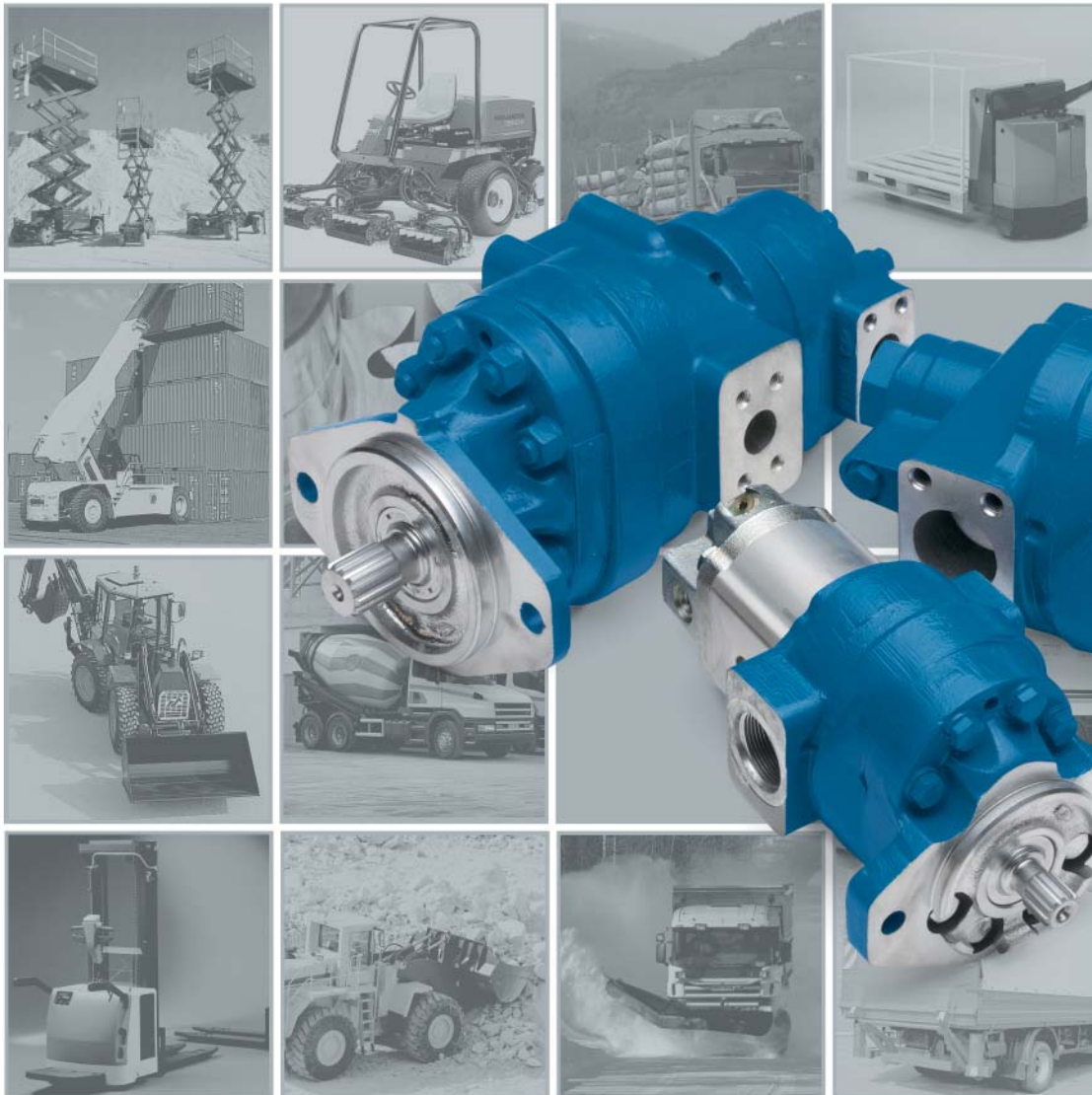


Haldex

G20/G30 Series Hydraulic Pumps



HYDRAULIC SYSTEMS DIVISION

Outstanding Hydraulic Products, Service and Expertise, Worldwide

DESCRIPTION, FEATURES AND BENEFITS

Reliable, efficient, serviceable design

Haldex external spur gear, positive displacement pumps are offered in single, double, triple and thru-drive versions.

Single and thru-drive pumps are of a three-section modular design. Front and rear covers are cast iron for reliability, strength, and sound reduction. A **cast iron center section** allows gear tips to generate their own run-in paths, creating minimum radial gear-tip clearance for high volumetric efficiency.

The thru-drive pump is a single pump with a mounting pad and coupling spline in its rear cover, allowing a second pump to be mounted and driven in tandem.

The double pump consists of two single pumps, each having its own outlet port but sharing a common inlet port and input shaft. This compact unit can, therefore, serve two separate hydraulic circuits, or supply greater volume to a single circuit through the combined delivery of both pumps.

Besides offering greater design flexibility to hydraulic system designers, thru-drive and double pumps reduce installation costs since they allow multiple pump operation from a single mounting and drive point. Also, double pumps require only one inlet line, compared to the two required when separate pumps are used.

Convenient, economical porting arrangements

A large selection of port sizes and positions allows greater system design flexibility, provides the means for reducing costs through simplified plumbing arrangements, and facilitates the interchangeability of Haldex and competitive pumps. SAE 4-bolt split flange ports and SAE straight thread ports are standard.

Choice of shafts, rotation and couplings

Splined SAE side-fit drive shafts are standard. Other popular shafts are available. Pumps are assembled for either clockwise or counterclockwise rotation.

Thru-drive pumps are provided with output drive couplings that mate with splined SAE side-fit drive shafts.

Meets many mounting requirements

SAE standard wet flange mountings and single or double shaft seals are available on all pumps. Mounting pads meet SAE standards and are available in several sizes and types to satisfy various mounting requirements and to facilitate interchangeability of Vickers and competitive units.

Double shaft seals are ideal for applications where the pump pilot and shaft extend into a transmission case or crankcase. If either seal fails, the pump fluid remains separated from the transmission or crankcase fluid. Leakage past either seals drains to the exterior of the pump. The double seal feature thus

reduces system downtime by preventing the mixing of different fluids and providing for visual detection of seal malfunction.

The inlet of the thru-drive pump is open to the pump's rear coupling area, requiring that mating pumps have a wet-flange mounting. If the rear mounting pad is capped instead of used to mount a pump, it must be sealed to prevent fluid leakage and entrance of air.

Heavy duty construction

The drive gear and drive shaft are one piece construction, as are the driven gear and shaft, to eliminate the potential problems of fretting and stress fatigue associated with two-piece construction. The one-piece design also allows the use of large diameter journals and bearings for greater load-carrying capacity.

Gears are of AISI 8620 alloy steel for greater shaft strength and a stronger gear assembly. Gears have ten teeth to minimize pressure ripple, and gear sides and shaft journals are carburized, hardened, and ground to a fine finish.

The pumps large teflon impregnated bronze bearings are installed in precision bored covers for optimum shaft alignment. They provide a large support area that keeps bearing pressures low enough to handle most indirect drives. For applications imposing very high side loads, consult your Haldex representative.

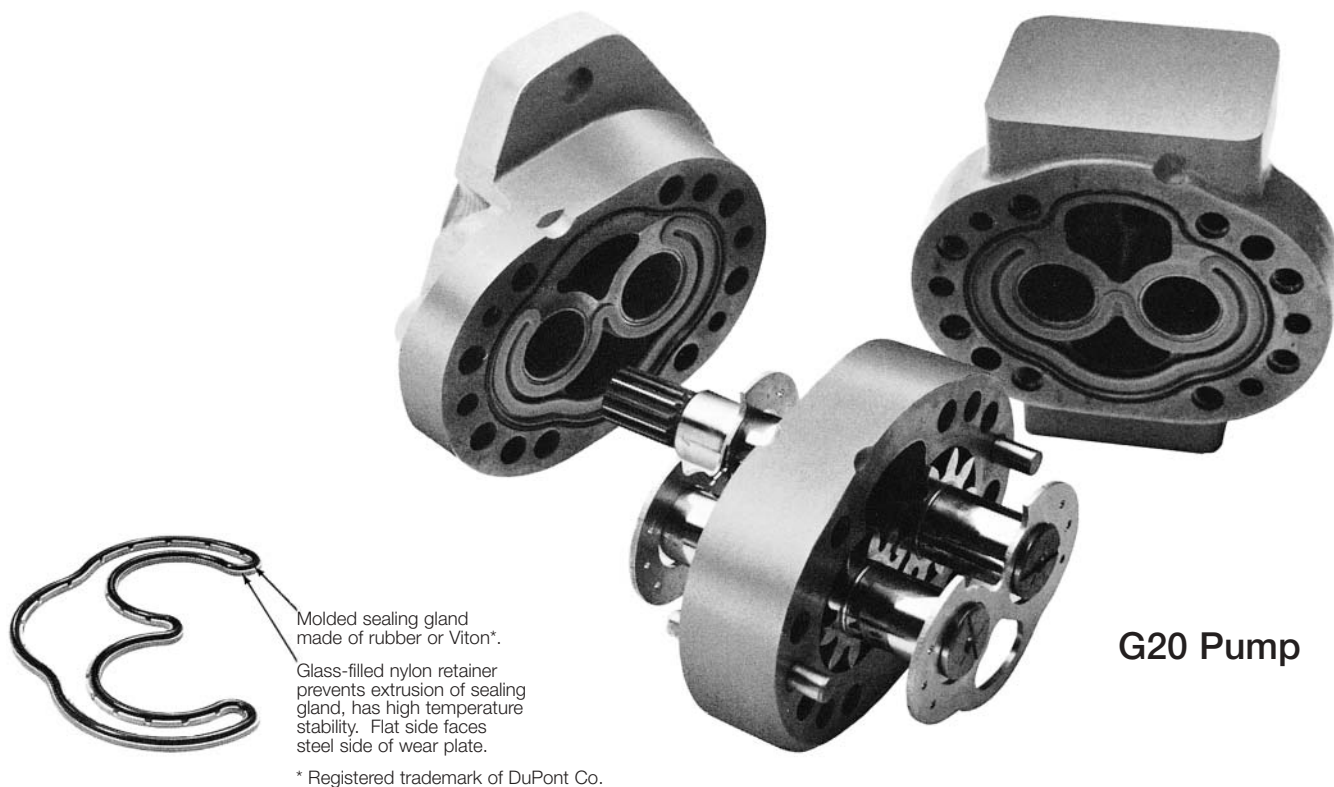
NOTE: This catalog features our most standard single, double and triple pump capabilities. Other pump options and multiple pump combinations are available. Please contact factory or your Haldex representative for information. See bottom of page 45 for contact information.

Minimum leakage and wear

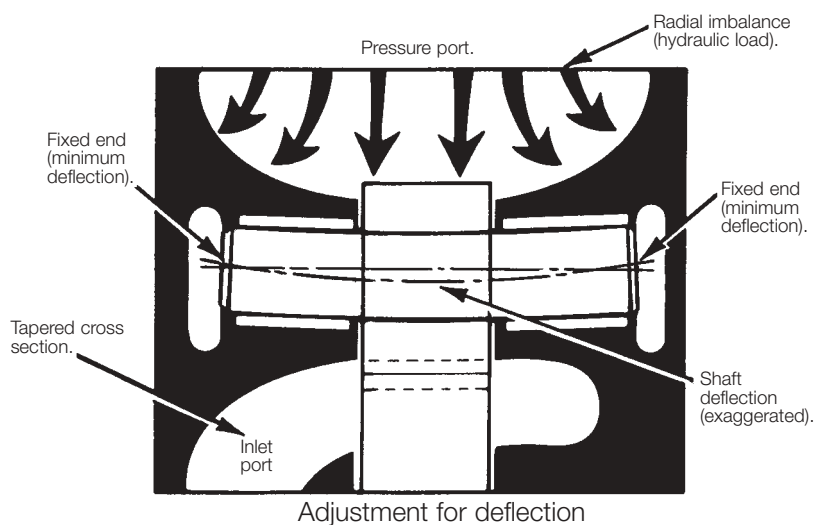
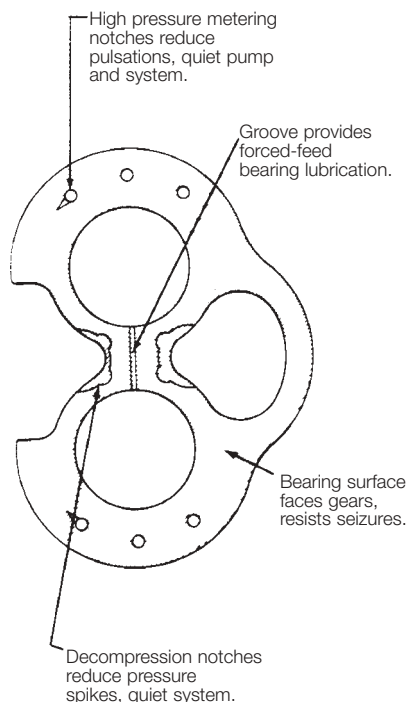
Haldex pumps utilize two seal packs and two wear plates to minimize leakage across the end faces of the gears and to reduce wear. During startup, the seal packs mechanically preload and seal a cantilever section of the plates against the ends of the gears.

The seal packs also establish the wear plate area exposed to system pressure, allowing axial pressure loading and balancing of the cantilever sections. As pressure increases, the sections deflect toward the gear faces to reduce clearances and balance opposing axial

forces. Running clearances are maintained small enough for minimum leakage across the faces, yet large enough to maintain the oil film required to minimize wear of mating surfaces.



LONG-LIFE BEARING SYSTEM



Bearings and support structures move in unison with, and adjust to, shafts that are deflected by high hydraulic loads. Optimum bearing alignment,

under load, maintains the large-area bearing support required for minimum wear and maximum life of bearings and pump.

4 PERFORMANCE SPECIFICATIONS for G20/G30 PUMPS

Single and thru-drive pumps		Theoretical displacement per revolution		Rated pressure		Rated speed @ rated pressure & .17 bar (5" Hg) vacuum inlet	Minimum speed @ rated pressure	Typical delivery @ rated speed & pressure		Typical input power @ rated speed & pressure	
Model series	Pump size	cc	cu. in.	bar	psi	rpm	rpm*	l/min	gpm	kW	hp
G20 and GT20	7	23	1.41	276	4000	3600	1000	75.7	20	37	50
	9	29	1.79	276	4000	3400	800	90.8	24	44	59
	11	36	2.18	276	4000	3200	600	105.9	28	51	68
	13	43	2.60	276	4000	3000	600	117.3	31	57	76
	15	48	2.94	276	4000	2800	600	124.9	33	60	80
	17	55	3.33	250	3625	2500	600	128.7	34	62	83
	19	62	3.77	228	3300	2500	600	147.6	39	57	76
	21	68	4.13	207	3000	2500	600	162.7	43	57	76
G30 and GT30	24	77	4.71	190	2750	2500	600	185.4	49	53	71
	27	87	5.30	170	2475	2300	600	193.0	51	49	66
	18	58	3.54	276	4000	3000	600	166.5	44	77	104
	21	68	4.13	276	4000	3000	600	193.0	51	90	121
	25	80	4.91	276	4000	3000	600	230.9	61	107	144
	28	91	5.51	276	4000	2750	600	214.0	57	95	128
	30	97	5.89	276	4000	2500	600	230.9	61	98	131
	32	104	6.30	250	3625	2500	600	245.0	65	99	133
G30 and GT30	35	113	6.88	250	3625	2500	600	272.5	72	95	127
	40	129	7.86	228	3300	2400	600	299.0	79	104	139
	45	145	8.84	190	2750	2300	600	325.5	86	92	123
	50	161	9.82	170	2475	2200	600	344.4	91	87	116

* Lower speeds are permissible when operating below rated pressure.

Double pump model series	Pump sizes and ratings †		† Rated speed of double pump is governed by pump with lower speed rating. If deliveries of both pumps are combined, rated pressure is governed by pump with lower pressure rating.
	Shaft-end pump	Cover-end pump	
G2020	Same as for G20 and GT20 above.	Same as for G20 and GT20 above.	
G3020	Same as for G30 and GT30 above.		
G3030		Same as for G30 and GT30 above.	

Efficiency

Depending on displacement, speed and pressure, volumetric efficiency is 81-98% and overall efficiency is 71-92% with SAE 10W oil at 49°C (120°F).

Inlet conditions

Pressure on the inlet should not exceed 1 bar (15 psi). Under continuous operation, inlet vacuum should not exceed 0.17 bar (5"Hg).

Operating temperature

Under continuous operation, a maximum of 96°C (205°F) is recommended. The maximum temperature for cyclic or intermittent operation is 107°C (225°F).

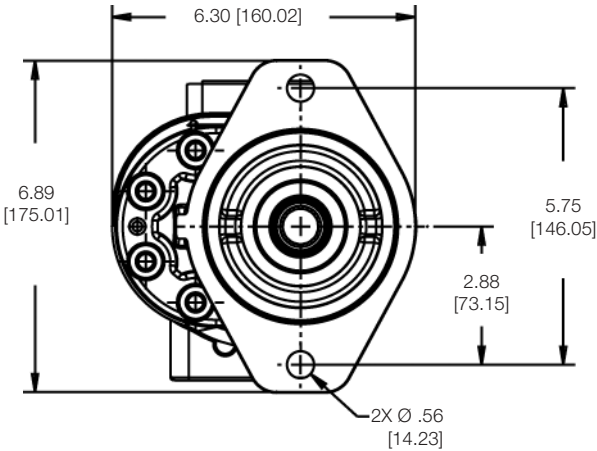
Fluids and filtration

For applications requiring fire resistant fluids, water glycols, water in-oil emulsions and synthetics may be used at slightly reduced ratings. Fluid should be selected

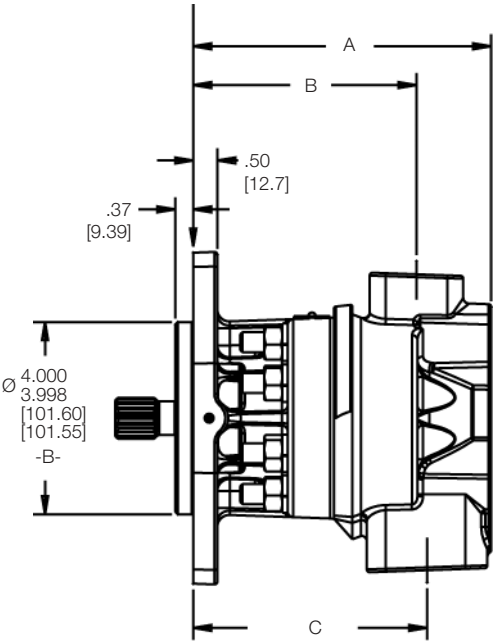
with an operating viscosity similar to the petroleum oil described above. For application assistance, consult your Haldex representative.

The system should be filtered to provide an ISO code (proposed) cleanliness level of 19/16. A 10-micron filter sized to accommodate full system return line flow, is recommended for most operating environments. Severe conditions may require greater efficiency from the filter.

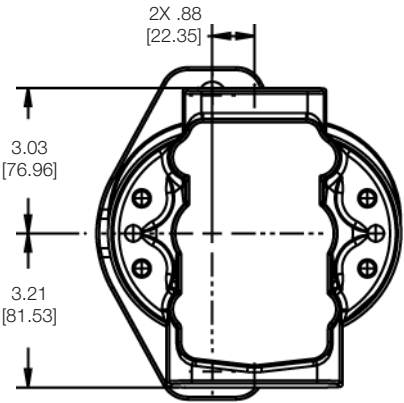
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FRONT VIEW



SIDE VIEW



REAR VIEW

5.30	87	27	7.95	201.9	6.40	162.6	6.62	168.1
4.71	77	24	7.70	195.6	6.15	156.2	6.37	161.8
4.13	68	21	7.43	188.7	5.88	149.4	6.10	154.9
3.77	62	19	7.26	184.4	5.71	145.0	5.93	150.6
3.33	55	17	7.06	179.3	5.51	140.0	5.73	145.5
2.94	48	15	6.89	175.0	5.34	135.6	5.56	141.2
2.60	43	13	6.73	170.9	5.18	131.6	5.40	137.2
2.18	36	11	6.54	166.1	4.99	126.7	5.21	132.3
1.79	29	9	6.36	161.5	4.81	122.2	5.03	127.8
1.41	23	7	6.18	157.0	4.63	117.6	4.85	123.2
CIR	CC	DISPLACEMENT CODE	A (in.)	A (mm)	B (in.)	B (mm)	C (in.)	C (mm)

All dimensions shown are for reference only. Consult factory for your specific configuration.

Model Code for G20 Series Single Pumps

7

ORDERING INFORMATION

Each option has been assigned an order code -- listed in the tables below -- for placement in the sequence shown at right.

1 (Special Seals)

Order Code	Description
F3	Viton Seal
Omit	Standard

2 (Series)

Order Code	Description
G20	G20 Series Single Gear Pump

3 (Mount Type)

Order Code	Description
D	Dry Mounting Flange (shorter length, single shaft seal)
W	Wet Mounting Flange (pilot diameter sealing and provides for optional double shaft seal)
S	Single Shaft Seal Short Mount

4 (Front Cover)

Order Code	Description
1	SAE "A" 2-Bolt Mount (G20W only)
2	SAE "B" 2-Bolt Flange
6	SAE "B" 2/4-Bolt Combination Mount (G20W only)
8	SAE "C" 2/4-Bolt Mount
31	SAE "A" 2-Bolt Mount w/Outboard Ball Bearing
32	SAE "B" 2-Bolt Mount w/Outboard Ball Bearing

5 (Inlet Port)

Order Code	Description
B	1.00", SAE 4-Bolt Split Flange
C	1.25", SAE 4-Bolt Split Flange
CM	1.25", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
D	1.50", SAE 4-Bolt Split Flange
DM	1.50", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
V	#16 SAE (1 5/16" - 12) Straight Thread
W	#20 SAE (1 5/8" - 12) Straight Thread
X	#24 SAE (1 7/8" - 12) Straight Thread

Contact factory for other requirements.

6 (Displacements)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
7-	23 cc/1.41 in. ³	17-	55 cc/3.33 in. ³
9-	29 cc/1.79 in. ³	19-	62 cc/3.77 in. ³
11-	36 cc/2.18 in. ³	21-	68 cc/4.13 in. ³
13-	43 cc/2.60 in. ³	24-	77 cc/4.71 in. ³
15-	48 cc/2.94 in. ³	27-	87 cc/5.30 in. ³

7 (Outlet Port)

Order Code	Description
A	.750", SAE 4-Bolt Split Flange
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
S	#10 SAE (.875" - 14) Straight Thread
T	#12 SAE (1 1/16" - 12) Straight Thread
V	#16 SAE (1 5/16" - 12) Straight Thread

Contact factory for other requirements.

8 (Rear Cover)

Order Code	Description
1	Standard Single Pump Rear Cover (no options)

9 (Shaft Seal)

Order Code	Description
A	Single Shaft Seal
B	Double Shaft Seal

EXAMPLE:

(F3)-	G20-	W-	2	-D-	15-B	-1-	A-	12-	A-	61-	L	
1	2	3	4	5	6	7	8	9	10	11	12	13
Special Seals	Series	Mount Type	Front Cover	Inlet Port	Displacements	Outlet Port	Rear Cover	Shaft Seal	Drive Shaft	Port Locations	Design	Rotation

10 (Drive Shaft)

Order Code	Description
1	SAE "B" Straight Keyed, .875" Diameter, 1.3125" Ext.
3	Straight Keyed with Thread (.625" - 18 UNC)
5	Tapered Threaded (1.50" taper per foot)
7	Tapered Keyed/Threaded (.625" - 18 UNC, 1.50" taper per foot)
12	SAE "B" 13-Tooth Spline, Flat Root-Side Fit
17	SAE "A" 9-Tooth Spline, Flat Root-Side Fit
21	SAE "BB" Straight Keyed, 1.00" diameter, 1.50" ext.
99	SAE "BB" 15-Tooth Spline, Flat Root-Side Fit

Contact factory for other requirements.

