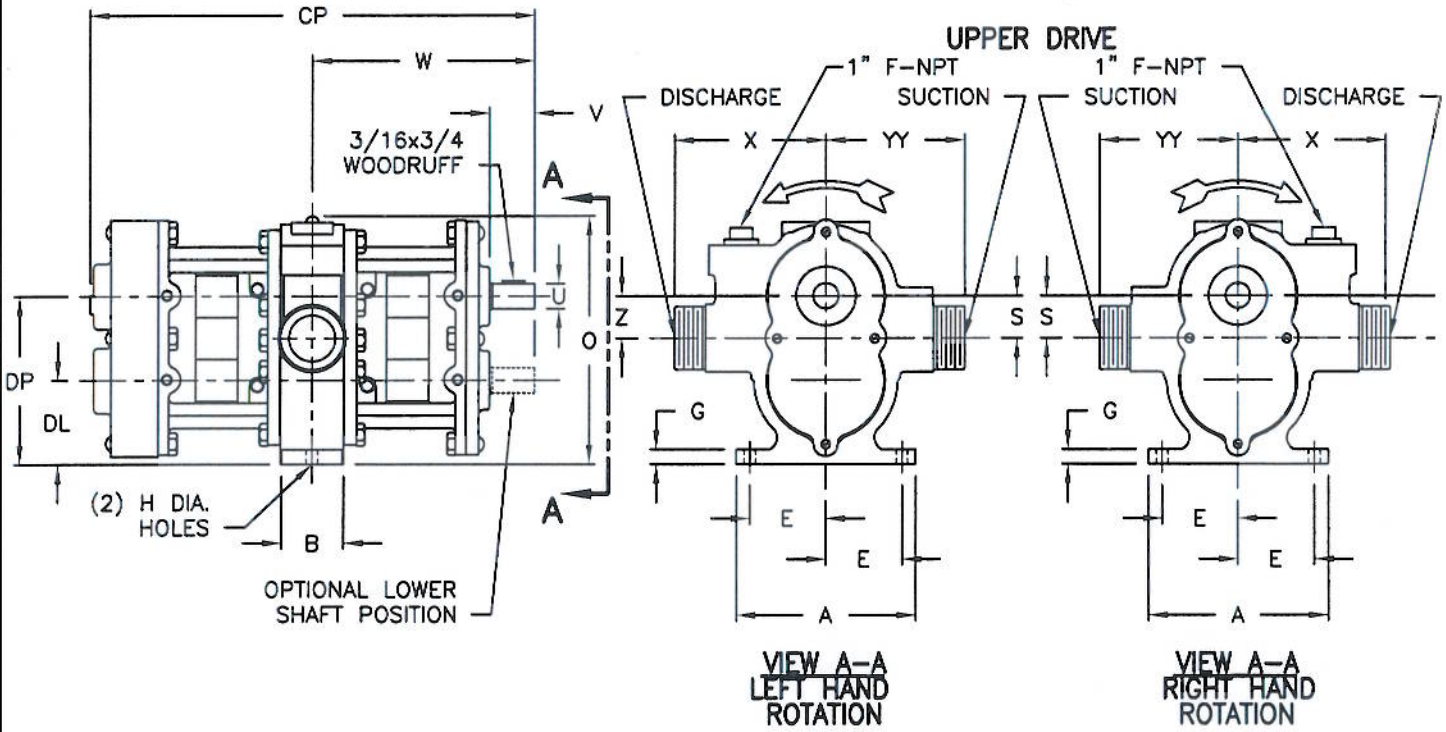
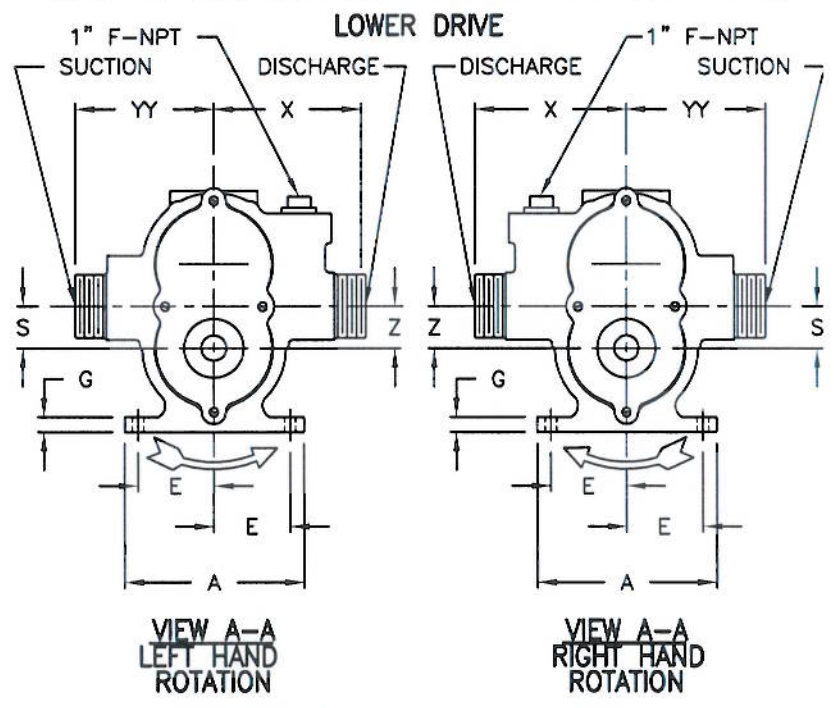




