

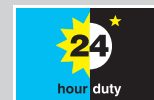
# Qdos 60 PROFIBUS pump with ReNu pumphead

**qdos60**  
Peristaltic Metering

Watson-Marlow Pumps

## FEATURES AND BENEFITS

- Flow rates 0.1-1000 ml/min at 7bar (100psi) RMS pressure
- ReNu pumphead provides accurate, linear and repeatable low pulse flow under varying process conditions
- Process uptime is maximised with no gas-locking, no valve blocking and rapid no-tools pumphead replacement
- Flow control 10000:1 with  $\pm 1\%$  accuracy
- Contained pumphead with integral leak detection
- Manual and PROFIBUS DP V0 functionality, bus speed up to 1,500 kb/s
- Intuitive HMI with 3.5" (89mm) color TFT display
- High suction lift ensures self priming and metering of viscous fluids



*Watson-Marlow...Innovation in Full Flow*

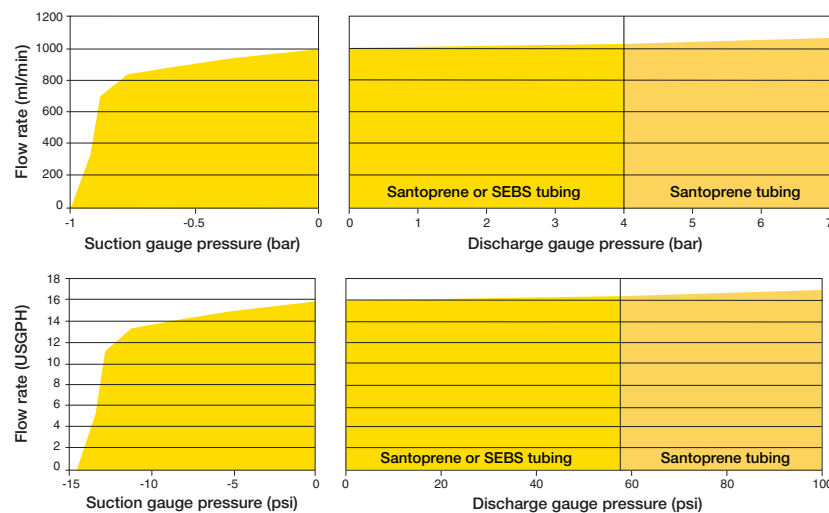
## PERFORMANCE

### Qdos 60 pump typical flow rates

	Speed (rpm)	Flow (ml/min)*
ReNu 60 Pumphead	0.025-125	0.1-1000
	Speed (rpm)	Flow (USGPH)*
ReNu 60 Pumphead	0.016-125	0.001-15.85

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

### Flow rate with discharge pressure for ReNu 60 pumpheads



The graphs show the flow performance for pumpheads with Santoprene tubing. Pumpheads with SEBS tubing will have slightly higher flow performance.

## TECHNICAL DATA

Functionality	Qdos 60 PROFIBUS
<b>Operational modes</b>	
Manual	•
PROFIBUS	•
Fluid recovery	•
Fault reporting	•
Leak detection	•
<b>Manual control</b>	
Flow rate range 0.1 to 1000 ml/min (10000:1)	•
Numerical flow display	•
Numerical speed display	•
Numerical percentage of max speed display	•
Fluid level monitor	•
Max (prime)	•

