CHEMSTEEL™ PUMP SERIES RM102 METALLIC

CHEMSTEEL™ PUMP

CHEMSTEEL PUMPS SERIES RM102 M



FEATURES

Gear/bearing design allows for "trimming" for optimizing the pump's maximum flow to reach minimum turndown or to match flow to a specific OEM's requirement.

Special materials combinations are available for specific liquids:

- Stainless or Alloy C housing construction.
- Gears available in 316 stainless and Alloy C. Also in Polytetrafluoroethylene (PTFE) and Polyetheretherketone
- Shafts are 316 stainless steel or Alloy C.
- Bearings available in Carbon or Polytetrafluoroethylene (PTFE)

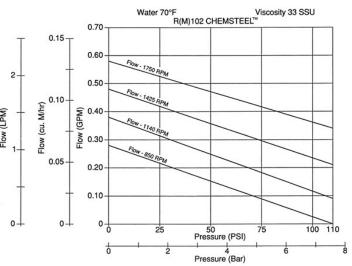
DRIVE

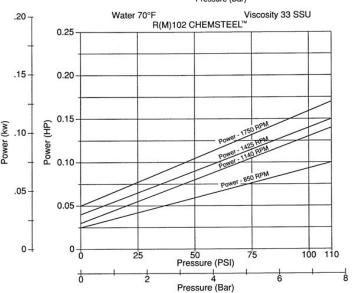
The pump is driven directly from the electric motor shaft by means of a flexible coupling. A close-coupled adapter connects the pump to the motor.

LIQUIDS AND TEMPERATURE

This pump is suitable to handle clear lubricating and non-lubricating fluids at temperatures to 450F. These pumps will handle viscous fluids to 100,000 cps (462,000 SSU) at reduced shaft speeds.

PERFORMANCE





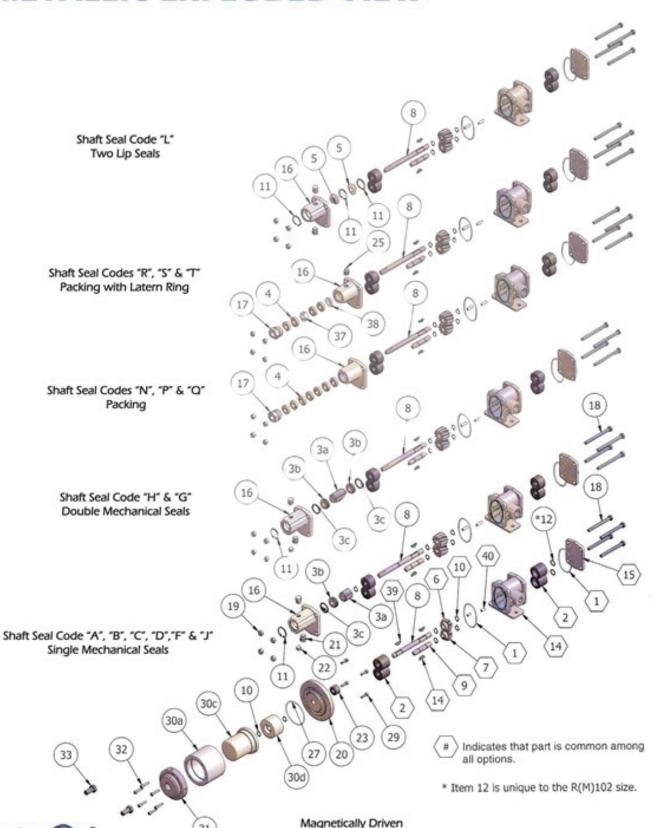
SUCTION LIFT

This pump has a suction lift capability of 20 feet for a new pump. Though gear pumps are self-priming, a foot valve is recommended. If possible, wet gears with the liquid to be pumped for the first dry start. Liquid retained in the system and gear chambers serves to wet the pump on subsequent starts.

EXPLODED VIEW AND PARTS LIST



R(M)102, R(M)103, R(M)104 & R(M)106 METALLIC EXPLODED VIEW



CHEMkit Parts

No.	Part No.	Part Name	Req.		61												
			GEAR CODE														
						2	3	4	5		7		9			E	F
6		Drive Gear-316 SS	1														
6		Drive Gear-PEEK	1														
6		Drive Gear-Alloy C	1				4										
6		Drive Gear-Teflon	1														
7		Idle Gear-316 SS	1														
7		Idle Gear-PEEK	1														
7		Idle Gear-Alloy C	1														
7	2317	Idle Gear-Teflon	1														
	_			BEARING CODE C P													
2	2318	Bearing, Carbon Graphite	4														
2		Bearing, Teflon	4														
23	2313	5th Bearing, Carbon Graphite	1	(2)	1												
23	2314	5th Bearing , Rulon	1														

