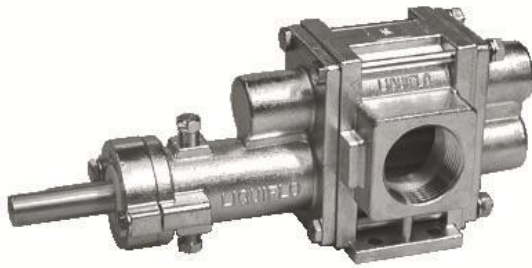




CONSOLIDATED BILL OF MATERIALS (BOM) FOR STANDARD 3-SERIES GEAR PUMPS



**Models 39R & 39F
Sealed, Long-Coupled**



**Models 39R & 39F
Sealed & Mag-Drive,
Close-Coupled**

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Liquiflo Chemical Processing Pumps™	3-Series Gear Pumps BOM: SEALED, LC Models 39R & 39F
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	39R	39F
Position 3 – Basic Material & Port Type (Center Housing, Alignment Pins & Hardware)					
Center Housing, NPT	21	S	316 SS	390001	3110005
Center Housing, Flanged (ANSI 150# RF)	21	L	316 SS	390026	3110004
Center Housing, BSPT	21	X	316 SS	390020	3110003
Pin, Housing Alignment	12	S, L, X	316 SS	360801 (4)	360801 (4)
Bolt, Housing (1/4-20 x 3.00/3.75 HHCS)	4	S, L, X	18-8 SS	390017 (4)	3112002 (4)
Nut, Housing (1/4-20)	10	S, L, X	18-8 SS	862108 (4)	862108 (4)
Lockwasher, Housing (1/4)	15	S, L, X	18-8 SS	863701 (4)	863701 (4)
Position 4 – Drive Gear					
Gear	22	1	Alloy-C	390008	3150022
Gear	22	3	Teflon	390010	3150058
Gear	22	6	316 SS	390007	3150021
Gear	22	P	PEEK	390009	3150024
Key, Gear	23A	1, 3, 6, P	316 SS	3150054	3150019
Position 5 – Idler Gear					
Gear	6	1	Alloy-C	390008	3150022
Gear	6	2	Carbon	390085	3150062
Gear	6	3	Teflon	390010	3150058
Gear	6	6	316 SS	390007	3150021
Gear	6	8	Ryton	390018	3150023
Gear	6	P	PEEK	390009	3150024
Key, Gear	23B	1, 2, 3, 6, 8, P	316 SS	3150054	3150019
Position 6 – Wear Plates					
Wear Plate, Relieved (obsolete)	7	2	Carbon	Use Code E	Use Code E
Wear Plate, Relieved	7	3	Teflon	360497 (4)	360497 (4)
Wear Plate, Relieved	7	4	SiC	360582 (4)	360582 (4)
Wear Plate, Relieved	7	E	Carbon 60	360534 (4)	360534 (4)
Wear Plate, Relieved	7	P	PEEK	360535 (4)	360535 (4)
Position 7 – Bearings					
Bearing (obsolete)	3A/3B	2	Carbon	Use Code E	Use Code E
Bearing	3A/3B	3	Teflon	3150057 (4)	3150057 (4)
Bearing	3A/3B	B	SiC	3150014 (4)	3150014 (4)
Bearing	3A/3B	E	Carbon 60	3150012 (4)	3150012 (4)
Bearing	3A/3B	P	PEEK	3150013 (4)	3150013 (4)
Position 8 – Seal Type					
Mechanical Seal, Single Internal	11	U	316 SS/Carbon	970032	970032
Mechanical Seal, Single Internal	11	S	316 SS/Teflon	970039	970039
Mechanical Seal, External	11	W	316 SS/Carbon	970032	970032
Mechanical Seal, External	11	X	316 SS/Teflon	970039	970039
Mechanical Seal, Double	11	F	316 SS/Carbon	970067	970067
Mechanical Seal, Double	11	H	316 SS/Teflon	970068	970068
Seal Seat, Outer	24	U, S, W, X, F, H	SiC	970123	970123
Seal Seat, Inner	25	F, H	SiC	970121	970121
Gland Plate, SMS/EMS/DMS	17	U, S, W, X, F, H	316 SS	970022	970022
Screw, Gland (1/4-28 x 1 HHCS)	16	U, S, W, X, F, H	18-8 SS	362005 (2)	362005 (2)
Lockwasher, Gland (1/4)	19	U, S, W, X, F, H	18-8 SS	863701 (2)	863701 (2)
Plug, 1/8 NPT	9	U, S, W, X	316 SS	362304 (2)	362304 (2)
Packing Ring	18	L	Teflon	970063 (5)	970063 (5)
Packing Ring	18	R	Graphoil	970062 (5)	970062 (5)
Lantern Ring	11	L, R	316 SS	970064	970064
Gland Plate, PS	17	L, R	316 SS	3150061	3150061
Screw, Gland (1/4-28 x 1 HHCS)	16	L, R	18-8 SS	362005 (2)	362005 (2)
Grease Fitting, 1/8 NPT	24	L, R	303 SS	867201	867201
Plug, 1/8 NPT	9	L, R	316 SS	362304	362304

See page 14 for Reference Drawing.

Liquiflo Chemical Processing Pumps™	3-Series Gear Pumps BOM: SEALED, LC Models 39R & 39F
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	39R	39F
Position 9 – Bearing Flush Option (Front & Rear Housings)					
Front Housing, Standard	8	0	316 SS	970026	970026
Front Housing, External Bearing Flush	8	1	316 SS	970030	970030
Front Housing, Internal Bearing Flush	8	2	316 SS	970028	970028
Rear Housing, Standard	2	0	316 SS	3150006	3150006
Rear Housing, External Bearing Flush	2	1	316 SS	3150010	3150010
Rear Housing, Internal Bearing Flush	2	2	316 SS	3150008	3150008
Plug, 1/8 NPT	9	1	316 SS	362304 (3)	362304 (3)
Position 10 – Shafts					
Drive Shaft, Uncoated (Excluding EMS)	20	0	316 SS	390011	3150052
Drive Shaft, CO-Coated (Excluding EMS)	20	1	316 SS/CO	390011-CO	3150052-CO
Drive Shaft, TC-Coated (Excluding EMS)	20	2	316 SS/TC	390011-TC	3150052-TC
Drive Shaft, Uncoated (EMS only)	20	0	316 SS	Consult Factory	
Drive Shaft, CO-Coated (EMS only)	20	1	316 SS/CO	Consult Factory	
Drive Shaft, TC-Coated (EMS only)	20	2	316 SS/TC	Consult Factory	
Idler Shaft, Uncoated	1	0	316 SS	390005	3150025
Idler Shaft, CO-Coated	1	1	316 SS/CO	390005-CO	3150025-CO
Idler Shaft, TC-Coated	1	2	316 SS/TC	390005-TC	3150025-TC
Position 11 – O-Rings/Gaskets					
O-ring, Housing (2.906" ID x .070" CSD)	5	0	Teflon	361101 (2)	361101 (2)
Gasket, Seal Seat, Outer (MS only)	18	0	Teflon	970024 (2)	970024 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	0	Viton	970120	970120
O-ring, Housing (2.906" ID x .070" CSD)	5	6	Silicone/FEP	371119 (2)	371119 (2)
Gasket, Seal Seat, Outer (MS only)	18	6	Teflon	970024 (2)	970024 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	6	Kalrez	970128	970128
O-ring, Housing (2-040)	5	B	Buna-N	361106 (2)	361106 (2)
Gasket, Seal Seat, Outer (MS only)	18	B	Buna-N	970058 (2)	970058 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	B	Buna-N	970126	970126
O-ring, Housing (2-040)	5	E	EPDM	361105 (2)	361105 (2)
Gasket, Seal Seat, Outer (MS only)	18	E	EPDM	970059 (2)	970059 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	E	EPDM	970127	970127
O-ring, Housing (2-040)	5	V	Viton	361102 (2)	361102 (2)
Gasket, Seal Seat, Outer (MS only)	18	V	Viton	970060 (2)	970060 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	V	Viton	970120	970120
O-ring, Housing (2-040)	5	K	Kalrez	361103 (2)	361103 (2)
Gasket, Seal Seat, Outer (MS only)	18	K	Kalrez	970061 (2)	970061 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	K	Kalrez	970128	970128
Position 12 – Retaining Rings					
Retaining Ring, Gear	14	0	316 SS	3150015 (4)	3150015 (4)
Position 13 – Bearing Pins					
Pin, Bearing Lock	13	0	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	13	6	316 SS	361807 (4)	361807 (4)
Position 14 – Coupling Method					
Long-Coupled	-	9	-	X	X
Suffix – Trim Options					
Temperature Trim (Gears & Bearings)	-	-8(T) ¹	-	Consult Factory	
Viscosity Trim (Gears)	-	-9D, -9T	-		

1 - T = Application Temperature in °F (e.g., -8(300) = Temperature Trim at 300°F).

