

## 4-Cylinder, High-Pressure Diaphragm Pumps with 4900.09 - VRG 160 Regulator



**BETA-170** 4-cylinder, high pressure, high volume diaphragm pumps are constructed of anodized aluminum, brass and stainless steel and have anodized aluminum, brass and stainless steel liquid handling parts. Includes mounting rails and 6005.05 control unit with pressure gauge. Simplicity of design and common parts allow for easy and economical maintenance.

**BETA-170** pumps are excellent choices for various horticultural and agricultural spraying applications.

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
BETA 170 TS2C	45.0	170.0	725	50	550	1-3/8" 6-Spline Male PTO Thru-Shaft	130 LBS

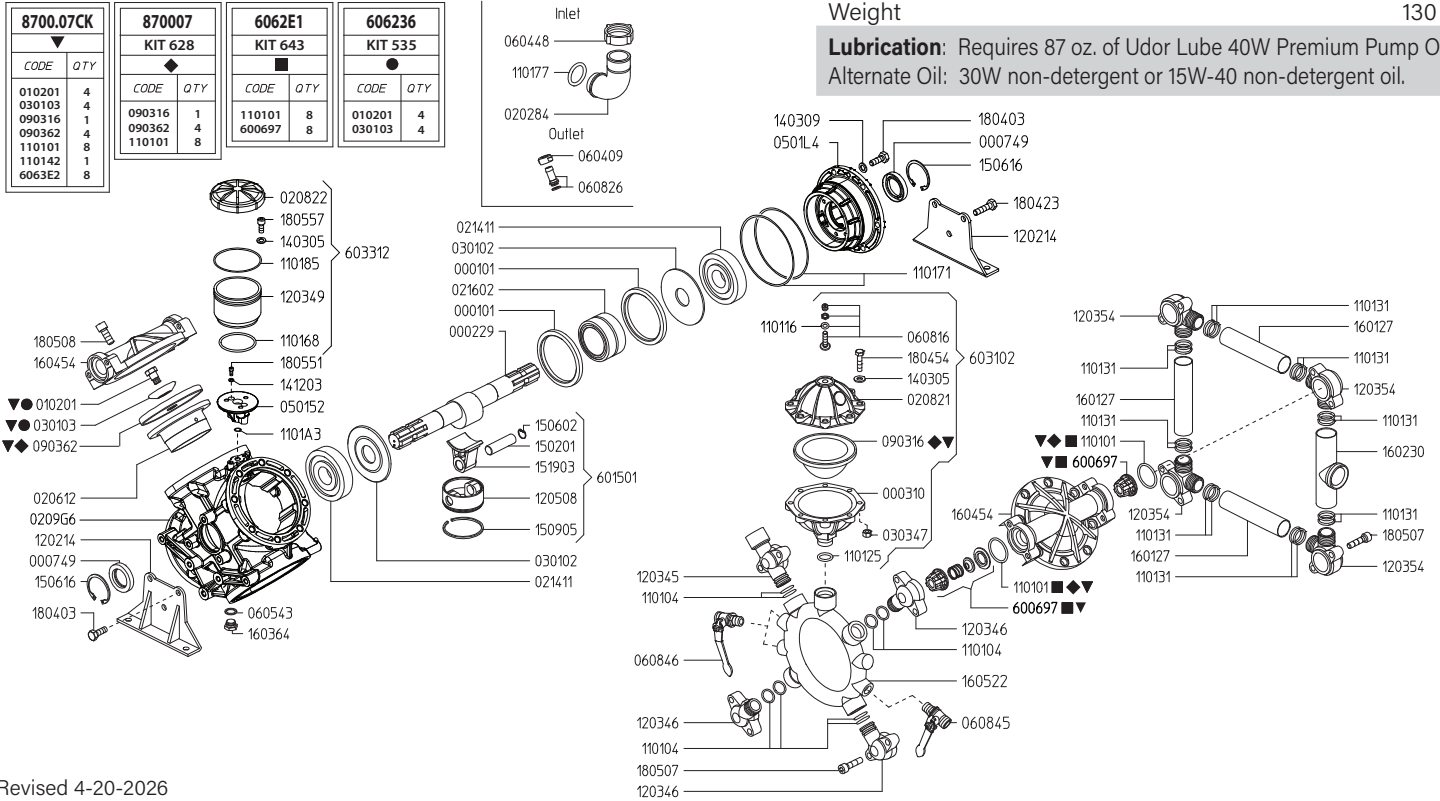
Specifications	BETA 170	Description	Part #
Inlet Port	1-1/2" Hose Barb	Diaphragm Kit (GREENTECH)	8700.07
Outlet Ports	(2) 1/2" Hose Barb, 3/4" NPT	Diaphragm Bolt / Washer Kit	6062.36
Bypass	1" Hose Barb	Valve Kit	6062.E1
Piston Diameter	75mm	Regulator Repair Kit	8701.03
Crankshaft Stroke/Code	19.0mm / U	Complete Repair Kit	8700.07CK
Dimensions	16"L x 15.5"W x 12.6"H		

**Lubrication:** Requires 91 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.



Maximum Flow	45.0 GPM / 170 lpm
Maximum Pressure	725 PSI / 50 bar
Maximum RPM	550 RPM
Inlet Port	1-1/2" Hose Barb
Outlet Ports	(2) 1/2" Hose Barb Valve, 3/4" FPT
Bypass	1" Hose Barb
Dimensions	16"L x 15.5"W x 12.6"H
Weight	130 lbs

**Lubrication:** Requires 87 oz. of Udor Lube 40W Premium Pump Oil.  
 Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.



