



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



## Models 41, 43, 44 & 45 Mag-Drive, Close-Coupled

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<b>Liquiflo</b> Chemical Processing Pumps™	<b>4-Series Gear Pumps</b> BOM: <b>MAG-DRIVE, CC Models 41 &amp; 43</b>
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	41	43
<b>Position 2 – Basic Material &amp; Port Type (Housings, C. Can, O-Rings, Pins, Ret. Rings &amp; Hardware)</b>					
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	18-8 SS	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)
Bolt, Mounting (1/4-20 x 5/8 HHCS) <sup>1</sup>	17	S, X	18-8 SS	620008 (4)	620008 (4)
Lockwasher, Mounting (1/4) <sup>1</sup>	30	S, X	18-8 SS	863701 (4)	863701 (4)
<b>Position 3 – Drive Gear</b>					
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
<b>Position 4 – Idler Gear</b>					
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
<b>Position 5 – Wear Plates</b>					
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)
<b>Position 6 – Bearings</b>					
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)
<b>Position 7 – Magnetic Coupling</b>					
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	SIMCN-5	SIMCN-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

1 - For NEMA motor frames.

See page 14 for Reference Drawing.

<b>Liquiflo</b> Chemical Processing Pumps™	<b>4-Series Gear Pumps</b> BOM: <b>MAG-DRIVE, CC Models 41 &amp; 43</b>
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	41	43
<b>Position 8 – Outer Magnet Bore (Mounting Bracket &amp; Adapter)</b>					
Bracket – 1/2" (NEMA 48C)	14	0	Cast Iron/Epoxy	442200	442200
Bracket – 14 mm (IEC 71 – B14 Face)	14	1	Cast Iron/Epoxy	442201	442201
Bracket – 5/8" (NEMA 56C)	14	2	Cast Iron/Epoxy	442200	442200
Adapter Plate (NEMA 56C)	18	2	CS/Epoxy	442203	442203
Bolt, Adapter (3/8-16 x 1-1/4 HHCS)	19	2	18-8 SS	S1000 (4)	S1000 (4)
Lockwasher, Adapter (3/8)	31	2	18-8 SS	S1004 (4)	S1004 (4)
<b>Position 9 – Shafts</b>					
Drive Shaft, Uncoated	20	0	316 SS	430372	430372
Drive Shaft, CO-Coated	20	A	316 SS/CO	430372-CO	430372-CO
Drive Shaft, TC-Coated	20	C	316 SS/TC	430372-TC	430372-TC
Idler Shaft, Uncoated	1	0	316 SS	320302	320302
Idler Shaft, CO-Coated	1	A	316 SS/CO	320302-CO	320302-CO
Idler Shaft, TC-Coated	1	C	316 SS/TC	320302-TC	320302-TC
<b>Position 10 – Motor</b>					
No Motor	–	0	–	X	X
¼ Hp/1750 RPM - TEFC - Single Phase <sup>2</sup>	–	A	–	<b>Consult Factory</b>	
¼ Hp/1150 RPM - TEFC - Single Phase <sup>2</sup>	–	B	–		
¼ Hp/1750 RPM - TENV - 90 VDC w/SCR	–	C	–		
<b>Suffix – Trim Options</b>					
Temperature Trim (Gears & Bearings)	–	-8(T) <sup>3</sup>	–	<b>Consult Factory</b>	
Viscosity Trim (Gears)	–	-9D, -9T	–		

2 - 115-230 VAC/50-60 Hz.

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

<b>Liquiflo</b> Chemical Processing Pumps™	<b>4-Series Gear Pumps</b> BOM: <b>MAG-DRIVE, CC Models 41 &amp; 43</b>
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	41	43
<b>Position 2 – Basic Material &amp; Port Type (Housings, C. Can, O-Rings, Pins, Ret. Rings &amp; Hardware)</b>					
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	18-8 SS	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)
Bolt, Mounting (1/4-20 x 5/8 HHCS) <sup>1</sup>	17	H, Y	18-8 SS	620008 (4)	620008 (4)
Lockwasher, Mounting (1/4) <sup>1</sup>	30	H, Y	18-8 SS	863701 (4)	863701 (4)
<b>Position 3 – Drive Gear</b>					
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
<b>Position 4 – Idler Gear</b>					
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
<b>Position 5 – Wear Plates</b>					
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)
<b>Position 6 – Bearings</b>					
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)
<b>Position 7 – Magnetic Coupling</b>					
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

1 - For NEMA motor frames.

