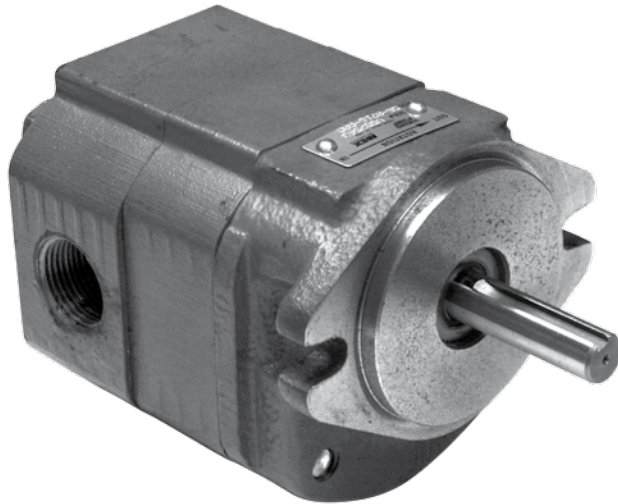


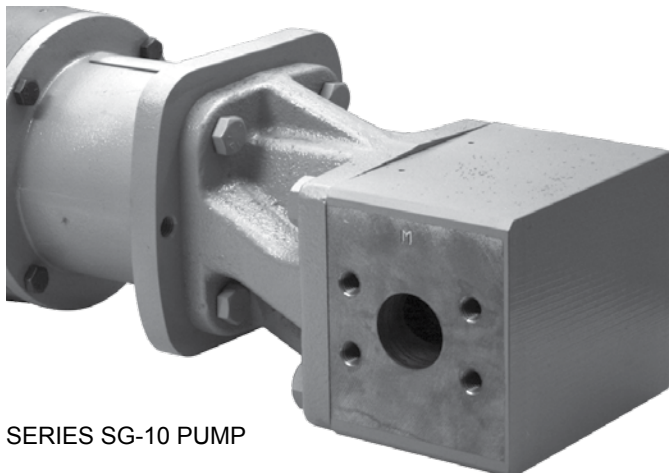
VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)



SERIES SG-04/-05 PUMP



SERIES SG-07 PUMP



SERIES SG-10 PUMP

OPERATING RANGE:

SG Pumps (Cast Iron, Lip- or Mechanical-Sealed)		
Displacements	No.	29
Flow Range	GPM	0.06 to 200
	M ³ /Hr	0.011 to 45
Pressure Range	PSI	to 500 Continuous, 2500 Intermittent
	Bar	to 34 Continuous, 172 Intermittent
Temperature Range	°F	-40° to 500°
	°C	-40° to 260°
Viscosity Range	SSU	28 to 1,000,000
	cSt	0.1 to 250,000

SGN Pumps (Ductile Iron, Lip- or Mechanical-Sealed)		
Displacements	No.	17
Flow Range	GPM	0.7 to 32
	M ³ /Hr	0.16 to 7.2
Pressure Range	PSI	to 500 Continuous, 2500 Intermittent
	Bar	to 34 Continuous, 172 Intermittent
Temperature Range	°F	-40° to 450°
	°C	-40° to 230°
Viscosity Range	SSU	28 to 1,000,000
	cSt	0.1 to 250,000

TYPICAL APPLICATIONS:

- Fuels & Fuel Oils
- Lubricants
- Chemical Metering
- Solvents
- Alcohol
- Cooking Oils
- Paints, Inks & Coatings
- Polyurethanes
- Heat Transfer Fluids

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SERIES SG-04, -05, -07, -10, -14 (Cast Iron)
SGN-05, -07 (Ductile Iron)



VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)

SERIES DESCRIPTION

Viking SG is an extensive series of precision, industrial-duty external gear pumps that develop higher pressures than other Viking pumps, yet offer a similarly broad range of options to handle a diverse range of liquids and applications.

With 29 different displacements in five frame sizes to 200 GPM (45 M3/Hr), most applications can be closely matched to a pump operating at motor speeds, without the need for a reducer or gear motor.

These pumps were designed for greatest reliability, with standard features like spur-type gears (instead of helical gears, which thrust into pump casing and bracket) and rolling element anti-friction bearings

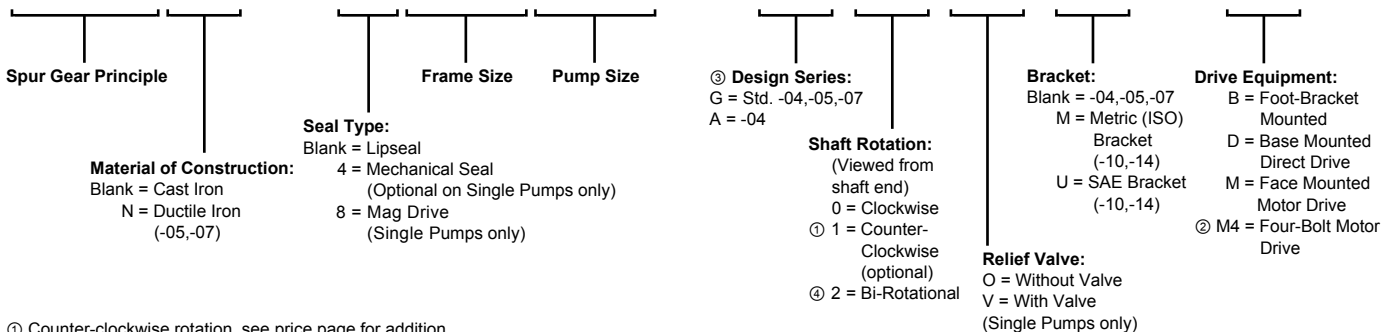
(instead of bushings, which wear every time a pump is stopped and the hydrodynamic film is lost).

Unwanted leaks are prevented by using the best sealing technology available, including single or duplex lip seals, single mechanical component seals, single or double mechanical cartridge seals with seal plans (SG-10 & -14 only), or sealless mag drive.

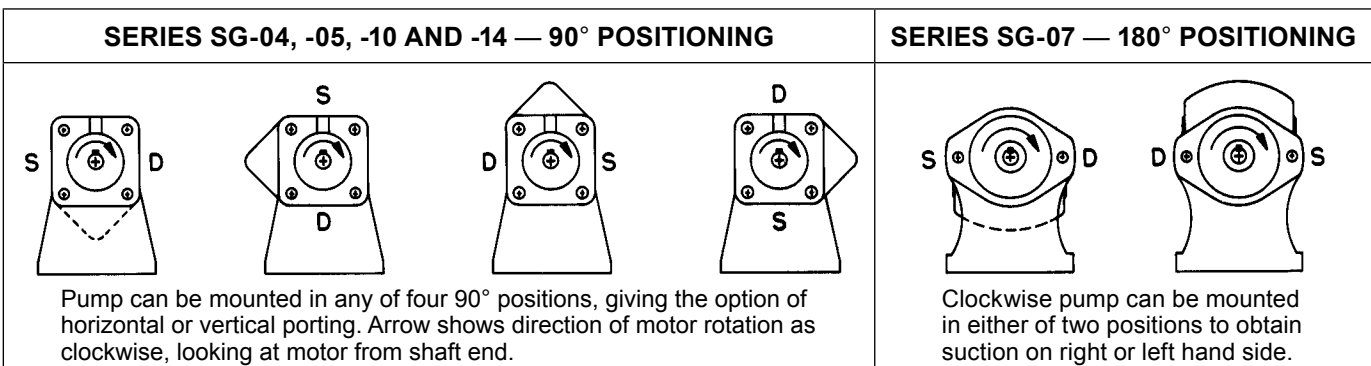
Installation is simple, with brackets to close couple to NEMA or IEC motors, or foot mount for speed-reduced applications. Piping is easy, with straight-through, 180° ports with the industry's broadest variety of pipe thread and flange options.

MODEL NUMBER KEY

SGN - 40518 - G 0 V U - B



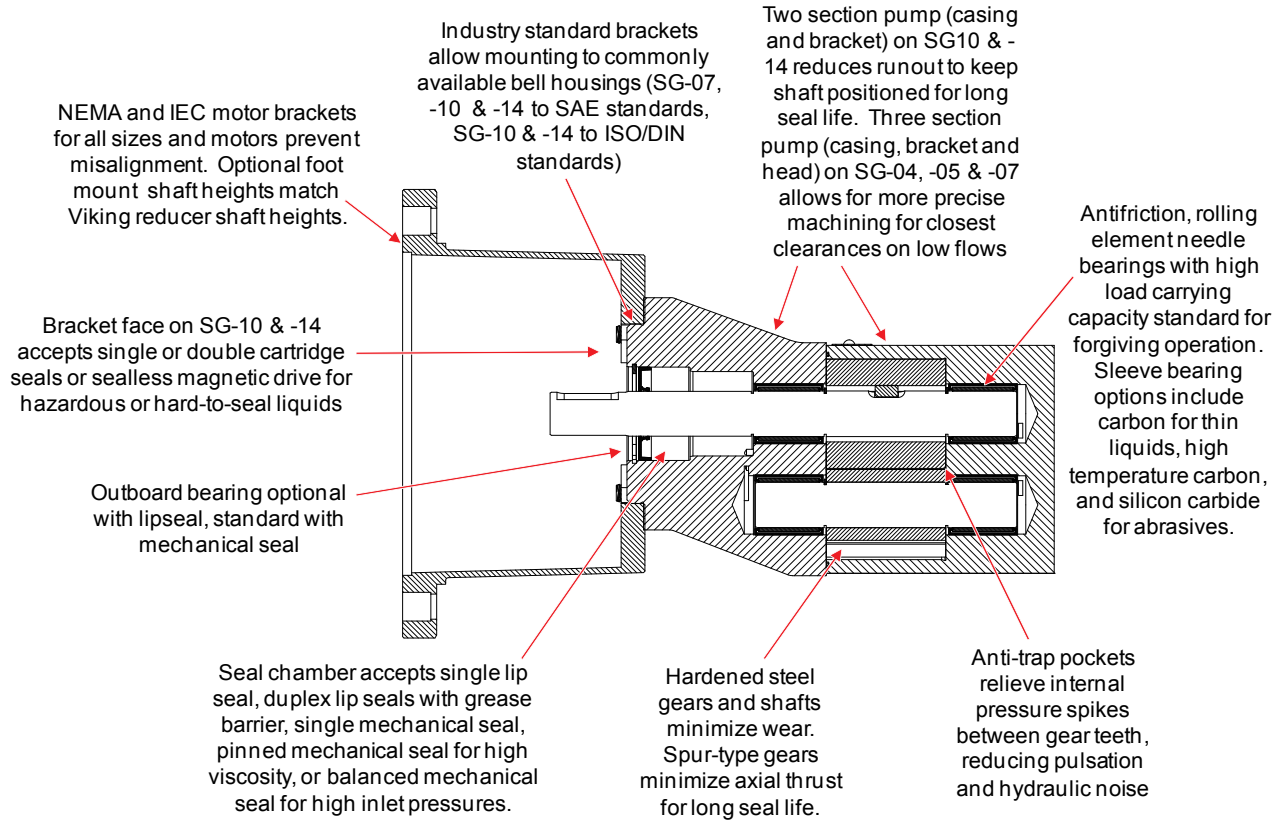
- ① Counter-clockwise rotation, see price page for addition.
- ② Four-Bolt Motor Drive option available only for Series SG-04 and SG-05 single pumps, lip seal.
- ③ **NOTE:** Design series letter designations are subject to change as the result of basic modifications to the product line. At the time of this printing the design series letter designation for the SG-04 in "A". Series SG-05 and SG-07 pumps use letter designation "G" for both single and double pumps. M = Mag Drive.
- ④ SG-10 & SG-14 not available as bi-rotational.



