



CONSOLIDATED BILL OF MATERIALS (BOM) FOR STANDARD 4-SERIES GEAR PUMPS



Models 41 & 43
Mag-Drive, Close-Coupled



Models 44 & 45
Mag-Drive, Close-Coupled

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Liquiflo Chemical Processing Pumps™	4-Series Gear Pumps BOM: MAG-DRIVE, CC Models 41 & 43
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	41	43
Position 2 – Basic Material & Port Type (Housings, C. Can, O-Rings, Pins, Ret. Rings & Hardware)					
Rear Housing, 1/4" NPT	12	S	316 SS	430214	430214
Rear Housing, 3/8" BSPT	12	X	316 SS	430220	430220
Center Housing	2	S, X	316 SS	430001	430001
Front Housing	8	S, X	316 SS	440109	440109
Containment Can	11	S, X	316 SS	442001	442001
O-ring, Housing (2-036)	5	S, X	Teflon	441103 (2)	441103 (2)
O-ring, Containment Can (2-033)	13	S, X	Teflon	341102	341102
Pin, Housing Alignment	25	S, X	17-4 PHSS	440802 (4)	440802 (4)
Pin, Bearing Lock	28	S, X	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	28	S, X	316 SS	361807 (4)	361807 (4)
Retaining Ring, Gear	21	S, X	316 SS	346702 (4)	346702 (4)
Bolt, Housing (1/4-28 x 1-1/2 SHCS)	4	S, X	18-8 SS	435005 (4)	435005 (4)
Bolt, Front Housing (#10-32 x 5/8 SHCS)	16	S, X	18-8 SS	620840 (4)	620840 (4)
Lockwasher, Front Housing (#10)	29	S, X	18-8 SS	5018 (4)	5018 (4)
Position 3 – Drive Gear					
Gear	15	1	Alloy-C	310680	320608
Gear	15	3	Teflon	310683	320600
Gear	15	6	316 SS	310685	320605
Gear	15	8	Ryton	310682	320601
Gear	15	P	PEEK	310684	320603
Key, Gear (HY)	24	1, 6, 8, P	316 SS	321903	321903
Key, Gear (LY)	24	3	316 SS	321901	321901
Position 4 – Idler Gear					
Gear	6	1	Alloy-C	310680	320608
Gear	6	3	Teflon	310683	320600
Gear	6	6	316 SS	310685	320605
Gear	6	8	Ryton	310682	320601
Gear	6	P	PEEK	310684	320603
Key, Gear (HY)	23	1, 6, 8, P	316 SS	321903	321903
Key, Gear (LY)	23	3	316 SS	321901	321901
Position 5 – Wear Plates					
Wear Plate, Relieved (obsolete)	7	2	Carbon	Use Code E	Use Code E
Wear Plate, Relieved	7	3	Teflon	310590 (4)	340521 (4)
Wear Plate, Relieved	7	4	SiC	310597 (4)	340582 (4)
Wear Plate, Relieved	7	E	Carbon-60	310596 (4)	340523 (4)
Wear Plate, Relieved	7	P	PEEK	310591 (4)	340524 (4)
Position 6 – Bearings					
Bearing (obsolete)	3	2	Carbon	Use Code E	Use Code E
Bearing	3	3	Teflon	340402 (4)	340402 (4)
Bearing	3	B	SiC	340413 (4)	340413 (4)
Bearing	3	E	Carbon-60	340416 (4)	340416 (4)
Bearing	3	P	PEEK	340417 (4)	340417 (4)
Position 7 – Magnetic Coupling					
Inner Magnet, MCN – 3/8" Bore	10	N	316 SS/NdFeB	SIMCN-03	SIMCN-03
Outer Magnet, MCN – 1/2" Bore	9	N (Pos. 8 = 0)	CS/NdFeB	SOMCN-4	SOMCN-4
Outer Magnet, MCN – 14 mm Bore	9	N (Pos. 8 = 1)	CS/NdFeB	SOMCN-71	SOMCN-71
Outer Magnet, MCN – 5/8" Bore	9	N (Pos. 8 = 2)	CS/NdFeB	SOMCN-5	SOMCN-5
Inner Magnet, MCR – 3/8" Bore	10	R	316 SS/SmCo	SIMCR-03	SIMCR-03
Outer Magnet, MCR – 1/2" Bore	9	R (Pos. 8 = 0)	CS/SmCo	SOMCR-4	SOMCR-4
Outer Magnet, MCR – 14 mm Bore	9	R (Pos. 8 = 1)	CS/SmCo	SOMCR-71	SOMCR-71
Outer Magnet, MCR – 5/8" Bore	9	R (Pos. 8 = 2)	CS/SmCo	SOMCR-5	SOMCR-5

See page 14 for Reference Drawing.

Liquiflo Chemical Processing Pumps™	4-Series Gear Pumps BOM: MAG-DRIVE, CC Models 41 & 43
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	41	43
Position 8 – Outer Magnet Bore / Motor Frame (Mounting Bracket & Hardware)					
Bracket – 1/2" (NEMA 48C)	14	0	304 SS	442200	442200
Bolt, Motor (1/4-20 x 5/8 HHCS)	17	0	18-8 SS	620008 (4)	620008 (4)
Lock-washer, Motor (1/4)	30	0	18-8 SS	863701 (4)	863701 (4)
Bracket – 14 mm (IEC 71 - B14 Face)	14	1	304 SS	442201	442201
Bolt, Motor (M6 x 16 mm SHCS)	17	1	18-8 SS	S1015 (4)	S1015 (4)
Lock-washer, Motor (1/4)	30	1	18-8 SS	863701 (4)	863701 (4)
Bracket – 5/8" (NEMA 56C) ¹	14	2	304 SS	442202	442202
Bolt, Motor (3/8-16 x 1-1/4 HHCS)	17	2	18-8 SS	S1000 (4)	S1000 (4)
Lock-washer, Motor (3/8)	30	2	18-8 SS	S1004 (4)	S1004 (4)
Bracket – 5/8" (NEMA 48C) ²	14	2	304 SS	442200	442200
Adapter Plate (NEMA 48C to 56C) ²	-	2	CS/Epoxy	442203	442203
Bolt, Adapter (1/4-20 x 5/8 HHCS) ²	-	2	18-8 SS	620008 (4)	620008 (4)
Lock-washer, Adapter (1/4) ²	-	2	18-8 SS	863701 (4)	863701 (4)
Position 9 – Shafts					
Drive Shaft, Uncoated	20	0	316 SS	430372	430372
Drive Shaft, CO-Coated	20	1	316 SS/CO	430372-CO	430372-CO
Drive Shaft, TC-Coated	20	2	316 SS/TC	430372-TC	430372-TC
Idler Shaft, Uncoated	1	0	316 SS	320302	320302
Idler Shaft, CO-Coated	1	1	316 SS/CO	320302-CO	320302-CO
Idler Shaft, TC-Coated	1	2	316 SS/TC	320302-TC	320302-TC
Position 10 – Motor					
No Motor	-	0	-	X	X
¼ Hp/1750 RPM - TEFC - Single Phase ³	-	A	-	Consult Factory	
¼ Hp/1150 RPM - TEFC - Single Phase ³	-	B	-		
¼ Hp/1750 RPM - TENV - 90 VDC w/SCR	-	C	-		
Suffix – Trim Options					
Temperature Trim (Gears & Bearings)	-	-8(T) ⁴	-	Consult Factory	
Viscosity Trim (Gears)	-	-9D, -9T	-		