11 (Port Locations)

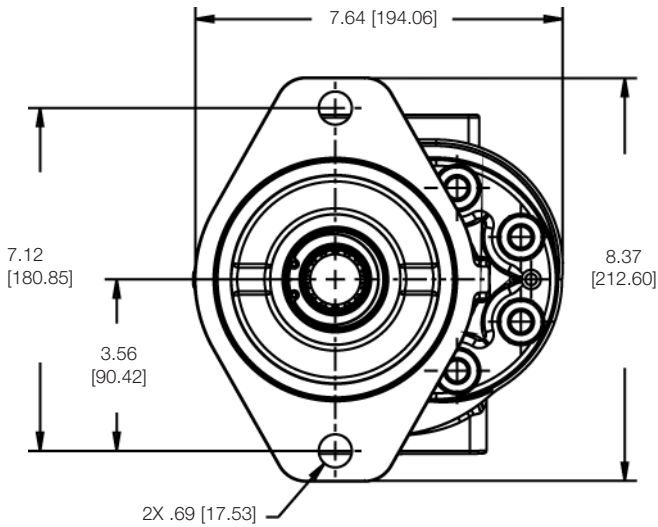
Order Code	Description
A	Side Inlet / Side Outlet
B	Side Inlet / Rear Outlet
C	Rear Inlet / Side Outlet
D	Rear Inlet / Rear Outlet

12 (Design Designation)

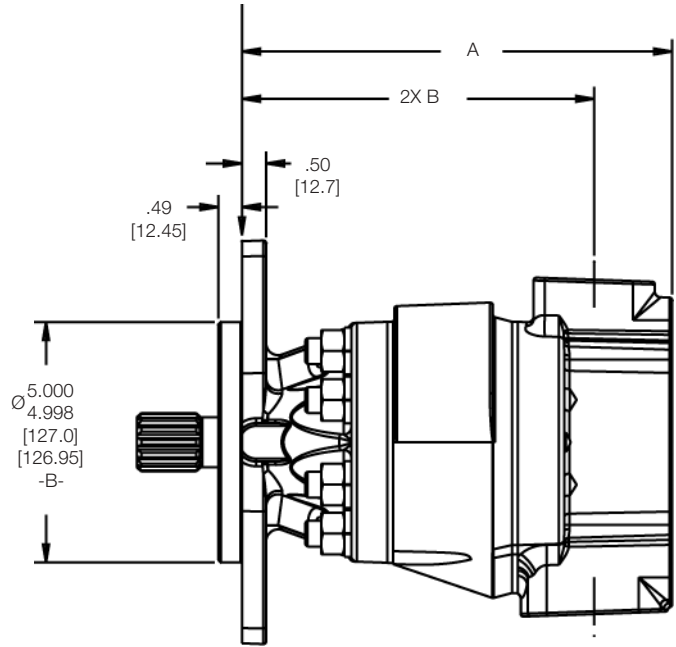
Order Code	Description
61	

13 (Rotation)

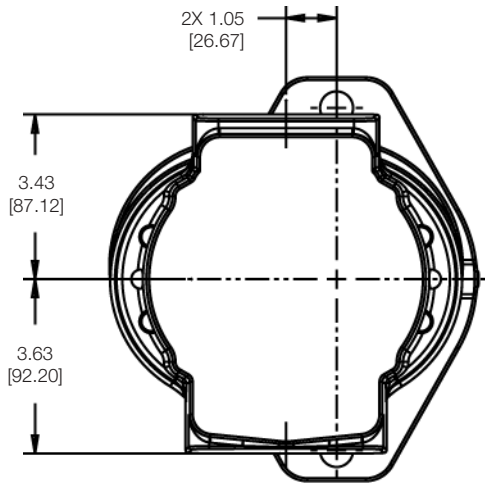
Order Code	Description
Omit	Clockwise Rotation
L	Counterclockwise Rotation



FRONT VIEW



SIDE VIEW



REAR VIEW

161	9.82	50	9.56	242.8	7.94	201.7
145	8.84	45	9.25	235.0	7.63	193.8
129	7.86	40	8.94	227.1	7.32	185.9
113	6.88	35	8.63	219.2	7.01	178.1
103	6.30	32	8.45	214.6	6.83	173.5
97	5.89	30	8.33	211.6	6.71	170.4
90	5.51	28	8.21	208.5	6.59	167.4
81	4.91	25	8.02	203.7	6.40	162.6
68	4.13	21	7.77	197.4	6.15	156.2
58	3.54	18	7.58	192.5	5.96	151.4
CC	CIR	DISPLACEMENT CODE	A (in.)	A (mm)	B (in.)	B (mm)

All dimensions shown are for reference only. Consult factory for your specific configuration.

Model Code for G30 Series Single Pumps

9

ORDERING INFORMATION

Each option has been assigned an order code -- listed in the tables below -- for placement in the sequence shown at right.

1 (Special Seals)

Order Code	Description
F3	Viton Seal
Omit	Standard

2 (Series)

Order Code	Description
G30	G30 Series Single Gear Pump

3 (Mount Type)

Order Code	Description
C	Standard Designation

4 (Front Cover)

Order Code	Description
4	SAE "C" 4-Bolt Mount
6	SAE "B" 2/4-Bolt Combination Mount
7	SAE "C" 2-Bolt Mount
8	SAE "C" 2/4-Bolt Combination Mount

5 (Inlet Port)

Order Code	Description
D	1.50", SAE 4-Bolt Split Flange
DM	1.50", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
E	2.00", SAE 4-Bolt Split Flange
EM	2.00", 4-Bolt Metric Split Flange (M14 x 2.0" threads)
W	#20 SAE (1 5/8" - 12) Straight Thread
X	#24 SAE (1 7/8" - 12) Straight Thread
Y	#30 SAE (2 1/2" - 12) Straight Thread

Contact factory for other requirements.

6 (Displacements)

Order Code	Cm ³ /in ³	Order Code	Cm ³ /in ³
18-	58 cc/3.54 in. ³	32-	104 cc/6.30 in. ³
21-	68 cc/4.13 in. ³	35-	113 cc/6.88 in. ³
25-	80 cc/4.91 in. ³	40-	129 cc/7.86 in. ³
28-	91 cc/5.51 in. ³	45-	145 cc/8.84 in. ³
30-	97 cc/5.89 in. ³	50-	161 cc/9.82 in. ³

7 (Outlet Port)

Order Code	Description
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
C	1.250", SAE 4-Bolt Split Flange
CM	1.250", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
D	1.50", SAE 4-Bolt Split Flange
DM	1.50", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
W	#20 SAE (1 5/8" - 12) Straight Thread
X	#24 SAE (1 7/8" - 12) Straight Thread
Y	#30 SAE (2 1/2" - 12) Straight Thread

Contact factory for other requirements.

8 (Rear Cover)

Order Code	Description
2	Standard Single Pump Rear Cover (no options)

9 (Shaft Seal)

Order Code	Description
A	Single Shaft Seal
B	Double Shaft Seal
X	None

EXAMPLE:

(F3)-	G30-	C-	4	-	E-30-	C	-	2-	A	-12-	A-	32-	L
1	2	3	4	5	6	7	8	9	10	11	12	13	
Special Seals	Series	Mount Type	Front Cover	Inlet Port	Displacements	Outlet Port	Rear Cover	Shaft Seal	Drive Shaft	Port Positions	Design	Rotation	

10 (Drive Shaft)

Order Code	Description
1	SAE "C" Straight Keyed, 1.250" Diameter, 1.875" Ext.
5	Tapered Threaded (1.50" taper per foot)
12	SAE "C" 14-Tooth Spline, Flat Root-Side Fit
34	SAE "C" 14-Tooth Spline

Contact factory for other requirements.

11 (Port Positions)

Order Code	Description
A	Side Inlet / Side Outlet
B	Side Inlet / Rear Outlet
C	Rear Inlet / Side Outlet
D	Rear Inlet / Rear Outlet

12 (Design Designation)

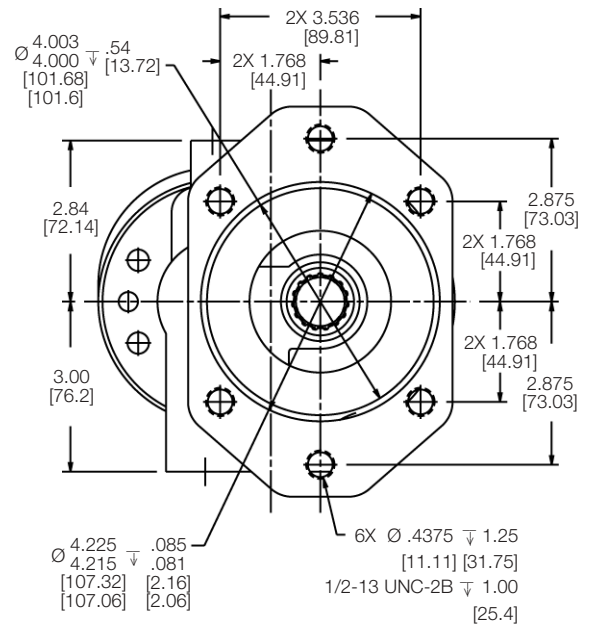
Order Code	Description
32	

13 (Rotation)

Order Code	Description
L	Counterclockwise Rotation
R	Clockwise Rotation



FRONT VIEW



REAR VIEW

87	5.30	27	9.68	245.9	6.42	163.1	6.64	168.7
77	4.71	24	9.41	239.0	6.15	156.2	6.37	161.8
68	4.13	21	9.14	232.2	5.88	149.4	6.10	154.9
62	3.77	19	8.97	227.8	5.71	145.0	5.93	150.6
55	3.33	17	8.78	223.0	5.51	140.0	5.73	145.5
48	2.94	15	8.60	218.4	5.34	135.6	5.56	141.2
43	2.60	13	8.44	214.4	5.18	131.6	5.40	137.2
36	2.18	11	8.25	209.6	4.99	126.7	5.21	132.3
29	1.79	9	8.07	205.0	4.81	122.2	5.03	127.8
23	1.41	7	7.90	200.7	4.63	117.6	4.85	123.2
CC	CIR	DISPLACEMENT CODE	A (in.)	A (mm)	B (in.)	B (mm)	C (in.)	C (mm)

All dimensions shown are for reference only. Consult factory for your specific configuration.

Model Code for GT20 Series Thru Drive Pumps

11

ORDERING INFORMATION

Each option has been assigned an order code -- listed in the tables below -- for placement in the sequence shown at right.

1 (Special Seals)

Order Code	Description
F3	Viton Seal
Omit	Standard

2 (Series)

Order Code	Description
GT20	GT20 Thru Drive Series Single Gear Pump

3 (Mount Type)

Order Code	Description
W	Wet Mounting Flange (pilot diameter sealing and provides for optional double shaft seal)

4 (Front Cover)

Order Code	Description
1	SAE "A" 2-Bolt Mount
2	SAE "B" 2-Bolt Mount
4	SAE "C" 4-Bolt Mount (Contact Factory)
6	SAE "B" 2/4-Bolt Combination Mount (Wet Mount Only)
8	SAE "C" 2/4-Bolt Combination Mount

5 (Inlet Port)

Order Code	Description
B	1.00", SAE 4-Bolt Split Flange
C	1.25", SAE 4-Bolt Split Flange
D	1.50", SAE 4-Bolt Split Flange
DM	1.50", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
V	#16 SAE (1 5/16" - 12) Straight Thread
W	#20 SAE (1 5/8" - 12) Straight Thread
X	#24 SAE (1 7/8" - 12) Straight Thread

Contact factory for other requirements.

6 (Displacements)

Order Code	Cm ³ /in ³	Order Code	Cm ³ /in ³
7-	23 cc/1.41 in. ³	17-	55 cc/3.33 in. ³
9-	29 cc/1.79 in. ³	19-	62 cc/3.77 in. ³
11-	36 cc/2.18 in. ³	21-	68 cc/4.13 in. ³
13-	43 cc/2.60 in. ³	24-	77 cc/4.71 in. ³
15-	48 cc/2.94 in. ³	27-	87 cc/5.30 in. ³

7 (Outlet Port)

Order Code	Description
A	.750", SAE 4-Bolt Split Flange
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
S	#10 SAE (.875" - 14) Straight Thread
T	#12 SAE (1 1/16" - 12) Straight Thread
V	#16 SAE (1 5/16" - 12) Straight Thread

Contact factory for other requirements.

8 (Rear Mounting Pad)

Order Code	Description
1	SAE "A" 2-Bolt Rear Mounting Pad
6	SAE "B" 2/4-Bolt Rear Mounting Pad

Note: A shorter length SAE "A" rear mounting pad option is available, contact factory for information.

9 (Shaft Seal)

Order Code	Description
A	Single Shaft Seal
B	Double Shaft Seal
X	None

EXAMPLE:

(F3)- GT20- W- 2 -D- 9-B- 1- A-12- A- 61-L												
1	2	3	4	5	6	7	8	9	10	11	12	13
Special Seals	Series	Mount Type	Front Cover	Inlet Port	Displacements	Outlet Port	Rear Mounting Pad	Shaft Seal	Drive Shaft	Rear Coupling	Design	Rotation

10 (Drive Shaft)

Order Code	Description
1	SAE "B" Straight Keyed, .875" diameter, 1.3125" ext.
12	SAE "B" 13-Tooth Spline, Flat Root-Side Fit
21	SAE "BB" Straight Keyed, 1.00" diameter, 1.50" ext.
99	SAE "BB" 15-Tooth Spline, Flat Root-Side Fit

Contact factory for other requirements.

11 (Rear Coupling)

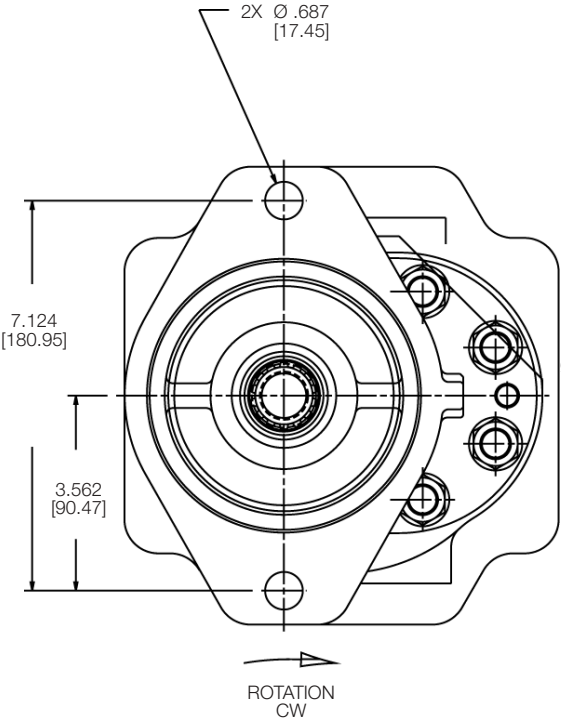
Order Code	Description
A	SAE "A" Coupling
B	SAE "B" Coupling
BB	SAE "BB" Coupling
G	SAE "A" Coupling 11-Tooth 16/32 DP, Flat Root-Side Fit
X	No Coupling

12 (Design Designation)

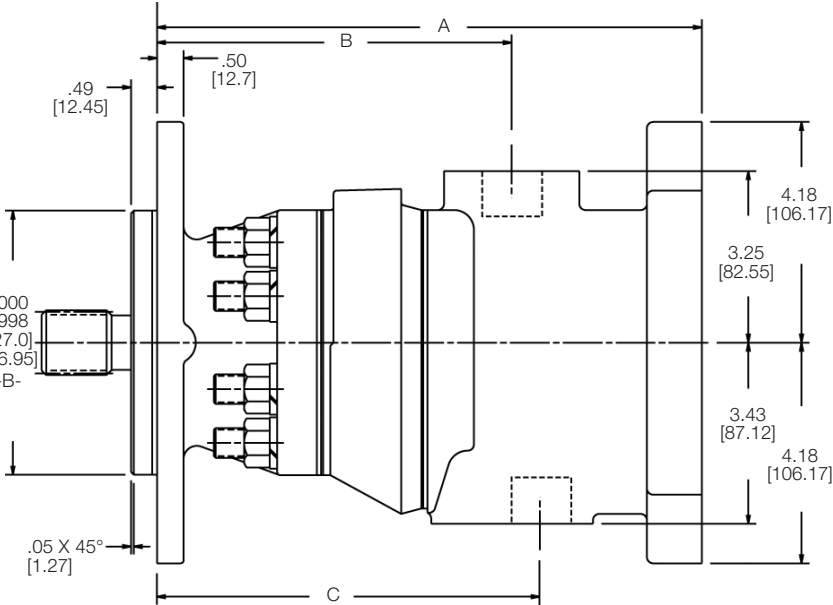
Order Code	Description
61	

13 (Rotation)

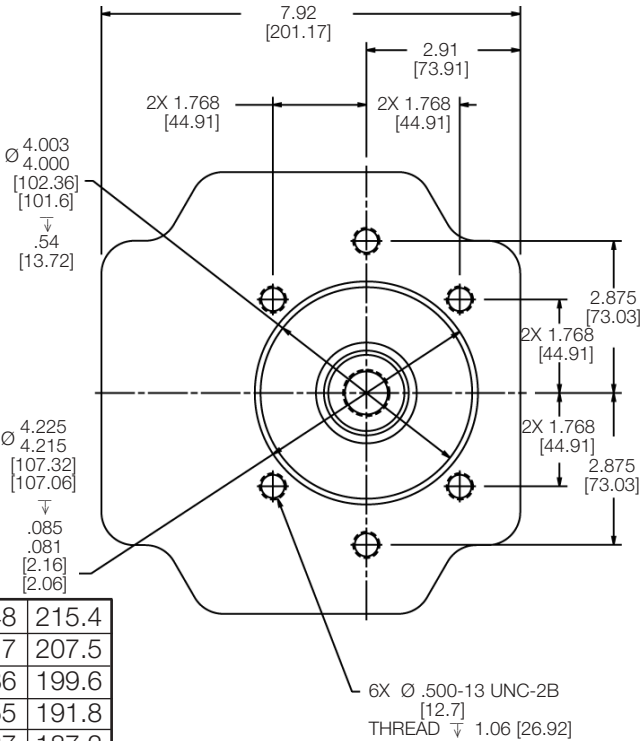
Order Code	Description
L	Counterclockwise Rotation
R	Clockwise Rotation



FRONT VIEW



SIDE VIEW



REAR VIEW

161	9.82	50	11.54	293.1	7.95	201.9	8.48	215.4
145	8.84	45	11.23	285.2	7.64	194.1	8.17	207.5
129	7.86	40	10.92	277.4	7.33	186.2	7.86	199.6
113	6.88	35	10.62	269.7	7.02	178.3	7.55	191.8
103	6.30	32	10.43	264.9	6.84	173.7	7.37	187.2
97	5.89	30	10.31	261.9	6.71	170.4	7.24	183.9
90	5.51	28	10.19	258.8	6.59	167.4	7.12	180.8
81	4.91	25	10.00	254.0	6.40	162.6	6.93	176.0
68	4.13	21	9.75	247.7	6.15	156.2	6.68	169.7
58	3.54	18	9.56	242.8	5.97	151.6	6.50	165.1
CC	CIR	DISPLACEMENT CODE	A (in.)	A (mm)	B (in.)	B (mm)	C (in.)	C (mm)

All dimensions shown are for reference only. Consult factory for your specific configuration.

Model Code for GT30(32) Series Thru Drive Pumps

13

ORDERING INFORMATION

Each option has been assigned an order code -- listed in the tables below -- for placement in the sequence shown at right.

1 (Special Seals)

Order Code	Description
F3	Viton Seal
Omit	Standard

2 (Series)

Order Code	Description
GT30	GT30 Thru Drive Series Gear Pump

3 (Mount Type)

Order Code	Description
C	Standard Designation

4 (Front Cover)

Order Code	Description
4	SAE "C" 4-Bolt Mount
6	SAE "B" 2/4-Bolt Combination Mount
7	SAE "C" 2-Bolt Mount
8	SAE "C" 2/4-Bolt Combination Mount

5 (Inlet Port)

Order Code	Description
D	1.50", SAE 4-Bolt Split Flange
DM	1.50", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
E	2.00", SAE 4-Bolt Split Flange
EM	2.00", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
W	#20 SAE (1 5/8" - 12) Straight Thread
X	#24 SAE (1 7/8" - 12) Straight Thread
Y	#30 SAE (2 1/2" - 12) Straight Thread

Contact factory for other requirements.

6 (Displacements)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
18-	58 cc/3.54 in. ³	32-	104 cc/6.30 in. ³
21-	68 cc/4.13 in. ³	35-	113 cc/6.88 in. ³
25-	80 cc/4.91 in. ³	40-	129 cc/7.86 in. ³
28-	91 cc/5.51 in. ³	45-	145 cc/8.84 in. ³
30-	97 cc/5.89 in. ³	50-	161 cc/9.82 in. ³

7 (Outlet Port)

Order Code	Description
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
C	1.25", SAE 4-Bolt Split Flange
CM	1.25", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
D	1.50", SAE 4-Bolt Split Flange
DM	1.50", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
W	#20 SAE (1 5/8" - 12) Straight Thread
X	#24 SAE (1 7/8" - 12) Straight Thread

Contact factory for other requirements.

8 (Rear Mounting Pad)

Order Code	Description
6	SAE "B" 2/4-Bolt Combination Rear Mounting Pad
8	SAE "C" 2/4-Bolt Combination Rear Mounting Pad

Note: SAE "A" rear mounting pad is available with GT30-41st design. Contact factory for information.

9 (Shaft Seal)

Order Code	Description
A	Single Shaft Seal
B	Double Shaft Seal
X	None

EXAMPLE:

(F3)-GT30(32)-C- 4 - E- 30-C -6- A -12-B- 32- L												
1	2	3	4	5	6	7	8	9	10	11	12	13
Special Seals	Series	Mount Type	Front Cover	Inlet Port	Displacements	Outlet Port	Rear Mounting Pad	Shaft Seal	Drive Shaft	Rear Coupling	Design	Rotation

10 (Drive Shaft)

Order Code	Description
1	SAE "C" Straight Keyed, 1.250" diameter, 1.875" ext.
12	SAE "C" 14-Tooth Spline, Flat Root-Side Fit
34	SAE "C" 14-Tooth Spline

Contact factory for other requirements.

11 (Rear Coupling)

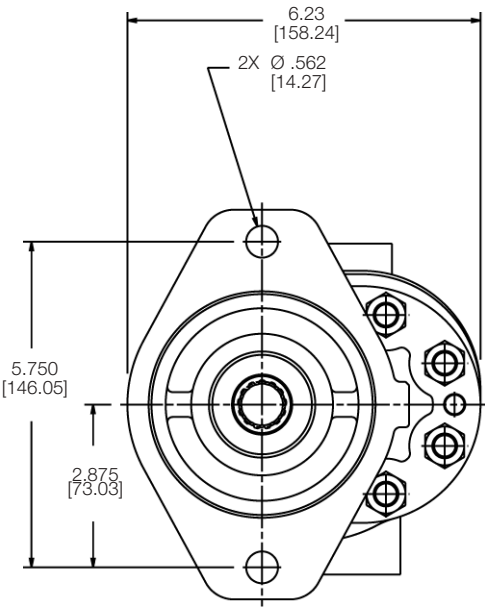
Order Code	Description
B	SAE "B" Coupling
BB	SAE "BB" Coupling
C	SAE "C" Coupling

12 (Design Designation)

Order Code	Description
32	Standard

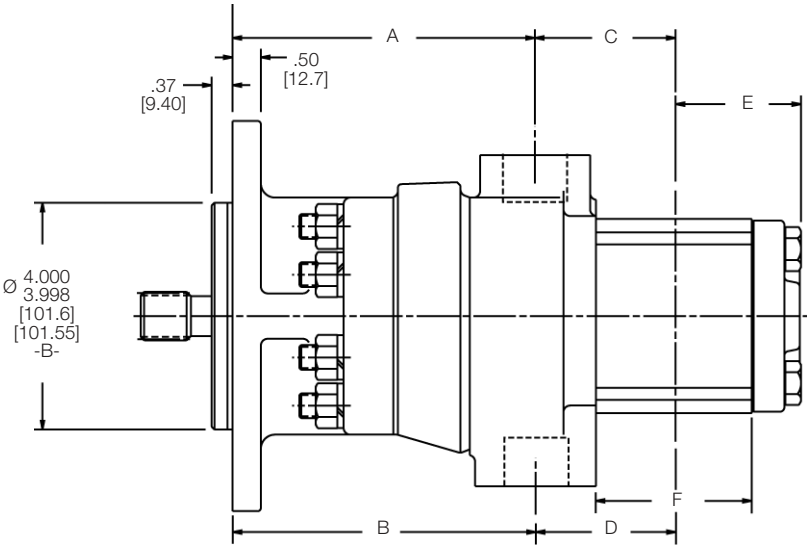
13 (Rotation)

Order Code	Description
L	Counterclockwise Rotation
R	Clockwise Rotation



ROTATION
CCW

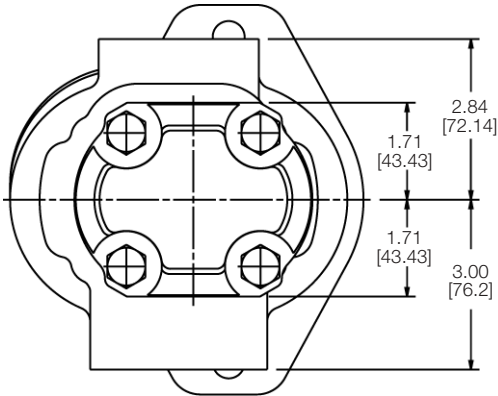
FRONT VIEW



SIDE VIEW

87	5.30	27	6.41	162.8	6.43	163.3
77	4.71	24	6.14	156.0	6.16	156.5
68	4.13	21	5.87	149.1	5.89	149.6
62	3.77	19	5.71	145.0	5.73	145.5
55	3.33	17	5.51	140.0	5.53	140.5
48	2.94	15	5.33	135.4	5.35	135.9
43	2.60	13	5.17	131.3	5.19	131.8
36	2.18	11	4.98	126.5	5.00	127.0
29	1.79	9	4.80	121.9	4.82	122.4
23	1.41	7	4.63	117.6	4.65	118.1
CC	CIR	DISPLACEMENT CODE	A (in.)	A (mm)	B (in.)	B (mm)

G20 SECTIONS



REAR VIEW

28	1.709	28	2.73	69.3	2.72	69.1	2.52	64.0	3.30	83.8
27	1.647	27	2.70	68.6	2.69	68.3	2.49	63.2	3.24	82.3
23	1.403	23	2.58	65.5	2.57	65.3	2.38	60.5	3.01	76.5
19	1.159	19	2.47	62.7	2.46	62.5	2.26	57.4	2.78	70.6
16	.976	16	2.38	60.5	2.37	60.2	2.17	55.1	2.60	66.0
14	.854	14	2.32	58.9	2.31	58.7	2.12	53.8	2.49	63.2
11	.671	11	2.23	56.6	2.22	56.4	2.03	51.6	2.31	58.7
10	.610	10	2.20	55.9	2.19	55.6	2.00	50.8	2.25	57.2
8	.488	8	2.15	54.6	2.14	54.4	1.94	49.3	2.14	54.4
6	.366	6	2.09	53.1	2.08	52.8	1.86	47.2	2.02	51.3
CC	CIR	DISPLACEMENT CODE	C (in.)	C (mm)	D (in.)	D (mm)	E (in.)	E (mm)	F (in.)	F (mm)

W900 SECTIONS

All dimensions shown are for reference only. Consult factory for your specific configuration.