Liquiflo Chemical Processing Pumps™	3-Series Gear Pumps BOM: SEALED, LC Models 39R & 39F
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	39R	39F
Position 3 – Basic Material & Port Type (Center Housing, Alignment Pins & Hardware)					
Center Housing, NPT	21	H	Alloy-C	390002	3110027
Center Housing, Flanged (ANSI 150# RF)	21	C	Alloy-C	390027	3110016
Center Housing, BSPT	21	Y	Alloy-C	390021	3110025
Pin, Housing Alignment	12	H, C, Y	Alloy-C	360804 (4)	360804 (4)
Bolt, Housing (1/4-20 x 3.00/3.75 HHCS)	4	H, C, Y	18-8 SS	390017 (4)	3112002 (4)
Nut, Housing (1/4-20)	10	H, C, Y	18-8 SS	862108 (4)	862108 (4)
Lockwasher, Housing (1/4)	15	H, C, Y	18-8 SS	863701 (4)	863701 (4)
Position 4 – Drive Gear					
Gear	22	1	Alloy-C	390008	3150022
Gear	22	3	Teflon	390010	3150058
Gear	22	6	316 SS	X	X
Gear	22	P	PEEK	390009	3150024
Key, Gear	23A	1, 3, P	Alloy-C	3150055	3150020
Position 5 – Idler Gear					
Gear	6	1	Alloy-C	390008	3150022
Gear	6	2	Carbon	390085	3150062
Gear	6	3	Teflon	390010	3150058
Gear	6	6	316 SS	X	X
Gear	6	8	Ryton	390018	3150023
Gear	6	P	PEEK	390009	3150024
Key, Gear	23B	1, 2, 3, 8, P	Alloy-C	3150055	3150020
Position 6 – Wear Plates					
Wear Plate, Relieved (obsolete)	7	2	Carbon	Use Code E	Use Code E
Wear Plate, Relieved	7	3	Teflon	360497 (4)	360497 (4)
Wear Plate, Relieved	7	4	SiC	360582 (4)	360582 (4)
Wear Plate, Relieved	7	E	Carbon 60	360534 (4)	360534 (4)
Wear Plate, Relieved	7	P	PEEK	360535 (4)	360535 (4)
Position 7 – Bearings					
Bearing (obsolete)	3A/3B	2	Carbon	Use Code E	Use Code E
Bearing	3A/3B	3	Teflon	3150057 (4)	3150057 (4)
Bearing	3A/3B	B	SiC	3150014 (4)	3150014 (4)
Bearing	3A/3B	E	Carbon 60	3150012 (4)	3150012 (4)
Bearing	3A/3B	P	PEEK	3150013 (4)	3150013 (4)
Position 8 – Seal Type					
Mechanical Seal, Single Internal	11	U	Alloy-C/Carbon	970033	970033
Mechanical Seal, Single Internal	11	S	Alloy-C/Teflon	970040	970040
Mechanical Seal, External	11	W	316 SS/Carbon	970032	970032
Mechanical Seal, External	11	X	316 SS/Teflon	970039	970039
Mechanical Seal, Double	11	F	316 SS/Carbon	970067	970067
Mechanical Seal, Double	11	H	316 SS/Teflon	970068	970068
Seal Seat, Outer	24	U, S, W, X, F, H	SiC	970123	970123
Seal Seat, Inner	25	F, H	SiC	970121	970121
Gland Plate, SMS & EMS	17	U, S, W, X	Alloy-C	970034	970034
Gland Plate, DMS	17	F, H	316 SS	970022	970022
Screw, Gland (1/4-28 x 1 HHCS)	16	U, S, W, X, F, H	18-8 SS	362005 (2)	362005 (2)
Lockwasher, Gland (1/4)	19	U, S, W, X, F, H	18-8 SS	863701 (2)	863701 (2)
Plug, 1/8 NPT	9	U, S, W, X	Alloy-C	362301 (2)	362301 (2)
Packing Ring	18	L	Teflon	970063 (5)	970063 (5)
Packing Ring	18	R	Graphoil	970062 (5)	970062 (5)
Lantern Ring	11	L, R	Alloy-C	970081	970081
Gland Plate, PS	17	L, R	Alloy-C	3150063	3150063
Screw, Gland (1/4-28 x 1 HHCS)	16	L, R	18-8 SS	362005 (2)	362005 (2)
Grease Fitting, 1/8 NPT	24	L, R	303 SS	867201	867201
Plug, 1/8 NPT	9	L, R	Alloy-C	362301	362301

See page 14 for Reference Drawing.

Liquiflo Chemical Processing Pumps™	3-Series Gear Pumps BOM: SEALED, LC Models 39R & 39F
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	39R	39F
Position 9 – Bearing Flush Option (Front & Rear Housings)					
Front Housing, Standard	8	0	Alloy-C	970027	970027
Front Housing, External Bearing Flush	8	1	Alloy-C	970031	970031
Front Housing, Internal Bearing Flush	8	2	Alloy-C	970029	970029
Rear Housing, Standard	2	0	Alloy-C	3150007	3150007
Rear Housing, External Bearing Flush	2	1	Alloy-C	3150011	3150011
Rear Housing, Internal Bearing Flush	2	2	Alloy-C	3150009	3150009
Plug, 1/8 NPT	9	1	Alloy-C	362301 (3)	362301 (3)
Position 10 – Shafts					
Drive Shaft, Uncoated (Excluding EMS)	20	0	Alloy-C	390012	3150053
Drive Shaft, CO-Coated (Excluding EMS)	20	1	Alloy-C/CO	390012-CO	3150053-CO
Drive Shaft, TC-Coated (Excluding EMS)	20	2	Alloy-C/TC	390012-TC	3150053-TC
Drive Shaft, Uncoated (EMS only)	20	0	Alloy-C	Consult Factory	
Drive Shaft, CO-Coated (EMS only)	20	1	Alloy-C/CO	Consult Factory	
Drive Shaft, TC-Coated (EMS only)	20	2	Alloy-C/TC	Consult Factory	
Idler Shaft, Uncoated	1	0	Alloy-C	390006	3150026
Idler Shaft, CO-Coated	1	1	Alloy-C/CO	390006-CO	3150026-CO
Idler Shaft, TC-Coated	1	2	Alloy-C/TC	390006-TC	3150026-TC
Position 11 – O-Rings/Gaskets					
O-ring, Housing (2.906" ID x .070" CSD)	5	0	Teflon	361101 (2)	361101 (2)
Gasket, Seal Seat, Outer (MS only)	18	0	Teflon	970024 (2)	970024 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	0	Viton	970120	970120
O-ring, Housing (2.906" ID x .070" CSD)	5	6	Silicone/FEP	371119 (2)	371119 (2)
Gasket, Seal Seat, Outer (MS only)	18	6	Teflon	970024 (2)	970024 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	6	Kalrez	970128	970128
O-ring, Housing (2-040)	5	B	Buna-N	361106 (2)	361106 (2)
Gasket, Seal Seat, Outer (MS only)	18	B	Buna-N	970058 (2)	970058 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	B	Buna-N	970126	970126
O-ring, Housing (2-040)	5	E	EPDM	361105 (2)	361105 (2)
Gasket, Seal Seat, Outer (MS only)	18	E	EPDM	970059 (2)	970059 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	E	EPDM	970127	970127
O-ring, Housing (2-040)	5	V	Viton	361102 (2)	361102 (2)
Gasket, Seal Seat, Outer (MS only)	18	V	Viton	970060 (2)	970060 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	V	Viton	970120	970120
O-ring, Housing (2-040)	5	K	Kalrez	361103 (2)	361103 (2)
Gasket, Seal Seat, Outer (MS only)	18	K	Kalrez	970061 (2)	970061 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	K	Kalrez	970128	970128
Position 12 – Retaining Rings					
Retaining Ring, Gear	14	0	Alloy-C	3150016 (4)	3150016 (4)
Position 13 – Bearing Pins					
Pin, Bearing Lock	13	0	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	13	1	Alloy-C	361806 (4)	361806 (4)
Position 14 – Coupling Method					
Long-Coupled	-	9	-	X	X
Suffix – Trim Options					
Temperature Trim (Gears & Bearings)	-	-8(T) ¹	-	Consult Factory	
Viscosity Trim (Gears)	-	-9D, -9T	-		

1 - T = Application Temperature in °F (e.g., -8(300) = Temperature Trim at 300°F).

