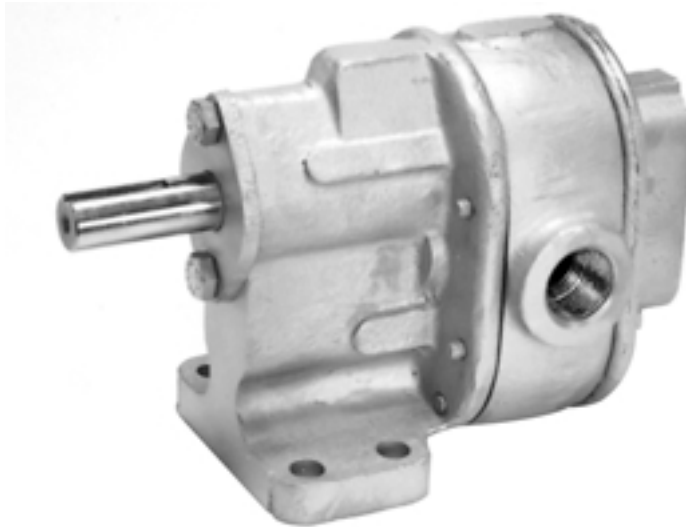


BSM ROTARY GEAR PUMPS

STAINLESS STEEL-SERIES



FT. MTD. PUMP

BSM Stainless Steel Pumps are designed to handle the toughest Chemical Processing Applications.

Design: Drive speeds to 1800 rpm; discharge pressures to 200 psi; flow rate to 32.0 gpm; foot or flange mounted; with or without integral relief valve.

Material: 316 stainless steel casings with precision machined, 17-4 stainless steel gears and case hardened shafts.

Bearings: Replaceable carbon graphite sleeve bearings with carbon graphite thrust plates.

Seal: Mechanical seal. Also available with compression packing or lip seal. Mechanical seal and lip seals available with different elastomers for pumping different types of liquids.

Lubrication: Self lubricating using the pumped liquid. Also available for handling non-lubricating liquids.

Rotation: Pumps are available for clockwise or counter-clockwise rotation. Discharge is always on the side of the pump toward which the top of the shaft rotates.

Liquid Viscosities: 32 ssu to 100,000 ssu.

Suction Lift: Up to 28" Hg / 31 feet depending on the type of liquid being pumped.

Drive Options: E-Drive (pump close coupled to motor); A-Drive (pump connected to C-Face motor with adapter bracket and coupling), D-Drive (pump coupled to motor mounted on baseplate); GR-Drive (pump coupled to gear reducer coupled to motor mounted on baseplate); B-Drive (pump and motor connected by V-belt and pulleys mounted on baseplate).

Accessories: Repair Kits; Gear Sets; Bearing Kit, and Seal Kits. Refer to Section 13.

BSM ROTARY GEAR PUMPS

STAINLESS STEEL PUMPS

TYPICAL INDUSTRIES

Chemical
Pharmaceutical
Textile
Plastic
Paint
Tanning

Soap
Rubber
Photographic
Plating

LIQUIDS PUMPED

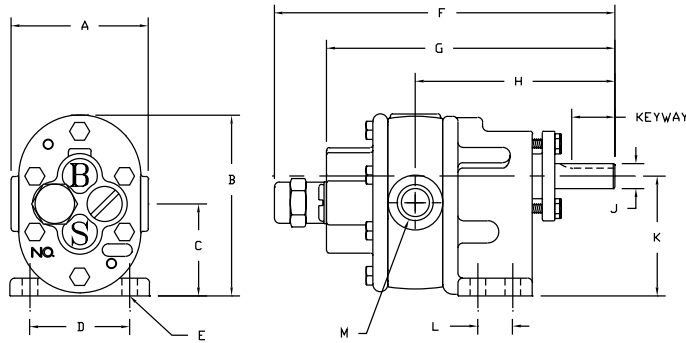
Acetate Solvents
Acetic Acid
Acetone
Acetylene
Adhesive — PVA
Alcohol
Aluminum Hydroxide 25%
Aluminum Nitrate
Aluminum Oxide
Ammonium Hydroxide
Ammonium Nitrate
Ammonium Persulfate
Anti-Freeze
Arsenic Acid
Asphalt
Beer
Beet Sugar Liquids
Calcium Chloride
Castor Oil
Cotton Seed Oil
Cresylic Acid
Fatty Acids
Formaldehyde
Gelatin

Glucose
Hydrazine
Mineral Oil
Molasses
Mustard
Naphtha
Nitric Acid - 90%
Potash
Rust Inhibitors
Sea Water
Shellac
Sodium Bicarbonate
Sodium Hydroxide — 20 %
Sodium Nitrate
Soy Bean Oil
Styrene
Turpentine
Vegetable Oil
Vinegar
Water
White Liquor (Pulp Mill)
Xylene

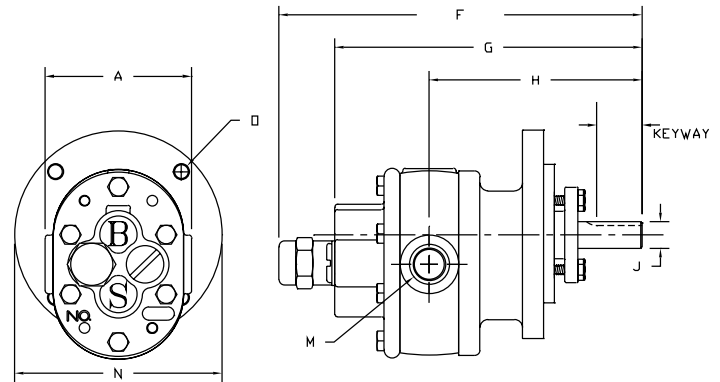
Note: The liquid list is based on information from reference sources and should be used as a guide only in the selection of a pump. Changes in the liquids' concentration, temperature, etc. can influence the effect the liquid has on component materials. After pumping corrosive liquids, it is recommended that the pump be thoroughly flushed. Do not permit corrosives to remain in the pump when idle for extended periods. For a complete list of liquids that may be pumped with this series of pumps, please contact the factory

BSM ROTARY GEAR PUMPS

DIMENSIONAL DATA STAINLESS STEEL-SERIES



FT. MTD. PUMP



FLG. MTD. PUMP

DIMENSIONS (INCHES)