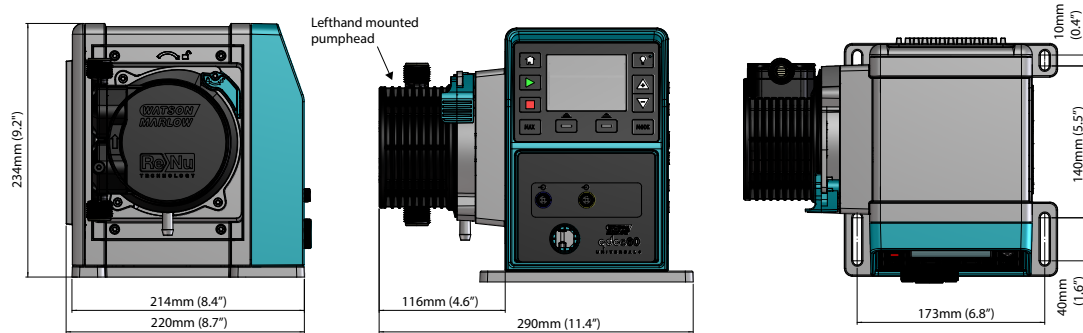
Functionality	Qdos 60 PROFIBUS
Auto restart	•
<b>Cyclic data write</b>	
Speed set point	•
Set flow calibration	•
<b>Cyclic data read</b>	
Measured speed	•
Hours run	•
Tacho counter	•
Flow calibration	•

## TECHNICAL DATA

Functionality continued	Qdos 60 PROFIBUS
<b>Diagnostic functions</b>	
Fluid level alarm	•
<b>Extended diagnostics</b>	
Overcurrent	•
Over temperature	•
Pump stalled	•
Tacho fault	•
Over voltage	•

Functionality	Qdos 60 PROFIBUS
<b>Extended diagnostics continued</b>	
Under voltage	•
Setpoint out of range (min speed)	•
Setpoint out of range (max speed)	•
<b>Security</b>	
Keypad lock	•
PIN lock to protect set up	•

## DIMENSIONS



## TECHNICAL SPECIFICATION

	Qdos 60 Universal and Universal+
Ingress rating	IP66
Enclosure	Watertight / dustproof
Humidity	Non-condensing 5% to 95%
Temperature	5C to 45C (41F to 113F)
Pump weight	Drive: 4.6kg (10lb 2oz) Pumphead: 1.1kg (2lb 7oz)
Control ratio	10000:1 with ±1% accuracy
Noise	< 70dB(A) at 1m
Standard	CE, NSF 61, cETLus
Power supply	Switch mode power supply ~100-240V 50-60Hz 190VA

## MATERIALS OF CONSTRUCTION

Component	Material
Keypad	Polyester
Drive casework	20% Glass filled PPE/ PS
Drive shaft	Stainless steel 440C
Pumphead enclosure	30% Glass filled PPE/PS
Rotor	Glass filled nylon
Rotor bearings	Steel
Tube†	Santoprene (max 7 bar, 100 psi) SEBS (max 4 bar, 60 psi)
Pumphead hydraulic ports	Polypropylene (Santoprene) PVDF (SEBS)
Hydraulic connectors	Polypropylene
Lubricant	PFPE based

\*The ReNu Pumphead contains lubricant. It is the user's responsibility to comply with local health and safety regulations, including ensuring chemical compatibility between the lubricant and the duty fluid before use. For guidance refer to [www.wmftg.com/chemical](http://www.wmftg.com/chemical)

## ORDER INFORMATION

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† For guidance on chemical compatibility see [www.qdospumps.com](http://www.qdospumps.com)

**Tube material†**  
2: Santoprene (max 7 bar, 100 psi)  
8: SEBS (max 4 bar, 60 psi)

**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  
H: Volt free 110V AC relay contacts, 110V AC inputs  
(only available with US mains leads)  
R: Volt free 24V DC relay contacts, 5 - 24V DC inputs

**Pumphead orientation\***  
L = Left  
R = Right

**Plug options**  
A: US  
E: European  
U: UK  
K: Australia  
R: Argentina  
C: Swiss

**Pumphead Lubricant**  
G: General purpose, PFPE lubricant

\* 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.

Pumphead product codes	
Description	Partcode
ReNu 60 pumphead Santoprene / PFPE 7 bar (100psi)	0M3.3200.PFP
ReNu 60 pumphead SEBS / PFPE 4 bar (60psi)	0M3.3800.PFP

All flow rates shown were obtained pumping water at 20C (68F) with zero suction and delivery heads.  
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Pumps**

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