See page 14 for Reference Drawing.

<b>Liquiflo</b> Chemical Processing Pumps™	<b>4-Series Gear Pumps</b> BOM: <b>MAG-DRIVE, CC Models 41 &amp; 43</b>
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	41	43
<b>Position 8 – Outer Magnet Bore (Mounting Bracket &amp; Adapter)</b>					
Bracket – 1/2" (NEMA 48C)	14	0	Cast Iron/Epoxy	442200	442200
Bracket – 14 mm (IEC 71 – B14 Face)	14	1	Cast Iron/Epoxy	442201	442201
Bracket – 5/8" (NEMA 56C)	14	2	Cast Iron/Epoxy	442200	442200
Adapter Plate (NEMA 56C)	18	2	CS/Epoxy	442203	442203
Bolt, Adapter (3/8-16 x 1-1/4 HHCS)	19	2	18-8 SS	S1000 (4)	S1000 (4)
Lockwasher, Adapter (3/8)	31	2	18-8 SS	S1004 (4)	S1004 (4)
<b>Position 9 – Shafts</b>					
Drive Shaft, Uncoated	20	0	Alloy-C	430373	430373
Drive Shaft, CO-Coated	20	A	Alloy-C/CO	430373-CO	430373-CO
Drive Shaft, TC-Coated	20	C	Alloy-C/TC	430373-TC	430373-TC
Idler Shaft, Uncoated	1	0	Alloy-C	320304	320304
Idler Shaft, CO-Coated	1	A	Alloy-C/CO	320304-CO	320304-CO
Idler Shaft, TC-Coated	1	C	Alloy-C/TC	320304-TC	320304-TC
<b>Position 10 – Motor</b>					
No Motor	–	0	–	X	X
¼ Hp/1750 RPM - TEFC - Single Phase <sup>2</sup>	–	A	–	<b>Consult Factory</b>	
¼ Hp/1150 RPM - TEFC - Single Phase <sup>2</sup>	–	B	–		
¼ Hp/1750 RPM - TENV - 90 VDC w/SCR	–	C	–		
<b>Suffix – Trim Options</b>					
Temperature Trim (Gears & Bearings)	–	-8(T) <sup>3</sup>	–	<b>Consult Factory</b>	
Viscosity Trim (Gears)	–	-9D, -9T	–		

2 - 115-230 VAC/50-60 Hz.

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

<b>Liquiflo</b> Chemical Processing Pumps™	<b>4-Series Gear Pumps</b> BOM: <b>MAG-DRIVE, CC Models 41 &amp; 43</b>
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Part Description	Drwg. Item #	Titanium Construction			
		Code	Material	41	43
<b>Position 2 – Basic Material &amp; Port Type (Housings, C. Can, O-Rings, Pins, Ret. Rings &amp; Hardware)</b>					
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	18-8 SS	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)
Bolt, Mounting (1/4-20 x 5/8 HHCS) <sup>1</sup>	17	T, Z	18-8 SS	620008 (4)	620008 (4)
Lockwasher, Mounting (1/4) <sup>1</sup>	30	T, Z	18-8 SS	863701 (4)	863701 (4)
<b>Position 3 – Drive Gear</b>					
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
<b>Position 4 – Idler Gear</b>					
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
<b>Position 5 – 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	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)
<b>Position 6 – Bearings</b>					
<b>Bearing (obsolete)</b>	<b>3</b>	<b>2</b>	<b>Carbon</b>	<b>Use Code E</b>	<b>Use Code E</b>
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)
<b>Position 7 – Magnetic Coupling</b>					
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

1 - For NEMA motor frames.

See page 14 for Reference Drawing.