**ROTARY GEAR PUMPS
PUMP ONLY**



- NOTES:**
1. All dimensions are in inches (mm).
 2. Dimensions may vary $\pm .25"$ (6).
 3. Not for construction purposes unless certified.
 4. Discharge and suction ports are:
M-NPT (Male pipe threads)
 5. Use the following notation for pump identification:
UR = UPPER SHAFT - RIGHT HAND ROTATION
UL = UPPER SHAFT - LEFT HAND ROTATION
LR = LOWER SHAFT - RIGHT HAND ROTATION
LL = LOWER SHAFT - LEFT HAND ROTATION

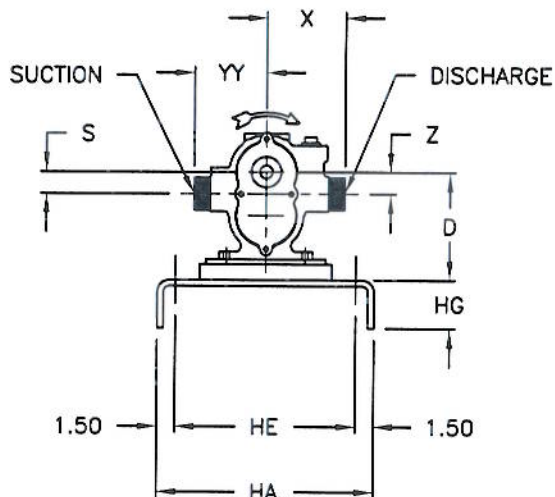
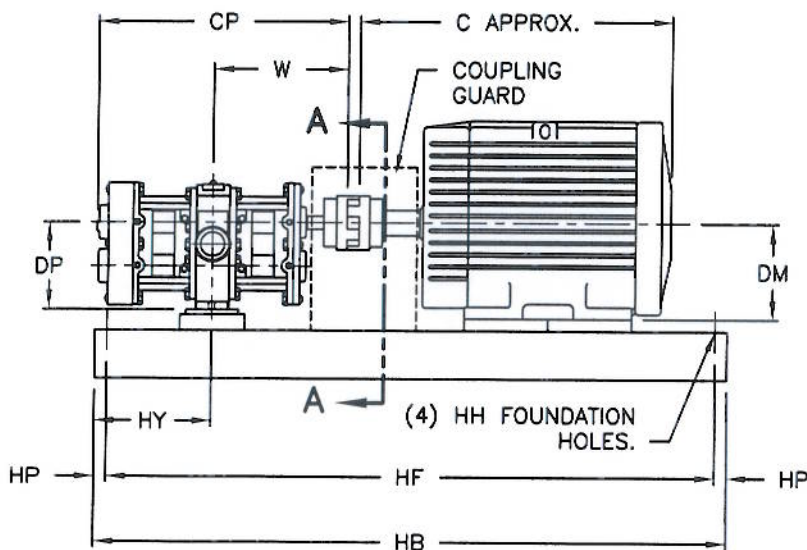


MODEL	DISCHARGE	SUCTION	A	B	CP	DL	DP	E	G	H
20	1 1/2" M-NPT	1 1/2" M-NPT	5.63 (143)	1.75 (44)	13.25 (337)	2.50 (64)	5.00 (127)	2.25 (57)	.38 (10)	.38 (10)