Model	A	B	C	D	E	F	G	H	J	K	L	M	O	Keyway
1SST	3.00	3.69	1.78	2.00	0.39	7.50	6.25	4.56	0.56	2.38	0.75	3/8	3/8-16	1/8x1/16
2SST	3.44	4.53	2.31	2.50	0.39	8.47	7.22	5.00	0.68	3.00	0.88	1/2	3/8-16	3/16x3/32
3SST	4.44	5.72	2.88	3.00	0.45	10.50	8.88	6.19	0.75	3.88	1.25	3/4	3/8-16	3/16x3/32
4SST	4.44	5.81	2.88	3.00	0.45	10.50	8.88	6.19	0.75	3.88	1.25	1	3/8-16	3/16x3/32
5SST	5.00	5.97	2.88	3.00	0.45	10.50	8.88	6.69	0.75	3.88	1.25	1 1/4	3/8-16	3/16x3/32

OPERATING CHARACTERISTICS

Model No.	Displ GPR	Slip GPM PSI	Drive Speed RPM	0 psi		50 psi		75 psi		100 psi		200 psi	
				gpm	hp	gpm	hp	gpm	hp	gpm	hp	gpm	hp
1SST	.00262	.0024	600	1.6	.03	1.5	.08	1.4	.11	1.3	.15	1.1	.33
			860	2.3	.04	2.1	.13	2.0	.18	2.0	.23	1.8	.49
			1140	3.0	.06	2.9	.17	2.8	.23	2.7	.30	2.5	.63
			1725	4.5	.14	4.4	.29	4.3	.36	4.28	.48	4.0	.95
2SST	.00521	.0035	600	3.1	.05	3.0	.15	2.9	.24	2.8	.31	2.4	.65
			860	4.5	.08	4.3	.22	4.2	.34	4.1	.45	3.8	.93
			1140	5.9	.13	5.8	.31	5.7	.41	5.6	.51	5.2	1.00
			1725	9.0	.44	8.8	.64	8.7	.78	8.6	.94	8.3	1.60
3SST	.00947	.0026	600	5.7	.08	5.6	.34	5.5	.47	5.4	.60	5.2	1.10
			860	8.1	.25	8.0	.54	7.9	.68	7.8	.83	7.6	1.50
			1140	10.8	.38	10.7	.77	10.6	.97	10.5	1.10	10.2	2.00
			1725	16.2	.92	16.1	1.40	16.0	1.70	15.9	2.00	15.7	3.10
4SST	.00135	.009	600	8.1	.30	7.9	.50	7.8	.60	7.7	.80	7.4	1.20
			860	11.6	.40	11.3	.70	11.2	.90	11.1	1.10	10.7	1.80
			1140	15.3	.50	15.0	.90	14.8	1.20	14.7	1.45	14.2	2.30
			1725	23.2	.80	22.7	1.40	22.5	1.80	22.3	2.20	21.4	3.50
5SST	.0186	.02	600	11.1	.45	10.8	.55	10.6	.75	10.4	.95	9.7	1.60
			860	15.9	.65	15.5	.80	15.2	1.00	15.0	1.30	14.0	2.30
			1140	21.1	.80	20.5	1.10	20.2	1.45	19.8	1.80	18.5	3.10
			1725	32.0	1.30	31.0	1.60	30.5	2.10	30.0	2.70	28.0	4.70

*Delivery and input horsepower are based on oil viscosity of 300 ssu at speed and pressures shown.

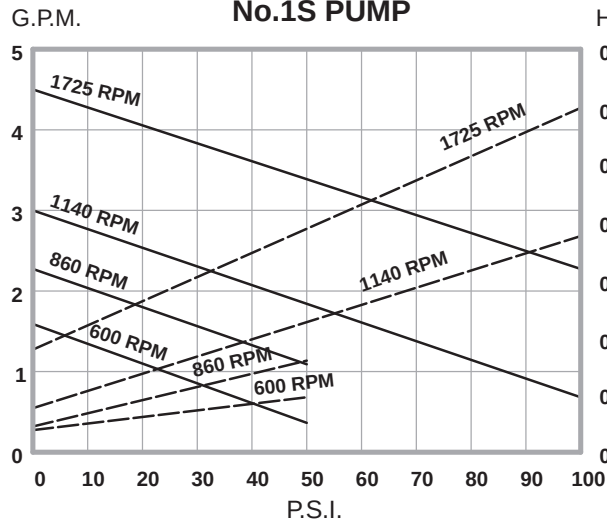
BSM Pump Corp. - MANUFACTURING SOLUTIONS TO PUMPING PROBLEMS FOR OVER 100 YEARS.

