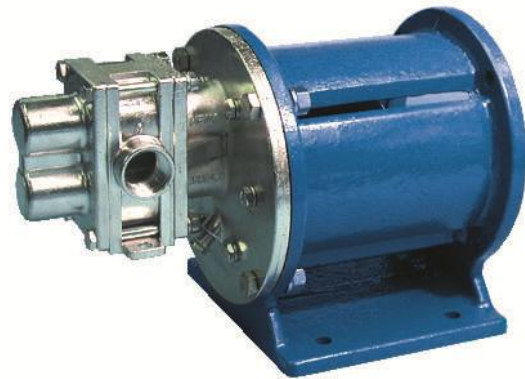




# CONSOLIDATED BILL OF MATERIALS (BOM) FOR STANDARD 3-SERIES GEAR PUMPS



**Models 37R & 37F  
Sealed, Long-Coupled**



**Models 37R & 37F  
Sealed & Mag-Drive,  
Close-Coupled**

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<b>Liquiflo</b> <b>Chemical Processing Pumps™</b>	<b>3-Series Gear Pumps</b> <b>BOM: SEALED, LC Models 37R &amp; 37F</b>
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	37R	37F
<b>Position 3 – Basic Material &amp; Port Type (Center Housing, Alignment Pins &amp; Hardware)</b>					
Center Housing, NPT	21	S	316 SS	360002	370003
Center Housing, Flanged (ANSI 150# RF)	21	L	316 SS	360013	370004
Center Housing, BSPT	21	X	316 SS	360008	370008
Pin, Housing Alignment	12	S, L, X	316 SS	360801 (4)	360801 (4)
Bolt, Housing (1/4-20 x 2.25/2.50 HHCS)	4	S, L, X	18-8 SS	362001 (4)	372001 (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)
<b>Position 4 – Drive Gear</b>					
Gear	22	1	Alloy-C	360604	360668
Gear	22	3	Teflon	360648	360600
Gear	22	6	316 SS	360685	360605
Gear	22	P	PEEK	360607	360606
Key, Gear (HY)	23A	1, 6, P	316 SS	361905	361905
Key, Gear (LY)	23A	3	316 SS	361906	361906
<b>Position 5 – Idler Gear</b>					
Gear	6	1	Alloy-C	360604	360668
Gear	6	2	Carbon	360681	360622
Gear	6	3	Teflon	360648	360600
Gear	6	6	316 SS	360685	360605
Gear	6	8	Ryton	360603	360602
Gear	6	P	PEEK	360607	360606
Key, Gear (HY)	23B	1, 2, 6, 8, P	316 SS	361905	361905
Key, Gear (LY)	23B	3	316 SS	361906	361906
<b>Position 6 – Wear Plates</b>					
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)
<b>Position 7 – Bearings</b>					
Bearing (obsolete)	3A/3B	2	Carbon	Use Code E	Use Code E
Bearing	3A/3B	3	Teflon	860403 (4)	860403 (4)
Bearing	3A/3B	B	SiC	860418 (4)	860418 (4)
Bearing	3A/3B	E	Carbon 60	860409 (4)	860409 (4)
Bearing	3A/3B	P	PEEK	860410 (4)	860410 (4)
<b>Position 8 – Seal Type</b>					
Mechanical Seal, Single Internal	11	U	316 SS/Carbon	A-867058	A-867058
Mechanical Seal, Single Internal	11	S	316 SS/Teflon	A-867059	A-867059
Mechanical Seal, External	11	W	316 SS/Carbon	A-867058	A-867058
Mechanical Seal, External	11	X	316 SS/Teflon	A-867059	A-867059
Mechanical Seal, Double	11	F	316 SS/Carbon	A-867031	A-867031
Mechanical Seal, Double	11	H	316 SS/Teflon	A-867032	A-867032
Seal Seat, Outer	24	U, S, W, X, F, H	SiC	371533	371533
Seal Seat, Inner	25	F, H	SiC	376103	376103
Gland Plate, SMS/EMS/DMS	17	U, S, W, X, F, H	316 SS	371724	371724
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)
U-Cup Lip Seal	11	J	Viton	371417	371417
Gland Plate	17	J	316 SS	371503	371503
Screw, Gland (1/4-28 x 5/8 HHCS)	16	J	18-8 SS	S620013 (2)	S620013 (2)
Lockwasher, Gland (1/4)	19	J	18-8 SS	863701 (2)	863701 (2)
Plug, 1/8 NPT	9	J	316 SS	362304 (2)	362304 (2)

See page 14 for Reference Drawing.

<b>Liquiflo</b> <b>Chemical Processing Pumps™</b>	<b>3-Series Gear Pumps</b> <b>BOM: SEALED, LC Models 37R &amp; 37F</b>
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	37R	37F
<b>Position 8 – Seal Type [Continued]</b>					
Packing Ring	18	L	Teflon	376501 (5)	376501 (5)
Packing Ring	18	R	Graphoil	376409 (5)	376409 (5)
Lantern Ring	11	L, R	316 SS	377110	377110
Gland Plate, PS	17	L, R	316 SS	371504	371504
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
<b>Position 9 – Bearing Flush Option (Front &amp; Rear Housings)</b>					
Front Housing, Standard	8	0	316 SS	370101	370101
Front Housing, External Bearing Flush	8	1	316 SS	370117	370117
Front Housing, Internal Bearing Flush	8	2	316 SS	370240	370240
Rear Housing, Standard	2	0	316 SS	360201	360201
Rear Housing, External Bearing Flush	2	1	316 SS	360216	360216
Rear Housing, Internal Bearing Flush	2	2	316 SS	360240	360240
Plug, 1/8 NPT	9	1	316 SS	362304 (3)	362304 (3)
<b>Position 10 – Shafts</b>					
Drive Shaft, Uncoated (Excluding EMS)	20	0	316 SS	360359	360359
Drive Shaft, CO-Coated (Excluding EMS)	20	1	316 SS/CO	360359-CO	360359-CO
Drive Shaft, TC-Coated (Excluding EMS)	20	2	316 SS/TC	360359-TC	360359-TC
Drive Shaft, Uncoated (EMS only)	20	0	316 SS	360381	360381
Drive Shaft, CO-Coated (EMS only)	20	1	316 SS/CO	360381-CO	360381-CO
Drive Shaft, TC-Coated (EMS only)	20	2	316 SS/TC	360381-TC	360381-TC
Idler Shaft, Uncoated	1	0	316 SS	360360	360360
Idler Shaft, CO-Coated	1	1	316 SS/CO	360360-CO	360360-CO
Idler Shaft, TC-Coated	1	2	316 SS/TC	360360-TC	360360-TC
<b>Position 11 – O-Rings/Gaskets</b>					
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	371106 (2)	371106 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	0	Viton	620613	620613
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	371106 (2)	371106 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	6	Kalrez	620617	620617
O-ring, Housing (2-040)	5	B	Buna-N	361106 (2)	361106 (2)
Gasket, Seal Seat, Outer (MS only)	18	B	Buna-N	371109 (2)	371109 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	B	Buna-N	620616	620616
O-ring, Housing (2-040)	5	E	EPDM	361105 (2)	361105 (2)
Gasket, Seal Seat, Outer (MS only)	18	E	EPDM	371110 (2)	371110 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	E	EPDM	620615	620615
O-ring, Housing (2-040)	5	V	Viton	361102 (2)	361102 (2)
Gasket, Seal Seat, Outer (MS only)	18	V	Viton	371111 (2)	371111 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	V	Viton	620613	620613
O-ring, Housing (2-040)	5	K	Kalrez	361103 (2)	361103 (2)
Gasket, Seal Seat, Outer (MS only)	18	K	Kalrez	371112 (2)	371112 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	K	Kalrez	620617	620617
<b>Position 12 – Retaining Rings</b>					
Retaining Ring, Gear	14	0	316 SS	366702 (4)	366702 (4)
<b>Position 13 – Bearing Pins</b>					
Pin, Bearing Lock	13	0	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	13	6	316 SS	361807 (4)	361807 (4)
<b>Position 14 – Coupling Method</b>					
Long-Coupled	-	9	-	X	X
<b>Suffix – Trim Options</b>					
Temperature Trim (Gears & Bearings)	-	-8(T) <sup>1</sup>	-	<b>Consult Factory</b>	
Viscosity Trim (Gears)	-	-9D, -9T	-		