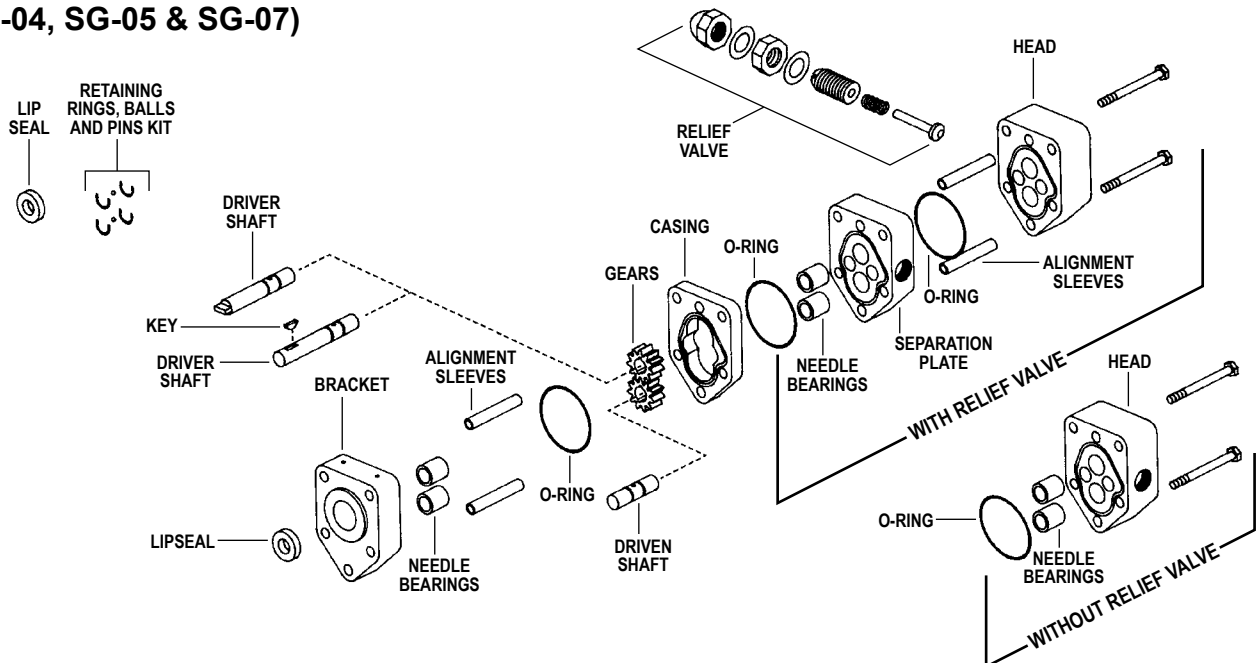
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VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)

PUMP CONSTRUCTION AND FEATURES



COMPONENT IDENTIFICATION (SG-04, SG-05 & SG-07)



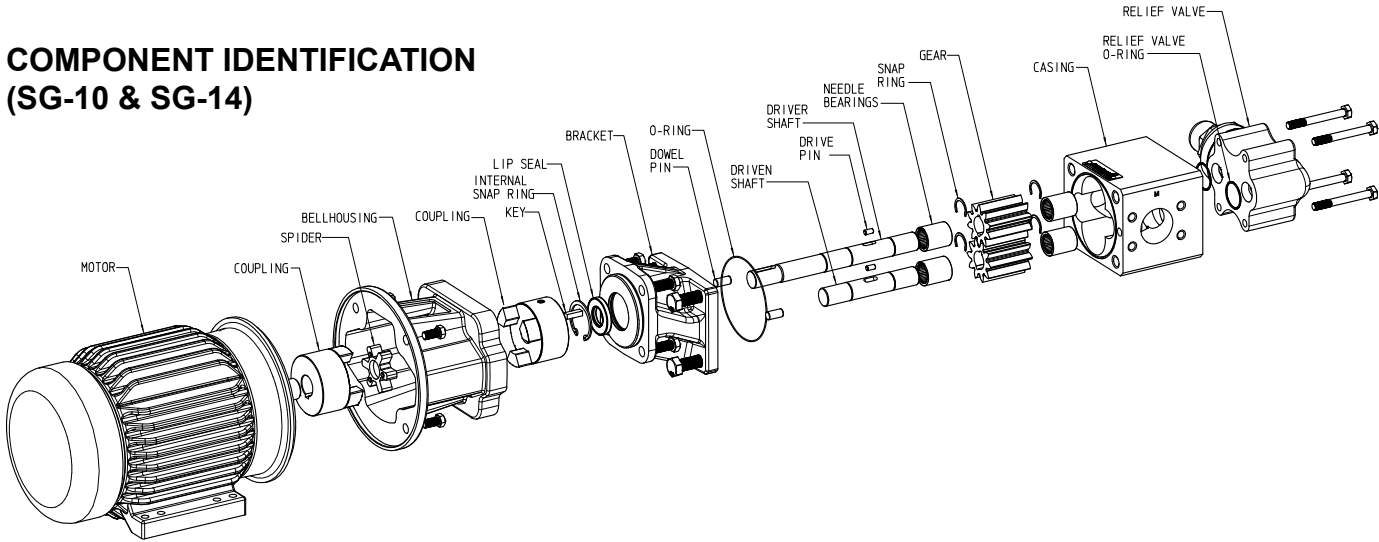
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SERIES SG-04, -05, -07, -10, -14 (Cast Iron)
SGN-05, -07 (Ductile Iron)



VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)

COMPONENT IDENTIFICATION (SG-10 & SG-14)



MATERIALS OF CONSTRUCTION - ALL SERIES

Component	Standard - SG-04, -05	Standard - SGN-04, -05	Standard - SG-10, -14	Options
Bracket	Cast Iron ASTM A823 Class 25	Ductile Iron ASTM A536 Grade 65-45-12	Cast Iron ASTM A48 Class 35B	Hardening (Vitek)
Casing	Cast Iron ASTM A823 Class 25	Ductile Iron ASTM A536 Grade 65-45-12	Cast Iron ASTM A823 Class 25	Hardening (Vitek)
Head, Separation Plate	Cast Iron ASTM A823 Class 25	Ductile Iron ASTM A536 Grade 65-45-12	N/A	Hardening (Vitek)
Relief Valve Body	Cast Iron ASTM A823 Class 25	Ductile Iron ASTM A536 Grade 65-45-12	Cast Iron ASTM A48 Class 35B	— — —
Relief Valve Poppet	375 Steel	375 Steel	Ductile Iron ASTM A536 Grade 60-40-18	— — —
Relief Valve Spring	Steel ASTM A229	Steel ASTM A229	Chrome Base Silicon ASTM A401	— — —
Gears	Heat Treated Steel ASTM A322 Grade 8620	Heat Treated Steel ASTM A322 Grade 8620	Heat Treated Steel ASTM A322 Grade 8620	PPS (composite)
Shafts	Heat Treated Steel ASTM A322 Grade 8620	Heat Treated Steel ASTM A322 Grade 8620	Heat Treated Steel ASTM A322 Grade 8620	— — —
Anti-Friction Needle Bearings ①	Steel	Steel	Steel	— — —
Sleeve Bearings	— — —	— — —	— — —	Carbon Graphite ②, High Temp Carbon Graphite, Silicon Carbide ③
Outboard Ball Bearing	— — —	— — —	— — —	Steel
O-Rings	Buna-N	Buna-N	Buna-N	Viton®, PTFE, Kalrez®
Lip Seals	Buna-N	Buna-N	Buna-N	Viton®, PTFE
Component Mechanical Seals	Carbon/Ni-Resist	Carbon/Ni-Resist	— — —	Carbon / Silicon Carbide, Silicon Carbide/Silicon Carbide
"B" Drive Foot Bracket	Cast Iron ASTM A48 Class 35B	Cast Iron ASTM A48 Class 35B	Cast Iron ASTM A48 Class 35B	— — —
"M" Drive Motor Bracket	Cast Iron ASTM A48 Class 35B	Cast Iron ASTM A48 Class 35B	AAA Designation 319 or AAA Designation 383.1	— — —

- ① Needle bearings standard with lip seals.
- ② Carbon graphite sleeve bearings standard with mechanical seals.
- ③ Tungsten-carbide coated shafts required with silicon carbide bearings.