BSM ROTARY GEAR PUMPS

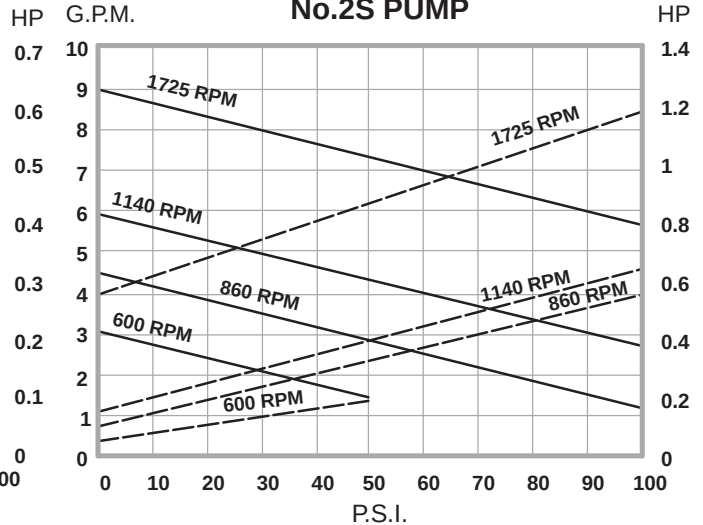
STAINLESS STEEL-SERIES

OPERATING CHARACTERISTICS, 32 SSU LIQUID

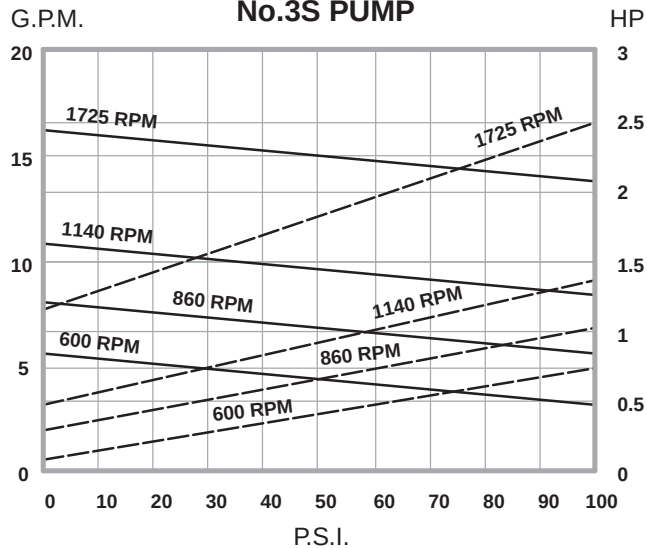
No.1S PUMP



No.2S PUMP



No.3S PUMP



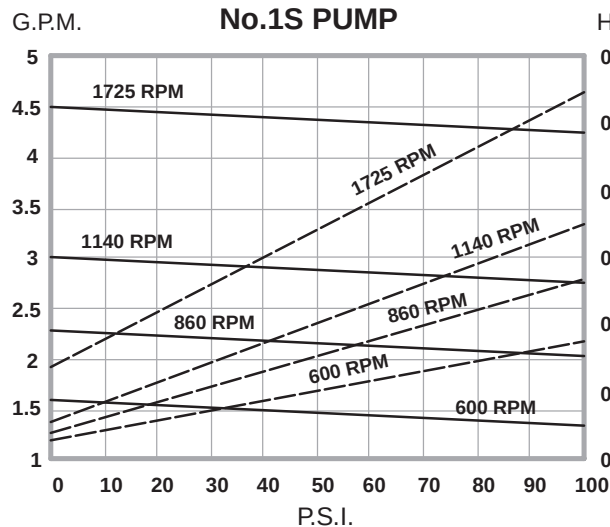
SOLID LINE = GPM
BROKEN LINE = HP