Model Code for G2009 Series Double Pumps

15

ORDERING INFORMATION

Each option has been assigned an order code -- listed in the tables below -- for placement in the sequence shown at right.

1 (Special Seals)

Order Code	Description
F3	Viton Seal
Omit	Standard

2 (Series)

Order Code	Description
G2009	G2009 Series Double Gear Pump

3 (Mount Type)

Order Code	Description
D	Dry Mounting Flange (shorter length, single shaft seal)
W	Wet Mounting Flange (pilot diameter sealing and provides for optional double shaft seal)

4 (Front Cover)

Order Code	Description
2	SAE "B" 2-Bolt Mount
4	SAE "C" 4-Bolt Mount (contact factory)
6	SAE "B" 2/4-Bolt Combination Mount (wet mount only)
8	SAE "C" 2/4-Bolt Mount (contact factory)

5 (Front Section Inlet Port)

Order Code	Description
C	1.250", SAE 4-Bolt Split Flange
CM	1.250", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
D	1.50", SAE 4-Bolt Split Flange
DM	1.50", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
E	2.0", SAE 4-Bolt Split Flange
EM	2.0", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
V	#16 SAE (1 5/16" - 12) Straight Thread
W	#20 SAE (1 5/8" - 12) Straight Thread

Contact factory for other requirements.

6 (Displacements, Front Section)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
7-	23 cc/1.41 in. ³	17-	55 cc/3.33 in. ³
9-	29 cc/1.79 in. ³	19-	62 cc/3.77 in. ³
11-	36 cc/2.18 in. ³	21-	68 cc/4.13 in. ³
13-	43 cc/2.60 in. ³	24-	77 cc/4.71 in. ³
15-	48 cc/2.94 in. ³	27-	87 cc/5.30 in. ³

7 (Front Section Outlet Port)

Order Code	Description
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
T	#12 SAE (1 1/16" - 12) Straight Thread
V	#16 SAE (1 5/16" - 12) Straight Thread

NOTE: Metric ports available, contact factory. Contact factory for other requirements.

8 (Displacements, Rear Section)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
6-	6 cc/.366 in. ³	16-	16 cc/.976 in. ³
8-	8 cc/.488 in. ³	19-	19 cc/1.159 in. ³
10-	10 cc/.610 in. ³	23-	23 cc/1.403 in. ³
11-	11 cc/.671 in. ³	27-	27 cc/1.647 in. ³
14-	14 cc/.854 in. ³	28-	28 cc/1.709 in. ³

9 (Rear Section Inlet Port)

Order Code	Description
X	No Rear Inlet Port (single inlet for double pump)

Rear Inlet Port Options (dual inlet for double pump):

S	6 cc, #10 SAE (7/8" - 14) Straight Thread
T	8 cc, #12 SAE (1 1/16" - 12) Straight Thread
V	19 cc - 28 cc, #16 SAE (1 5/16" - 12) Straight Thread
A	16 cc - 19 cc, .750", SAE 4-Bolt Split Flange
B	23 cc - 28 cc, 1.00", SAE 4-Bolt Split Flange

NOTES: Split flange ports are not available for 6cc - 14 cc sizes.

Metric ports available, contact factory.

EXAMPLE:

(F3)-G2009- W- 2 -W-13- T -23-X- A -12- E- C -61- L														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Special Seals	Series	Mount Type	Front Cover	Front Inlet Port	Displacements	Front Outlet Port	Displacements	Rear Inlet Port	Rear Outlet Port	Drive Shaft	Valve Options	Relief Valve Setting	Design	Rotation

10 (Rear Section Outlet Porting)

Order Code	Description
Q	6 cc, #8 SAE (3/4" - 16) Straight Thread
S	8 cc - 16 cc, #10 SAE (7/8" - 14) Straight Thread
T	19 cc - 28 cc, #12 SAE (1 1/16" - 12) Straight Thread
Y	16 cc - 19 cc, .500", SAE 4-Bolt Split Flange
A	23 cc - 28 cc, .750", SAE 4-Bolt Split Flange

NOTES: Split flange ports are not available for 6cc - 14 cc sizes.

Metric ports available, contact factory.

11 (Drive Shaft)

Order Code	Description
1	SAE "B" Straight Keyed, .875" Diameter, 1.3125" Ext.
12	SAE "B" 13-Tooth Spline, Flat Root-Side Fit
21	SAE "BB" Straight Keyed, 1.00" Diameter, 1.50" Ext.
99	SAE "BB" 15-Tooth Spline, Flat Root-Side Fit

Contact factory for other requirements.

12 (Valve Options) **

Order Code	Description
A	Tuneable Priority Flow Control Valve, Secondary Flow Loadable
B	Tuneable Priority Flow Control Valve, Secondary Bypass to Pump Inlet
C	Tuneable Priority Flow Control Valve w/Relief Valve on Priority Flow Only, Secondary Flow Loadable (> 4 GPM)
CC	Tuneable Priority Flow Control Valve w/Relief Valve on Priority Flow Only, Secondary Flow Loadable (< 4 GPM)
D	Load Sense Priority Flow Control, Priority Flow Relief Bypass to Pump Inlet
E	Pilot-Operated Relief Valve, Bypass to Tank External
X	No Valve Option

** Contact factory for availability and minimum quantity requirements for above valve options.

13 (Relief Valve Setting)

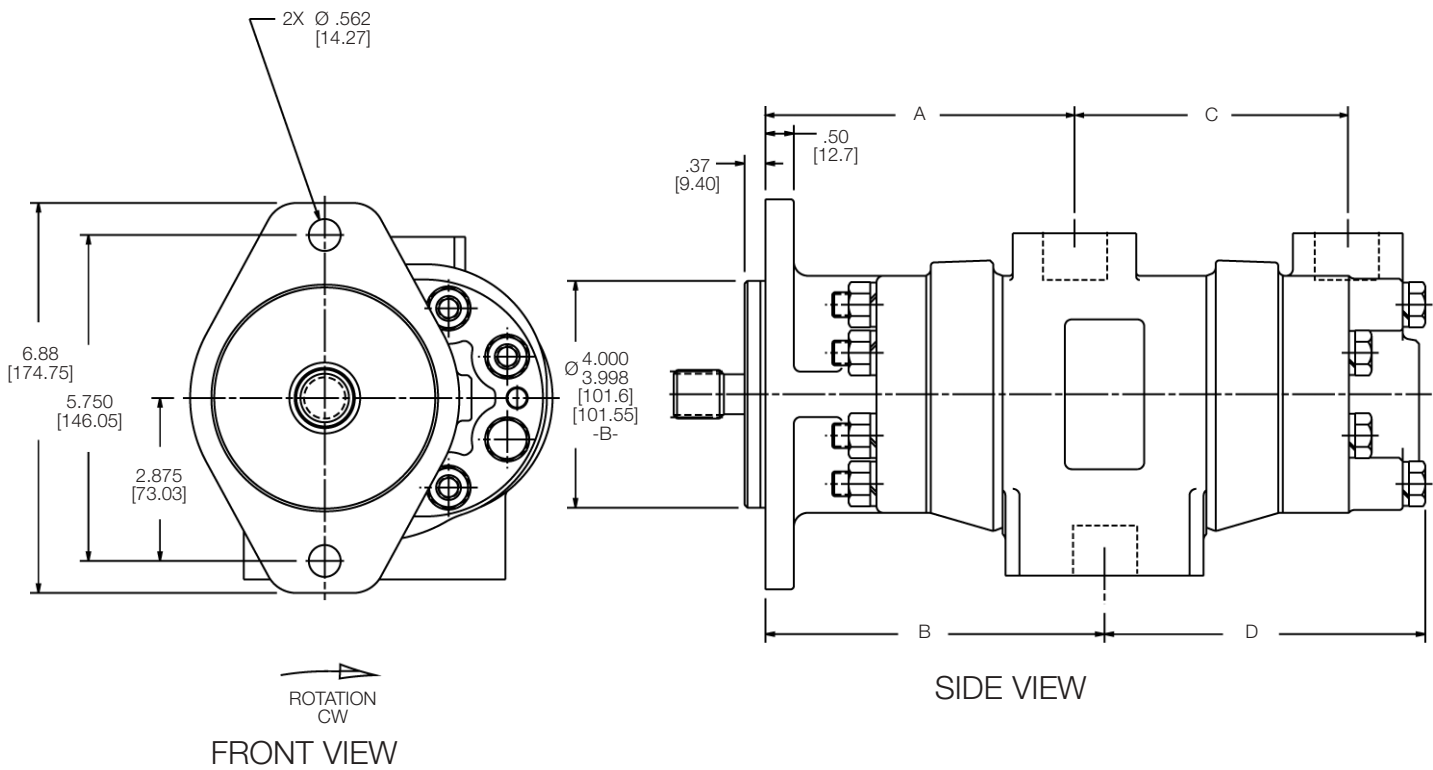
Order Code	Description	Order Code	Description
A	69 BAR (1000 PSI)	G	190 BAR (2750 PSI)
B	103 BAR (1500 PSI)	H	207 BAR (3000 PSI)
C	121 BAR (1750 PSI)	I	224 BAR (3250 PSI)
D	138 BAR (2000 PSI)	J	241 BAR (3500 PSI)
E	155 BAR (2250 PSI)	K	250 BAR (3750 PSI)
F	172 BAR (2500 PSI)	L	275 BAR (4000 PSI)

14 (Design Designation)

Order Code	Description
61	

15 (Rotation)

Order Code	Description
Omit	Clockwise Rotation
L	Counterclockwise Rotation



87	5.30	27	6.54	166.1	7.07	179.6	5.90	149.9	6.74	171.2
77	4.71	24	6.27	159.3	6.80	172.7	5.68	144.3	6.47	164.3
68	4.13	21	6.00	152.4	6.53	165.9	5.36	136.1	6.20	157.5
62	3.77	19	5.83	148.1	6.36	161.5	5.21	132.3	6.05	153.7
55	3.33	17	5.63	143.0	6.16	156.5	5.01	127.3	5.85	148.6
48	2.94	15	5.46	138.7	5.99	152.1	4.82	122.4	5.66	143.8
43	2.60	13	5.30	134.6	5.83	148.1	4.67	118.6	5.51	140.0
36	2.18	11	5.11	129.8	5.64	143.3	4.47	113.5	5.31	134.9
29	1.79	9	4.93	125.2	5.46	138.7	4.30	109.2	5.14	130.6
23	1.41	7	4.85	123.2	5.28	134.1	4.03	102.4	5.02	127.5
CC	CIR	DISPLACEMENT CODE	A (in.)	A (mm)	B (in.)	B (mm)	C (in.)	C (mm)	D (in.)	D (mm)

All dimensions shown are for reference only. Consult factory for your specific configuration.

Model Code for G2020 Series Double Pumps

17

ORDERING INFORMATION

Each option has been assigned an order code -- listed in the tables below -- for placement in the sequence shown at right.

1 (Special Seals)

Order Code	Description
F3	Viton Seal
Omit	Standard

2 (Series)

Order Code	Description
G2020	G2020 Series Double Gear Pump

3 (Mount)

Order Code	Description
W	Wet Mount Flange (pilot diameter sealing and provides for optional double shaft seal)

4 (Front Cover)

Order Code	Description
2	SAE "B" 2-Bolt Mount
3	SAE "B" 4-Bolt Mount (Contact Factory)
6	SAE "B" 2/4-Bolt Combination Mount (wet mount only)
8	SAE "C" 2/4-Bolt Mount

5 (Inlet Port)

Order Code	Description
D	1.50", SAE 4-Bolt Split Flange
DM	1.50", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
E	2.00", SAE 4-Bolt Split Flange
EM	2.00", 4-Bolt Metric Split Flange (M14 x 2.0" threads)
F	2.50", SAE 4-Bolt Split Flange
FM	2.50", 4-Bolt Metric Split Flange (M14 x 2.0" threads)

Contact factory for other requirements.

6 (Displacements, Front Section)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
7-	23 cc/1.41 in. ³	17-	55 cc/3.33 in. ³
9-	29 cc/1.79 in. ³	19-	62 cc/3.77 in. ³
11-	36 cc/2.18 in. ³	21-	68 cc/4.13 in. ³
13-	43 cc/2.60 in. ³	24-	77 cc/4.71 in. ³
15-	48 cc/2.94 in. ³	27-	87 cc/5.30 in. ³

SAE Rated Flow, GPM @ 1200 RPM, 100 PSI

7 (Front Section Outlet)

Order Code	Description
A	.750", SAE 4-Bolt Split Flange
AM	.750", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
C	1.250", SAE 4-Bolt Split Flange
CM	1.250", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
S	#10 SAE (.875" - 12) Straight Thread
T	#12 SAE (1 1/16" - 12) Straight Thread
V	#16 SAE (1 5/16" - 12) Straight Thread

Contact factory for other requirements.

8 (Rear Section Inlet) (Contact factory)

Order Code	Description
+	None

9 (Displacements, Rear Section)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
7-	23 cc/1.41 in. ³	17-	55 cc/3.33 in. ³
9-	29 cc/1.79 in. ³	19-	62 cc/3.77 in. ³
11-	36 cc/2.18 in. ³	21-	68 cc/4.13 in. ³
13-	43 cc/2.60 in. ³	24-	77 cc/4.71 in. ³
15-	48 cc/2.94 in. ³	27-	87 cc/5.30 in. ³

SAE Rated Flow, GPM @ 1200 RPM, 100 PSI

EXAMPLE:

(F3)-G2020- W- 6 - E-15-B - + -11- B-12- A- 61- L													
1 Special Seals	2 Series	3 Mount	4 Front Cover	5 Inlet Port	6 Displacements	7 Front Section Outlet	8 Rear Section Inlet	9 Displacements	10 Rear Section Outlet	11 Drive Shaft	12 Shaft Seal	13 Design Designation	14 Rotation

10 (Rear Section Outlet)

Order Code	Description
A	.750", SAE 4-Bolt Split Flange
AM	.750", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
S	#10 SAE (.875" - 12) Straight Thread
T	#12 SAE (1 1/16" - 12) Straight Thread
V	#16 SAE (1 5/16" - 12) Straight Thread

Contact factory for other requirements.

11 (Drive Shaft)

Order Code	Description
1	SAE "B" Straight Keyed, 1.250" Diameter, 1.875" Ext.
12	SAE "B" 14-Tooth Spline, Flat Root-Side Fit
21	SAE "BB" Straight Keyed, 1.00" Diameter, 1.50" Ext.
99	SAE "BB" 15-Tooth Spline, Flat Root-Side Fit

Contact factory for other requirements.

12 (Shaft Seal)

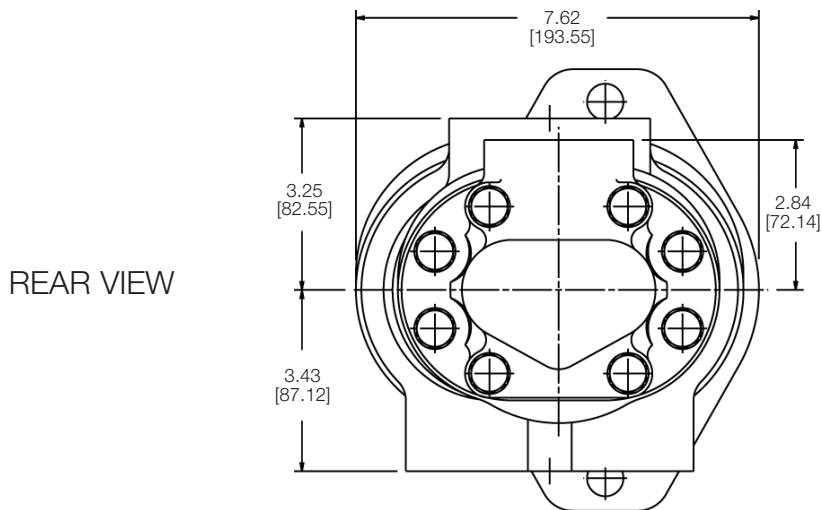
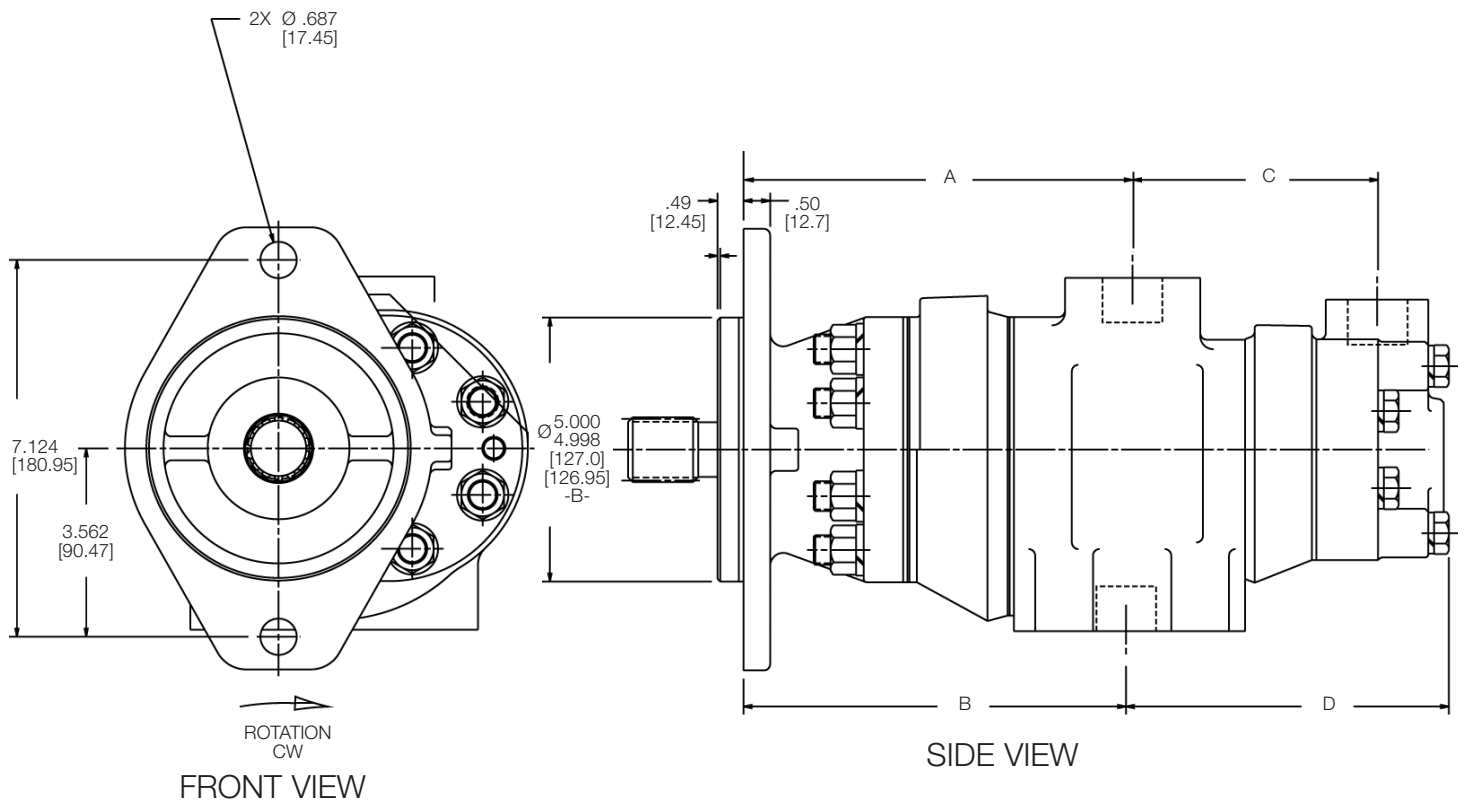
Order Code	Description
A	Single Shaft Seal
B	Double Shaft Seal

13 (Design Designation)

Order Code	Description
61	Standard
62	90 Durometer Seals for Low Pressure
71	Non-Communication Inlets

14 (Rotation)

Order Code	Description
R	Clockwise Rotation
L	Counterclockwise Rotation



All dimensions shown are for reference only. Consult factory for your specific configuration.

161	9.82	50	8.60	218.4	7.36	186.9
145	8.84	45	8.29	210.6	8.17	207.5
129	7.86	40	7.80	198.1	7.86	199.6
113	6.88	35	7.61	193.3	7.52	191.0
103	6.30	32	7.49	190.2	7.37	187.2
97	5.89	30	7.36	186.9	7.24	183.9
90	5.51	28	7.24	183.9	7.12	180.8
81	4.91	25	7.05	179.1	6.93	176.0
68	4.13	21	6.81	173.0	6.68	169.7
58	3.54	18	6.62	168.1	6.50	165.1
CC	CIR	DISPLACEMENT CODE	A (in.)	A (mm)	B (in.)	B (mm)
G30 SECTIONS						

87	5.30	27	5.71	145.0	7.19	182.6
77	4.71	24	5.44	138.2	6.92	175.8
68	4.13	21	5.17	131.3	6.65	168.9
62	3.77	19	5.01	127.3	5.71	145.0
55	3.33	17	4.81	122.2	6.29	159.8
48	2.94	15	4.63	117.6	6.11	155.2
43	2.60	13	4.47	113.5	5.96	151.4
36	2.18	11	4.28	108.7	5.76	146.3
29	1.79	9	4.10	104.1	5.59	142.0
23	1.41	7	3.93	99.8	5.41	137.4
CC	CIR	DISPLACEMENT CODE	C (in.)	C (mm)	D (in.)	D (mm)
G20 SECTIONS						

Model Code for G3020 Series Double Pumps

19

ORDERING INFORMATION

Each option has been assigned an order code -- listed in the tables below -- for placement in the sequence shown at right.

1 (Special Seals)

Order Code	Description
F3	Viton Seal
Omit	Standard

2 (Series)

Order Code	Description
G3020	G3020 Series Double Gear Pump

3 (Mount)

Order Code	Description
W	Wet Mount Flange (pilot diameter sealing and provides for optional double shaft seal)

4 (Front Cover)

Order Code	Description
4	SAE "C" 4-Bolt Mount (contact factory)
7	SAE "C" 2-Bolt Mount (contact factory)
8	SAE "C" 2/4-Bolt Combination Mount

5 (Inlet Port)

Order Code	Description
E	2.00", SAE 4-Bolt Split Flange
EM	2.00", 4-Bolt Metric Split Flange (M14 x 2.0" threads)
F	2.50", SAE 4-Bolt Split Flange
FM	2.50", 4-Bolt Metric Split Flange (M14 x 2.0" threads)
G	3.00", SAE 4-Bolt Split Flange
GM	3.00", 4-Bolt Metric Split Flange (M16 x 2.0" threads)
Y	#30 SAE (2 1/2" - 12) Straight Thread

Contact factory for other requirements.

6 (Displacements, Front Section)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
18-	58 cc/3.54 in. ³	32-	104 cc/6.30 in. ³
21-	68 cc/4.13 in. ³	35-	113 cc/6.88 in. ³
25-	80 cc/4.91 in. ³	40-	129 cc/7.86 in. ³
28-	91 cc/5.51 in. ³	45-	145 cc/8.84 in. ³
30-	97 cc/5.89 in. ³	50-	161 cc/9.82 in. ³

7 (Front Section Outlet)

Order Code	Description
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
C	1.250", SAE 4-Bolt Split Flange
CM	1.250", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
D	2.00", SAE 4-Bolt Split Flange
DM	2.00", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
V	#16 SAE (1 5/16" - 12) Straight Thread
W	#20 SAE (1 5/8" - 12) Straight Thread
X	#24 SAE (1 7/8" - 12) Straight Thread

Contact factory for other requirements.

