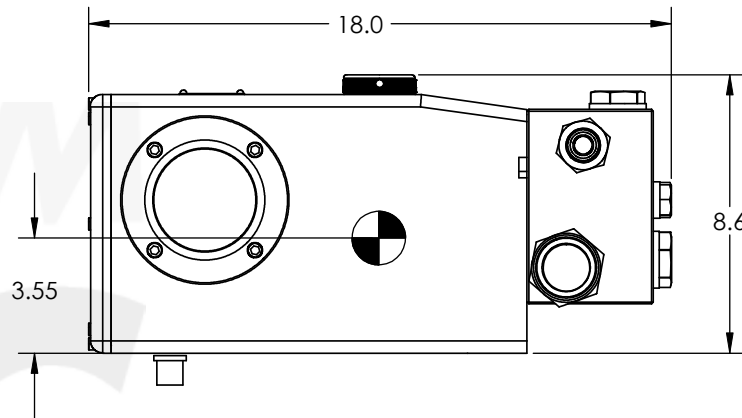
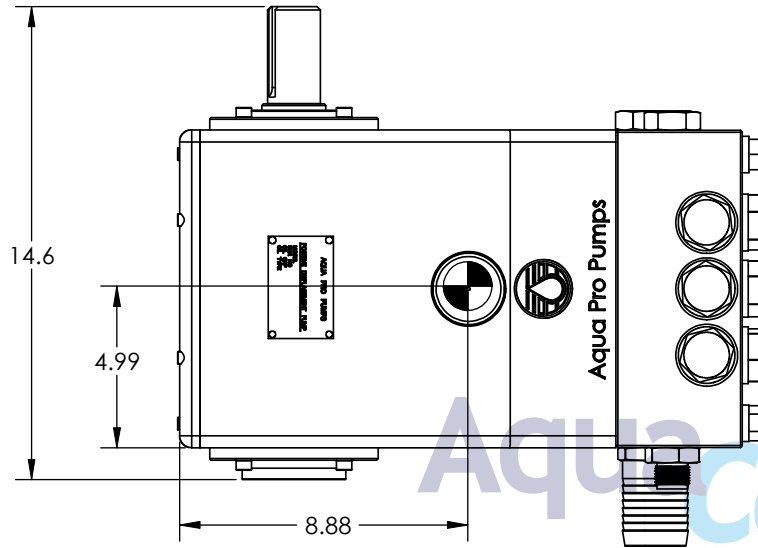


3P20 Aqua Pro Pump Titan Series

REV		DESCRIPTION	DATE	APPROVED
INITIAL RELEASE				
A	SHEETS 2 AND 3 HAVE BEEN REVISED		4/21/10	CC



- NOTES:
- 1) WEIGHT OF PUMP: 117 LBS
  - 2) PUMP MANUFACTURER: VILLAGE MARINE TEC. CAGE CODE: 62144
  - 3) THE PUMP SHALL BE RATED AT 20 GPM ( $\pm 0.5$ ) GPM AT A SHAFT SPEED OF 900 RPM. THE PUMP SHALL WITHSTAND A HYDROSTATIC TEST OF 1800 PSI WITHOUT ANY LEAKAGE, DAMAGE OR LOSS OF FUNCTION. EACH PUMP SHALL BE PERFORMANCE TESTED.
  - 4) THE FLUID PORTS FOR THE PUMP SHALL BE STRAIGHT THREAD BOSSES IAW MS16142. THE INLET SHALL BE SIZED FOR A MS16142-24 IPS AND THE OUTLET SIZED FOR A MS16142-16 IPS. THE DISCHARGE AND SUCTION PLUGS SHALL BE SUPPLIED WITH THE PUMP AND WITH O-RINGS.
  - 5) LABEL PLATE DATA:  
 AQUA PRO PUMPS  
 2000 W. 135TH ST GARDENA, CA 90249 (CAGE 62144)  
 (310)516-9911  
 POSITIVE DISPLACEMENT PUMP  
 MODEL 3P20  
 SER. NO.  
 OIL CAP 4 QTS (APPROX)  
 OIL TYPE (SEE OWNERS MANUAL)
  - 6) PUMP SHAFT ROTATION IS REVERSIBLE.