Viton® and Kalrez® are registered trademarks of DuPont Performance Elastomers



SERIES SG-04, -05, -07, -10, -14 (Cast Iron)
SGN-05, -07 (Ductile Iron)

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VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)

SPECIFICATIONS

Ⓜ Max. Recommended Temperature with Standard Construction: 225°F (107°C) / Ⓜ Max. Continuous Pressure: 500 PSI (34 BAR)

Pump Model Ⓜ				Port Size (NPT)	Nominal Capacity at Maximum Rated Speed 20 cSt (100 SSU) Liquid				Motor Horsepower / Kilowatts Required at 20 cSt (100 SSU)				Approximate Shipping Weight	
					60 Hz Motor Speed		50 Hz Motor Speed		60 Hz Motor Speed		50 Hz Motor Speed			
Lip Seal		Mech. Seal			GPM	RPM	M ³ /Hr	RPM	100 PSI	500 PSI	7 BAR	34 BAR	Lb.	Kg.
SG-0417	–	SG-40417	–	3/8	0.06	1750	0.011	1450	1/8	1/4	0.08	0.16	6	2.7
SG-0418	–	SG-40418	–	3/8	0.14	1750	0.026	1450	1/8	1/3	0.08	0.21	6	2.7
SG-0425	–	SG-40425	–	3/8	0.18	1750	0.034	1450	1/6	1/3	0.10	0.21	6	2.7
SG-0435	–	SG-40435	–	3/8	0.27	1750	0.051	1450	1/6	1/2	0.10	0.31	6	2.7
SG-0450	–	SG-40450	–	3/8	0.36	1750	0.068	1450	1/4	1/2	0.16	0.31	7	3.2
SG-0470	–	SG-40470	–	3/8	0.50	1750	0.095	1450	1/4	1/2	0.16	0.31	7	3.2
Ⓜ SG-0518	SGN-0518	SG-40518	SGN-40518	1/2	0.7	1750	0.132	1450	1/8	1/3	0.08	0.21	6	2.7
Ⓜ SG-0525	SGN-0525	SG-40525	SGN-40525	1/2	1.0	1750	0.189	1450	1/8	1/2	0.08	0.31	6	2.7
Ⓜ SG-0535	SGN-0535	SG-40535	SGN-40535	1/2	1.4	1750	0.265	1450	1/4	3/4	0.16	0.47	6	2.7
Ⓜ SG-0550	SGN-0550	SG-40550	SGN-40550	1/2	2.0	1750	0.378	1450	1/4	3/4	0.16	0.47	7	3.2
Ⓜ SG-0570	SGN-0570	SG-40570	SGN-40570	1/2	2.8	1750	0.529	1450	1/4	1	0.16	0.62	7	3.2
Ⓜ SG-0510	SGN-0510	SG-40510	SGN-40510	1/2	4.0	1750	0.756	1450	1/2	1 1/2	0.31	0.93	8	3.6
Ⓜ SG-0514	SGN-0514	SG-40514	SGN-40514	3/4	5.6	1750	1.059	1450	1/2	2	0.31	1.24	9	4.1
Ⓜ SG-0519	SGN-0519	SG-40519	SGN-40519	3/4	7.6	1750	1.437	1450	3/4	–	0.47	–	10	4.5
Ⓜ SG-0528	SGN-0528	SG-40528	SGN-40528	3/4	11.2	1750	2.118	1450	1	–	0.62	–	11	5
SG-0729	SGN-0729	SG-40729	SGN-40729	1	2.8	1750	0.529	1450	1 1/2	1 1/2	0.78	0.93	14	6.4
SG-0741	SGN-0741	SG-40741	SGN-40741	1	4.0	1750	0.756	1450	1/2	1 1/2	0.31	0.93	15	6.8
SG-0758	SGN-0758	SG-40758	SGN-40758	1	5.6	1750	1.059	1450	3/4	3	0.47	1.86	17	7.7
SG-0782	SGN-0782	SG-40782	SGN-40782	1	8.0	1750	1.513	1450	1	3	0.62	1.86	18	8.2
SG-0711	SGN-0711	SG-40711	SGN-40711	1	11.2	1750	2.118	1450	1 1/2	5	0.78	3.11	19	8.6
SG-0716	SGN-0716	SG-40716	SGN-40716	1	16.0	1750	3.025	1450	2	7 1/2	1.24	4.66	20	9.1
SG-0722	SGN-0722	SG-40722	SGN-40722	1 1/2 x 1 1/4	22.0	1750	4.160	1450	3	10	1.86	6.21	41	18.6
SG-0732	SGN-0732	SG-40732	SGN-40732	1 1/2 x 1 1/4	32.0	1750	6.051	1450	5	15	3.11	9.32	43	19.5
SG-1009	–	SG-41009	–	1	16	1750	2.95	1450	1 1/2	7.2	0.9	4.5	45	20.5
SG-1013	–	SG-41013	–	1 1/2	25	1750	4.77	1450	3	11.3	1.4	7.0	49	22.1
SG-1026	–	SG-41026	–	2	50	1750	9.31	1450	5	22.5	2.8	13.9	54	24.5
SG-1420	–	SG-41420	–	2	70	1750	13.17	1450	7 1/2	29.2	3.9	19.5	130	59.1
SG-1436	–	SG-41436	–	3	125	1750	23.62	1450	15	Ⓜ	7.0	Ⓜ	158	71.5
SG-1456	–	SG-41456	–	4	200	1750	37.70	1450	20	Ⓜ	11.2	Ⓜ	189	85.8

- ① Carbon graphite bushings are standard when mechanical (face type) shaft seal option is specified.
- ② Buna-N seals (O-Rings, lip seals or mechanical (face type) shaft seals) can be used from -40°F. to +225°F. (-40°C. to +107°C.) With sealing elements of other materials, temperatures up to +450°F. (+232°C.) can be tolerated.
- ③ See model numbering code, page 341.1.2.
- ④ For maximum recommended discharge pressures when handling other viscosities and/or operating at other speeds, see performance curves, pages 341.19 through 341.66. Performance curves show recommended construction.
- ⑤ UL 343 rating (-X) for fuel oil is available on this pump.
- Ⓜ Maximum continuous pressure 290 PSI (20 BAR)
- Ⓜ Maximum continuous pressure 190 PSI (13 BAR)

Metric conversions are based on US measurements.

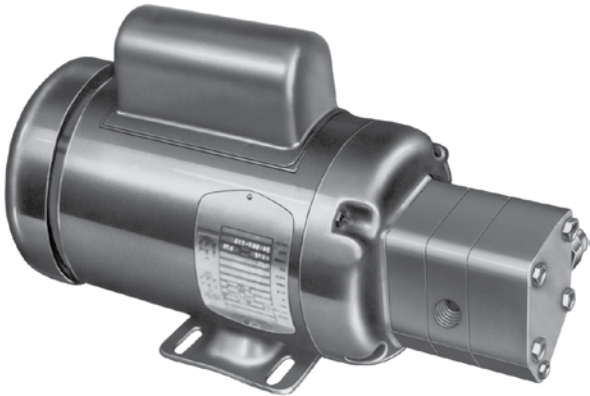
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SERIES SG-04, -05, -07, -10, -14 (Cast Iron)
SGN-05, -07 (Ductile Iron)



VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)

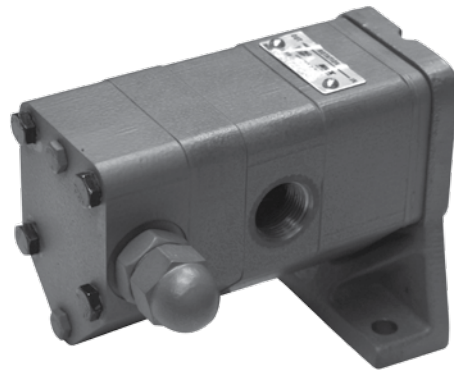
DRIVE OPTIONS



FOUR-BOLT MOTOR MOUNTED UNITS (“M4” DRIVE)

Available with either Series SG-04 or SG-05 integral pump and motor units. It helps reduce onsite assembly costs and provides maximum compactness where space is at a premium. (Not available with Mech. Seal option).

Dimensions for Four-Bolt Motor Mounted Units (“M4” Drive) — See Page 341.1.14.



FOOT-BRACKET MOUNTED PUMPS (“B” DRIVE)

Series SG-04, -05, -07, -10 and -14 external gear single pumps are available mounted to a foot-bracket that is machined by Viking for an accurate fit with the pump.

Dimensions for Foot-Bracket Mounted Pumps (“B” Drive)— See Page 341.1.15.

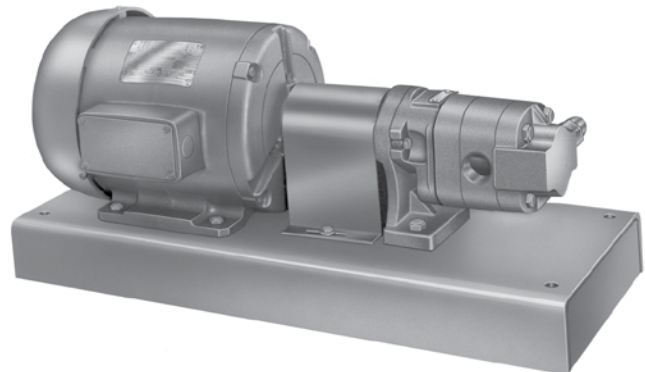


MOTOR MOUNTED UNITS (“M” DRIVE)

Series SG-04, -05, -07, -10 and -14 external gear single pumps, in combination with the NEMA “C” flange or “IEC” bracket and flexible coupling, provide an easily assembled compact pumping unit. This mounting arrangement eliminates the need for on-site coupling alignment that is normally required with a base mounted unit.

Dimensions for C-Flange Motor Mounted Units (“M” Drive) — See Page 341.1.10.