<b>Liquiflo</b> Chemical Processing Pumps™	<b>4-Series Gear Pumps</b> BOM: <b>MAG-DRIVE, CC Models 41 &amp; 43</b>
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Part Description	Drwg. Item #	Titanium Construction			
		Code	Material	41	43
<b>Position 8 – Outer Magnet Bore (Mounting Bracket &amp; Adapter)</b>					
Bracket – 1/2" (NEMA 48C)	14	0	Cast Iron/Epoxy	442200	442200
Bracket – 14 mm (IEC 71 – B14 Face)	14	1	Cast Iron/Epoxy	442201	442201
Bracket – 5/8" (NEMA 56C)	14	2	Cast Iron/Epoxy	442200	442200
Adapter Plate (NEMA 56C)	18	2	CS/Epoxy	442203	442203
Bolt, Adapter (3/8-16 x 1-1/4 HHCS)	19	2	18-8 SS	S1000 (4)	S1000 (4)
Lockwasher, Adapter (3/8)	31	2	18-8 SS	S1004 (4)	S1004 (4)
<b>Position 9 – Shafts</b>					
Drive Shaft, TO-Coated	20	0	Titanium/TO	430374-TO	430374-TO
Idler Shaft, TO-Coated	1	0	Titanium/TO	420309-TO	420309-TO
<b>Position 10 – Motor</b>					
No Motor	–	0	–	X	X
¼ Hp/1750 RPM - TEFC - Single Phase <sup>2</sup>	–	A	–	<b>Consult Factory</b>	
¼ Hp/1150 RPM - TEFC - Single Phase <sup>2</sup>	–	B	–		
¼ Hp/1750 RPM - TENV - 90 VDC w/SCR	–	C	–		
<b>Suffix – Trim Options</b>					
Temperature Trim (Gears & Bearings)	–	-8(T) <sup>3</sup>	–	<b>Consult Factory</b>	
Viscosity Trim (Gears)	–	-9D, -9T	–		

<sup>2</sup> - 115-230 VAC/50-60 Hz.

<sup>3</sup> - T = Application Temperature in °F (e.g., -8(300) = Temperature Trim at 300°F).

<b>Liquiflo</b> Chemical Processing Pumps™	<b>4-Series Gear Pumps</b> BOM: <b>MAG-DRIVE, CC Models 44 &amp; 45</b>
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	44	45
<b>Position 2 – Basic Material &amp; Port Type (Housings, C. Can, O-Rings, Pins, Ret. Rings &amp; Hardware)</b>					
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	18-8 SS	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)
Bolt, Mounting (1/4-20 x 5/8 HHCS) <sup>1</sup>	17	S, X	18-8 SS	620008 (4)	620008 (4)
Lockwasher, Mounting (1/4) <sup>1</sup>	30	S, X	18-8 SS	863701 (4)	863701 (4)
<b>Position 3 – Drive Gear</b>					
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
<b>Position 4 – Idler Gear</b>					
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
<b>Position 5 – 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	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)
<b>Position 6 – Bearings</b>					
<b>Bearing (obsolete)</b>	<b>3</b>	<b>2</b>	<b>Carbon</b>	<b>Use Code E</b>	<b>Use Code E</b>
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)
<b>Position 7 – Magnetic Coupling</b>					
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	SIMCN-5	SIMCN-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

1 - For NEMA motor frames.

See page 14 for Reference Drawing.



<b>Liquiflo</b> Chemical Processing Pumps™	<b>4-Series Gear Pumps</b> BOM: <b>MAG-DRIVE, CC Models 44 &amp; 45</b>
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Part Description	Drwg. Item #	316 Stainless Steel Construction			
		Code	Material	44	45
<b>Position 8 – Outer Magnet Bore (Mounting Bracket &amp; Adapter)</b>					
Bracket – 1/2" (NEMA 48C)	14	0	Cast Iron/Epoxy	442200	442200
Bracket – 14 mm (IEC 71 – B14 Face)	14	1	Cast Iron/Epoxy	442201	442201
Bracket – 5/8" (NEMA 56C)	14	2	Cast Iron/Epoxy	442200	442200
Adapter Plate (NEMA 56C)	18	2	CS/Epoxy	442203	442203
Bolt, Adapter (3/8-16 x 1-1/4 HHCS)	19	2	18-8 SS	S1000 (4)	S1000 (4)
Lockwasher, Adapter (3/8)	31	2	18-8 SS	S1004 (4)	S1004 (4)
<b>Position 9 – Shafts</b>					
Drive Shaft, Uncoated	20	0	316 SS	440372	440372
Drive Shaft, CO-Coated	20	A	316 SS/CO	440372-CO	440372-CO
Drive Shaft, TC-Coated	20	C	316 SS/TC	440372-TC	440372-TC
Idler Shaft, Uncoated	1	0	316 SS	340378	340378
Idler Shaft, CO-Coated	1	A	316 SS/CO	340378-CO	340378-CO
Idler Shaft, TC-Coated	1	C	316 SS/TC	340378-TC	340378-TC
<b>Position 10 – Motor</b>					
No Motor	–	0	–	X	X
¼ Hp/1750 RPM - TEFC - Single Phase <sup>2</sup>	–	A	–	<b>Consult Factory</b>	
¼ Hp/1150 RPM - TEFC - Single Phase <sup>2</sup>	–	B	–		
¼ Hp/1750 RPM - TENV - 90 VDC w/SCR	–	C	–		
<b>Suffix – Trim Options</b>					
Temperature Trim (Gears & Bearings)	–	-8(T) <sup>3</sup>	–	<b>Consult Factory</b>	
Viscosity Trim (Gears)	–	-9D, -9T	–		