- 1 - New Bracket for NEMA 56C motors (no Adapter Plate required).
- 2 - Obsolete parts for NEMA 56C motors.
- 3 - 115-230 VAC/50-60 Hz.
- 4 - T = Application Temperature in °F (e.g., -8(300) = Temperature Trim at 300°F).

Liquiflo Chemical Processing Pumps™	4-Series Gear Pumps BOM: MAG-DRIVE, CC Models 41 & 43
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	41	43
Position 2 – Basic Material & Port Type (Housings, C. Can, O-Rings, Pins, Ret. Rings & Hardware)					
Rear Housing, 1/4" NPT	12	H	Alloy-C	430215	430215
Rear Housing, 3/8" BSPT	12	Y	Alloy-C	430221	430221
Center Housing	2	H, Y	Alloy-C	430002	430002
Front Housing	8	H, Y	Alloy-C	440110	440110
Containment Can	11	H, Y	Alloy-C	442002	442002
O-ring, Housing (2-036)	5	H, Y	Teflon	441103 (2)	441103 (2)
O-ring, Containment Can (2-033)	13	H, Y	Teflon	341102	341102
Pin, Housing Alignment	25	H, Y	17-4 PHSS	440802 (4)	440802 (4)
Pin, Bearing Lock	28	H, Y	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	28	H, Y	Alloy-C	361806 (4)	361806 (4)
Retaining Ring, Gear	21	H, Y	Alloy-C	346701 (4)	346701 (4)
Bolt, Housing (1/4-28 x 1-1/2 SHCS)	4	H, Y	18-8 SS	435005 (4)	435005 (4)
Bolt, Front Housing (#10-32 x 5/8 SHCS)	16	H, Y	18-8 SS	620840 (4)	620840 (4)
Lockwasher, Front Housing (#10)	29	H, Y	18-8 SS	5018 (4)	5018 (4)
Position 3 – Drive Gear					
Gear	15	1	Alloy-C	310680	320608
Gear	15	3	Teflon	310683	320600
Gear	15	8	Ryton	310682	320601
Gear	15	P	PEEK	310684	320603
Key, Gear (HY)	24	1, 8, P	Alloy-C	321904	321904
Key, Gear (LY)	24	3	Alloy-C	321902	321902
Position 4 – Idler Gear					
Gear	6	1	Alloy-C	310680	320608
Gear	6	3	Teflon	310683	320600
Gear	6	8	Ryton	310682	320601
Gear	6	P	PEEK	310684	320603
Key, Gear (HY)	23	1, 8, P	Alloy-C	321904	321904
Key, Gear (LY)	23	3	Alloy-C	321902	321902
Position 5 – Wear Plates					
<i>Wear Plate, Relieved (obsolete)</i>	<i>7</i>	<i>2</i>	<i>Carbon</i>	<i>Use Code E</i>	<i>Use Code E</i>
Wear Plate, Relieved	7	3	Teflon	310590 (4)	340521 (4)
Wear Plate, Relieved	7	4	SiC	310597 (4)	340582 (4)
Wear Plate, Relieved	7	E	Carbon-60	310596 (4)	340523 (4)
Wear Plate, Relieved	7	P	PEEK	310591 (4)	340524 (4)
Position 6 – Bearings					
<i>Bearing (obsolete)</i>	<i>3</i>	<i>2</i>	<i>Carbon</i>	<i>Use Code E</i>	<i>Use Code E</i>
Bearing	3	3	Teflon	340402 (4)	340402 (4)
Bearing	3	B	SiC	340413 (4)	340413 (4)
Bearing	3	E	Carbon-60	340416 (4)	340416 (4)
Bearing	3	P	PEEK	340417 (4)	340417 (4)
Position 7 – Magnetic Coupling					
Inner Magnet, MCN – 3/8" Bore	10	N	Alloy-C/NdFeB	SIMCN-13	SIMCN-13
Outer Magnet, MCN – 1/2" Bore	9	N (Pos. 8 = 0)	CS/NdFeB	SOMCN-4	SOMCN-4
Outer Magnet, MCN – 14 mm Bore	9	N (Pos. 8 = 1)	CS/NdFeB	SOMCN-71	SOMCN-71
Outer Magnet, MCN – 5/8" Bore	9	N (Pos. 8 = 2)	CS/NdFeB	SOMCN-5	SOMCN-5
Inner Magnet, MCR – 3/8" Bore	10	R	Alloy-C/SmCo	SIMCR-13	SIMCR-13
Outer Magnet, MCR – 1/2" Bore	9	R (Pos. 8 = 0)	CS/SmCo	SOMCR-4	SOMCR-4
Outer Magnet, MCR – 14 mm Bore	9	R (Pos. 8 = 1)	CS/SmCo	SOMCR-71	SOMCR-71
Outer Magnet, MCR – 5/8" Bore	9	R (Pos. 8 = 2)	CS/SmCo	SOMCR-5	SOMCR-5

See page 14 for Reference Drawing.

