

Watson-Marlow Bredel Alitea Flexicon MasoSine BioPure



120 PERISTALTIC PUMPS

Small, Simple, Precise



The new 120 peristaltic pumps

For biopharm, science, research and OEM

- Compact footprint saves bench space
- Exceptional speed control and accuracy
- New flip-top 114 pumphead up to 190 ml/min
- Simple: minimum key presses, intuitive operation

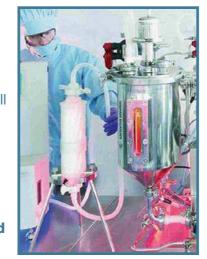


Fewer key presses, fewer mistakes and minimal setup time. The 120 pump is efficient and intuitive to use

Fermentation

The 120 is the perfect pump for maximising yield in fermentation and cell culture applications. Ultra-compact and stackable for multiple feeds like pH control, antifoam, nutrient and buffer addition,

the 120 offers the ideal combination of size and technology to optimise your process.



Single-use systems

The new 120 pump is perfectly suited to singleuse systems where no contamination can be accepted. Error-free tube change takes only seconds, with tubing automatically clamped and tensioned to ensure repeatable performance.



Process validation

The biopharm process requires accurate and repeatable pumping which is easy to validate. With an exceptional 2,000:1 speed range and a selection of USP Class VI tubes, the 120 delivers the flexibility and purity so vital to drug trials. A keypad lock secures your pumping parameters for constant and repeatable performance.



The 114DV pumphead offers trouble-free tube loading in seconds, for high accuracy and repeatable flow

Small, simple, precise

Compact footprint

The compact, stackable 120 pump saves valuable space in cleanroom, LAF and biosafety cabinet installations.



Flexible control

The 120 range of fixed speed, manual control or auto control pumps all quarantee ±1% accuracy, considerably better than the nearest competitive peristaltic pumps. For ultimate flexibility, the 120U delivers 2,000:1 speed control.



High accuracy flows

The flip-top 114DV pumphead assures trouble-free tube loading in seconds for high accuracy and repeatable flow, and long tube life.



Intuitive use

The 120 pump's intuitive interface makes the pump easy and quick to setup, with fewer key presses for fewer mistakes. The pump brings maximum efficiency to your process.



Hygienic

The pump case has no sharp edges to tear gloves and no bug traps. Rated to IP31, it is ideally suited for ethanol wipe-down.



Process security

Two of the 120 models feature a keypad lock. The security of your process and product is safe with a 120 pump.



The Watson-Marlow family of pumps

Watson-Marlow value

Our pumps combine simple operation with sophisticated control and flow accuracy - available next day and backed by an outstanding warranty and knowledgeable global support. Our products deliver real value with minimum maintenance, maximum performance and the lowest lifecycle cost.

Three-year warranty

Demonstrating total confidence in our reliability and our commitment to customer satisfaction, Watson-Marlow 120 pumps carry a three-year warranty. Your production is safe with us.

The perfect pump

Low-shear peristaltic pumping is created by compressing a tube with rollers, which progress the fluid forward. This simple dynamic effect requires no seals or valves to leak, clog or replace. The fluid is totally contained within the tube, eliminating contamination risks and simplifying validation. The pump handles delicate or viscous fluids with precision, and pumps suspended solids and live cells with integrity.



The 120 is the latest model in the world's most widely respected biopharm pumps range

PROCESS UPSCALING

Full scale production

Pilot/lab scale



120 for flows up to 190 ml/min. pressures up to 2 bar

323 for flows up to 2,000 ml/min, pressures up to 2 bar

520 for flows up to 3,500 ml/min, pressures up to 7 bar

620 for flows up to 18 litre/min, pressures up to 4 bar

720 for flows up to 55 litre/min, pressures up to 2 bar

Choose your pump

Three drives



Fixed speed

The 120F is offered in five fixed flow rate versions: 10, 17, 31, 52 and 220 rpm. Pumphead options are the 114DV and the 120R.



