

# 720SN, 720UN and 720DuN with 720R and 720RX pumpheads

# 700 series

Watson-Marlow Bredel

## COMMON FEATURES AND BENEFITS

- Flows up to 2,000 litre/hr and 2 bar 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 integral float switch leak detector and fluid management
- 720RX extension pumphead can be fitted to double the flow



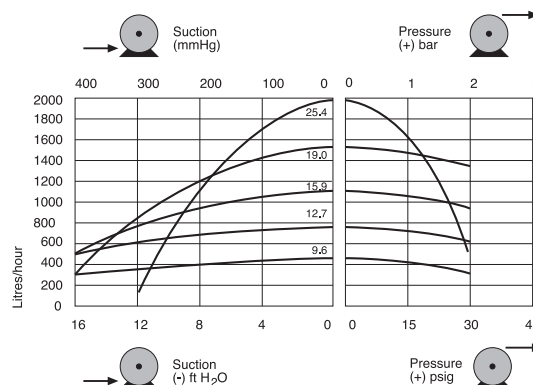
Watson-Marlow Bredel ... Value for life

## TECHNICAL DATA

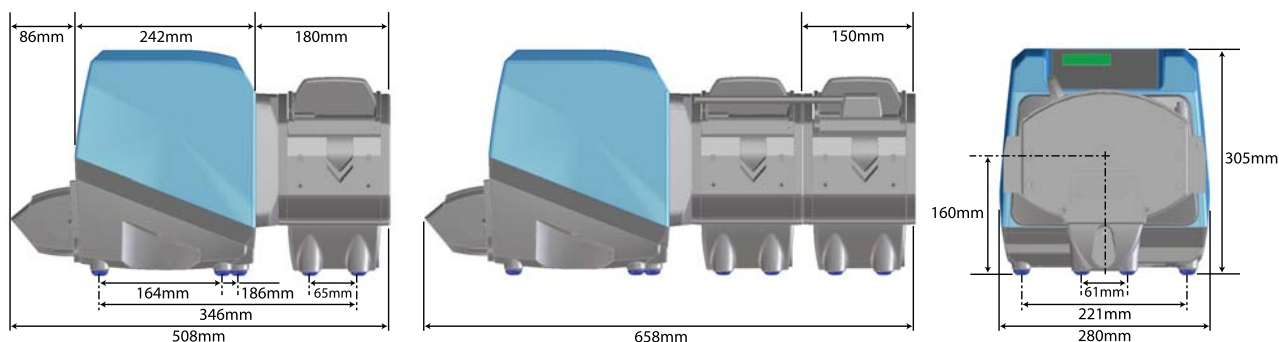
Functionality	720SN	720UN	720DuN
<b>Enclosure - ingress protection rating</b>	IP66	IP66	IP66
<b>Manual control</b>			
Keypad speed control with simple calibration to display flow	•	•	•
Comprehensive calibration for flow rate display; metric or imperial units			•
Numeric keypad for entry of speed, flow or PIN code			•
Cumulative volume indication			•
<b>Remote control</b>			
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		•	•
<b>Analogue speed control</b>			
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			•
<b>RS485 digital communication</b>			
Digital network serial control			•
<b>Security</b>			
Basic security code to protect set-up		•	
Dual operator/supervisor PIN code protection of pump settings			•

## PERFORMANCE

	Speed rpm	Tube bore and flow rates (litre/hr)				
		9.6mm	12.7mm	15.9mm	19.0mm	25.4mm
720R	0.1-360	0.12-420	0.22-780	0.30-1100	0.42-1500	0.56-2000
720R/RX	0.1-360	0.23-840	0.43-1560	0.60-2200	0.83-3000	1.1-4000



## TECHNICAL DRAWINGS



## TECHNICAL SPECIFICATION

	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) with 720R, 31.5kg (69lb) with 720RX
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

### Pump and pumphead product codes

Description	Partcode	Description	Partcode
720SN/R	070.413N.000*	720R pumphead only	073.2001.000
720SN/R/RX	070.413N.X00*	720RX pumphead only	073.2011.000
720UN/R	070.414N.000*		
720UN/R/RX	070.414N.X00*		
720DuN/R	070.415N.000*		
720DuN/R/RX	070.415N.X00*	Leak detector	079.6131.000

\*Replace 0 (plug-less) with A for 2.8m American mains lead

### Continuous tubing for 720R and 720RX

	9.6mm	12.7mm	15.9mm	19mm	25.4mm
Sta-Pure	960.0096.048	960.0127.048	960.0159.048	960.0190.048	960.0254.048
Bioprene	903.0096.048	903.0127.048	903.0159.048	903.0190.048	903.0254.048
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	913.0254.048
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, Loadsure, 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. © Chem-Sure and © STA-PURE is a registered trademark of W.L. Gore & Associates Inc. Please state the product code when ordering pumps and tubing.



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