BSM ROTARY GEAR PUMPS

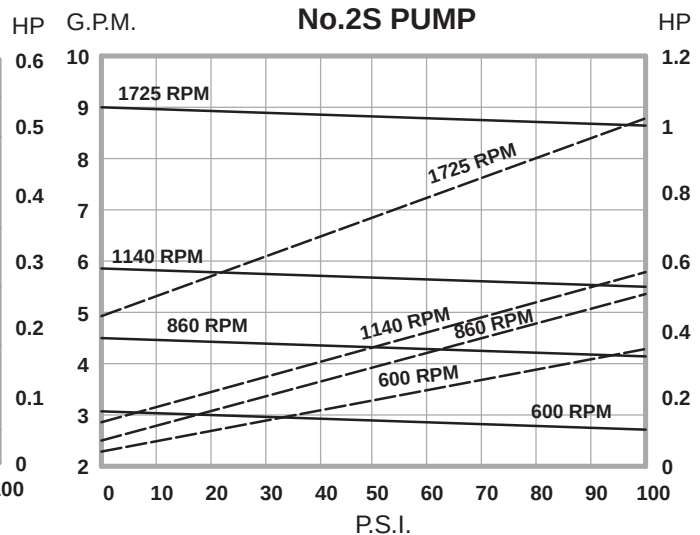
STAINLESS STEEL-SERIES

OPERATING CHARACTERISTICS, 300 SSU LIQUID

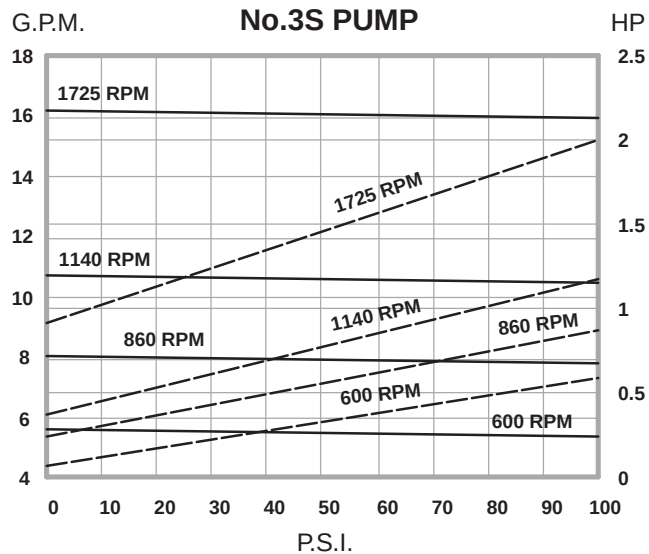
No.1S PUMP



No.2S PUMP



No.3S PUMP

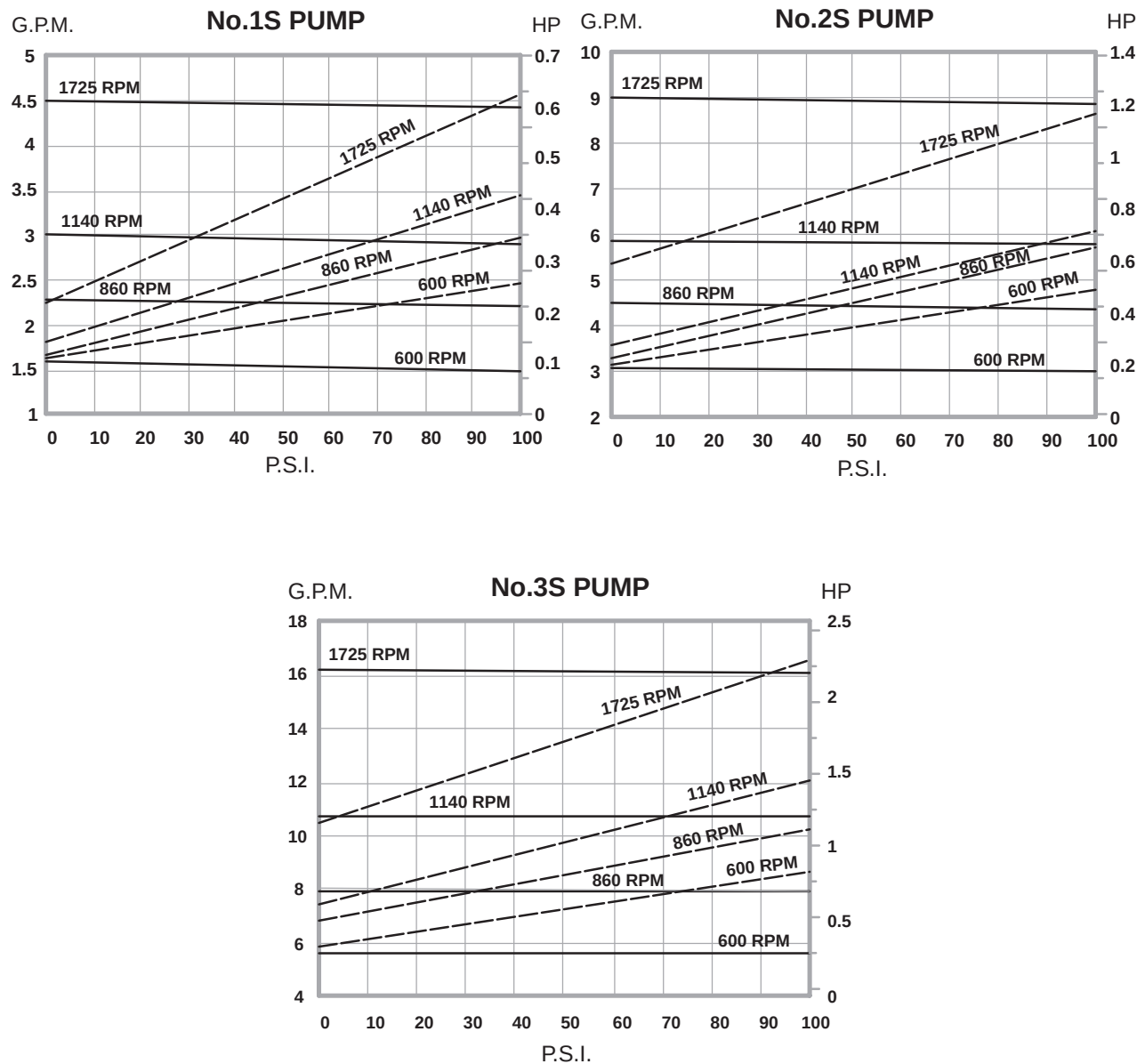


SOLID LINE = GPM
BROKEN LINE = HP