Manual variable speed

The manual control, variable speed 120S offers 1-200 rpm operation in 1 rpm

increments. It features speed scrolling, priming and keypad lock. All pumpheads are available.



Automatic control

The 0.1 to 200 rpm 120U offers manual remote control of the pump in 0.1 rpm

400 series

The single-channel

The multi-channel

400D1 accepts tubing

from 0.5mm to 3.2mm.

400DM2 and 400DM3

pumpheads use three-

bridge manifold tubing.

increments or automatic control via 4-20mA or 0-10V inputs. All pumpheads are available.

Five pumpheads



114DV

The flip-top, 114DV single-channel pumphead assures trouble-free continuous tube loading in seconds, high accuracy

and repeatable flow. It accepts tubing in bores sizes 0.5mm to 4.8mm.



102R

The 102R single-channel pumphead with two-roller rotor is suitable for silicone tubing in bore sizes 0.5mm to 4.8mm.



Tubing



Pumpsil

Pumpsil platinum-cured silicone tubing is Animal Derived Content Free (ADCF) and laser-etched to make it lot traceable

and is post-cured to reduce leachables to near zero. It is manufactured in our own dedicated tubing plant, and carries full USP Class VI and ISO 10993 certification, is FDA compliant and is fully validated.

Fu he XI

PureWeld XL

Fully weldable ADCF and heat-sealable PureWeld XL thermoplastic elastomer gives excellent pumping performance and

produces virtually no internal spallation. It is USP Class VI and FDA compliant, and is fully validated.



Bioprene

Bioprene thermoplastic elastomer offers the best combination of purity, chemical compatibility and long

pumping life. It is manufactured in our own dedicated tubing plant. It is USP Class VI certified and FDA compliant, and is fully validated.

STA-PURE PCS

GORE STA-PURE PCS is a composite of silicone in an ePTFE lattice. It offers 18 times the pumping life of silicone. It is USP Class VI approved.

STA-PURE PFL

GORE STA-PURE PFL is a composite of ePTFE and a highgrade fluoroelastomer, offering extraordinary chemical resistance and long life. It is USP Class VI approved.

Performance information

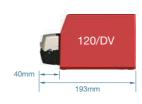
Tube bore and flow rates 114DV,	102R and 400D1 (n	nl/min)					
Model and Speed	0.5mm	0.8mm	1.6mm	2.4mm	3.2mm	4.0mm	4.8mm
120F/DV 10 rpm	0.2	0.4	1.4	2.9	4.7	6.7	8.5
120F/DV 17 rpm	0.3	0.7	2.4	4.9	8.0	11	14
120F/DV 31 rpm	0.6	1.2	4.3	9.0	15	21	26
120F/DV 52 rpm	1.0	2.1	7.3	15	24	35	44
120F/DV 220 rpm	4.4	8.8	31	64	100	150	190
120S/DV 1-200 rpm	0.02-4.0	0.04-8.0	0.14-28	0.29-58	0.47-94	0.67-130	0.85-170
120U/DV 0.1-200 rpm	0.002-4.0	0.004-8.0	0.014-28	0.029-58	0.047-94	0.067-130	0.085-170
120F/R 10 rpm	0.3	0.5	2.1	-	8.5	-	17
120F/R 17 rpm	0.5	0.9	3.6	-	14	-	29
120F/R 31 rpm	0.9	1.6	6.5	-	26	-	52
120S/R 1 - 32 rpm	0.03-0.9	0.05-1.6	0.21-6.7	-	0.85-27	-	1.6-54
120U/R 0.1 - 32 rpm	0.003-0.9	0.005-1.6	0.02-6.7	-	0.09-27	-	0.16-54
120S/D1 1-200 rpm	0.01-2.2	0.03-5.8	0.11-23	0.24-49	0.41-81	0.59-120	-
120U/D1 0.1 - 200 rpm	0.001-2.2	0.003-5.8	0.011-23	0.024-49	0.041-81	0.059-120	-
Tube bore and flow rates 400DM2	? and 400DM3 (ml/r	min)					
Model and Speed	0.13mm	0.19mm	0.25mm	0.38mm	0.50mm	0.63mm	0.76mm
120S/DM2 1-100 rpm	0.001-0.1	0.002-0.2	0.004-0.4	0.008-0.8	0.014-1.4	0.022-2.2	0.031-3.1
120U/DM3 0.1-100 rpm	0.0001-0.1	0.0002-0.2	0.0004-0.4	0.0008-0.8	0.001-1.4	0.002-2.2	0.003-3.1
	0.88mm	1.02mm	1.14mm	129mm	1.42mm	1.52mm	1.65mm
120S/DM2 1-100 rpm	0.043-4.3	0.055-5.5	0.070-7.0	0.089-8.9	0.110-11	0.120-12	0.140-14
120U/DM3 0.1-100 rpm	0.004-4.3	0.006-5.5	0.007-7.0	0.009-8.9	0.011-11	0.012-12	0.014-14
	1.85mm	2.05mm	2.29mm	2.54mm	2.79mm		
120S/DM2 1-100 rpm	0.180-18	0.210-21	0.260-26	0.31-31	0.360-36	-	-
120U/DM3 0.1-100 rpm	0.018-18	0.021-21	0.026-26	0.031-31	0.036-36	-	-