UNLESS OTHERWISE SPECIFIED  
 DIMENSIONS & TOLERANCING ARE IN INCHES  
 PER ANSI Y14.5 M & MIL-STD-100

DECIMALS	ANGULAR	FRACTIONAL
.X $\pm$ .020	$\pm 0^{\circ}30'$	
.XX $\pm$ .010		
.XXX $\pm$ .005		$\pm 1/32$

125 ✓

MATL	
WEIGHT LBS	
FINISH	
DRAWN	DATE
CHECKED	DATE
APPROVED	DATE

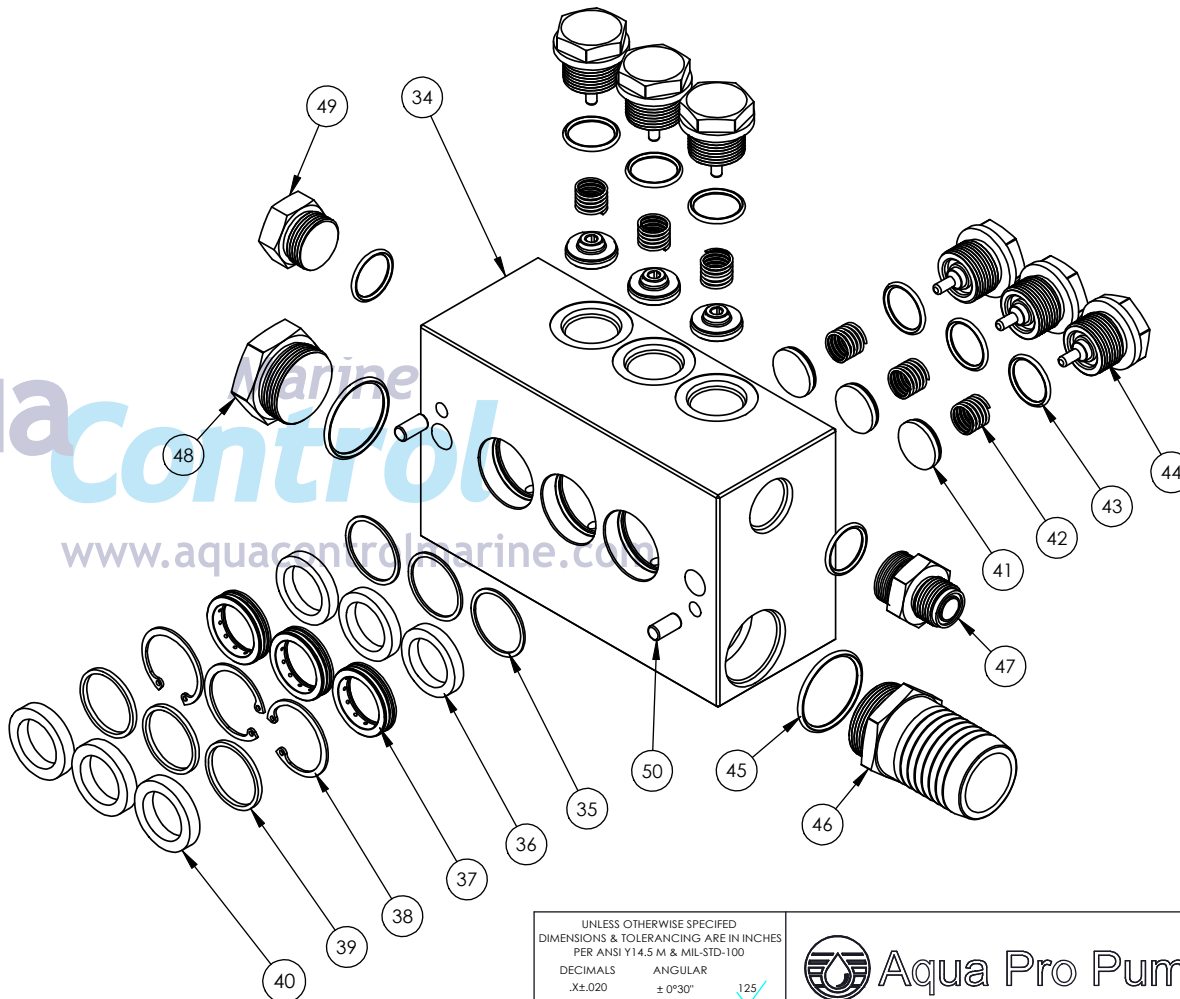
		TITLE	
		ASSEMBLY, 3P20 MAIN	
SIZE	DWG NO	REV	
B	70-2030	A	
SCALE 1:8		SHEET 1 OF 4	