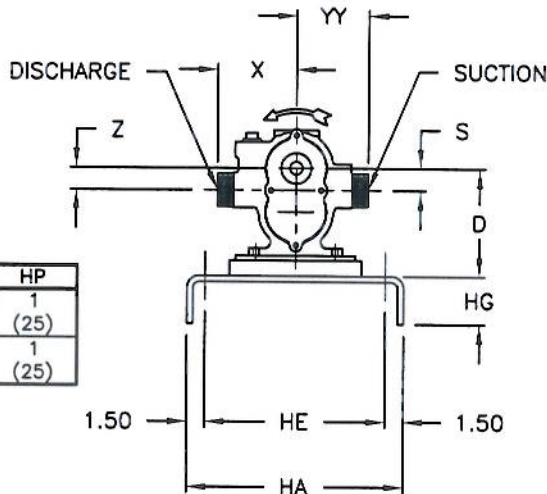
MODEL	O	S	U	V	W	X	YY	Z
20	7.25 (184)	1.25 (32)	.75 (19)	1.34 (34)	6.60 (168)	4.50 (114)	4.13 (105)	1.25 (32)



**ROTARY GEAR PUMPS
ELECTRIC MOTOR DRIVEN ON STANDARD STEEL BASE
UPPER DRIVE**



**VIEW A-A
RIGHT HAND
ROTATION**



**VIEW A-A
LEFT HAND
ROTATION**

NOTES:

1. All dimensions are in inches (mm).
2. Dimensions may vary $\pm .25"$ (6).
3. Not for construction purposes unless certified.
4. Coupling gap may vary .13"(3) to 1.00"(25).
5. Motor dimension "CP" is approximate. Motor dimensions are not specified as they vary with each motor manufacturer.
6. Discharge and suction ports are:
M-NPT (Male pipe threads)
7. Use the following notation for pump identification:
UR = UPPER SHAFT - RIGHT HAND ROTATION
UL = UPPER SHAFT - LEFT HAND ROTATION

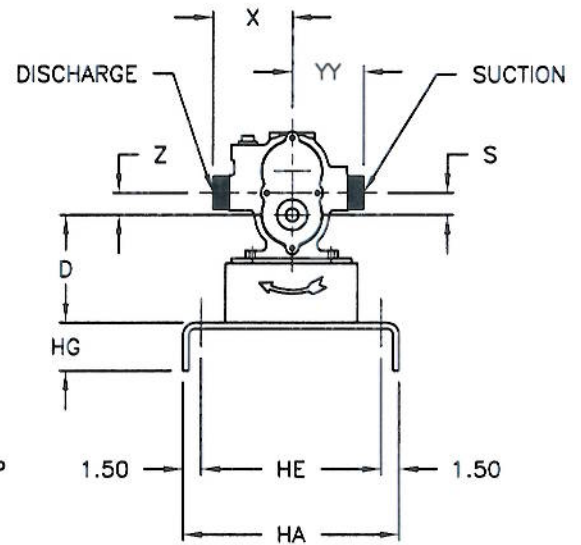
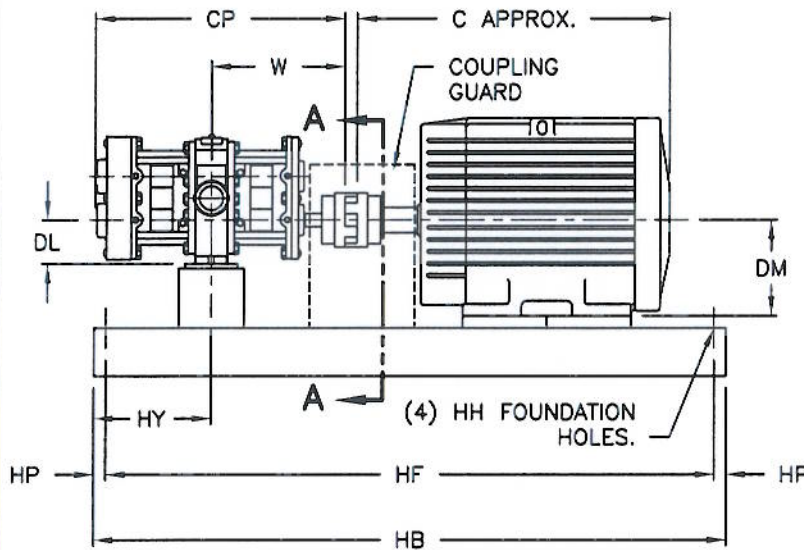
BASE NO.	SIZE	HA	HB	HE	HF	HG	HH	HP
1	12 X 30	12 (305)	30 (762)	9 (229)	28 (711)	3 (76)	.63 (16)	1 (25)
2	12 X 34	12 (305)	34 (864)	9 (229)	32 (813)	3 (76)	.63 (16)	1 (25)

