

# 521F fixed speed, 521V variable speed, or 521P pneumatic speed 30-60psi pumps with 520REMC LoadSure® element pumphead

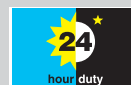
# 500 series

## Watson-Marlow Bredel

### FEATURES

- Flow rates up to 24.7 gph (1560 ml/min) at 60psi (4 bar) peak pressure with 520 LoadSure® elements
- 520REMC 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

2 – 4 bar  
30 – 60 psi



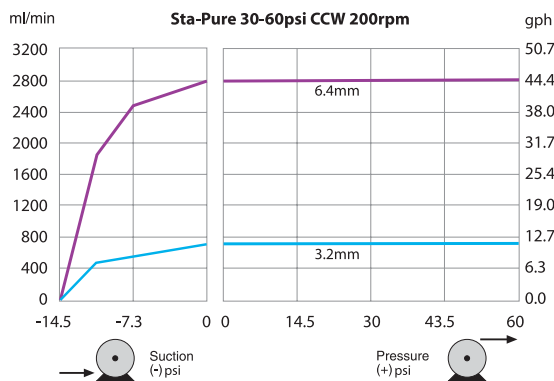
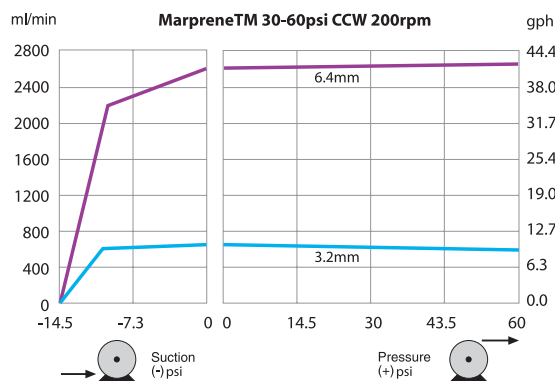
### FUNCTIONALITY

	521F	521V	521P
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

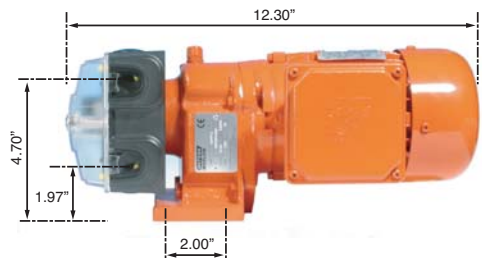
### PERFORMANCE

LoadSure® Element tubing flow rates, ml/min(gph)			
Tube Material	Speed	3.2mm	6.4mm
Marprene TM, Bioprene TM	6-57rpm	10-95(0.2-1.5)	40-380(0.6-6.0)
	23-227rpm	40-385(0.6-6.1)	155-1560(2.5-24.7)
Sta-Pure, Chem-Sure	6-57rpm	10-105(0.2-1.7)	40-400(0.6-6.3)
	23-227rpm	40-400(0.6-6.3)	155-1560(2.5-24.7)



To achieve 60psi pressure the pump must rotate counter-clockwise

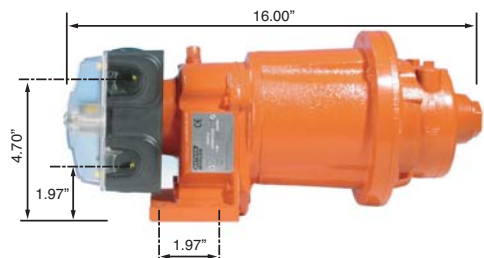
## DRAWINGS



521F



521P



Length may vary if  
C-faced motor used

## SPECIFICATIONS

	521F	521P
Ingress rating	IP55	IP55
Temperature	40F to 104F	40F to 104F
Pump weight	24lb 4oz	24lb 4oz
Control ratio	10:1	5:1
Noise	< 70dB(A) at 1m	< 70dB(A) at 1m
Standard	CE, EN60529	CE
Supply	230/460V 3ph 60Hz	Compressed air, clean/dry/lubricated
Power	1/3HP	Up to equivalent 3/4HP (30 cfm) @100psi

## 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		520REMC pumphead	053.1031.EMO
		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	6.4mm	3.2mm	6.4mm
Marprene TM	902.P032.PFQ	902.P064.PFQ		
Chem-Sure	965.M032.PFQ	965.M064.PFQ	965.M032.PFT	965.M064.PFT
Bioprene TM			903.P032.PFT	903.P064.PFT
Sta-Pure			960.M032.PFT	960.M064.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.



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