8 (Rear Inlet Port) (Contact Factory)

Order Code	Description
+	None

9 (Displacements, Rear Section)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
7-	23 cc/1.41 in. ³	17-	55 cc/3.33 in. ³
9-	29 cc/1.79 in. ³	19-	62 cc/3.77 in. ³
11-	36 cc/2.18 in. ³	21-	68 cc/4.13 in. ³
13-	43 cc/2.60 in. ³	24-	77 cc/4.71 in. ³
15-	48 cc/2.94 in. ³	27-	87 cc/5.30 in. ³

EXAMPLE:

(F3)-G3020- W- 7 - E-18-B - + -11-B -12- A- 61- L

1	2	3	4	5	6	7	8	9	10	11	12	13	14
Special Seals	Series	Mount	Front Cover	Inlet Port	Displacements	Front Section Outlet	Rear Inlet Port	Displacements	Rear Section Outlet	Drive Shaft	Shaft Seal	Design Designation	Rotation

10 (Rear Section Outlet)

Order Code	Description
A	.750", SAE 4-Bolt Split Flange
AM	.750", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
S	#10 SAE (.875" - 12) Straight Thread
T	#12 SAE (1 1/16" - 12) Straight Thread
V	#16 SAE (1 5/16" - 12) Straight Thread

Contact factory for other requirements.

11 (Drive Shaft)

Order Code	Description
1	SAE "C" Straight Keyed, 1.250" Diameter, 1.875" Ext.
12	SAE "C" 14-Tooth Spline, Flat Root-Side Fit
34	SAE "C" 14-Tooth Spline

Contact factory for other requirements.

12 (Shaft Seal)

Order Code	Description
A	Single Shaft Seal
B	Double Shaft Seal

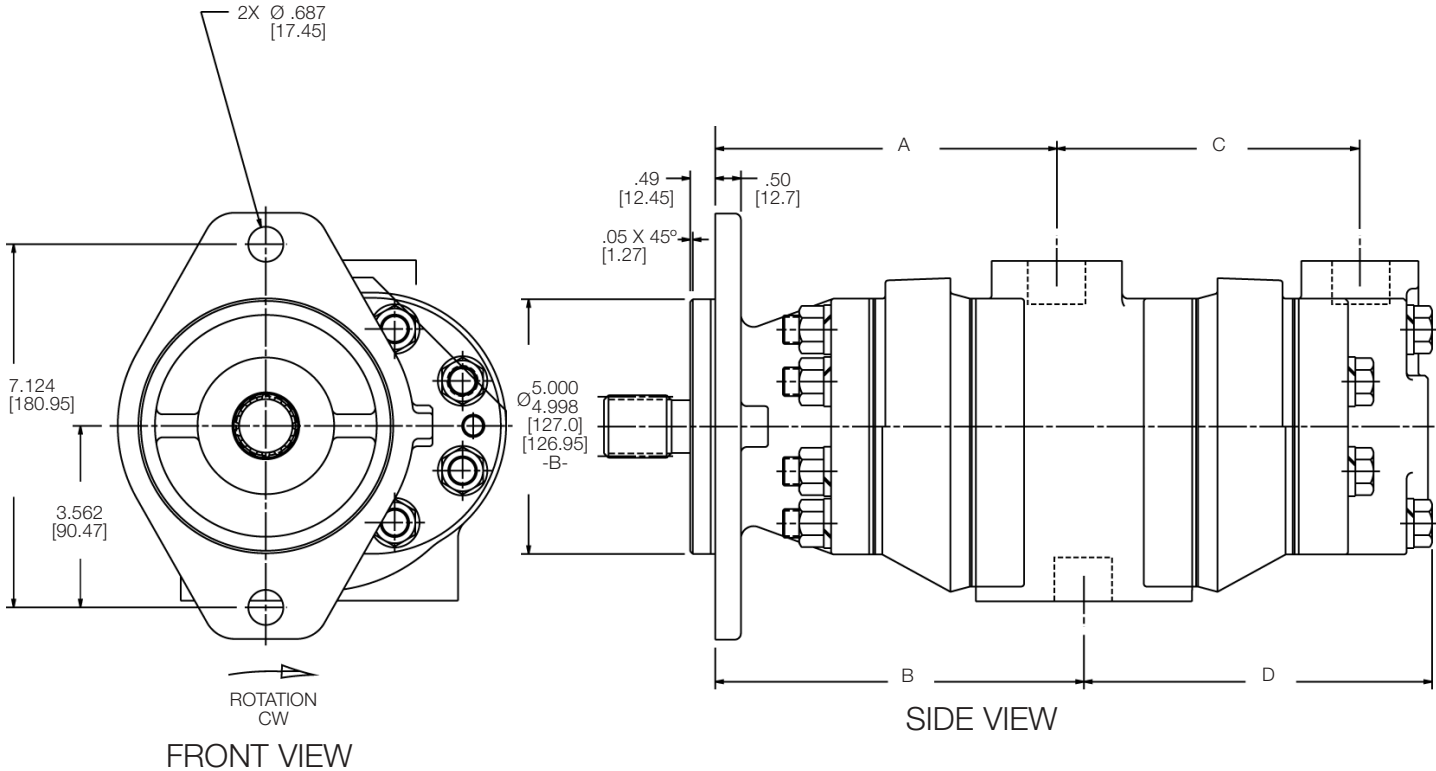
13 (Design Designation)

Order Code	Description
61	Standard

14 (Rotation)

Order Code	Description
R	Clockwise Rotation
L	Counterclockwise Rotation

G3030



161	9.82	50	7.94	201.7	8.48	215.4	7.19	182.6	8.07	205.0
145	8.84	45	7.63	193.8	8.16	207.3	6.89	175.0	7.77	197.4
129	7.86	40	7.33	186.2	7.86	199.6	6.57	166.9	7.46	189.5
113	6.88	35	7.02	178.3	7.55	191.8	6.26	159.0	7.15	181.6
103	6.30	32	6.84	173.7	7.37	187.2	6.08	154.4	6.97	177.0
97	5.89	30	6.71	170.4	7.24	183.9	5.95	151.1	6.84	173.7
90	5.51	28	6.59	167.4	7.12	180.8	5.83	148.1	6.72	170.7
81	4.91	25	6.40	162.6	6.93	176.0	5.64	143.3	6.53	165.9
68	4.13	21	6.15	156.2	6.68	169.7	5.40	137.2	6.29	159.8
58	3.54	18	5.96	151.4	6.50	165.1	5.22	132.6	6.10	154.9
CC	CIR	DISPLACEMENT CODE	A (in.)	A (mm)	B (in.)	B (mm)	C (in.)	C (mm)	D (in.)	D (mm)

All dimensions shown are for reference only. Consult factory for your specific configuration.

Model Code for G3030 Series Double Pumps

21

ORDERING INFORMATION

Each option has been assigned an order code -- listed in the tables below -- for placement in the sequence shown at right.

1 (Special Seals)

Order Code	Description
F3	Viton Seal
Omit	Standard

2 (Series)

Order Code	Description
G3030	G3030 Series Double Gear Pump

3 (Mount)

Order Code	Description
W	Wet Mount Flange (pilot diameter sealing and provides for optional double shaft seal)

4 (Front Cover)

Order Code	Description
4	SAE "C" 4-Bolt Mount (contact factory)
7	SAE "C" 2-Bolt Mount (contact factory)
8	SAE "C" 2/4-Bolt Combination Mount

5 (Inlet Port)

Order Code	Description
E	2.00", SAE 4-Bolt Split Flange
EM	2.00", 4-Bolt Metric Split Flange (M14 x 2.0" threads)
F	2.50", SAE 4-Bolt Split Flange
FM	2.50", 4-Bolt Metric Split Flange (M14 x 2.0" threads)
G	3.00", SAE 4-Bolt Split Flange
GM	3.00", 4-Bolt Metric Split Flange (M16 x 2.0" threads)
Y	#30 SAE (2 1/2" - 12) Straight Thread

Contact factory for other requirements.

6 (Displacements, Front Section)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
18-	58 cc/3.54 in. ³	32-	104 cc/6.30 in. ³
21-	68 cc/4.13 in. ³	35-	113 cc/6.88 in. ³
25-	80 cc/4.91 in. ³	40-	129 cc/7.86 in. ³
28-	91 cc/5.51 in. ³	45-	145 cc/8.84 in. ³
30-	97 cc/5.89 in. ³	50-	161 cc/9.82 in. ³

7 (Front Outlet Port)

Order Code	Description
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
C	1.250", SAE 4-Bolt Split Flange
CM	1.250", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
D	2.00", SAE 4-Bolt Split Flange
DM	2.00", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
V	#16 SAE (1 5/16" - 12) Straight Thread
W	#20 SAE (1 5/8" - 12) Straight Thread
X	#24 SAE (1 7/8" - 12) Straight Thread

Contact factory for other requirements.

8 (Rear Inlet Port) (Contact Factory)

Order Code	Description
+	None

9 (Displacements, Rear Section)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
18-	58 cc/3.54 in. ³	32-	104 cc/6.30 in. ³
21-	68 cc/4.13 in. ³	35-	113 cc/6.88 in. ³
25-	80 cc/4.91 in. ³	40-	129 cc/7.86 in. ³
28-	91 cc/5.51 in. ³	45-	145 cc/8.84 in. ³
30-	97 cc/5.89 in. ³	50-	161 cc/9.82 in. ³

EXAMPLE:

(F3)-G3030- W- 7 - E-30-B - + -30-B -12- A- 61- L

1 Special Seals	2 Series	3 Mount	4 Front Cover	5 Inlet Port	6 Displacements	7 Front Outlet Port	8 Rear Inlet Port	9 Displacements	10 Rear Outlet Port	11 Drive Shaft	12 Shaft Seal	13 Design Designation	14 Rotation
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10 (Rear Outlet Port)

Order Code	Description
A	.750", SAE 4-Bolt Split Flange
AM	.750", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
C	1.250", SAE 4-Bolt Split Flange
CM	1.250", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
V	#16 SAE (1 5/16" - 12) Straight Thread

Contact factory for other requirements.

11 (Drive Shaft)

Order Code	Description
1	SAE "C" Straight Keyed, 1.250" Diameter, 1.875" Ext.
12	SAE "C" 14-Tooth Spline, Flat Root-Side Fit
34	SAE "C" 14-Tooth Spline

Contact factory for other requirements.

12 (Shaft Seal)

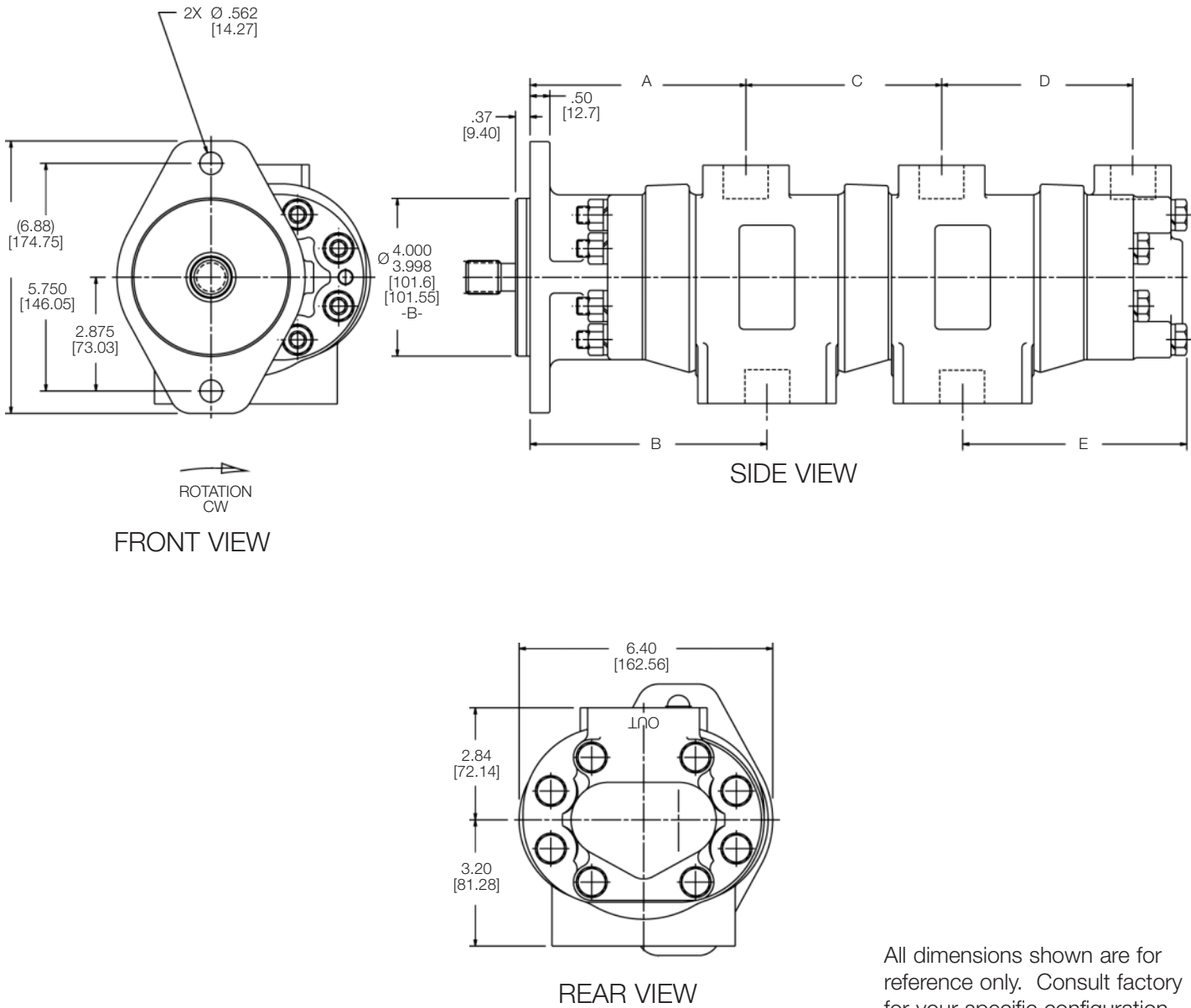
Order Code	Description
A	Single Shaft Seal
B	Double Shaft Seal

13 (Design Designation)

Order Code	Description
61	Standard

14 (Rotation)

Order Code	Description
R	Clockwise Rotation
L	Counterclockwise Rotation



All dimensions shown are for reference only. Consult factory for your specific configuration.

87	5.30	27	6.54	166.1	7.07	179.6	6.03	153.2	5.38	136.7	6.74	171.2
77	4.71	24	6.27	159.3	6.80	172.7	5.78	146.8	5.11	129.8	6.47	164.3
68	4.13	21	6.00	152.4	6.53	165.9	5.49	139.4	4.84	122.9	6.20	157.5
62	3.77	19	5.83	148.1	6.36	161.5	5.32	135.1	4.67	118.6	6.03	153.2
55	3.33	17	5.63	143.0	6.16	156.5	5.12	130.0	4.47	113.5	5.83	148.1
48	2.94	15	5.46	138.7	5.99	152.1	4.95	125.7	4.30	109.2	5.66	143.8
43	2.60	13	5.30	134.6	5.83	148.1	4.79	121.7	4.14	105.2	5.50	139.7
36	2.18	11	5.11	129.8	5.64	143.3	4.60	116.8	3.95	100.3	5.31	134.9
29	1.79	9	4.93	125.2	5.46	138.7	4.42	112.3	3.77	95.8	5.13	130.3
23	1.41	7	4.75	120.7	5.28	134.1	4.24	107.7	3.59	91.2	4.95	125.7
CC	CIR	DISPLACEMENT CODE	A (in.)	A (mm)	B (in.)	B (mm)	C (in.)	C (mm)	D (in.)	D (mm)	E (in.)	E (mm)

ORDERING INFORMATION

Each option has been assigned an order code -- listed in the tables below -- for placement in the sequence shown at right.

1 (Special Seals)

Order Code	Description
F3	Viton Seal
Omit	Standard

2 (Series)

Order Code	Description
G202020	G202020 Series Triple Gear Pump

3 (Mount)

Order Code	Description
W	Wet Mount Flange (pilot diameter sealing and provides for optional double shaft seal)

4 (Front Cover)

Order Code	Description
6	SAE "B" 2/4-Bolt Combination Mount (wet mount only)

5 (First Inlet Port)

Order Code	Description
E	2.00", SAE 4-Bolt Split Flange
EM	2.00", 4-Bolt Metric Split Flange (M14 x 2.0" threads)
F	2.50", SAE 4-Bolt Split Flange
FM	2.50", 4-Bolt Metric Split Flange (M14 x 2.0" threads)

Contact factory for other requirements.

6 (Displacements, Front Section)

Order Code	Cm ³ /in ³	Order Code	Cm ³ /in ³
7-	23 cc/1.41 in. ³	17-	55 cc/3.33 in. ³
9-	29 cc/1.79 in. ³	19-	62 cc/3.77 in. ³
11-	36 cc/2.18 in. ³	21-	68 cc/4.13 in. ³
13-	43 cc/2.60 in. ³	24-	77 cc/4.71 in. ³
15-	48 cc/2.94 in. ³	27-	87 cc/5.30 in. ³

7 (Front Section Outlet)

Order Code	Description
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
C	1.250", SAE 4-Bolt Split Flange
CM	1.250", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
T	#12 SAE (1 1/16" - 12) Straight Thread
V	#16 SAE (1 5/16" - 12) Straight Thread

Contact factory for other requirements.

8 (Second Section Inlet)

Order Code	Description
D	1.50", SAE 4-Bolt Split Flange
DM	1.50", 4-Bolt Metric Split Flange (M14 x 2.0" threads)
E	2.00", SAE 4-Bolt Split Flange
EM	2.00", 4-Bolt Metric Split Flange (M14 x 2.0" threads)
F	2.50", SAE 4-Bolt Split Flange
FM	2.50", 4-Bolt Metric Split Flange (M14 x 2.0" threads)

Contact factory for other requirements.

9 (Displacements, Center Section)

Order Code	Cm ³ /in ³	Order Code	Cm ³ /in ³
7-	23 cc/1.41 in. ³	17-	55 cc/3.33 in. ³
9-	29 cc/1.79 in. ³	19-	62 cc/3.77 in. ³
11-	36 cc/2.18 in. ³	21-	68 cc/4.13 in. ³
13-	43 cc/2.60 in. ³	24-	77 cc/4.71 in. ³
15-	48 cc/2.94 in. ³	27-	87 cc/5.30 in. ³

10 (Second Outlet)

Order Code	Description
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
C	1.250", SAE 4-Bolt Split Flange
CM	1.250", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
T	#12 SAE (1 1/16" - 12) Straight Thread
V	#16 SAE (1 5/16" - 12) Straight Thread

Contact factory for other requirements.

EXAMPLE:

(F3)G202020-W- 6 - E- 15-B -E -11- B - + - 9 - B- 99- A- 61-L																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Special Seals	Series	Mount	Front Cover	First Inlet Port	Displacements	Front Section Outlet	Second Section Inlet	Displacements	Second Outlet	Third Section Inlet	Displacements	Third Outlet	Drive Shaft	Shaft Seal	Design	Rotation

11 (Third Section Inlet) (Contact Factory)

Order Code	Description
+	None

12 (Displacements, Rear Section)

Order Code	Cm ³ /in ³	Order Code	Cm ³ /in ³
7-	23 cc/1.41 in. ³	17-	55 cc/3.33 in. ³
9-	29 cc/1.79 in. ³	19-	62 cc/3.77 in. ³
11-	36 cc/2.18 in. ³	21-	68 cc/4.13 in. ³
13-	43 cc/2.60 in. ³	24-	77 cc/4.71 in. ³
15-	48 cc/2.94 in. ³	27-	87 cc/5.30 in. ³

13 (Third Outlet)

Order Code	Description
A	.750", SAE 4-Bolt Split Flange
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
C	1.250", SAE 4-Bolt Split Flange
CM	1.250", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
S	#10 SAE (.875" - 12) Straight Thread
T	#12 SAE (1 1/16" - 12) Straight Thread
V	#16 SAE (1 5/16" - 12) Straight Thread

Contact factory for other requirements.

14 (Drive Shaft)

Order Code	Description
21	SAE "BB" Straight Keyed, 1.00" Diameter, 1.50" Ext.
99	SAE "BB" 15-Tooth Spline, Flat Root-Side Fit

Contact factory for other requirements

15 (Shaft Seal)

Order Code	Description
A	Single Shaft Seal
B	Double Shaft Seal
C	None

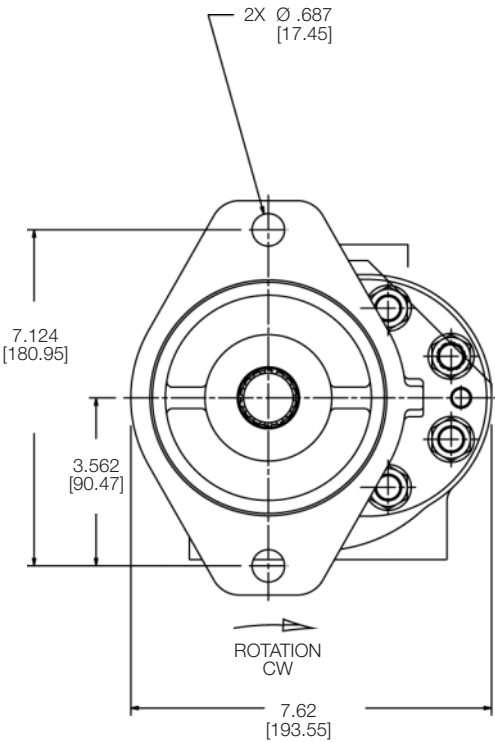
16 (Design Designation)

Order Code	Description
61	Standard
62	90 Durometer Seals for Low Pressure
71	Non-Communication Inlets

17 (Rotation)

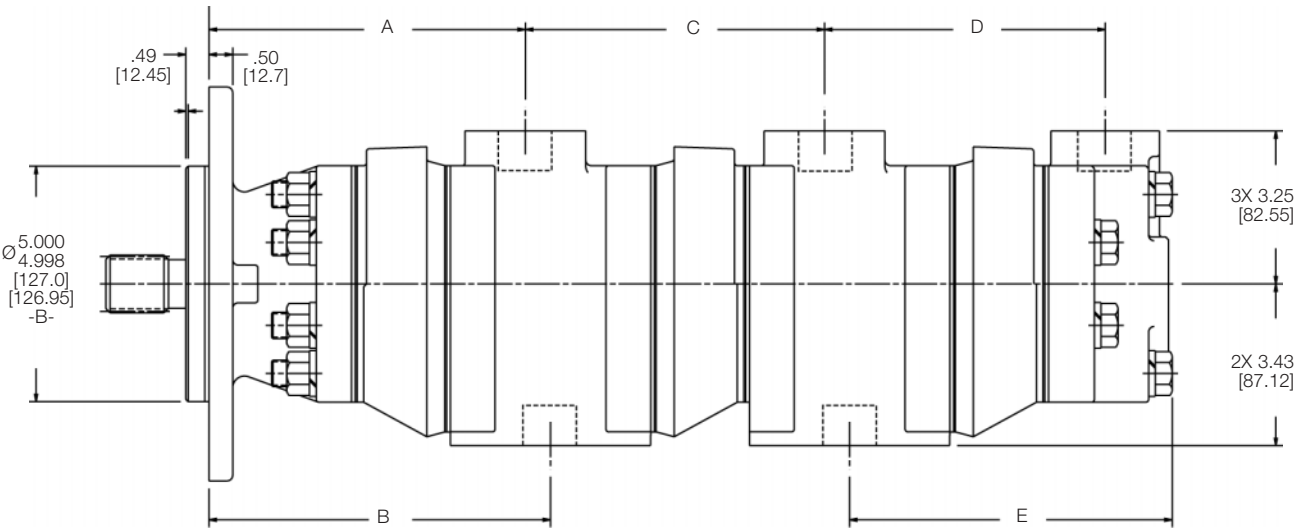
Order Code	Description
Omit	Clockwise Rotation
L	Counterclockwise Rotation

G303030



All dimensions shown are for reference only. Consult factory for your specific configuration.

FRONT VIEW



SIDE VIEW

161	9.82	50	7.94	201.7	8.48	215.4	7.58	192.5	7.19	182.6	8.08	205.2
145	8.84	45	7.63	193.8	8.16	207.3	7.27	184.7	6.88	174.8	7.77	197.4
129	7.86	40	7.33	186.2	7.86	199.6	6.96	176.8	6.57	166.9	7.46	189.5
113	6.88	35	7.02	178.3	7.55	191.8	6.65	168.9	6.26	159.0	7.15	181.6
103	6.30	32	6.84	173.7	7.37	187.2	6.47	164.3	6.08	154.4	6.97	177.0
97	5.89	30	6.71	170.4	7.24	183.9	6.34	161.0	5.95	151.1	6.84	173.7
90	5.51	28	6.59	167.4	7.12	180.9	6.23	158.2	5.84	148.3	6.72	170.7
81	4.91	25	6.40	162.6	6.93	176.0	6.04	153.4	5.65	143.5	6.53	165.9
68	4.13	21	6.15	156.2	6.68	169.7	5.79	147.1	5.40	137.2	6.28	159.5
58	3.54	18	5.96	151.4	6.50	165.1	5.60	142.2	5.21	132.3	6.10	154.9
CC	CIR	DISPLACEMENT CODE	A (in.)	A (mm)	B (in.)	B (mm)	C (in.)	C (mm)	D (in.)	D (mm)	E (in.)	E (mm)

Model Code for G303030 Series Triple Pumps

25

ORDERING INFORMATION

Each option has been assigned an order code -- listed in the tables below -- for placement in the sequence shown at right.

