

# BSM ROTARY GEAR PUMPS

## 53/55-SERIES



FT. MTD. PUMP

These pumps operate quietly at nominal motor speeds and discharge large volumes of liquid at medium pressures. Typical applications for these pumps are hydraulic power for positioning devices, lifts, machine actuation, liquid pressurization for fuel burners and blenders as well as general transfer in all industries.

**Design:** Drive speeds to 1725 rpm; discharge pressures to 200 psi; flow rate to 51.4 gpm; foot or flange mounted.

**Material:** Cast Iron casings with precision machined, heat treated gears and case hardened shafts. Pumps are also available in Ductile Iron.

**Bearings:** Anti-friction.

**Seal:** Mechanical seal. Also available with packed seal.

**Lubrication:** Self lubricating using the pumped liquid.

**Rotation:** Clockwise or counter-clockwise. Specify at time of order.

**Liquid Viscosities:** 100 ssu to 3,000 ssu. Clean liquids having good lubricating qualities. Adaptable for handling liquids of higher or lower viscosities.

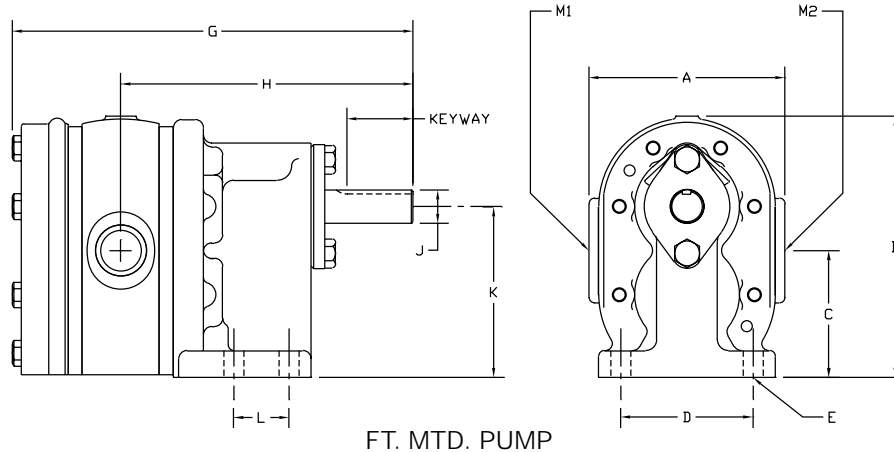
**Suction Lift:** 28" Hg / 31 feet depending on the type of liquid being pumped.

**Drive Options:** 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).

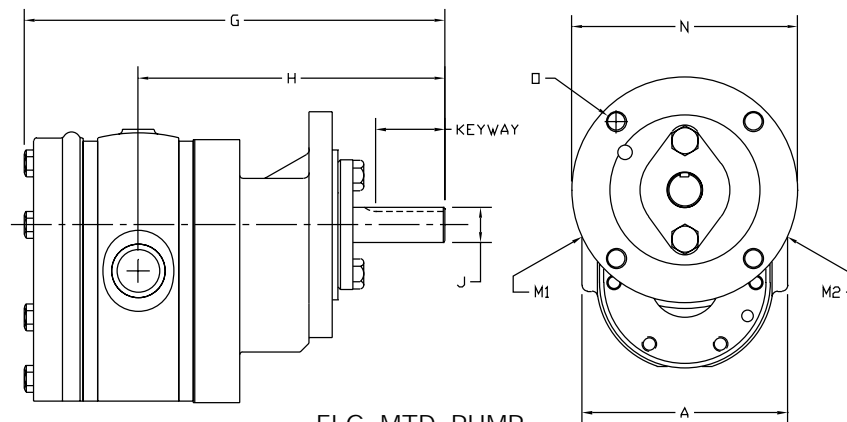
**Accessories:** Repair Kits; Gear Sets; Bearing Kits; and Seal Kits. Refer to Section 13.

