



Improving your PERFORMANCE

501DF/RLA and 501DF/RL2A ATEX pumps

Technical information

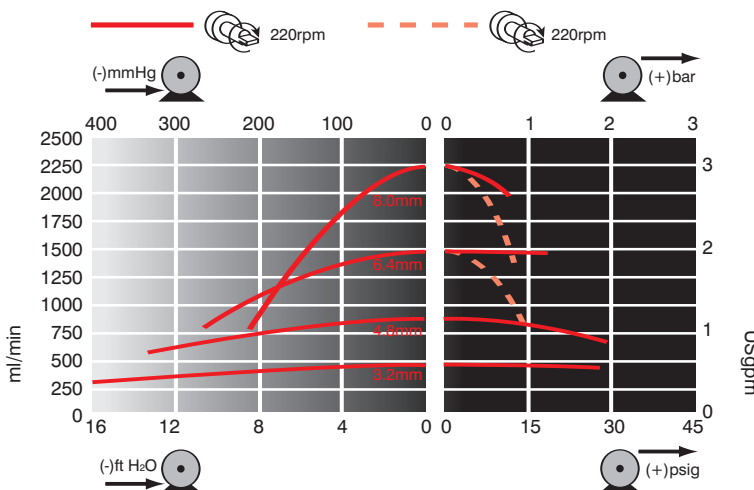
- ATEX Category II Group 2 Gas max surface temperature 135C (II 2G c IIB T4) pump assembly
- 501RLA pumphead uses 1.6mm wall thickness tubing
- 501RL2A pumphead uses 2.4mm wall thickness tubing for higher pressure and viscous fluids
- Pumpheads have twin spring-loaded rollers for long tube life and tool lockable guard
- 0.18kW 230/400V 3 phase 50Hz TEFC EExd IIB T4 geared units with or without positive temperature coefficient (PTC) thermistors
- Three 0.18kW pump assemblies with PTC thermistors fitted are available for use with inverters. 0.25kW inverters are available with various control functions



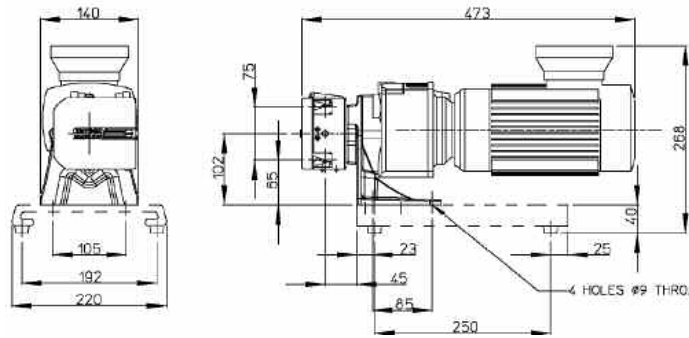
Flow rates at transfer pressure with water at 20C

Tube bore and flow rates (ml/min)							
Speed range	0.5mm	0.8mm	1.6mm	3.2mm	4.8mm	6.4mm	8.0mm
62rpm	2.6	7.6	26	120	250	390	620
223rpm	9.3	27	95	410	900	1400	2200
281rpm	12	34	120	520	1100	1800	2800
6 to 62rpm*	0.25-2.6	0.74-7.6	2.6-26	11-120	24-250	38-390	60-620
22 to 223rpm*	0.92-9.3	2.7-27	9.4-95	41-410	89-900	140-1400	220-2200
28 to 281rpm*	1.2-12	3.4-34	12-120	52-520	110-1100	180-1800	280-2800

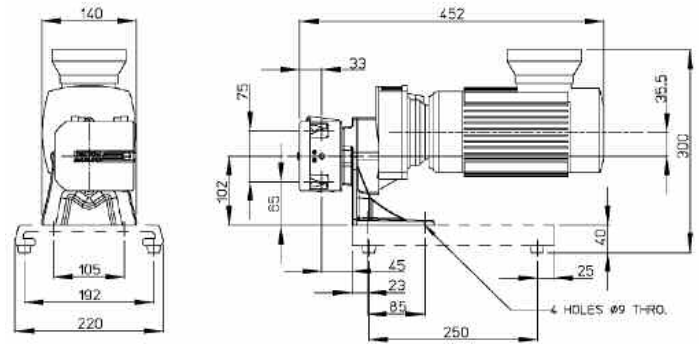
Maximum duty pressure with 6.4mm and 8.0mm bore tube is 1 bar. Maximum duty pressure with other tube bore sizes is 2 bar.
*10:1 speed reduction available using VFD. Geared units fitted with PTC thermistors



