

Low Flow Elevator Screw Pumps

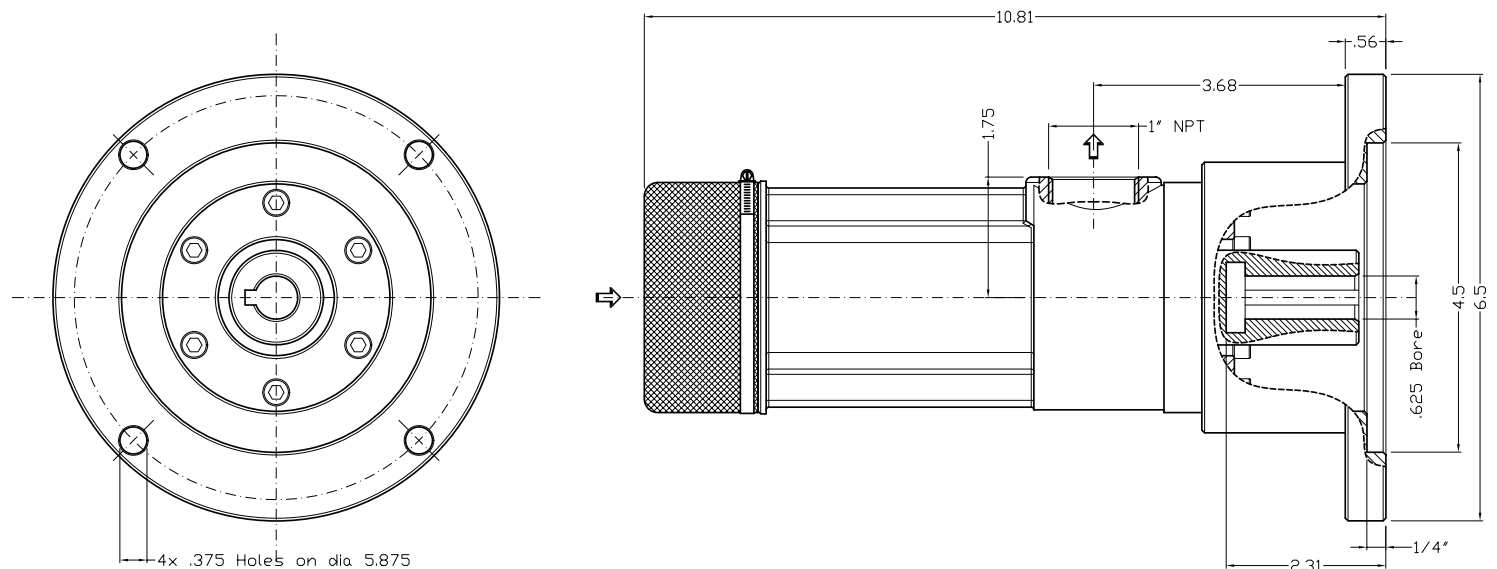
- **Hollow Shaft Pumps Mount Directly to NEMA 56C Frame motors**
- **Six Flow Rates Available**
- **Pump Rotation is C.W. as Viewed from Drive End**
- **300 Micron Screen**
- **Virtually Noise and Pulsation FREE**

Settima has been manufacturing elevator screw pumps since 1978 and currently produces over 30,000 pumps per year. The pumps are a positive displacement rotary design with axial flow. A major design feature is the self aligning power rotor which virtually eliminates pump noise and pulsations.

What separates this product line from other screw pumps is the 5/8" dia hollow shaft and the 56C flange. The pump is designed to mount directly to a standard NEMA 56C frame motor. This allows the O.E.M. to use an "off the self" motor.

These pumps can be mounted in any position as long as the inlet remains submersed in oil. This accommodates both submersible and dry motor arrangements.