1 (Special Seals)

Order Code	Description
F3	Viton Seal
Omit	Standard

2 (Series)

Order Code	Description
G303030	G303030 Series Triple Gear Pump

3 (Mount)

Order Code	Description
W	Wet Mount Flange (pilot diameter sealing and provides for optional double shaft seal)

4 (Front Cover)

Order Code	Description
4	SAE "C" 4-Bolt Mount
7	SAE "C" 2-Bolt Mount
8	SAE "C" 2/4-Bolt Combination Mount

5 (First Inlet Port)

Order Code	Description
E	2.00", SAE 4-Bolt Split Flange
EM	2.00", 4-Bolt Metric Split Flange (M14 x 2.0" threads)
F	2.50", SAE 4-Bolt Split Flange
FM	2.50", 4-Bolt Metric Split Flange (M14 x 2.0" threads)
G	3.00", SAE 4-Bolt Split Flange
GM	3.00", 4-Bolt Metric Split Flange (M16 x 2.0" threads)
Y	#30 SAE (2 1/2" - 12) Straight Thread

Contact factory for other requirements.

6 (Displacements, Front Section)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
18-	58 cc/3.54 in. ³	32-	104 cc/6.30 in. ³
21-	68 cc/4.13 in. ³	35-	113 cc/6.88 in. ³
25-	80 cc/4.91 in. ³	40-	129 cc/7.86 in. ³
28-	91 cc/5.51 in. ³	45-	145 cc/8.84 in. ³
30-	97 cc/5.89 in. ³	50-	161 cc/9.82 in. ³

7 (First Outlet Port)

Order Code	Description
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
C	1.250", SAE 4-Bolt Split Flange
CM	1.250", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
D	2.00", SAE 4-Bolt Split Flange
DM	2.00", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
V	#16 SAE (1 5/16" - 12) Straight Thread
W	#20 SAE (1 5/8" - 12) Straight Thread
X	#24 SAE (1 7/8" - 12) Straight Thread

Contact factory for other requirements.

8 (Second Inlet Port)

Order Code	Description
E	2.00", SAE 4-Bolt Split Flange
EM	2.00", 4-Bolt Metric Split Flange (M14 x 2.0" threads)
F	2.50", SAE 4-Bolt Split Flange
FM	2.50", 4-Bolt Metric Split Flange (M14 x 2.0" threads)
G	3.00", SAE 4-Bolt Split Flange
GM	3.00", 4-Bolt Metric Split Flange (M16 x 2.0" threads)

9 (Displacements, Center Section)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
18-	58 cc/3.54 in. ³	32-	104 cc/6.30 in. ³
21-	68 cc/4.13 in. ³	35-	113 cc/6.88 in. ³
25-	80 cc/4.91 in. ³	40-	129 cc/7.86 in. ³
28-	91 cc/5.51 in. ³	45-	145 cc/8.84 in. ³
30-	97 cc/5.89 in. ³	50-	161 cc/9.82 in. ³

EXAMPLE:

(F3)G303030-W- 7 - E- 30-B -E -25- B - + - 9 - B- 12- A- 61-L																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Special Seals	Series	Mount	Front Cover	First Inlet Port	Displacements	First Outlet Port	Second Inlet Port	Displacements	Second Outlet Port	Third Inlet Port	Displacements	Third Outlet Port	Drive Shaft	Shaft Seal	Design	Rotation

10 (Second Outlet Port)

Order Code	Description
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
C	1.250", SAE 4-Bolt Split Flange
CM	1.250", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
D	2.00", SAE 4-Bolt Split Flange
DM	2.00", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
V	#16 SAE (1 5/16" - 12) Straight Thread
W	#20 SAE (1 5/8" - 12) Straight Thread

Contact factory for other requirements.

11 (Third Inlet Port) (Contact Factory)

Order Code	Description
+	None

12 (Displacements, Rear Section)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
18-	58 cc/3.54 in. ³	32-	104 cc/6.30 in. ³
21-	68 cc/4.13 in. ³	35-	113 cc/6.88 in. ³
25-	80 cc/4.91 in. ³	40-	129 cc/7.86 in. ³
28-	91 cc/5.51 in. ³	45-	145 cc/8.84 in. ³
30-	97 cc/5.89 in. ³	50-	161 cc/9.82 in. ³

13 (Third Outlet Port)

Order Code	Description
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
C	1.250", SAE 4-Bolt Split Flange
CM	1.250", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
D	2.00", SAE 4-Bolt Split Flange
DM	2.00", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
V	#16 SAE (1 5/16" - 12) Straight Thread
W	#20 SAE (1 5/8" - 12) Straight Thread

Contact factory for other requirements.

14 (Drive Shaft)

Order Code	Description
1	SAE "C" Straight Keyed, 1.250" Diameter, 1.875" Ext.
12	SAE "C" 14-Tooth Spline, Flat Root-Side Fit
34	SAE "C" 14-Tooth Spline

Contact factory for other requirements

15 (Shaft Seal)

Order Code	Description
A	Single Shaft Seal
B	Double Shaft Seal
C	None

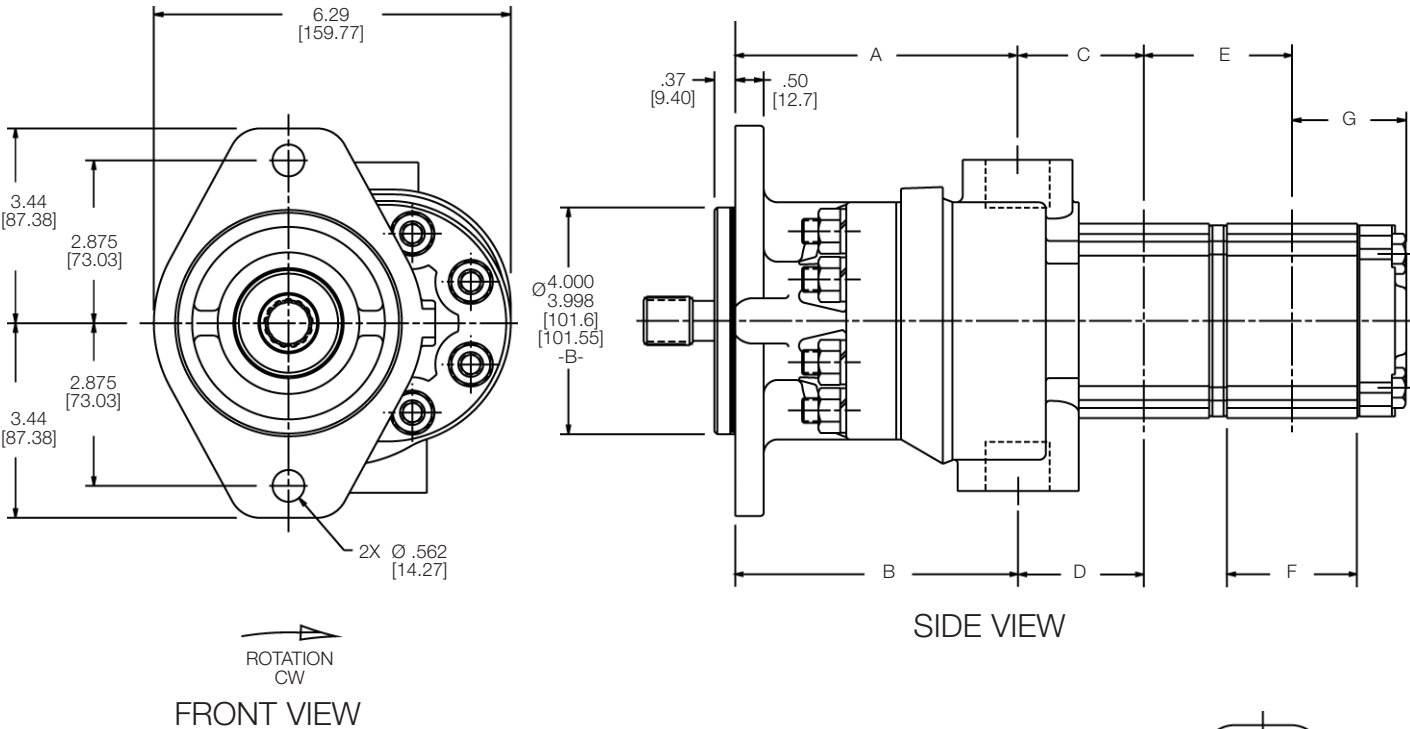
16 (Design Designation)

Order Code	Description
61	Standard

17 (Rotation)

Order Code	Description
R	Clockwise Rotation
L	Counterclockwise Rotation

G200909



87	5.30	27	6.41	162.8	6.43	163.3
77	4.71	24	6.14	156.0	6.16	156.5
68	4.13	21	5.87	149.1	5.89	149.6
62	3.77	19	5.71	145.0	5.73	145.5
55	3.33	17	5.51	140.0	5.53	140.5
48	2.94	15	5.33	135.4	5.35	135.9
43	2.60	13	5.17	131.3	5.19	131.8
36	2.18	11	4.98	126.5	5.00	127.0
29	1.79	9	4.80	121.9	4.82	122.4
23	1.41	7	4.63	117.6	4.65	118.1
CC	CIR	DISPLACEMENT CODE	A (in.)	A (mm)	B (in.)	B (mm)
G20 SECTIONS						

28	1.709	28	2.73	69.3	2.72	69.1	3.62	91.9	3.30	83.8	2.52	64.0
27	1.647	27	2.70	68.6	2.69	68.3	3.54	89.9	3.24	82.3	2.49	63.2
23	1.403	23	2.58	65.5	2.57	65.3	3.33	84.6	3.01	76.5	2.38	60.5
19	1.159	19	2.47	62.7	2.46	62.5	3.09	78.5	2.78	70.6	2.26	57.4
16	.976	16	2.38	60.5	2.37	60.2	2.91	73.9	2.60	66.0	2.17	55.1
14	.854	14	2.32	58.9	2.31	58.7	2.80	71.1	2.49	63.2	2.12	53.8
11	.671	11	2.23	56.6	2.22	56.4	2.61	66.3	2.31	58.7	2.03	51.6
10	.610	10	2.20	55.9	2.19	55.6	2.56	65.0	2.25	57.2	2.00	50.8
8	.488	8	2.15	54.6	2.14	54.4	2.44	62.0	2.14	54.4	1.94	49.3
6	.366	6	2.09	53.1	2.08	52.8	2.34	59.4	2.02	51.3	1.86	47.2
CC	CIR	DISPLACEMENT CODE	C (in.)	C (mm)	D (in.)	D (mm)	E (in.)	E (mm)	F (in.)	F (mm)	G (in.)	G (mm)
W900 SECTIONS												

All dimensions shown are for reference only. Consult factory for your specific configuration.

Model Code for G200909 Series Triple Pumps

27

ORDERING INFORMATION

Each option has been assigned an order code -- listed in the tables below -- for placement in the sequence shown at right.

1 (Special Seals)

Order Code	Description
F3	Viton Seal
Omit	Standard

2 (Series)

Order Code	Description
G200909	G200909 Series Triple Gear Pump

3 (Mount Type)

Order Code	Description
D	Dry Mounting Flange (shorter length, single shaft seal)
W	Wet Mounting Flange (pilot diameter sealing and provides for optional double shaft seal)

4 (Front Cover)

Order Code	Description
2	SAE "B" 2-Bolt Mount
4	SAE "C" 4-Bolt Mount (contact factory)
6	SAE "B" 2/4-Bolt Combination Mount (wet mount only)
8	SAE "C" 2/4-Bolt Mount (contact factory)

5 (Front Section Inlet Port)

Order Code	Description
C	1.250", SAE 4-Bolt Split Flange
CM	1.250", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
V	#16 SAE (1 5/16" - 12) Straight Thread
W	#20 SAE (1 5/8" - 12) Straight Thread

Contact factory for other requirements.

6 (Displacements, Front Section)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
7-	23 cc/1.41 in. ³	17-	55 cc/3.33 in. ³
9-	29 cc/1.79 in. ³	19-	62 cc/3.77 in. ³
11-	36 cc/2.18 in. ³	21-	68 cc/4.13 in. ³
13-	43 cc/2.60 in. ³	24-	77 cc/4.71 in. ³
15-	48 cc/2.94 in. ³	27-	87 cc/5.30 in. ³

GPM @ 1200 RPM, 100 PSI

7 (Front Section Outlet Port)

Order Code	Description
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
T	#12 SAE (1 1/16" - 12) Straight Thread
V	#16 SAE (1 5/16" - 12) Straight Thread

Contact factory for other requirements.

8 (Displacements, Center Section)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
6-	6 cc/.366 in. ³	16-	16 cc/.976 in. ³
8-	8 cc/.488 in. ³	19-	19 cc/1.159 in. ³
10-	10 cc/.610 in. ³	23-	23 cc/1.403 in. ³
11-	11 cc/.671 in. ³	27-	27 cc/1.647 in. ³
14-	14 cc/.854 in. ³	28-	28 cc/1.709 in. ³

GPM @ 1200 RPM, 100 PSI

9 (Rear Section Outlet Porting)

Order Code	Description
A	23 cc - 28 cc, .750", SAE 4-Bolt Split Flange
Q	6 cc, #8 SAE (3/4" - 16) Straight Thread
S	8 cc - 16 cc, #10 SAE (7/8" - 14) Straight Thread
T	19 cc - 28 cc, #12 SAE (1 1/16" - 12) Straight Thread
Y	16 cc - 19 cc, .5", SAE 4-Bolt Split Flange

Contact factory for other requirements.

EXAMPLE:

(F3)-G200909-W- 2 -W-13- T -23-Y- Q -11- A- 1 - B -63- L															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Special Seals	Series	Mount Type	Front Cover	Front Section Inlet Port	Displacements, Front Section	Front Section Outlet Port	Displacements, Center Section	Rear Section Outlet Porting	Center Section Outlet Porting	Displacements, Rear Section	Rear Section Outlet Port	Drive Shaft	Shaft Seal	Design Designation	Design Designation

10 (Center Section Outlet Porting)

Order Code	Description
A	23 cc - 28 cc, .750", SAE 4-Bolt Split Flange
Q	6 cc, #8 SAE (3/4" - 16) Straight Thread
S	8 cc - 16 cc, #10 SAE (7/8" - 14) Straight Thread
T	19 cc - 28 cc, #12 SAE (1 1/16" - 12) Straight Thread
V	19 cc - 28 cc, #16 SAE (1 5/16" - 14) Straight Thread
Y	16 cc - 19 cc, .5", SAE 4-Bolt Split Flange

11 (Displacements, Rear Section)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
6-	6 cc/.366 in. ³	16-	16 cc/.976 in. ³
8-	8 cc/.488 in. ³	19-	19 cc/1.159 in. ³
10-	10 cc/.610 in. ³	23-	23 cc/1.403 in. ³
11-	11 cc/.671 in. ³	27-	27 cc/1.647 in. ³
14-	14 cc/.854 in. ³	28-	28 cc/1.709 in. ³

GPM @ 1200 RPM, 100 PSI

12 (Rear Section Outlet Port)

Order Code	Description
A	23 cc - 28 cc, .750", SAE 4-Bolt Split Flange
Q	6 cc, #8 SAE (3/4" - 16) Straight Thread
S	8 cc - 16 cc, #10 SAE (7/8" - 14) Straight Thread
T	19 cc - 28 cc, #12 SAE (1 1/16" - 12) Straight Thread
Y	16 cc - 19 cc, .5", SAE 4-Bolt Split Flange

Contact factory for other requirements.

13 (Drive Shaft)

Order Code	Description
1	SAE "B" Straight Keyed, .875" Diameter, 1.3125" Ext.
12	SAE "B" 13-Tooth Spline, Flat Root-Side Fit
21	SAE "BB" Straight Keyed, 1.00" Diameter, 1.50" Ext.
99	SAE "BB" 15-Tooth Spline, Flat Root-Side Fit

Contact factory for other requirements.

14 (Shaft Seal)

Order Code	Description
A	Single Shaft Seal
B	Double Shaft Seal

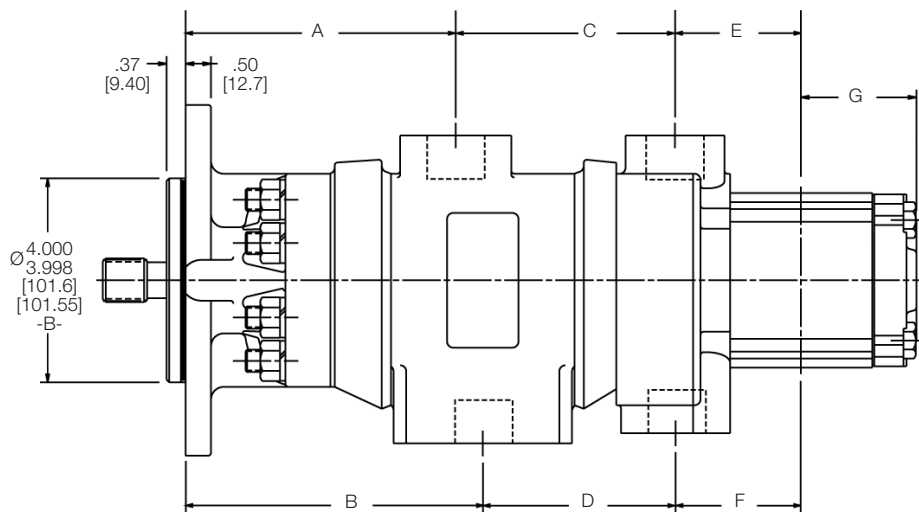
Contact Applications Engineer for Valve Options.

15 (Design Designation)

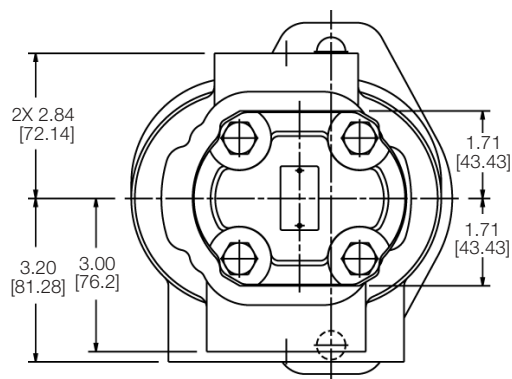
Order Code	Description
61	Standard
63	Sealed Between Sections

16 (Rotation)

Order Code	Description
L	Counterclockwise Rotation
R	Clockwise Rotation



SIDE VIEW



REAR VIEW

All dimensions shown are for reference only. Consult factory for your specific configuration.

28	1.709	28	2.73	69.3	2.72	69.1	2.52	64.0
27	1.647	27	2.70	68.6	2.69	68.3	2.49	63.2
23	1.403	23	2.58	65.5	2.57	65.3	2.38	6.05
19	1.159	19	2.47	62.7	2.46	62.5	2.26	57.4
16	.976	16	2.38	60.5	2.37	60.2	2.17	55.1
14	.854	14	2.32	58.9	2.31	58.7	2.12	53.8
11	.671	11	2.24	56.9	2.23	56.6	2.03	51.6
10	.610	10	2.21	56.1	2.49	63.2	2.00	50.8
8	.488	8	2.15	54.6	2.14	54.4	1.94	49.3
6	.366	6	2.09	53.1	2.08	52.8	1.86	47.2
CC	CIR	DISPLACEMENT CODE	E (in.)	E (mm)	F (in.)	F (mm)	G (in.)	G (mm)
W900 SECTIONS								

87	5.30	27	6.53	165.9	7.06	179.3	5.90	149.9	5.38	136.7
77	4.71	24	6.27	159.3	6.80	172.7	5.64	143.3	5.12	130.0
68	4.13	21	6.00	152.4	6.53	165.9	5.37	136.4	4.85	123.2
62	3.77	19	5.83	148.1	6.36	161.5	5.20	132.1	4.68	118.9
55	3.33	17	5.63	143.0	6.16	156.5	5.00	127.0	4.48	113.8
48	2.94	15	5.46	138.7	5.99	152.1	4.83	122.7	4.31	109.5
43	2.60	13	5.30	134.6	5.83	148.1	4.67	118.6	4.15	105.4
36	2.18	11	5.11	129.8	5.64	143.3	4.48	113.8	3.96	100.6
29	1.79	9	4.93	125.2	5.46	138.7	4.30	109.2	3.78	96.0
23	1.41	7	4.75	120.7	5.28	134.1	4.12	104.6	3.60	91.4
CC	CIR	DISPLACEMENT CODE	A (in.)	A (mm)	B (in.)	B (mm)	C (in.)	C (mm)	D (in.)	D (mm)
G20 SECTIONS										

Model Code for G202009 Series Triple Pumps

29

ORDERING INFORMATION

Each option has been assigned an order code -- listed in the tables below -- for placement in the sequence shown at right.

1 (Special Seals)

Order Code	Description
F3	Viton Seal
Omit	Standard

2 (Series)

Order Code	Description
G202009	G202009 Series Triple Gear Pump

3 (Mount Type)

Order Code	Description
W	Wet Mounting Flange (pilot diameter sealing and provides for optional double shaft seal)
Contact factory for other requirements.	

4 (Front Cover)

Order Code	Description
2	SAE "B" 2-Bolt Mount
6	SAE "B" 2/4-Bolt Combination Mount (wet mount only)
8	SAE "C" 2/4-Bolt Mount

5 (Front Section Inlet Port)

Order Code	Description
E	2", SAE 4-Bolt Split Flange
EM	2", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
F	2.5", SAE 4-Bolt Split Flange
FM	2.5", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
Contact factory for other requirements.	

6 (Displacements, Front Section)

Order Code	Cm ³ /in ³	Order Code	Cm ³ /in ³
7-	23 cc/1.41 in. ³	17-	55 cc/3.33 in. ³
9-	29 cc/1.79 in. ³	19-	62 cc/3.77 in. ³
11-	36 cc/2.18 in. ³	21-	68 cc/4.13 in. ³
13-	43 cc/2.60 in. ³	24-	77 cc/4.71 in. ³
15-	48 cc/2.94 in. ³	27-	87 cc/5.30 in. ³
GPM @ 1200 RPM, 100 PSI			

7 (Front Section Outlet Port)

Order Code	Description
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
C	1.25", SAE 4-Bolt Split Flange
CM	1.25", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
T	#12 SAE (1 1/16" - 12) Straight Thread
V	#16 SAE (1 5/16" - 12) Straight Thread
Contact factory for other requirements.	

8 (Displacements, Center Section)

Order Code	Cm ³ /in ³	Order Code	Cm ³ /in ³
7-	23 cc/1.41 in. ³	17-	55 cc/3.33 in. ³
9-	29 cc/1.79 in. ³	19-	62 cc/3.77 in. ³
11-	36 cc/2.18 in. ³	21-	68 cc/4.13 in. ³
13-	43 cc/2.60 in. ³	24-	77 cc/4.71 in. ³
15-	48 cc/2.94 in. ³	27-	87 cc/5.30 in. ³
GPM @ 1200 RPM, 100 PSI			

9 (Center Section Outlet Porting)

Order Code	Description
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
C	1.25", SAE 4-Bolt Split Flange
CM	1.25", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
T	#12 SAE (1 1/16" - 12) Straight Thread
V	#16 SAE (1 5/16" - 12) Straight Thread
Contact factory for other requirements.	

EXAMPLE:

(F3)-G202009-W- 2 -F- 13- T -13-V- A -23- Q- 21 -B -63- L															
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Special Seals	Series	Mount Type	Front Cover	Front Inlet Port	Displacements, Front Section	Front Outlet Port	Displacements, Center Section	Center Section Outlet Porting	Rear Section Inlet Port	Displacements, Rear Section	Rear Section Outlet Porting	Drive Shaft	Shaft Seal	Design Designation	Rotation

10 (Rear Section Inlet Port)

Order Code	Description
A	16 cc - 19 cc, .75", SAE 4-Bolt Split Flange
B	23 cc - 28 cc, 1", SAE 4-Bolt Split Flange Straight Thread
S	6 cc, #10 SAE (7/8" - 14) Straight Thread
T	8 cc - 16 cc, #12 SAE (1 1/16" - 12) Straight Thread
V	19 cc - 28 cc, #16 SAE (1 5/16" - 14) Straight Thread

11 (Displacements, Rear Section)

Order Code	Cm ³ /in ³	Order Code	Cm ³ /in ³
6-	6 cc/.366 in. ³	16-	16 cc/.976 in. ³
8-	8 cc/.488 in. ³	19-	19 cc/1.159 in. ³
10-	10 cc/.610 in. ³	23-	23 cc/1.403 in. ³
11-	11 cc/.671 in. ³	27-	27 cc/1.647 in. ³
14-	14 cc/.854 in. ³	28-	28 cc/1.709 in. ³
GPM @ 1200 RPM, 100 PSI			

12 (Rear Section Outlet Port)

Order Code	Description
A	23 cc - 28 cc, .75", SAE 4-Bolt Split Flange
Q	6 cc, #8 SAE (3/4" - 16) Straight Thread
S	8 cc - 16 cc, #10 SAE (7/8" - 14) Straight Thread
T	19 cc - 28 cc, #12 SAE (1 1/16" - 12) Straight Thread
Y	16 cc - 19 cc, .5", SAE 4-Bolt Split Flange
Contact factory for other requirements.	