Dimensions for IEC Motor Mounted Units (“M” Drive) — See Page 341.1.12.



BASE MOUNTED UNITS (“D” DRIVE)

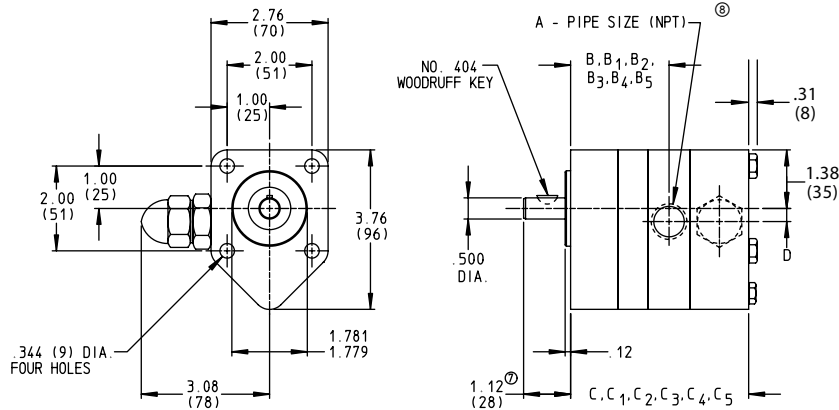
Series SG-04, SG-05 and SG-07 external gear single pumps mounted to a Viking rectangular, formed steel base provides you with a solid mounting for the drive equipment and the foot-bracket mounted pump.

NOTE: This mounting arrangement requires on-site coupling alignment.

Dimensions for Base Mounted Units (“D” Drive) — See Page 341.1.17.

VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)

DIMENSIONS – SERIES SG-04, SG-05, SGN-05 UNMOUNTED SINGLE PUMPS - (LIP AND MECHANICAL SEAL)



MODEL NO.		A		B	① B ₁	② B ₂	③ B ₃	④ B ₄	⑤ B ₅	C	① C ₁	② C ₂	③ C ₃	④ C ₄	⑤ C ₅	D
LIP SEAL	MECH. SEAL															
SG-0417	SG-40417	3/8	in	1.80	2.68	2.18	1.99	2.87	2.37	3.68	4.56	4.06	2.68	3.56	3.06	.31
			mm	46	68	55	51	73	60	93	116	103	68	90	78	8
SG-0418	SG-40418	3/8	in	1.80	2.68	2.18	1.99	2.87	2.37	3.68	4.56	4.06	2.68	3.56	3.06	.31
			mm	46	68	55	51	73	60	93	116	103	68	90	78	8
SG-0425	SG-40425	3/8	in	1.87	2.75	2.25	2.06	2.94	2.44	3.75	4.63	4.13	2.75	3.63	3.13	.31
			mm	47	70	57	52	75	62	95	118	105	70	92	80	8
SG-0435	SG-40435	3/8	in	1.97	2.85	2.35	2.16	3.04	2.54	3.85	4.73	4.23	2.85	3.73	3.23	.31
			mm	50	72	60	55	77	65	98	120	107	72	95	82	8
SG-0450	SG-40450	3/8	in	2.12	3.00	2.50	2.31	3.19	2.69	4.00	4.88	4.38	3.00	3.88	3.38	.31
			mm	54	76	64	58	81	68	102	124	111	76	99	86	8
SG-0470	SG-40470	3/8	in	2.32	3.20	2.70	2.51	3.39	2.89	4.20	5.08	4.58	3.20	4.08	3.58	.31
			mm	59	81	69	64	86	73	107	129	116	81	104	91	8
SG-0518 SGN-0518	SG-40518 SGN-40518	1/2	in	1.80	2.68	2.18	1.99	2.87	2.37	3.68	4.56	4.06	2.68	3.56	3.06	.31
			mm	46	68	55	51	73	60	93	116	103	68	90	78	8
SG-0525 SGN-0525	SG-40525 SGN-40525	1/2	in	1.87	2.75	2.25	2.06	2.94	2.44	3.75	4.63	4.13	2.75	3.63	3.13	.31
			mm	47	70	57	52	75	62	95	118	105	70	92	80	8
SG-0535 SGN-0535	SG-40535 SGN-40535	1/2	in	1.97	2.85	2.35	2.16	3.04	2.54	3.85	4.73	4.23	2.85	3.73	3.23	.31
			mm	50	72	60	55	77	65	98	120	107	72	95	82	8
SG-0550 SGN-0550	SG-40550 SGN-40550	1/2	in	2.12	3.00	2.50	2.31	3.19	2.69	4.00	4.88	4.38	3.00	3.88	3.38	.31
			mm	54	76	64	58	81	68	102	124	111	76	99	86	8
SG-0570 SGN-0570	SG-40570 SGN-40570	1/2	in	2.32	3.20	2.70	2.51	3.39	2.89	4.20	5.08	4.58	3.20	4.08	3.58	.31
			mm	59	81	69	64	86	73	107	129	116	81	104	91	8
⑥ SG-0510 SGN-0510	⑥ SG-40510 SGN-40510	1/2	in	1.62	2.50	2.00	1.62	2.50	2.00	4.50	5.38	4.88	3.50	4.38	3.88	.31
			mm	41	64	51	41	64	51	114	137	124	89	111	99	8
⑥ SG-0514 SGN-0514	⑥ SG-40514 SGN-40514	3/4	in	1.82	2.70	2.20	1.82	2.70	2.20	4.90	5.78	5.28	3.90	4.78	4.28	.19
			mm	46	69	56	46	69	56	124	147	134	99	121	109	5
⑥ SG-0519 SGN-0519	⑥ SG-40519 SGN-40519	3/4	in	2.07	2.95	2.45	2.07	2.95	2.45	5.40	6.28	5.78	4.40	5.28	4.78	.19
			mm	53	75	62	53	75	62	137	160	147	112	134	121	5
⑥ SG-0528 SGN-0528	⑥ SG-40528 SGN-40528	3/4	in	1.82	2.70	2.20	1.82	2.70	2.20	6.30	7.18	6.68	5.30	6.18	5.68	.19
			mm	46	69	56	46	69	56	160	182	170	135	157	144	5

- ① These dimensions apply when the mechanical shaft seal option is selected.
 - ② These dimensions apply when the overhung load option is selected.
 - ③ These dimensions apply when the relief valve is deleted.
 - ④ These dimensions apply when the relief valve is deleted and the mechanical shaft seal option is selected.
 - ⑤ These dimensions apply when the relief valve is deleted and the overhung load option is selected.
 - ⑥ These models have the ports in the casing.
 - ⑦ When the overhung load option is selected the pump shaft extension becomes 1.62" (41mm).
 - ⑧ Standard ports NPT. Optional threads include BSP and SAE O-ring J1453.
- NOTE: Dimensions in parentheses are millimeters; others are inches.

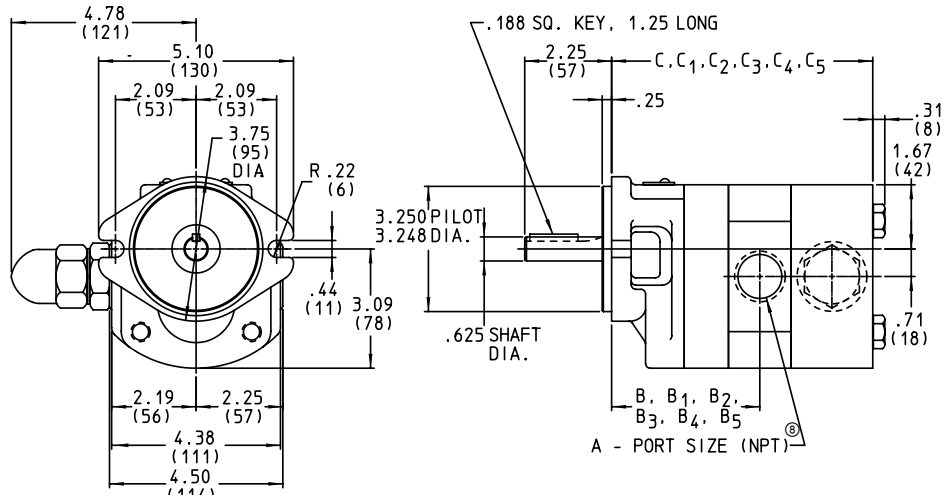
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SERIES SG-04, -05, -07, -10, -14 (Cast Iron)
SGN-05, -07 (Ductile Iron)



VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)

DIMENSIONS – SERIES SG-07, SGN-07 UNMOUNTED SINGLE PUMPS (LIP AND MECHANICAL SEAL)



MODEL NO.	A		B	① B ₁	② B ₂	③ B ₃	④ B ₄	⑤ B ₅	C	① C ₁	② C ₂	③ C ₃	④ C ₄	⑤ C ₅
SG-0741 SGN-0741	⑥ 1	in	3.10	4.72	3.29	4.91	3.54	5.16	6.03	7.65	4.41	6.03	6.91	8.53
		mm	79	120	84	125	90	131	153	194	112	153	176	217
SG-0758 SGN-0758	⑥ 1	in	3.27	4.89	3.46	5.08	3.71	5.33	6.20	7.82	4.58	6.20	7.08	8.70
		mm	83	124	88	129	94	135	157	199	116	157	180	221
SG-0782 SGN-0782	⑥ 1	in	3.51	5.13	3.70	5.32	3.95	5.57	6.44	8.06	4.82	6.44	7.32	8.94
		mm	89	130	94	135	100	141	164	205	122	164	186	227
SG-0711 SGN-0711	⑥ 1	in	3.84	5.46	4.03	5.65	4.28	5.90	6.77	8.39	5.15	6.77	7.65	9.27
		mm	98	139	102	144	109	150	172	213	131	172	194	235
SG-0716 SGN-0716	⑥ 1	in	4.34	5.96	4.53	6.15	4.78	6.40	7.27	8.89	5.65	7.27	8.15	9.77
		mm	110	151	115	156	121	163	185	226	144	185	207	248
SG-0722 SGN-0722	⑦ 1½ x 1¼	in	4.28	5.90	4.28	5.90	—	—	10.42	12.04	8.80	10.42	—	—
		mm	109	150	109	150	—	—	265	306	224	265	—	—
SG-0732 SGN-0732	⑦ 1½ x 1¼	in	4.78	6.40	4.78	6.40	—	—	11.42	13.04	9.80	11.42	—	—
		mm	121	163	121	163	—	—	290	331	249	290	—	—

① These dimensions apply when the mechanical shaft seal option is selected.