Dimensional Data:



Electro-Mech Industries

2420 Hamilton Rd., Arlington Heights, IL 60005
Phone: (847) 593-4900 Fax (847) 593-1394

SPEC.: GR2532 PG1
DATE: January 2007

MANUFACTURED BY:



SETTIMA MECCANICA

Low Flow Elevator Screw Pumps

Settima Elevator Screw Pumps

**Roped Hydro (1:2) Car Speed (feet per minute) for Various Dia. Pistons
1750 RPM, 400 PSI, 150 SSU**

Car Speed (Feet per Minute)										
Piston (mm)	60					70			80	90
Piston (in)	2.362	2 3/8	2 1/2	2 5/8	2 3/4	2.756	2 7/8	3.000	3.150	3.543
Model#	Car Speed (ft/min)									
GR25-25L	39.58	39.16	35.34	32.05	29.20	29.08	26.72	24.54	22.26	17.59
GR25-30L	49.26	48.73	43.98	39.89	36.34	36.19	33.25	30.54	27.71	21.89
GR32-35L	58.05	57.43	51.83	47.01	42.83	42.65	39.19	35.99	32.65	25.80
GR32-45L	71.24	70.48	63.61	57.69	52.57	52.34	48.10	44.17	40.08	31.66
GR32-55L	77.40	76.57	69.10	62.68	57.11	56.87	52.25	47.99	43.54	34.40
GR32-75L	102.91	101.80	91.88	83.34	75.93	75.61	69.47	63.80	57.89	45.74

Note: For direct drive Hydro applications, Car speed will be 1/2 of stated values.

Settima Elevator Screw Pumps

1750 RPM, 150 SSU

Model#		Pressure at Pump Discharge (PSI)									
		200	300	350	400	450	500	550	600	700	800
GR25-25L	GPM	4.70	4.60	4.50	4.50	4.40	4.40	4.30	4.30	4.20	4.20
	HP	0.8	1.1	1.3	1.4	1.5	1.7	1.8	1.9	2.2	2.5
GR25-30L	GPM	5.90	5.70	5.60	5.60	5.50	5.50	5.40	5.40	5.30	5.20
	HP	1.0	1.4	1.6	1.8	1.9	2.1	2.3	2.4	2.8	3.1
GR32-35L	GPM	6.90	6.70	6.70	6.60	6.50	6.50	6.40	6.30	6.20	6.10
	HP	1.2	1.6	1.9	2.1	2.3	2.5	2.7	2.9	3.2	3.6
GR32-45L	GPM	8.40	8.20	8.10	8.10	8.00	7.90	7.80	7.80	7.60	7.50
	HP	1.5	2.0	2.3	2.5	2.8	3.0	3.3	3.5	4.0	4.4
GR32-55L	GPM	9.20	9.00	8.90	8.80	8.70	8.60	8.50	8.50	8.30	8.20
	HP	1.6	2.2	2.5	2.8	3.0	3.3	3.6	3.9	4.3	4.9
GR32-75L	GPM	12.30	12.00	11.80	11.70	11.60	11.50	11.40	11.30	11.10	10.90
	HP	2.1	2.9	3.3	3.7	4.0	4.4	4.8	5.1	5.8	6.5



Electro-Mech. Industries
250 Hamilton Rd., Arlington Heights, IL 60005
Phone (847) 593-4900 Fax (847) 593-1394

SPEC.: GR2532r2PG2
DATE: July 2016

MANUFACTURED BY:



Elevator Screw Pumps

Features & Benefits

Overview:

Settima Meccanica has been manufacturing Elevator screw pumps since 1978 and is ISO 9001/2000 certified. With over 500,000 units in operation and current production levels exceeding 30,000 unit per year, Settima Meccanica is an industry leading screw pump manufacturer.

Operation:

All models are positive displacement rotary pumps with an axial flow design. There are only three moving parts and the power rotor is the only driven component that extends outside the housing. The idler screws actually act as sealing parts and are turned hydraulically by the pumped fluid. There is only a rolling action between the drive screw and the idlers this rolling action eliminates noise and vibration.