Liquiflo Chemical Processing Pumps™	3-Series Gear Pumps BOM: SEALED, CC Models 39R & 39F
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	39R	39F
Position 3 – Basic Material & Port Type (Center Housing, Alignment Pins & Hardware)					
Center Housing, NPT	21	S	316 SS	390001	3110005
Center Housing, Flanged (ANSI 150# RF)	21	L	316 SS	390026	3110004
Center Housing, BSPT	21	X	316 SS	390020	3110003
Pin, Housing Alignment	12	S, L, X	316 SS	360801 (4)	360801 (4)
Bolt, Housing (1/4-20 x 3.00/3.75 HHCS)	4	S, L, X	18-8 SS	390017 (4)	3112002 (4)
Nut, Housing (1/4-20)	10	S, L, X	18-8 SS	862108 (4)	862108 (4)
Lockwasher, Housing (1/4)	15	S, L, X	18-8 SS	863701 (4)	863701 (4)
Position 4 – Drive Gear					
Gear	22	1	Alloy-C	390008	3150022
Gear	22	3	Teflon	390010	3150058
Gear	22	6	316 SS	390007	3150021
Gear	22	P	PEEK	390009	3150024
Key, Gear	23A	1, 3, 6, P	316 SS	3150054	3150019
Position 5 – Idler Gear					
Gear	6	1	Alloy-C	390008	3150022
Gear	6	2	Carbon	390085	3150062
Gear	6	3	Teflon	390010	3150058
Gear	6	6	316 SS	390007	3150021
Gear	6	8	Ryton	390018	3150023
Gear	6	P	PEEK	390009	3150024
Key, Gear	23B	1, 2, 3, 6, 8, P	316 SS	3150054	3150019
Position 6 – Wear Plates					
Wear Plate, Relieved (obsolete)	7	2	Carbon	Use Code E	Use Code E
Wear Plate, Relieved	7	3	Teflon	360497 (4)	360497 (4)
Wear Plate, Relieved	7	4	SiC	360582 (4)	360582 (4)
Wear Plate, Relieved	7	E	Carbon 60	360534 (4)	360534 (4)
Wear Plate, Relieved	7	P	PEEK	360535 (4)	360535 (4)
Position 7 – Bearings					
Bearing (obsolete)	3A/3B	2	Carbon	Use Code E	Use Code E
Bearing	3A/3B	3	Teflon	3150057 (4)	3150057 (4)
Bearing	3A/3B	B	SiC	3150014 (4)	3150014 (4)
Bearing	3A/3B	E	Carbon 60	3150012 (4)	3150012 (4)
Bearing	3A/3B	P	PEEK	3150013 (4)	3150013 (4)
Position 8 – Seal Type					
Mechanical Seal, Single Internal	11	U	316 SS/Carbon	970032	970032
Mechanical Seal, Single Internal	11	S	316 SS/Teflon	970039	970039
Mechanical Seal, External	11	W	316 SS/Carbon	970032	970032
Mechanical Seal, External	11	X	316 SS/Teflon	970039	970039
Mechanical Seal, Double	11	F	316 SS/Carbon	970067	970067
Mechanical Seal, Double	11	H	316 SS/Teflon	970068	970068
Seal Housing, SMS/DMS/PS	28	U, S, F, H	316 SS	390270	390270
Seal Housing, EMS	28	W, X	316 SS	390273	390273
Seal Seat, Outer	24	U, S, W, X, F, H	SiC	970123	970123
Seal Seat, Inner	25	F, H	SiC	970121	970121
Gland Plate, SMS/EMS/DMS	17	U, S, W, X, F, H	316 SS	970022	970022
Screw, Gland (1/4-28 x 1 HHCS)	16	U, S, W, X, F, H	18-8 SS	362005 (2)	362005 (2)
Lockwasher, Gland (1/4)	19	U, S, W, X, F, H	18-8 SS	863701 (2)	863701 (2)
Plug, 1/8 NPT	9	U, S	316 SS	362304 (2)	362304 (2)
Packing Ring	43	L	Teflon	970063 (5)	970063 (5)
Packing Ring	43	R	Graphoil	970062 (5)	970062 (5)

See page 15 for Reference Drawing.

Liquiflo Chemical Processing Pumps™	3-Series Gear Pumps BOM: SEALED, CC Models 39R & 39F
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	39R	39F
Position 8 – Seal Type [Continued]					
Seal Housing, SMS/DMS/PS	28	L, R	316 SS	390270	390270
Lantern Ring	44	L, R	316 SS	970064	970064
Gland Plate, PS	17	L, R	316 SS	3150061	3150061
Screw, Gland (1/4-28 x 1 HHCS)	16	L, R	18-8 SS	362005 (2)	362005 (2)
Grease Fitting, 1/8 NPT	45	L, R	303 SS	867201	867201
Plug, 1/8 NPT	9	L, R	316 SS	362304	362304
Position 9 – Bearing Flush Option (Front & Rear Housings)					
Front Housing, CC, Standard & EBF	8	0, 1	316 SS	3150033	3150033
Front Housing, CC, IBF	8	2	316 SS	3150035	3150035
Rear Housing, Standard	2	0	316 SS	3150006	3150006
Rear Housing, EBF	2	1	316 SS	3150010	3150010
Rear Housing, IBF	2	2	316 SS	3150008	3150008
Plug, 1/8 NPT	9	0, 2	316 SS	362304 (1)	362304 (1)
Plug, 1/8 NPT	9	1	316 SS	362304 (3)	362304 (3)
Position 10 – Shafts					
Drive Shaft, Uncoated	20	0	316 SS	390011	3150052
Drive Shaft, CO-Coated	20	1	316 SS/CO	390011-CO	3150052-CO
Drive Shaft, TC-Coated	20	2	316 SS/TC	390011-TC	3150052-TC
Idler Shaft, Uncoated	1	0	316 SS	390005	3150025
Idler Shaft, CO-Coated	1	1	316 SS/CO	390005-CO	3150025-CO
Idler Shaft, TC-Coated	1	2	316 SS/TC	390005-TC	3150025-TC
Position 11 – O-Rings/Gaskets					
O-ring, Housing (2.906" ID x .070" CSD)	5	0	Teflon	361101 (2)	361101 (2)
O-ring, Seal Housing (2-042)	27	0	Teflon	S4000	S4000
Gasket, Seal Seat, Outer (MS only)	18	0	Teflon	970024 (2)	970024 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	0	Viton	970120	970120
O-ring, Housing (2.906" ID x .070" CSD)	5	6	Silicone/FEP	371119 (2)	371119 (2)
O-ring, Seal Housing (2-042)	27	6	Silicone/FEP	371118	371118
Gasket, Seal Seat, Outer (MS only)	18	6	Teflon	970024 (2)	970024 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	6	Kalrez	970128	970128
O-ring, Housing (2-040)	5	B	Buna-N	361106 (2)	361106 (2)
O-ring, Seal Housing (2-042)	27	B	Buna-N	S4003	S4003
Gasket, Seal Seat, Outer (MS only)	18	B	Buna-N	970058 (2)	970058 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	B	Buna-N	970126	970126
O-ring, Housing (2-040)	5	E	EPDM	361105 (2)	361105 (2)
O-ring, Seal Housing (2-042)	27	E	EPDM	S4001	S4001
Gasket, Seal Seat, Outer (MS only)	18	E	EPDM	970059 (2)	970059 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	E	EPDM	970127	970127
O-ring, Housing (2-040)	5	V	Viton	361102 (2)	361102 (2)
O-ring, Seal Housing (2-042)	27	V	Viton	S4002	S4002
Gasket, Seal Seat, Outer (MS only)	18	V	Viton	970060 (2)	970060 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	V	Viton	970120	970120
O-ring, Housing (2-040)	5	K	Kalrez	361103 (2)	361103 (2)
O-ring, Seal Housing (2-042)	27	K	Kalrez	S4004	S4004
Gasket, Seal Seat, Outer (MS only)	18	K	Kalrez	970061 (2)	970061 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	K	Kalrez	970128	970128
Position 12 – Retaining Rings					
Retaining Ring, Gear	14	0	316 SS	3150015 (4)	3150015 (4)
Position 13 – Bearing Pins					
Pin, Bearing Lock	13	0	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	13	6	316 SS	361807 (4)	361807 (4)
Position 14 – Coupling Method					
Close-Coupled (Additional Parts)	-	0 thru 5	-	See Appendix 3	
Suffix – Trim Options					
Temperature Trim (Gears & Bearings)	-	-8(T) ¹	-	Consult Factory	
Viscosity Trim (Gears)	-	-9D, -9T	-		

1 - T = Application Temperature in °F (e.g., -8(300) = Temperature Trim at 300°F).

Liquiflo Chemical Processing Pumps™	3-Series Gear Pumps BOM: SEALED, CC Models 39R & 39F
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	39R	39F
Position 3 – Basic Material & Port Type (Center Housing, Alignment Pins & Hardware)					
Center Housing, NPT	21	H	Alloy-C	390002	3110027
Center Housing, Flanged (ANSI 150# RF)	21	C	Alloy-C	390027	3110016
Center Housing, BSPT	21	Y	Alloy-C	390021	3110025
Pin, Housing Alignment	12	H, C, Y	Alloy-C	360804 (4)	360804 (4)
Bolt, Housing (1/4-20 x 3.00/3.75 HHCS)	4	H, C, Y	18-8 SS	390017 (4)	3112002 (4)
Nut, Housing (1/4-20)	10	H, C, Y	18-8 SS	862108 (4)	862108 (4)
Lockwasher, Housing (1/4)	15	H, C, Y	18-8 SS	863701 (4)	863701 (4)
Position 4 – Drive Gear					
Gear	22	1	Alloy-C	390008	3150022
Gear	22	3	Teflon	390010	3150058
Gear	22	6	316 SS	X	X
Gear	22	P	PEEK	390009	3150024
Key, Gear	23A	1, 3, P	Alloy-C	3150055	3150020
Position 5 – Idler Gear					
Gear	6	1	Alloy-C	390008	3150022
Gear	6	2	Carbon	390085	3150062
Gear	6	3	Teflon	390010	3150058
Gear	6	6	316 SS	X	X
Gear	6	8	Ryton	390018	3150023
Gear	6	P	PEEK	390009	3150024
Key, Gear	23B	1, 2, 3, 8, P	Alloy-C	3150055	3150020
Position 6 – Wear Plates					
Wear Plate, Relieved (obsolete)	7	2	Carbon	Use Code E	Use Code E
Wear Plate, Relieved	7	3	Teflon	360497 (4)	360497 (4)
Wear Plate, Relieved	7	4	SiC	360582 (4)	360582 (4)
Wear Plate, Relieved	7	E	Carbon 60	360534 (4)	360534 (4)
Wear Plate, Relieved	7	P	PEEK	360535 (4)	360535 (4)
Position 7 – Bearings					
Bearing (obsolete)	3A/3B	2	Carbon	Use Code E	Use Code E
Bearing	3A/3B	3	Teflon	3150057 (4)	3150057 (4)
Bearing	3A/3B	B	SiC	3150014 (4)	3150014 (4)
Bearing	3A/3B	E	Carbon 60	3150012 (4)	3150012 (4)
Bearing	3A/3B	P	PEEK	3150013 (4)	3150013 (4)
Position 8 – Seal Type					
Mechanical Seal, Single Internal	11	U	Alloy-C/Carbon	970033	970033
Mechanical Seal, Single Internal	11	S	Alloy-C/Teflon	970040	970040
Mechanical Seal, External	11	W	316 SS/Carbon	970032	970032
Mechanical Seal, External	11	X	316 SS/Teflon	970039	970039
Mechanical Seal, Double	11	F	316 SS/Carbon	970067	970067
Mechanical Seal, Double	11	H	316 SS/Teflon	970068	970068
Seal Housing, SMS/DMS/PS	28	U, S, F, H	Alloy-C	390271	390271
Seal Housing, EMS	28	W, X	Alloy-C	390272	390272
Seal Seat, Outer	24	U, S, W, X, F, H	SiC	970123	970123
Seal Seat, Inner	25	F, H	SiC	970121	970121
Gland Plate, SMS & EMS	17	U, S, W, X	Alloy-C	970034	970034
Gland Plate, DMS	17	F, H	316 SS	970022	970022
Screw, Gland (1/4-28 x 1 HHCS)	16	U, S, W, X, F, H	18-8 SS	362005 (2)	362005 (2)
Lockwasher, Gland (1/4)	19	U, S, W, X, F, H	18-8 SS	863701 (2)	863701 (2)
Plug, 1/8 NPT	9	U, S	Alloy-C	362301 (2)	362301 (2)
Packing Ring	43	L	Teflon	970063 (5)	970063 (5)
Packing Ring	43	R	Graphoil	970062 (5)	970062 (5)