Liquiflo Chemical Processing Pumps™	4-Series Gear Pumps BOM: MAG-DRIVE, CC Models 41 & 43
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	41	43
Position 8 – Outer Magnet Bore / Motor Frame (Mounting Bracket & Hardware)					
Bracket – 1/2" (NEMA 48C)	14	0	304 SS	442200	442200
Bolt, Motor (1/4-20 x 5/8 HHCS)	17	0	18-8 SS	620008 (4)	620008 (4)
Lock-washer, Motor (1/4)	30	0	18-8 SS	863701 (4)	863701 (4)
Bracket – 14 mm (IEC 71 - B14 Face)	14	1	304 SS	442201	442201
Bolt, Motor (M6 x 16 mm SHCS)	17	1	18-8 SS	S1015 (4)	S1015 (4)
Lock-washer, Motor (1/4)	30	1	18-8 SS	863701 (4)	863701 (4)
Bracket – 5/8" (NEMA 56C) ¹	14	2	304 SS	442202	442202
Bolt, Motor (3/8-16 x 1-1/4 HHCS)	17	2	18-8 SS	S1000 (4)	S1000 (4)
Lock-washer, Motor (3/8)	30	2	18-8 SS	S1004 (4)	S1004 (4)
Bracket – 5/8" (NEMA 48C) ²	14	2	304 SS	442200	442200
Adapter Plate (NEMA 48C to 56C) ²	-	2	CS/Epoxy	442203	442203
Bolt, Adapter (1/4-20 x 5/8 HHCS) ²	-	2	18-8 SS	620008 (4)	620008 (4)
Lock-washer, Adapter (1/4) ²	-	2	18-8 SS	863701 (4)	863701 (4)
Position 9 – Shafts					
Drive Shaft, Uncoated	20	0	Alloy-C	430373	430373
Drive Shaft, CO-Coated	20	1	Alloy-C/CO	430373-CO	430373-CO
Drive Shaft, TC-Coated	20	2	Alloy-C/TC	430373-TC	430373-TC
Idler Shaft, Uncoated	1	0	Alloy-C	320304	320304
Idler Shaft, CO-Coated	1	1	Alloy-C/CO	320304-CO	320304-CO
Idler Shaft, TC-Coated	1	2	Alloy-C/TC	320304-TC	320304-TC
Position 10 – Motor					
No Motor	-	0	-	X	X
¼ Hp/1750 RPM - TEFC - Single Phase ³	-	A	-	Consult Factory	
¼ Hp/1150 RPM - TEFC - Single Phase ³	-	B	-		
¼ Hp/1750 RPM - TENV - 90 VDC w/SCR	-	C	-		
Suffix – Trim Options					
Temperature Trim (Gears & Bearings)	-	-8(T) ⁴	-	Consult Factory	
Viscosity Trim (Gears)	-	-9D, -9T	-		

1 - New Bracket for NEMA 56C motors (no Adapter Plate required).

2 - Obsolete parts for NEMA 56C motors.

3 - 115-230 VAC/50-60 Hz.

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

Liquiflo Chemical Processing Pumps™	4-Series Gear Pumps BOM: MAG-DRIVE, CC Models 41 & 43
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Part Description	Drwg. Item #	Titanium Construction			
		Code	Material	41	43
Position 2 – Basic Material & Port Type (Housings, C. Can, O-Rings, Pins, Ret. Rings & Hardware)					
Rear Housing, 1/4" NPT	12	T	Titanium	430216	430216
Rear Housing, 3/8" BSPT	12	Z	Titanium	430222	430222
Center Housing	2	T, Z	Titanium	430003	430003
Front Housing	8	T, Z	Titanium	440111	440111
Containment Can	11	T, Z	Titanium	442003	442003
O-ring, Housing (2-036)	5	T, Z	Teflon	441103 (2)	441103 (2)
O-ring, Containment Can (2-033)	13	T, Z	Teflon	341102	341102
Pin, Housing Alignment	25	T, Z	17-4 PHSS	440802 (4)	440802 (4)
Pin, Bearing Lock	28	T, Z	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	28	T, Z	Titanium	361809 (4)	361809 (4)
Retaining Ring, Gear	21	T, Z	Titanium	446704 (4)	446704 (4)
Bolt, Housing (1/4-28 x 1-1/2 SHCS)	4	T, Z	18-8 SS	435005 (4)	435005 (4)
Bolt, Front Housing (#10-32 x 5/8 SHCS)	16	T, Z	18-8 SS	620840 (4)	620840 (4)
Lockwasher, Front Housing (#10)	29	T, Z	18-8 SS	5018 (4)	5018 (4)
Position 3 – Drive Gear					
Gear	15	3	Teflon	310683	320600
Gear	15	4	Titanium	410647	420647
Gear	15	8	Ryton	310682	320601
Gear	15	P	PEEK	310684	320603
Key, Gear (HY)	24	4, 8, P	Titanium	420915	420915
Key, Gear (LY)	24	3	Titanium	420925	420925
Position 4 – Idler Gear					
Gear	6	3	Teflon	310683	320600
Gear	6	4	Titanium	410647	420647
Gear	6	8	Ryton	310682	320601
Gear	6	P	PEEK	310684	320603
Key, Gear (HY)	23	4, 8, P	Titanium	420915	420915
Key, Gear (LY)	23	3	Titanium	420925	420925
Position 5 – Wear Plates					
<i>Wear Plate, Relieved (obsolete)</i>	7	2	Carbon	Use Code E	Use Code E
Wear Plate, Relieved	7	3	Teflon	310590 (4)	340521 (4)
Wear Plate, Relieved	7	4	SiC	310597 (4)	340582 (4)
Wear Plate, Relieved	7	E	Carbon-60	310596 (4)	340523 (4)
Wear Plate, Relieved	7	P	PEEK	310591 (4)	340524 (4)
Position 6 – Bearings					
<i>Bearing (obsolete)</i>	3	2	Carbon	Use Code E	Use Code E
Bearing	3	3	Teflon	340402 (4)	340402 (4)
Bearing	3	B	SiC	340413 (4)	340413 (4)
Bearing	3	E	Carbon-60	340416 (4)	340416 (4)
Bearing	3	P	PEEK	340417 (4)	340417 (4)
Position 7 – Magnetic Coupling					
Inner Magnet, MCN – 3/8" Bore	10	N	Titanium/NdFeB	SIMCN-23	SIMCN-23
Outer Magnet, MCN – 1/2" Bore	9	N (Pos. 8 = 0)	CS/NdFeB	SOMCN-4	SOMCN-4
Outer Magnet, MCN – 14 mm Bore	9	N (Pos. 8 = 1)	CS/NdFeB	SOMCN-71	SOMCN-71
Outer Magnet, MCN – 5/8" Bore	9	N (Pos. 8 = 2)	CS/NdFeB	SOMCN-5	SOMCN-5
Inner Magnet, MCR – 3/8" Bore	10	R	Titanium/SmCo	SIMCR-23	SIMCR-23
Outer Magnet, MCR – 1/2" Bore	9	R (Pos. 8 = 0)	CS/SmCo	SOMCR-4	SOMCR-4
Outer Magnet, MCR – 14 mm Bore	9	R (Pos. 8 = 1)	CS/SmCo	SOMCR-71	SOMCR-71
Outer Magnet, MCR – 5/8" Bore	9	R (Pos. 8 = 2)	CS/SmCo	SOMCR-5	SOMCR-5

See page 14 for Reference Drawing.