② These dimensions apply when the relief valve is deleted.

③ These dimensions apply when the relief valve is deleted and the mechanical shaft seal option is selected.

④ These dimensions apply when the oversize port option (1½" NPT suction, 1¼" NPT discharge) is selected, with or without the relief valve.

⑤ These dimensions apply when the oversize port option (1½" NPT suction, 1¼" NPT discharge) and the mechanical seal option are both selected, with or without the relief valve.

⑥ Standard ports for these size pumps are 1" NPT. Oversize ports are available (1½" NPT suction, 1¼" NPT discharge) as an option on clockwise rotation pumps only. See footnotes 4 and 5 for appropriate dimensions. (See Price page P341.2).

⑦ Standard ports for these size pumps are 1½" NPT suction, 1¼" NPT discharge. These pumps are only available in clockwise rotation.

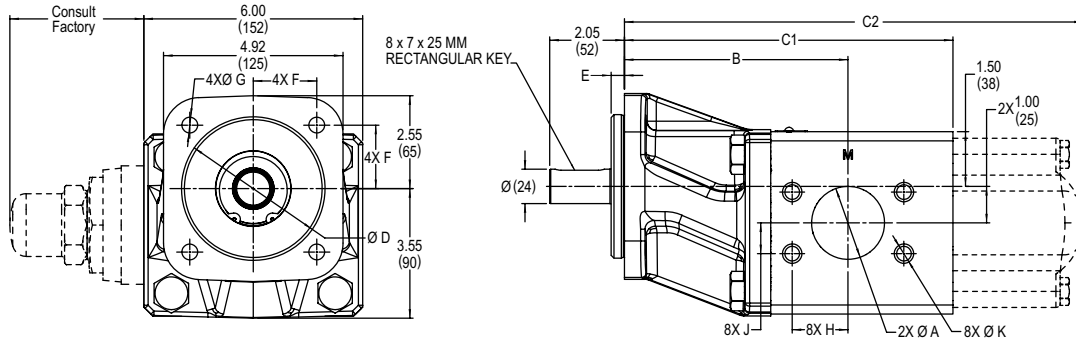
⑧ Standard ports NPT. Optional threads include BSP and SAE O-ring J1453.

NOTE: SG-07 bracket to SAE-A 2-bolt standard for NEMA or IEC M-drive.

NOTE: Dimensions shown in parentheses are millimeters; others are inches.

VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)

DIMENSIONS – SERIES SG-10 UNMOUNTED SINGLE PUMPS



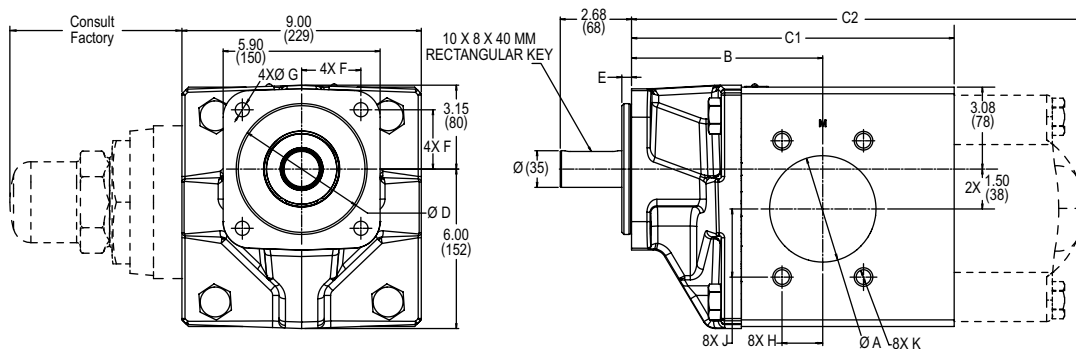
MODEL NO.		A ③	B	C1	C2	D	E	F	G	H	J	K
SG-1009 ①	U	1.00	5.35	7.42	Consult Factory	3.94	0.36	1.74	0.43	0.52	1.03	M10 X 1.50
SG-1009 ②	M	25	136	188		102	9.2	44.2	14	13	26	M10 X 1.50
SG-1013 ①	U	1.50	5.91	8.04		3.94	0.36	1.74	0.43	1.38	0.70	M12 X 1.75
SG-1013 ②	M	38	150	204		102	9.2	44.2	14	35	18	M12 X 1.75
SG-1026 ①	U	2.00	6.13	9.01		3.94	0.37	1.77	0.43	1.53	0.84	M12 X 1.75
SG-1026 ②	M	51	156	229		102	9.2	44.9	14	39	21	M12 X 1.75

① Bracket to SAE-B 4-bolt standard for NEMA M-drive or foot bracket

② Bracket to 100 mm ISO 3019-2 DIN 4x standard for IEC M-drive or foot bracket

③ Standard ports SAE J518 code 61 flange. Optional tapped ports on same centerline include NPT or BSP (up to 2") or SAE O-Ring J1453 (up to 1½")

DIMENSIONS – SERIES SG-14 UNMOUNTED SINGLE PUMPS



MODEL NO.		A ③	B	C	C2	D	E	F	G	H	J	K
SG-1420 ①	U	2.00	6.10	8.53	Consult Factory	4.92	0.36	2.23	0.53	0.84	1.53	M12 X 1.75
SG-1420 ②	M	51	155	217		127	12	57	14	21	39	M12 X 1.75
SG-1436 ①	U	3.00	6.80	10.13		4.92	0.36	2.23	0.53	1.22	2.09	M16 X 2.00
SG-1436 ②	M	76	173	257		127	12	57	14	31	53	M16 X 2.00
SG-1456 ①	U	4.00	7.19	12.13		4.92	0.36	2.23	0.53	1.53	2.56	M16 X 2.00
SG-1456 ②	M	102	183	308		127	12	57	14	39	65	M16 X 2.00

① Bracket to SAE-C 4-bolt standard for NEMA M-drive or foot bracket

② Bracket to 125 mm ISO 3019-2 DIN 4x standard for IEC M-drive or foot bracket

③ Standard ports SAE J518 code 61 flange. Optional tapped ports on same centerline include NPT or BSP (up to 2") or SAE O-Ring J1453 (up to 1½")

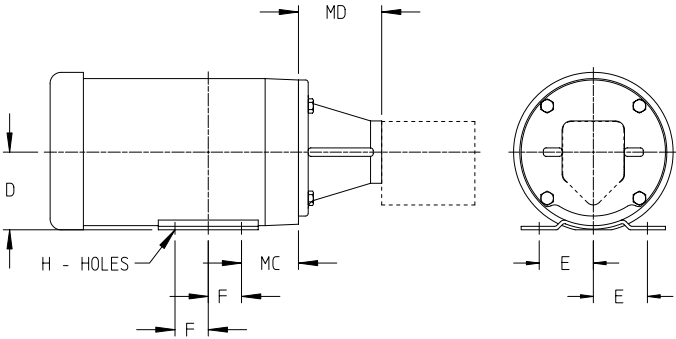
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SERIES SG-04, -05, -07, -10, -14 (Cast Iron)
SGN-05, -07 (Ductile Iron)



VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)

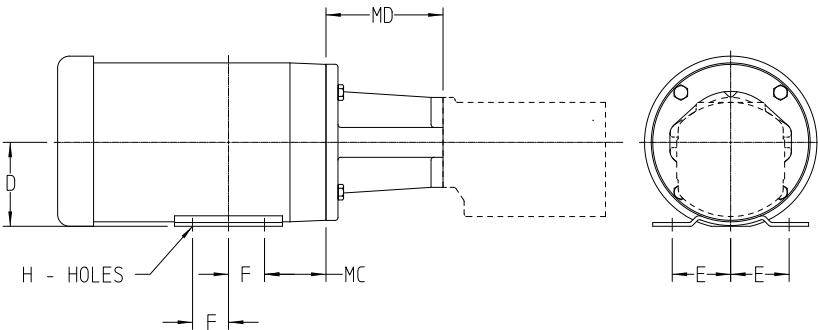
DIMENSIONS – SERIES SG-04, SG-05, SGN-05 C-FLANGE MOTOR MOUNT (“M” DRIVE) – NEMA



① Drive equipment weight listed is for a typical TEFC motor pump/motor adaptor, and couplings. (If a more accurate motor shipping weight is required, consult factory with complete motor specifications.) For total unit shipping weight, add the electric motor shipping weight to the pump shipping weight shown on the pump specification chart.

MOTOR FRAME SIZE		D	E	F	H	MC	MD	APPROX. DRIVE ① EQUIP. SHIPPING WEIGHT IN POUNDS (KG)
56C	in	3.50	2.44	1.50	.34 SLOT	2.56	3.75	34 (15)
143TC	in	3.50	2.75	2.00	.34	2.88	3.75	52 (24)
145TC	in	3.50	2.75	2.50	.34	2.88	3.75	57 (26)
182TC	in	4.50	3.75	2.25	.41	3.62	4.25	83 (38)
184TC	in	4.50	3.75	2.75	.41	3.62	4.25	88 (40)

DIMENSIONS – SERIES SG-07, SGN-07 – C-FLANGE MOTOR MOUNT (“M” DRIVE) – NEMA

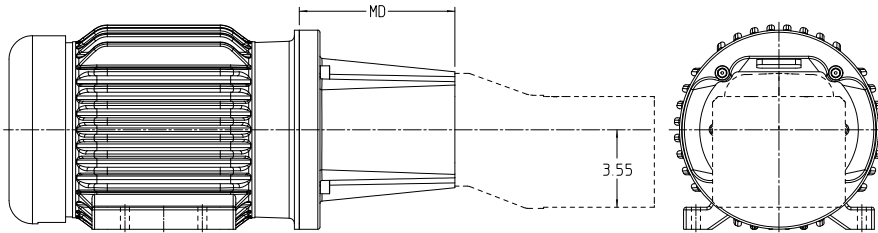


① Drive equipment shipping weight includes typical TEFC motor, pump/motor adaptor, and couplings. (If a more accurate drive equipment shipping weight is required, consult factory with complete motor specifications.) For total unit shipping weight, add the drive equipment shipping weight to the pump shipping weight shown on the pump specification chart.