2 - 115-230 VAC/50-60 Hz.

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

<b>Liquiflo</b> Chemical Processing Pumps™	<b>4-Series Gear Pumps</b> BOM: <b>MAG-DRIVE, CC Models 44 &amp; 45</b>
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	44	45
<b>Position 2 – Basic Material &amp; Port Type (Housings, C. Can, O-Rings, Pins, Ret. Rings &amp; Hardware)</b>					
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	18-8 SS	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)
Bolt, Mounting (1/4-20 x 5/8 HHCS) <sup>1</sup>	17	H, Y	18-8 SS	620008 (4)	620008 (4)
Lockwasher, Mounting (1/4) <sup>1</sup>	30	H, Y	18-8 SS	863701 (4)	863701 (4)
<b>Position 3 – Drive Gear</b>					
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
<b>Position 4 – Idler Gear</b>					
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
<b>Position 5 – Wear Plates</b>					
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)
<b>Position 6 – Bearings</b>					
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)
<b>Position 7 – Magnetic Coupling</b>					
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

1 - For NEMA motor frames.

See page 14 for Reference Drawing.

<b>Liquiflo</b> Chemical Processing Pumps™	<b>4-Series Gear Pumps</b> BOM: <b>MAG-DRIVE, CC Models 44 &amp; 45</b>
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Part Description	Drwg. Item #	Alloy-C Construction			
		Code	Material	44	45
<b>Position 8 – Outer Magnet Bore (Mounting Bracket &amp; Adapter)</b>					
Bracket – 1/2" (NEMA 48C)	14	0	Cast Iron/Epoxy	442200	442200
Bracket – 14 mm (IEC 71 – B14 Face)	14	1	Cast Iron/Epoxy	442201	442201
Bracket – 5/8" (NEMA 56C)	14	2	Cast Iron/Epoxy	442200	442200
Adapter Plate (NEMA 56C)	18	2	CS/Epoxy	442203	442203
Bolt, Adapter (3/8-16 x 1-1/4 HHCS)	19	2	18-8 SS	S1000 (4)	S1000 (4)
Lockwasher, Adapter (3/8)	31	2	18-8 SS	S1004 (4)	S1004 (4)
<b>Position 9 – Shafts</b>					
Drive Shaft, Uncoated	20	0	Alloy-C	440373	440373
Drive Shaft, CO-Coated	20	A	Alloy-C/CO	440373-CO	440373-CO
Drive Shaft, TC-Coated	20	C	Alloy-C/TC	440373-TC	440373-TC
Idler Shaft, Uncoated	1	0	Alloy-C	340379	340379
Idler Shaft, CO-Coated	1	A	Alloy-C/CO	340379-CO	340379-CO
Idler Shaft, TC-Coated	1	C	Alloy-C/TC	340379-TC	340379-TC
<b>Position 10 – Motor</b>					
No Motor	–	0	–	X	X
¼ Hp/1750 RPM - TEFC - Single Phase <sup>2</sup>	–	A	–	<b>Consult Factory</b>	
¼ Hp/1150 RPM - TEFC - Single Phase <sup>2</sup>	–	B	–		
¼ Hp/1750 RPM - TENV - 90 VDC w/SCR	–	C	–		
<b>Suffix – Trim Options</b>					
Temperature Trim (Gears & Bearings)	–	-8(T) <sup>3</sup>	–	<b>Consult Factory</b>	
Viscosity Trim (Gears)	–	-9D, -9T	–		

2 - 115-230 VAC/50-60 Hz.

