

# 521FD fixed speed, 521VD variable speed, or 521PD pneumatic speed 60-100psi duplex pumps with 520REHC LoadSure® element pumphead

# 500 series

## Watson-Marlow Bredel

### FEATURES

- Flow rates up to 16 gph (1010 ml/min) at 100psi (7 bar) peak pressure with 520 LoadSure® elements
- 520REHC pumphead features PPS (polyphenylene sulphide) track and rotor with stainless steel occlusion rollers to resist chemical attack and abrasive wear
- Heavy duty pumphead construction with impact proof safeguard
- Sprung rotor gently compresses tubing using large low friction rollers with sealed bearings, guaranteeing long tube life and accurate metering
- Fast and simple pumphead set-up using a clutched rotor for effortless element loading



4 – 7 bar  
60 – 100 psi



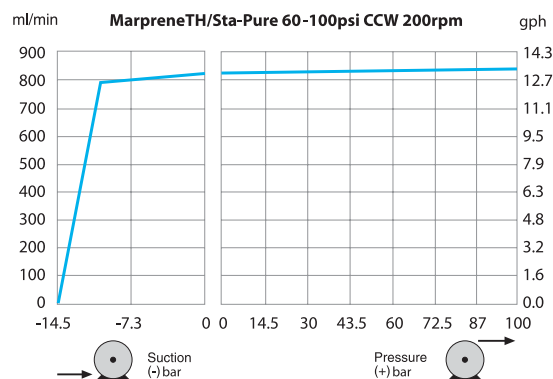
### FUNCTIONALITY

	521FD	521VD	521PD
Industry approved motors with 2 standard gearing speeds	•	•	•
Supplied with free standing variable frequency drive (VFD)		•	
Speed start/stop forward/reverse keypad control with remote control features		•	
Speed control ratio		10:1	5:1
VFD input power 230/3/60, 460/3/60, 115/1/60 in either NEMA 1 or NEMA 4X		•	
Standard integral gearmotor 3 phase 230/460V 60Hz TEFC	•	•	
Optional 115/1/60	•		
Optional gearbox and NEMA C motor	•	•	
Optional explosion proof (XP) motor	•	•*	
Four vane pneumatic motor with speed limiting			•
Optional FDA approved white epoxy paint	•	•	•
Optional baseplate mounting	•	•	•

\*VFD must be mounted outside XP area

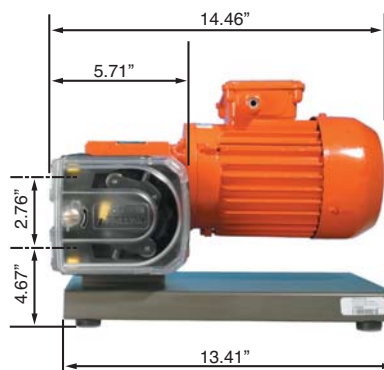
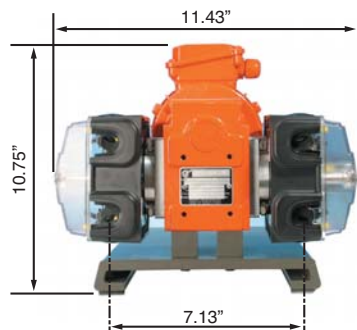
### PERFORMANCE

LoadSure® Element tubing flow rates, ml/min(gph)		
Tube Material	Speed	3.2mm
Marprene TH, Bioprene TH Sta-Pure,	7-65rpm	25-265(0.4-4.2)
	25-247rpm	100-1010(1.6-16)



To achieve 100psi pressure the pump must rotate counter-clockwise

## DRAWINGS



Length may vary if C-faced motor used

## SPECIFICATIONS

	521FD
Ingress rating	IP55
Temperature	40F to 104F
Pump weight	27lb 7oz
Control ratio	10:1
Noise	< 70dB(A) at 1m
Standard	CE, EN60529
Supply	230/460V 3ph 60Hz
Power	1/3HP

## MATERIALS OF CONSTRUCTION

Component	Material
Motor	Cast aluminum alloy
Gearbox	Cast iron
Pumphead track	PPS (polyphenylene sulphide)
Guard - inner/outer	Polycarbonate
Guard seal	Neoprene
Rotor hub	Stainless steel 316
Roller arms, rotor cover	PPS (polyphenylene sulphide)
Rollers – main/guide	Stainless steel
Main roller bearings	Stainless steel
Drain port	PP (polypropylene)
Drain plug	Hytrell

## ORDER INFORMATION

Pump and pumphead product codes			
Description	Partcode	Description	Partcode
Pump product codes not available		520REHC pumphead	053.1031.EH0
		Leak detector	059.8111.000

Element product codes				
	Industrial LoadSure® elements		Sanitary LoadSure® elements	
	Quick-release PVDF connectors		<sup>3</sup> / <sub>4</sub> in Sanitary PVDF connectors	
	3.2mm		3.2mm	
Marpene TH	902.H032.PFQ			
Bioprene TH			903.H032.PFT	
Sta-Pure	960.H032.PFQ		960.H032.PFT	

All flow rates shown were obtained pumping water at 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. ® Chem-Sure and ® STA-PURE are registered trademarks of W.L Gore & Associates Inc. Pumpsil is a trademark of Watson-Marlow Limited. Please state the product code when ordering pumps and tubing.



Watson-Marlow-Bredel Pumps  
37 Upton Technology Park  
Wilmington, MA 01887  
Tel: 800 282 8823 Fax: 978 658 0041  
www.watson-marlow.com support@watson-marlow.com