MODEL	FRAME	143T	145T	182T	184T	213T	215T
	C	13 (330)	13 (330)	13 (330)	14 (356)	16 (406)	18 (457)
	DM	3.50 (89)	3.50 (89)	4.50 (114)	4.50 (114)	5.25 (133)	5.25 (133)
20	BASE NO.	1	1	1	2	2	2
	D	5.00 (127)	5.00 (127)	5.00 (127)	5.00 (127)	5.25 (133)	5.25 (133)

MODEL	DISCHARGE	SUCTION	CP	DP	HY	S	W	X	YY	Z
20	1 1/2" M-NPT	1 1/2" M-NPT	13.25 (337)	5.00 (127)	7.50 (191)	1.25 (32)	6.60 (168)	4.50 (114)	4.13 (105)	1.25 (32)



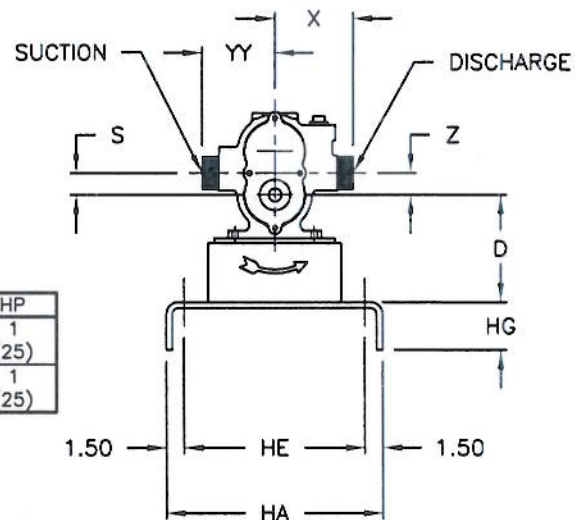
ROTARY GEAR PUMPS ELECTRIC MOTOR DRIVEN ON STANDARD STEEL BASE LOWER DRIVE



NOTES:

1. All dimensions are in inches (mm).
2. Dimensions may vary $\pm .25"$ (6).
3. Not for construction purposes unless certified.
4. Coupling gap may vary .13"(3) to 1.00"(25).
5. Motor dimension "CP" is approximate. Motor dimensions are not specified as they vary with each motor manufacturer.
6. Discharge and suction ports are:
M-NPT (Male pipe threads)
7. Use the following notation for pump identification:
LR = LOWER SHAFT - RIGHT HAND ROTATION
LL = LOWER SHAFT - LEFT HAND ROTATION

**VIEW A-A
RIGHT HAND
ROTATION**



**VIEW A-A
LEFT HAND
ROTATION**

BASE NO.	SIZE	HA	HB	HE	HF	HG	HH	HP
1	12 X 30	12 (305)	30 (762)	9 (229)	28 (711)	3 (76)	.63 (16)	1 (25)
2	12 X 34	12 (305)	34 (864)	9 (229)	32 (813)	3 (76)	.63 (16)	1 (25)

MODEL	FRAME	143T	145T	182T	184T	213T	215T
	C	13 (330)	13 (330)	13 (330)	14 (356)	16 (406)	18 (457)
	DM	3.50 (89)	3.50 (89)	4.50 (114)	4.50 (114)	5.25 (133)	5.25 (133)
20	BASE NO.	1	1	1	2	2	2
	D	3.50 (89)	3.50 (89)	4.50 (114)	4.50 (114)	5.25 (133)	5.25 (133)

MODEL	DISCHARGE	SUCTION	CP	DL	HY	S	W	X	YY	Z
20	1 1/2" M-NPT	1 1/2" M-NPT	13.25 (337)	2.50 (64)	7.50 (191)	1.25 (32)	6.60 (168)	4.50 (114)	4.13 (105)	1.25 (32)