

720SN, 720UN and 720DuN with 720R pumphead

700series

Watson-Marlow Pumps

FEATURES

- Flows up to 2,000 L/h (8.81 USGPM) and 2bar (29 psi) maximum operating pressure with single channel 720R pumphead
- Continuous tubing from source to delivery
- 3,600:1 control ratio (0.1 to 360rpm speed range)
- Display pumphead speed or calibrated flow rate
- Manual control flow calibration and MemoDose for single shot dispensing
- Maintenance-free brushless DC motor
- Dual voltage 100-120/200-240V 50/60Hz power supply range, 350VA
- Optional optical leak detector and fluid management

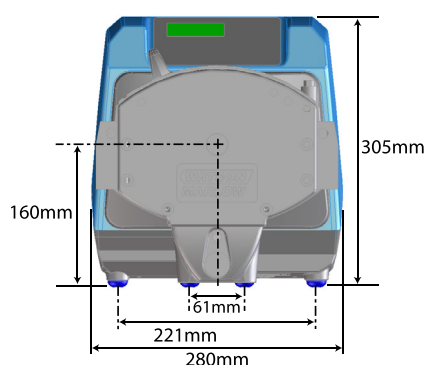
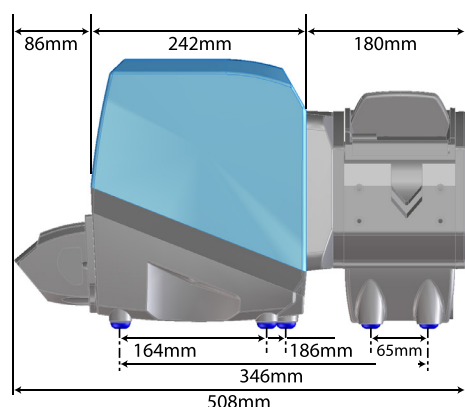


Watson-Marlow...Innovation in Full Flow

TECHNICAL DATA

Functionality	720SN	720UN	720DuN
Enclosure - ingress protection rating	IP66	IP66	IP66
Manual control			
Keypad speed control with simple calibration to display flow	•	•	•
Comprehensive calibration for flow rate display; metric or imperial units			•
Numeric keypad for entry of speed, flow or PIN code			•
Cumulative volume indication			•
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 MemoDose (foot/hand-switch or logic input)		•	•
Four programmable digital status outputs through 24V, 30W relays		•	•
Analogue speed control			
Software programmable inputs; 0-10V, 1-5V or 4-20mA		•	•
Analogue outputs; 0-10V (8 bit resolution)		•	
Analogue outputs; 0-10V, 4-20mA (8 bit resolution)			•
Keypad/analogue input scaling (replacement of diaphragm pumps)			•
Frequency output; 0-768Hz			•
RS485 digital communication			
Digital network serial control			•
Security			
Basic security code to protect set-up		•	
Dual operator/supervisor PIN code protection of pump settings			•

DIMENSIONS

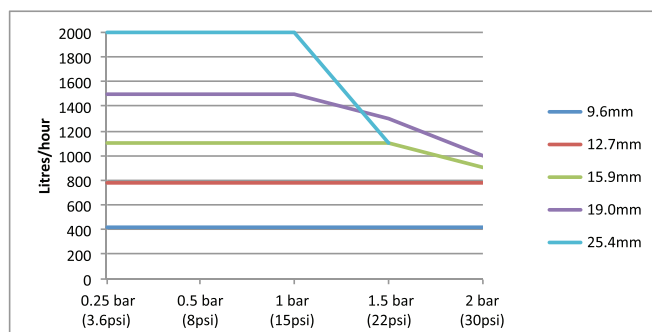
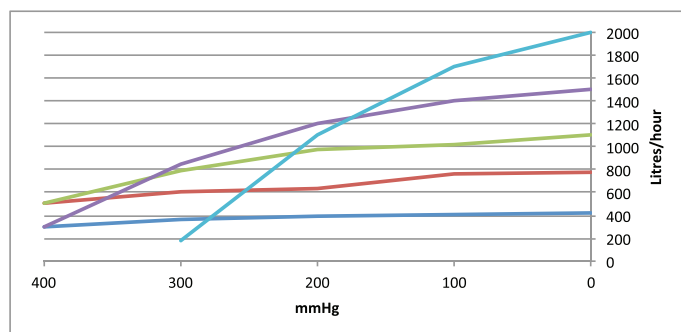