Revised 4-20-2026

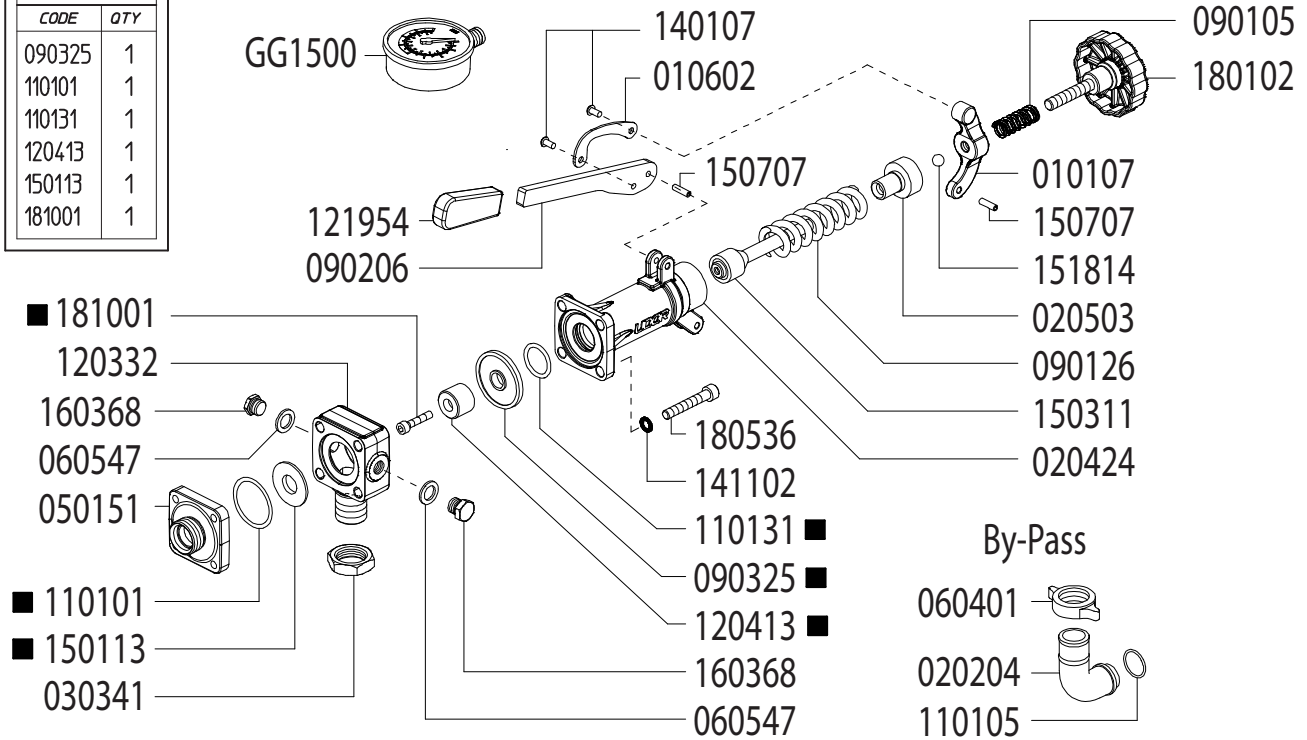
Part #	Description	Qty	Part #	Description	Qty
0001.01	RETAINER RING "BETA/OMEGA"	2	1203.45	OUTLET ELBOW "BETA"	1
0002.29	CRANKSHAFT - TS 2C	1	1203.46	OUTLET ELBOW "BETA"	3
0003.10	PRESSURE ACCUMULATOR BASE	1	1203.49	OIL RESERVOIR "BETA"	1
0007.49	OIL SEAL D35	2	1203.54	INLET ELBOW "BETA 150"	4
0102.01	DIAPHRAGM BOLT "ZETA/KAPPA 121" ●▼	4	1205.08	ALUMINIUM PISTON D75 "BETA/OMEGA/ZETA"	4
0202.84	HOSE BARB D40	1	1403.05	WASHER M8	11
0206.12	SLEEVE D75	4	1403.09	WASHER M10	6
0208.21	PRESSURE ACCUMULATOR COVER	1	1412.03	BONDED WASHER D6.7	2
0208.22	OIL RESERVOIR COVER	1	1502.01	PIN D18X64	4
0209.G6	CRANKCASE "BETA 170/OMEGA 170"	1	1506.02	SNAP RING D18	4
0214.11	BALL BEARING D35	2	1506.16	SNAP RING D55	2
0216.02	ROLLER BEARING D55	1	1509.05	PISTON RING D75	4
0301.02	ROD DISC "BETA/OMEGA"	2	1519.03	CONNECTING ROD "OMEGA/BETA 110/150"	4
0301.03	DIAPHRAGM DISC "BETA/OMEGA" ●▼	4	1601.27	SUCTION MANIFOLD "BETA 150"	3
0303.47	HEX NUT M8X8	8	1602.30	SUCTION MANIFOLD M48X2 "BETA 150"	1
0501.52	OIL CUP SUPPORT FLANGE "BETA / OMEGA"	1	1603.64	PLUG G3/8	1
0501.L4	BUSHING FLANGE "BETA/OMEGA"	1	1604.54	HEAD "BETA 110/150/200/240"	4
0604.09	BRASS NUT G1/2	1	1605.22	OUTLET MANIFOLD	1
0604.48	BRASS NUT M48X2	1	1804.03	HEX BOLT M10X30	10
0605.43	GASKET D17	1	1804.23	HEX BOLT M10X40	2
0608.16	AIR VALVE ASSY	1	1804.54	HEX BOLT M12X50	8
0608.26	HOSE BARB D13+GASKET	1	1805.07	ALLEN BOLT M10X40	16
0608.45	BALL VALVE RIGHT	1	1805.08	ALLEN BOLT M12X30	32
0608.46	BALL VALVE LEFT	1	1805.51	ALLEN BOLT M6X40	2
0903.16	ACCUMULATOR DIAPHRAGM ▼◆▲	1	1805.57	ALLEN BOLT M8X22	3
0903.62	PISTON DIAPHRAGM 130MM GREENTECH ◆▼	4	6006.97	VALVE ASSEMBLY W/O O-RING ■▼	8
1101.01	O-RING - VALVE ◆■▼	8	6015.01	ROD ASSEMBLY "OMEGA/BETA" D75	4
1101.04	O-RING - DISCHARGE ELBOWS	8	6031.02	PRESSURE ACCUMULATOR ASSEMBLY	1
1101.16	O-RING - PRESSURE ACCUMULATOR AIR VALVE	1	6033.02	OIL RESERVOIR ASSEMBLY	1
1101.25	O-RING - PRESSURE ACCUMULATOR	1	6062.36	DIAPHRAGM DISC "BETA 150" (KIT 535)	1
1101.31	O-RING - INLET MANIFOLD TUBES	16	6062.E1	IN/OUTLET VALVE KIT "BETA 150" (KIT 643)	1
1101.68	O-RING - OIL RESERVOIR	1	8700.07	DIAPHRAGM KIT 130MM GREENTECH (KIT 628)	1
1101.71	O-RING - BUSHING FLANGE	2	8700.07CK	COMPLETE REPAIR KIT	1
1101.77	O-RING - INLET HOSE BARB ▼	1			
1101.85	O-RING - OIL RESERVOIR	1			
1101.A3	O-RING - OIL CUP SUPPORT FLANGE	1			
1202.14	BASE PLATE "BETA 110/150"	2			