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

<b>Liquiflo</b> Chemical Processing Pumps™	<b>3-Series Gear Pumps</b> BOM: <b>SEALED, LC Models 37R &amp; 37F</b>
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	37R	37F
<b>Position 3 – Basic Material &amp; Port Type (Center Housing, Alignment Pins &amp; Hardware)</b>					
Center Housing, NPT	21	H	Alloy-C	360006	370007
Center Housing, Flanged (ANSI 150# RF)	21	C	Alloy-C	360014	370005
Center Housing, BSPT	21	Y	Alloy-C	360007	370010
Pin, Housing Alignment	12	H, C, Y	Alloy-C	360804 (4)	360804 (4)
Bolt, Housing (1/4-20 x 2.25/2.50 HHCS)	4	H, C, Y	18-8 SS	362001 (4)	372001 (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)
<b>Position 4 – Drive Gear</b>					
Gear	22	1	Alloy-C	360604	360668
Gear	22	3	Teflon	360648	360600
Gear	22	6	316 SS	X	X
Gear	22	P	PEEK	360607	360606
Key, Gear (HY)	23A	1, P	Alloy-C	361903	361903
Key, Gear (LY)	23A	3	Alloy-C	361904	361904
<b>Position 5 – Idler Gear</b>					
Gear	6	1	Alloy-C	360604	360668
Gear	6	2	Carbon	360681	360622
Gear	6	3	Teflon	360648	360600
Gear	6	6	316 SS	X	X
Gear	6	8	Ryton	360603	360602
Gear	6	P	PEEK	360607	360606
Key, Gear (HY)	23B	1, 2, 8, P	Alloy-C	361903	361903
Key, Gear (LY)	23B	3	Alloy-C	361904	361904
<b>Position 6 – Wear Plates</b>					
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)
<b>Position 7 – Bearings</b>					
Bearing (obsolete)	3A/3B	2	Carbon	Use Code E	Use Code E
Bearing	3A/3B	3	Teflon	860403 (4)	860403 (4)
Bearing	3A/3B	B	SiC	860418 (4)	860418 (4)
Bearing	3A/3B	E	Carbon 60	860409 (4)	860409 (4)
Bearing	3A/3B	P	PEEK	860410 (4)	860410 (4)
<b>Position 8 – Seal Type</b>					
Mechanical Seal, Single Internal	11	U	Alloy-C/Carbon	A-867055	A-867055
Mechanical Seal, Single Internal	11	S	Alloy-C/Teflon	A-867060	A-867060
Mechanical Seal, External	11	W	316 SS/Carbon	A-867058	A-867058
Mechanical Seal, External	11	X	316 SS/Teflon	A-867059	A-867059
Mechanical Seal, Double	11	F	316 SS/Carbon	A-867031	A-867031
Mechanical Seal, Double	11	H	316 SS/Teflon	A-867032	A-867032
Seal Seat, Outer	24	U, S, W, X, F, H	SiC	371533	371533
Seal Seat, Inner	25	F, H	SiC	376103	376103
Gland Plate, SMS & EMS	17	U, S, W, X	Alloy-C	371726	371726
Gland Plate, DMS	17	F, H	316 SS	371724	371724
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)
U-Cup Lip Seal	11	J	Viton	371417	371417
Gland Plate	17	J	Alloy-C	371511	371511
Screw, Gland (1/4-28 x 5/8 HHCS)	16	J	18-8 SS	S620013 (2)	S620013 (2)
Lockwasher, Gland (1/4)	19	J	18-8 SS	863701 (2)	863701 (2)
Plug, 1/8 NPT	9	J	Alloy-C	362301 (2)	362301 (2)

See page 14 for Reference Drawing.

