

# 720SN, 720UN, 720US, 720DuN, and 720DuS with 720RE and 720REX pumpheads

# 700 series

Watson-Marlow Bredel

## COMMON FEATURES AND BENEFITS

- Flows up to 8.8 GPM and 30 psi maximum operating pressure with single channel 720RE pumphead
- LoadSure tubing elements ensure correct fitting and long life
- 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
- 720REX extension pumphead can be fitted to double the flow



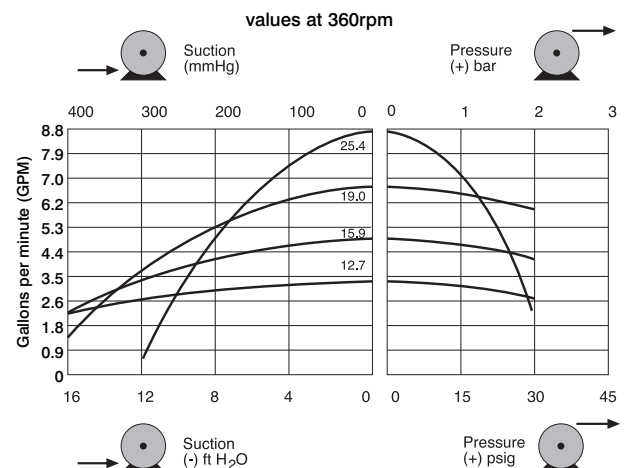
Watson-Marlow Bredel ... Value for life

## TECHNICAL DATA

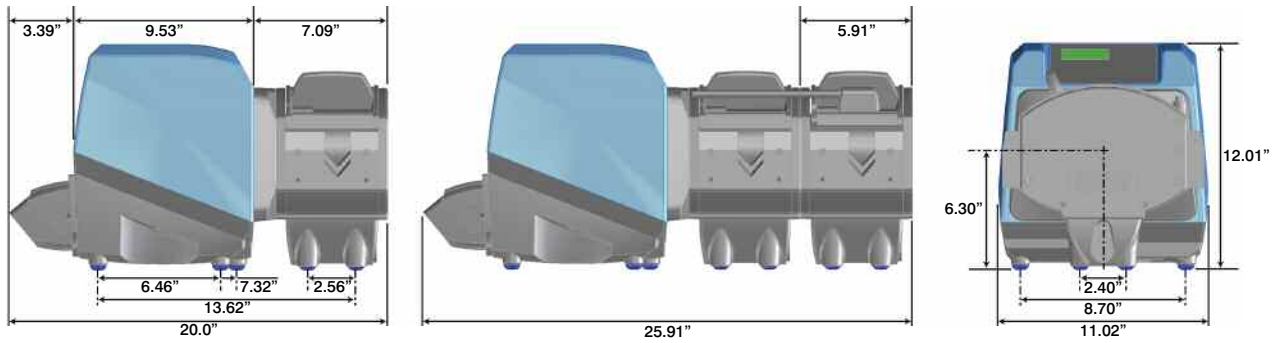
Functionality	720SN	720UN	720DuN	720US	720DuS
Enclosure - ingress protection rating	NEMA 4X	NEMA 4X	NEMA 4X	NEMA 4X	NEMA 4X
<b>Manual control</b>					
Keypad speed control with simple calibration to display flow	•	•	•	•	•
Comprehensive calibration for flow rate display; metric or imperial units			•		•
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)		•	•	110VAC	110VAC
Remote operation of MemoDose (foot/hand-switch or logic input)		•	•	110VAC	110VAC
Four programmable digital status outputs through 24V, 30W relays		•	•	110VAC	110VAC
<b>Analog speed control</b>					
Software programmable inputs; 0-10V, 1-5V or 4-20mA		•	•	•	•
Analog outputs; 0-10V (8 bit resolution)		•		•	
Analog outputs; 0-10V, 4-20mA (8 bit resolution)			•		•
Keypad/analog 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

		Tube bore and flow rates (GPM)			
	Speed rpm	12.7mm	15.9mm	19.0mm	25.4mm
720RE	0.1-360	0.001-3.5	0.001-4.8	0.002-6.6	0.003-8.8
720RE/REX	0.1-360	0.002-7.0	0.002-9.6	0.004-13.2	0.006-17.6



## TECHNICAL DRAWINGS



## TECHNICAL SPECIFICATION

	<b>720SN, 720UN, 720US, 720DuN, 720DuS</b>
Ingress rating	NEMA 4X
Enclosure	Watertight, dustproof
Suitability	Corrosion resistant for heavy industrial environments
Humidity	Condensing 10-100% RH
Temperature	40F to 104F (5C to 40C)
Pump weight	55lb with 720RE, 69lb 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 aluminum (top -LM6, base - LM24)
Casework and pumphead	Alocrom pre-treatment, exterior grade polyester powder coat
Drive shaft	Stainless steel 440C
Pumphead body/track	Aluminum
Rotor end plates	Aluminum
Rollers	MOS2 filled nylon 6 (Nylatron)
Springs/spindles	Stainless steel

## ORDER INFORMATION

<b>Pump and pumphead product codes</b>			
Description	Partcode	Description	Partcode
720SN/RE	070.413N.E0A	720RE pumphead only	073.2004.000
720SN/RE/REX	070.413N.EXA	720REX pumphead only	073.2014.000
720UN/RE	070.414N.E0A		
720UN/RE/REX	070.414N.EXA		
720DuN/RE	070.415N.E0A		
720DuN/RE/REX	070.415N.EXA		
720US/RE	070.414S.E0A		
720US/RE/REX	070.414S.EXA		
720DuS/RE	070.415S.E0A		
720DuS/RE/REX	070.415S.EXA	Leak detector	079.6131.000

<b>Element codes for 720RE and 720REX</b>									
	LoadSure Industrial elements 3/4" Cam & Groove PP connectors				1" Cam & Groove PP connectors	LoadSure Sanitary elements 3/4" Tri-clamp style PVDF connectors			1" Tri-clamp style PVDF connectors
	12.7mm	15.9mm	19.0mm	25.4mm	25.4mm	12.7mm	15.9mm	19.0mm	25.4mm
Marprene	902.0127.PPC	902.0159.PPC	902.0190.PPC	902.0254.PPC					
Pumpsil	913.A127.PPC	913.A159.PPC	913.A190.PPC	913.A254.PPC		913.A127.PFT	913.A159.PFT	913.A190.PFT	913.A254.PFT
Neoprene	920.0127.PPC	920.0159.PPC	920.0190.PPC	920.0254.PPC					
Bioprene						903.0127.PFT	903.0159.PFT	903.0190.PFT	903.0254.PFT
Sta-Pure						960.0127.PFT	960.0159.PFT	960.0190.PFT	960.0254.PFT

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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