# BSM ROTARY GEAR PUMPS

## DIMENSIONAL DATA 53/55-SERIES



FT. MTD. PUMP



FLG. MTD. PUMP

### DIMENSIONS (INCHES)

Model	A	B	C	D	E	G	H	J	K	L	M1	M2	N	O	Keyway
53	4.52	6.03	2.88	3.00	29/64	9.13	6.63	.75	3.88	1.25	1	3/4	4 7/8	3/8-16	3/16 x 3/32
55	5.00	6.03	2.88	3.00	29/64	10.13	7.13	.75	3.88	1.25	1 1/4	1.00	"	"	3/16 x 3/32

### OPERATING CHARACTERISTICS

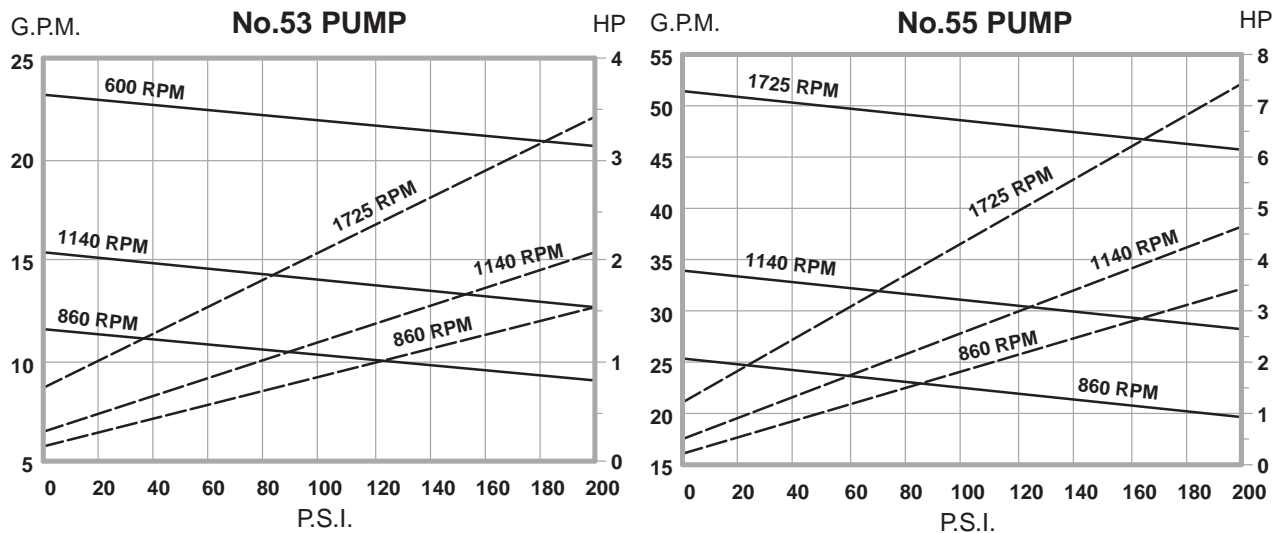
Model	Displmnt gals. per rev.	Slip gpm/psi	Drive Speed rpm	0 psi		50 psi		75 psi		100 psi		200 psi	
				gpm	hp	gpm	hp	gpm	hp	gpm	hp	gpm	hp
53	.01347	.0090	860	11.6	.2	11.1	.5	10.9	.7	10.7	.2	9.8	1.6
			1140	15.4	.3	14.9	.8	14.7	1.0	14.5	1.2	13.6	2.2
			1725	23.2	.8	22.7	1.4	22.5	1.8	22.3	2.1	21.4	3.5
55	.02984	.0200	860	25.6	.3	24.6	1.0	24.1	1.4	23.6	1.8	21.6	3.5
			1140	35.0	.5	34.0	1.5	33.5	2.0	33.0	2.6	31.0	4.7
			1725	51.4	1.3	50.4	2.6	49.9	3.4	49.4	4.2	47.4	7.5