MOTOR FRAME SIZE		D	E	F	H	MC	MD	APPROX. DRIVE ① EQUIP. SHIPPING WEIGHT IN POUNDS (KG)
56C	in	3.50	2.44	1.50	.34 SLOT	2.56	4.88	41 (19)
143TC	in	3.50	2.75	2.00	.34	2.88	4.88	60 (27)
145TC	in	3.50	2.75	2.50	.34	2.88	4.88	70 (32)
182TC	in	4.50	3.75	2.25	.41	3.62	5.37	108 (49)
184TC	in	4.50	3.75	2.75	.41	3.62	5.37	123 (56)
213TC	in	5.25	4.25	2.75	.41	4.50	6.26	161 (73)
215TC	in	5.25	4.25	3.50	.41	4.50	6.26	195 (88)

VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)

DIMENSIONS – SERIES SG-10 MOTOR MOUNT (“M” DRIVE) – NEMA



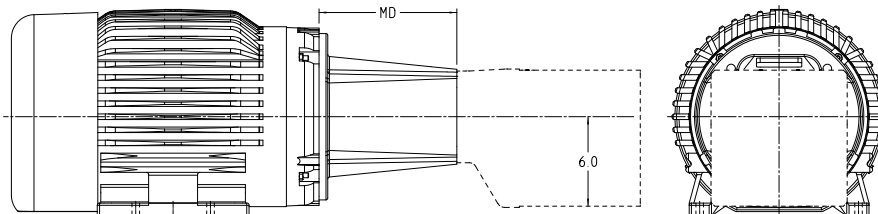
① Drive equipment weight listed is for a typical cast iron TEFC motor pump/motor adaptor, keys and couplings. (If a more accurate motor shipping weight is required, consult factory with complete motor specifications.) For total unit shipping weight, add the drive shipping weight to the pump shipping weight shown on the pump specification chart.

② Pump extends below motor feet. Motor must be blocked up.

NOTE: Cartridge seals may not be used with M-Drives

MOTOR FRAME SIZE		D	E	F	H	MC	MD	APPROX. DRIVE ① EQUIP. SHIPPING WEIGHT IN POUNDS (KG)
56C	in	3.50 ②	2.44	1.50	.34	2.56	5.06	49 (22.1)
143TC	in	3.50 ②	2.75	2.00	.34	2.88	5.06	65 (29.7)
145TC	in	3.50 ②	2.75	2.50	.34	2.88	5.06	74 (33.5)
182TC	in	4.50	3.75	2.25	.41	3.38	5.69	151 (68.6)
184TC	in	4.50	3.75	2.75	.41	3.38	5.69	159 (71.9)
213TC	in	5.25	4.25	2.75	.41	4.25	6.63	190 (86.1)
215TC	in	5.25	4.25	3.50	.41	4.25	6.63	257 (116.6)
254TC	in	6.25	5.00	4.13	.53	4.75	7.04	284 (128.9)
256TC	in	6.25	5.00	5.00	.53	4.75	7.04	328 (149.0)
284TC	in	7.00	5.50	4.75	.53	4.75	8.11	432 (195.8)
286TC	in	7.00	5.50	5.50	.53	4.75	8.11	485 (220.1)

DIMENSIONS – SERIES SG-14 MOTOR MOUNT (“M” DRIVE) – NEMA



① Drive equipment weight listed is for a typical TEFC motor pump/motor adaptor, keys and couplings. (If a more accurate motor shipping weight is required, consult factory with complete motor specifications.) For total unit shipping weight, add the electric motor shipping weight to the pump shipping weight shown on the pump specification chart.

② Pump extends below motor feet. Motor must be blocked up.

MOTOR FRAME SIZE		D	E	F	H	MC	MD	APPROX. DRIVE ① EQUIP. SHIPPING WEIGHT IN POUNDS (KG)
182TC	in	4.50 ②	3.75	2.25	.41	3.62	7.63	151 (68.6)
184TC	in	4.50 ②	3.75	2.75	.41	3.62	7.63	159 (71.9)
213TC	in	5.25 ②	4.25	2.75	.41	4.50	7.63	190 (86.1)
215TC	in	5.25 ②	4.25	3.50	.41	4.50	7.63	257 (116.5)
254TC	in	6.25	5.00	4.13	.53	4.75	7.63	284 (128.9)
256TC	in	6.25	5.00	5.00	.53	4.75	7.63	328 (149.0)
284TC	in	7.00	5.50	4.75	.53	4.75	9.12	432 (195.8)
286TC	in	7.00	5.50	5.50	.53	4.75	9.12	485 (220.1)
324TC	in	8.00	6.25	5.25	.65	5.25	9.13	680 (308.5)

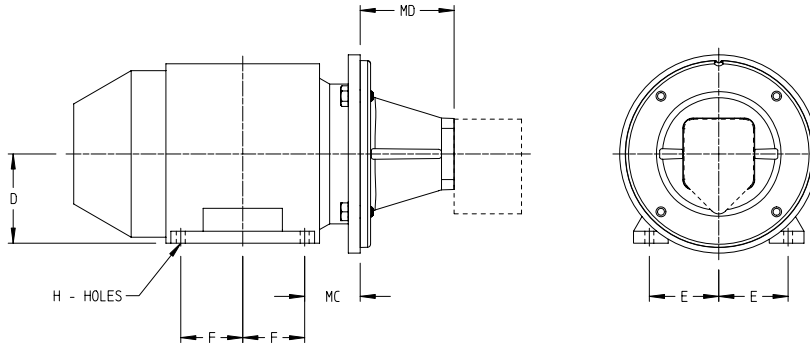
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SERIES SG-04, -05, -07, -10, -14 (Cast Iron)
SGN-05, -07 (Ductile Iron)



VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)

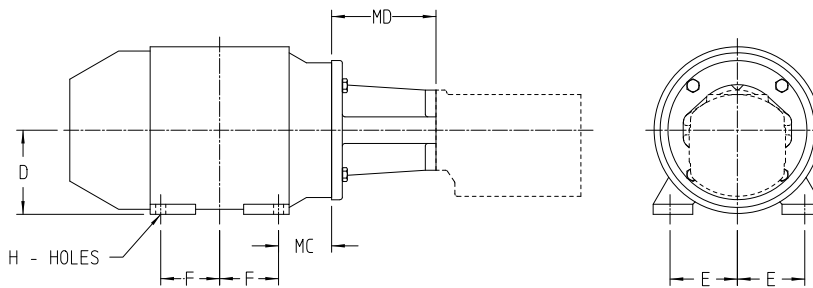
DIMENSIONS – SERIES SG-04, SG-05, SGN-05 – MOTOR MOUNT – (“M” DRIVE) – IEC FRAME



MOTOR FRAME SIZE		D	E	F	H	MC	MD	APPROX. DRIVE [Ⓢ] EQUIP. SHIPPING WEIGHT IN POUNDS (KG)
IEC 80 B35 FLANGE	mm	80	62.5	50	10	50	94.7	46 (21)
IEC 90 B35 FLANGE	mm	90	70	S 50 / L 62.5	10	56	94.7	64 (29)

Ⓢ Motor shipping weight listed is for a typical IEC motor.
 (If a more accurate motor shipping weight is required, consult factory with complete motor specifications.)
 For total unit shipping weight, add the electric motor shipping weight to the pump shipping weight shown on the pump specification chart.

DIMENSIONS – SERIES SG-07, SGN-07 – MOTOR MOUNT (“M” DRIVE) – IEC FRAME



MOTOR FRAME SIZE		D	E	F	H	MC	MD	APPROX. DRIVE [Ⓢ] EQUIP. SHIPPING WEIGHT IN POUNDS (KG)
IEC 90 B35 FLANGE	mm	90	70	S 50 / L 62.5	10	56	130.3	68 (31)
IEC 100 B14 FACE	mm	100	80	S 56 / L 70	12	63	133.6	114 (52)
IEC 112 B14 FACE	mm	112	95	S 57 / L 70	12	70	133.6	129 (59)

Ⓢ Motor shipping weight listed is for a typical IEC motor.
 (If a more accurate motor shipping weight is required, consult factory with complete motor specifications.)
 For total unit shipping weight, add the electric motor shipping weight to the pump shipping weight shown on the pump specification chart.

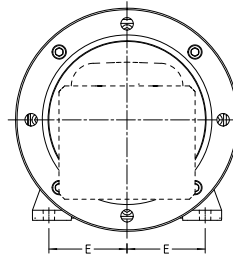
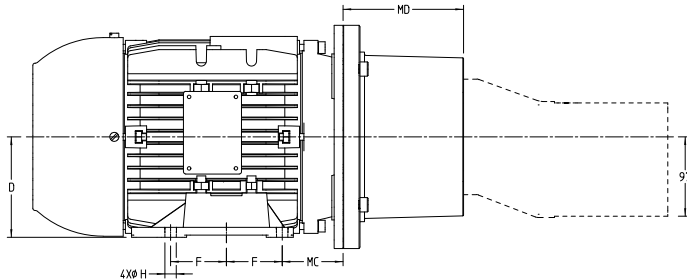


SERIES SG-04, -05, -07, -10, -14 (Cast Iron)
SGN-05, -07 (Ductile Iron)

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VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)

DIMENSIONS – SG-10 – MOTOR MOUNT (“M” DRIVE) – IEC B35 FRAME



NOTE: Dimensions are in mm.