Liquiflo Chemical Processing Pumps™	4-Series Gear Pumps BOM: MAG-DRIVE, CC Models 41 & 43
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Part Description	Drwg. Item #	Titanium Construction			
		Code	Material	41	43
Position 8 – Outer Magnet Bore / Motor Frame (Mounting Bracket & Hardware)					
Bracket – 1/2" (NEMA 48C)	14	0	304 SS	442200	442200
Bolt, Motor (1/4-20 x 5/8 HHCS)	17	0	18-8 SS	620008 (4)	620008 (4)
Lock-washer, Motor (1/4)	30	0	18-8 SS	863701 (4)	863701 (4)
Bracket – 14 mm (IEC 71 - B14 Face)	14	1	304 SS	442201	442201
Bolt, Motor (M6 x 16 mm SHCS)	17	1	18-8 SS	S1015 (4)	S1015 (4)
Lock-washer, Motor (1/4)	30	1	18-8 SS	863701 (4)	863701 (4)
Bracket – 5/8" (NEMA 56C) ¹	14	2	304 SS	442202	442202
Bolt, Motor (3/8-16 x 1-1/4 HHCS)	17	2	18-8 SS	S1000 (4)	S1000 (4)
Lock-washer, Motor (3/8)	30	2	18-8 SS	S1004 (4)	S1004 (4)
Bracket – 5/8" (NEMA 48C) ²	14	2	304 SS	442200	442200
Adapter Plate (NEMA 48C to 56C) ²	-	2	CS/Epoxy	442203	442203
Bolt, Adapter (1/4-20 x 5/8 HHCS) ²	-	2	18-8 SS	620008 (4)	620008 (4)
Lock-washer, Adapter (1/4) ²	-	2	18-8 SS	863701 (4)	863701 (4)
Position 9 – Shafts					
Drive Shaft, TO-Coated	20	0	Titanium/TO	430374-TO	430374-TO
Idler Shaft, TO-Coated	1	0	Titanium/TO	420309-TO	420309-TO
Position 10 – Motor					
No Motor	-	0	-	X	X
¼ Hp/1750 RPM - TEFC - Single Phase ³	-	A	-	Consult Factory	
¼ Hp/1150 RPM - TEFC - Single Phase ³	-	B	-		
¼ Hp/1750 RPM - TENV - 90 VDC w/SCR	-	C	-		
Suffix – Trim Options					
Temperature Trim (Gears & Bearings)	-	-8(T) ⁴	-	Consult Factory	
Viscosity Trim (Gears)	-	-9D, -9T	-		

- 1 - New Bracket for NEMA 56C motors (no Adapter Plate required).
- 2 - Obsolete parts for NEMA 56C motors.
- 3 - 115-230 VAC/50-60 Hz.
- 4 - T = Application Temperature in °F (e.g., -8(300) = Temperature Trim at 300°F).

Liquiflo Chemical Processing Pumps™	4-Series Gear Pumps BOM: MAG-DRIVE, CC Models 44 & 45
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	44	45
Position 2 – Basic Material & Port Type (Housings, C. Can, O-Rings, Pins, Ret. Rings & Hardware)					
Rear Housing, 3/8" NPT	12	S	316 SS	440214	440214
Rear Housing, 3/8" BSPT	12	X	316 SS	430220	430220
Center Housing	2	S, X	316 SS	440001	440001
Front Housing	8	S, X	316 SS	440109	440109
Containment Can	11	S, X	316 SS	442001	442001
O-ring, Housing (2-036)	5	S, X	Teflon	441103 (2)	441103 (2)
O-ring, Containment Can (2-033)	13	S, X	Teflon	341102	341102
Pin, Housing Alignment	25	S, X	17-4 PHSS	440802 (4)	440802 (4)
Pin, Bearing Lock	28	S, X	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	28	S, X	316 SS	361807 (4)	361807 (4)
Retaining Ring, Gear	21	S, X	316 SS	346702 (4)	346702 (4)
Bolt, Housing (1/4-28 x 2 SHCS)	4	S, X	18-8 SS	445005 (4)	445005 (4)
Bolt, Front Housing (#10-32 x 5/8 SHCS)	16	S, X	18-8 SS	620840 (4)	620840 (4)
Lockwasher, Front Housing (#10)	29	S, X	18-8 SS	5018 (4)	5018 (4)
Position 3 – Drive Gear					
Gear	15	1	Alloy-C	340613	340638
Gear	15	3	Teflon	340623	340600
Gear	15	6	316 SS	340685	340605
Gear	15	8	Ryton	340612	340602
Gear	15	P	PEEK	340607	340604
Key, Gear (HY)	24	1, 6, 8, P	316 SS	341910	341906
Key, Gear (LY)	24	3	316 SS	341916	341905
Position 4 – Idler Gear					
Gear	6	1	Alloy-C	340613	340638
Gear	6	3	Teflon	340623	340600
Gear	6	6	316 SS	340685	340605
Gear	6	8	Ryton	340612	340602
Gear	6	P	PEEK	340607	340604
Key, Gear (HY)	23	1, 6, 8, P	316 SS	341910	341906
Key, Gear (LY)	23	3	316 SS	341916	341905
Position 5 – Wear Plates					
Wear Plate, Relieved (obsolete)	7	2	Carbon	Use Code E	Use Code E
Wear Plate, Relieved	7	3	Teflon	310590 (4)	340521 (4)
Wear Plate, Relieved	7	4	SiC	310597 (4)	340582 (4)
Wear Plate, Relieved	7	E	Carbon-60	310596 (4)	340523 (4)
Wear Plate, Relieved	7	P	PEEK	310591 (4)	340524 (4)
Position 6 – Bearings					
Bearing (obsolete)	3	2	Carbon	Use Code E	Use Code E
Bearing	3	3	Teflon	340402 (4)	340402 (4)
Bearing	3	B	SiC	340413 (4)	340413 (4)
Bearing	3	E	Carbon-60	340416 (4)	340416 (4)
Bearing	3	P	PEEK	340417 (4)	340417 (4)
Position 7 – Magnetic Coupling					
Inner Magnet, MCN – 3/8" Bore	10	N	316 SS/NdFeB	SIMCN-03	SIMCN-03
Outer Magnet, MCN – 1/2" Bore	9	N (Pos. 8 = 0)	CS/NdFeB	SOMCN-4	SOMCN-4
Outer Magnet, MCN – 14 mm Bore	9	N (Pos. 8 = 1)	CS/NdFeB	SOMCN-71	SOMCN-71
Outer Magnet, MCN – 5/8" Bore	9	N (Pos. 8 = 2)	CS/NdFeB	SOMCN-5	SOMCN-5
Inner Magnet, MCR – 3/8" Bore	10	R	316 SS/SmCo	SIMCR-03	SIMCR-03
Outer Magnet, MCR – 1/2" Bore	9	R (Pos. 8 = 0)	CS/SmCo	SOMCR-4	SOMCR-4
Outer Magnet, MCR – 14 mm Bore	9	R (Pos. 8 = 1)	CS/SmCo	SOMCR-71	SOMCR-71
Outer Magnet, MCR – 5/8" Bore	9	R (Pos. 8 = 2)	CS/SmCo	SOMCR-5	SOMCR-5