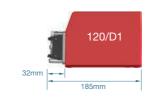
Product ordering

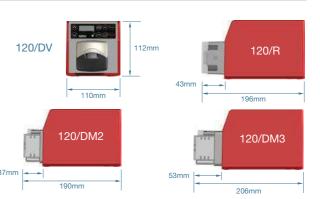
Pump								
	Specification		Pumphead				Product code	
120F/DV	10 rpm		114DV pumphea	010.6111.DA0				
	17 rpm		114DV pumphea	010.6112.DA0				
	31 rpm		114DV pumphea		010.6113.DA0			
	52 rpm			d, continuous tubir	•		010.6114.DA0	
	220 rpm		114DV pumphea	d, continuous tubir	ng, max 0.5 bar		010.6115.DA0	
120F/R	10 rpm		102R pumphead,	010.6111.R00				
	17 rpm		102R pumphead,	continuous tubing	g, max 0.5 bar		010.6112.R00	
	31 rpm			continuous tubing	**		010.6113.R00	
120S/DV			114DV pumphea	010.6131.DA0				
120S/R			102R pumphead,	010.6131.R00				
120S/D1			400D1 pumphead	010.6131.010				
120S/DM2			400DM2 pumphe	010.6131.M20				
120S/DM3	1-100 rpm 400		400DM3 pumphe	00DM3 pumphead, manifold tubing, max 2 bar				
120U/DV	0.1-200 rpm		114DV pumphea	d, continuous tubir	ng, max 2 bar		010.6141.DA0	
120U/R	0.1-32 rpm		102R pumphead,	continuous tubing	g, max 2 bar	010.6141.R00		
120U/D1	0.1-200 rpm		400D1 pumphead	d, continuous tubir	ng, max 2 bar		010.6141.010	
120U/DM2	0.1-100 rpm		400DM2 pumphe	ad, manifold tubin	g, max 2 bar		010.6141.M20	
120U/DM3	0.1-100 rpm		400DM3 pumphe	ad, manifold tubin	g, max 2 bar		010.6141.M30	
Pumpheads								
	Specification						Product code	
Pumphead	•	16						
114DV		d for maximum 2					013.6000.00A	
102R				•	umpsil silicone tubir	ng only	013.7101.000	
400D1				ng only, 3.2mm (1/	8in) bore maximum		043.001D.D1C	
400DM2		2-channel pumphead. Accepts manifold tubing only					043.001D.D2C	
400DM3	3-channel pumpl	head. Accepts ma	anifold tubing only				043.001D.D3C	
Continuous tubin	g for 114DV, 102R	and 400D1 pumph	neads 1.6mm (1/16	in) thin wall tubing				
Bore	0.5mm	0.8mm	1.6mm	2.4mm	3.2mm	4.0mm	4.8mm	
	(#112, 1/50in)	(#13 1/32in)	(#14, 1/16in)	(3/32in)	(#16, 1/8in)	(5/32in)	(#25, 3/16in)	
Pumpsil	913.A005.016	913.A008.016	913.A016.016	913.A024.016	913.A032.016	913.A040.016	913.A048.016	
Bioprene	933.0005.016	933.0008.016	933.0016.016	933.0024.016	933.0032.016	933.0040.016	933.0048.016	
The second second					300.0002.010		333.0040.010	
STA-PURE PCS	-	-	960.0016.016	-	960.0032.016	-	960.0048.016	
STA-PURE PCS	-	-	960.0016.016 965.0016.016	-				
	- - 941.0005.016	- - -		- -	960.0032.016	-	960.0048.016	
STA-PURE PFL PureWeld XL	941.0005.016	- - - noheads).	965.0016.016	- - -	960.0032.016 965.0032.016	-	960.0048.016 965.0048.016	
STA-PURE PFL PureWeld XL	941.0005.016 (DM2 and DM3 Pun	· · · · · · · · · · · · · · · · · · ·	965.0016.016 941.0016.016	-	960.0032.016 965.0032.016 941.0032.016	- - -	960.0048.016 965.0048.016 941.0048.016	
STA-PURE PFL PureWeld XL Manifold Tubing olour code	941.0005.016 (DM2 and DM3 Pun Bore (mm)	· · · · · · · · · · · · · · · · · · ·	965.0016.016		960.0032.016 965.0032.016 941.0032.016 ygon R3603/3607	- - -	960.0048.016 965.0048.016	
STA-PURE PFL PureWeld XL Manifold Tubing olour code range/black	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13	· · · · · · · · · · · · · · · · · · ·	965.0016.016 941.0016.016	9	960.0032.016 965.0032.016 941.0032.016 5ygon R3603/3607 981.A013.072	- - -	960.0048.016 965.0048.016 941.0048.016	
STA-PURE PFL PureWeld XL Manifold Tubing olour code range/black range/red	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19	F -	965.0016.016 941.0016.016 Pharmed	9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 ygon R3603/3607 981.A013.072 981.A019.072	-	960.0048.016 965.0048.016 941.0048.016 Tygon LFL	