<b>Liquiflo</b> <b>Chemical Processing Pumps™</b>	<b>3-Series Gear Pumps</b> <b>BOM: SEALED, LC Models 37R &amp; 37F</b>
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	37R	37F
<b>Position 8 – Seal Type [Continued]</b>					
Packing Ring	18	L	Teflon	376501 (5)	376501 (5)
Packing Ring	18	R	Graphoil	376409 (5)	376409 (5)
Lantern Ring	11	L, R	Alloy-C	377111	377111
Gland Plate, PS	17	L, R	Alloy-C	371512	371512
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
<b>Position 9 – Bearing Flush Option (Front &amp; Rear Housings)</b>					
Front Housing, Standard	8	0	Alloy-C	370102	370102
Front Housing, External Bearing Flush	8	1	Alloy-C	370123	370123
Front Housing, Internal Bearing Flush	8	2	Alloy-C	370241	370241
Rear Housing, Standard	2	0	Alloy-C	360202	360202
Rear Housing, External Bearing Flush	2	1	Alloy-C	360238	360238
Rear Housing, Internal Bearing Flush	2	2	Alloy-C	360241	360241
Plug, 1/8 NPT	9	1	Alloy-C	362301 (3)	362301 (3)
<b>Position 10 – Shafts</b>					
Drive Shaft, Uncoated (Excluding EMS)	20	0	Alloy-C	360361	360361
Drive Shaft, CO-Coated (Excluding EMS)	20	1	Alloy-C/CO	360361-CO	360361-CO
Drive Shaft, TC-Coated (Excluding EMS)	20	2	Alloy-C/TC	360361-TC	360361-TC
Drive Shaft, Uncoated (EMS only)	20	0	Alloy-C	360395	360395
Drive Shaft, CO-Coated (EMS only)	20	1	Alloy-C/CO	360395-CO	360395-CO
Drive Shaft, TC-Coated (EMS only)	20	2	Alloy-C/TC	360395-TC	360395-TC
Idler Shaft, Uncoated	1	0	Alloy-C	360362	360362
Idler Shaft, CO-Coated	1	1	Alloy-C/CO	360362-CO	360362-CO
Idler Shaft, TC-Coated	1	2	Alloy-C/TC	360362-TC	360362-TC
<b>Position 11 – O-Rings/Gaskets</b>					
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	371106 (2)	371106 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	0	Viton	620613	620613
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	371106 (2)	371106 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	6	Kalrez	620617	620617
O-ring, Housing (2-040)	5	B	Buna-N	361106 (2)	361106 (2)
Gasket, Seal Seat, Outer (MS only)	18	B	Buna-N	371109 (2)	371109 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	B	Buna-N	620616	620616
O-ring, Housing (2-040)	5	E	EPDM	361105 (2)	361105 (2)
Gasket, Seal Seat, Outer (MS only)	18	E	EPDM	371110 (2)	371110 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	E	EPDM	620615	620615
O-ring, Housing (2-040)	5	V	Viton	361102 (2)	361102 (2)
Gasket, Seal Seat, Outer (MS only)	18	V	Viton	371111 (2)	371111 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	V	Viton	620613	620613
O-ring, Housing (2-040)	5	K	Kalrez	361103 (2)	361103 (2)
Gasket, Seal Seat, Outer (MS only)	18	K	Kalrez	371112 (2)	371112 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	K	Kalrez	620617	620617
<b>Position 12 – Retaining Rings</b>					
Retaining Ring, Gear	14	0	Alloy-C	366701 (4)	366701 (4)
<b>Position 13 – Bearing Pins</b>					
Pin, Bearing Lock	13	0	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	13	1	Alloy-C	361806 (4)	361806 (4)
<b>Position 14 – Coupling Method</b>					
Long-Coupled	-	9	-	X	X
<b>Suffix – Trim Options</b>					
Temperature Trim (Gears & Bearings)	-	-8(T) <sup>1</sup>	-	<b>Consult Factory</b>	
Viscosity Trim (Gears)	-	-9D, -9T	-		

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

<b>Liquiflo</b> Chemical Processing Pumps™	<b>3-Series Gear Pumps</b> BOM: SEALED, CC Models 37R & 37F
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	37R	37F
<b>Position 3 – Basic Material &amp; Port Type (Center Housing, Alignment Pins &amp; Hardware)</b>					
Center Housing, NPT	21	S	316 SS	360002	370003
Center Housing, Flanged (ANSI 150# RF)	21	L	316 SS	360013	370004
Center Housing, BSPT	21	X	316 SS	360008	370008
Pin, Housing Alignment	12	S, L, X	316 SS	360801 (4)	360801 (4)
Bolt, Housing (1/4-20 x 2.25/2.50 HHCS)	4	S, L, X	18-8 SS	362001 (4)	372001 (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)
<b>Position 4 – Drive Gear</b>					
Gear	22	1	Alloy-C	360604	360668
Gear	22	3	Teflon	360648	360600
Gear	22	6	316 SS	360685	360605
Gear	22	P	PEEK	360607	360606
Key, Gear (HY)	23A	1, 6, P	316 SS	361905	361905
Key, Gear (LY)	23A	3	316 SS	361906	361906
<b>Position 5 – Idler Gear</b>					
Gear	6	1	Alloy-C	360604	360668
Gear	6	2	Carbon	360681	360622
Gear	6	3	Teflon	360648	360600
Gear	6	6	316 SS	360685	360605
Gear	6	8	Ryton	360603	360602
Gear	6	P	PEEK	360607	360606
Key, Gear (HY)	23B	1, 2, 6, 8, P	316 SS	361905	361905
Key, Gear (LY)	23B	3	316 SS	361906	361906
<b>Position 6 – Wear Plates</b>					
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)
<b>Position 7 – Bearings</b>					
Bearing (obsolete)	3A/3B	2	Carbon	Use Code E	Use Code E
Bearing	3A/3B	3	Teflon	860403 (4)	860403 (4)
Bearing	3A/3B	B	SiC	860418 (4)	860418 (4)
Bearing	3A/3B	E	Carbon 60	860409 (4)	860409 (4)
Bearing	3A/3B	P	PEEK	860410 (4)	860410 (4)
<b>Position 8 – Seal Type</b>					
Mechanical Seal, Single Internal	11	U	316 SS/Carbon	A-867058	A-867058
Mechanical Seal, Single Internal	11	S	316 SS/Teflon	A-867059	A-867059
Mechanical Seal, External	11	W	316 SS/Carbon	A-867058	A-867058
Mechanical Seal, External	11	X	316 SS/Teflon	A-867059	A-867059
Mechanical Seal, Double	11	F	316 SS/Carbon	A-867031	A-867031
Mechanical Seal, Double	11	H	316 SS/Teflon	A-867032	A-867032
Seal Housing, SMS/DMS/PS	28	U, S, F, H	316 SS	370270	370270
Seal Housing, EMS	28	W, X	316 SS	370273	370273
Seal Seat, Outer	24	U, S, W, X, F, H	SiC	371533	371533
Seal Seat, Inner	25	F, H	SiC	376103	376103
Gland Plate, SMS/EMS/DMS	17	U, S, W, X, F, H	316 SS	371724	371724
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	376501 (5)	376501 (5)
Packing Ring	43	R	Graphoil	376409 (5)	376409 (5)

See page 15 for Reference Drawing.