See page 14 for Reference Drawing.

Liquiflo Chemical Processing Pumps™	4-Series Gear Pumps BOM: MAG-DRIVE, CC Models 44 & 45
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	44	45
Position 8 – Outer Magnet Bore / Motor Frame (Mounting Bracket & Hardware)					
Bracket – 1/2" (NEMA 48C)	14	0	304 SS	442200	442200
Bolt, Motor (1/4-20 x 5/8 HHCS)	17	0	18-8 SS	620008 (4)	620008 (4)
Lock-washer, Motor (1/4)	30	0	18-8 SS	863701 (4)	863701 (4)
Bracket – 14 mm (IEC 71 - B14 Face)	14	1	304 SS	442201	442201
Bolt, Motor (M6 x 16 mm SHCS)	17	1	18-8 SS	S1015 (4)	S1015 (4)
Lock-washer, Motor (1/4)	30	1	18-8 SS	863701 (4)	863701 (4)
Bracket – 5/8" (NEMA 56C) ¹	14	2	304 SS	442202	442202
Bolt, Motor (3/8-16 x 1-1/4 HHCS)	17	2	18-8 SS	S1000 (4)	S1000 (4)
Lock-washer, Motor (3/8)	30	2	18-8 SS	S1004 (4)	S1004 (4)
Bracket – 5/8" (NEMA 48C) ²	14	2	304 SS	442200	442200
Adapter Plate (NEMA 48C to 56C) ²	-	2	CS/Epoxy	442203	442203
Bolt, Adapter (1/4-20 x 5/8 HHCS) ²	-	2	18-8 SS	620008 (4)	620008 (4)
Lock-washer, Adapter (1/4) ²	-	2	18-8 SS	863701 (4)	863701 (4)
Position 9 – Shafts					
Drive Shaft, Uncoated	20	0	316 SS	440372	440372
Drive Shaft, CO-Coated	20	1	316 SS/CO	440372-CO	440372-CO
Drive Shaft, TC-Coated	20	2	316 SS/TC	440372-TC	440372-TC
Idler Shaft, Uncoated	1	0	316 SS	340378	340378
Idler Shaft, CO-Coated	1	1	316 SS/CO	340378-CO	340378-CO
Idler Shaft, TC-Coated	1	2	316 SS/TC	340378-TC	340378-TC
Position 10 – Motor					
No Motor	-	0	-	X	X
¼ Hp/1750 RPM - TEFC - Single Phase ³	-	A	-	Consult Factory	
¼ Hp/1150 RPM - TEFC - Single Phase ³	-	B	-		
¼ Hp/1750 RPM - TENV - 90 VDC w/SCR	-	C	-		
Suffix – Trim Options					
Temperature Trim (Gears & Bearings)	-	-8(T) ⁴	-	Consult Factory	
Viscosity Trim (Gears)	-	-9D, -9T	-		

1 - New Bracket for NEMA 56C motors (no Adapter Plate required).

2 - Obsolete parts for NEMA 56C motors.

3 - 115-230 VAC/50-60 Hz.