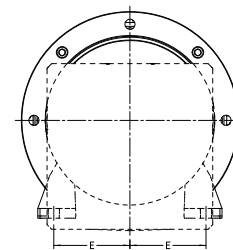
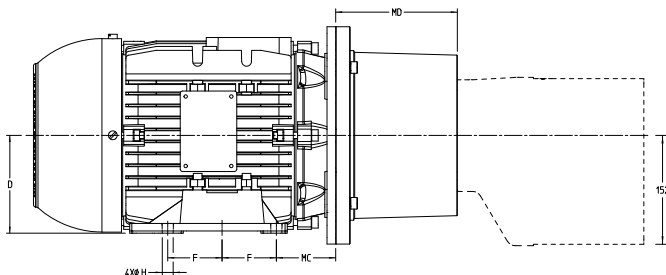
NOTE: Cartridge seals may not be used with M-Drives

MOTOR FRAME SIZE		D	E	F	H	MC	BELLHOUSING PN	MD	APPROX. DRIVE [®] EQUIPMENT SHIPPING WEIGHT IN POUNDS (KG)
90	mm	90	70	62.5	10	56	2-085-054-720-00	124	63 (28.8)
100L	mm	100	80	70	12	63	2-085-050-720-00	135	89 (40.5)
112M	mm	112	95	70	12	70	2-085-050-720-00	135	110 (49.9)
132S/M	mm	132	108	70	12	89	2-085-051-720-00	155	179 (81.3)
160L	mm	160	127	105	15	108	2-085-052-720-00	188	331 (150.3)
180L	mm	180	139.5	120.5	15	121	2-085-052-720-00	188	496 (225.1)
200M	mm	200	159	133.5	18	133	2-085-053-720-00	204	668 (303.3)

① Motor shipping weight listed is for a typical cast iron TEFC motor. (If a more accurate motor shipping weight is required, consult factory with complete motor specifications.)

② Drive equipment shipping weight includes base, foot-bracket, coupling and coupling guard. For total unit shipping weight, add electric motor shipping weight, drive equipment shipping weight and the pump shipping weight shown on the pump specification chart.

DIMENSIONS – SG-14 – MOTOR MOUNT (“M” DRIVE) – IEC B35 FRAME



NOTE: Dimensions are in mm.

MOTOR FRAME SIZE		D	E	F	H	MC	BELLHOUSING PN	MD	APPROX. DRIVE [®] EQUIPMENT SHIPPING WEIGHT IN POUNDS (KG)
132	mm	132	108	70	12	89	2-085-041-720-00	168	179 (81.3)
160	mm	160	127	105	15	108	2-085-048-720-00	204	331 (150.3)
180	mm	180	139.5	120.5	15	121	2-085-048-720-00	204	496 (225.1)
200	mm	200	159	133.5	18	133	2-085-040-720-00	204	668 (303.3)
225	mm	225	178	143	18	149	2-085-049-720-00	234	793 (359.9)

① Motor shipping weight listed is for a typical cast iron TEFC motor. (If a more accurate motor shipping weight is required, consult factory with complete motor specifications.)

② Drive equipment shipping weight includes base, foot-bracket, coupling and coupling guard. For total unit shipping weight, add electric motor shipping weight, drive equipment shipping weight and the pump shipping weight shown on the pump specification chart.

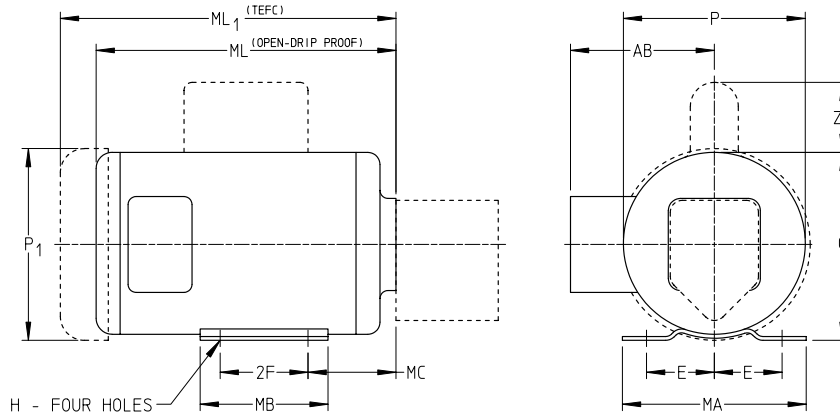
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SERIES SG-04, -05, -07, -10, -14 (Cast Iron)
SGN-05, -07 (Ductile Iron)



VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)

DIMENSIONS – SERIES SG-04, SG-05, SGN-05 FOUR-BOLT MOTOR MOUNT (“M4” DRIVE)



BALDOR MOTOR FRAME	APPROX. MOTOR SHIPPING WEIGHT (POUNDS)		AB	D	E	2F	H	MA	MB	MC	1 PHASE		3 PHASE		ML	ML ₁	O	P	P	ZZ
											HP	RPM	HP	RPM						
48YZ	25	in	4.50	3.00	2.12	2.75	.34 SLOT	5.75	4.00	2.75	1/4	1725	1/4 1/3 1/2	1725	8.38 (213)		5.88	5.69 (145)		2.19 (56)
											1/3	1725	3/4	1725	9.38 (238)					
		mm	114	76	54	70	9	146	102	70	1/4	1725	1/4 1/3 1/2	1725	9.50 (241)	149		6.12 (155)	2.25 (57)	
											1/3	1725	3/4	1725	10.50 (267)					
											1/2	1725		1725	11.50 (292)					
56YZ	29	in	5.25	3.50	2.44	3.00	.34 SLOT	6.50	4.50	2.62	3/4	1725	1	1725	10.38 (264)	6.88	6.62 (168)		2.25	
											1	1725			11.38 (289)					
		mm	133	89	62	76	9	165	114	66			1	1725	10.38 (264)	175		7.19 (183)	57	
											3/4	1	1725		11.38 (289)					

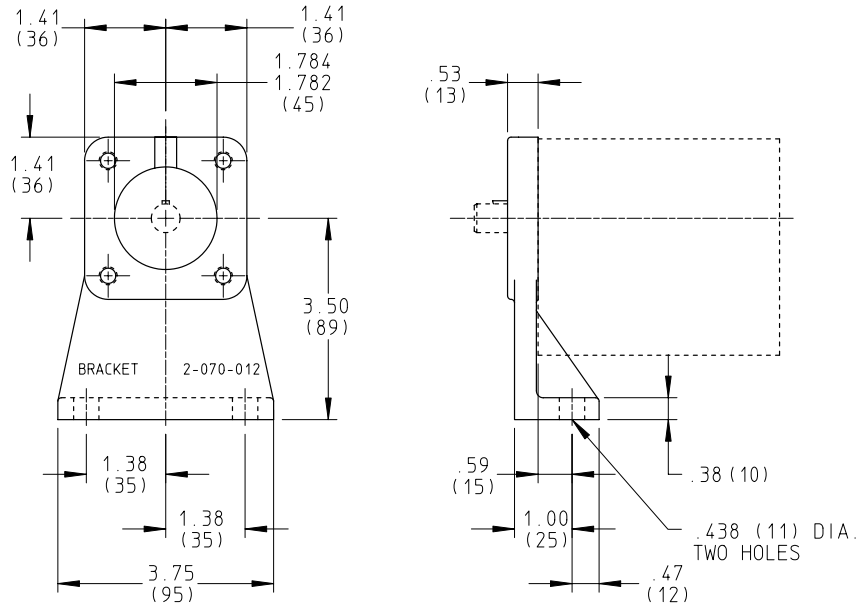
① Motor shipping weight listed is for a typical TEFC motor.
(If a more accurate motor shipping weight is required, consult factory with complete motor specifications.)
For total unit shipping weight, add the electric motor shipping weight to the pump shipping weight shown on the pump specification chart.

NOTE: Dimensions shown in parentheses are millimeters; others are inches.

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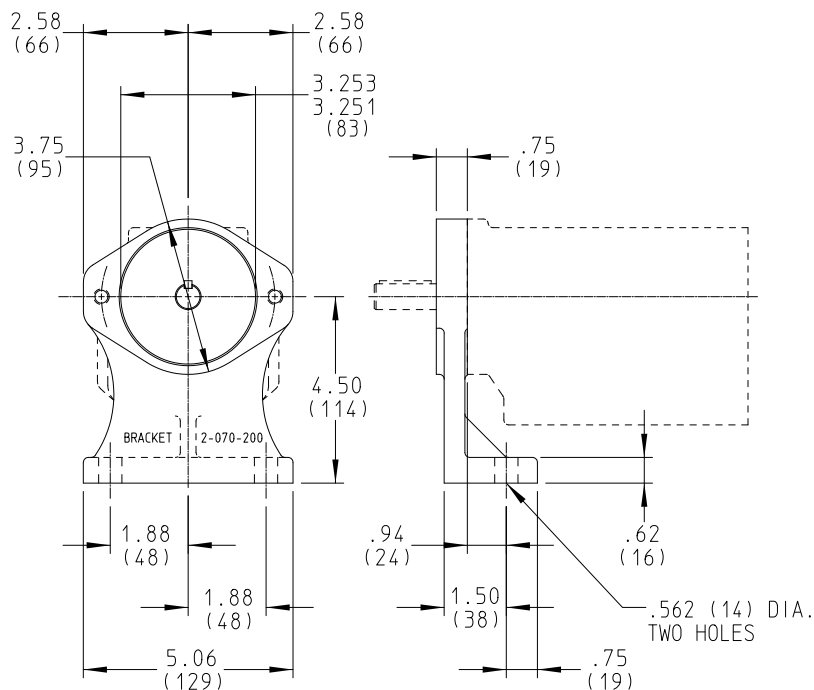
VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)

DIMENSIONS – SERIES SG-04, SG-05, SGN-05 FOOT BRACKET MOUNT (B MOUNT)



NOTE: Approximate shipping weight of foot bracket is 2¼ lbs.
NOTE: Dimensions shown in parentheses are millimeters; others are inches.