<b>Liquiflo</b> <b>Chemical Processing Pumps™</b>	<b>3-Series Gear Pumps</b> <b>BOM: SEALED, CC Models 37R &amp; 37F</b>
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	37R	37F
<b>Position 8 – Seal Type [Continued]</b>					
Seal Housing, SMS/DMS/PS	28	L, R	316 SS	370270	370270
Lantern Ring	44	L, R	316 SS	377110	377110
Gland Plate, PS	17	L, R	316 SS	371504	371504
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
<b>Position 9 – Bearing Flush Option (Front &amp; Rear Housings)</b>					
Front Housing, CC, Standard & EBF	8	0, 1	316 SS	S3700	S3700
Front Housing, CC, IBF	8	2	316 SS	S3704	S3704
Rear Housing, Standard	2	0	316 SS	360201	360201
Rear Housing, EBF	2	1	316 SS	360216	360216
Rear Housing, IBF	2	2	316 SS	360240	360240
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)
<b>Position 10 – Shafts</b>					
Drive Shaft, Uncoated	20	0	316 SS	360359	360359
Drive Shaft, CO-Coated	20	1	316 SS/CO	360359-CO	360359-CO
Drive Shaft, TC-Coated	20	2	316 SS/TC	360359-TC	360359-TC
Idler Shaft, Uncoated	1	0	316 SS	360360	360360
Idler Shaft, CO-Coated	1	1	316 SS/CO	360360-CO	360360-CO
Idler Shaft, TC-Coated	1	2	316 SS/TC	360360-TC	360360-TC
<b>Position 11 – O-Rings/Gaskets</b>					
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	371106 (2)	371106 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	0	Viton	620613	620613
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	371106 (2)	371106 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	6	Kalrez	620617	620617
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	371109 (2)	371109 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	B	Buna-N	620616	620616
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	371110 (2)	371110 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	E	EPDM	620615	620615
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	371111 (2)	371111 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	V	Viton	620613	620613
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	371112 (2)	371112 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	K	Kalrez	620617	620617
<b>Position 12 – Retaining Rings</b>					
Retaining Ring, Gear	14	0	316 SS	366702 (4)	366702 (4)
<b>Position 13 – Bearing Pins</b>					
Pin, Bearing Lock	13	0	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	13	6	316 SS	361807 (4)	361807 (4)
<b>Position 14 – Coupling Method</b>					
Close-Coupled (Additional Parts)	–	0 thru 5	–	See Appendix 3	
<b>Suffix – Trim Options</b>					
Temperature Trim (Gears & Bearings)	–	-8(T) <sup>1</sup>	–	Consult Factory	
Viscosity Trim (Gears)	–	-9D, -9T	–		

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

<b>Liquiflo</b> Chemical Processing Pumps™	<b>3-Series Gear Pumps</b> BOM: <b>SEALED, CC Models 37R &amp; 37F</b>
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	37R	37F
<b>Position 3 – Basic Material &amp; Port Type (Center Housing, Alignment Pins &amp; Hardware)</b>					
Center Housing, NPT	21	H	Alloy-C	360006	370007
Center Housing, Flanged (ANSI 150# RF)	21	C	Alloy-C	360014	370005
Center Housing, BSPT	21	Y	Alloy-C	360007	370010
Pin, Housing Alignment	12	H, C, Y	Alloy-C	360804 (4)	360804 (4)
Bolt, Housing (1/4-20 x 2.25/2.50 HHCS)	4	H, C, Y	18-8 SS	362001 (4)	372001 (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)
<b>Position 4 – Drive Gear</b>					
Gear	22	1	Alloy-C	360604	360668
Gear	22	3	Teflon	360648	360600
Gear	22	6	316 SS	X	X
Gear	22	P	PEEK	360607	360606
Key, Gear (HY)	23A	1, P	Alloy-C	361903	361903
Key, Gear (LY)	23A	3	Alloy-C	361904	361904
<b>Position 5 – Idler Gear</b>					
Gear	6	1	Alloy-C	360604	360668
Gear	6	2	Carbon	360681	360622
Gear	6	3	Teflon	360648	360600
Gear	6	6	316 SS	X	X
Gear	6	8	Ryton	360603	360602
Gear	6	P	PEEK	360607	360606
Key, Gear (HY)	23B	1, 2, 8, P	Alloy-C	361903	361903
Key, Gear (LY)	23B	3	Alloy-C	361904	361904
<b>Position 6 – Wear Plates</b>					
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)
<b>Position 7 – Bearings</b>					
Bearing (obsolete)	3A/3B	2	Carbon	Use Code E	Use Code E
Bearing	3A/3B	3	Teflon	860403 (4)	860403 (4)
Bearing	3A/3B	B	SiC	860418 (4)	860418 (4)
Bearing	3A/3B	E	Carbon 60	860409 (4)	860409 (4)
Bearing	3A/3B	P	PEEK	860410 (4)	860410 (4)
<b>Position 8 – Seal Type</b>					
Mechanical Seal, Single Internal	11	U	Alloy-C/Carbon	A-867055	A-867055
Mechanical Seal, Single Internal	11	S	Alloy-C/Teflon	A-867060	A-867060
Mechanical Seal, External	11	W	316 SS/Carbon	A-867058	A-867058
Mechanical Seal, External	11	X	316 SS/Teflon	A-867059	A-867059
Mechanical Seal, Double	11	F	316 SS/Carbon	A-867031	A-867031
Mechanical Seal, Double	11	H	316 SS/Teflon	A-867032	A-867032
Seal Housing, SMS/DMS/PS	28	U, S, F, H	Alloy-C	370271	370271
Seal Housing, EMS	28	W, X	Alloy-C	370272	370272
Seal Seat, Outer	24	U, S, W, X, F, H	SiC	371533	371533
Seal Seat, Inner	25	F, H	SiC	376103	376103
Gland Plate, SMS & EMS	17	U, S, W, X	Alloy-C	371726	371726
Gland Plate, DMS	17	F, H	316 SS	371724	371724
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	376501 (5)	376501 (5)
Packing Ring	43	R	Graphoil	376409 (5)	376409 (5)

See page 15 for Reference Drawing.