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

Liquiflo Chemical Processing Pumps™	4-Series Gear Pumps BOM: MAG-DRIVE, CC Models 44 & 45
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	44	45
Position 2 – Basic Material & Port Type (Housings, C. Can, O-Rings, Pins, Ret. Rings & Hardware)					
Rear Housing, 3/8" NPT	12	H	Alloy-C	440215	440215
Rear Housing, 3/8" BSPT	12	Y	Alloy-C	430221	430221
Center Housing	2	H, Y	Alloy-C	440002	440002
Front Housing	8	H, Y	Alloy-C	440110	440110
Containment Can	11	H, Y	Alloy-C	442002	442002
O-ring, Housing (2-036)	5	H, Y	Teflon	441103 (2)	441103 (2)
O-ring, Containment Can (2-033)	13	H, Y	Teflon	341102	341102
Pin, Housing Alignment	25	H, Y	17-4 PHSS	440802 (4)	440802 (4)
Pin, Bearing Lock	28	H, Y	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	28	H, Y	Alloy-C	361806 (4)	361806 (4)
Retaining Ring, Gear	21	H, Y	Alloy-C	346701 (4)	346701 (4)
Bolt, Housing (1/4-28 x 2 SHCS)	4	H, Y	18-8 SS	445005 (4)	445005 (4)
Bolt, Front Housing (#10-32 x 5/8 SHCS)	16	H, Y	18-8 SS	620840 (4)	620840 (4)
Lockwasher, Front Housing (#10)	29	H, Y	18-8 SS	5018 (4)	5018 (4)
Position 3 – Drive Gear					
Gear	15	1	Alloy-C	340613	340638
Gear	15	3	Teflon	340623	340600
Gear	15	8	Ryton	340612	340602
Gear	15	P	PEEK	340607	340604
Key, Gear (HY)	24	1, 8, P	Alloy-C	341911	341904
Key, Gear (LY)	24	3	Alloy-C	341917	341903
Position 4 – Idler Gear					
Gear	6	1	Alloy-C	340613	340638
Gear	6	3	Teflon	340623	340600
Gear	6	8	Ryton	340612	340602
Gear	6	P	PEEK	340607	340604
Key, Gear (HY)	23	1, 8, P	Alloy-C	341911	341904
Key, Gear (LY)	23	3	Alloy-C	341917	341903
Position 5 – Wear Plates					
<i>Wear Plate, Relieved (obsolete)</i>	<i>7</i>	<i>2</i>	<i>Carbon</i>	<i>Use Code E</i>	<i>Use Code E</i>
Wear Plate, Relieved	7	3	Teflon	310590 (4)	340521 (4)
Wear Plate, Relieved	7	4	SiC	310597 (4)	340582 (4)
Wear Plate, Relieved	7	E	Carbon-60	310596 (4)	340523 (4)
Wear Plate, Relieved	7	P	PEEK	310591 (4)	340524 (4)
Position 6 – Bearings					
<i>Bearing (obsolete)</i>	<i>3</i>	<i>2</i>	<i>Carbon</i>	<i>Use Code E</i>	<i>Use Code E</i>
Bearing	3	3	Teflon	340402 (4)	340402 (4)
Bearing	3	B	SiC	340413 (4)	340413 (4)
Bearing	3	E	Carbon-60	340416 (4)	340416 (4)
Bearing	3	P	PEEK	340417 (4)	340417 (4)
Position 7 – Magnetic Coupling					
Inner Magnet, MCN – 3/8" Bore	10	N	Alloy-C/NdFeB	SIMCN-13	SIMCN-13
Outer Magnet, MCN – 1/2" Bore	9	N (Pos. 8 = 0)	CS/NdFeB	SOMCN-4	SOMCN-4
Outer Magnet, MCN – 14 mm Bore	9	N (Pos. 8 = 1)	CS/NdFeB	SOMCN-71	SOMCN-71
Outer Magnet, MCN – 5/8" Bore	9	N (Pos. 8 = 2)	CS/NdFeB	SOMCN-5	SOMCN-5
Inner Magnet, MCR – 3/8" Bore	10	R	Alloy-C/SmCo	SIMCR-13	SIMCR-13
Outer Magnet, MCR – 1/2" Bore	9	R (Pos. 8 = 0)	CS/SmCo	SOMCR-4	SOMCR-4
Outer Magnet, MCR – 14 mm Bore	9	R (Pos. 8 = 1)	CS/SmCo	SOMCR-71	SOMCR-71
Outer Magnet, MCR – 5/8" Bore	9	R (Pos. 8 = 2)	CS/SmCo	SOMCR-5	SOMCR-5

See page 14 for Reference Drawing.

Liquiflo Chemical Processing Pumps™	4-Series Gear Pumps BOM: MAG-DRIVE, CC Models 44 & 45
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	44	45
Position 8 – Outer Magnet Bore / Motor Frame (Mounting Bracket & Hardware)					
Bracket – 1/2" (NEMA 48C)	14	0	304 SS	442200	442200
Bolt, Motor (1/4-20 x 5/8 HHCS)	17	0	18-8 SS	620008 (4)	620008 (4)
Lock-washer, Motor (1/4)	30	0	18-8 SS	863701 (4)	863701 (4)
Bracket – 14 mm (IEC 71 - B14 Face)	14	1	304 SS	442201	442201
Bolt, Motor (M6 x 16 mm SHCS)	17	1	18-8 SS	S1015 (4)	S1015 (4)
Lock-washer, Motor (1/4)	30	1	18-8 SS	863701 (4)	863701 (4)
Bracket – 5/8" (NEMA 56C) ¹	14	2	304 SS	442202	442202
Bolt, Motor (3/8-16 x 1-1/4 HHCS)	17	2	18-8 SS	S1000 (4)	S1000 (4)
Lock-washer, Motor (3/8)	30	2	18-8 SS	S1004 (4)	S1004 (4)
Bracket – 5/8" (NEMA 48C) ²	14	2	304 SS	442200	442200
Adapter Plate (NEMA 48C to 56C) ²	-	2	CS/Epoxy	442203	442203
Bolt, Adapter (1/4-20 x 5/8 HHCS) ²	-	2	18-8 SS	620008 (4)	620008 (4)
Lock-washer, Adapter (1/4) ²	-	2	18-8 SS	863701 (4)	863701 (4)
Position 9 – Shafts					
Drive Shaft, Uncoated	20	0	Alloy-C	440373	440373
Drive Shaft, CO-Coated	20	1	Alloy-C/CO	440373-CO	440373-CO
Drive Shaft, TC-Coated	20	2	Alloy-C/TC	440373-TC	440373-TC
Idler Shaft, Uncoated	1	0	Alloy-C	340379	340379
Idler Shaft, CO-Coated	1	1	Alloy-C/CO	340379-CO	340379-CO
Idler Shaft, TC-Coated	1	2	Alloy-C/TC	340379-TC	340379-TC
Position 10 – Motor					
No Motor	-	0	-	X	X
¼ Hp/1750 RPM - TEFC - Single Phase ³	-	A	-	Consult Factory	
¼ Hp/1150 RPM - TEFC - Single Phase ³	-	B	-		
¼ Hp/1750 RPM - TENV - 90 VDC w/SCR	-	C	-		
Suffix – Trim Options					
Temperature Trim (Gears & Bearings)	-	-8(T) ⁴	-	Consult Factory	
Viscosity Trim (Gears)	-	-9D, -9T	-		

1 - New Bracket for NEMA 56C motors (no Adapter Plate required).

2 - Obsolete parts for NEMA 56C motors.

3 - 115-230 VAC/50-60 Hz.