Specifications & Features

- * Rotor Housing: Alloy Al-Si Treated - UNI 3600
- * Power Rotor: Steel - UNI 4838
- * Idler Rotors: Pearlitic iron - UNI 5007
- * Suction Filter: 0.0003 inch²
- * Operating Pressure: 1,100 PSI max
- * Viscosity: 18 to 9270 SSU
- * Temperature: 100 deg C max
- * Rotation: C.W. as viewed facing pump shaft
- * Noise: Silent

Product Offering:

- * Residential Submersible Standard :
Six models ranging from 9 to 25 GPM @ 3400rpm. Standardized shaft and mounting dimensions allow for mounting to all the most popular submersible motors.
- * Residential Submersible Hollow Shaft:
Six models ranging from 9 to 25 GPM @3400rpm. These pumps are designed to mount to a standard 56C face motor. A Submersible or Dry mount motor can be used.
- * Submersible Commercial :
Twenty one models ranging from 33 to 255GPM @ 3400rpm. Standardized shaft and mounting dimensions allow for mounting to all common submersible motors.
- * Dry Hydraulic Commercial:
Thirteen models with flows ranging from 41 to 321 GPM



Electro-Mech Industries

2420 Hamilton Rd., Arlington Heights, IL 60005
Phone: (847) 593-4900 Fax (847) 593-1394

SPEC.: SM3501
DATE: Aug. 09

MANUFACTURED BY:



SETTIMA MECCANICA

Elevator Screw Pump

Cross Reference

Submersible Pumps

SETTIMA		ALLWEILER		IMO USA	
MODEL	GPM	MODEL	GPM	MODEL	GPM
GR25 SMU 25L	9.0	20 - 38	8.1	-	
GR25 SMU 30L	11.2	20 - 46	10.8	-	
GR32 SMU 35L	13.2	20 - 50		-	
GR32 SMU 45L	16.2	20 - 56	15.2	-	
GR32 SMU 55L	17.6	40 - 41	17.0	-	
GR32 SMU 75L	23.5	40 - 49	23.0	-	
GR40 SMU 100L	32.2	80 - 36	31.0	-	
GR40 SMU 125L	39.1	80 - 42	37.0	-	
GR40 SMU 150L	46.0	80 - 46	45.0	-	
-		-		187AJ	49.1
GR45 SMU 180L	55.3	140 - 37	54.5	187Y	53.6
		140 - 39	59.0	187P	58.5
GR45 SMU 210L	65.4	140 - 43	65.1	187M	63.7
GR45 SMU 250L	78.5	140 - 46	76.0	187	74.4
GR55 SMU 270L	82.5	-		217Y	83.8
GR55 SMU 300L	93.4	-		217P	93.8
GR55 SMU 330L	103.2	210 - 40	97.2	217M	101.3
-		210 - 43	107.0	-	
GR55 SMU 380L	117.3	210 - 46	122.3	217	118.4
GR60 SMU 440L	139.6	280 - 43	142.7	236G	138.0
GR60 SMU 500L	155.1	280 - 46	162.2	236	156.8
GR70 SMU 560L	167.1	280 - 51	185.2	-	
-		-		236AS	181.6
GR70 SMU 600L	190.0	440 - 40	204.0	276P	196.2
GR70 SMU 660L	211.1	-		276G	220.1
GR70 SMU 800L	246.3	440 - 46	258.9	276	248.8

Comparison Parameters (Submersible):

Pressure: 500 PSI
 Pump Speed: 3400 RPM
 Oil Viscosity: 150SSU

Dry Mounted Pumps

IMO		SETTIMA	
MODEL	GPM	MODEL	GPM
		GR45 SMTU 180L	41.2
3D-187	48.0	GR45 SMTU 210L	48.8
		GR55 SMTU 250L	63.3
		GR55 SMTU 300L	71.1
3D-218	81.0	GR55 SMTU 330L	79.2
		GR55 SMTU 380L	85.3
		GR60 SMTU 440L	101.7
3D-250	124.9	GR60 SMTU 500L	113.0
		GR70 SMTU 560L	121.8
		GR70 SMTU 600L	138.4
3D-275	173.0	GR70 SMTU 660L	153.6
		GR70 SMTU 800L	179.1
3D-312	261.0	GR80 SMTU 1000L	234.1
		GR80 SMTU 1200L	274.7
3D-350	377.0		