<b>Liquiflo</b> <b>Chemical Processing Pumps™</b>	<b>3-Series Gear Pumps</b> <b>BOM: SEALED, CC Models 37R &amp; 37F</b>
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	37R	37F
<b>Position 8 – Seal Type [Continued]</b>					
Seal Housing, SMS/DMS/PS	28	L, R	Alloy-C	370271	370271
Lantern Ring	44	L, R	Alloy-C	377111	377111
Gland Plate, PS	17	L, R	Alloy-C	371512	371512
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
<b>Position 9 – Bearing Flush Option (Front &amp; Rear Housings)</b>					
Front Housing, CC, Standard & EBF	8	0, 1	Alloy-C	S3701	S3701
Front Housing, CC, IBF	8	2	Alloy-C	S3705	S3705
Rear Housing, Standard	2	0	Alloy-C	360202	360202
Rear Housing, EBF	2	1	Alloy-C	360238	360238
Rear Housing, IBF	2	2	Alloy-C	360241	360241
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)
<b>Position 10 – Shafts</b>					
Drive Shaft, Uncoated	20	0	Alloy-C	360361	360361
Drive Shaft, CO-Coated	20	1	Alloy-C/CO	360361-CO	360361-CO
Drive Shaft, TC-Coated	20	2	Alloy-C/TC	360361-TC	360361-TC
Idler Shaft, Uncoated	1	0	Alloy-C	360362	360362
Idler Shaft, CO-Coated	1	1	Alloy-C/CO	360362-CO	360362-CO
Idler Shaft, TC-Coated	1	2	Alloy-C/TC	360362-TC	360362-TC
<b>Position 11 – O-Rings/Gaskets</b>					
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	371106 (2)	371106 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	0	Viton	620613	620613
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	371106 (2)	371106 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	6	Kalrez	620617	620617
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	371109 (2)	371109 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	B	Buna-N	620616	620616
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	371110 (2)	371110 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	E	EPDM	620615	620615
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	371111 (2)	371111 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	V	Viton	620613	620613
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	371112 (2)	371112 (2)
O-ring, Seal Seat, Inner (2-022; DMS only)	26	K	Kalrez	620617	620617
<b>Position 12 – Retaining Rings</b>					
Retaining Ring, Gear	14	0	Alloy-C	366701 (4)	366701 (4)
<b>Position 13 – Bearing Pins</b>					
Pin, Bearing Lock	13	0	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	13	1	Alloy-C	361806 (4)	361806 (4)
<b>Position 14 – Coupling Method</b>					
Close-Coupled (Additional Parts)	–	0 thru 5	–	<b>See Appendix 3</b>	
<b>Suffix – Trim Options</b>					
Temperature Trim (Gears & Bearings)	–	-8(T) <sup>1</sup>	–	<b>Consult Factory</b>	
Viscosity Trim (Gears)	–	-9D, -9T	–		

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

<b>Liquiflo</b> Chemical Processing Pumps™	<b>3-Series Gear Pumps</b> BOM: <b>MAG-DRIVE, CC Models 37R &amp; 37F</b>
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	37R	37F
<b>Position 3 – Basic Material &amp; Port Type (Center Housing, Alignment Pins &amp; Hardware)</b>					
Center Housing, NPT	21	S	316 SS	360002	370003
Center Housing, Flanged (ANSI 150# RF)	21	L	316 SS	360013	370004
Center Housing, BSPT	21	X	316 SS	360008	370008
Pin, Housing Alignment	24	S, L, X	316 SS	360801 (4)	360801 (4)
Bolt, Housing (1/4-20 x 2.25/2.50 HHCS)	4	S, L, X	18-8 SS	362001 (4)	372001 (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)
<b>Position 4 – Drive Gear</b>					
Gear	22	1	Alloy-C	360604	360668
Gear	22	3	Teflon	360648	360600
Gear	22	6	316 SS	360685	360605
Gear	22	P	PEEK	360607	360606
Key, Gear (HY)	23A	1, 6, P	316 SS	361905	361905
Key, Gear (LY)	23A	3	316 SS	361906	361906
<b>Position 5 – Idler Gear</b>					
Gear	6	1	Alloy-C	360604	360668
Gear	6	2	Carbon	360681	360622
Gear	6	3	Teflon	360648	360600
Gear	6	6	316 SS	360685	360605
Gear	6	8	Ryton	360603	360602
Gear	6	P	PEEK	360607	360606
Key, Gear (HY)	23B	1, 2, 6, 8, P	316 SS	361905	361905
Key, Gear (LY)	23B	3	316 SS	361906	361906
<b>Position 6 – Wear Plates</b>					
<b>Wear Plate, Relieved (obsolete)</b>	<b>7</b>	<b>2</b>	<b>Carbon</b>	<b>Use Code E</b>	<b>Use Code E</b>
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)
<b>Position 7 – Bearings</b>					
<b>Bearing (obsolete)</b>	<b>3A/3B</b>	<b>2</b>	<b>Carbon</b>	<b>Use Code E</b>	<b>Use Code E</b>
Bearing	3A/3B	3	Teflon	860403 (4)	860403 (4)
Bearing	3A/3B	B	SiC	860418 (4)	860418 (4)
Bearing	3A/3B	E	Carbon 60	860409 (4)	860409 (4)
Bearing	3A/3B	P	PEEK	860410 (4)	860410 (4)
<b>Position 8 – Outer Magnet Bore (Pedestal, Shims, Adapter &amp; Motor-Mounting Hardware)</b>					
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	
<b>Position 9 – Bearing Flush Option (Front &amp; Rear Housings)</b>					
Front Housing, MC, Standard & EBF	8	0, 1	316 SS	S3700	S3700
Front Housing, MC, IBF	8	2	316 SS	S3704	S3704
Rear Housing, Standard	2	0	316 SS	360201	360201
Rear Housing, EBF	2	1	316 SS	360216	360216
Rear Housing, IBF	2	2	316 SS	360240	360240

See page 16 for Reference Drawing.