# 3P20 Aqua Pro Pump Titan Series

## NOTES:


- 1) ASSEMBLY PART NUMBERS ARE AS FOLLOWS:  
70-6122 ASSY, MANIFOLD, 3P20 TITAN SERIES  
70-0623 KIT, REBUILD, MANIFOLD, 3P20
- 2) PART NUMBERS 85-0087 AND 21-1122 ARE NOT SHOWN IN DRAWING

REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
-	INITIAL RELEASE	-	-
A	UPDATED PARTS - PUMP VALVE, WEEP RING	3/16/2010	CC



52	21-1122	SILICONE GREASE	-	1
51	85-0087	ANTISIEZE	-	1
50	70-3050	PIN, DOWEL	2	-
49	70-3066	PLUG,MS18229-16,TI	1	-
48	70-3065	PLUG,MS18829-24	1	-
47	70-3059	ADTR, FACE SEAL	1	-
46	70-3064	ADTR, 2.0 HB, MS18229-24	1	-
45	70-3074	O-RING, APTR, INLET	2	2
44	70-3001	PLUG, VALVE, MS18229-16	6	-
43	70-3002	O-RING, VALVE	8	8
42	70-7049	SPRING, VALVE, 3P20/5P50	6	6
41	70-3004	VALVE,PUMP,3P20/5P50	6	6
40	70-2501	SEAL, LOW PRESSURE	3	3
39	70-3010	SPACER, LOW PRESSURE SEAL	3	3
38	70-3009	RING, RETAINING, 3P20/5P50	3	3
37	70-3008	ASSEMBLY, WEEP RING,3P20/5P50	3	3
36	70-2502	SEAL, HIGH PRESSURE	3	3
35	70-0407	RING, SPACER, HP SEAL	3	3
34	70-1301	MANIFOLD, TITAN SERIES 3P20	1	-
ITEM	PART NUMBER	DESCRIPTION	QTY (70-6122)	QTY KIT (70-0623)