STA-PURE PFL PureWeld XL Manifold Tubing clour code range/black range/red range/blue	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25	- - -	965.0016.016 941.0016.016 Pharmed	9 9 9	960.0032.016 965.0032.016 941.0032.016 7ygon R3603/3607 081.A013.072 081.A019.072 081.A025.072	-	960.0048.016 965.0048.016 941.0048.016 Tygon LFL - - 988.A025.072	
STA-PURE PFL PureWeld XL Manifold Tubing clour code range/black range/red range/blue range/green	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38	- - -	965.0016.016 941.0016.016 Pharmed	9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 Fygon R3603/3607 981.A013.072 981.A019.072 981.A025.072 981.A038.072	-	960.0048.016 965.0048.016 941.0048.016 Tygon LFL	
STA-PURE PFL PureWeld XL Manifold Tubing clour code range/black range/red range/blue range/green reen/yellow	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44	- - - - - - - -	965.0016.016 941.0016.016 Pharmed 979.A025.072 979.A038.072	9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 Fygon R3603/3607 981.A013.072 981.A019.072 981.A025.072 981.A038.072 981.A044.072	-	960.0048.016 965.0048.016 941.0048.016 Tygon LFL - - 988.A025.072 988.A038.072	
STA-PURE PFL PureWeld XL Manifold Tubing olour code range/black range/red range/blue range/green reen/yellow range/yellow	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51	- - - - - - - -	965.0016.016 941.0016.016 Pharmed	9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 5ygon R3603/3607 881.A013.072 881.A019.072 881.A025.072 881.A038.072 881.A044.072 881.A051.072	-	960.0048.016 965.0048.016 941.0048.016 Tygon LFL - - 988.A025.072	
STA-PURE PFL PureWeld XL Manifold Tubing olour code range/black range/red range/blue range/green reen/yellow range/yellow /hite/yellow	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51	F	965.0016.016 941.0016.016 Pharmed 979.A025.072 979.A038.072	9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 5ygon R3603/3607 181.A013.072 181.A019.072 181.A025.072 181.A038.072 181.A044.072 181.A051.072	-	960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A038.072 - 988.A051.072	
STA-PURE PFL PureWeld XL Manifold Tubing olour code range/black range/red range/blue range/green reen/yellow range/yellow /hite/yellow range/white	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51 0.57	F	965.0016.016 941.0016.016 Pharmed 979.A025.072 979.A038.072 979.A051.072	9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 7990 R3603/3607 881.A013.072 881.A019.072 881.A025.072 881.A038.072 881.A044.072 881.A051.072 881.A051.072 881.A051.072		960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A038.072 - 988.A051.072 - 988.A064.072	
STA-PURE PFL PureWeld XL Manifold Tubing olour code range/black range/red range/blue range/green reen/yellow range/yellow /hite/yellow range/white	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51 0.57 0.64 0.76	F	965.0016.016 941.0016.016 Pharmed 979.A025.072 979.A038.072 979.A051.072 979.A064.072 979.A076.072	9 9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 941.0032.016 981.A013.072 981.A019.072 981.A025.072 981.A025.072 981.A04.072 981.A051.072 981.A051.072 981.A057.072 981.A064.072 981.A076.072	-	960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A038.072 - 988.A051.072 - 988.A064.072 988.A076.072	