<b>Liquiflo</b> <b>Chemical Processing Pumps™</b>	<b>3-Series Gear Pumps</b> <b>BOM: MAG-DRIVE, CC Models 37R &amp; 37F</b>
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	37R	37F
<b>Position 9 – Bearing Flush Option [Continued]</b>					
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)
<b>Position 10 – Shafts</b>					
Drive Shaft, MC, Uncoated	20	0	316 SS	S3730B	S3730B
Drive Shaft, MC, CO-Coated	20	1	316 SS/CO	S3730B-CO	S3730B-CO
Drive Shaft, MC, TC-Coated	20	2	316 SS/TC	S3730B-TC	S3730B-TC
Idler Shaft, Uncoated	1	0	316 SS	360360	360360
Idler Shaft, CO-Coated	1	1	316 SS/CO	360360-CO	360360-CO
Idler Shaft, TC-Coated	1	2	316 SS/TC	360360-TC	360360-TC
<b>Position 11 – O-Rings</b>					
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
<b>Position 12 – Retaining Rings</b>					
Retaining Ring (Gears & Inner Magnet)	28	0	316 SS	366702 (6)	366702 (6)
<b>Position 13 – Bearing Pins</b>					
Pin, Bearing Lock	25	0	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	25	6	316 SS	361807 (4)	361807 (4)
<b>Position 14 – Magnetic Coupling</b>					
Inner Magnet, MCU – 1/2" Bore	11	U	316 SS/SmCo	SIMCU-04	SIMCU-04
Outer Magnet, MCU – NEMA 56C	10	U (Pos. 8 = 0)	CS/ SmCo	SOMCU-5	SOMCU-5
Outer Magnet, MCU – NEMA 143/145TC	10	U (Pos. 8 = 1)	CS/ SmCo	SOMCU-7	SOMCU-7
Outer Magnet, MCU – IEC 71 (B5)	10	U (Pos. 8 = 2)	CS/ SmCo	SOMCU-71	SOMCU-71
Outer Magnet, MCU – IEC 80 (B5)	10	U (Pos. 8 = 3)	CS/ SmCo	SOMCU-80	SOMCU-80
Outer Magnet, MCU – IEC 90 (B5)	10	U (Pos. 8 = 4)	CS/ SmCo	SOMCU-90	SOMCU-90
Outer Magnet, MCU – NEMA 182/184TC	10	U (Pos. 8 = 5)	CS/ SmCo	SOMCU-9	SOMCU-9
Inner Magnet, MCB – 1/2" Bore	11	B	316 SS/SmCo	SIMCB-04	SIMCB-04
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 – 1/2" Bore	11	V	316 SS/SmCo	SIMCV-04	SIMCV-04
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	361905	361905
<b>Position 15 – Containment Can</b>					
Containment Can, Single Wall (Domed)	12	S	316 SS	S2002	S2002
Dual Kan Option (Modified Parts)	12	D	316 SS	<b>Consult Factory</b>	
<b>Suffix – Trim Options</b>					
Temperature Trim (Gears & Bearings)	-	-8(T) <sup>1</sup>	-	<b>Consult Factory</b>	
Viscosity Trim (Gears)	-	-9D, -9T	-		

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

<b>Liquiflo</b> Chemical Processing Pumps™	<b>3-Series Gear Pumps</b> BOM: <b>MAG-DRIVE, CC Models 37R &amp; 37F</b>
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	37R	37F
<b>Position 3 – Basic Material &amp; Port Type (Center Housing, Alignment Pins &amp; Hardware)</b>					
Center Housing, NPT	21	H	Alloy-C	360006	370007
Center Housing, Flanged (ANSI 150# RF)	21	C	Alloy-C	360014	370005
Center Housing, BSPT	21	Y	Alloy-C	360007	370010
Pin, Housing Alignment	24	H, C, Y	Alloy-C	360804 (4)	360804 (4)
Bolt, Housing (1/4-20 x 2.25/2.50 HHCS)	4	H, C, Y	18-8 SS	362001 (4)	372001 (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)
<b>Position 4 – Drive Gear</b>					
Gear	22	1	Alloy-C	360604	360668
Gear	22	3	Teflon	360648	360600
Gear	22	6	316 SS	X	X
Gear	22	P	PEEK	360607	360606
Key, Gear (HY)	23A	1, P	Alloy-C	361903	361903
Key, Gear (LY)	23A	3	Alloy-C	361904	361904
<b>Position 5 – Idler Gear</b>					
Gear	6	1	Alloy-C	360604	360668
Gear	6	2	Carbon	360681	360622
Gear	6	3	Teflon	360648	360600
Gear	6	6	316 SS	X	X
Gear	6	8	Ryton	360603	360602
Gear	6	P	PEEK	360607	360606
Key, Gear (HY)	23B	1, 2, 8, P	Alloy-C	361903	361903
Key, Gear (LY)	23B	3	Alloy-C	361904	361904
<b>Position 6 – Wear Plates</b>					
<b>Wear Plate, Relieved (obsolete)</b>	<b>7</b>	<b>2</b>	<b>Carbon</b>	<b>Use Code E</b>	<b>Use Code E</b>
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)
<b>Position 7 – Bearings</b>					
<b>Bearing (obsolete)</b>	<b>3A/3B</b>	<b>2</b>	<b>Carbon</b>	<b>Use Code E</b>	<b>Use Code E</b>
Bearing	3A/3B	3	Teflon	860403 (4)	860403 (4)
Bearing	3A/3B	B	SiC	860418 (4)	860418 (4)
Bearing	3A/3B	E	Carbon 60	860409 (4)	860409 (4)
Bearing	3A/3B	P	PEEK	860410 (4)	860410 (4)
<b>Position 8 – Outer Magnet Bore (Pedestal, Shims, Adapter &amp; Motor-Mounting Hardware)</b>					
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	
<b>Position 9 – Bearing Flush Option (Front &amp; Rear Housings)</b>					
Front Housing, MC, Standard & EBF	8	0, 1	Alloy-C	S3701	S3701
Front Housing, MC, IBF	8	2	Alloy-C	S3705	S3705
Rear Housing, Standard	2	0	Alloy-C	360202	360202
Rear Housing, EBF	2	1	Alloy-C	360238	360238
Rear Housing, IBF	2	2	Alloy-C	360241	360241

See page 16 for Reference Drawing.