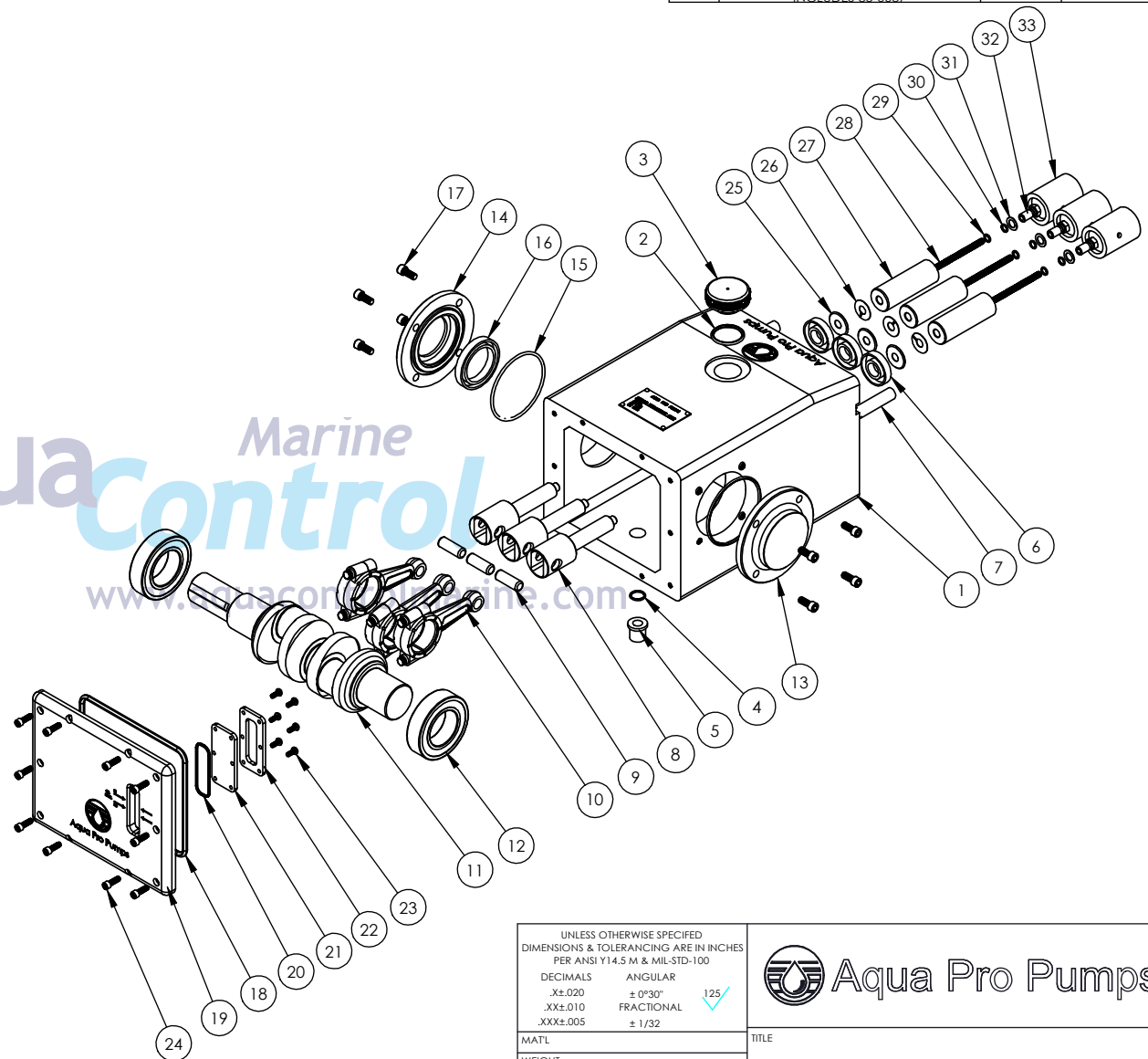
UNLESS OTHERWISE SPECIFIED DIMENSIONS & TOLERANCING ARE IN INCHES PER ANSI Y14.5 M & MIL-STD-100	
DECIMALS	ANGULAR
.X±.020	± 0°30"
.XX±.010	FRACTIONAL
.XXX±.005	± 1/32
125 ✓	
MATERIAL	
WEIGHT LBS	
FINISH	
DRAWN	DATE
CHECKED	DATE
APPROVED	DATE

 <b>Aqua Pro Pumps</b>	
TITLE <b>ASSEMBLY, 3P20 MANIFOLD</b>	
SIZE <b>B</b>	DWG NO <b>70-2030</b>
SCALE <b>1:12</b>	REV <b>A</b>
SHEET <b>3 OF 4</b>	

# 3P20 Aqua Pro Pump Titan Series

REVISIONS		DATE	APPROVED
REV	DESCRIPTION		
-	INITIAL RELEASE	2/6/07	BC
A	MODIFIED BOM QTY TITLE, NOTE 1. INCLUDES 85-0087	3/25/10	CC

NOTES:  
 1) ASSEMBLY PART NUMBERS ARE AS FOLLOWS:  
 70-3083 ASSY, CRANKCASE, 3P20 TITAN SERIES  
 70-0624 KIT, REBUILD, CRANKCASE, 3P20  
 2) PART NUMBERS 85-0087 AND 21-1122 ARE NOT SHOWN IN DRAWING