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

<b>Liquiflo</b> Chemical Processing Pumps™	<b>4-Series Gear Pumps</b> BOM: <b>MAG-DRIVE, CC Models 44 &amp; 45</b>
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Part Description	Drwg. Item #	Titanium Construction			
		Code	Material	44	45
<b>Position 2 – Basic Material &amp; Port Type (Housings, C. Can, O-Rings, Pins, Ret. Rings &amp; Hardware)</b>					
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	18-8 SS	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)
Bolt, Mounting (1/4-20 x 5/8 HHCS) <sup>1</sup>	17	T, Z	18-8 SS	620008 (4)	620008 (4)
Lockwasher, Mounting (1/4) <sup>1</sup>	30	T, Z	18-8 SS	863701 (4)	863701 (4)
<b>Position 3 – Drive Gear</b>					
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
<b>Position 4 – Idler Gear</b>					
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
<b>Position 5 – Wear Plates</b>					
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)
<b>Position 6 – Bearings</b>					
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)
<b>Position 7 – Magnetic Coupling</b>					
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

1 - For NEMA motor frames.

See page 14 for Reference Drawing.

<b>Liquiflo</b> Chemical Processing Pumps™	<b>4-Series Gear Pumps</b> BOM: <b>MAG-DRIVE, CC Models 44 &amp; 45</b>
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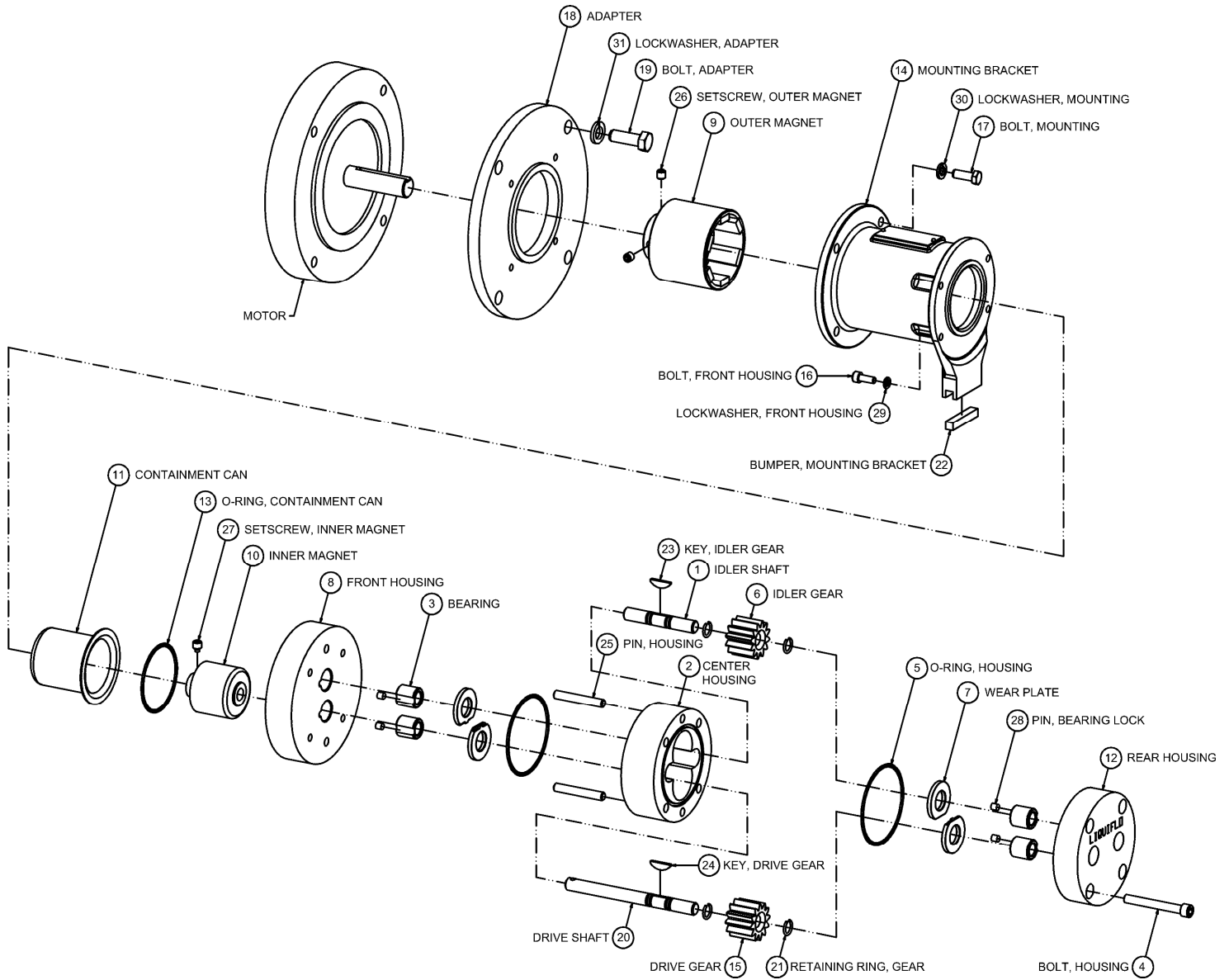
Part Description	Drwg. Item #	Titanium Construction			
		Code	Material	44	45
<b>Position 8 – Outer Magnet Bore (Mounting Bracket &amp; Adapter)</b>					
Bracket – 1/2" (NEMA 48C)	14	0	Cast Iron/Epoxy	442200	442200
Bracket – 14 mm (IEC 71 – B14 Face)	14	1	Cast Iron/Epoxy	442201	442201
Bracket – 5/8" (NEMA 56C)	14	2	Cast Iron/Epoxy	442200	442200
Adapter Plate (NEMA 56C)	18	2	CS/Epoxy	442203	442203
Bolt, Adapter (3/8-16 x 1-1/4 HHCS)	19	2	18-8 SS	S1000 (4)	S1000 (4)
Lockwasher, Adapter (3/8)	31	2	18-8 SS	S1004 (4)	S1004 (4)
<b>Position 9 – Shafts</b>					
Drive Shaft, TO-Coated	20	0	Titanium/TO	440374-TO	440374-TO
Idler Shaft, TO-Coated	1	0	Titanium/TO	440375-TO	440375-TO
<b>Position 10 – Motor</b>					
No Motor	–	0	–	X	X
¼ Hp/1750 RPM - TEFC - Single Phase <sup>2</sup>	–	A	–	<b>Consult Factory</b>	
¼ Hp/1150 RPM - TEFC - Single Phase <sup>2</sup>	–	B	–		
¼ Hp/1750 RPM - TENV - 90 VDC w/SCR	–	C	–		
<b>Suffix – Trim Options</b>					
Temperature Trim (Gears & Bearings)	–	-8(T) <sup>3</sup>	–	<b>Consult Factory</b>	
Viscosity Trim (Gears)	–	-9D, -9T	–		