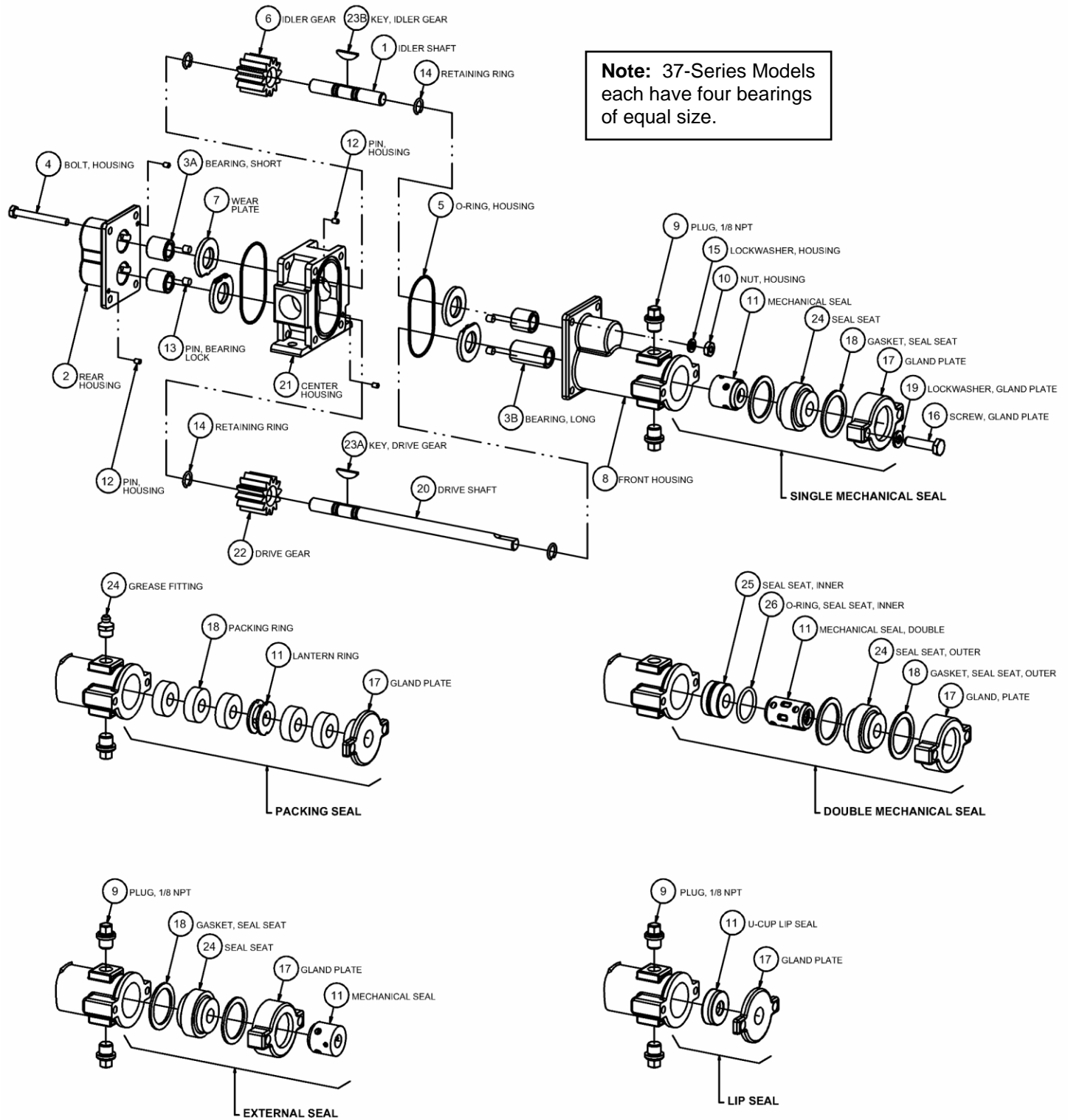
<b>Liquiflo</b> Chemical Processing Pumps™	<b>3-Series Gear Pumps</b> BOM: <b>MAG-DRIVE, CC Models 37R &amp; 37F</b>
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	37R	37F
<b>Position 9 – Bearing Flush Option [Continued]</b>					
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)
<b>Position 10 – Shafts</b>					
Drive Shaft, MC, Uncoated	20	0	Alloy-C	S3731B	S3731B
Drive Shaft, MC, CO-Coated	20	1	Alloy-C/CO	S3731B-CO	S3731B-CO
Drive Shaft, MC, TC-Coated	20	2	Alloy-C/TC	S3731B-TC	S3731B-TC
Idler Shaft, Uncoated	1	0	Alloy-C	360362	360362
Idler Shaft, CO-Coated	1	1	Alloy-C/CO	360362-CO	360362-CO
Idler Shaft, TC-Coated	1	2	Alloy-C/TC	360362-TC	360362-TC
<b>Position 11 – O-Rings</b>					
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
<b>Position 12 – Retaining Rings</b>					
Retaining Ring (Gears & Inner Magnet)	28	0	Alloy-C	366701 (6)	366701 (6)
<b>Position 13 – Bearing Pins</b>					
Pin, Bearing Lock	25	0	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	25	1	Alloy-C	361806 (4)	361806 (4)
<b>Position 14 – Magnetic Coupling</b>					
Inner Magnet, MCU – 1/2" Bore	11	U	Alloy-C/SmCo	SIMCU-14	SIMCU-14
Outer Magnet, MCU – NEMA 56C	10	U (Pos. 8 = 0)	CS/ SmCo	SOMCU-5	SOMCU-5
Outer Magnet, MCU – NEMA 143/145TC	10	U (Pos. 8 = 1)	CS/ SmCo	SOMCU-7	SOMCU-7
Outer Magnet, MCU – IEC 71 (B5)	10	U (Pos. 8 = 2)	CS/ SmCo	SOMCU-71	SOMCU-71
Outer Magnet, MCU – IEC 80 (B5)	10	U (Pos. 8 = 3)	CS/ SmCo	SOMCU-80	SOMCU-80
Outer Magnet, MCU – IEC 90 (B5)	10	U (Pos. 8 = 4)	CS/ SmCo	SOMCU-90	SOMCU-90
Outer Magnet, MCU – NEMA 182/184TC	10	U (Pos. 8 = 5)	CS/ SmCo	SOMCU-9	SOMCU-9
Inner Magnet, MCB – 1/2" Bore	11	B	Alloy-C/SmCo	SIMCB-14	SIMCB-14
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 – 1/2" Bore	11	V	Alloy-C/SmCo	SIMCV-14	SIMCV-14
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	361903	361903
<b>Position 15 – Containment Can</b>					
Containment Can, Single Wall (Domed)	12	S	Alloy-C	S2003	S2003
Dual Kan Option (Modified Parts)	12	D	Alloy-C	<b>Consult Factory</b>	
<b>Suffix – Trim Options</b>					
Temperature Trim (Gears & Bearings)	-	-8(T) <sup>1</sup>	-	<b>Consult Factory</b>	
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