Note: ** Flow at 2400 rpm

Comparison Parameters (Dry Mounted):

Pressure: 400 PSI
 Pump Speed: 2500 RPM
 Oil Viscosity: 100SSU

Data is subject to change without notice



Electro-Mech Industries

2420 Hamilton Rd., Arlington Heights, IL 60005
 Phone: (847) 593-4900 Fax (847) 593-1394

SPEC.: SM3502
 DATE: Aug 09

MANUFACTURED BY:



SETTIMA MECCANICA

SUBMERSIBLE PERFORMANCE DATA

3400 RPM, 150SSU

MODEL		PRESSURE							
		250	350	400	500	550	600	700	800
GR 25 25L	GPM	9.3	9.2	9.1	9.0	8.9	8.9	8.8	8.7
	HP	2.0	2.6	2.9	3.6	3.9	4.2	4.8	5.4
GR 25 30L	GPM	11.6	11.5	11.4	11.2	11.2	11.1	11.0	10.9
	HP	2.5	3.3	3.7	4.4	4.8	5.2	6.0	6.8
GR 32 35L	GPM	13.7	13.5	13.4	13.2	13.2	13.1	12.9	12.8
	HP	2.9	3.8	4.2	5.1	5.6	6.1	7.0	7.9
GR 32 45L	GPM	16.8	16.5	16.4	16.2	16.1	16.0	15.8	15.7
	HP	3.5	4.6	5.2	6.3	6.8	7.4	8.5	9.6
GR 32 55L	GPM	18.3	18.0	17.9	17.6	17.5	17.4	17.3	17.1
	HP	3.8	5.0	5.6	6.9	7.5	8.1	9.3	10.5
GR 32 75L	GPM	24.4	24.0	23.8	23.5	23.4	23.3	23.0	22.8
	HP	5.1	6.7	7.5	9.1	9.9	10.8	12.4	14.0
GR 40 100L	GPM	33.4	32.8	32.6	32.2	32.0	31.8	31.5	31.1
	HP	6.8	9.0	10.1	12.3	13.4	14.5	16.7	18.9
GR 40 125L	GPM	40.5	39.9	39.6	39.1	38.8	38.6	38.2	37.8
	HP	8.3	10.9	12.3	15.0	16.3	17.7	20.3	23.0
GR 40 150L	GPM	47.6	46.9	46.6	46.0	45.7	45.4	44.9	44.5
	HP	9.7	12.9	14.5	17.6	19.2	20.8	23.9	27.1
GR 45 180L	GPM	57.3	56.4	56.0	55.3	54.9	54.6	54.0	53.5
	HP	11.6	15.3	17.3	21.0	22.9	24.8	28.6	32.4
GR 45 210L	GPM	67.8	66.8	66.3	65.4	65.1	64.7	64.0	63.4
	HP	13.7	18.1	20.4	24.9	27.1	29.4	33.9	38.4
GR 45 250L	GPM	81.4	80.1	79.6	78.5	78.1	77.6	76.8	76.0
	HP	16.4	21.8	24.5	29.9	32.6	35.3	40.6	46.0
GR 55 270L	GPM	85.6	84.2	83.6	82.5	82.1	81.6	80.7	79.9
	HP	17.0	22.6	25.5	31.1	33.9	36.8	42.4	48.1
GR 55 300L	GPM	96.8	95.3	94.6	93.4	92.9	92.3	91.3	90.4
	HP	19.2	25.6	28.8	35.2	38.4	41.7	48.0	54.4
GR 55 330L	GPM	107.0	105.3	104.5	103.2	102.6	102.0	100.9	99.9
	HP	21.2	28.3	31.8	38.9	42.4	46.0	53.0	60.1
GR 55 380L	GPM	121.6	119.7	118.8	117.3	116.6	115.9	114.7	113.6
	HP	24.1	32.1	36.2	44.3	48.2	52.3	60.3	68.4
GR 60 440L	GPM	144.7	142.5	141.4	139.6	138.8	138.0	136.5	135.1
	HP	28.5	38.0	42.9	52.5	57.2	62.1	71.6	81.2
GR 60 500L	GPM	160.8	158.3	157.2	155.1	154.2	153.3	151.7	150.2
	HP	31.7	42.3	47.7	58.3	63.6	69.0	79.5	90.2
GR 70 560L	GPM	173.3	170.6	169.3	167.1	166.1	165.2	163.4	161.8
	HP	33.8	45.2	51.0	62.5	68.1	74.0	85.4	96.8
GR 70 600L	GPM	197.0	193.9	192.5	190.0	188.9	187.8	185.8	183.9
	HP	38.4	51.4	58.0	71.0	77.5	84.1	97.0	110.1
GR 70 660L	GPM	218.9	215.5	213.9	211.1	209.9	208.7	206.4	204.4
	HP	42.7	57.1	64.4	78.9	86.1	93.4	107.8	122.3
GR 70 800L	GPM	255.4	251.4	249.6	246.3	244.9	243.4	240.8	238.5
	HP	49.8	66.6	75.2	92.1	100.4	109.0	125.8	142.7