\*Delivery and input horsepower are based on liquid viscosity of 100 ssu

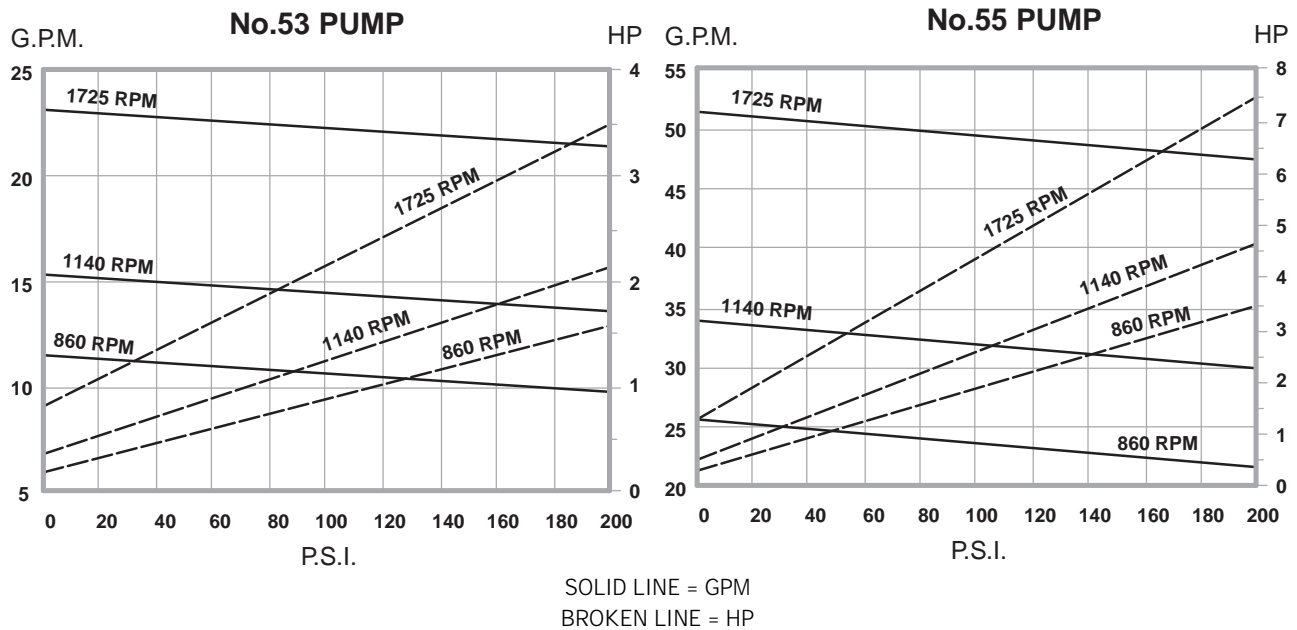
# BSM ROTARY GEAR PUMPS

## 53/55-SERIES

### OPERATING CHARACTERISTICS, 70 SSU LIQUID



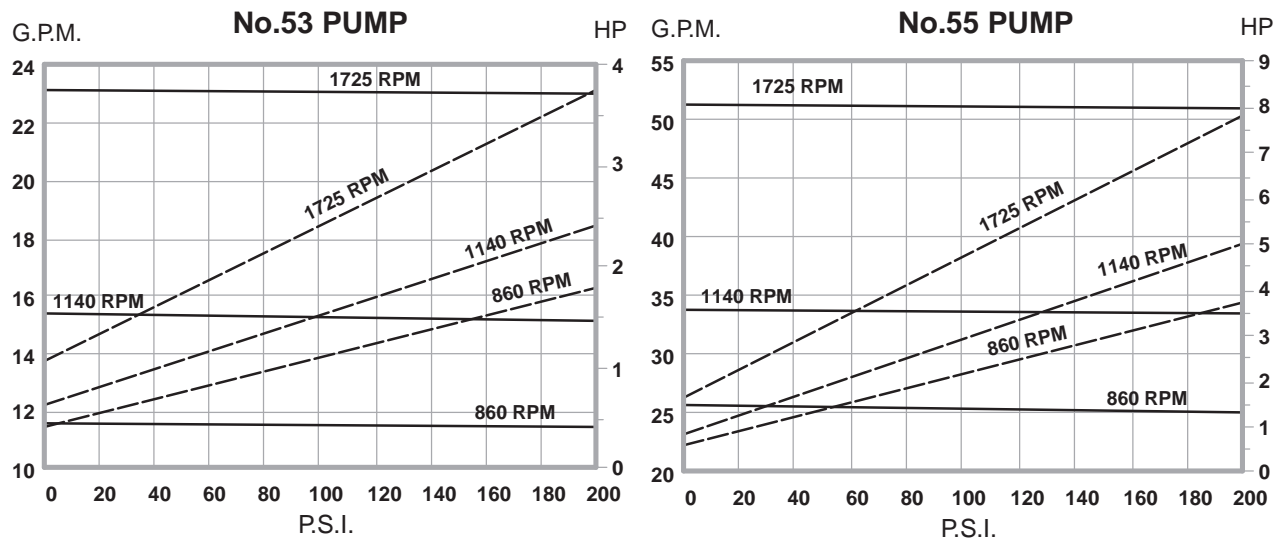
### OPERATING CHARACTERISTICS, 100 SSU LIQUID