BSM ROTARY GEAR PUMPS

STAINLESS STEEL-SERIES

OPERATING CHARACTERISTICS, 1,000 SSU LIQUID

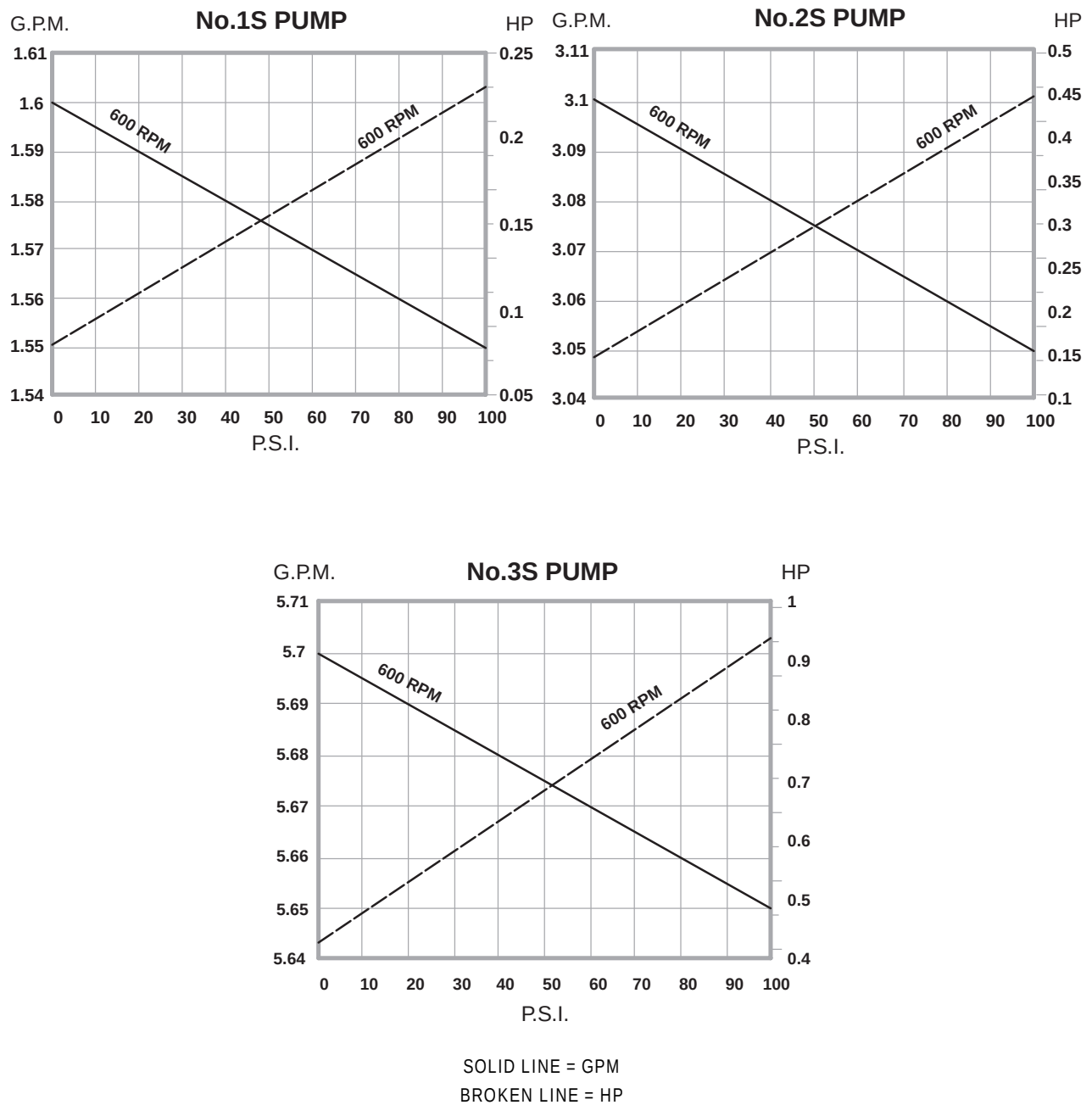


SOLID LINE = GPM
BROKEN LINE = HP

BSM ROTARY GEAR PUMPS

STAINLESS STEEL-SERIES

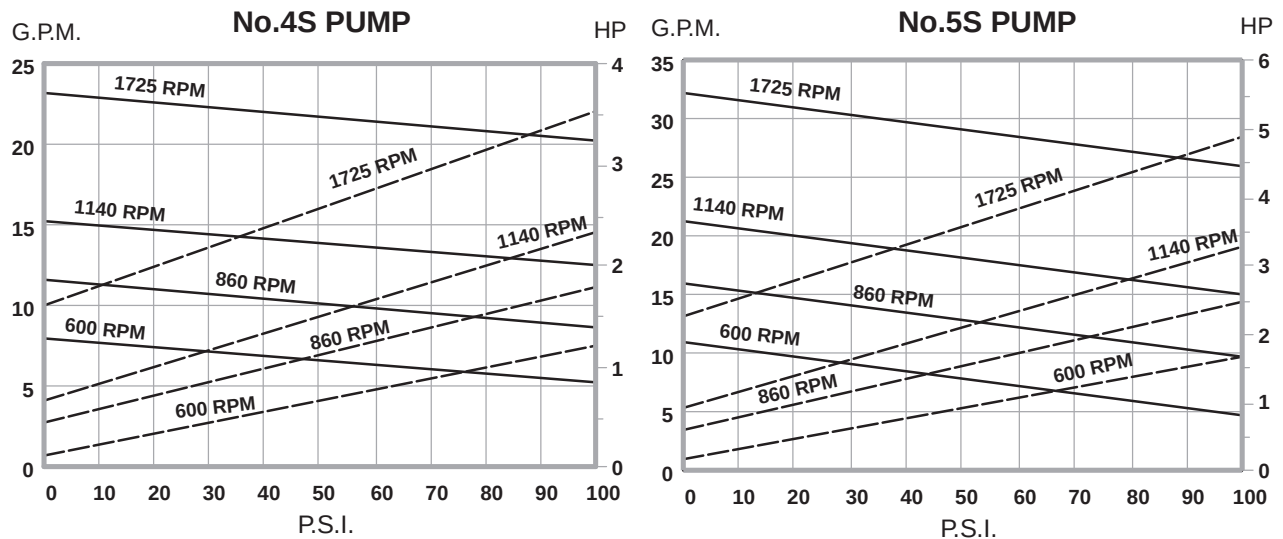
OPERATING CHARACTERISTICS, 5,000 SSU LIQUID



