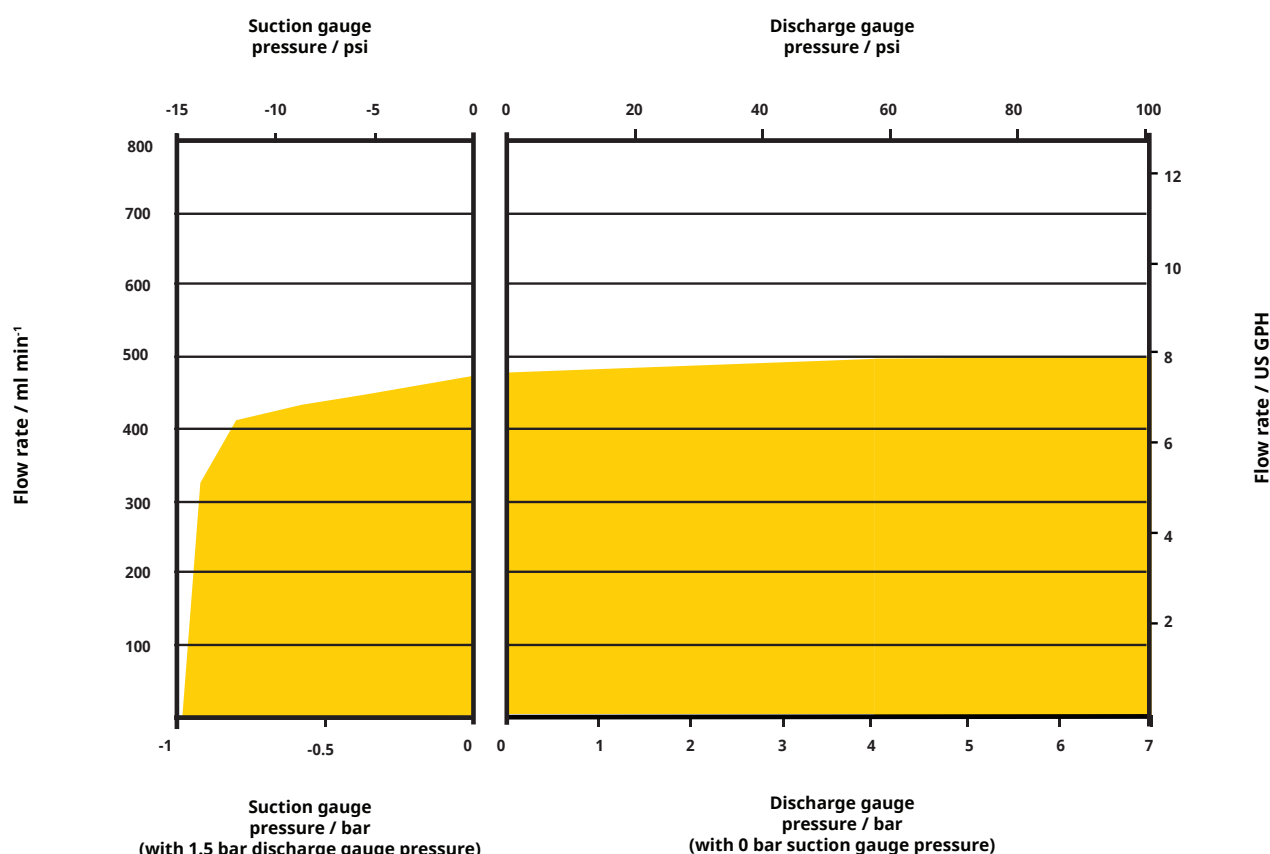
qdos pump typical flow rates

qdos		qdos remote	
Speed (rpm)	Flow ml/min (USGPH)*	Speed (rpm)	Flow ml/min(USGPH)*
0.025-125	0.1-500 (0.001-7.93)	0.078-125	0.3-500 (0.005-7.93)