13 (Drive Shaft)

Order Code	Description
21	SAE "BB" Straight Keyed, 1.00" Diameter, 1.50" Ext.
99	SAE "BB" 15-Tooth Spline, Flat Root-Side Fit
Contact factory for other requirements.	

14 (Shaft Seal)

Order Code	Description
A	Single Shaft Seal
B	Double Shaft Seal
C	None

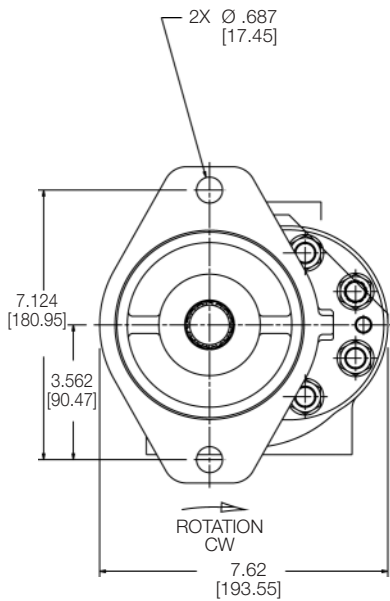
15 (Design Designation)

Order Code	Description
61	Standard
63	Sealed Between G20 and 09 Sections

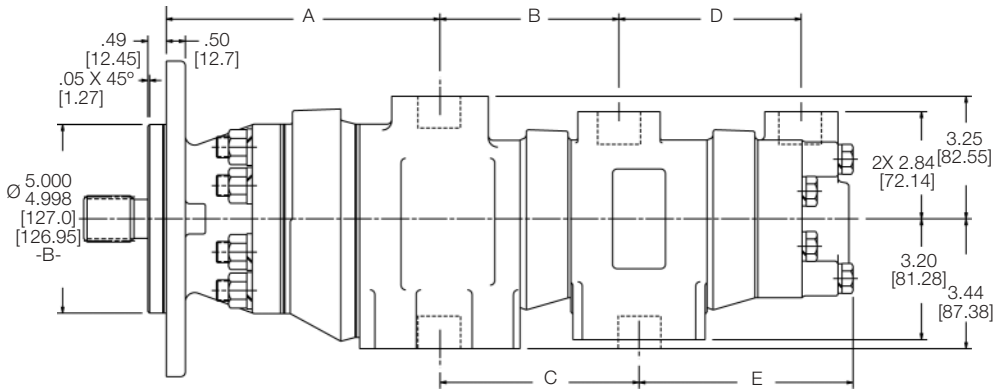
16 (Rotation)

Order Code	Description
L	Counterclockwise Rotation
R	Clockwise Rotation
Contact factory for other requirements.	

G302020



FRONT VIEW



SIDE VIEW

161	9.82	50	8.48	215.4
145	8.84	45	8.17	207.5
129	7.86	40	7.87	199.9
113	6.88	35	7.56	192.0
103	6.30	32	7.38	187.5
97	5.89	30	7.25	184.2
90	5.51	28	7.13	181.1
81	4.91	25	6.94	176.3
68	4.13	21	6.69	169.9
58	3.54	18	6.51	165.4
CC	CIR	DISPLACEMENT CODE	A (in.)	A (mm)
G30 SECTIONS				

87	5.30	27	5.82	147.8	6.35	161.3	5.91	150.1	6.75	171.5
77	4.71	24	5.55	141.0	6.08	154.4	5.64	143.3	6.48	164.6
68	4.13	21	5.28	134.1	5.81	147.6	5.37	136.4	6.21	157.7
62	3.77	19	5.11	129.8	5.64	143.3	5.20	132.1	6.04	153.4
55	3.33	17	4.91	124.7	5.44	138.2	5.00	127.0	5.84	148.3
48	2.94	15	4.74	120.4	5.27	133.9	4.83	122.7	5.67	144.0
43	2.60	13	4.58	116.3	5.11	129.8	4.67	118.6	5.51	140.0
36	2.18	11	4.39	111.5	4.92	125.0	4.48	113.8	5.32	135.1
29	1.79	9	4.21	106.9	4.74	120.4	4.30	109.2	5.14	130.6
23	1.41	7	4.03	102.4	4.56	115.8	4.12	104.6	4.96	126.0
CC	CIR	DISPLACEMENT CODE	B (in.)	B (mm)	C (in.)	C (mm)	D (in.)	D (mm)	E (in.)	E (mm)
G20 SECTIONS										

All dimensions shown are for reference only. Consult factory for your specific configuration.

Model Code for G302020 Series Triple Pumps

31

ORDERING INFORMATION

Each option has been assigned an order code -- listed in the tables below -- for placement in the sequence shown at right.

1 (Special Seals)

Order Code	Description
F3	Viton Seal
Omit	Standard

2 (Series)

Order Code	Description
G302020	G302020 Series Triple Gear Pump

3 (Mount Type)

Order Code	Description
W	Wet Mounting Flange

4 (Front Cover)

Order Code	Description
4	SAE "C" 4-Bolt Mount
7	SAE "C" 2-Bolt Mount
8	SAE "C" 2/4-Bolt Combination Mount

5 (First Inlet Port)

Order Code	Description
E	2", SAE 4-Bolt Split Flange
EM	2", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
F	2.5", SAE 4-Bolt Split Flange
FM	2.5", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
G	3", SAE 4-Bolt Split Flange
GM	3", SAE 4-Bolt Metric Split Flange (M16 x 2.0" threads)
Y	#30 SAE (2-1/2" - 12) Straight Thread

Contact factory for other requirements.

6 (Displacements, Front Section)

Order Code	Cm ³ /in ³	Order Code	Cm ³ /in ³
18-	58 cc/3.54 in. ³	32-	104 cc/6.30 in. ³
21-	68 cc/4.13 in. ³	35-	113 cc/6.88 in. ³
25-	80 cc/4.91 in. ³	40-	129 cc/7.86 in. ³
28-	91 cc/5.51 in. ³	45-	145 cc/8.84 in. ³
30-	97 cc/5.89 in. ³	50-	161 cc/9.82 in. ³

GPM @ 1200 RPM, 100 PSI

7 (First Outlet Port)

Order Code	Description
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
C	1.25", SAE 4-Bolt Split Flange
CM	1.25", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
D	2.00", SAE 4-Bolt Split Flange
DM	2.00", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
V	#16 SAE (1 5/16" - 12) Straight Thread
W	#20 SAE (1 5/8" - 12) Straight Thread
X	#24 SAE (1 7/8" - 12) Straight Thread

Contact factory for other requirements.

8 (Second Inlet Port)

Order Code	Description
E	2", SAE 4-Bolt Split Flange
EM	2", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
F	2.5", SAE 4-Bolt Split Flange
FM	2.5", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)

Contact factory for other requirements.

9 (Displacements, Center Section)

Order Code	Cm ³ /in ³	Order Code	Cm ³ /in ³
7-	23 cc/1.41 in. ³	17-	55 cc/3.33 in. ³
9-	29 cc/1.79 in. ³	19-	62 cc/3.77 in. ³
11-	36 cc/2.18 in. ³	21-	68 cc/4.13 in. ³
13-	43 cc/2.60 in. ³	24-	77 cc/4.71 in. ³
15-	48 cc/2.94 in. ³	27-	87 cc/5.30 in. ³

GPM @ 1200 RPM, 100 PSI

EXAMPLE:

(F3)-G302020-W- 7 - E- 25-B -E- 11- B- + - 9- B- 12 - A -61-L																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Special Seals	Series	Mount Type	Front Cover	First Inlet Port	Displacements, Front	First Outlet Port	Second Inlet Port	Displacements, Center	Second Outlet Port	Third Inlet Port	Displacements, Rear	Third Outlet Port	Drive Shaft	Shaft Seal	Design Designation	Rotation

10 (Second Outlet Port)

Order Code	Description
A	.75", SAE 4-Bolt Split Flange
AM	.75", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
S	#10 SAE (.875" - 14) Straight Thread
T	#12 SAE (1 1/16" - 12) Straight Thread
V	#16 SAE (1 5/16" - 12) Straight Thread

Contact factory for other requirements.

11 (Third Inlet Port)

Order Code	Description
+	None

12 (Displacements, Rear Section)

Order Code	Cm ³ /in ³	Order Code	Cm ³ /in ³
7-	23 cc/1.41 in. ³	17-	55 cc/3.33 in. ³
9-	29 cc/1.79 in. ³	19-	62 cc/3.77 in. ³
11-	36 cc/2.18 in. ³	21-	68 cc/4.13 in. ³
13-	43 cc/2.60 in. ³	24-	77 cc/4.71 in. ³
15-	48 cc/2.94 in. ³	27-	87 cc/5.30 in. ³

GPM @ 1200 RPM, 100 PSI

13 (Third Outlet Port)

Order Code	Description
A	.75", SAE 4-Bolt Split Flange
AM	.75", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
S	#10 SAE (.875" - 14) Straight Thread
T	#12 SAE (1 1/16" - 12) Straight Thread
V	#16 SAE (1 5/16" - 12) Straight Thread

Contact factory for other requirements.

14 (Drive Shaft)

Order Code	Description
1	SAE "C" Straight Keyed, 1.25" Dia., 1.875" Ext.
12	SAE "C" 14-Tooth Spline, Flat Root-Side Fit
34	SAE "C" 14-Tooth Spline

Contact factory for other requirements.

15 (Shaft Seal)

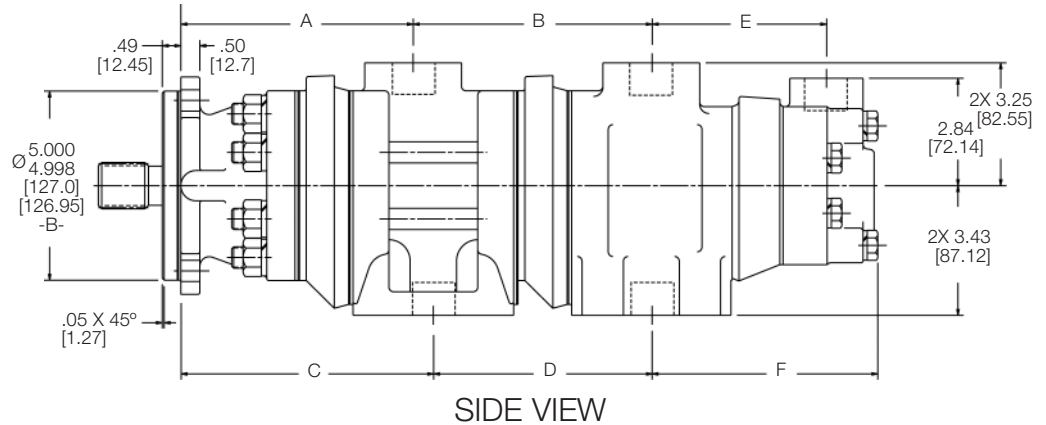
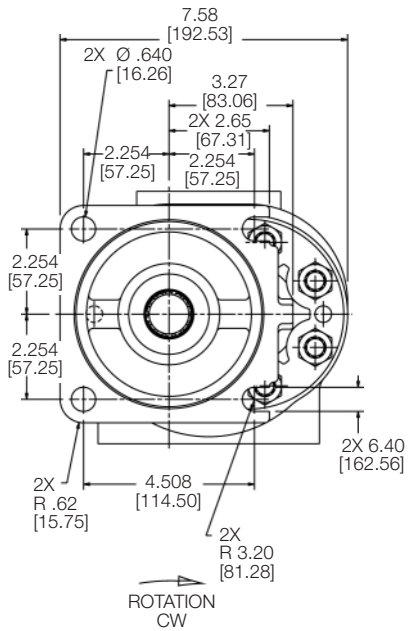
Order Code	Description
A	Single Shaft Seal
B	Double Shaft Seal
C	None

16 (Design Designation)

Order Code	Description
61	Standard

17 (Rotation)

Order Code	Description
L	Counterclockwise Rotation
R	Clockwise Rotation



161	9.82	50	7.94	201.7	8.12	206.2	8.47	215.1	7.59	192.8
145	8.84	45	7.63	193.8	7.81	198.4	8.16	207.3	7.28	184.9
129	7.86	40	7.33	186.2	7.50	190.5	7.86	199.6	6.97	177.0
113	6.88	35	7.02	178.3	7.19	182.6	7.55	191.8	6.66	169.2
103	6.30	32	6.84	173.7	7.01	178.1	7.37	187.2	6.48	164.6
97	5.89	30	6.71	170.4	6.88	174.8	7.24	183.9	6.35	161.3
90	5.51	28	6.59	167.4	6.77	172.0	7.12	180.8	6.24	158.5
81	4.91	25	6.40	162.6	6.58	167.1	6.93	176.0	6.05	153.7
68	4.13	21	6.15	156.2	6.33	160.8	6.68	169.7	5.80	147.3
58	3.54	18	5.97	151.6	6.14	156.0	6.50	165.1	5.61	142.5
CC	CIR	DISPLACEMENT CODE	A (in.)	A (mm)	B (in.)	B (mm)	C (in.)	C (mm)	D (in.)	D (mm)

G30 SECTIONS

87	5.30	27	5.70	144.8	7.07	179.6
77	4.71	24	5.43	137.9	6.80	172.7
68	4.13	21	5.16	131.1	6.53	165.9
62	3.77	19	4.99	126.7	6.36	161.5
55	3.33	17	4.79	121.7	6.16	156.5
48	2.94	15	4.62	117.3	5.99	152.1
43	2.60	13	4.46	113.3	5.83	148.1
36	2.18	11	4.39	111.5	5.64	143.3
29	1.79	9	4.09	103.9	5.46	138.7
23	1.41	7	3.91	99.3	5.28	134.1
CC	CIR	DISPLACEMENT CODE	E (in.)	E (mm)	F (in.)	F (mm)

G20 SECTIONS

All dimensions shown are for reference only. Consult factory for your specific configuration.

Model Code for G303020 Series Triple Pumps

33

ORDERING INFORMATION

Each option has been assigned an order code -- listed in the tables below -- for placement in the sequence shown at right.

1 (Special Seals)

Order Code	Description
F3	Viton Seal
Omit	Standard

2 (Series)

Order Code	Description
G303020	G303020 Series Triple Gear Pump

3 (Mount Type)

Order Code	Description
W	Wet Mounting Flange

4 (Front Cover)

Order Code	Description
4	SAE "C" 4-Bolt Mount
7	SAE "C" 2-Bolt Mount
8	SAE "C" 2/4-Bolt Combination Mount

5 (First Inlet Port)

Order Code	Description
E	2", SAE 4-Bolt Split Flange
EM	2", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
F	2.5", SAE 4-Bolt Split Flange
FM	2.5", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
G	3", SAE 4-Bolt Split Flange
GM	3", SAE 4-Bolt Metric Split Flange (M16 x 2.0" threads)
Y	#30 SAE (2-1/2" - 12) Straight Thread

Contact factory for other requirements.

6 (Displacements, Front Section)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
18-	58 cc/3.54 in. ³	32-	104 cc/6.30 in. ³
21-	68 cc/4.13 in. ³	35-	113 cc/6.88 in. ³
25-	80 cc/4.91 in. ³	40-	129 cc/7.86 in. ³
28-	91 cc/5.51 in. ³	45-	145 cc/8.84 in. ³
30-	97 cc/5.89 in. ³	50-	161 cc/9.82 in. ³

GPM @ 1200 RPM, 100 PSI

7 (First Outlet Port)

Order Code	Description
C	1.25", SAE 4-Bolt Split Flange
CM	1.25", SAE 4-Bolt Metric Split Flange (M10 x 1.5" threads)
D	2.00", SAE 4-Bolt Split Flange
DM	2.00", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
V	#16 SAE (1 5/16" - 12) Straight Thread
W	#20 SAE (1 5/8" - 12) Straight Thread
X	#24 SAE (1 7/8" - 12) Straight Thread

Contact factory for other requirements.

8 (Second Inlet Port)

Order Code	Description
E	2", SAE 4-Bolt Split Flange
EM	2", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
F	2.5", SAE 4-Bolt Split Flange
FM	2.5", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
G	3", SAE 4-Bolt Split Flange
GM	3", SAE 4-Bolt Metric Split Flange (M16 x 2.0" threads)

Contact factory for other requirements.

9 (Displacements, Center Section)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
18-	58 cc/3.54 in. ³	32-	104 cc/6.30 in. ³
21-	68 cc/4.13 in. ³	35-	113 cc/6.88 in. ³
25-	80 cc/4.91 in. ³	40-	129 cc/7.86 in. ³
28-	91 cc/5.51 in. ³	45-	145 cc/8.84 in. ³
30-	97 cc/5.89 in. ³	50-	161 cc/9.82 in. ³

GPM @ 1200 RPM, 100 PSI

EXAMPLE:

(F3)-G303020-W- 7 -E- 30-B -E- 25-B- + - 9- B- I2 - A -61-L																
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
Special Seals	Series	Mount Type	Front Cover	First Inlet Port	Displacements, Front	First Outlet Port	Second Inlet Port	Displacements, Center	Second Outlet Port	Third Inlet Port	Displacements, Rear	Third Outlet Port	Drive Shaft	Shaft Seal	Design Designation	Rotation

10 (Second Outlet Port)

Order Code	Description
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
C	1.25", SAE 4-Bolt Split Flange
CM	1.25", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
D	2.00", SAE 4-Bolt Split Flange
DM	2.00", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
V	#16 SAE (1 5/16" - 12) Straight Thread
W	#20 SAE (1 5/8" - 12) Straight Thread

Contact factory for other requirements.

11 (Third Inlet Port) (Contact Factory)

Order Code	Description
+	None

12 (Displacements, Rear Section)

Order Code	Cm ³ /In ³	Order Code	Cm ³ /In ³
7-	23 cc/1.41 in. ³	17-	55 cc/3.33 in. ³
9-	29 cc/1.79 in. ³	19-	62 cc/3.77 in. ³
11-	36 cc/2.18 in. ³	21-	68 cc/4.13 in. ³
13-	43 cc/2.60 in. ³	24-	77 cc/4.71 in. ³
15-	48 cc/2.94 in. ³	27-	87 cc/5.30 in. ³

GPM @ 1200 RPM, 100 PSI

13 (Third Outlet Port)

Order Code	Description
A	.75", SAE 4-Bolt Split Flange
AM	.75", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
B	1.00", SAE 4-Bolt Split Flange
BM	1.00", SAE 4-Bolt Metric Split Flange (M10 x 1.50" threads)
S	#10 SAE (.875" - 14) Straight Thread
T	#12 SAE (1 1/16" - 12) Straight Thread
V	#16 SAE (1 5/16" - 12) Straight Thread

Contact factory for other requirements.

14 (Drive Shaft)

Order Code	Description
1	SAE "C" Straight Keyed, 1.25" Dia., 1.875" Ext.
12	SAE "C" 14-Tooth Spline, Flat Root-Side Fit
34	SAE "C" 14-Tooth Spline

Contact factory for other requirements.

15 (Shaft Seal)

Order Code	Description
A	Single Shaft Seal
B	Double Shaft Seal
C	None

16 (Design Designation)

Order Code	Description
61	Standard

17 (Rotation)

Order Code	Description
L	Counterclockwise Rotation
R	Clockwise Rotation



87	5.30	27	6.54	166.1	5.91	150.1	7.07	179.6	5.60	142.2	15.70	398.8
77	4.71	24	6.27	159.3	5.64	143.3	6.80	172.7	5.33	135.4	15.17	385.3
68	4.13	21	6.00	152.4	5.37	136.4	6.53	165.9	5.06	128.5	14.63	371.6
62	3.77	19	5.83	148.1	5.20	132.1	6.36	161.5	4.89	124.2	14.30	363.2
55	3.33	17	5.63	143.0	5.00	127.0	6.16	156.5	4.69	119.1	13.90	353.1
48	2.94	15	5.46	138.7	4.83	122.7	5.99	152.1	4.52	114.8	13.55	344.2
43	2.60	13	5.30	134.6	4.67	118.6	5.83	148.1	4.36	110.7	13.23	336.0
36	2.18	11	5.11	129.8	4.48	113.8	5.64	143.3	4.17	105.9	12.84	326.1
29	1.79	9	4.93	125.2	4.30	109.2	5.46	138.7	3.99	101.3	12.49	317.2
23	1.41	7	4.75	120.7	4.12	104.6	5.28	134.1	3.81	96.8	12.14	308.4
CC	CIR	DISPLACEMENT CODE	A (in.)	A (mm)	B (in.)	B (mm)	C (in.)	C (mm)	D (in.)	D (mm)	E (in.)	E (mm)
G20 SECTIONS												

All dimensions shown
are for reference only.
Consult factory for your
specific configuration.

ORDERING INFORMATION

Each option has been assigned an order code -- listed in the tables below -- for placement in the sequence shown at right.

1 (Special Seals)

Order Code	Description
F3	Viton Seal
Omit	Standard

2 (Series)

Order Code	Description
GT2020	GT2020 Series Double Thru Drive Pump

3 (Mount Type)

Order Code	Description
W	Wet Mounting Flange (pilot diameter sealing and provides for option double shaft seal)

4 (Front Cover)

Order Code	Description
1	SAE "A" 2-Bolt Mount
2	SAE "B" 2-Bolt Mount
4	SAE "C" 4-Bolt Mount (Contact Factory)
6	SAE "B" 2/4-Bolt Combination Mount
8	SAE "C" 2/4-Bolt Combination Mount

5 (Inlet Port)

Order Code	Description
E	2", SAE 4-Bolt Split Flange
EM	2", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
F	2.5", SAE 4-Bolt Split Flange
FM	2.5", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)

Contact factory for other requirements.

6 (Displacements, Front Section)

Order Code	Cm ³ /in ³	Order Code	Cm ³ /in ³
7-	23 cc/1.41 in. ³	17-	55 cc/3.33 in. ³
9-	29 cc/1.79 in. ³	19-	62 cc/3.77 in. ³
11-	36 cc/2.18 in. ³	21-	68 cc/4.13 in. ³
13-	43 cc/2.60 in. ³	24-	77 cc/4.71 in. ³
15-	48 cc/2.94 in. ³	27-	87 cc/5.30 in. ³

GPM @ 1200 RPM, 100 PSI

7 (Outlet Port)

Order Code	Description
A	.75", SAE 4-Bolt Split Flange
B	1", SAE 4-Bolt Split Flange (M10 x 1.5" threads)
BM	1", SAE 4-Bolt Metric Split Flange (M10 x 1.5" threads)
S	#10 SAE (.875" - 14) Straight Thread
T	#12 SAE (1 1/16" - 12) Straight Thread
V	#16 SAE (1 5/16" - 12) Straight Thread

Contact factory for other requirements.

8 (Displacements, Rear Section)

Order Code	Cm ³ /in ³	Order Code	Cm ³ /in ³
7-	23 cc/1.41 in. ³	17-	55 cc/3.33 in. ³
9-	29 cc/1.79 in. ³	19-	62 cc/3.77 in. ³
11-	36 cc/2.18 in. ³	21-	68 cc/4.13 in. ³
13-	43 cc/2.60 in. ³	24-	77 cc/4.71 in. ³
15-	48 cc/2.94 in. ³	27-	87 cc/5.30 in. ³

GPM @ 1200 RPM, 100 PSI

9 (Rear Section Outlet Port)

Order Code	Description
A	.75", SAE 4-Bolt Split Flange
B	1", SAE 4-Bolt Split Flange (M10 x 1.5" threads)
BM	1", SAE 4-Bolt Metric Split Flange (M10 x 1.5" threads)
S	#10 SAE (.875" - 14) Straight Thread
T	#12 SAE (1 1/16" - 12) Straight Thread
V	#16 SAE (1 5/16" - 12) Straight Thread

Contact factory for other requirements.

EXAMPLE:

(F3)-GT2020- W- 2 - E-13- T -21 -V- 1 -B - 11- A - 61- L

1 Special Seals	2 Series	3 Mount Type	4 Front Cover	5 Inlet Port	6 Displacements, Front Section	7 Outlet Port	8 Displacements, Rear Section	9 Rear Section Outlet Port	10 Rear Mounting Pad	11 Shaft Seal	12 Drive Shaft	13 Rear Coupling	14 Design Designation	15 Rotation
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10 (Rear Mounting Pad)

Order Code	Description
1	SAE "A" 2-Bolt Rear Mounting Pad
6	SAE "B" 2/4-Bolt Rear Mounting Pad

Note: SAE "A" rear mounting pad is available with GT30 - 41st design. Contact factory for information.