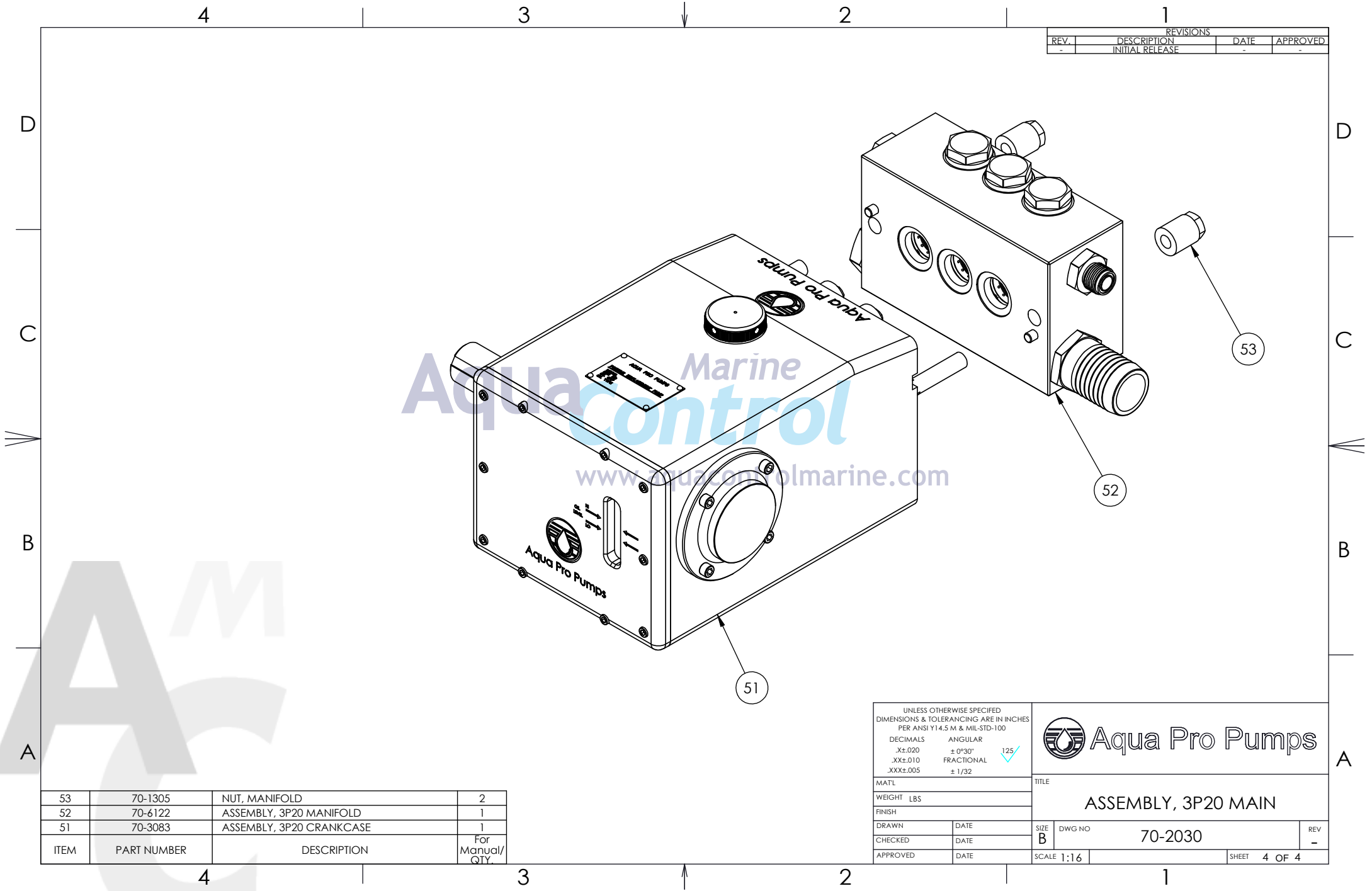


41	21-1122	SILICONE GREASE	-	1
40	85-0087	ANTISIEZE	-	1
33	70-3012	RETAINER, SEAL	3	-
32	70-3016	NUT, PLUNGER RETAINER	3	-
31	70-3017	WASHER, PLUNGER RETAINER	3	3
30	70-3411	O-RING, PLUNGER	3	3
29	70-3019	RING, BACK-UP, SPLIT	3	3
28	70-3020	STUD, M7x1.0, 3.40, PLUNGER	3	-
27	70-3021	PLUNGER, CERAMIC	3	-
26	70-3022	WASHER, KEYHOLE	3	-
25	70-3023	SLINGER, PLUNGER	3	-
24	86-0151	SCREW, REAR COVER	10	-
23	86-0120	SCREW, SIGHT GLASS	6	-
22	70-3060	FRAME, SIGHT GLASS	1	-
21	70-3039	SIGHTGLASS, OIL, 3P20/5P100	1	-
20	70-3040	O-RING, SIGHT GLASS	1	1
19	70-6099	COVER, CRANKCASE, TITAN SERIES 3P20	1	-
18	70-6102	O-RING, BACK COVER	1	1
17	86-0256	SCREW, SIDE CAP	8	-
16	70-3043	SEAL, OIL, CRANKSHAFT	1	1
15	70-3037	O-RING, BEARING CAP	2	2
14	70-3042	CAP, BEARING, PULLEY	1	-
13	70-3053	CAP, BEARING, CLOSED	1	-
12	70-0609	BEARING, CRANKSHAFT	2	-
11	70-1302	CRANKSHAFT, 3P20	1	-
10	70-3028	ASSY, ROD, CONNECTING	3	-
9	70-3027	PIN, DOWEL	3	-
8	70-0344M	ASSEMBLY, PLUNGER ROD	3	-
7	70-3006	STUD, MANIFOLD RETAINING	2	-
6	70-3062	SEAL, OIL, PLUNGER, 3P20/5P50	3	3
5	70-3046	ADAPTER, OIL DRAIN X .25 FNPT	1	-