STA-PURE PFL PureWeld XL Manifold Tubing olour code range/black range/red range/flue range/green reen/yellow range/yellow range/white lack/black range/orange	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51 0.57 0.64 0.76 0.89	F	965.0016.016 941.0016.016 Pharmed 979.A025.072 979.A038.072 979.A051.072	9 9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 879on R3603/3607 881.A013.072 881.A025.072 881.A038.072 881.A04.072 881.A057.072 881.A057.072 881.A064.072 881.A064.072 881.A076.072	-	960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A038.072 - 988.A051.072 - 988.A064.072	
STA-PURE PFL PureWeld XL Manifold Tubing olour code range/black range/red range/folue range/green reen/yellow range/yellow range/white lack/black range/orange /hite/black	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51 0.57 0.64 0.76 0.89 0.95		965.0016.016 941.0016.016 941.0016.016 979.A025.072 979.A038.072 979.A051.072 979.A064.072 979.A064.072 979.A089.072	9 9 9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 (ygon R3603/3607 181.A013.072 181.A019.072 181.A025.072 181.A038.072 181.A044.072 181.A051.072 181.A051.072 181.A057.072 181.A059.072 181.A095.072 181.A095.072		960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A038.072 - 988.A051.072 - 988.A064.072 988.A076.072 988.A076.072	
STA-PURE PFL PureWeld XL Manifold Tubing clour code range/black range/red range/blue range/green reen/yellow	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51 0.57 0.64 0.76 0.89		965.0016.016 941.0016.016 Pharmed 979.A025.072 979.A038.072 979.A051.072 979.A064.072 979.A076.072	9 9 9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 879on R3603/3607 881.A013.072 881.A025.072 881.A038.072 881.A04.072 881.A057.072 881.A057.072 881.A064.072 881.A064.072 881.A076.072		960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A038.072 - 988.A051.072 - 988.A064.072 988.A076.072	
STA-PURE PFL PureWeld XL Manifold Tubing olour code range/black range/red range/jolue range/green reen/yellow range/yellow range/yellow range/white lack/black range/orange /hite/black /hite/black /hite/white	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51 0.57 0.64 0.76 0.89 0.95		965.0016.016 941.0016.016 941.0016.016 979.A025.072 979.A038.072 979.A051.072 979.A064.072 979.A064.072 979.A089.072	9 9 9 9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 (ygon R3603/3607 181.A013.072 181.A019.072 181.A025.072 181.A038.072 181.A044.072 181.A051.072 181.A051.072 181.A057.072 181.A059.072 181.A095.072 181.A095.072		960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A038.072 - 988.A051.072 - 988.A064.072 988.A076.072 988.A076.072	
STA-PURE PFL PureWeld XL Manifold Tubing olour code range/black range/red range/jolue range/green reen/yellow range/yellow //tite/yellow range/orange //tite/black range/orange //tite/black //tite/white //tite/red	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51 0.57 0.64 0.76 0.89 0.95 1.02		965.0016.016 941.0016.016 941.0016.016 979.A025.072 979.A038.072 979.A051.072 979.A064.072 979.A064.072 979.A089.072	9 9 9 9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 8ygon R3603/3607 881.A013.072 881.A025.072 881.A038.072 881.A044.072 881.A051.072 881.A051.072 881.A050.072 881.A064.072 881.A064.072 881.A064.072 881.A095.072	-	960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A038.072 - 988.A051.072 - 988.A064.072 988.A076.072 988.A076.072	