See page 15 for Reference Drawing.

Liquiflo Chemical Processing Pumps™	3-Series Gear Pumps BOM: SEALED, CC Models 39R & 39F
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	39R	39F
Position 8 – Seal Type [Continued]					
Seal Housing, SMS/DMS/PS	28	L, R	Alloy-C	390271	390271
Lantern Ring	44	L, R	Alloy-C	970081	970081
Gland Plate, PS	17	L, R	Alloy-C	3150063	3150063
Screw, Gland (1/4-28 x 1 HHCS)	16	L, R	18-8 SS	362005 (2)	362005 (2)
Grease Fitting, 1/8 NPT	45	L, R	303 SS	867201	867201
Plug, 1/8 NPT	9	L, R	Alloy-C	362301	362301
Position 9 – Bearing Flush Option (Front & Rear Housings)					
Front Housing, CC, Standard & EBF	8	0, 1	Alloy-C	3150034	3150034
Front Housing, CC, IBF	8	2	Alloy-C	3150036	3150036
Rear Housing, Standard	2	0	Alloy-C	3150007	3150007
Rear Housing, EBF	2	1	Alloy-C	3150011	3150011
Rear Housing, IBF	2	2	Alloy-C	3150009	3150009
Plug, 1/8 NPT	9	0, 2	Alloy-C	362301 (1)	362301 (1)
Plug, 1/8 NPT	9	1	Alloy-C	362301 (3)	362301 (3)
Position 10 – Shafts					
Drive Shaft, Uncoated	20	0	Alloy-C	390012	3150053
Drive Shaft, CO-Coated	20	1	Alloy-C/CO	390012-CO	3150053-CO
Drive Shaft, TC-Coated	20	2	Alloy-C/TC	390012-TC	3150053-TC
Idler Shaft, Uncoated	1	0	Alloy-C	390006	3150026
Idler Shaft, CO-Coated	1	1	Alloy-C/CO	390006-CO	3150026-CO
Idler Shaft, TC-Coated	1	2	Alloy-C/TC	390006-TC	3150026-TC
Position 11 – O-Rings/Gaskets					
O-ring, Housing (2.906" ID x .070" CSD)	5	0	Teflon	361101 (2)	361101 (2)
O-ring, Seal Housing (2-042)	27	0	Teflon	S4000	S4000
Gasket, Seal Seat, Outer (MS only)	18	0	Teflon	970024 (2)	970024 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	0	Viton	970120	970120
O-ring, Housing (2.906" ID x .070" CSD)	5	6	Silicone/FEP	371119 (2)	371119 (2)
O-ring, Seal Housing (2-042)	27	6	Silicone/FEP	371118	371118
Gasket, Seal Seat, Outer (MS only)	18	6	Teflon	970024 (2)	970024 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	6	Kalrez	970128	970128
O-ring, Housing (2-040)	5	B	Buna-N	361106 (2)	361106 (2)
O-ring, Seal Housing (2-042)	27	B	Buna-N	S4003	S4003
Gasket, Seal Seat, Outer (MS only)	18	B	Buna-N	970058 (2)	970058 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	B	Buna-N	970126	970126
O-ring, Housing (2-040)	5	E	EPDM	361105 (2)	361105 (2)
O-ring, Seal Housing (2-042)	27	E	EPDM	S4001	S4001
Gasket, Seal Seat, Outer (MS only)	18	E	EPDM	970059 (2)	970059 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	E	EPDM	970127	970127
O-ring, Housing (2-040)	5	V	Viton	361102 (2)	361102 (2)
O-ring, Seal Housing (2-042)	27	V	Viton	S4002	S4002
Gasket, Seal Seat, Outer (MS only)	18	V	Viton	970060 (2)	970060 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	V	Viton	970120	970120
O-ring, Housing (2-040)	5	K	Kalrez	361103 (2)	361103 (2)
O-ring, Seal Housing (2-042)	27	K	Kalrez	S4004	S4004
Gasket, Seal Seat, Outer (MS only)	18	K	Kalrez	970061 (2)	970061 (2)
O-ring, Seal Seat, Inner (2-023; DMS only)	26	K	Kalrez	970128	970128
Position 12 – Retaining Rings					
Retaining Ring, Gear	14	0	Alloy-C	3150016 (4)	3150016 (4)
Position 13 – Bearing Pins					
Pin, Bearing Lock	13	0	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	13	1	Alloy-C	361806 (4)	361806 (4)
Position 14 – Coupling Method					
Close-Coupled (Additional Parts)	-	0 thru 5	-	See Appendix 3	
Suffix – Trim Options					
Temperature Trim (Gears & Bearings)	-	-8(T) ¹	-	Consult Factory	
Viscosity Trim (Gears)	-	-9D, -9T	-		

1 - T = Application Temperature in °F (e.g., -8(300) = Temperature Trim at 300°F).

Liquiflo Chemical Processing Pumps™	3-Series Gear Pumps BOM: MAG-DRIVE, CC Models 39R & 39F
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	39R	39F
Position 3 – Basic Material & Port Type (Center Housing, Alignment Pins & Hardware)					
Center Housing, NPT	21	S	316 SS	390001	3110005
Center Housing, Flanged (ANSI 150# RF)	21	L	316 SS	390026	3110004
Center Housing, BSPT	21	X	316 SS	390020	3110003
Pin, Housing Alignment	24	S, L, X	316 SS	360801 (4)	360801 (4)
Bolt, Housing (1/4-20 x 3.00/3.75 HHCS)	4	S, L, X	18-8 SS	390017 (4)	3112002 (4)
Nut, Housing (1/4-20)	29	S, L, X	18-8 SS	862108 (4)	862108 (4)
Lockwasher, Housing (1/4)	30	S, L, X	18-8 SS	863701 (4)	863701 (4)
Bolt, Front Housing (3/8-16 x 1.50 HHCS)	27	S, L, X	18-8 SS	620833 (4)	620833 (4)
Nut, Front Housing (3/8-16)	26	S, L, X	18-8 SS	S1003 (4)	S1003 (4)
Lockwasher, Front Housing (3/8)	31	S, L, X	18-8 SS	S1004 (4)	S1004 (4)
Bolt, Containment Can (1/4-28 x 5/8 HHCS)	18	S, L, X	18-8 SS	S620013 (6)	S620013 (6)
Lockwasher, Containment Can (1/4)	32	S, L, X	18-8 SS	863701 (6)	863701 (6)
Position 4 – Drive Gear					
Gear	22	1	Alloy-C	390008	3150022
Gear	22	3	Teflon	390010	3150058
Gear	22	6	316 SS	390007	3150021
Gear	22	P	PEEK	390009	3150024
Key, Gear	23A	1, 3, 6, P	316 SS	3150054	3150019
Position 5 – Idler Gear					
Gear	6	1	Alloy-C	390008	3150022
Gear	6	2	Carbon	390085	3150062
Gear	6	3	Teflon	390010	3150058
Gear	6	6	316 SS	390007	3150021
Gear	6	8	Ryton	390018	3150023
Gear	6	P	PEEK	390009	3150024
Key, Gear	23B	1, 2, 3, 6, 8, P	316 SS	3150054	3150019
Position 6 – Wear Plates					
Wear Plate, Relieved (obsolete)	7	2	Carbon	Use Code E	Use Code E
Wear Plate, Relieved	7	3	Teflon	360497 (4)	360497 (4)
Wear Plate, Relieved	7	4	SiC	360582 (4)	360582 (4)
Wear Plate, Relieved	7	E	Carbon 60	360534 (4)	360534 (4)
Wear Plate, Relieved	7	P	PEEK	360535 (4)	360535 (4)
Position 7 – Bearings					
Bearing (obsolete)	3A/3B	2	Carbon	Use Code E	Use Code E
Bearing	3A/3B	3	Teflon	3150057 (4)	3150057 (4)
Bearing	3A/3B	B	SiC	3150014 (4)	3150014 (4)
Bearing	3A/3B	E	Carbon 60	3150012 (4)	3150012 (4)
Bearing	3A/3B	P	PEEK	3150013 (4)	3150013 (4)
Position 8 – Outer Magnet Bore (Pedestal, Shims, Adapter & Motor-Mounting Hardware)					
Pedestal – 5/8" (NEMA 56C)	16	0	CI/Epoxy	SP000	SP000
Pedestal – 7/8" (NEMA 143/145TC)	16	1	CI/Epoxy	SP000	SP000
Pedestal – 14 mm (IEC 71 - B5)	16	2	CI/Epoxy	SP001	SP001
Pedestal – 19 mm (IEC 80 - B5)	16	3	CI/Epoxy	SP002	SP002
Pedestal – 24 mm (IEC 90 - B5)	16	4	CI/Epoxy	SP002	SP002
Pedestal – 1-1/8" (NEMA 182/184TC)	16	5	CI/Epoxy	SP000	SP000
Shim, Pedestal (NEMA 182/184TC)	-	5	303 SS	SHIM-S105 (4)	SHIM-S105 (4)
Adapter Plate (NEMA 182/184TC)	-	5	CS/Epoxy	SP0046	SP0046
Motor-Mounting Hardware	15/34	0 thru 5	18-8 SS	See Appendix 4	
Position 9 – Bearing Flush Option (Front & Rear Housings)					
Front Housing, MC, Standard & EBF	8	0, 1	316 SS	3150033	3150033
Front Housing, MC, IBF	8	2	316 SS	3150035	3150035
Rear Housing, Standard	2	0	316 SS	3150006	3150006
Rear Housing, EBF	2	1	316 SS	3150010	3150010
Rear Housing, IBF	2	2	316 SS	3150008	3150008
Plug, 1/8 NPT	9	0, 2	316 SS	362304 (1)	362304 (1)
Plug, 1/8 NPT	9	1	316 SS	362304 (3)	362304 (3)