Data is subject to change without notice



Electro-Mech Industries

2420 Hamilton Rd., Arlington Heights, IL 60005
 Phone: (847) 593-4900 Fax (847) 593-1394

SPEC.: SM3504
 DATE: Aug. 09

MANUFACTURED BY:



ZETIMA MECCANICA

PLUNGER SPEED (ft./min.)

DIRECT ACTING 3400 RPM. 350 PSI, 150 SSU

3400 RPM 150SSU C PLUNGER SPEED (FT/MIN) DIRECT ACTING

350PSI

MODEL	GPM	PLUNGER DIAMETER (INCHES)																
		3.88	4.00	4.38	4.44	4.50	5.00	5.38	5.44	6.00	6.50	7.00	7.50	8.00	8.50	9.00	10.00	
GR 25	25L	9.2	15.0	14.0	11.7	11.4	11.1	9.0	7.8	-	-	-	-	-	-	-	-	-
	30L	11.5	18.7	17.5	14.7	14.3	13.9	11.2	9.7	9.5	-	-	-	-	-	-	-	-
GR 32	35L	13.5	22.1	20.7	17.3	16.8	16.4	13.2	11.5	11.2	9.2	-	-	-	-	-	-	-
	45L	16.5	27.0	25.3	21.1	20.6	20.0	16.2	14.0	13.7	11.2	9.6	-	-	-	-	-	-
	55L	18.0	29.4	27.6	23.1	22.4	21.8	17.7	15.3	14.9	12.3	10.4	9.0	-	-	-	-	-
	75L	24.0	39.2	36.8	30.8	29.9	29.1	23.5	20.4	19.9	16.4	13.9	12.0	10.5	-	-	-	-
GR 40	100L	32.8	53.6	50.3	42.0	40.9	39.7	32.2	27.9	27.2	22.4	19.0	16.4	14.3	12.6	-	-	-
	125L	39.9	65.1	61.1	51.1	49.6	48.3	39.1	33.8	33.1	27.1	23.1	19.9	17.4	15.3	13.5	-	-
	150L	46.9	76.6	71.9	60.1	58.4	56.8	46.0	39.8	38.9	31.9	27.2	23.5	20.4	18.0	15.9	14.2	-
GR 45	180L	56.4	92.1	86.4	72.2	70.2	68.3	55.3	47.8	46.8	38.4	32.7	28.2	24.6	21.6	19.1	17.1	13.8
	210L	66.8	109.0	102.3	85.5	83.1	80.8	65.5	56.7	55.4	45.5	38.7	33.4	29.1	25.6	22.7	20.2	16.4
	250L	80.1	130.8	122.8	102.6	99.8	97.0	78.6	68.0	66.4	54.6	46.5	40.1	34.9	30.7	27.2	24.3	19.6
GR 55	270L	84.2	137.5	129.1	107.9	104.9	102.0	82.6	71.5	69.8	57.4	48.9	42.1	36.7	32.3	28.6	25.5	20.6
	300L	95.3	155.6	146.0	122.1	118.7	115.4	93.5	80.9	79.0	64.9	55.3	47.7	41.5	36.5	32.3	28.8	23.4
	330L	105.3	171.9	161.3	134.8	131.1	127.5	103.2	89.3	87.3	71.7	61.1	52.7	45.9	40.3	35.7	31.9	25.8
	380L	119.7	195.4	183.4	153.3	149.0	144.9	117.4	101.6	99.2	81.5	69.5	59.9	52.2	45.8	40.6	36.2	29.3
GR 60	440L	142.5	232.6	218.3	182.4	177.3	172.4	139.7	120.9	118.1	97.0	82.7	71.3	62.1	54.6	48.3	43.1	34.9
	500L	158.3	258.4	242.5	202.7	197.0	191.6	155.2	134.3	131.2	107.8	91.8	79.2	69.0	60.6	53.7	47.9	38.8
GR 70	560L	170.6	-	261.3	218.4	212.3	206.5	167.2	144.7	141.4	116.1	99.0	85.3	74.3	65.3	57.9	51.6	41.8
	600L	193.9	-	-	248.3	241.4	234.7	190.1	164.5	160.8	132.0	112.5	97.0	84.5	74.3	65.8	58.7	47.5
	660L	215.5	-	-	-	268.2	260.8	211.2	182.8	178.6	146.7	125.0	107.8	93.9	82.5	73.1	65.2	52.8
	800L	251.4	-	-	-	-	-	246.5	213.3	208.4	171.1	145.8	125.7	109.5	96.3	85.3	76.1	61.6