										S	EAL (CODE	's							MAG (CODE's
				Α	В	С	D	F	G	Н	J	Z	L	N	P	Q	R	S	Т	M	W
1	9355-031	O-Ring, Body -Teflon Encapsulating Silicone	2																		
3	32674A	Single Mech. Stainless Wedge Carb/Ceramic/TFE/Kalrez	1																		
3	32823	Single Mech. Alloy C Wedge Carb/Ceramic/TFE/Kalrez	1																		
3	33067	Single Mech. Stainless Wedge Carb/SilCarb/TFE/Kalrez	1																		
3	33068	Single Mech. Alloy C Wedge Carb/SilCarb/TFE/Kalrez	1																		
3	33065	Single Mechanical Bellows Carb/Ceramic/Viton/Viton	1																		
3	33073	Single Mechanical Bellows SilCarb/Silcarb/EPDM/EPDM	1																		
3	33075	Double Mechanical Wedge Carb/SilCarb/TFE/Kalrez	1																		
3	33078	Double Mechanical Bellows Carb/Ceramic/Viton/Viton	1																		
3	33131	Single Mechanical Bellows SilCarb/Silcarb/Viton/Viton	1																	1	
4	9140	Packing Ring, Teflon with Graphite	7 or 4											7			4				
4	9483	Packing Ring, Grafoil	7 or 4												7			4			
4	2498	Packing Ring, Teflon	8 or 5													8			5		
5	2748	Lip Seal	2																		
8	3127	Drive Shaft - Single Mechanical Seals (Stainless)	1																		
8	3128	Drive Shaft - Single Mechanical Seals (Alloy C)	1																		
8	3129	Drive Shaft (Stainless)	1																		
8	3130	Drive Shaft (Alloy C)	1																		
8	2306	Drive Shaft - Mag (Stainless)	1																		
8	2307	Drive Shaft - Mag (Alloy C)	1																		
9	3131	Idle Shaft (Stainless)	1																		
9	3132	Idle Shaft (Alloy C)	1																		
10	2067	Clip, Retaining (Stainless)	4,5, or 6	5	5	5	5	5	4	4	5	5	4	4	4	4	4	4	4	6	6
10	2068	Clip, Retaining (Alloy C)	4,5, or 6	5	5	5	5	5	4	4	5	5	4	4	4	4	4	4	4	6	6
11	7065	Retaining Ring	1 or 3	1	-1	1	1	1	1	1	1	1	3						igspace		
12	2336	Wave Spring (Alloy C)	2																		
39	9524	Key, Woodruff	1 1	_															-		
14	9524	Key, Woodruff	2																		

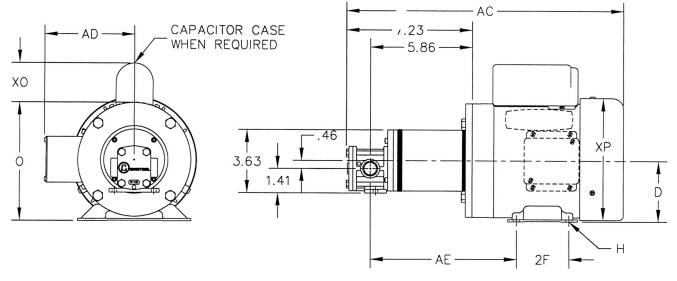
Other Parts

				SEAL CODE's									MAG CODE's								
				Α	В	С	D	F	G	Н	J	Z	L	N	Р	Q	R	S	Т	М	W
14	9127S-1P	Body with 1/4" NPT Ports (Stainless)	1																		
14	9127H-1P	Body with 1/4" NPT Ports (Alloy C)	1																		
15	9128S-1	Rear Cover (Stainless)	1																		
15	9128H-1	Rear Cover (Alloy C)	1																		
16	9130S-3	Front Cover, Single/ Double Mechanical (Stainless)	1																		
16	9130H-3	Front Cover, Single/ Double Mechanical (Alloy C)	1																		
16	9129S-5	Front Cover, Lip (Stainless)	1																		
16	9129S-1	Front Cover, Packing (Stainless)	1																		
16	9129H-1	Front Cover, Packing (Alloy C)	1																		
16	9129S-3	Front Cover, Lantern Packing (Stainless)	1																		
16	9129H-3	Front Cover, Lantern Packing (Alloy C)	1																		
17	9138	Pack Nut (Stainless)	1	$\overline{}$																	$\overline{}$
17	2746	Pack Nut (Alloy C)	1																		
18	9365-070	Hex Head Cap Screws	4																		
18	9365-062	Hex Head Cap Screws (Mag)	4																		
19	9367	Hex Nuts	4																		
40	9793	Dowel Pin	2																		
21	6600-01	Hex Head Pipe Plug (Stainless)	2																		
21	6600-02	Hex Head Pipe Plug (Alloy C)	2																		
25	5390-01	Grease Lubrication Fitting	1																		
38	2695	Starter Ring	1																		
37	2671	Lantern Ring	1													1					
20	2312S	Pump Adapter (Stainless)	1																		
20	2312H	Pump Adapter (Alloy C)	1																		
26	2302-01	Bell Housing	1																		
27	9355-033	O-Ring, Containment Can -Teflon Encapsulating Silicone	1																		
29	2481-014	Hex Head Cap Screws (Bell/Pump Adapter)	4																		
30 a b c d	2023-3NS	Magnet Kit, Neo (Stainless)	1	$\overline{}$																	
30 a b c d	2023-3NH	Magnet Kit, Neo (Alloy C)	1																		
30a b c d	2023-3SS	Magnet Kit, Sam C (Stainless)	1													1					
30a b c d	2023-3SH	Magnet Kit, Sam C (Alloy C)	1																		