STA-PURE PFL PureWeld XL Manifold Tubing olour code range/black range/red range/blue range/green reen/yellow range/yellow range/yellow range/white lack/black range/orange /hite/black /hite/white /hite/red ad/red	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51 0.57 0.64 0.76 0.89 0.95 1.02 1.09		965.0016.016 941.0016.016 941.0016.016 979.A025.072 979.A025.072 979.A051.072 979.A064.072 979.A064.072 979.A089.072	9 9 9 9 9 9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 8ygon R3603/3607 881.A013.072 881.A025.072 881.A038.072 881.A051.072 881.A051.072 881.A051.072 881.A051.072 881.A050.072 881.A050.072 881.A050.072 881.A050.072 881.A050.072 881.A050.072	-	960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A038.072 - 988.A051.072 - 988.A064.072 988.A076.072 988.A089.072 - 988.A102.072	
STA-PURE PFL PureWeld XL Manifold Tubing clour code range/black range/red range/blue range/green reen/yellow range/yellow range/yellow range/white lack/black range/orange rhite/black range/orange rhite/black rhite/white rhite/red ded/red ded/grey	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51 0.57 0.64 0.76 0.89 0.95 1.02 1.09 1.14		965.0016.016 941.0016.016 941.0016.016 979.A025.072 979.A025.072 979.A051.072 979.A064.072 979.A064.072 979.A089.072	9 9 9 9 9 9 9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 941.0032.016 8 8 941.0032.016 8 941.0032.016 8 941.0032.016 8 941.0032.016 8 941.0032.012 8 941.0032.072 8 941.0038.072 8 941.0038.072 8 941.005.072 8 941.005.072 8 941.005.072 8 941.005.072 8 941.005.072 8 941.005.072 8 941.005.072 8 941.005.072 8 941.005.072 8 941.005.072 8 941.005.072 8 941.005.072 8 941.005.072 8 941.005.072 8 941.005.072		960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A038.072 - 988.A051.072 - 988.A064.072 988.A076.072 988.A089.072 - 988.A102.072	
STA-PURE PFL PureWeld XL Manifold Tubing clour code range/black range/red range/green reen/yellow range/yellow range/yellow range/yellow range/orange hite/black range/orange hite/black chite/white hite/red ded/red ded/grey reey/grey	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51 0.57 0.64 0.76 0.89 0.95 1.02 1.09 1.14 1.22		965.0016.016 941.0016.016 941.0016.016 979.A025.072 979.A025.072 979.A051.072 979.A064.072 979.A064.072 979.A089.072	9 9 9 9 9 9 9 9 9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 941.0032.016 2941.0032.016 2941.0032.016 2941.0032.016 2941.0032.016 2941.0032.072 2941.0038.072 2941.0057.072		960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A038.072 - 988.A051.072 - 988.A064.072 988.A064.072 988.A069.072 - 988.A012.072 - 988.A102.072 -	