PERFORMANCE

720 cased pumps' performance limits

Single pumphead (720R, 720RE)	0.25 bar (3.6 psi)		0.5 bar (8 psi)		1 bar (15 psi)		1.5 bar (22 psi)		2 bar (30 psi)	
	Max speed (rpm)*	Max flow	Max speed (rpm)*	Max flow	Max speed (rpm)*	Max flow	Max speed (rpm)*	Max flow	Max speed (rpm)*	Max flow
9.6mm (0.4")	360	420 l/hr (111 GPH)	360	420 l/hr (111 GPH)	360	420 l/hr (111 GPH)	360	420 l/hr (111 GPH)	360	420 l/hr (111 GPH)
12.7mm (0.5")	360	780 l/hr (206 GPH)	360	780 l/hr (206 GPH)	360	780 l/hr (206 GPH)	360	780 l/hr (206 GPH)	360	780 l/hr (206 GPH)
15.9mm (0.6")	360	1100 l/hr (291 GPH)	360	1100 l/hr (291 GPH)	360	1100 l/hr (291 GPH)	360	1100 l/hr (291 GPH)	300	900 l/hr (238 GPH)
19.0mm (0.7")	360	1500 l/hr (396 GPH)	360	1500 l/hr (396 GPH)	360	1500 l/hr (396 GPH)	300	1300 l/hr (343 GPH)	250	1000 l/hr (264 GPH)
25.4mm (1.0")	360	2000 l/hr (528 GPH)	360	2000 l/hr (528 GPH)	360	2000 l/hr (528 GPH)	200	1100 l/hr (291 GPH)		

*The maximum speed is reduced at increased discharge pressures to ensure safe running of the pump



SPECIFICATIONS

720SN, 720UN, 720DuN	
Ingress rating	IP66 / NEMA 4X
Enclosure	Watertight / dustproof
Suitability	Corrosion resistant for heavy industrial environments
Humidity	Condensing 10-100% RH
Temperature	5C to 40C (40F to 104F)
Pump weight	25kg (55lb 2oz) with 720RE, 31.5kg (69lb 7oz) with 720REX
Control ratio	3,600:1
Torque rating	Max 2.5Nm (shaft, x 4 at pumphead)
Noise	< 85dB(A) at 1m
Standard	CE, cETLus
Power supply	100-120V/200-240V 1ph 50/60Hz, 350vA

MATERIALS OF CONSTRUCTION

Component	Material
Keypad	Polyester
Switch-plate	ABS PA-765
Rear blanking plate	Stainless steel 316
Drive casework	Pressure die-cast aluminium (top - LM6, base - LM24)
Casework and pumphead coating	Alocrom pre-treatment, exterior grade polyester powder coat
Drive shaft	Stainless steel 440C
Pumphead body/ track	Aluminium
Rotor end plates	Aluminium
Rollers	MOS2 filled nylon 6 (Nylatron)
Springs/spindles	Stainless steel

ORDER INFORMATION

Product codes			
Description	Partcode	Description	Partcode
720SN/R	070.413N.000*	720R pumphead only	073.2001.000
720UN/R	070.414N.000*		
720DuN/R	070.415N.000*		
Leak detector	079.6131.E00		

* Supplied as 2.4 metre mains lead without plug. To specify an American 2.8m mains lead, please replace the last zero with the mains lead code A. For example - 070.413N.00A is a 720SN/R pump with American mains lead.

Continuous tubing					
	9.6mm	12.7mm	15.9mm	19mm	25.4mm
STA-PURE PCS	960.0096.048	960.0127.048	960.0159.048	960.0190.048	960.0254.048
Bioprene	933.0096.048	933.0127.048	933.0159.048	933.0190.048	933.0254.048
Marprene	902.0096.048	902.0127.048	902.0159.048	902.0190.048	902.0254.048
Pumpsil	913.A096.048	913.A127.048	913.A159.048	913.A190.048	913.A254.048
Neoprene	920.0096.048	920.0127.048	920.0159.048	920.0190.048	920.0254.048

All flow rates shown were obtained pumping water at 20C (68F) with zero suction and delivery heads. Watson-Marlow, Bioprene and Marprene are trademarks of Watson-Marlow Limited. 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. LoadSure is a trademark 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
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Pumps**

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