<sup>2</sup> - 115-230 VAC/50-60 Hz.

<sup>3</sup> - 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
<b>BSPT</b>	British Standard Pipe Threads	Type of threaded port
<b>CC</b>	Close-Coupled	Method of pump-motor coupling
<b>CO</b>	Chrome Oxide	Shaft coating material
<b>CS</b>	Carbon Steel	Outer magnet and adapter structural material
<b>Drwg.</b>	Drawing (Item #)	See exploded view reference drawing
<b>HHCS</b>	Hex Head Cap Screw	Type of bolt
<b>HY</b>	High-Yield (key)	Type of gear key
<b>LY</b>	Low-Yield (key)	Type of gear key
<b>NdFeB</b>	Neodymium Iron Boron	Inner and outer magnet material
<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>SCR</b>	Silicon Controlled Rectifier	Type of variable speed drive for DC motors
<b>SHCS</b>	Socket Head Cap Screw	Type of bolt
<b>SiC</b>	Silicon Carbide	Bearing and wear plate material
<b>SmCo</b>	Samarium Cobalt	Inner and outer magnet material
<b>SS</b>	Stainless Steel	e.g., 303 SS, 316 SS, 18-8 SS
<b>TC</b>	Tungsten Carbide	Shaft coating material
<b>TEFC</b>	Totally Enclosed, Fan-Cooled	Type of motor enclosure
<b>TENV</b>	Totally Enclosed, Non-Ventilated	Type of motor enclosure
<b>TO</b>	Titanium Oxide	Shaft coating material; TiO <sub>2</sub>
<b>X</b>	Not Available or Not Applicable	Used in lieu of Part Number
<b>#</b>	Number	e.g., Item #, Position #, Part #, etc.