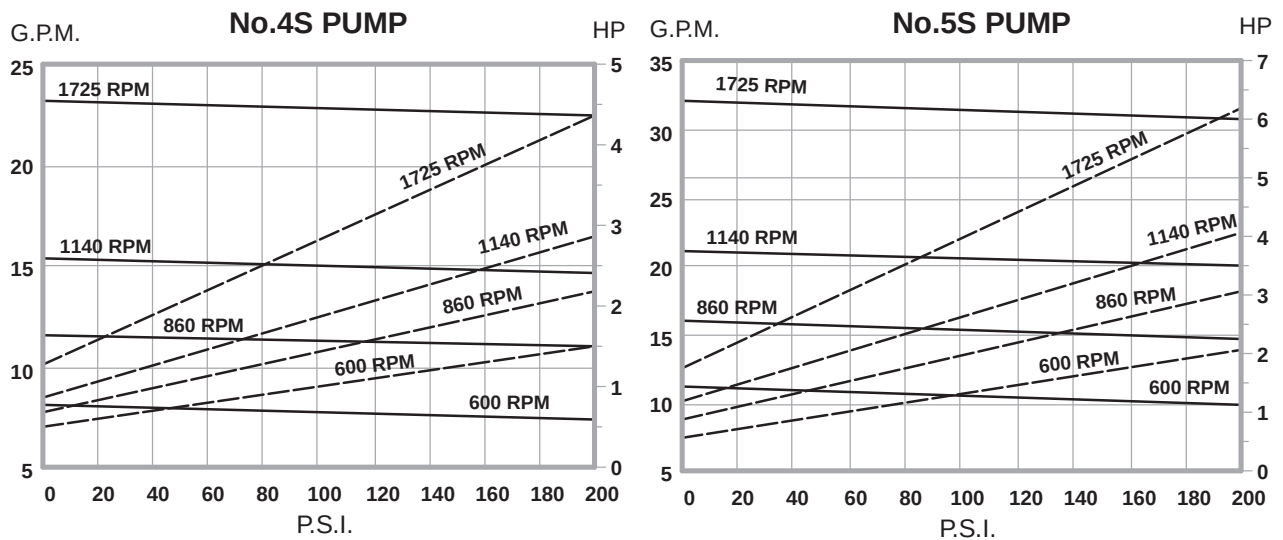
BSM ROTARY GEAR PUMPS

STAINLESS STEEL-SERIES

OPERATING CHARACTERISTICS, 32 SSU LIQUID



OPERATING CHARACTERISTICS, 300 SSU LIQUID

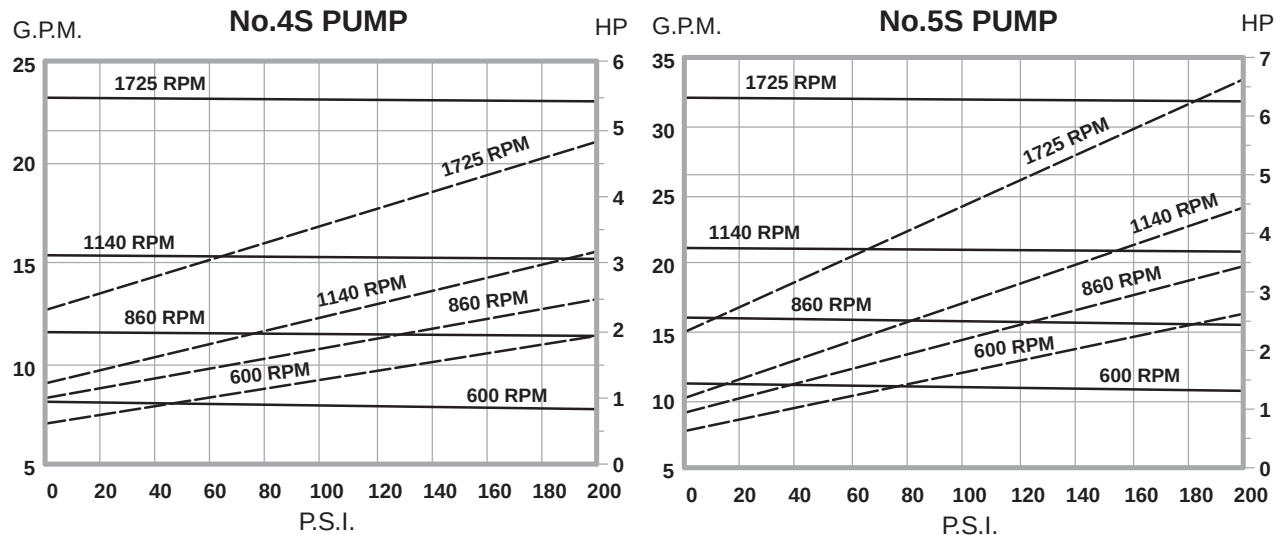


SOLID LINE = GPM
BROKEN LINE = HP

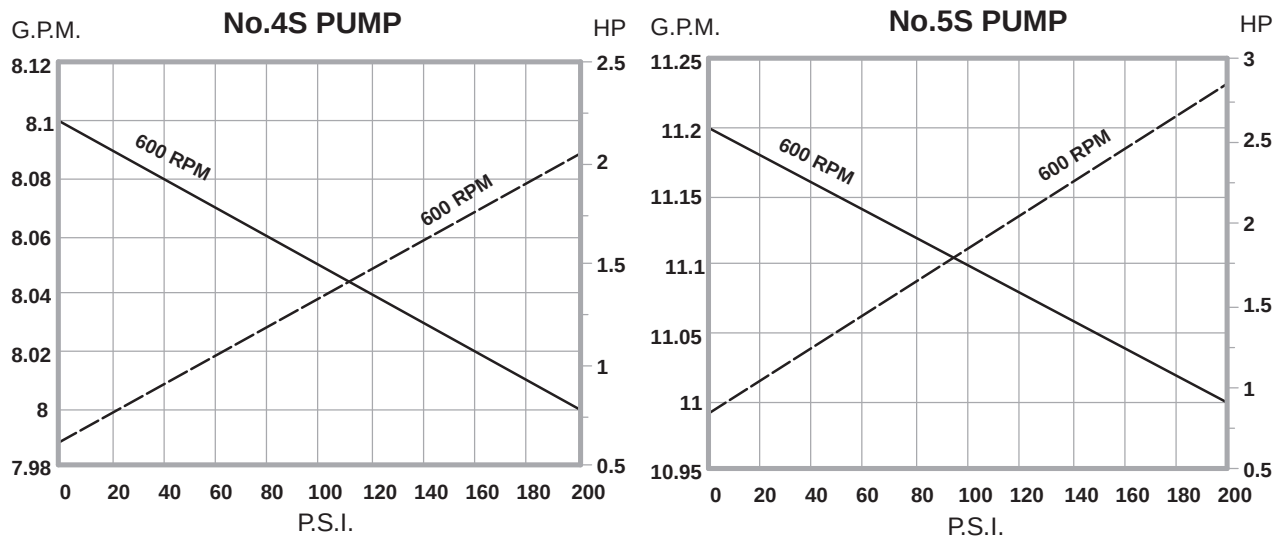
BSM ROTARY GEAR PUMPS

STAINLESS STEEL-SERIES

OPERATING CHARACTERISTICS, 1,000 SSU LIQUID



OPERATING CHARACTERISTICS, 5,000 SSU LIQUID

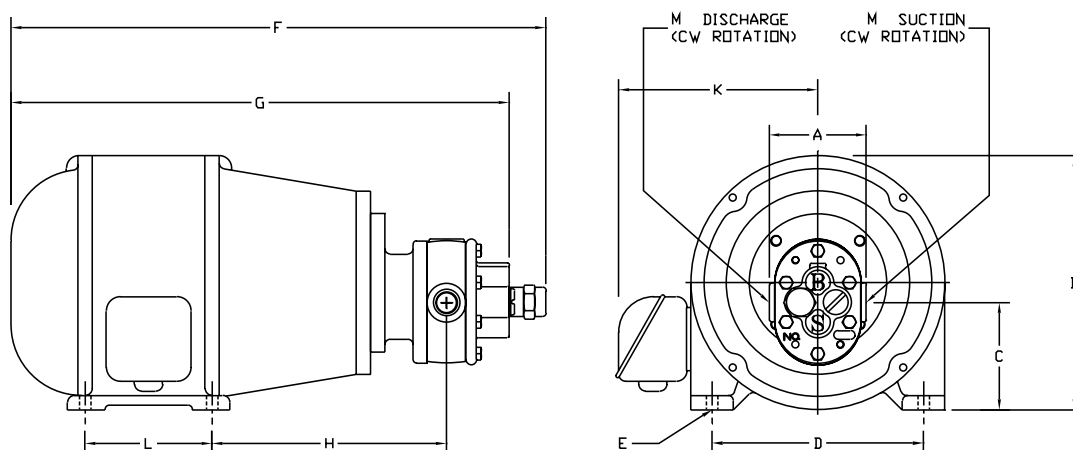


SOLID LINE = GPM
BROKEN LINE = HP

BSM ROTARY GEAR PUMPS

STAINLESS STEEL SERIES CLOSE COUPLED MOTOR DRIVEN ROTARY GEAR PUMPS (E-DRIVE)

BSM Stainless Steel-Series pumps are available direct coupled to the end bell of a foot mounted motor. This assembly, referred to as an E-Drive ensures accurate alignment and requires less space than a pump connected to the C-Face of a motor. BSM Stainless Steel Series Close Coupled Motor Driven Rotary Gear Pumps are available in motor speeds of 860, 1140 & 1725 rpm with capacities to 32.0 gpm and pressures to 100 psi.