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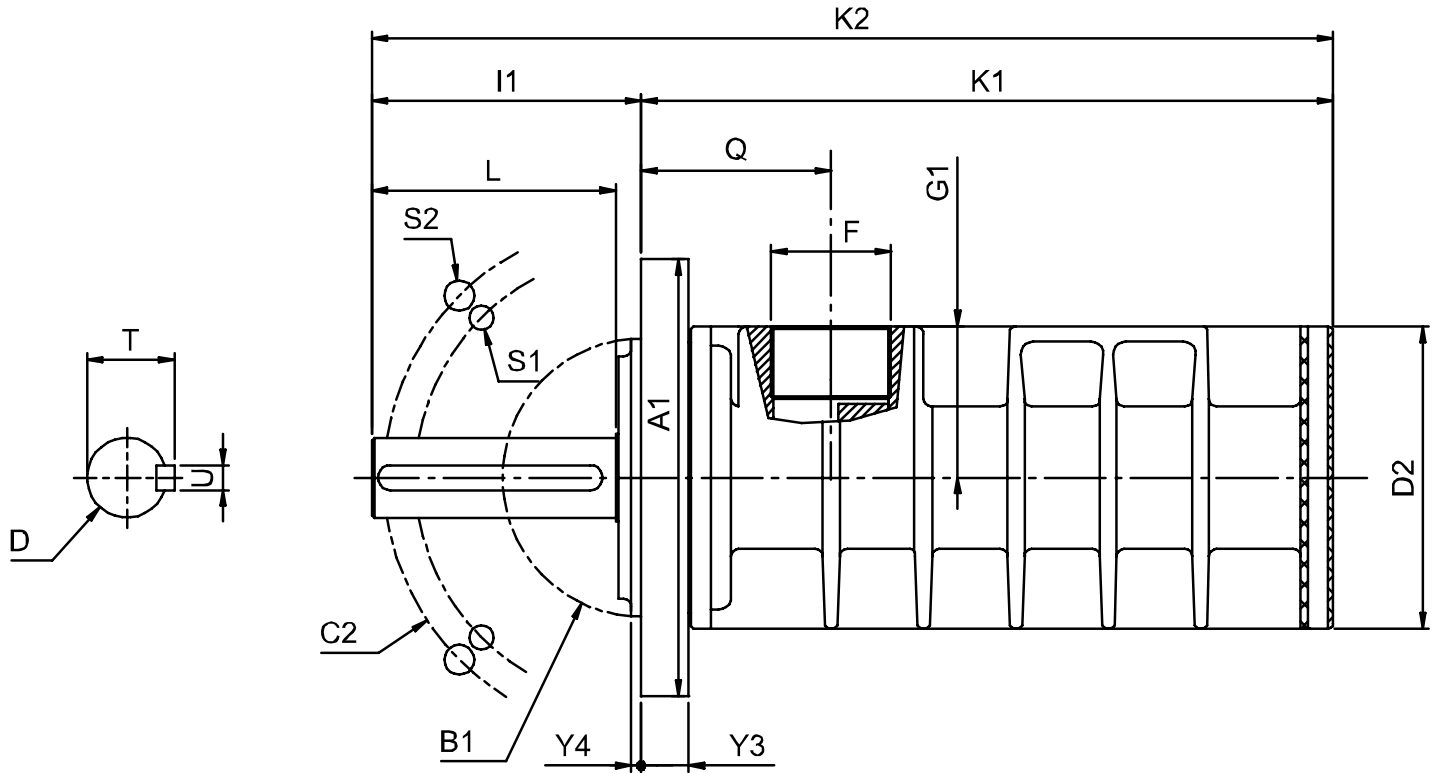
MANUFACTURED BY:

SPEC.: SM3505
DATE: JAN '15



SETTIMA MECCANICA

SUBMERSIBLE PUMP DIMENSIONS



MODEL	PUMP					SHAFT				DISCHARGE	
	D2	I1	K1	K2	Q	D (min)	T	U	L	F (NPT)	G1
GR20	2.36	1.61	7.05	8.66	2.36	0.55	0.63	0.2	1.22	1/2"	1.18
GR25	3.43	2.24	8.87	11.11	2.36	0.7472	0.85	0.23	1.38	1"	1.77
GR32	3.43	2.2	8.65	10.85	2.04	0.7472	0.85	0.23	1.38	1"	1.77
GR40	4.37	2.28	9.67	11.95	2.4	0.7472	0.85	0.23	1.38	1-1/4"	2.17
GR45	4.8	4.25	10.91	15.16	2.99	1.2591	1.38	0.39	3.84	2"	2.38
GR55	5.55	4.25	12.6	16.85	2.64	1.2591	1.38	0.39	3.84	2"	2.78
GR60	6.55	4.25	13.45	17.7	3.15	1.2591	1.38	0.39	3.84	2"	3.25
GR70	7.09	4.19	21.16	25.35	3.25	1.2591	1.38	0.39	3.84	2 1/2"	3.54

MODEL	FLANGE								WEIGHT
	A1	B1	C1	C2	S1/QTY	S2/QTY	Y3	Y4	NET
GR20	5.04 SAE	3.25	4.17	-	0.47/2	-	0.39	0.31	4.5
GR25	6.1 RND	3.15	5.31	-	0.37/2	-	0.61	0.83	9.5
GR32	6.1 RND	3.15	5.31	-	0.37/2	-	0.54	0.06	9.5
GR40	6.1 RND	4.33	5.31	-	0.37/2	-	0.24	0.12	14.5
GR45	6.89 SQ	4.37	7.12	8.11	0.37/4	0.47/4	0.79	0.16	21.4
GR55	6.89 SQ	4.37	7.12	8.11	0.37/4	0.47/4	0.79	0.16	33.1
GR60	6.89 SQ	4.37	7.12	8.11	0.37/4	0.47/4	0.79	0.16	39.7
GR70	6.89 SQ	4.37	7.12	8.11	0.37/4	0.47/4	0.79	0.16	59.5



Electro-Mech Industries

2420 Hamilton Rd., Arlington Heights, IL 60005
 Phone: (847) 593-4900 Fax (847) 593-1394

SPEC.: SM3503
 DATE: Aug. 11

MANUFACTURED BY:

