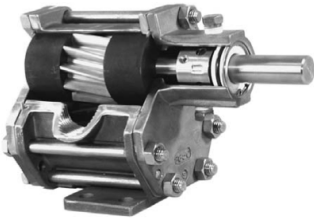


CHEMSTEEL™ PUMP

CHEMSTEEL PUMPS SERIES S210 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.

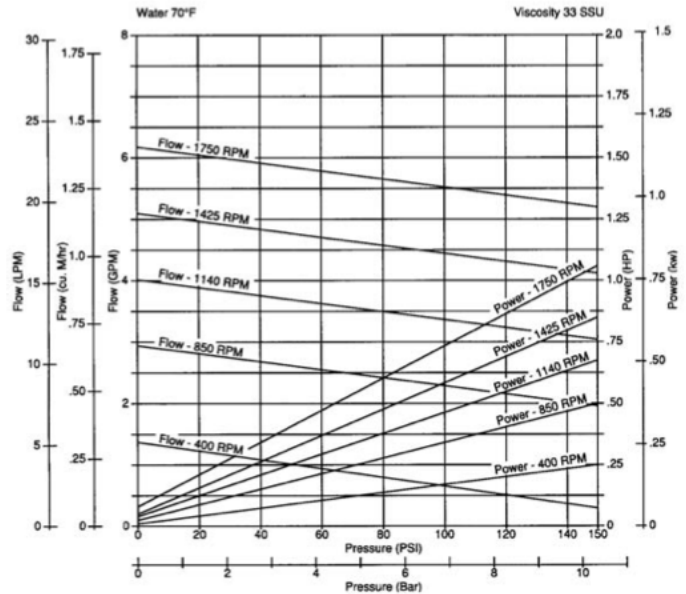
Full range of seal options including lip seal, packing and mechanical designs.

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



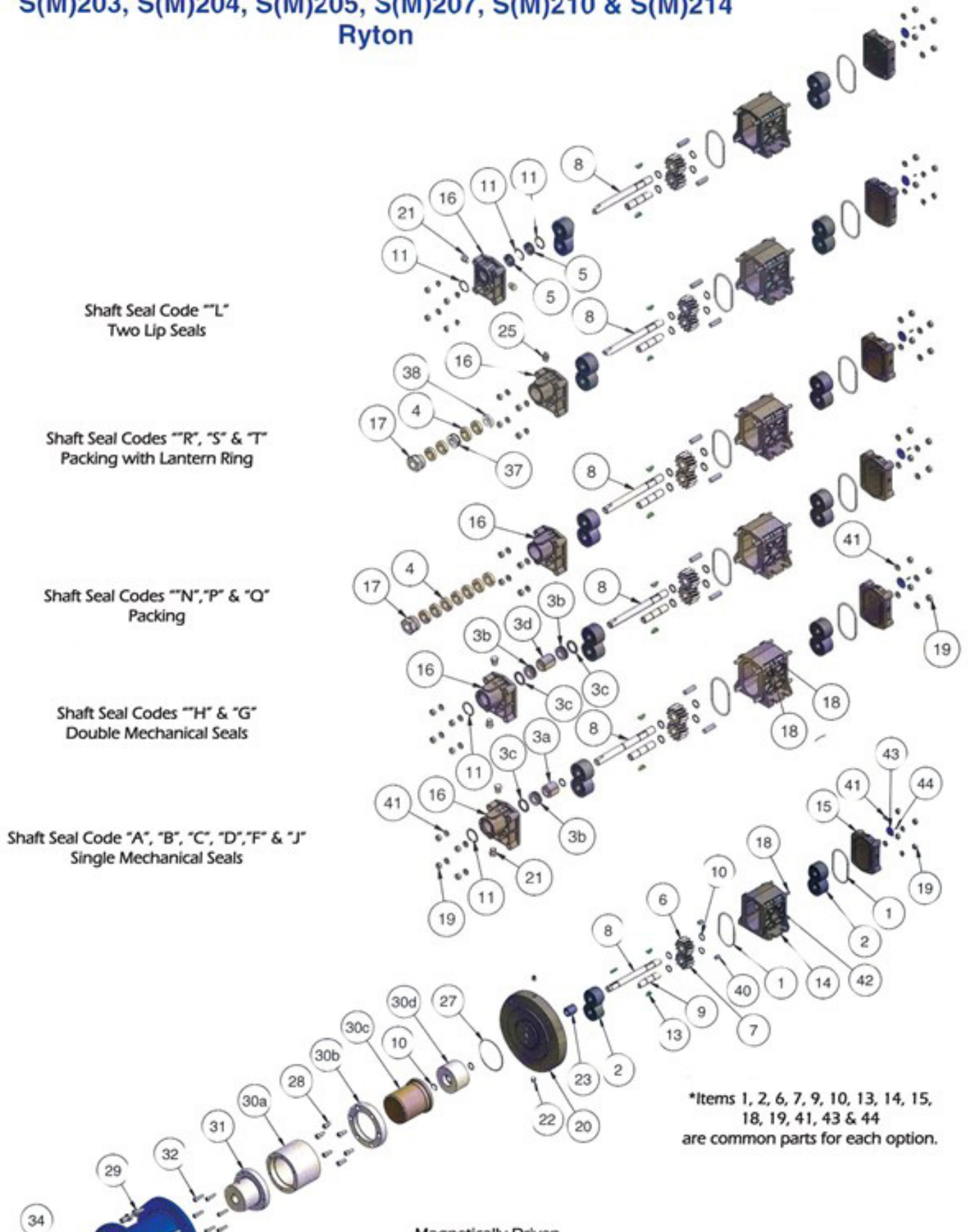
SUCTION LIFT

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

CHEMSTEEL™

Chemsteel™ S(M)203, S(M)204, S(M)205, S(M)207, S(M)210 & S(M)214 Ryton



Shaft Seal Code "L"
Two Lip Seals

Shaft Seal Codes "R", "S" & "T"
Packing with Lantern Ring

Shaft Seal Codes "N", "P" & "Q"
Packing

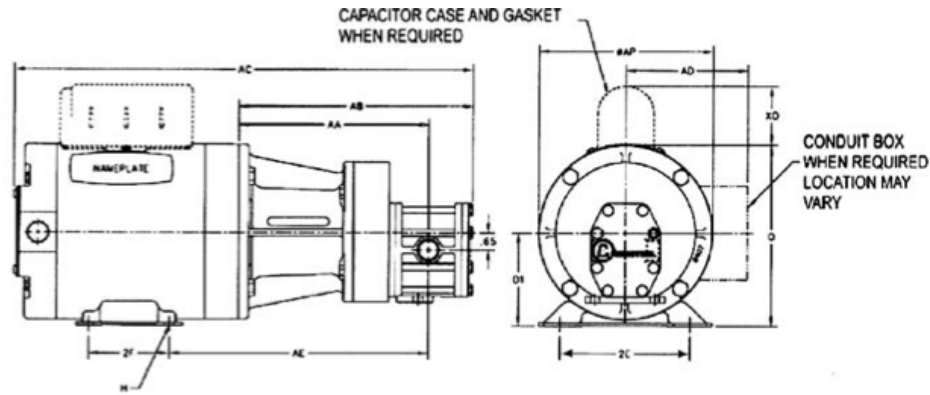
Shaft Seal Codes "H" & "G"
Double Mechanical Seals

Shaft Seal Code "A", "B", "C", "D", "F" & "J"
Single Mechanical Seals

*Items 1, 2, 6, 7, 9, 10, 13, 14, 15,
18, 19, 41, 43 & 44
are common parts for each option.

Series	Model	Repair Kit
S210 M	S21039JD-F50	S21039JD-F50K
	S21039JD	S21039JDK
	S21035JX	S21035JXK
	S21035JD-C2	S21035JD-C2K
	S21035JD	S21035JDK
	S21031CD	S21031CDK
	S2101FPN	S2101FPNK
	S2101FPB-C3	S2101FPB-C3K
	S2101FPB	S2101FPBK
	S2101FPA	S2101FPAK
	S2101FJC-J47	S2101FJC-J47K
	S2101FJC	S2101FJCK
	S2101FCZ	S2101FCZK
	S2101FCQ	S2101FCQK
	S2101FCJ	S2101FCJK
	S2101FCC-C2	S2101FCC-C2K
	S2101FCC	S2101FCCK
	S2101FCB-C1	S2101FCB-C1K
	S2101FCB	S2101FCBK
	S2101FCA-J09	S2101FCA-J09K
	S2101FCA-C2	S2101FCA-C2K
	S2101FCA-C1	S2101FCA-C1K
	S2101FCA	S2101FCAK
	S2101EPH-C1	S2101EPH-C1K
	S2101EPH	S2101EPHK
	S2101EJZ	S2101EJZK