See page 16 for Reference Drawing.

Liquiflo Chemical Processing Pumps™	3-Series Gear Pumps BOM: MAG-DRIVE, CC Models 39R & 39F
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	39R	39F
Position 10 – Shafts					
Drive Shaft, MC, Uncoated	20	0	316 SS	390013	3150048
Drive Shaft, MC, CO-Coated	20	1	316 SS/CO	390013-CO	3150048-CO
Drive Shaft, MC, TC-Coated	20	2	316 SS/TC	390013-TC	3150048-TC
Idler Shaft, Uncoated	1	0	316 SS	390005	3150025
Idler Shaft, CO-Coated	1	1	316 SS/CO	390005-CO	3150025-CO
Idler Shaft, TC-Coated	1	2	316 SS/TC	390005-TC	3150025-TC
Position 11 – O-Rings					
O-ring, Housing (2.906" ID x .070" CSD)	5	0	Teflon	361101 (2)	361101 (2)
O-ring, Containment Can (2-042)	19	0	Teflon	S4000	S4000
O-ring, Housing (2.906" ID x .070" CSD)	5	6	Silicone/FEP	371119 (2)	371119 (2)
O-ring, Containment Can (2-042)	19	6	Silicone/FEP	371118	371118
O-ring, Housing (2-040)	5	B	Buna-N	361106 (2)	361106 (2)
O-ring, Containment Can (2-042)	19	B	Buna-N	S4003	S4003
O-ring, Housing (2-040)	5	E	EPDM	361105 (2)	361105 (2)
O-ring, Containment Can (2-042)	19	E	EPDM	S4001	S4001
O-ring, Housing (2-040)	5	V	Viton	361102 (2)	361102 (2)
O-ring, Containment Can (2-042)	19	V	Viton	S4002	S4002
O-ring, Housing (2-040)	5	K	Kalrez	361103 (2)	361103 (2)
O-ring, Containment Can (2-042)	19	K	Kalrez	S4004	S4004
Position 12 – Retaining Rings					
Retaining Ring (Gears & Inner Magnet)	28	0	316 SS	3150015 (6)	3150015 (6)
Position 13 – Bearing Pins					
Pin, Bearing Lock	25	0	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	25	6	316 SS	361807 (4)	361807 (4)
Position 14 – Magnetic Coupling					
Inner Magnet, MCU – 5/8" Bore	11	U	316 SS/SmCo	SIMCU-05	X
Outer Magnet, MCU – NEMA 56C	10	U (Pos. 8 = 0)	CS/ SmCo	SOMCU-5	X
Outer Magnet, MCU – NEMA 143/145TC	10	U (Pos. 8 = 1)	CS/ SmCo	SOMCU-7	X
Outer Magnet, MCU – IEC 71 (B5)	10	U (Pos. 8 = 2)	CS/ SmCo	SOMCU-71	X
Outer Magnet, MCU – IEC 80 (B5)	10	U (Pos. 8 = 3)	CS/ SmCo	SOMCU-80	X
Outer Magnet, MCU – IEC 90 (B5)	10	U (Pos. 8 = 4)	CS/ SmCo	SOMCU-90	X
Outer Magnet, MCU – NEMA 182/184TC	10	U (Pos. 8 = 5)	CS/ SmCo	SOMCU-9	X
Inner Magnet, MCB – 5/8" Bore	11	B	316 SS/SmCo	SIMCB-05	SIMCB-05
Outer Magnet, MCB – NEMA 56C	10	B (Pos. 8 = 0)	CS/ SmCo	SOMCB-5	SOMCB-5
Outer Magnet, MCB – NEMA 143/145TC	10	B (Pos. 8 = 1)	CS/ SmCo	SOMCB-7	SOMCB-7
Outer Magnet, MCB – IEC 71 (B5)	10	B (Pos. 8 = 2)	CS/ SmCo	SOMCB-71	SOMCB-71
Outer Magnet, MCB – IEC 80 (B5)	10	B (Pos. 8 = 3)	CS/ SmCo	SOMCB-80	SOMCB-80
Outer Magnet, MCB – IEC 90 (B5)	10	B (Pos. 8 = 4)	CS/ SmCo	SOMCB-90	SOMCB-90
Outer Magnet, MCB – NEMA 182/184TC	10	B (Pos. 8 = 5)	CS/ SmCo	SOMCB-9	SOMCB-9
Inner Magnet, MCV – 5/8" Bore	11	V	316 SS/SmCo	SIMCV-05	SIMCV-05
Outer Magnet, MCV – NEMA 56C	10	V (Pos. 8 = 0)	CS/ SmCo	SOMCV-5	SOMCV-5
Outer Magnet, MCV – NEMA 143/145TC	10	V (Pos. 8 = 1)	CS/ SmCo	SOMCV-7	SOMCV-7
Outer Magnet, MCV – IEC 71 (B5)	10	V (Pos. 8 = 2)	CS/ SmCo	SOMCV-71	SOMCV-71
Outer Magnet, MCV – IEC 80 (B5)	10	V (Pos. 8 = 3)	CS/ SmCo	SOMCV-80	SOMCV-80
Outer Magnet, MCV – IEC 90 (B5)	10	V (Pos. 8 = 4)	CS/ SmCo	SOMCV-90	SOMCV-90
Outer Magnet, MCV – NEMA 182/184TC	10	V (Pos. 8 = 5)	CS/ SmCo	SOMCV-9	SOMCV-9
Key, Inner Magnet	13	U, B, V	316 SS	3150054	3150054
Position 15 – Containment Can					
Containment Can, Single Wall (Domed)	12	S	316 SS	S2002	S2002
Dual Kan Option (Modified Parts)	12	D	316 SS	Consult Factory	
Suffix – Trim Options					
Temperature Trim (Gears & Bearings)	–	-8(T) ¹	–	Consult Factory	
Viscosity Trim (Gears)	–	-9D, -9T	–		

1 - T = Application Temperature in °F (e.g., -8(300) = Temperature Trim at 300°F).