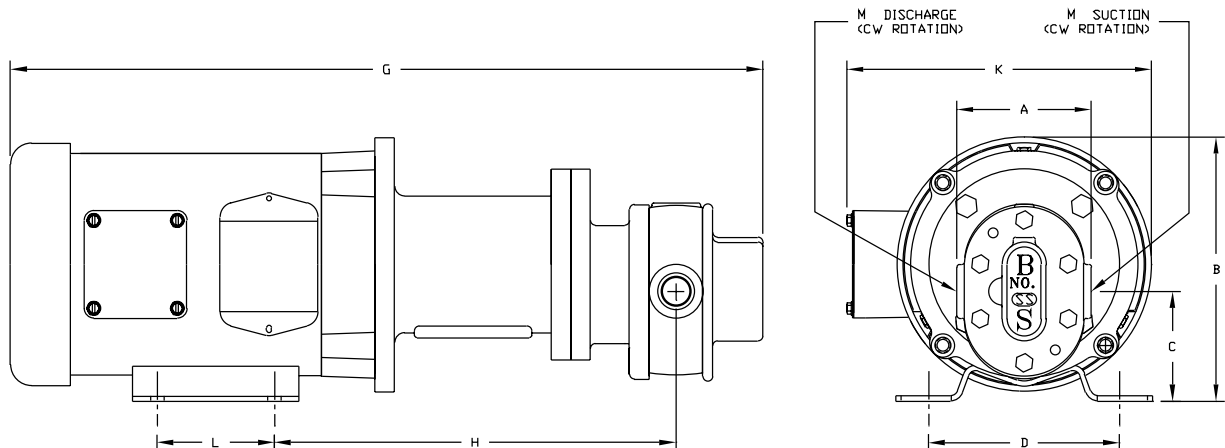
DIMENSIONS (INCHES)

Model	Motor Frame	A	B	C	D	E	F	G	H	K	L	M
1SST-E	182	3.00	9.00	3.90	7.50	.406	17.94	16.69	7.88	7.06	4.50	3/8
2SST-E	182	3.44	9.00	3.81	7.50	.406	18.91	17.66	8.31	7.06	4.50	1/2
	184	3.44	9.00	3.81	7.50	.406	19.91	18.66	8.31	7.06	5.50	"
	213	3.44	10.38	4.56	8.50	.406	21.47	20.22	9.12	7.94	5.50	"
3SST-E	182	4.44	9.00	3.50	7.50	.406	20.94	19.31	9.50	7.06	4.50	3/4
	184	4.44	9.00	3.50	7.50	.406	21.94	20.31	9.50	7.06	5.50	"
	213	4.44	10.38	4.25	8.50	.406	23.50	21.88	10.31	7.94	5.50	"
	215	4.44	10.38	4.25	8.50	.406	24.00	22.38	10.31	7.94	7.00	"
4SST-E	182	4.44	9.00	3.50	7.50	.406	20.94	19.31	9.50	7.06	4.50	1
	184	4.44	9.00	3.50	7.50	.406	21.94	20.31	9.50	7.06	5.50	"
	213	4.44	10.38	4.25	8.50	.406	23.50	21.88	10.31	7.94	5.50	"
	215	4.44	10.38	4.25	8.50	.406	24.00	22.38	10.31	7.94	7.00	"
	254U	4.44	12.38	5.25	6.03	.406	26.19	24.56	12.49	9.81	8.25	"
5SST-E	182	5.00	9.00	3.47	7.50	.406	21.94	20.31	10.00	7.06	4.50	1 1/4
	184	5.00	9.00	3.47	7.50	.406	22.94	21.31	10.00	7.06	5.50	"
	213	5.00	10.38	4.22	8.50	.406	24.50	22.88	10.81	7.94	5.50	"
	215	5.00	10.38	4.22	8.50	.406	25.00	23.38	10.81	7.94	7.00	"
	254U	5.00	12.38	5.22	6.03	.406	27.19	25.56	12.99	9.81	8.25	"

BSM ROTARY GEAR PUMPS

STAINLESS STEEL-SERIES MOTOR DRIVEN ROTARY GEAR PUMPS (A-DRIVE)

BSM Stainless Steel-Series pumps are available direct coupled to a Nema C-Face foot mounted motor. This assembly, referred to as an A-Drive, ensures accurate alignment and requires less space and is less costly than a pump and motor mounted on a baseplate. BSM Stainless Steel-Series Motor Driven Rotary Gear Pumps are available in motor speeds of 860, 1140 & 1725 rpm with capacities to 32.0 gpm and pressures to 100 psi.



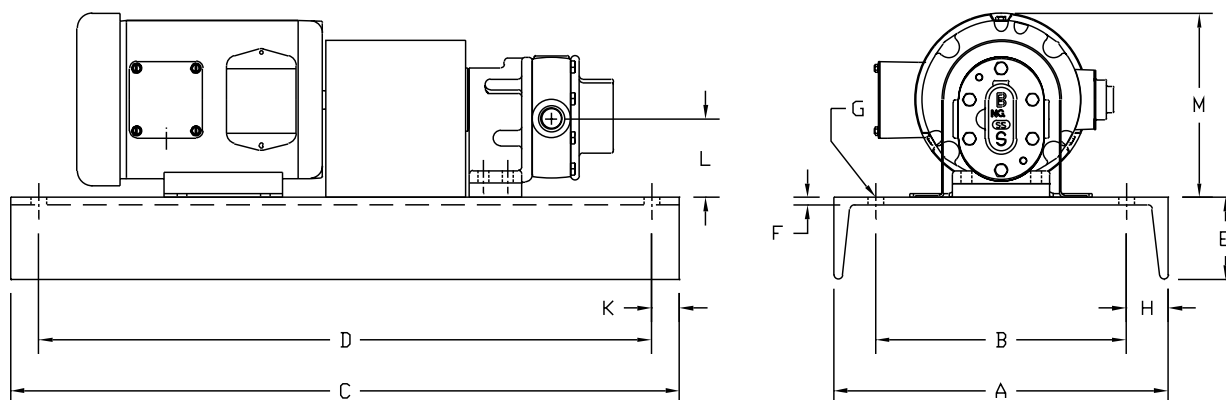
DIMENSIONS (INCHES)