STA-PURE PFL PureWeld XL Manifold Tubing blour code range/black range/red range/green reen/yellow range/yellow range/white lack/black range/orange rhite/black rhite/white rhite/red ded/grey rey/grey ellow/yellow	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51 0.57 0.64 0.76 0.89 0.95 1.02 1.09 1.14 1.22 1.30		965.0016.016 941.0016.016 941.0016.016 979.A025.072 979.A038.072 979.A051.072 979.A064.072 979.A089.072 979.A102.072	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 841.0032.016 841.0032.016 841.0032.016 841.0032.012 841.003072 841.003072 841.003072 841.0051.072 841.0051.072 841.0051.072 841.0051.072 841.0051.072 841.0051.072 841.0051.072 841.0051.072 841.0051.072 841.0051.072 841.0051.072 841.0051.072 841.0051.072 841.0051.072 841.0051.072 841.0051.072		960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A051.072 - 988.A051.072 - 988.A064.072 988.A076.072 988.A089.072 - 988.A114.072 - 988.A114.072 - 988.A130.072	
STA-PURE PFL PureWeld XL Manifold Tubing olour code range/black range/red range/plue range/green reren/yellow range/yellow range/white lack/black range/orange white/black rihite/black rihite/white white/red add/red add/grey rey/grey ellow/yellow ellow/blue	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51 0.57 0.64 0.76 0.89 0.95 1.02 1.09 1.14 1.22 1.30 1.42 1.52		965.0016.016 941.0016.016 941.0016.016 979.4025.072 979.4038.072 979.4051.072 979.4064.072 979.4064.072 979.4089.072 979.4142.072 979.4142.072	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 941.0032.016 881.0013.072 881.0019.072 881.0025.072 881.0025.072 881.00272 881.00272 881.00272 881.005.072 881.005.072 881.005.072 881.005.072 881.005.072 881.005.072 881.005.072 881.005.072 881.005.072 881.005.072 881.005.072 881.005.072 881.005.072 881.005.072 881.005.072 881.005.072 881.005.072 881.005.072 881.005.072		960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A038.072 - 988.A051.072 - 988.A064.072 988.A064.072 988.A069.072 - 988.A114.072 - 988.A114.072 - 988.A130.072 988.A130.072 988.A142.072	
STA-PURE PFL PureWeld XL Manifold Tubing olour code range/black range/black range/red range/green reen/yellow range/yellow rhite/yellow range/white lack/black range/orange rhite/black rhite/white rhite/red ad/grey rey/grey ellow/yellow ellow/blue lue/blue	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51 0.57 0.64 0.76 0.89 0.95 1.02 1.09 1.14 1.22 1.30 1.42 1.52 1.65		965.0016.016 941.0016.016 941.0016.016 979.A025.072 979.A038.072 979.A051.072 979.A064.072 979.A064.072 979.A089.072 979.A102.072	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 941.0032.016 881.A013.072 881.A025.072 881.A025.072 881.A051.072 881.A051.072 881.A051.072 881.A064.072 881.A089.072 881.A095.072 881.A102.072 881.A102.072 881.A102.072		960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A038.072 - 988.A051.072 - 988.A064.072 988.A064.072 988.A089.072 988.A102.072 - 988.A114.072 - 988.A114.072 - 988.A130.072	
STA-PURE PFL PureWeld XL Manifold Tubing olour code range/black range/red range/folue range/green reen/yellow range/yellow range/white lack/black range/orange rhite/black rhite/white dd/red ed/grey rery/grey ellow/yellow ellow/blue lue/blue lue/green	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51 0.57 0.64 0.76 0.89 0.95 1.02 1.09 1.14 1.22 1.30 1.42 1.52 1.65 1.75		965.0016.016 941.0016.016 941.0016.016 Pharmed 079.A025.072 079.A038.072 079.A051.072 079.A064.072 079.A064.072 079.A089.072 079.A102.072 079.A114.072 079.A142.072 079.A165.072	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 941.0032.016 881.4013.072 881.4019.072 881.4038.072 881.4057.072 881.4057.072 881.4057.072 881.4095.072 881.4095.072 881.4102.072 881.414.072 881.414.072 881.415.072 881.415.072		960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A038.072 - 988.A051.072 - 988.A064.072 988.A069.072 - 988.A114.072 - 988.A114.072 - 988.A130.072 988.A142.072 988.A152.072 988.A152.072	