11 (Shaft Seal)

Order Code	Description
B	Double Shaft Seal
X	None

12 (Drive Shaft)

Order Code	Description
1	SAE "B" Straight Keyed, .875" Dia., 1.3125" Ext.
12	SAE "B" 13-Tooth Spline, Flat Root-Side Fit
21	SAE "BB" Straight Keyed, 1" Dia., 1.5" Ext.
99	SAE "BB" 15-Tooth Spline, Flat Root-Side Fit

Contact factory for other requirements.

13 (Rear Coupling)

Order Code	Description
A	SAE "A" Coupling
B	SAE "B" Coupling

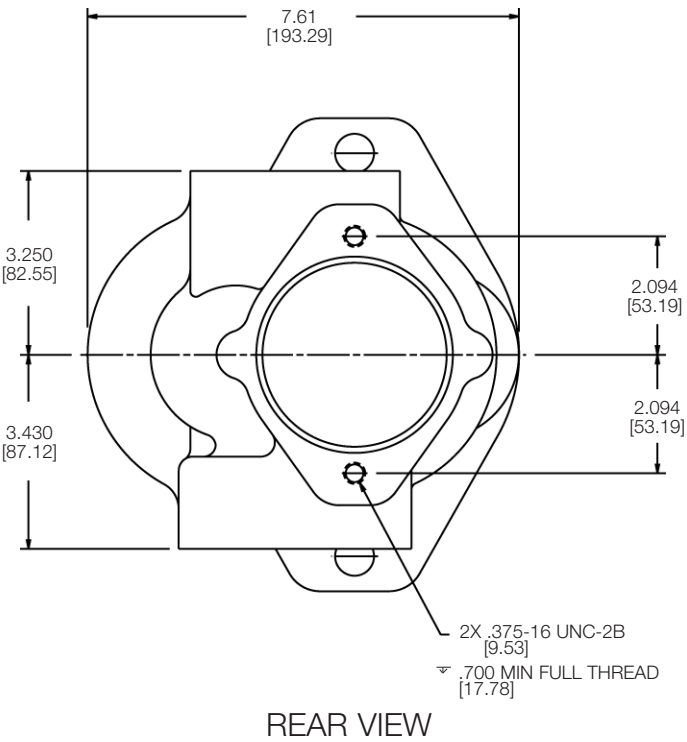
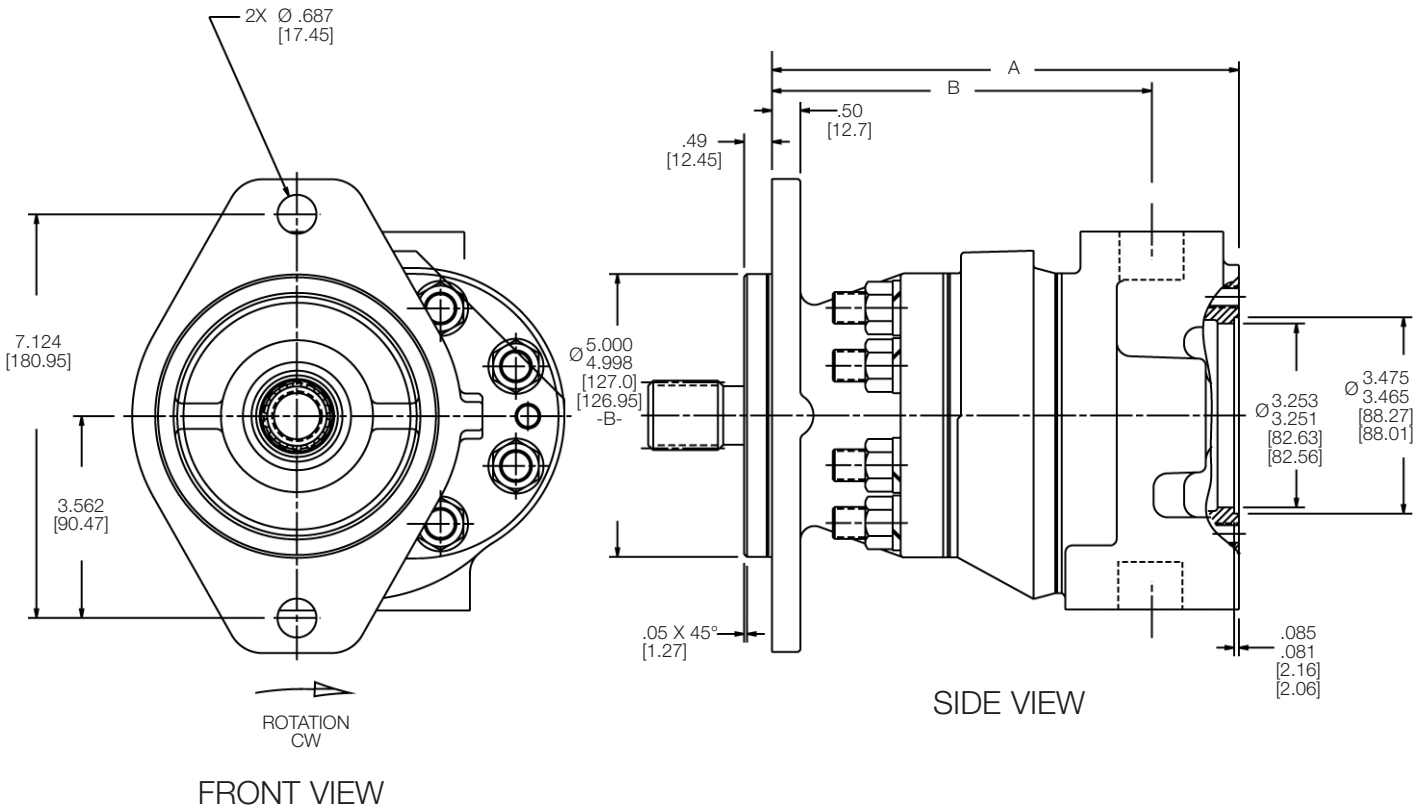
14 (Design Designation)

Order Code	Description
61	Standard

15 (Rotation)

Order Code	Description
L	Counterclockwise Rotation
R	Clockwise Rotation

GT30-41



161	9.82	50	9.48	240.8	7.94	201.7
145	8.84	45	9.17	232.9	7.63	193.8
129	7.86	40	8.86	225.0	7.33	186.2
113	6.88	35	8.55	217.2	7.02	178.3
103	6.30	32	8.37	212.6	6.84	173.7
97	5.89	30	8.24	209.3	6.71	170.4
90	5.51	28	8.12	206.2	6.59	167.4
81	4.91	25	7.93	201.4	6.40	162.6
68	4.13	21	7.69	195.3	6.15	156.2
58	3.54	18	7.50	190.5	5.97	151.6
CC	CIR	DISPLACEMENT CODE	A (in.)	A (mm)	B (in.)	B (mm)

All dimensions shown are for reference only. Consult factory for your specific configuration.

ORDERING INFORMATION

Each option has been assigned an order code -- listed in the tables below -- for placement in the sequence shown at right.

1 (Special Seals)

Order Code	Description
F3	Viton Seal
Omit	Standard

2 (Series)

Order Code	Description
GT30(41)	GT30(41) Series Thru Drive Pump
Multiple GT3030 double thru-drive pumps are available. Contact factory for information.	

3 (Standard Designation)

Order Code	Description
C	Standard Designation

4 (Front Cover)

Order Code	Description
4	SAE "C" 4-Bolt Mount
6	SAE "B" 2/4-Bolt Combination Mount
7	SAE "C" 2-Bolt Mount
8	SAE "C" 2/4-Bolt Combination Mount

5 (Inlet Port)

Order Code	Description
D	1.5", SAE 4-Bolt Split Flange
DM	1.5", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
E	2", SAE 4-Bolt Split Flange
EM	2", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
W	#20 SAE (1 5/8" - 12) Straight Thread
X	#24 SAE (1 7/8" - 12) Straight Thread
Y	#30 SAE (2 1/2" - 12) Straight Thread

Contact factory for other requirements.

6 (Displacements)

Order Code	Cm ³ /in ³	Order Code	Cm ³ /in ³
18-	58 cc/3.54 in. ³	32-	104 cc/6.30 in. ³
21-	68 cc/4.13 in. ³	35-	113 cc/6.88 in. ³
25-	80 cc/4.91 in. ³	40-	129 cc/7.86 in. ³
28-	91 cc/5.51 in. ³	45-	145 cc/8.84 in. ³
30-	97 cc/5.89 in. ³	50-	161 cc/9.82 in. ³

GPM @ 1200 RPM, 100 PSI

7 (Outlet Port)

Order Code	Description
B	1", SAE 4-Bolt Split Flange
BM	1", SAE 4-Bolt Metric Split Flange (M10 x 1.5" threads)
C	1.25", SAE 4-Bolt Split Flange
CM	1.25", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
D	1.5", SAE 4-Bolt Split Flange
DM	1.5", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
W	#20 SAE (1 5/8" - 12) Straight Thread
X	#24 SAE (1 7/8" - 12) Straight Thread

Contact factory for other requirements.

8 (Rear Mounting Pad)

Order Code	Description
1	SAE "A" 2-Bolt Rear Mounting Pad

EXAMPLE:

(F3)-GT30(41)-C -4- D- 18- B -1 -A- 1 -X- 41- L

1 Special Seals	2 Series	3 Standard Designation	4 Front Cover	5 Inlet Port	6 Displacements	7 Outlet Port	8 Rear Mounting Pad	9 Shaft Seal	10 Drive Shaft	11 Rear Coupling	12 Design Designation	13 Rotation
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9 (Shaft Seal)

Order Code	Description
A	Single Shaft Seal
B	Double Shaft Seal
X	None

10 (Drive Shaft)

Order Code	Description
1	SAE "C" Straight Keyed, 1.25" Dia., 1.875" Ext.
12	SAE "C" 14-Tooth Spline, Flat Root-Side Fit
34	SAE "C" 14-Tooth Spline

Contact factory for other requirements.

11 (Rear Coupling)

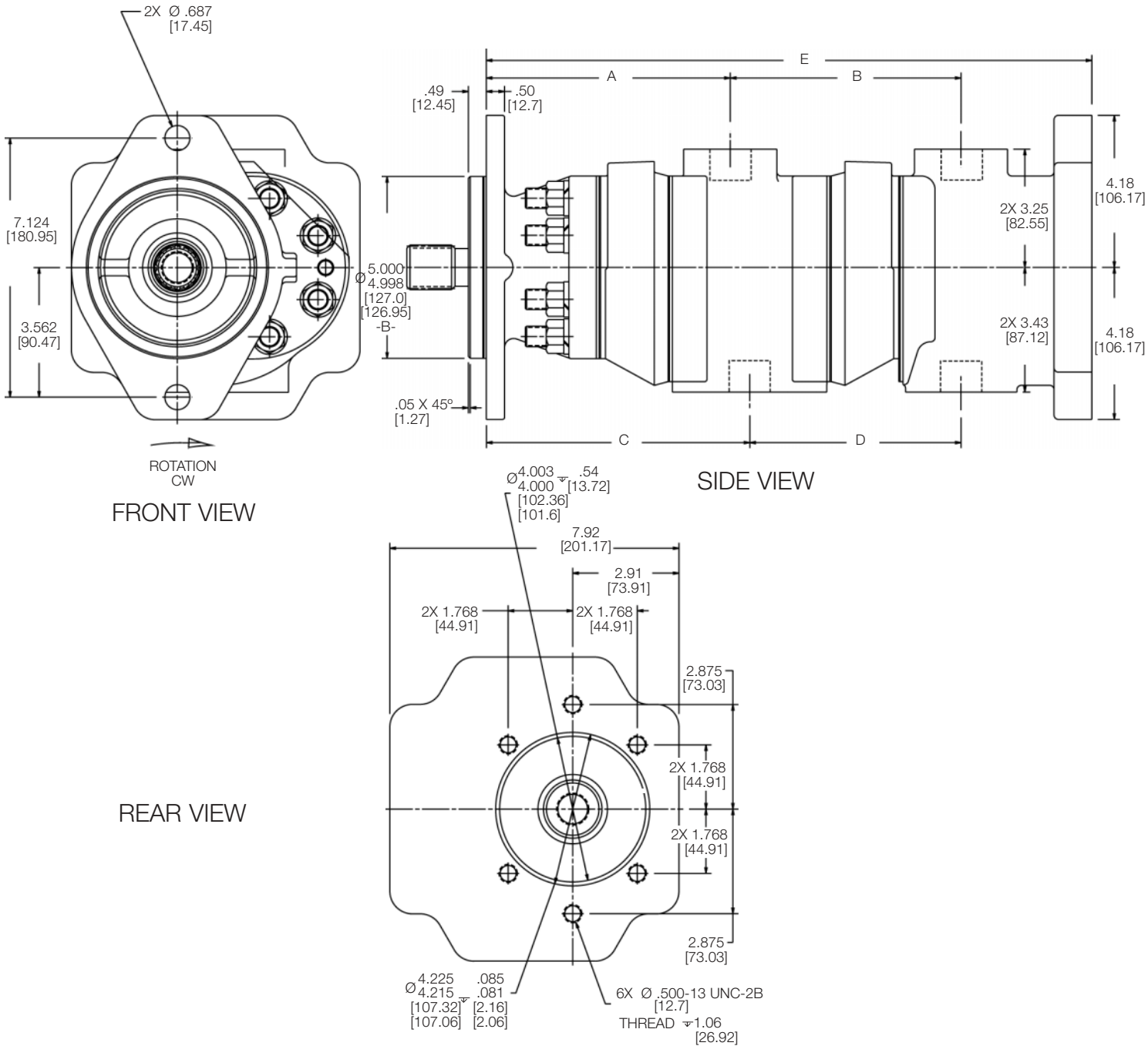
Order Code	Description
A	SAE "A" Coupling
X	No Coupling
See GT30(32) design for "B" and "C".	

12 (Design Designation)

Order Code	Description
41	Standard

13 (Rotation)

Order Code	Description
L	Counterclockwise Rotation
R	Clockwise Rotation



161	9.82	50	7.94	201.7	7.58	192.5	8.48	215.4	6.81	173.0	19.13	485.9
145	8.84	45	7.63	193.8	7.27	184.7	8.17	207.5	6.50	165.1	18.51	470.2
129	7.86	40	7.33	186.2	6.96	176.8	7.86	199.6	6.19	157.2	17.89	454.4
113	6.88	35	7.02	178.3	6.65	168.9	7.55	191.8	5.89	149.6	17.27	438.7
103	6.30	32	6.84	173.7	6.47	164.3	7.37	187.2	5.70	144.8	16.92	429.8
97	5.89	30	6.71	170.4	6.34	161.0	7.24	183.9	5.58	141.7	16.65	422.9
90	5.51	28	6.59	167.4	6.23	158.2	7.12	180.8	5.46	138.7	16.41	416.8
81	4.91	25	6.40	162.6	6.04	153.4	6.93	176.0	5.27	133.9	16.03	407.2
68	4.13	21	6.15	156.2	5.79	147.1	6.69	169.9	5.02	127.5	15.54	394.7
58	3.54	18	5.97	151.6	5.60	142.4	6.50	165.1	4.83	122.7	15.17	385.3
CC	CIR	DISPLACEMENT CODE	A (in.)	A (mm)	B (in.)	B (mm)	C (in.)	C (mm)	D (in.)	D (mm)	E (in.)	E (mm)

All dimensions shown are for reference only. Consult factory for your specific configuration.

Model Code for GT3030(32) Double Thru Drive Pumps 39

ORDERING INFORMATION

Each option has been assigned an order code -- listed in the tables below -- for placement in the sequence shown at right.

1 (Special Seals)

Order Code	Description
F3	Viton Seal
Omit	Standard

2 (Series)

Order Code	Description
GT3030(32)	GT3030(32) Series Double Thru Drive Pump
Contact factory for other requirements.	

3 (Standard Designation)

Order Code	Description
C	Standard Designation

4 (Front Cover)

Order Code	Description
4	SAE "C" 4-Bolt Mount
7	SAE "C" 2-Bolt Mount
8	SAE "C" 2/4-Bolt Combination Mount

5 (Inlet Port)

Order Code	Description
E	2", SAE 4-Bolt Split Flange
EM	2", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
F	2.5", SAE 4-Bolt Split Flange
FM	2.5", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
G	3", SAE 4-Bolt Split Flange
GM	3", SAE 4-Bolt Metric Split Flange (M16 x 2.0" threads)
Y	#30 SAE (2 1/2" - 12) Straight Thread

Contact factory for other requirements.

6 (Displacements, Front Section)

Order Code	Cm ³ /in ³	Order Code	Cm ³ /in ³
18-	58 cc/3.54 in. ³	32-	104 cc/6.30 in. ³
21-	68 cc/4.13 in. ³	35-	113 cc/6.88 in. ³
25-	80 cc/4.91 in. ³	40-	129 cc/7.86 in. ³
28-	91 cc/5.51 in. ³	45-	145 cc/8.84 in. ³
30-	97 cc/5.89 in. ³	50-	161 cc/9.82 in. ³

GPM @ 1200 RPM, 100 PSI

7 (Front Section Outlet Port)

Order Code	Description
B	1", SAE 4-Bolt Split Flange
BM	1", SAE 4-Bolt Metric Split Flange (M10 x 1.5" threads)
C	1.25", SAE 4-Bolt Split Flange
CM	1.25", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
D	1.5", SAE 4-Bolt Split Flange
DM	1.5", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
V	#16 SAE (1 5/16" - 12) Straight Thread
W	#20 SAE (1 5/8" - 12) Straight Thread
X	#24 SAE (1 7/8" - 12) Straight Thread

Contact factory for other requirements.

8 (Displacements, Rear Section)

Order Code	Cm ³ /in ³	Order Code	Cm ³ /in ³
18-	58 cc/3.54 in. ³	32-	104 cc/6.30 in. ³
21-	68 cc/4.13 in. ³	35-	113 cc/6.88 in. ³
25-	80 cc/4.91 in. ³	40-	129 cc/7.86 in. ³
28-	91 cc/5.51 in. ³	45-	145 cc/8.84 in. ³
30-	97 cc/5.89 in. ³	50-	161 cc/9.82 in. ³

GPM @ 1200 RPM, 100 PSI

EXAMPLE:

(F3)-GT3030- C- 4 - E- 18-B -28 -X- 6 - A- 12- B - 32- L														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Special Seals	Series	Standard Designation	Front Cover	Inlet Port	Displacements, Front Section	Front Section Outlet Port	Displacements, Rear Section	Rear Section Outlet Port	Rear Mounting Pad	Shaft Seal	Drive Shaft	Rear Coupling	Design Designation	Rotation

9 (Rear Section Outlet Port)

Order Code	Description
B	1", SAE 4-Bolt Split Flange
BM	1", SAE 4-Bolt Metric Split Flange (M10 x 1.5" threads)
C	1.25", SAE 4-Bolt Split Flange
CM	1.25", SAE 4-Bolt Metric Split Flange (M12 x 1.75" threads)
D	1.5", SAE 4-Bolt Split Flange
DM	1.5", SAE 4-Bolt Metric Split Flange (M14 x 2.0" threads)
W	#20 SAE (1 5/8" - 12) Straight Thread
X	#24 SAE (1 7/8" - 12) Straight Thread

Contact factory for other requirements.

10 (Rear Mounting Pad)

Order Code	Description
6	SAE "B" 2/4-Bolt Rear Mounting Pad
8	SAE "C" 2/4-Bolt Rear Mounting Pad

Note: SAE "A" rear mounting pad is available with GT30 - 41st design. Contact factory for information.

11 (Shaft Seal)

Order Code	Description
A	Single Shaft Seal
B	Double Shaft Seal
X	None

12 (Drive Shaft)

Order Code	Description
1	SAE "C" Straight Keyed, 1.25" Dia., 1.875" Ext.
12	SAE "C" 14-Tooth Spline, Flat Root-Side Fit
34	SAE "C" 14-Tooth Spline

Contact factory for other requirements.

13 (Rear Coupling)

Order Code	Description
B	SAE "B" Coupling
C	SAE "C" Coupling

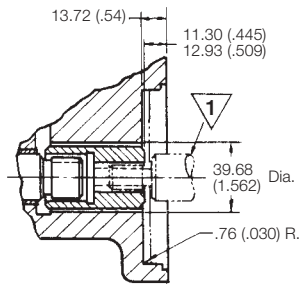
14 (Design Designation)

Order Code	Description
32	Standard

15 (Rotation)

Order Code	Description
L	Counterclockwise Rotation
R	Clockwise Rotation

Rear Couplings for Thru-Drive Pumps

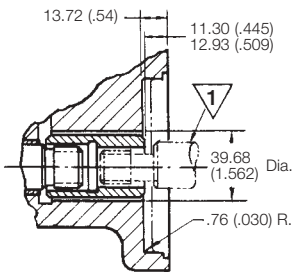


SAE "A" SIZE COUPLING

Coupling Spline Data - mm (inches)

Internal Involute Spline - Special
 Pitch Dia. - 14.29 (.5625)
 Base Dia. - 12.37 (.4871)
 Flat Root - Side Fit
 No. of Teeth - 9
 Diametral Pitch - 16/32
 Pressure Angle - 30°
 Form Dia. - 15.56 (.6125)
 Major Dia. - 16.15/15.88 (.6360/.6250)
 Minor Dia. - 13.05/12.93 (.5139/.5089)

Circular Space Width
 2.67 (.1053) Max. Eff. Ref.
 2.71 (.1067) Max. Act.
 2.64 (.1041) Min. Eff.
 2.68 (.1055) Min. Act. Ref.
 Measurement between 2.74 (.1080)
 Dia. Pins -
 10.45 (.4115) Max. Ref.
 10.38 (.4088) Min. Ref.

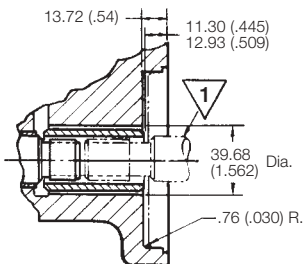


SAE "B" SIZE COUPLING

Coupling Spline Data - mm (inches)

Internal Involute Spline - Special
 Pitch Dia. - 20.64 (.8125)
 Base Dia. - 17.87 (.7036)
 Flat Root - Side Fit
 No. of Teeth - 13
 Diametral Pitch - 16/32
 Pressure Angle - 30°
 Form Dia. - 21.91 (.8625)
 Major Dia. - 22.50/22.23 (.8860/.8750)
 Minor Dia. - 19.26/19.13 (.7583/.7533)

Circular Space Width
 2.67 (.1053) Max. Eff. Ref.
 2.71 (.1067) Max. Act.
 2.64 (.1041) Min. Eff.
 2.68 (.1055) Min. Act. Ref.
 Measurement between 2.74 (.1080)
 Dia. Pins -
 16.90 (.6654) Max. Ref.
 16.84 (.6630) Min. Ref.

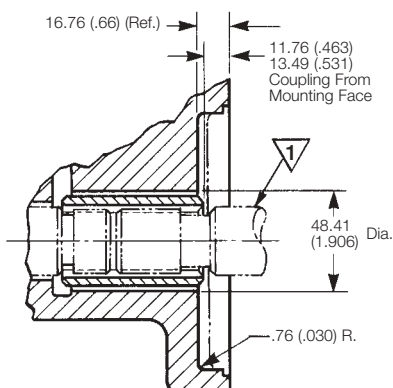


SAE "B-B" SIZE COUPLING

Coupling Spline Data - mm (inches)

Internal Involute Spline - Special
 Pitch Dia. - 23.81 (.9375)
 Base Dia. - 20.62 (.8119)
 Flat Root - Side Fit
 No. of Teeth - 15
 Diametral Pitch - 16/32
 Pressure Angle - 30°
 Form Dia. - 25.08 (.9875)
 Major Dia. - 25.68/25.40 (1.011/1.000)
 Minor Dia. - 22.40/22.27 (.8817/.8767)

Circular Space Width
 2.67 (.1053) Max. Eff. Ref.
 2.71 (.1067) Max. Act.
 2.64 (.1041) Min. Eff.
 2.68 (.1055) Min. Act. Ref.
 Measurement between 2.74 (.1080)
 Dia. Pins -
 20.30 (.7915) Max. Ref.
 20.04 (.7891) Min. Ref.



SAE "C" SIZE COUPLING

Coupling Spline Data - mm (inches)

Internal Involute Spline - Special
 Pitch Dia. - 29.63 (1.1667)
 Base Dia. - 25.66 (1.0104)
 Flat Root - Side Fit
 No. of Teeth - 14
 Diametral Pitch - 12/24
 Pressure Angle - 30°
 Form Dia. - 31.33 (1.2333)
 Major Dia. - 32.08/31.75 (1.2630/1.2500)
 Minor Dia. - 27.72/27.59 (1.0912/1.0862)

Circular Space Width
 3.50 (.1378) Max. Eff. Ref.
 3.54 (.1394) Max. Act.
 3.47 (.1366) Min. Eff.
 3.51 (.1382) Min. Act. Ref.
 Measurement between 3.66 (.1440)
 Dia. Pins -
 24.70 (.9726) Max. Ref.
 24.64 (.9701) Min. Ref.