Liquiflo Chemical Processing Pumps™	3-Series Gear Pumps BOM: MAG-DRIVE, CC Models 39R & 39F
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	39R	39F
Position 3 – Basic Material & Port Type (Center Housing, Alignment Pins & Hardware)					
Center Housing, NPT	21	H	Alloy-C	390002	3110027
Center Housing, Flanged (ANSI 150# RF)	21	C	Alloy-C	390027	3110016
Center Housing, BSPT	21	Y	Alloy-C	390021	3110025
Pin, Housing Alignment	24	H, C, Y	Alloy-C	360804 (4)	360804 (4)
Bolt, Housing (1/4-20 x 3.00/3.75 HHCS)	4	H, C, Y	18-8 SS	390017 (4)	3112002 (4)
Nut, Housing (1/4-20)	29	H, C, Y	18-8 SS	862108 (4)	862108 (4)
Lockwasher, Housing (1/4)	30	H, C, Y	18-8 SS	863701 (4)	863701 (4)
Bolt, Front Housing (3/8-16 x 1.50 HHCS)	27	H, C, Y	18-8 SS	620833 (4)	620833 (4)
Nut, Front Housing (3/8-16)	26	H, C, Y	18-8 SS	S1003 (4)	S1003 (4)
Lockwasher, Front Housing (3/8)	31	H, C, Y	18-8 SS	S1004 (4)	S1004 (4)
Bolt, Containment Can (1/4-28 x 5/8 HHCS)	18	H, C, Y	18-8 SS	S620013 (6)	S620013 (6)
Lockwasher, Containment Can (1/4)	32	H, C, Y	18-8 SS	863701 (6)	863701 (6)
Position 4 – Drive Gear					
Gear	22	1	Alloy-C	390008	3150022
Gear	22	3	Teflon	390010	3150058
Gear	22	6	316 SS	X	X
Gear	22	P	PEEK	390009	3150024
Key, Gear	23A	1, 3, P	Alloy-C	3150055	3150020
Position 5 – Idler Gear					
Gear	6	1	Alloy-C	390008	3150022
Gear	6	2	Carbon	390085	3150062
Gear	6	3	Teflon	390010	3150058
Gear	6	6	316 SS	X	X
Gear	6	8	Ryton	390018	3150023
Gear	6	P	PEEK	390009	3150024
Key, Gear	23B	1, 2, 3, 8, P	Alloy-C	3150055	3150020
Position 6 – Wear Plates					
Wear Plate, Relieved (obsolete)	7	2	Carbon	Use Code E	Use Code E
Wear Plate, Relieved	7	3	Teflon	360497 (4)	360497 (4)
Wear Plate, Relieved	7	4	SiC	360582 (4)	360582 (4)
Wear Plate, Relieved	7	E	Carbon 60	360534 (4)	360534 (4)
Wear Plate, Relieved	7	P	PEEK	360535 (4)	360535 (4)
Position 7 – Bearings					
Bearing (obsolete)	3A/3B	2	Carbon	Use Code E	Use Code E
Bearing	3A/3B	3	Teflon	3150057 (4)	3150057 (4)
Bearing	3A/3B	B	SiC	3150014 (4)	3150014 (4)
Bearing	3A/3B	E	Carbon 60	3150012 (4)	3150012 (4)
Bearing	3A/3B	P	PEEK	3150013 (4)	3150013 (4)
Position 8 – Outer Magnet Bore (Pedestal, Shims, Adapter & Motor-Mounting Hardware)					
Pedestal – 5/8" (NEMA 56C)	16	0	CI/Epoxy	SP000	SP000
Pedestal – 7/8" (NEMA 143/145TC)	16	1	CI/Epoxy	SP000	SP000
Pedestal – 14 mm (IEC 71 - B5)	16	2	CI/Epoxy	SP001	SP001
Pedestal – 19 mm (IEC 80 - B5)	16	3	CI/Epoxy	SP002	SP002
Pedestal – 24 mm (IEC 90 - B5)	16	4	CI/Epoxy	SP002	SP002
Pedestal – 1-1/8" (NEMA 182/184TC)	16	5	CI/Epoxy	SP000	SP000
Shim, Pedestal (NEMA 182/184TC)	-	5	303 SS	SHIM-S105 (4)	SHIM-S105 (4)
Adapter Plate (NEMA 182/184TC)	-	5	CS/Epoxy	SP0046	SP0046
Motor-Mounting Hardware	15/34	0 thru 5	18-8 SS	See Appendix 4	
Position 9 – Bearing Flush Option (Front & Rear Housings)					
Front Housing, MC, Standard & EBF	8	0, 1	Alloy-C	3150034	3150034
Front Housing, MC, IBF	8	2	Alloy-C	3150036	3150036
Rear Housing, Standard	2	0	Alloy-C	3150007	3150007
Rear Housing, EBF	2	1	Alloy-C	3150011	3150011
Rear Housing, IBF	2	2	Alloy-C	3150009	3150009
Plug, 1/8 NPT	9	0, 2	Alloy-C	362301 (1)	362301 (1)
Plug, 1/8 NPT	9	1	Alloy-C	362301 (3)	362301 (3)

See page 16 for Reference Drawing.

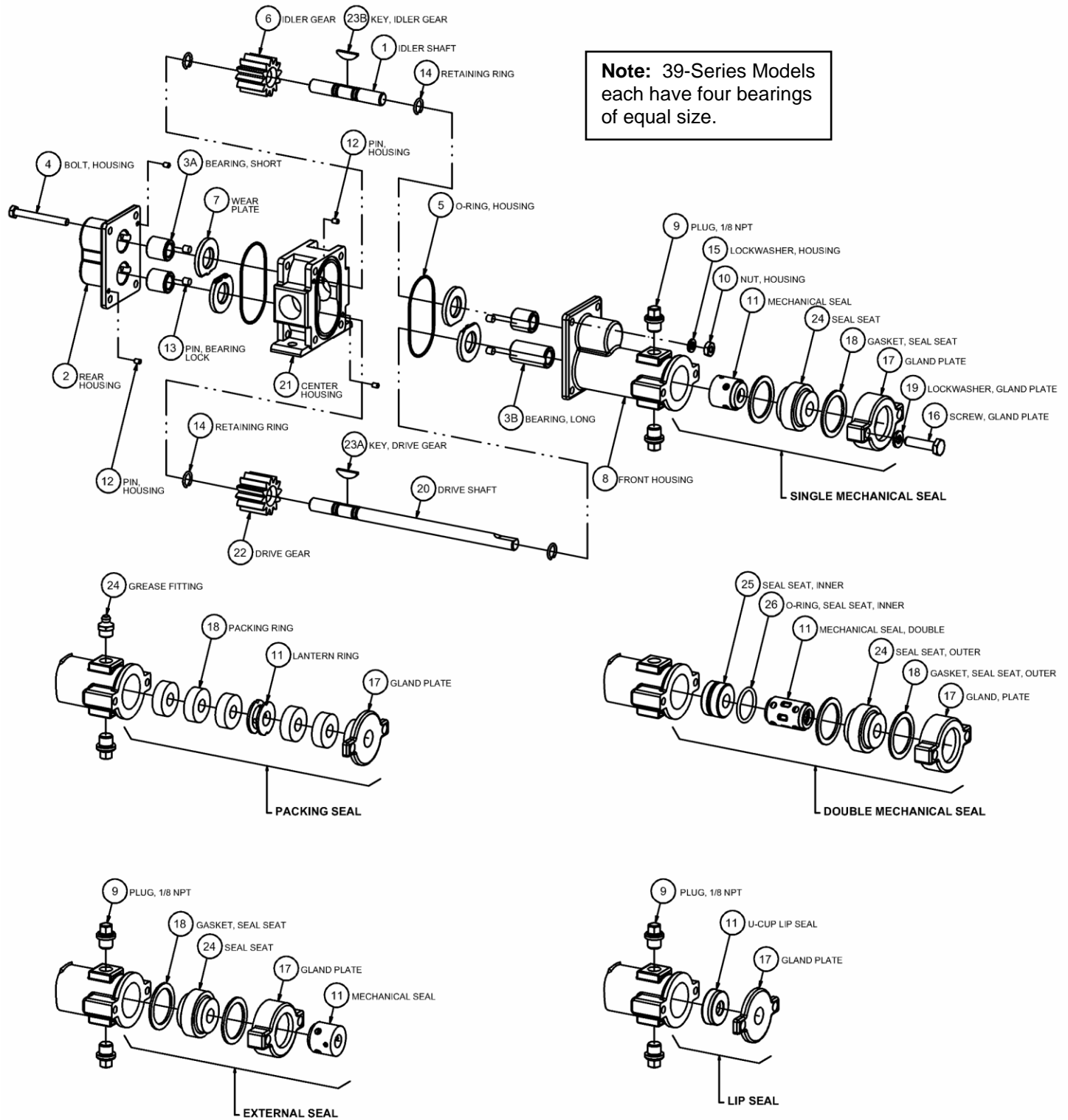
Liquiflo Chemical Processing Pumps™	3-Series Gear Pumps BOM: MAG-DRIVE, CC Models 39R & 39F
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	39R	39F
Position 10 – Shafts					
Drive Shaft, MC, Uncoated	20	0	Alloy-C	390014	3150049
Drive Shaft, MC, CO-Coated	20	1	Alloy-C/CO	390014-CO	3150049-CO
Drive Shaft, MC, TC-Coated	20	2	Alloy-C/TC	390014-TC	3150049-TC
Idler Shaft, Uncoated	1	0	Alloy-C	390006	3150026
Idler Shaft, CO-Coated	1	1	Alloy-C/CO	390006-CO	3150026-CO
Idler Shaft, TC-Coated	1	2	Alloy-C/TC	390006-TC	3150026-TC
Position 11 – O-Rings					
O-ring, Housing (2.906" ID x .070" CSD)	5	0	Teflon	361101 (2)	361101 (2)
O-ring, Containment Can (2-042)	19	0	Teflon	S4000	S4000
O-ring, Housing (2.906" ID x .070" CSD)	5	6	Silicone/FEP	371119 (2)	371119 (2)
O-ring, Containment Can (2-042)	19	6	Silicone/FEP	371118	371118
O-ring, Housing (2-040)	5	B	Buna-N	361106 (2)	361106 (2)
O-ring, Containment Can (2-042)	19	B	Buna-N	S4003	S4003
O-ring, Housing (2-040)	5	E	EPDM	361105 (2)	361105 (2)
O-ring, Containment Can (2-042)	19	E	EPDM	S4001	S4001
O-ring, Housing (2-040)	5	V	Viton	361102 (2)	361102 (2)
O-ring, Containment Can (2-042)	19	V	Viton	S4002	S4002
O-ring, Housing (2-040)	5	K	Kalrez	361103 (2)	361103 (2)
O-ring, Containment Can (2-042)	19	K	Kalrez	S4004	S4004
Position 12 – Retaining Rings					
Retaining Ring (Gears & Inner Magnet)	28	0	Alloy-C	3150016 (6)	3150016 (6)
Position 13 – Bearing Pins					
Pin, Bearing Lock	25	0	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	25	6	Alloy-C	361806 (4)	361806 (4)
Position 14 – Magnetic Coupling					
Inner Magnet, MCU – 5/8" Bore	11	U	Alloy-C/SmCo	SIMCU-15	X
Outer Magnet, MCU – NEMA 56C	10	U (Pos. 8 = 0)	CS/ SmCo	SOMCU-5	X
Outer Magnet, MCU – NEMA 143/145TC	10	U (Pos. 8 = 1)	CS/ SmCo	SOMCU-7	X
Outer Magnet, MCU – IEC 71 (B5)	10	U (Pos. 8 = 2)	CS/ SmCo	SOMCU-71	X
Outer Magnet, MCU – IEC 80 (B5)	10	U (Pos. 8 = 3)	CS/ SmCo	SOMCU-80	X
Outer Magnet, MCU – IEC 90 (B5)	10	U (Pos. 8 = 4)	CS/ SmCo	SOMCU-90	X
Outer Magnet, MCU – NEMA 182/184TC	10	U (Pos. 8 = 5)	CS/ SmCo	SOMCU-9	X
Inner Magnet, MCB – 5/8" Bore	11	B	Alloy-C/SmCo	SIMCB-15	SIMCB-15
Outer Magnet, MCB – NEMA 56C	10	B (Pos. 8 = 0)	CS/ SmCo	SOMCB-5	SOMCB-5
Outer Magnet, MCB – NEMA 143/145TC	10	B (Pos. 8 = 1)	CS/ SmCo	SOMCB-7	SOMCB-7
Outer Magnet, MCB – IEC 71 (B5)	10	B (Pos. 8 = 2)	CS/ SmCo	SOMCB-71	SOMCB-71
Outer Magnet, MCB – IEC 80 (B5)	10	B (Pos. 8 = 3)	CS/ SmCo	SOMCB-80	SOMCB-80
Outer Magnet, MCB – IEC 90 (B5)	10	B (Pos. 8 = 4)	CS/ SmCo	SOMCB-90	SOMCB-90
Outer Magnet, MCB – NEMA 182/184TC	10	B (Pos. 8 = 5)	CS/ SmCo	SOMCB-9	SOMCB-9
Inner Magnet, MCV – 5/8" Bore	11	V	Alloy-C/SmCo	SIMCV-15	SIMCV-15
Outer Magnet, MCV – NEMA 56C	10	V (Pos. 8 = 0)	CS/ SmCo	SOMCV-5	SOMCV-5
Outer Magnet, MCV – NEMA 143/145TC	10	V (Pos. 8 = 1)	CS/ SmCo	SOMCV-7	SOMCV-7
Outer Magnet, MCV – IEC 71 (B5)	10	V (Pos. 8 = 2)	CS/ SmCo	SOMCV-71	SOMCV-71
Outer Magnet, MCV – IEC 80 (B5)	10	V (Pos. 8 = 3)	CS/ SmCo	SOMCV-80	SOMCV-80
Outer Magnet, MCV – IEC 90 (B5)	10	V (Pos. 8 = 4)	CS/ SmCo	SOMCV-90	SOMCV-90
Outer Magnet, MCV – NEMA 182/184TC	10	V (Pos. 8 = 5)	CS/ SmCo	SOMCV-9	SOMCV-9
Key, Inner Magnet	13	U, B, V	Alloy-C	3150055	3150055
Position 15 – Containment Can					
Containment Can, Single Wall (Domed)	12	S	Alloy-C	S2003	S2003
Dual Kan Option (Modified Parts)	12	D	Alloy-C	Consult Factory	
Suffix – Trim Options					
Temperature Trim (Gears & Bearings)	–	-8(T) ¹	–	Consult Factory	
Viscosity Trim (Gears)	–	-9D, -9T	–		