4	30-1286	O-RING, PLUG, OIL DRAIN	1	1
3	70-3044	CAP, OIL FILLER	1	-
2	70-6029	O-RING, OIL FILLER CAP	1	1
1	70-1300	CRANKCASE, TITAN SERIES 3P20	1	-
ITEM	PART NUMBER	DESCRIPTION	QTY (70-3083)	QTY KIT (70-0624)

UNLESS OTHERWISE SPECIFIED DIMENSIONS & TOLERANCING ARE IN INCHES PER ANSI Y14.5 M & MIL-STD-100	
DECIMALS	ANGULAR
.X±.020	± 0°30"
.XX±.010	FRACTIONAL
.XXX±.005	± 1/32
125 ✓	
MATL	TITLE
WEIGHT LBS	ASSEMBLY, 3P20 CRANKCASE
FINISH	
DRAWN JR	DATE 2/6/07
CHECKED BC	DATE 4/28/08
APPROVED BC	DATE 4/28/08

TITLE	
ASSEMBLY, 3P20 CRANKCASE	
SIZE B	DWG NO 70-2030
REV A	
SCALE 1:16	SHEET 2 OF 4

# 3P20 Aqua Pro Pump Titan Series



REVISIONS			
REV.	DESCRIPTION	DATE	APPROVED
-	INITIAL RELEASE	-	-

53	70-1305	NUT, MANIFOLD	2
52	70-6122	ASSEMBLY, 3P20 MANIFOLD	1
51	70-3083	ASSEMBLY, 3P20 CRANKCASE	1
ITEM	PART NUMBER	DESCRIPTION	For Manual/ QTY.

UNLESS OTHERWISE SPECIFIED DIMENSIONS & TOLERANCING ARE IN INCHES PER ANSI Y14.5 M & MIL-STD-100			
DECIMALS	ANGULAR		
.X±.020	± 0°30"	125	
.XX±.010	FRACTIONAL		
.XXX±.005	± 1/32		
MATL		TITLE	
WEIGHT LBS		ASSEMBLY, 3P20 MAIN	
FINISH		SIZE B DWG NO 70-2030	
DRAWN	DATE	REV	-
CHECKED	DATE	SCALE 1:16	
APPROVED	DATE	SHEET 4 OF 4	