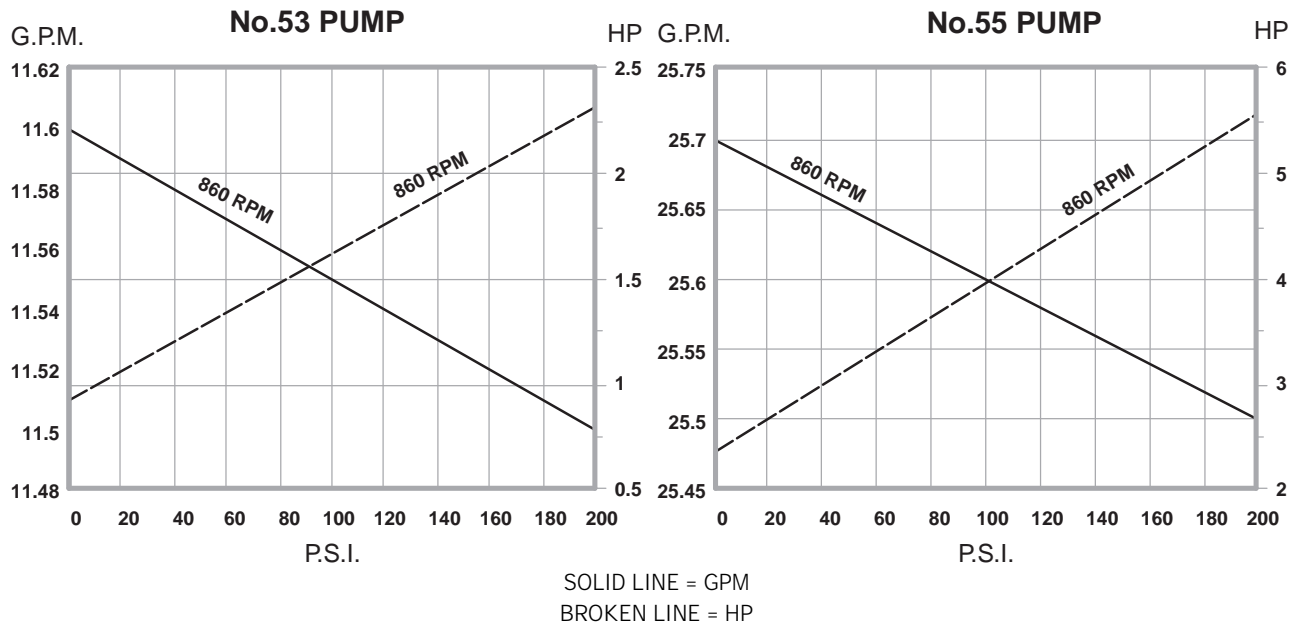
# BSM ROTARY GEAR PUMPS

## 53/55-SERIES

### OPERATING CHARACTERISTICS, 1,000 SSU LIQUID



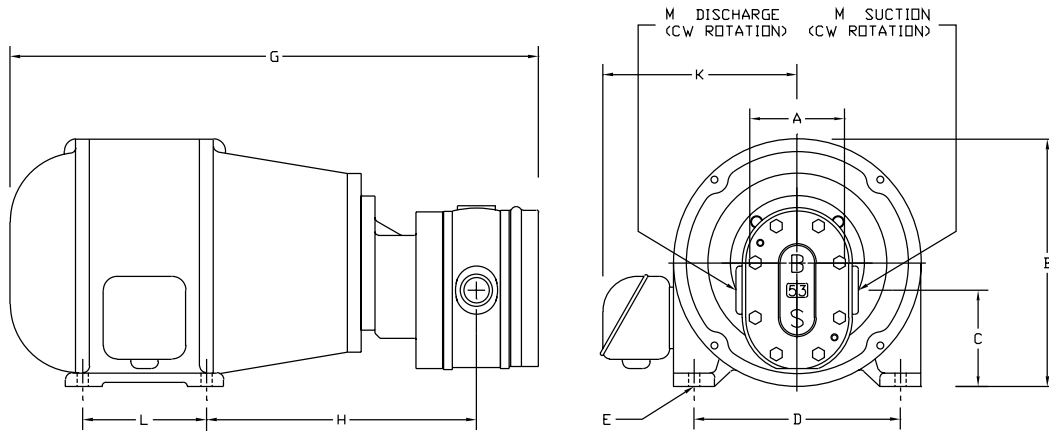
### OPERATING CHARACTERISTICS, 3,000 SSU LIQUID