62rpm model



223rpm model and 281rpm models



501DF/RLA and 501DF/RL2A

Order information			
Pump ordering codes			
Pump	rpm	Supply	Product code
501DF/RLA ATEX fixed speed	62	230/400V 50Hz 3ph 0.18kW	050.8322.L00
	223	230/400V 50Hz 3ph 0.18kW	050.8352.L00
	281	230/400V 50Hz 3ph 0.18kW	050.8372.L00
501DF/RLA ATEX fixed speed PTC's plated for inverter use	62	230/400V 50Hz 3ph 0.18kW, 10:1*	050.8622.L00
	223	230/400V 50Hz 3ph 0.18kW, 10:1*	050.8652.L00
	281	230/400V 50Hz 3ph 0.18kW, 10:1*	050.8672.L00
501DF/RL2A ATEX fixed speed	62	230/400V 50Hz 3ph 0.18kW	050.8322.L20
	223	230/400V 50Hz 3ph 0.18kW	050.8352.L20
	281	230/400V 50Hz 3ph 0.18kW	050.8372.L20
501DF/RL2A ATEX fixed speed PTC's plated for inverter use	62	230/400V 50Hz 3ph 0.18kW, 10:1*	050.8622.L20
	223	230/400V 50Hz 3ph 0.18kW, 10:1*	050.8652.L20
	281	230/400V 50Hz 3ph 0.18kW, 10:1*	050.8672.L20

*10:1 speed reduction available using VFD from geared units fitted with PTC thermistors

Pumphead ordering codes		
Pumphead	Description	Product code
501RLA	Close coupled pumphead for 1.6mm wall thickness tubing	053.0002.A00
501RL2A	Close coupled pumphead for 2.4mm wall thickness tubing	053.0002.A20
501RLGA	Close coupled pumphead for 1.6mm wall thickness STA-PURE tubing	053.0022.A0G
501RL2GA	Close coupled pumphead for 2.4mm wall thickness STA-PURE tubing	053.0022.A2G

Variable frequency drive ordering (0.25kW)			
Inverter	Filter	Supply	Product code
Micromaster Compact "Plus"	Class B	230/400V 50Hz/60Hz 3ph	079.4025.1FP
Micromaster Compact "Basic"	Class A	230/400V 50Hz/60Hz 3ph	079.4025.1FB
Micromaster Compact "Vector"	Class A	230/400V 50Hz/60Hz 3ph	079.4025.1FV

Specification

Weight	15kg max
Ingress protection	IP55 geared unit
Operational temperature range	5°C to 40°C
Noise	< 70dB(A) @ 1m
Control ratio	10:1 for motors fitted with thermistors
Standards	CE. EN60529 (IP55), EN50014, EN13463-1:2001
Supply	230/400V 50Hz 3 phase

Materials of construction

Motor	Cast aluminium alloy
Gearbox	Cast iron
Track	Zinc alloy - powder coated
Rotor body and tube clamps	Zinc alloy - chromium plated
Earth lead	Copper – tin plated
Springs	Stainless steel DIN 17224
Roller spindles, rotor collet	Stainless steel 303S31
Main and follower rollers	MOS2 filled Nylon
Guide rollers, guard hinges	Kematal (Acetal copolymer)
Rollers (G) models	Stainless steel 303S31
Guard	Polycarbonate - carbon painted
Tube clamps	Kematal (Acetal copolymer)
Tube clamp springs	Stainless steel 301S21

Tubing 2.4mm wall tubing ordering codes (change last 3 code digits to 016 for 1.6mm wall tubing)				
Bore/wall (mm)	Bioprene	Marprene	Platinum Silicone	PVC
1.6 / 1.6	903.0016.016	902.0016.016	913.A016.016	950.0016.016
3.2 / 1.6	903.0032.016	902.0032.016	913.A032.016	950.0032.016
4.8 / 1.6	903.0048.016	902.0048.016	913.A048.016	950.0048.016
6.4 / 1.6	903.0064.016	902.0064.016	913.A064.016	950.0064.016
8.0 / 1.6	903.0080.016	902.0080.016	913.A080.016	950.0080.016
1.6 / 2.4	903.0016.024	902.0016.024	913.A016.024	
3.2 / 2.4	903.0032.024	902.0032.024	913.A032.024	
4.8 / 2.4	903.0048.024	902.0048.024	913.A048.024	
6.4 / 2.4	903.0064.024	902.0064.024	913.A064.024	
Bore/wall (mm)	Neoprene	STA-PURE®	Chem-Sure®	Fluorel®
1.6 / 1.6	920.0016.016	960.0016.016	965.0016.016	970.0016.016
3.2 / 1.6	920.0032.016	960.0032.016	965.0032.016	970.0032.016
4.8 / 1.6	920.0048.016	960.0048.016	965.0048.016	970.0048.016
6.4 / 1.6	920.0064.016	960.0064.016	965.0064.016	970.0064.016
8.0 / 1.6	920.0080.016	960.0080.016	965.0080.016	970.0080.016
1.6 / 2.4		960.0016.024	965.0016.024	
3.2 / 2.4		960.0032.024	965.0032.024	
4.8 / 2.4		960.0048.024	965.0048.024	
6.4 / 2.4		960.0064.024	965.0064.024	



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