DIMENSIONS – SERIES SG-07, SGN-07 – FOOT BRACKET MOUNT (B MOUNT)



NOTE: Approximate shipping weight of foot bracket is 5 lbs.
NOTE: Dimensions shown in parentheses are millimeters; others are inches.

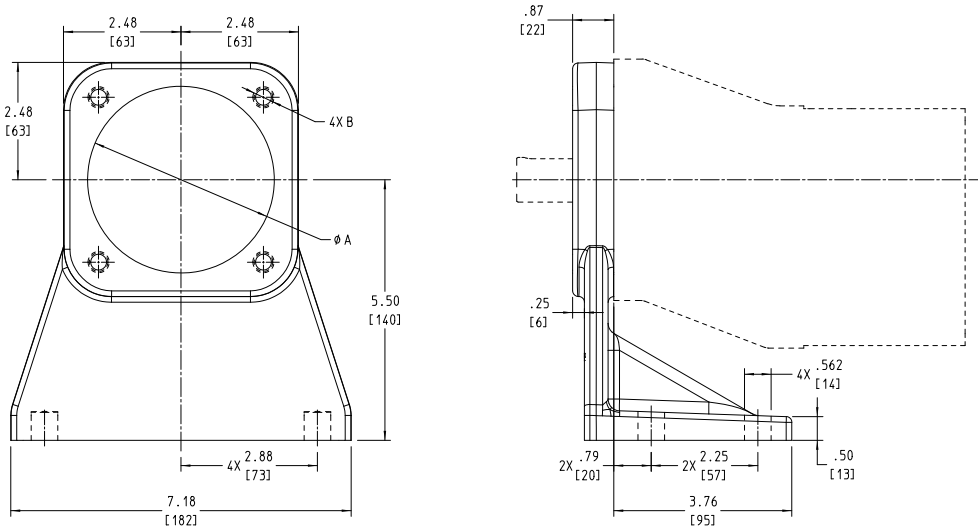
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SERIES SG-04, -05, -07, -10, -14 (Cast Iron)
SGN-05, -07 (Ductile Iron)



VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)

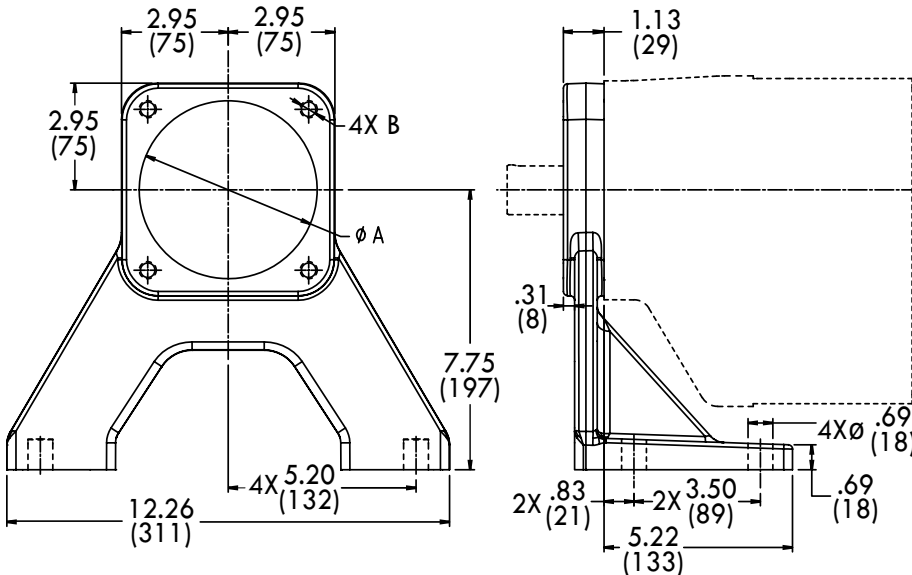
DIMENSIONS – SERIES SG-10 FOOT BRACKET MOUNT (B MOUNT)



FOR USE WITH		A	B
SAE B 4 BOLT ("U" BRACKET)	in	4.00	1/2 - 13
ISO 100MM 4 BOLT ("M" BRACKET)	mm	100	M10 X 1.5

NOTE: Approximate shipping weight is 11 lbs (4.8 Kg)
NOTE: Dimensions shown in parentheses are millimeters; others are inches.

DIMENSIONS – SERIES SG-14 FOOT BRACKET MOUNT (B MOUNT)



FOR USE WITH		A	B
SAE C 4 BOLT ("U" BRACKET)	in	5.00	1/2 - 13
ISO 125MM 4 BOLT ("M" BRACKET)	mm	125	M12 X 1.75

NOTE: Approximate shipping weight is 19 lbs (8.6 Kg)
NOTE: Dimensions shown in parentheses are millimeters; others are inches.

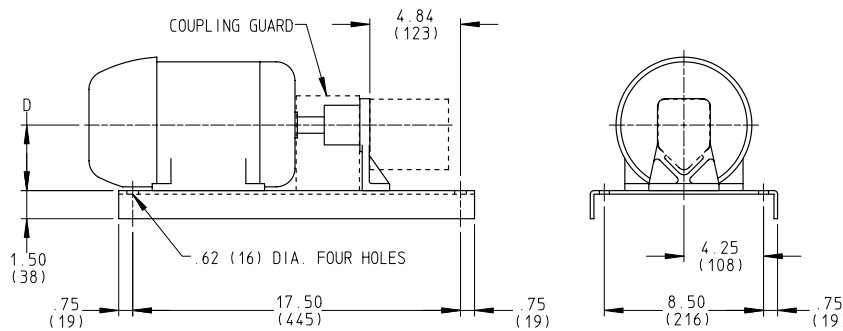


SERIES SG-04, -05, -07, -10, -14 (Cast Iron)
SGN-05, -07 (Ductile Iron)

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VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)

DIMENSIONS – SERIES SG-04, SG-05, SGN-05 BASE-MOUNTED UNIT (“D” DRIVE)



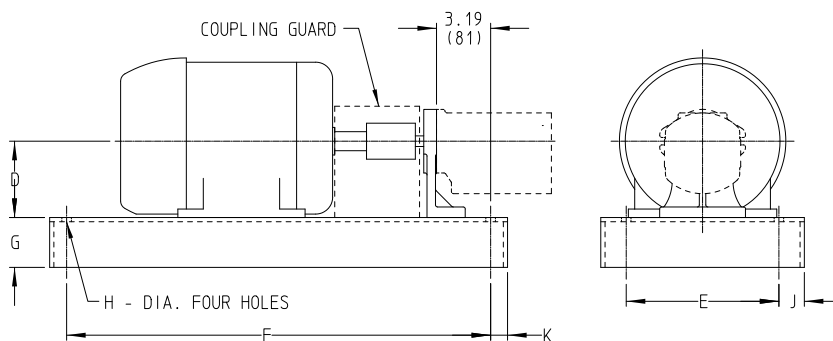
NOTE: Dimensions shown in parentheses are millimeters; others are inches.

MOTOR FRAME SIZE		D	APPROX. MOTOR [®] SHIPPING WEIGHT IN POUNDS (KG)	APPROX. DRIVE [®] EQUIP. SHIPPING WEIGHT IN POUNDS (KG)
56	in	3.50	31 (14)	17 (8)
	mm	89		
143T	in	3.50	50 (23)	17 (8)
	mm	89		
145T	in	3.50	60 (27)	17 (8)
	mm	89		
182T	in	4.50	95 (43)	20 (9)
	mm	114		
184T	in	4.50	110 (50)	20 (9)
	mm	114		

① Motor shipping weight listed is for a typical TEFC motor. (If a more accurate motor shipping weight is required, consult factory with complete motor specifications.)

② Drive equipment shipping weight includes base, foot-bracket, coupling and coupling guard. For total unit shipping weight, add electric motor shipping weight, drive equipment shipping weight and the pump shipping weight shown on the pump specification chart.

DIMENSIONS – SERIES SG-07, SGN-07 BASE-MOUNTED UNIT (“D” DRIVE)



NOTE: Dimensions shown in parentheses are millimeters; others are inches.

MOTOR FRAME SIZE		D	E	F	G	H	J	K	APPROX. MOTOR [®] SHIPPING WEIGHT IN POUNDS (KG)	APPROX. DRIVE [®] EQUIP. SHIPPING WEIGHT IN POUNDS (KG)
56	in	4.50	8.50	20.50	1.50	.50	.75	.75	31 (14)	38 (17)
	(mm)								(114)	
145T									60 (27)	
182T	in	4.50	9.00	25.00	2.94	.56	1.50	1.00	95 (43)	49 (22)
	(mm)								(114)	
213T									145 (66)	
215T	in	5.25	9.00	25.00	2.94	.56	1.50	1.00	179 (81)	56 (25)
	(mm)								(133)	

① Motor shipping weight listed is for a typical TEFC motor. (If a more accurate motor shipping weight is required, consult factory with complete motor specifications.)

② Drive equipment shipping weight includes base, foot-bracket, coupling and coupling guard. For total unit shipping weight, add electric motor shipping weight, drive equipment shipping weight and the pump shipping weight shown on the pump specification chart.

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SERIES SG-04, -05, -07, -10, -14 (Cast Iron)
SGN-05, -07 (Ductile Iron)



VIKING SG SERIES SINGLE PUMPS (WITH SHAFT SEAL)

PERFORMANCE CURVE NOTES

Printed performance curves are not available.

Performance curves can be electronically generated with the Viking Pump Selector Program. This program can be located on www.vikingpump.com for the general public.

For authorized distributors, this program can be found listed under the "Products" tab at www.idexconnect.com. Security passwords are required to access IDEXconnect.