# BSM ROTARY GEAR PUMPS

## 53/55-SERIES CLOSE COUPLED MOTOR DRIVEN ROTARY GEAR PUMPS (E-DRIVE)

BSM 53/55-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 53/55 Close Coupled Motor Driven Rotary Gear Pumps are available in motor speeds of 860, 1140 & 1725 rpm with capacities to 51.4 gpm and pressures to 200 psi.



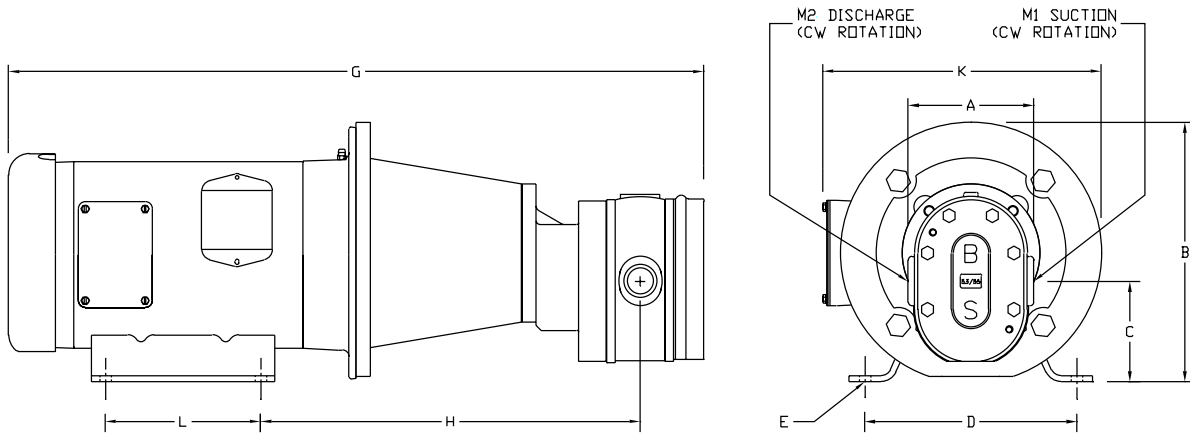
### DIMENSIONS (INCHES)

Model	Motor Frame	A	B	C	D	E	G	H	K	L	M1	M2
53-E	182	4.44	9.00	3.50	7.50	0.41	18.31	8.94	7.06	4.50	3/4	1
	184	4.44	9.00	3.50	7.50	0.41	19.31	8.94	7.06	5.50	3/4	1
	213	4.44	10.38	4.25	8.50	0.41	20.88	9.75	7.94	5.50	3/4	1
	215	4.44	10.38	4.25	8.50	0.41	21.38	9.75	7.94	7.00	3/4	1
	254U	4.44	12.38	5.25	10.00	0.41	23.56	11.93	9.81	8.25	1	1 1/4
55-E	182	5.00	9.00	3.50	7.50	0.41	19.68	10.82	7.06	4.50	1	1 1/4
	184	5.00	9.00	3.50	7.50	0.41	20.68	10.82	7.06	5.50	1	1 1/4
	213	5.00	10.38	4.25	8.50	0.41	22.25	11.63	7.94	5.50	1	1 1/4
	215	5.00	10.38	4.25	8.50	0.41	22.75	11.63	7.94	7.00	1	1 1/4
	254U	5.00	12.38	5.25	10.00	0.41	24.93	13.81	9.81	8.25	1	1 1/4

# BSM ROTARY GEAR PUMPS

## 53/55-SERIES MOTOR DRIVEN ROTARY GEAR PUMPS (A-DRIVE)

BSM 53/55-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 53/55 Motor Driven Rotary Gear Pumps are available in motor speeds of 860, 1140, 1725 rpm with capacities to 51.4 gpm and pressures to 200 psi.