1 - T = Application Temperature in °F (e.g., -8(300) = Temperature Trim at 300°F).

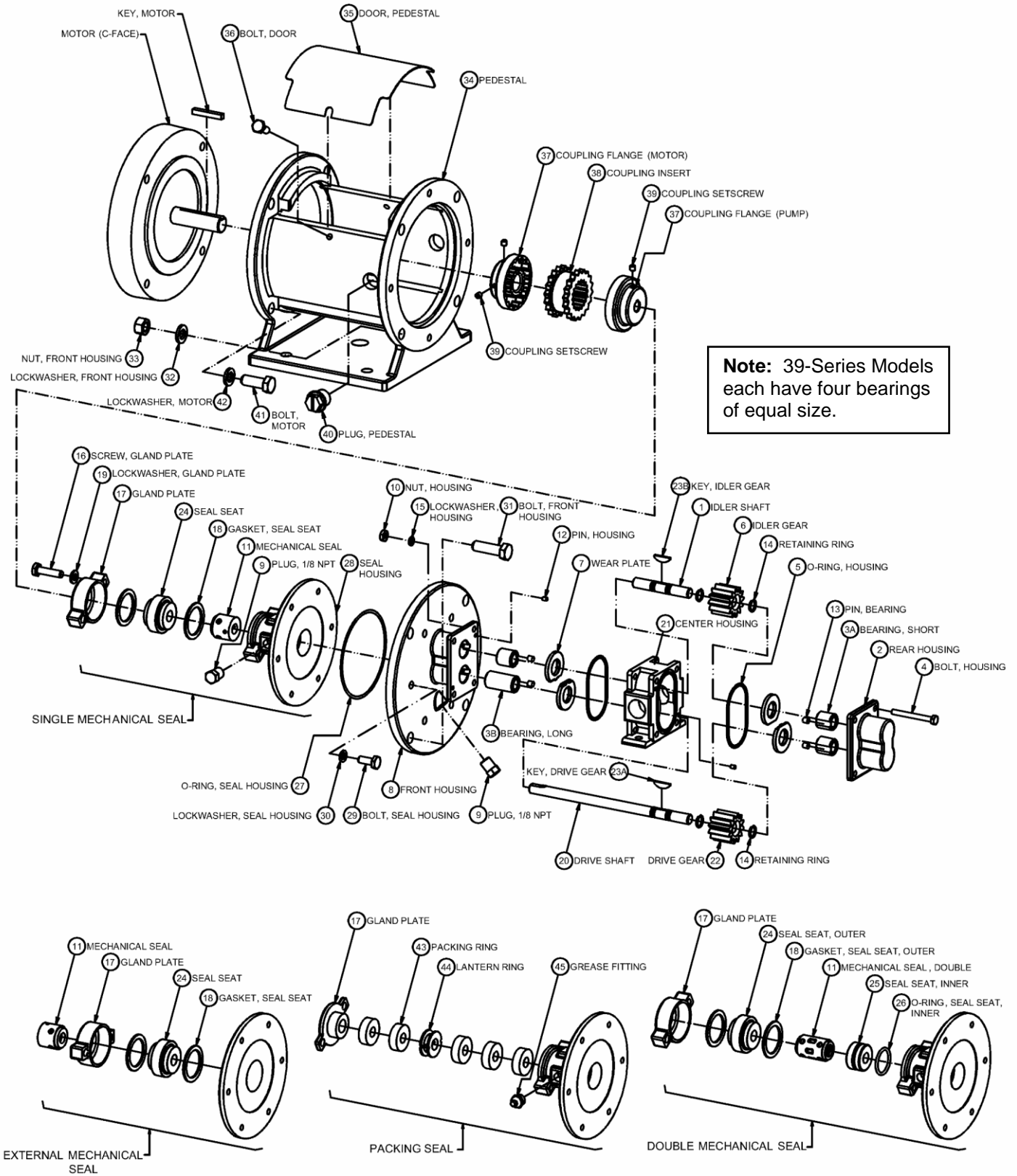
Appendix 1: Exploded View Reference Drawings