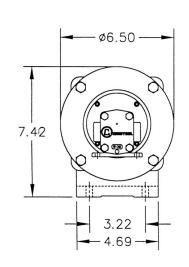
31,32,33,34,35	catalog	Mag - Power End Kit (motor hub, adapters, hardware)
	2464	Optional Mag Foot Kit (not shown)
	catalog	Sealed - Close Coupled Adapter Kit (not shown-faceplate, motor adapter, couplings, hardware)
	catalog	Sealed- Long Mount Bedplate Kits (not shown - base, shims, couplings, coupling guard, hardware)
	catalog	Motors (not shown)
	catalog	Pressure Relief Valve (not shown)

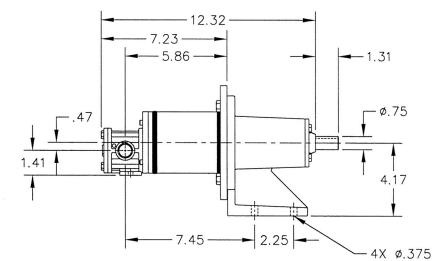
Series	Model	Repair Kit
RM102 M	RM10239CW-T5M1	RM10239CW-T5M1K
	RM10239CW-T5	RM10239CW-T5K
	RM10239CW	RM10239CWK
	RM10237PW-M1	RM10237PW-M1K
	RM10237JW-T12M1	RM10237JW-T12M1K
	RM10235CW-M1	RM10235CW-M1K
	RM10234JW-M1	RM10234JW-M1K
	RM10234CW-M1	RM10234CW-M1K
	RM1021FPWM1-F50	RM1021FPWM1-F50K
	RM1021FPW	RM1021FPWK
	RM1021FCW-M1	RM1021FCW-M1K
	RM1021ECW-M1	RM1021ECW-M1K
	RM1021ECW	RM1021ECWK
	RM10216CWM1-F50	RM10216CWM1-F50K
	RM10216CW-M1	RM10216CW-M1K
	RM10216CW	RM10216CWK
	RM10212PW-F97	RM10212PW-F97K
	RM10212PW	RM10212PWK
	RM10212CW-T5M1	RM10212CW-T5M1K
	RM10212CW-T5	RM10212CW-T5K
	RM10212CW-M1	RM10212CW-M1K
	RM10212CW	RM10212CWK

DIMENSIONS



RM1 MAG DRIVE





RM1 MAG DRIVE W/ PEDESTAL

MAINTENANCE

A three-part housing provides easy disassembly and service. Full size bearings match the gear diameter, and eliminate the need for separate wear plates. TFE encapsulating silicone o-ring pump housing seals provide elastic memory to assure an effective long lasting seal and thus avoiding the re-torqueing required of pumps using pure TFE.

To order a CHEMKIT™ parts kit, simply add a "K" to the end of the model number.

A repair kit contains the following parts: bearings, gears, o-rings, shafts, keys, c clips, and retaining rings.

LIFE CYCLE/COST OF OWNERSHIP

Pump design and materials selection, together provide the longest life available from a gear pump. Key attributes include:

- Gear & bearing combinations of metallic and nonmetallic wear surfaces.
- Slotted bearings to lubricate shaft and gear surfaces.
- Ample port sizing to reduce the likelihood of cavitation when inlet pressure is marginal.
- Effective housing seals with elastic memory prevent leakage of corrosives.

FIT

Connections are 1/4" female NPT or BSPT, pump hardware is metric and close couple adapters mount to both NEMA and IEC standard motor frame sizes for worldwide acceptance.