STA-PURE PFL PureWeld XL Manifold Tubing olour code range/black range/red range/solue range/green range/green range/gllow range/yellow range/yellow range/white lack/black range/orange rhite/black rhite/white did/red did/red did/grey rery/grey ellow/yellow ellow/blue lue/blue lue/green reen/green	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51 0.57 0.64 0.76 0.89 0.95 1.02 1.09 1.14 1.22 1.30 1.42 1.52 1.65 1.75 1.85		965.0016.016 941.0016.016 941.0016.016 941.0016.016 Pharmed 079.A025.072 079.A038.072 079.A051.072 079.A064.072 079.A064.072 079.A102.072 079.A114.072 079.A114.072 079.A152.072 079.A165.072 079.A165.072	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 941.0032.016 8941.0032.016 8941.0032.016 8941.0032.016 8941.0032.016 8941.004.072 891.0025.072		960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A038.072 - 988.A051.072 - 988.A064.072 988.A076.072 988.A089.072 - 988.A114.072 - 988.A130.072 988.A142.072 988.A152.072 988.A152.072 988.A152.072	
STA-PURE PFL PureWeld XL Manifold Tubing olour code range/black range/red range/green reen/yellow range/yellow range/yellow range/yellow range/white lack/black range/orange white/black range/orange reellow/yellow ellow/plow ellow/plow ellow/plue lue/green reen/green urple/purple	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51 0.57 0.64 0.76 0.89 0.95 1.02 1.09 1.14 1.22 1.30 1.42 1.52 1.65 1.75 1.85 2.06		965.0016.016 941.0016.016 941.0016.016 941.0016.016 979.A025.072 979.A038.072 979.A051.072 979.A064.072 979.A089.072 979.A114.072 979.A114.072 979.A165.072 979.A165.072 979.A185.072 979.A206.072	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 941.0032.016 8		960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A038.072 - 988.A051.072 - 988.A064.072 988.A076.072 988.A089.072 - 988.A102.072 - 988.A114.072 - 988.A142.072 988.A142.072 988.A152.072 988.A152.072 988.A152.072 988.A152.072	
STA-PURE PFL PureWeld XL Manifold Tubing olour code range/black range/red range/solue range/green range/green range/gllow range/yellow range/yellow range/white lack/black range/orange rhite/black rhite/white did/red did/red did/grey rery/grey ellow/yellow ellow/blue lue/blue lue/green reen/green	941.0005.016 (DM2 and DM3 Pun Bore (mm) 0.13 0.19 0.25 0.38 0.44 0.51 0.57 0.64 0.76 0.89 0.95 1.02 1.09 1.14 1.22 1.30 1.42 1.52 1.65 1.75 1.85		965.0016.016 941.0016.016 941.0016.016 941.0016.016 Pharmed 079.A025.072 079.A038.072 079.A051.072 079.A064.072 079.A064.072 079.A102.072 079.A114.072 079.A114.072 079.A152.072 079.A165.072 079.A165.072	9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	960.0032.016 965.0032.016 941.0032.016 941.0032.016 941.0032.016 8941.0032.016 8941.0032.016 8941.0032.016 8941.0032.016 8941.004.072 891.0025.072		960.0048.016 965.0048.016 941.0048.016 Tygon LFL 988.A025.072 988.A038.072 - 988.A051.072 - 988.A064.072 988.A076.072 988.A089.072 - 988.A114.072 - 988.A130.072 988.A142.072 988.A152.072 988.A152.072 988.A152.072	

Weights

120 cased pump weights								
120/DV	120/R	120/D1	120/DM2	120/DM3				
1.50kg	1.55kg	1.65kg	1.70kg	1.70kg				







6