

720SN, 720UN and 720DuN with 720RE and 720REX 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 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



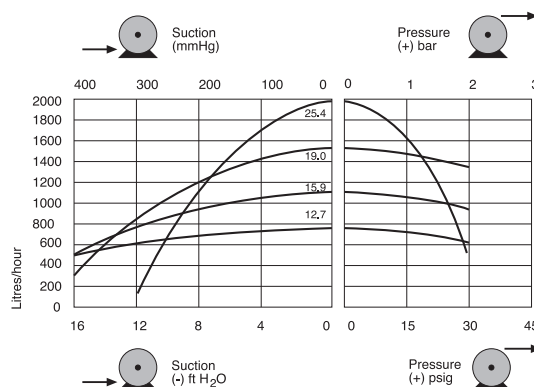
Watson-Marlow Bredel ... Value for life

TECHNICAL DATA

Functionality	720SN	720UN	720DuN
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			•

PERFORMANCE

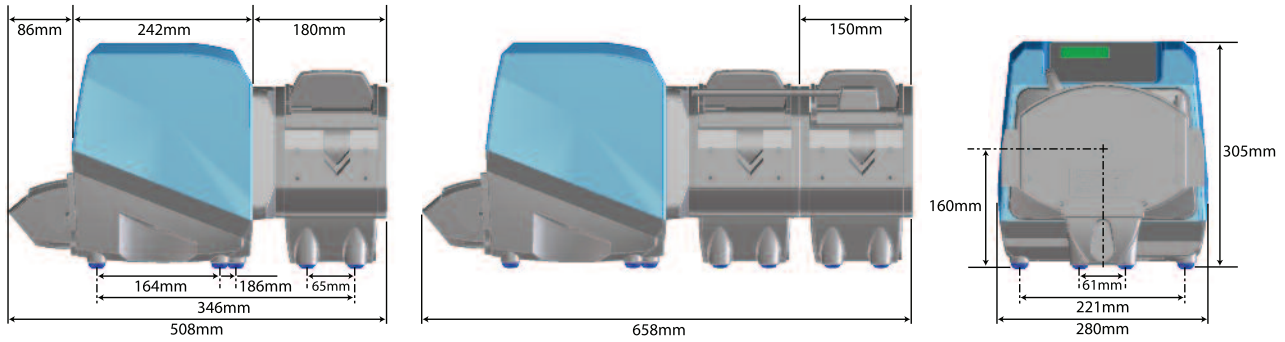
	Speed rpm	Tube bore and flow rates (litre/hr)			
		12.7mm	15.9mm	19.0mm	25.4mm
720RE	0.1-360	0.22-780	0.30-1100	0.42-1500	0.56-2000
720RE/REX	0.1-360	0.43-1600	0.60-2200	0.83-3000	1.1- 4000



values at 360rpm

Note: When a second pumphead is fitted, the maximum pressure for each channel should not exceed 1 bar (15psi)

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 720RE, 31.5kg (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 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/RE	070.413N.E00*	720RE pumphead only	073.2004.000
720SN/RE/REX	070.413N.EX0*	720REX pumphead only	073.2014.000
720UN/RE	070.414N.E00*		
720UN/RE/REX	070.414N.EX0*		
720DuN/RE	070.415N.E00*		
720DuN/RE/REX	070.415N.EX0*	Leak detector	079.6131.000

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

Element codes for 720RE and 720REX

	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		12.7mm	15.9mm	19.0mm	
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.



Watson-Marlow-Bredel Pumps
Falmouth, Cornwall England TR11 4RU
Tel: +44 (0)1326 370370 Fax: +44 (0)1326 376009
www.watson-marlow.com info@watson-marlow.co.uk
Watson-Marlow Bredel ... Value for life