

CHEMSTEEL™ PUMP SERIES

S214 METALLIC

CHEMSTEEL[™] PUMP

CHEMSTEEL PUMPS SERIES S214 M

PERFORMANCE



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,. W88 stainless and Alloy C. Also in Polytetrafluoroethylene, polyphenylenesulfide and polyetheretherketone.
- Shafts are 316 stainless steel or Alloy C.
- Bearings available in carbon or polytetrafluoroethylene. Full range of seal options including lip seal, packing and mechanical designs.

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 nonlubricating fluids at temperatures to 450F. These pumps will handle viscous fluids to 100,000 cps (462,000 SSU) at reduced shaft speeds.



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

SERIES S214 / SM214 METAL PUMPS

Revised 12/09/03

CHEMkit Parts



Other Parts

							SEAL CODE's												MAG CODE's			
					Α	В	C	D	F	G	н	J	Z	L	N	Р	Q	R	S	Т	M	w
14	7532S-3	Body with 1/2" NPT Ports (Stainless)	1																			
14	7532H-3	Body with 1/2" NPT Ports (Alloy C)	1																			
15	7535S-1	Rear Cover (Stainless)	1																			
15	7535H-1	Rear Cover (Alloy C)	1											-								
16	7534S-3	Front Cover, Single/ Double Mechanical (Stainless)	1																			
16	7534H-3	Front Cover, Single/ Double Mechanical (Alloy C)	1																			
16	8906S-5	Front Cover, Lip (Stainless)	1																		()	
16	8906S-1	Front Cover, Packing (Stainless)	1																			
16	8906H-1	Front Cover, Packing (Alloy C)	1																			
16	8906S-3	Front Cover, Lantern Packing (Stainless)	1																			
16	8906H-3	Front Cover, Lantern Packing (Alloy C)	1																			
17	7552	Pack Nut (Stainless)	1																			
17	8905	Pack Nut (Alloy C)	1																		\square	
18	9365-090	Hex Head Cap Screws	8																			
18	9365-076	Hex Head Cap Screws (Mag)	8																			
19	9367	Hex Nuts	8																			
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	2696	Starter Ring	1																			
37	2672	Lantern Ring	1																			
22	2919-01	Allen Head Pipe Plug (Stainless)	2																			
22	2919-02	Allen Head Pipe Plug (Alloy C)	2																			
20	2489S-2	Pump Adapter (Stainless)	1											1								
20	2489H-2	Pump Adapter (Alloy C)	1																			
26	2099-B	Bell Housing	1																			
27	9355-038	O-Ring, Containment Can -Teflon Encapsulating Silicone	1																			
28	2479-016	Socket Head Cap Screws (Can Flange)	6																			
29	2484-020	Hex Head Cap Screws (Bell/Pump Adapter)	4																			
30 a b c d	2023-8NS	Magnet Kit, Neo (Stainless)	1																			
30 a b c d	2023-8NH	Magnet Kit, Neo (Alloy C)	1																			
30a b c d	2023-8SS	Magnet Kit, Sam C (Stainless)	1																			
30a b c d	2023-8SH	Magnet Kit, Sam C (Alloy C)	1																			
36	2919H-015	0.015" Orifice Plug	1	1																		
31,32,33,34,35	catalog	Mag - Power End Kit (motor hub, ada	pters, hardwa	are)	٦																	
	2464	Optional Mag Foot Kit (not	1																			
	ontolog	Sealed Class Coupled Adenter Kit (not shown foreniste	-																			

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
S214 M	S21437JD	S21437JDK
	S21435PF-C2	S21435PF-C2K
	S21435PF	S21435PFK
	S21435CF-C1	S21435CF-C1K
	S21435CF	S21435CFK
	S21435CD	S21435CDK
	S21435CB	S21435CBK
	S21433JD	S21433JDK
	S2141FPN	S2141FPNK
	S2141FPL	S2141FPLK
	S2141FPC	S2141FPCK
	S2141FPB	S2141FPBK
	S2141FPA-C1	S2141FPA-C1K
	S2141FPA	S2141FPAK
	S2141FJJ	S2141FJJK
	S2141FJH-T5BC2	S2141FJH-T5BC2K
	S2141FJH-T5B	S2141FJH-T5BK
	S2141FCC	S2141FCCK
	S2141FCB-C4	S2141FCB-C4K
	S2141FCB-C2	S2141FCB-C2K
	S2141FCB-C1	S2141FCB-C1K
	S2141FCB	S2141FCBK
	S2141EPB	S2141EPBK

DIMENSIONS



FAX (315) 463-9561

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. The upper shaft configuration lends itself to inline pump seal maintenance without the leakage of trapped chemicals from an incompletely drained pump. To order a CHEMkit®, simply add a "K" to the end of the model number. A repair kit contains the following parts: seals, bearings, gears, o-rings, shafts, keys, c clips, and retaining ring.

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.
- Hydraulic porting to balance axial thrust and to reduce wear.
- 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 1/2" 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. "Near" dimensional interchangeability offers easy upgrade to CHEMSTEEL™ pump. The port size is the same as competitive pumps.