*accuracy $\pm 1\%$, repeatability $\pm 0.5\%$

*Flow rates shown can be affected by discharge pressure

Flow rate with discharge pressure



TECHNICAL SPECIFICATION

Specification	Rating
Ingress rating	IP66
Enclosure	Watertight / dustproof
Humidity	80% up to 31°C (88°F), decreasing linearly to 50% at 40°C (104°F)
Temperature (EPDM)	5C-40C (41F-104F)
Drive weight	4.6 kg (10lb 2oz)
Pumphead weight	2.2kg (4lb 14oz)
Control ratio ±1% accuracy	5000:1
Control ratio (Remote)	1600:1
Noise	< 70dB(A) at 1m
Standard	CE, NSF 61, cETLus, IRAM S Mark, C-Tick, CSA
Power supply options	Switch mode power supply ~100-240V 50-60Hz 190VA Country specific plug options
	12-24V DC power supply Typical 12V current (100W) = 10A Typical 24V current (100W) = 5A Terminal connectors: M8 (5/16") studs (hole diameter 8.33mm (0.328"))

MATERIALS OF CONSTRUCTION

Fluid path components

Component	Material
Fluid contacting element	EPDM and PEEK
Fluid connection ports	Polypropylene
Fluid connectors	Polypropylene (standard) PVDF (option)
Fluid connection seals	Santoprene

Materials of construction that have the potential of being wetted when the fluid contacting element fails

Component	Material
Pumphead enclosure	40% GF PPS
Pumphead enclosure seals	EPDM, NBR
Rotor	303 stainless steel
Bearings	Steel
Clamp ring	30% Glass filled PA
Lubricant	PFPE

Materials of construction for external casing

Component	Material
Keypad	Polyester
Drive casework	20% Glass Filled PPE / PS
Drive shaft	Stainless steel 440C

*The pump housing contains aluminium components which can react with some chemicals to produce explosive gas.

*It is the user's responsibility to comply with local health and safety regulations, including ensuring chemical compatibility between the duty fluid, the tube and lubricant contained in the ReNu Pumphead. For guidance refer to www.qdosumps.com.

TECHNICAL DATA

Operational modes	Manual	Remote	PROFIBUS	Universal	Universal+
Manual	•		•	•	•
PROFIBUS—bus speed 9.6–1,500 kb/s			•		
Contact				•	•
4-20mA		•		•	•

Features	Manual	Remote	PROFIBUS	Universal	Universal+
Numerical flow display	•		•	•	•
Numerical speed display	•		•	•	•
Fluid level monitor	•		•	•	•
Max (prime)	•		•	•	•
Auto restart (after power restored)	•	•	•	•	•
Fluid recovery	•		•	•	•
Leak detection	•	•	•	•	•
3.5" (88.9mm) colour TFT display	•		•	•	•
Fault reporting	•	LED status icons	•	•	•

Control methods	Manual	Remote	PROFIBUS	Universal	Universal+
Input/Output Options*		L	L	L or R	L or R
Manual control capability	•		•	•	•
4-20mA input		•		•	•
4-20mA input two point calibration					•
4-20mA output		•			•
Contact input (pulse/batch)				• L or R	• L or R
Run stop input		•		•	•
Run status output		•		•	L
Alarm output		•		•	L
Four configurable relay outputs					R
Remote fluid recovery		•		•	•