Models 39R & 39F – SEALED, Long-Coupled



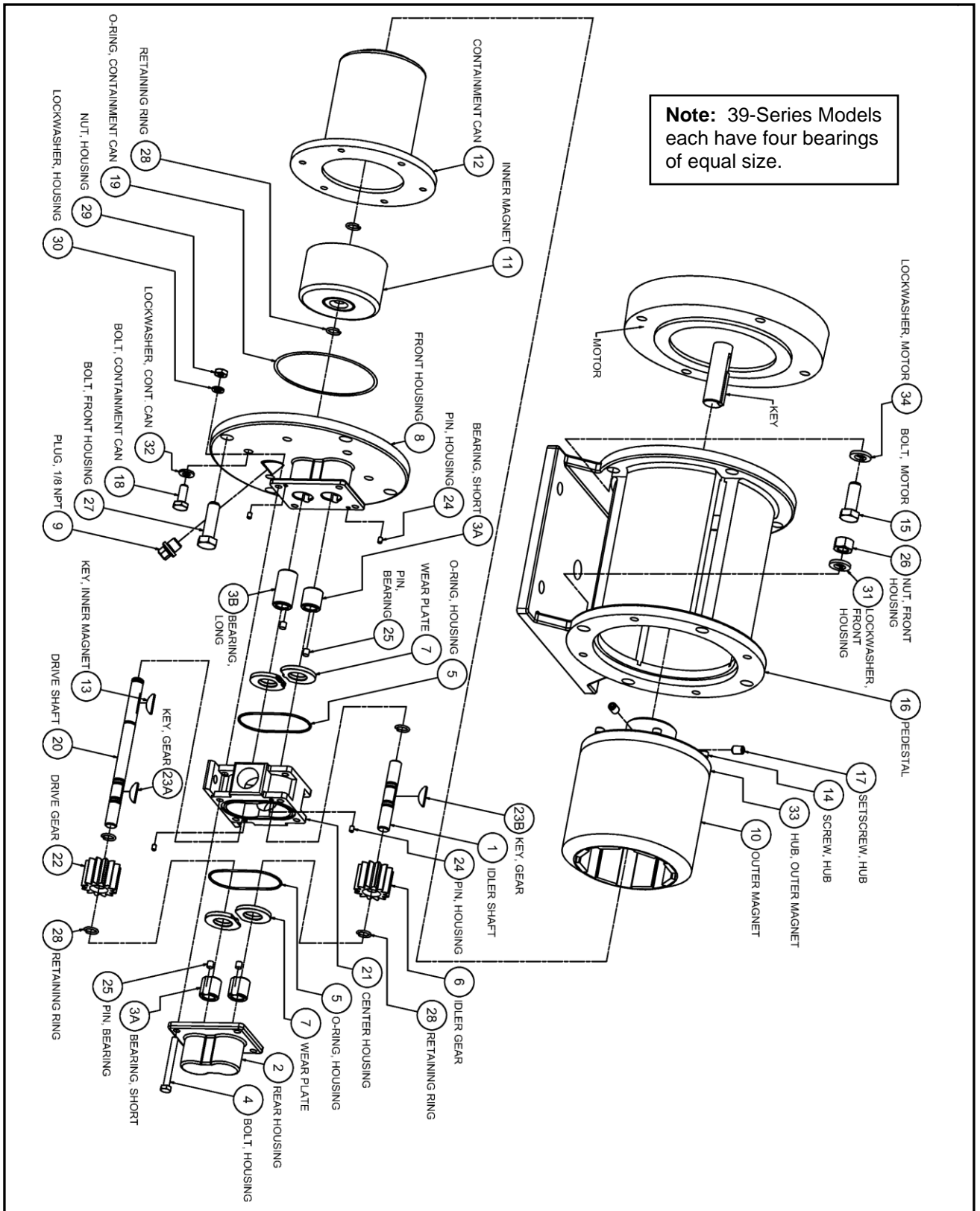
Appendix 1: Exploded View Reference Drawings (continued)

Models 39R & 39F – SEALED, Close-Coupled



Appendix 1: Exploded View Reference Drawings (continued)

Models 39R & 39F – MAG-DRIVE, Close-Coupled



Appendix 2: Meaning of Abbreviated Terms

Term	Meaning	Notes
ANSI	American National Standards Institute	e.g., ANSI 150# flanges
BSPT	British Standard Pipe Threads	Type of threaded port
Buna-N	Buna Nitrile (rubber)	O-ring material; NBR; elastomer
CC	Close-Coupled	Method of pump-motor coupling
CI	Cast Iron	Pedestal structural material
CO	Chrome Oxide	Shaft coating material
CS	Carbon Steel	Outer magnet and adapter structural material
CSD	Cross-Sectional Diameter	O-ring dimension
DMS	Double Mechanical Seal	Internally mounted double seal
Drwg.	Drawing (Item #)	See corresponding exploded view reference drawing
EBF	External Bearing Flush	Housing option for 3-Series pumps
EMS	External Mechanical Seal	Externally mounted single seal
EPDM	Ethylene-Propylene-Diene Monomer (rubber)	O-ring material; elastomer
HHCS	Hex Head Cap Screw	Type of bolt
HY	High-Yield (key)	Type of gear key
IBF	Internal Bearing Flush	Housing option for 3-Series pumps
ID	Inner Diameter	O-ring dimension
LC	Long-Coupled	Method of pump-motor coupling
LY	Low-Yield (key)	Type of gear key
MC	Magnetically Coupled	Mag-drive pump
MS	Mechanical Seal	Includes single, double & external seals
NPT	National Pipe Threads	Type of threaded port
PEEK	Poly-Ether-Ether-Ketone (plastic)	Bearing Grade PEEK; material option for gears, bearings & wear plates
Pos.	Position (#)	Position number of model code
PS	Packing Seal	Comprised of Teflon or Graphoil packing rings
RF	Raised Face	Type of flange
SHCS	Socket Head Cap Screw	Type of bolt
SiC	Silicon Carbide	Bearing, wear plate and seal seat material
Silicone/FEP	Silicone Rubber (encapsulated with) Fluoro-ethylene-propylene (plastic)	O-ring material; suggested for temperature cycling applications
SmCo	Samarium Cobalt	Inner and outer magnet material
SMS	Single Mechanical Seal	Internally mounted single seal
SS	Stainless Steel	e.g., 303 SS, 316 SS, 18-8 SS
TC	Tungsten Carbide	Shaft coating material
X	Not Available or Not Applicable	Used in lieu of Part Number
#	Number or Pound	e.g., Position #, Part #, 150# flanges, etc.

Appendix 3: Additional Parts for SEALED-CC Configuration

Mechanical Coupling, Pedestal & Adapter

Model Code Pos. 14	Motor Frame	Mechanical Coupling ¹				Pedestal ³	Adapter ⁴
		Part #	Size	Type (Woods)	Max Torque ²	Part #	Part #
0	NEMA 56C	A-5107	5/8" x 5/8"	4J	156	SP009	970045
1	NEMA 143/145TC	A-5108	5/8" x 7/8"	4J	156	SP009	970045
2	IEC 71–B5 Flange	A-5121	5/8" x 14 mm	4J	156	SP010	X
3	IEC 80–B5 Flange	A-5117	5/8" x 19 mm	4J	156	SP011	X
4	IEC 90–B5 Flange	A-5113	5/8" x 24 mm	4J	156	SP011	970046
5	NEMA182/184TC	A-5214	5/8" x 1-1/8"	5J	312	SP009	970045 & SP0046

1 – Coupling material is Steel flanges with EPDM insert. Coupling Temperature Range is -30°F to 275°F.

2 – Maximum Torque rating in inch-pounds at 75°F (24°C). Consult factory for couplings with higher torque ratings.

3 – Material is Cast Iron/Epoxy. Pedestal includes 303 SS door (Part # 865078) and two 1/4-20 x 5/8 bolts (Part # 620008).

4 – Material is Carbon Steel/Epoxy.

Assembly Hardware

Model Code Pos. 14	Part Description	Material	Size	Bolt Type	Part #	Qty.
0 thru 5	Bolt, Seal Housing	18-8 SS	1/4-28 x 5/8	HHCS	S620013	6
	Lockwasher, Seal Housing	18-8 SS	1/4	–	863701	6
	Bolt, Front Housing	18-8 SS	3/8-16 x 1-1/2	HHCS	620833	4
	Nut, Front Housing	18-8 SS	3/8-16	–	S1003	4
	Lockwasher, Front Housing	18-8 SS	3/8	–	S1004	4
0, 1, 5	Bolt, Motor	18-8 SS	3/8-16 x 1-3/4	HHCS	620835	4
	Lockwasher, Motor	18-8 SS	3/8	–	S1004	4
5	Bolt, Adapter (NEMA 182/184TC) ¹	18-8 SS	1/2-13 x 1	SHCS	641105	4
2	Bolt, Motor	18-8 SS	3/8-16 x 1-1/2	SHCS	781117	4
	Nut, Motor	18-8 SS	3/8-16	–	S1003	4
	Lockwasher, Motor	18-8 SS	3/8	–	S1004	4
3, 4	Bolt, Motor	18-8 SS	M10 x 40	SHCS	S1011	4
	Nut, Motor	18-8 SS	M10 Std. Hex	–	S1013	4
	Lockwasher, Motor	18-8 SS	M10	–	S1012	4

1 – For mounting adapter plate (Part # SP0046) to motor.

Appendix 4: Mag-Drive Motor-Mounting Hardware

Mag-Drive Motor-Mounting Hardware

Model Code Pos. 8	Part Description	Material	Size	Bolt Type	Part #	Qty.
0, 1, 5	Bolt, Motor	18-8 SS	3/8-16 x 1-1/4	HHCS	S1000	4
	Lockwasher, Motor	18-8 SS	3/8	–	S1004	4
5	Bolt, Adapter (NEMA 182/184TC) ¹	18-8 SS	1/2-13 x 1	SHCS	641105	4
2	Bolt, Motor	18-8 SS	3/8-16 x 1-1/2	SHCS	781117	4
	Nut, Motor	18-8 SS	3/8-16	–	S1003	4
	Lockwasher, Motor	18-8 SS	3/8	–	S1004	4
3, 4	Bolt, Motor	18-8 SS	M10 x 40	SHCS	S1011	4
	Nut, Motor	18-8 SS	M10 Std. Hex	–	S1013	4
	Lockwasher, Motor	18-8 SS	M10	–	S1012	4

1 – For mounting adapter plate (Part # SP0046) to motor.