

620Di and 620DiN with 620RE pumphead

620 series dispensing pumps

Features and benefits

- Keypad entry of flow from 0.001 L/min to 18 L/min
- Dispenses 500 ml to within $\pm 0.5\%$
- Stores up to 50 dispensing programs
- Up to 4 bar pressure
- 2650:1 control ratio (0.1 to 265 rpm speed range)
- Digital speed adjustment with choice of 0.1 rpm, 0.5 rpm, 1 rpm, 2 rpm, 5 rpm and 10 rpm step changes
- Maintenance-free brushless DC motor
- Smooth easy-to-clean enclosure free from bug traps



620Di and 620DiN with 620RE pumphead performance

Flow ranges (L/min) (over 0.1 to 265rpm speed range)	LoadSure™ element tubing	
	620RE (2 rollers)	
Tubing material	12mm	17mm
Marpren TM, Biopren TM	0.004-9.8	0.01-16
Marpren TL, Biopren TL	0.004-9.8	0.01-18
Pumpsil silicone	0.004-10	0.01-16
STA-PURE, Neoprene	0.004-11	0.01-18
620RE dose sizes		
Tube bore	12mm	17mm
Minimum possible dose	19ml	30ml
Minimum recommended	189ml	302ml

Technical specifications

	620Di and 620DiN with 620RE pumphead
Filling volume range	Up to 500ml in 3.0s ml
Accuracy	$\pm 0.5\%$
Ingress rating	IP31, IP66, NEMA 2, NEMA 4X
Operating temperature range	5 to 40 °C
Operating temperature range	40 to 104 °F
Speed control ratio	2650:1
Humidity	(Condensing) 10-100 % RH, (Non-condensing) 80 % up to 31 °C (88 °F) decreasing linearly to 50 % at 40 °C (104 °F)
Noise	<70dB(A) at 1m
Standards	CE, cETLus
Power supply	100-120 V, 200-240 V, 50/60 Hz, Single-phase
Weight	19.6 - 20.5 kg
Weight	43.2 - 45.2 lbs
Accessories	Footswitch, handswitch, RS232 cable, batch records cable
Compatible tubing size	12.0 mm ID, 12.7 mm ID, 15.9 mm ID, 17.0 mm ID, 6.4 mm ID, 9.6 mm ID

Materials of construction

	620Di and 620DiN with 620RE pumphead
Bearings	Carbon steel
Casework	Pressure die-cast aluminium LM24, Pressure die-cast aluminium LM6
Keypad/HMI	Polyester
Pumphead roller assembly	Nylatron, Stainless steel

620Di and 620DiN with 620RE pumphead dimensions



Control options

Functionality	620Di	620DiN
Enclosure - ingress protection rating	IP31	IP66
Manual control		
Digital speed control with simple calibration to display flow	✓	✓
Choice of flow rate display; metric or imperial units	✓	✓
Numeric keypad for entry of speed, flow or PIN code	✓	✓
Remote control		
Run/stop, direction change, auto/manual mode, leak detector input (via contact closure or 5V TTL to 24V industrial logic)	✓	✓
Remote operation of dosing (foot/handswitch or logic input)	✓	✓
Four programmable digital status outputs through 5V TTL to 24V industrial logic		✓
Analogue speed feedback		
Tachometer output; 0-1478Hz	✓	✓
Digital communication		
Digital network serial control RS232 RS485	RS232	RS485
Specialist dispensing functionality		
Drip control feature (momentary direction reverse at end of dose)	✓	✓
Ramp control to improve accuracy and avoid splashing or frothing	✓	✓
Export of batch records to PC or printer for cGMP requirements RS232	RS232	
Dual operator/supervisor PIN code protection of pump settings	✓	✓

Product codes

	Pumpheads	Accessories			
	620RE MkII head	Footswitch	Handswitch	RS232 cable	Batch records cable
Pumphead only	063.4231.000				
IP31/NEMA 2 wipe-down pumps		IP31	IP31	IP31	IP31
620Di	060.4171.E20*	059.3002.000	059.3022.000	059.3121.000	059.3125.000
*Replace 0 (plug-less) with A, E or U for 2.8m American, European or UK mains plug					
IP66/NEMA 4X wash-down pumps		IP55			
620DiN	060.417N.E20**	069.5231.000	n/a	n/a	—
** Replace 0 (plug-less) with A for 2.8m American mains lead					

Tubing								
	Continuous tubing for 620R				Sanitary LoadSure™ elements (3/4" Tri-clamp PVDF connectors)		Industrial LoadSure™ elements (3/4" Cam & Groove PP connectors)	
	6.4mm	9.6mm	12.7mm	15.9mm	12mm	17mm	12mm	17mm
STA-PURE	960.0064.032	960.0096.032	960.0127.032	960.0159.032	960.0120.PFT	960.0170.PFT	—	—
CHEM-SURE	965.0064.032	965.0096.032	965.0127.032	965.0159.032	965.0120.SST*	965.0170.SST*	—	—
Bioprene TM	—	—	—	—	903.P120.PFT	903.P170.PFT	—	—
Bioprene TL	903.0064.032	903.0096.032	903.0127.032	903.0159.032	903.0120.PFT	903.0170.PFT	—	—
Marprene TM	—	—	—	—	—	—	902.P120.PPC	902.P170.PPC
Marprene TL	902.0064.032	902.0096.032	902.0127.032	902.0159.032	—	—	902.0120.PPC	902.0170.PPC
Pumpsil silicone	913.A064.032	913.A096.032	913.A127.032	913.A159.032	913.A120.PFT	913.A170.PFT	913.A120.PPC	913.A170.PPC
Neoprene	920.0064.032	920.0096.032	920.0127.032	920.0159.032	—	—	920.0120.PPC	920.0170.PPC
PVC	950.0064.032	950.0096.032	950.0127.032	950.0159.032	—	—	—	—
NB: 4 bar pressure capability with Sta-Pure, Bioprene TM and Marprene TM							*SST = sanitary stainless steel connectors	

Disclaimer: The information in this document is believed to be correct, but Watson-Marlow Flexicon A/S accepts no liability for any errors it contains, and reserves the right to alter specifications without notice. WARNING: These products are not designed for use in, and should not be used for, patient-connected applications. asepticu and Accusil are registered trademarks.

wmfts.com/global



26 July 2023