Model No.	Motor Frame	A	B	C	D	E	G	H	K	L	M
1SST-A	56C	3.00	6.88	2.91	4.88	0.34	18.56	9.81	8.31	3.00	3/8
	145TC	3.00	6.88	2.91	5.50	0.34	20.28	10.12	8.56	5.00	3/8
	182TC	3.00	8.69	3.91	7.50	0.41	21.87	11.75	9.81	4.50	3/8
2SST-A	56C	3.44	6.88	2.81	4.88	0.34	19.53	10.25	8.31	3.00	1/2
	145TC	3.44	6.88	2.81	5.50	0.34	21.25	10.56	8.56	5.00	1/2
	182TC	3.44	8.69	3.81	7.50	0.41	22.84	12.19	9.81	4.50	1/2
	184TC	3.44	8.69	3.81	7.50	0.41	23.84	12.19	9.81	5.50	1/2
3SST-A	56C	4.44	6.88	2.50	4.88	0.34	21.19	11.43	8.31	3.00	3/4
	145TC	4.44	6.88	2.50	5.50	0.34	22.91	11.75	8.56	5.00	3/4
	182TC	4.44	8.69	3.50	7.50	0.41	24.50	13.37	9.81	4.50	3/4
	184TC	4.44	8.69	3.50	7.50	0.41	25.50	13.37	9.81	5.50	3/4
	213TC	4.44	10.25	4.25	8.50	0.41	27.41	14.25	12.16	5.50	3/4
	215TC	4.44	10.25	4.25	8.50	0.41	28.91	14.25	12.16	7.00	3/4
4SST-A	56C	4.44	6.88	2.50	4.88	0.34	21.19	11.43	8.31	3.00	1
	145TC	4.44	6.88	2.50	5.50	0.34	22.91	11.75	8.56	5.00	1
	182TC	4.44	8.69	3.50	7.50	0.41	24.50	13.37	9.81	4.50	1
	184TC	4.44	8.69	3.50	7.50	0.41	25.50	13.37	9.81	5.50	1
	213TC	4.44	10.25	4.25	8.50	0.41	27.41	14.25	12.16	5.50	1
	215TC	4.44	10.25	4.25	8.50	0.41	28.91	14.25	12.16	7.00	1
5SST-A	56C	5.00	6.88	2.50	4.88	0.34	21.57	11.63	8.31	3.00	1 1/4
	145TC	5.00	6.88	2.50	5.50	0.34	23.29	11.95	8.56	5.00	1 1/4
	182TC	5.00	8.69	3.50	7.50	0.41	24.88	13.57	9.81	4.50	1 1/4
	184TC	5.00	8.69	3.50	7.50	0.41	25.88	13.57	9.81	5.50	1 1/4
	213TC	5.00	10.25	4.25	8.50	0.41	27.79	14.45	12.16	5.50	1 1/4
	215TC	5.00	10.25	4.25	8.50	0.41	29.29	14.45	12.16	7.00	1 1/4
	254TC	5.00	12.88	5.25	10.00	0.53	35.63	16.19	16.09	8.25	1 1/4

BSM ROTARY GEAR PUMPS

STAINLESS STEEL-SERIES BASE MOUNTED ASSEMBLIES (D-DRIVE)

BSM Stainless Steel-Series pumps are available as base mounted pump and motor assemblies. Each assembly includes the base, flexible coupling, coupling guard, riser blocks, (if required) lifting eyebolts, and mounting hardware. The fabricated steel or channel steel bases are available with optional features such as drip lip construction, drain plugs, mounting lugs, casters, etc..



DIMENSIONS (INCHES)

Model No.	Motor Frame	A	B	C	D	E	F	G	H	K	L	M
1SST-D	56C	12.00	9.00	24.00	22.00	2.94	0.28	0.56	1.50	1.00	2.91	6.88
	145TC	12.00	9.00	26.00	24.00	2.94	0.28	0.56	1.50	1.00	2.91	6.88
	182TC	12.00	9.00	30.00	28.00	2.94	0.28	0.56	1.50	1.00	3.91	8.69
2SST-D	56C	12.00	9.00	24.00	22.00	2.94	0.28	0.56	1.50	1.00	2.81	6.88
	145TC	12.00	9.00	26.00	24.00	2.94	0.28	0.56	1.50	1.00	2.81	6.88
	182TC	15.00	9.00	30.00	28.00	2.94	0.28	0.56	1.50	1.00	3.81	8.69
	184TC	12.00	12.00	32.00	30.00	3.41	0.41	0.56	1.50	1.00	3.81	8.69
3SST-D	56C	12.00	9.00	24.00	22.00	2.94	0.28	0.56	1.50	1.00	2.50	6.88
	145TC	12.00	9.00	26.00	24.00	2.94	0.28	0.56	1.50	1.00	2.50	6.88
	182TC	12.00	9.00	30.00	28.00	2.94	0.28	0.56	1.50	1.00	3.50	8.69
	184TC	15.00	12.00	32.00	30.00	3.41	0.41	0.56	1.50	1.00	3.50	8.69
	213TC	15.00	12.00	34.00	32.00	3.41	0.41	0.56	1.50	1.00	4.25	10.25
	215TC	15.00	12.00	36.00	34.00	3.41	0.41	0.56	1.50	1.00	4.25	10.25
4SST-D 5SST-D	145TC	12.00	9.00	26.00	24.00	2.94	0.28	0.56	1.50	1.00	2.50	6.88
	182TC	12.00	9.00	30.00	28.00	2.94	0.28	0.56	1.50	1.00	3.50	8.69
	184TC	15.00	12.00	32.00	30.00	3.41	0.41	0.56	1.50	1.00	3.50	8.69
	213TC	15.00	12.00	34.00	32.00	3.41	0.41	0.56	1.50	1.00	4.25	10.25
	215TC	15.00	12.00	36.00	34.00	3.41	0.41	0.56	1.50	1.00	4.25	10.25