The customer shaft extension must conform, in all respects, to SAE J744C "Hydraulic Power Pump" standards as they apply to external splines.

Technical drawing of the 1000 Series Coupling, showing front and side views with dimensions in inches and millimeters.

Front View Dimensions:

- Overall Width: 87.38 (3.44)
- Overall Height: 103.63 (4.08)
- Reference Dimension: 44.45 (1.750) (REF.)
- Internal Widths: 53.19 (2.094)
- Internal Heights: 59.18 (2.33)
- Thread Specification: .375-16 UNC-2B THD. 22.4 (.88) DEEP 2 HOLES
- Feature: COUPLING & MOUNTING HOLES IN THIS POSITION FOR COUNTERCLOCKWISE (L.H.) ROTATION

Side View Dimensions:

- Overall Length: 11.43 (.45)
- Internal Lengths: 2.05 (.081), 2.16 (.085)
- Internal Widths: 88.01 (3.465), 88.27 (3.475) DIA.
- Internal Height: 82.63 (3.251) (3.475) DIA.
- Internal Width: 82.58 (3.251) (3.475) DIA.
- Internal Width: 1.875 (MAX.)
- Internal Width: .76 (.030) R (MAX.)
- Internal Width: .381 (.015) R
- Feature: CUSTOMER SHAFT

COUPLING & MOUNTING HOLES IN THIS POSITION FOR COUNTERCLOCKWISE ROTATION

73.15 (2.88) 73.15 (2.88)

127.25 (5.01)

57.25 (2.254)

57.25 (2.254)

73.91 (2.91)

57.25 (2.254) 57.25 (2.254)

90.48 (3.562) 90.48 (3.562)

106.2 106.2

.500-13 UNC-2B THD. 26.9 (1.06) DEEP 4 PLACES

127.03 (5.001) DIA.

127.08 (5.003) DIA.

132.46 (5.215) DIA.

132.72 (5.225) DIA.

.76 (.030) R.

57.15 (2.250) MAX.

2.05 (.081) 2.16 (.085)

16.76 (.66)

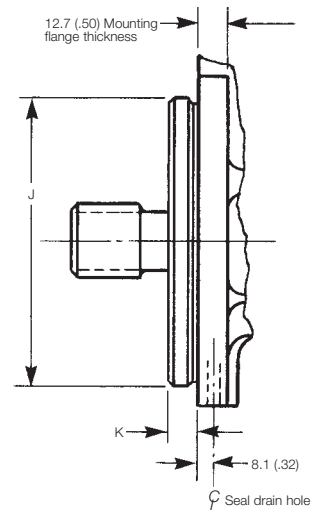
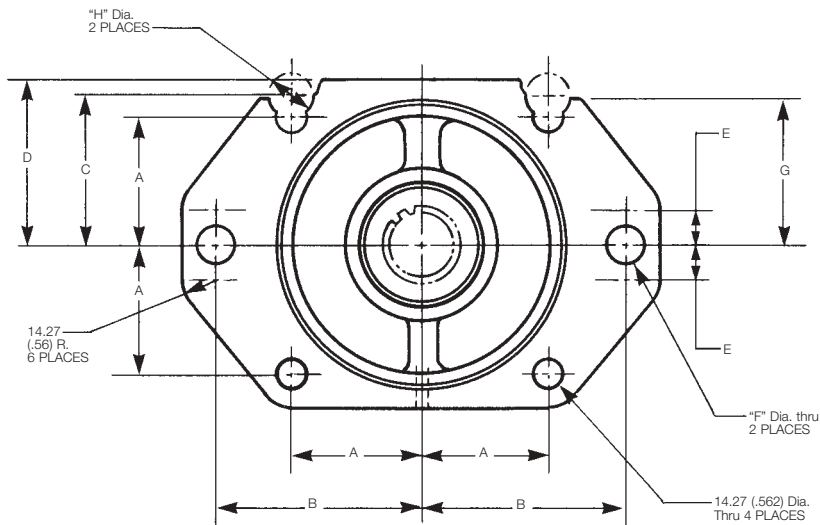
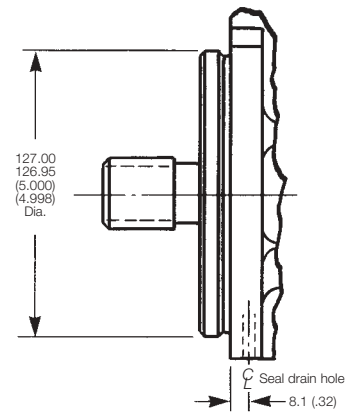
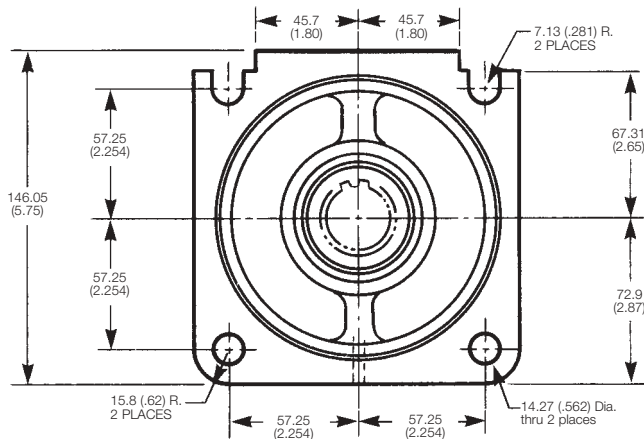
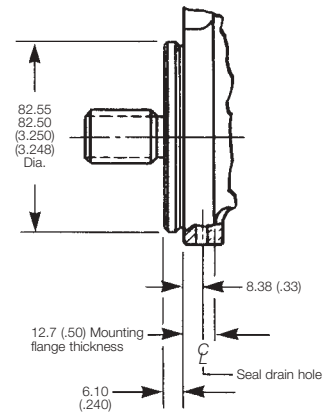
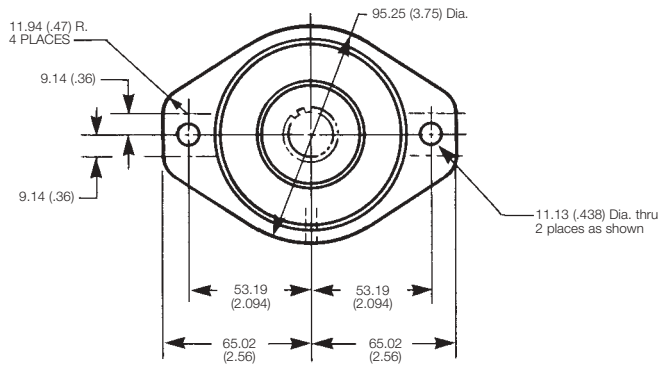
127 (.005) .381 (.015) R.

CUSTOMER SHAFT EXTENSION

5-11 UNC-2B THD. 9 (1.06) DEEP 4 PLACES

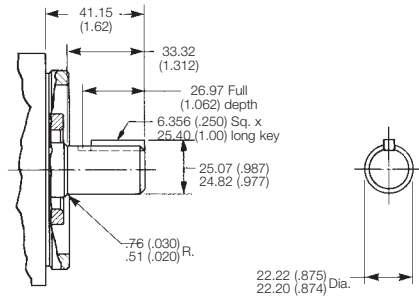
	Port size (model code designation)	Dimensions - mm (inch)						
		H	J	K	L	M	N	P
	A	19.05 (.750)	11.13 (.438)	22.22 (.875)	23.82 (.938)	47.62 (1.875)	(.375-16)	22.35 (.88)
	B	25.40 (1.000)	13.09 (.515)	26.19 (1.031)	26.19 (1.031)	52.37 (2.062)	(.375-16)	22.35 (.88)
	C	31.75 (1.250)	15.09 (.594)	30.18 (1.199)	29.36 (1.156)	58.72 (2.312)	(.438-14)	25.40 (1.00)
	D	38.10 (1.500)	17.86 (.703)	35.71 (1.406)	34.93 (1.375)	69.85 (2.750)	(.500-13)	25.40 (1.00)
	E	50.80 (2.000)	21.44 (.844)	42.87 (1.688)	38.89 (1.531)	77.77 (3.062)	(.500-13)	25.40 (1.00)
	F	63.50 (2.500)	25.40 (1.000)	50.80 (2.000)	44.45 (1.750)	88.90 (3.500)	(.500-13)	30.23 (1.19)
	G	76.20 (3.000)	30.96 (1.219)	61.93 (2.438)	53.19 (2.094)	106.38 (4.188)	(.625-11)	30.23 (1.19)

Mounting Flanges

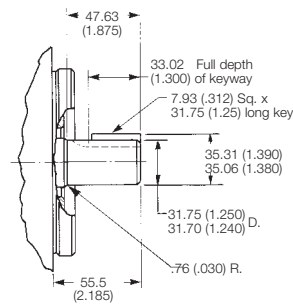


Pump series	2-Bolt/4-Bolt combination flange	A	B	C	D	E	F	G	H	J	K
G20, G2020, GT20	SAE "B"	44.91 (1.768)	87.38 (3.44)	54.61 (2.15)	59.18 (2.33)	12.7 (.50)	14.27 (.562)	52.02 (2.048)	19.05 (.750)	101.60 101.54 (4.000) (3.998)	9.40 (.370)
G30, G3020, G3030, GT30	SAE "C"	57.25 (2.254)	90.48 (3.56)	67.30 (2.65)	72.90 (2.87)	15.5 (.61)	17.48 (.688)	65.99 (2.598)	19.94 (.785)	127.00 126.95 (5.000) (4.998)	12.45 (.490)

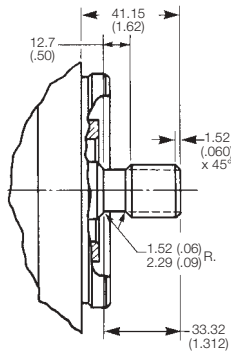
Shaft No. 1: For G20, G2020 & GT20 Pumps
292.6 Nm (2590 in. lb.) torsional capacity.*



Shaft No. 1: For G30, G3020, G3030 & GT30 Pumps
720.8 Nm (6380 in. lb.) torsional capacity.*



Shaft No. 12: For G20, G2020 & GT20 Pumps
279.6 Nm (2475 in. lb.) torsional capacity.*



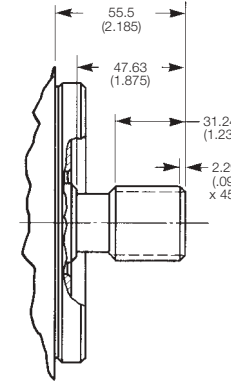
External Involute Spline

Pitch Dia. - 20.64 (.8125)
Base Dia. - 17.87 (.7036)
Flat Root - Side Fit
No. of Teeth - 13
Diametral Pitch - 16/32
Pressure Angle - 30°
Form Dia. - 19.03 (.7493)
Major Dia. - 21.81/21.68 (.8585/.8535)
Minor Dia. - 18.63/18.35 (.7335/.7225)

Circular Tooth Thickness

2.46 (.0967) Max. Eff.
2.42 (.0952) Max. Act. Ref.
2.43 (.0955) Min. Eff. Ref.
2.39 (.0940) Min. Act.
Measurement Over 3.05 (.1200) Dia. Pins -
25.03 (.9853) Max. Ref.
24.98 (.9836) Min. Ref.

Shaft No. 12: For G30, G3020, G3030 & GT30 Pumps
819.1 Nm (7250 in. lb.) torsional capacity.*



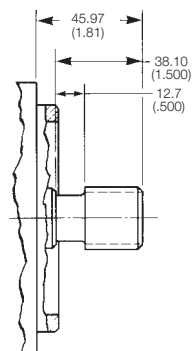
External Involute Spline

Pitch Dia. - 29.63 [1.667]
Base Dia. - 25.66 [1.0104]
Flat Root - Side Fit
No. of Teeth - 14
Diametral Pitch - 12/24
Pressure Angle - 30°
Form Dia. - 27.49 [1.0822]
Major Dia. - 31.22/31.10 [1.2293/1.2243]
Minor Dia. - 26.99/26.66 [1.0627/1.0497]

Circular Tooth Thickness

3.29 [1.294] Max. Eff.
3.24 [1.277] Max. Act. Ref.
3.26 [1.282] Min. Eff. Ref.
3.21 [1.265] Min. Act.
Measurement Over 4.06 [1.600] Dia. Pins -
35.70 [1.4054] Min. Ref.

Shaft No. 99: For G20, G2020 & GT20 Pumps
451.9 Nm (4000 in. lb.) torsional capacity.*



External Involute Spline

Pitch Dia. - 23.81 [.9375]
Base Dia. - 20.62 [.8119]
Flat Root - Side Fit
No. of Teeth - 15
Diametral Pitch - 16/32
Pressure Angle - 30°
Form Dia. - 22.17 [.8727]
Major Dia. - 24.98/24.85 [.9835/.9785]
Minor Dia. - 21.81/21.53 [.8585/.8475]

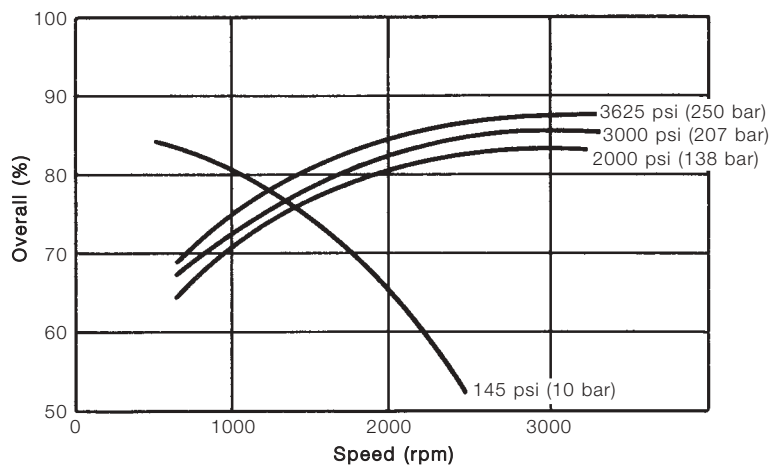
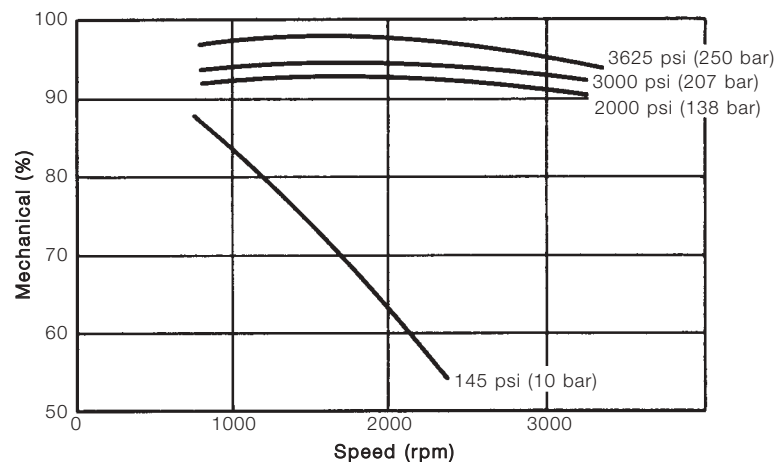
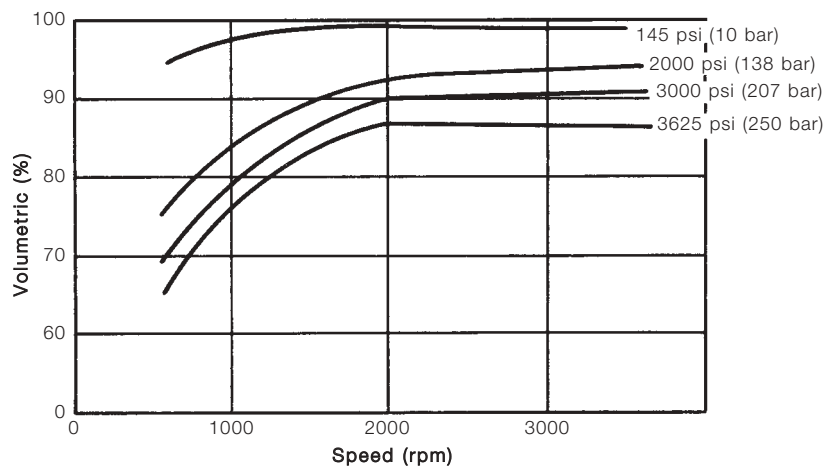
Circular Tooth Thickness

2.456 [.0967] Max. Eff.
2.418 [.0952] Max. Act. Ref.
2.426 [.0955] Min. Eff. Ref.
2.388 [.0940] Min. Act.
Measurement Over 3.05 [.1200] Dia. Pins -
28.24 [1.1118] Max. Ref.
28.19 [1.1100] Min. Ref.

* Applies to coaxial applications only. Consult representative if application requires greater capacity or has side loads.

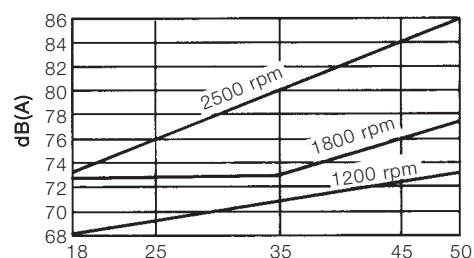
For shaft options not shown, contact factory for specific shaft information.

Typical efficiency



Sound levels dB(A)

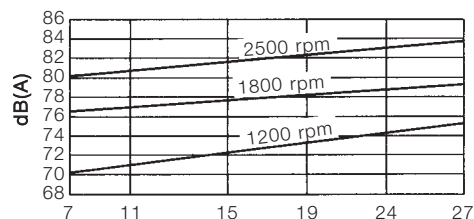
Data per NFPA T.3.9.70.12



G30 Single pump sizes (gpm)
@ 2000 psi, 5" hg

Sound levels dB(A)

Data per NFPA T.3.9.70.12



G20 Single pump sizes (gpm)
@ 2000 psi, 5" hg

Only Haldex offers this extensive range of pumps, hydraulic motors, power packs and flow dividers, worldwide.

GC Series Hydraulic Pumps

Compact cast iron gear pumps with a wide variety of integrated options provide custom systems capability and high-efficiency performance. Displacements from 0.065 to 0.711 cu. in. (1.066 to 11.65 cc) per revolution. Pressures to 4,000 psi (275 bar).

D Series Hydraulic Pumps

Compact, external gear pumps for use in pumping fluids with lubricating qualities. Suitable for use in a wide variety of applications, including agricultural, construction, transmission charge and lube, and diesel fuel transfer. Displacements from .232 cu. in. to 1.395 cu. in. (3.8 - 22.9 cc) per revolution. Pressures to 3,000 psi (207 bar).

H Series Hydraulic Pumps

Cast iron, external gear pumps for use in pumping fluids with lubricating qualities. Designed to provide reliable, long-life service under rugged conditions. Suitable for use in a wide variety of applications, including agricultural, construction, transmission charge and lube, and diesel fuel transfer. Displacements from 0.60 cu. in. to 2.40 cu. in. (9.8 - 39.4 cc) per revolution. Pressures to 3,000 psi (207 bar).

W Series Gear Pumps

Highly efficient pumps feature 4,000 psi continuous operation, speed range from 500 to 4,000 rpm, low noise operation and overall efficiency greater than 90%. Displacements from .03 to 3.05 cu. in. (.5 to 50 cc) per revolution. Other features include SAE, ISO and DIN shafts, flanges and ports; integrated valves and multiple pump configurations.

G20-LS/G-30LS Load Sense Variable Discharge Gear Pumps

Offers the horsepower conservation of a load sense system and the low cost reliability of a gear pump. Featuring cast iron construction and 4,000 psi continuous operation for severe-duty applications. Displacements from 1.41 to 9.82 cu. in. (23 to 161 cc).

G20 & G30 Series Gear Pumps

Rugged cast iron pumps offer high performance for severe-duty applications. Available in single, multiple and through-drive versions. Displacements from 1.41 to 9.82 cu. in. (23 to 161 cc) per revolution. Pressures to 4,000 psi (275 Bar) continuous.

G20 / G30 Specialty Products

- G20-DM Pump/Motor Series, G20 series pump with direct mount motor options. Motor options --- 7.5 HP, 10 HP, and 15 HP and displacements from 1.41 to 2.94 cu. in. (23 to 48 cc) for pump/motor units. Integral manifold options also available.
- G20 / G30 PTO Pump Series. Specifically designed pump options and features for PTO (power take off) applications. Displacements from 1.41 to 9.82 cu. in. (23 to 161 cc).
- G20 / G30 two section flow dividers. Displacements from 1.41 to 9.82 cu. in. (23 to 161 cc) per section. Pressures to 4,000 psi continuous (275 Bar).

Gerotor Pumps

High-efficiency, low-maintenance design with quiet operation and uniform flow. Extremely tolerant of contamination. Displacements from 0.05 to 8.29 cu. in. (0.8 to 135.8 cc) per revolution. Pressures to 2,000 psi (136 Bar).

GC-9500 AC Hydraulic Power Units

AC power units offering the ultimate in design versatility and ordering flexibility. It can be ordered completely assembled or in kits. Standard options include: motors (1/2-5 hp, TEFC, open, and drip-proof); 4 reservoirs (5, 10, 15 and 20 gal.); and pumps (pressure balanced and high/low with flows to 28 gpm and pressures to 3500 psi).

HE Power Packs (AC & DC Hydraulic Power Packs)

Self-contained modular power systems in fully assembled or kit form; wide range of standard or high efficiency pumps, motors, switches, mounts, valves, and reservoirs. Custom options also available. Pressures to 4,000 psi (276 Bar). Flows from 0.20 to 7.0 GPM.

Hydraulic Motors

Available in the GC, W and G20 Series in unidirectional and birotational configurations. Motors available with modular valve, bearing, seal and shaft options for maximum flexibility. Displacements from 0.065 to 5.30 cu. in. (1.06 to 87.0 cc) per revolution. Pressures to 4,000 psi (275 Bar).

Two-Stage Hydraulic Pumps

External gear pumps designed for high-speed positioning coupled with maximum working pressure. High-pressure displacements from 0.258 to 1.395 cu. in. (4.23 to 22.86 cc) per revolution. Pressures to 4,000 psi (275 Bar). Flows from 5 to 28 GPM.

Rotary Flow Dividers

Rotary-gear units up to four sections for synchronized operation of multiple cylinders or motors, proportional division of output or intensified flow. Single-section displacements from 0.065 to 0.813 cu. in. (1.0 to 13.32 cc) per revolution. Pressures to 4,500 psi (306 Bar).

Call us for more information

For application assistance or detailed literature on any Haldex product line, call us toll-free: **1-800-572-7867**.

Visit our web site: <http://www.hbus.haldex.com>

E-mail us: info.hydraulics.us@haldex.com or info.hydraulics.eu@haldex.com





PRODUCT RANGE

He Power Packs

12/24/48 VDC 0.8 - 3.5 kW and 0.75
- 3 kW AC modular power packs

Pressure Switches

5 - 350 bar connecting /
disconnecting

He Classic Power Packs

12/24/48 VDC modular
powerpacks in weatherproof boxes

W100 Hydraulic Pumps

0.5 - 2.0 cc/section, 227 bar

W300 Hydraulic Pumps

0.8 - 5.7 cc/section, 230 bar

W600 Hydraulic Pumps

4 - 12 cc/section, 276 bar

WM600 Hydraulic Motors

4 - 12 cc/section, 276 bar

W900 Hydraulic Pumps

5 - 31 cc/section, 276 bar

WM900 Hydraulic Motors

5 - 31 cc/section, 276 bar

WQ900 The Quiet Pump

5 - 27 cc/section, 230 bar

W1500 Hydraulic Pumps

19 - 50 cc/section, 276 bar

WM1500 Hydraulic Motors

19 - 50 cc/section, 276 bar

G25 Hydraulic Pumps

23 - 87 cc/section, 250 bar

GM25 Hydraulic Motors

23 - 87 cc/section, 250 bar

GPA Internal Gear Pumps

1.7 - 63 cc/section, 100 bar

GC Hydraulic Pumps/Fluid Motors

1.06 - 11.65 cc/section, 276 bar

II-Stage Hydraulic Pumps

4.2 - 22.8 cc/section, 276 bar

Rotary Flow Dividers

3.8 - 13.3 cc/section, 300 bar

D Hydraulic Pumps

3.8 - 22.9 cc/section, 207 bar

H Hydraulic Pumps

9.8 - 39.4 cc/section, 207 bar

G20/G30 Hydraulic Pumps

23 - 161 cc/section, 276 bar

GM20/GM30 Hydraulic Motors

23 - 161 cc/section, 276 bar

G20/G30 (LS) Hydraulic Pumps

23 - 161 cc/section, 276 bar

Transmission Pumps

Fuel Pumps

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