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

Liquiflo Chemical Processing Pumps™	4-Series Gear Pumps BOM: MAG-DRIVE, CC Models 44 & 45
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Part Description	Drwg. Item #	Titanium Construction			
		Code	Material	44	45
Position 2 – Basic Material & Port Type (Housings, C. Can, O-Rings, Pins, Ret. Rings & Hardware)					
Rear Housing, 3/8" NPT	12	T	Titanium	440216	440216
Rear Housing, 3/8" BSPT	12	Z	Titanium	430222	430222
Center Housing	2	T, Z	Titanium	440003	440003
Front Housing	8	T, Z	Titanium	440111	440111
Containment Can	11	T, Z	Titanium	442003	442003
O-ring, Housing (2-036)	5	T, Z	Teflon	441103 (2)	441103 (2)
O-ring, Containment Can (2-033)	13	T, Z	Teflon	341102	341102
Pin, Housing Alignment	25	T, Z	17-4 PHSS	440802 (4)	440802 (4)
Pin, Bearing Lock	28	T, Z	Teflon	361801 (4)	361801 (4)
Pin, Bearing Lock (High Temperature)	28	T, Z	Titanium	361809 (4)	361809 (4)
Retaining Ring, Gear	21	T, Z	Titanium	446704 (4)	446704 (4)
Bolt, Housing (1/4-28 x 2 SHCS)	4	T, Z	18-8 SS	445005 (4)	445005 (4)
Bolt, Front Housing (#10-32 x 5/8 SHCS)	16	T, Z	18-8 SS	620840 (4)	620840 (4)
Lockwasher, Front Housing (#10)	29	T, Z	18-8 SS	5018 (4)	5018 (4)
Position 3 – Drive Gear					
Gear	15	3	Teflon	340623	340600
Gear	15	4	Titanium	440687	440647
Gear	15	8	Ryton	340612	340602
Gear	15	P	PEEK	340607	340604
Key, Gear (HY)	24	4, 8, P	Titanium	440928	440915
Key, Gear (LY)	24	3	Titanium	440918	440925
Position 4 – Idler Gear					
Gear	6	3	Teflon	340623	340600
Gear	6	4	Titanium	440687	440647
Gear	6	8	Ryton	340612	340602
Gear	6	P	PEEK	340607	340604
Key, Gear (HY)	23	4, 8, P	Titanium	440928	440915
Key, Gear (LY)	23	3	Titanium	440918	440925
Position 5 – Wear Plates					
<i>Wear Plate, Relieved (obsolete)</i>	<i>7</i>	<i>2</i>	<i>Carbon</i>	<i>Use Code E</i>	<i>Use Code E</i>
Wear Plate, Relieved	7	3	Teflon	310590 (4)	340521 (4)
Wear Plate, Relieved	7	4	SiC	310597 (4)	340582 (4)
Wear Plate, Relieved	7	E	Carbon-60	310596 (4)	340523 (4)
Wear Plate, Relieved	7	P	PEEK	310591 (4)	340524 (4)
Position 6 – Bearings					
<i>Bearing (obsolete)</i>	<i>3</i>	<i>2</i>	<i>Carbon</i>	<i>Use Code E</i>	<i>Use Code E</i>
Bearing	3	3	Teflon	340402 (4)	340402 (4)
Bearing	3	B	SiC	340413 (4)	340413 (4)
Bearing	3	E	Carbon-60	340416 (4)	340416 (4)
Bearing	3	P	PEEK	340417 (4)	340417 (4)
Position 7 – Magnetic Coupling					
Inner Magnet, MCN – 3/8" Bore	10	N	Titanium/NdFeB	SIMCN-23	SIMCN-23
Outer Magnet, MCN – 1/2" Bore	9	N (Pos. 8 = 0)	CS/NdFeB	SOMCN-4	SOMCN-4
Outer Magnet, MCN – 14 mm Bore	9	N (Pos. 8 = 1)	CS/NdFeB	SOMCN-71	SOMCN-71
Outer Magnet, MCN – 5/8" Bore	9	N (Pos. 8 = 2)	CS/NdFeB	SOMCN-5	SOMCN-5
Inner Magnet, MCR – 3/8" Bore	10	R	Titanium/SmCo	SIMCR-23	SIMCR-23
Outer Magnet, MCR – 1/2" Bore	9	R (Pos. 8 = 0)	CS/SmCo	SOMCR-4	SOMCR-4
Outer Magnet, MCR – 14 mm Bore	9	R (Pos. 8 = 1)	CS/SmCo	SOMCR-71	SOMCR-71
Outer Magnet, MCR – 5/8" Bore	9	R (Pos. 8 = 2)	CS/SmCo	SOMCR-5	SOMCR-5

See page 14 for Reference Drawing.