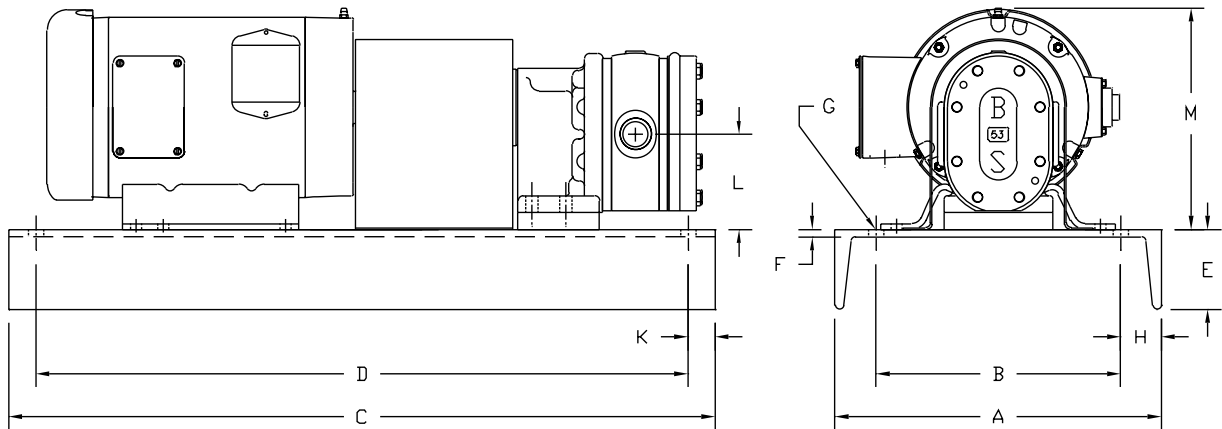
### DIMENSIONS (INCHES)

Model No.	Motor Frame	A	B	C	D	E	G	H	K	L	M1	M2
<b>53-A</b>	56C	4.44	6.88	2.50	4.88	0.34	21.19	11.74	8.31	3.00	3/4	1
	145TC	4.44	6.88	2.50	5.50	0.34	22.91	12.06	8.56	5.00	3/4	1
	182TC	4.44	8.69	3.50	7.50	0.41	24.50	13.68	9.81	4.50	3/4	1
	184TC	4.44	8.69	3.50	7.50	0.41	25.50	13.68	9.81	5.50	3/4	1
<b>55-A</b>	56C	5.00	6.88	2.50	4.88	0.34	22.19	12.24	8.31	3.00	1	1 1/4
	145TC	5.00	6.88	2.50	5.50	0.34	23.91	12.56	8.56	5.00	1	1 1/4
	182TC	5.00	8.69	3.50	7.50	0.41	25.50	14.18	9.81	4.50	1	1 1/4
	184TC	5.00	8.69	3.50	7.50	0.41	26.50	14.18	9.81	5.50	1	1 1/4
	213TC	5.00	10.25	4.25	8.50	0.41	28.41	15.06	12.16	5.50	1	1 1/4
	215	5.00	10.25	4.25	8.50	0.41	29.91	15.06	12.16	7.00	1	1 1/4

# BSM ROTARY GEAR PUMPS

## 53/55-SERIES BASE MOUNTED ASSEMBLIES (D-DRIVE)

BSM 53/55-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 eye-bolts, 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
<b>53-D</b>	56	12.00	9.00	26.00	24.00	2.94	0.28	0.56	1.50	1.00	2.50	6.88
	145T	12.00	9.00	26.00	24.00	2.94	0.28	0.56	1.50	1.00	2.50	6.88
	182T	15.00	12.00	30.00	28.00	3.41	0.41	0.56	1.50	1.00	3.50	8.69
	184T	15.00	12.00	30.00	28.00	3.41	0.41	0.56	1.50	1.00	3.50	8.69
<b>55-D</b>	56	12.00	9.00	30.00	28.00	2.94	0.28	0.56	1.50	1.00	2.50	6.88
	145T	12.00	9.00	30.00	28.00	2.94	0.28	0.56	1.50	1.00	2.50	6.88
	182T	15.00	12.00	32.00	30.00	3.41	0.41	0.56	1.50	1.00	3.50	8.69
	184T	15.00	12.00	32.00	30.00	3.41	0.41	0.56	1.50	1.00	3.50	8.69
	213T	15.00	12.00	34.00	32.00	3.41	0.41	0.56	1.50	1.00	4.25	10.25
	215T	15.00	12.00	34.00	32.00	3.41	0.41	0.56	1.50	1.00	4.25	10.25