DIMENSIONS

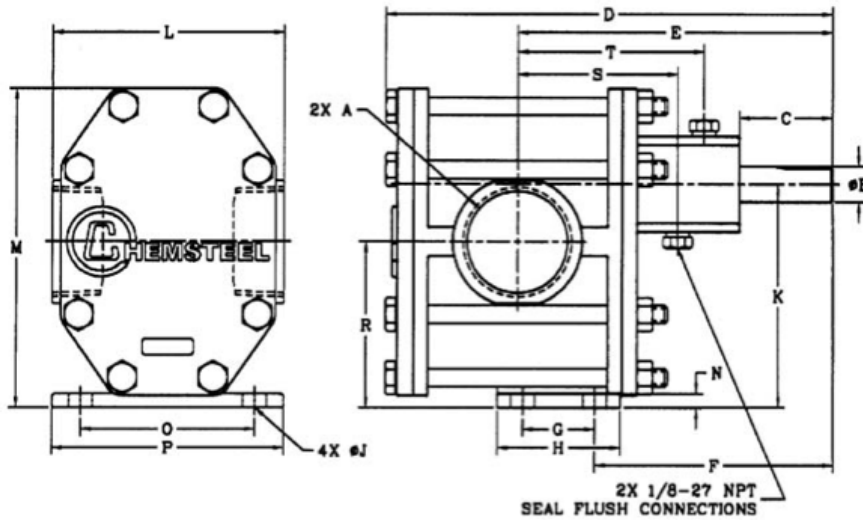


adapter code	kit part no.	motor frame		D1	2E	2F	H				AA	AB			AE	
C1	M2AD56	56C	INCHES	3.50	4.88	3.00	ø.34 SLOT	6.88	6.63	2.25	7.15	8.80	17.18	-	9.71	
			MILLIMETERS	88.9	124	76.2	ø8.6 SLOT	174.8	168.4	57.2	181.6	223.5	436.4	-	246.6	
C2	M2AD45T	143TC	145TC	INCHES	3.50	5.50	4.00	5.00	ø.34 SLOT	6.88	6.63	2.25	-	-	18.37	19.87
				MILLIMETERS	88.9	139.7	102	127	ø8.6 SLOY	174.8	168.4	57.2	7.15	8.80	466.6	504.7
		182C	184C	INCHES	4.50	7.50	4.50	5.50	ø.41 SLOT	8.69	7.88	2.38	-	-	21.09	20.31
				MILLIMETERS	114.3	190.5	114.3	139.7	ø10.41 SLOT	220.7	200	60.3	181.6	223.5	535.7	515.9
C3	M2AD71E	IEC 71, B14 FACE		INCHES	2.80	4.41	3.54	ø.28 SLOT	5.14	4.69	-	6.65	8.30	17.61	4.00	8.42
				MILLIMETERS	71	112	89.9	ø7 SLOT	130.6	119.1	-	168.9	210.8	447.3	102	213.9
C4	M2AD80E	IEC 80, B14 FACE		INCHES	3.15	4.92	3.94	ø.39 SLOT	6.00	5.69	-	6.65	8.30	17.84	4.51	8.62
				MILLIMETERS	80	125	100.1	ø10 SLOT	152.4	144.5	-	168.9	210.8	453.1	116	218.9

1 These dimensions vary depending on hp, enclosure, speed and motor manufacturer. Specifications are subject to change without notification.

	A	B	C			D	E	F	G	H	K			L	M	N	O	P	R
			Mechanical	Pack ¹	Lip						Diameter	Standard drive	Lower drive						
inches	0.50	0.50	1.28	0.72	1.26	6.28	4.60	4.22	0.56	1.38	0.34	2.63	1.33	2.63	3.75	0.25	2.25	3.00	1.97
millimeters	12.7	12.7	32.5	18.2	32.0	159.5	116.8	107.2	14.2	35.1	8.6	66.7	33.7	66.8	95.3	6.4	57.2	76.2	50.0

2. Dimension is approximated with packing nut installed



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-torquing 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™ parts kit, 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 world wide acceptance. “Near” dimensional interchangeability offers easy upgrade to CHEMSTEEL™ pump. The port size is the same as competitive pumps.