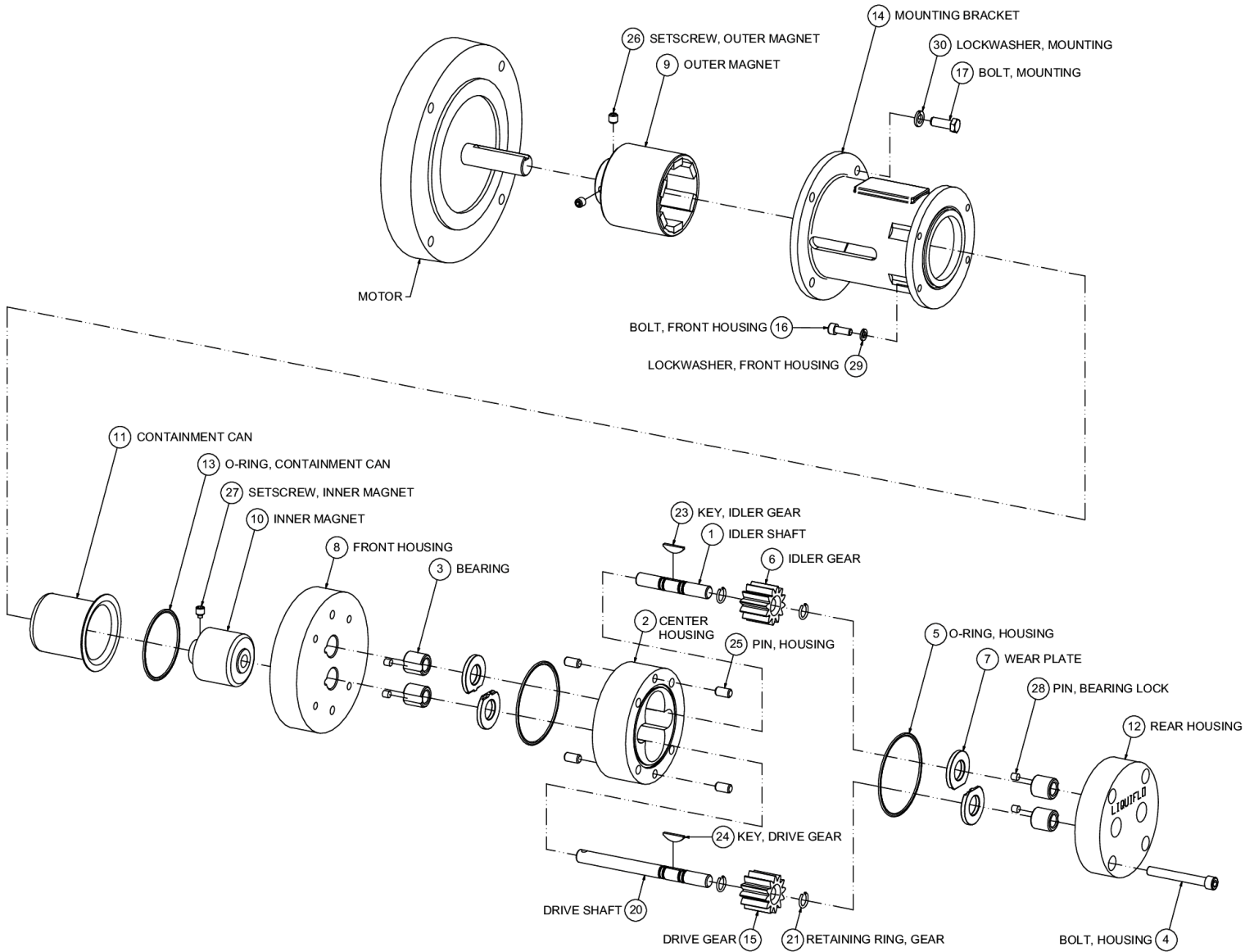
Liquiflo Chemical Processing Pumps™	4-Series Gear Pumps BOM: MAG-DRIVE, CC Models 44 & 45
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Part Description	Drwg. Item #	Titanium Construction			
		Code	Material	44	45
Position 8 – Outer Magnet Bore / Motor Frame (Mounting Bracket & Hardware)					
Bracket – 1/2" (NEMA 48C)	14	0	304 SS	442200	442200
Bolt, Motor (1/4-20 x 5/8 HHCS)	17	0	18-8 SS	620008 (4)	620008 (4)
Lock-washer, Motor (1/4)	30	0	18-8 SS	863701 (4)	863701 (4)
Bracket – 14 mm (IEC 71 - B14 Face)	14	1	304 SS	442201	442201
Bolt, Motor (M6 x 16 mm SHCS)	17	1	18-8 SS	S1015 (4)	S1015 (4)
Lock-washer, Motor (1/4)	30	1	18-8 SS	863701 (4)	863701 (4)
Bracket – 5/8" (NEMA 56C) ¹	14	2	304 SS	442202	442202
Bolt, Motor (3/8-16 x 1-1/4 HHCS)	17	2	18-8 SS	S1000 (4)	S1000 (4)
Lock-washer, Motor (3/8)	30	2	18-8 SS	S1004 (4)	S1004 (4)
Bracket – 5/8" (NEMA 48C) ²	14	2	304 SS	442200	442200
Adapter Plate (NEMA 48C to 56C) ²	-	2	CS/Epoxy	442203	442203
Bolt, Adapter (1/4-20 x 5/8 HHCS) ²	-	2	18-8 SS	620008 (4)	620008 (4)
Lock-washer, Adapter (1/4) ²	-	2	18-8 SS	863701 (4)	863701 (4)
Position 9 – Shafts					
Drive Shaft, TO-Coated	20	0	Titanium/TO	440374-TO	440374-TO
Idler Shaft, TO-Coated	1	0	Titanium/TO	440375-TO	440375-TO
Position 10 – Motor					
No Motor	-	0	-	X	X
¼ Hp/1750 RPM - TEFC - Single Phase ³	-	A	-	Consult Factory	
¼ Hp/1150 RPM - TEFC - Single Phase ³	-	B	-		
¼ Hp/1750 RPM - TENV - 90 VDC w/SCR	-	C	-		
Suffix – Trim Options					
Temperature Trim (Gears & Bearings)	-	-8(T) ⁴	-	Consult Factory	
Viscosity Trim (Gears)	-	-9D, -9T	-		

- 1 - New Bracket for NEMA 56C motors (no Adapter Plate required).
- 2 - Obsolete parts for NEMA 56C motors.
- 3 - 115-230 VAC/50-60 Hz.
- 4 - T = Application Temperature in °F (e.g., -8(300) = Temperature Trim at 300°F).

Appendix 1: Exploded View Reference Drawing

Models 41 thru 45 – MAG-DRIVE, Close-Coupled



Appendix 2: Meaning of Abbreviated Terms

Term	Meaning	Notes
BSPT	British Standard Pipe Threads	Type of threaded port
CC	Close-Coupled	Method of pump-motor coupling
CO	Chrome Oxide	Shaft coating material
CS	Carbon Steel	Outer magnet and adapter structural material
Drwg.	Drawing (Item #)	See exploded view reference drawing
HHCS	Hex Head Cap Screw	Type of bolt
HY	High-Yield (key)	Type of gear key
LY	Low-Yield (key)	Type of gear key
NdFeB	Neodymium Iron Boron	Inner and outer magnet material
NPT	National Pipe Threads	Type of threaded port
PEEK	Poly-Ether-Ether-Ketone (plastic)	Bearing Grade PEEK; material option for gears, bearings & wear plates
PHSS	Precipitate Hardened Stainless Steel	e.g., 17-4 PHSS
Pos.	Position (#)	Position number of model code
SCR	Silicon Controlled Rectifier	Type of variable speed drive for DC motors
SHCS	Socket Head Cap Screw	Type of bolt
SiC	Silicon Carbide	Bearing and wear plate material
SmCo	Samarium Cobalt	Inner and outer magnet material
SS	Stainless Steel	e.g., 304 SS, 316 SS, 18-8 SS
TC	Tungsten Carbide	Shaft coating material
TEFC	Totally Enclosed, Fan-Cooled	Type of motor enclosure
TENV	Totally Enclosed, Non-Ventilated	Type of motor enclosure
TO	Titanium Oxide	Shaft coating material; TiO ₂
X	Not Available or Not Applicable	Used in lieu of Part Number
#	Number	e.g., Item #, Position #, Part #, etc.