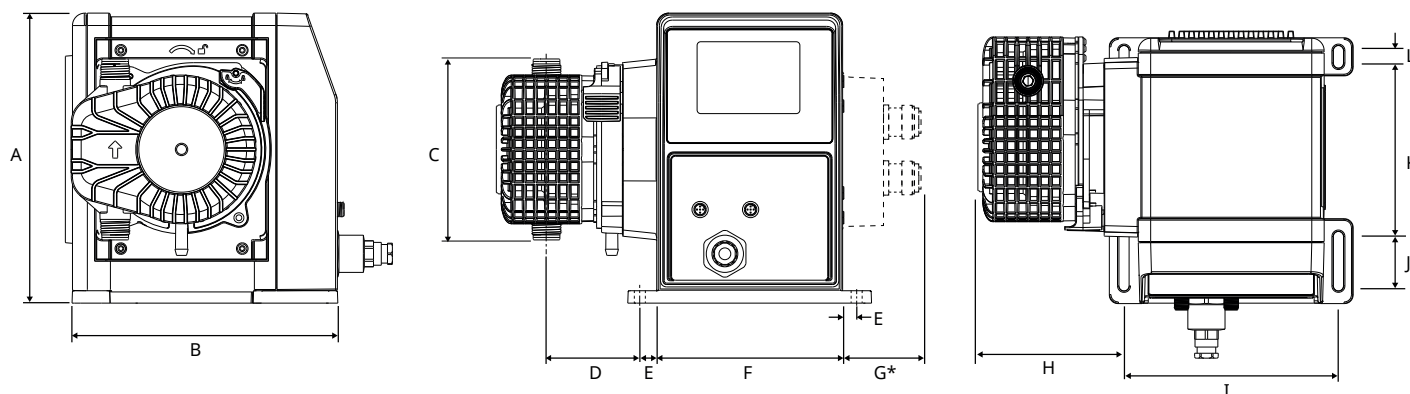
PROFIBUS	Manual	Remote	PROFIBUS	Universal	Universal+
Speed set point			•		
Speed feedback			•		
Flow calibration function			•		
Hours run			•		
Revolution counter			•		
Leak detection			•		
Low fluid level alarm			•		
Diagnostic feedback			•		

Security	Manual	Remote	PROFIBUS	Universal	Universal+
Keypad lock	•		•	•	•
PIN lock to protect set up	•		•	•	•

Power supply options	Manual	Remote	PROFIBUS	Universal	Universal+
12–24V DC	•	•		•	•
~100-240V AC	•	•	•	•	•

*Control options - Universal and Universal+ models		
Variant	Standard pump (L)	
Input	5-24V DC	Front mounted M12 connectors
Output	Open collector	
Variant	Relay Module (R)	
Input	5-24V DC or 110V AC	Spring terminals in a side mounted connection module
Output	Contact rating 110V AC, 4A 30V DC, 4A	

DIMENSIONS



A	B	C	D	E	F	G*	H	I	J	K	L
234mm (9.2")	214mm (8.4")	146mm (5.8")	77.4mm (3.1")	11.5mm (0.5")	150mm (5.9")	43mm (1.7")	117.9mm (4.6")	173mm (6.8")	40mm (1.6")	140mm (5.5")	10mm (0.4")

* Optional relay modules (H or R)

ORDER INFORMATION

0 M 0 . 5 7 . . G . .

Model

1: Remote
3: Manual
4: Universal
5: Universal+
7: PROFIBUS

Digital I/O type

Manual, Remote and PROFIBUS models

L: Standard pump variant

Universal and Universal+ models

L: Open collector outputs, 5-24V DC inputs
R: Volt free 110V AC 30V DC relay contacts, 5-24V DC or 110V AC inputs

Pumphead orientation*

L = Left
R = Right

Plug options

A: US
E: European
U: UK
K: Australia
R: Argentina
C: Swiss
D: India/South Africa
V: 12-24V DC

Pumphead product codes

Description	Partcode
ReNu 30 CWT pumphead EPDM / PEEK / PFPE 7 bar (130 psi)	0M3.5700.PFP

* The pumphead side location is required when ordering. The left/right perspective assumes the user is looking at the front of the pump. The pump in the dimensions diagram is considered a pumphead located to the left.

All flow rates shown were obtained pumping water at 20C (68F) with zero suction and delivery heads. qdos drives are not ATEX rated and should not be used within explosive atmospheres. Disclaimer: The information contained in this document is believed to be correct but Watson-Marlow Limited accepts no liability for any errors it contains and reserves the right to alter specifications without notice. It is the users responsibility to ensure product suitability for use within their application. Watson-Marlow, Qdos, ReNu, LoadSure, Bioprene, Pumpsil and Marprene are trademarks of Watson-Marlow Limited. STA-PURE PFL® and STA-PURE PCS® are registered trademarks of W.L Gore & Associates Inc. Please state the product code when ordering pumps and tubing.

**WATSON
MARLOW**
Pumps

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