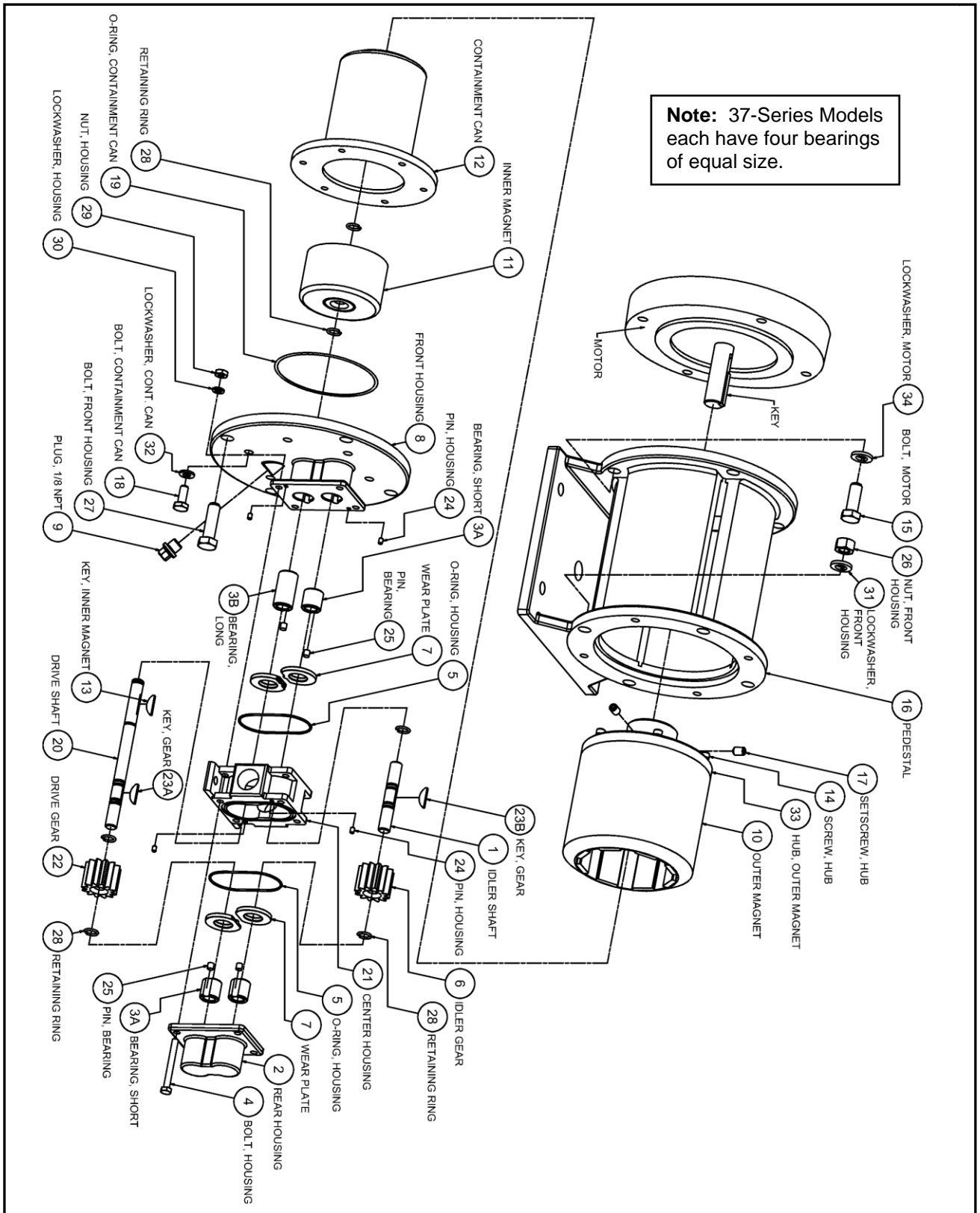
### Models 37R & 37F – SEALED, Long-Coupled





## Appendix 1: Exploded View Reference Drawings (continued)

### Models 37R & 37F – MAG-DRIVE, Close-Coupled



## Appendix 2: Meaning of Abbreviated Terms

Term	Meaning	Notes
<b>ANSI</b>	American National Standards Institute	e.g., ANSI 150# flanges
<b>BSPT</b>	British Standard Pipe Threads	Type of threaded port
<b>Buna-N</b>	Buna Nitrile (rubber)	O-ring material; NBR; elastomer
<b>CC</b>	Close-Coupled	Method of pump-motor coupling
<b>CI</b>	Cast Iron	Pedestal structural material
<b>CO</b>	Chrome Oxide	Shaft coating material
<b>CS</b>	Carbon Steel	Outer magnet and adapter structural material
<b>CSD</b>	Cross-Sectional Diameter	O-ring dimension
<b>DMS</b>	Double Mechanical Seal	Internally mounted double seal
<b>Drwg.</b>	Drawing (Item #)	See corresponding exploded view reference drawing
<b>EBF</b>	External Bearing Flush	Housing option for 3-Series pumps
<b>EMS</b>	External Mechanical Seal	Externally mounted single seal
<b>EPDM</b>	Ethylene-Propylene-Diene Monomer (rubber)	O-ring material; elastomer
<b>HHCS</b>	Hex Head Cap Screw	Type of bolt
<b>HY</b>	High-Yield (key)	Type of gear key
<b>IBF</b>	Internal Bearing Flush	Housing option for 3-Series pumps
<b>ID</b>	Inner Diameter	O-ring dimension
<b>LC</b>	Long-Coupled	Method of pump-motor coupling
<b>LY</b>	Low-Yield (key)	Type of gear key
<b>MC</b>	Magnetically Coupled	Mag-drive pump
<b>MS</b>	Mechanical Seal	Includes single, double & external seals
<b>NPT</b>	National Pipe Threads	Type of threaded port
<b>PEEK</b>	Poly-Ether-Ether-Ketone (plastic)	Bearing Grade PEEK; material option for gears, bearings & wear plates
<b>Pos.</b>	Position (#)	Position number of model code
<b>PS</b>	Packing Seal	Comprised of Teflon or Graphoil packing rings
<b>RF</b>	Raised Face	Type of flange
<b>SHCS</b>	Socket Head Cap Screw	Type of bolt
<b>SiC</b>	Silicon Carbide	Bearing, wear plate and seal seat material
<b>Silicone/FEP</b>	Silicone Rubber (encapsulated with) Fluoro-ethylene-propylene (plastic)	O-ring material; suggested for temperature cycling applications
<b>SmCo</b>	Samarium Cobalt	Inner and outer magnet material
<b>SMS</b>	Single Mechanical Seal	Internally mounted single seal
<b>SS</b>	Stainless Steel	e.g., 303 SS, 316 SS, 18-8 SS
<b>TC</b>	Tungsten Carbide	Shaft coating material
<b>X</b>	Not Available or Not Applicable	Used in lieu of Part Number
<b>#</b>	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 <sup>1</sup>				Pedestal <sup>3</sup>	Adapter <sup>4</sup>
		Part #	Size	Type (Woods)	Max Torque <sup>2</sup>	Part #	Part #
0	NEMA 56C	A-5105	1/2" x 5/8"	4J	156	SP009	X
1	NEMA 143/145TC	A-5106	1/2" x 7/8"	4J	156	SP009	X
2	IEC 71–B5 Flange	A-5226	1/2" x 14 mm	5J	312	SP010	X
3	IEC 80–B5 Flange	A-5114	1/2" x 19 mm	4J	156	SP011	X
4	IEC 90–B5 Flange	A-5112	1/2" x 24 mm	4J	156	SP011	X
5	NEMA182/184TC	A-5224	1/2" x 1-1/8"	5J	312	SP009	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 1-1/4	HHCS	S1000	4
	Lockwasher, Motor	18-8 SS	3/8	–	S1004	4
5	Bolt, Adapter (NEMA 182/184TC) <sup>1</sup>	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) <sup>1</sup>	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.