- Parts in 6062.36 (Kit 535)
- Parts in 6062.E1 (Kit 643)
- ◆ Parts in 8700.07 (Kit 628)
- ▼ Parts in 8700.07CK (Complete Repair Kit)

## Adjustable Pressure Regulator

Maximum Flow	47.3 GPM / 179.2 lpm
Maximum Pressure	1470 PSI / 10 bar
Inlet Port	3/4" Male BSP
Outlet Ports	-
Bypass - Hose Barb	1" HB

<b>606254</b>	
<b>KIT 553</b>	
<b>CODE</b>	<b>QTY</b>
090325	1
110101	1
110131	1
120413	1
150113	1
181001	1



Revised 10-9-2025

Part #	Description	Qty
0101.07	LEVER GUIDE	1
0106.02	PRESSURE BAIL	1
0202.04	1" BRASS ELBOW HOSE BARB	1
0204.24	VALVE BODY	1
0205.03	VALVE CYLINDER	1
0303.41	NUT	1
0501.50	FLANGE	1
0604.01	BARB NUT	1
0605.47	GASKET D8	1
0901.05	SPRING	1
0901.26	SPRING	1
0902.06	HANDLE	1
0903.25	DIAPHRAGM	1
1101.01	O-RING - BYPASS FLANGE	1
1101.05	O-RING - BYPASS HOSE BARB	1
1101.31	O-RING - VALVE BODY	1
1203.32	INLET ELBOW - 3/4" MALE BSP	1

Part #	Description	Qty
1204.13	POPPET	1
1219.54	HANDLE COVER - RUBBER	1
1401.07	RIVET	2
1411.02	WASHER	4
1501.13	SEAT	1
1503.11	REGULATOR STEM	1
1507.07	PIN	2
1518.14	BALL	1
1603.68	PLUG - 1/4" BRASS	1
1801.02	ADJUSTMENT KNOB	1
1805.36	BOLT	4
1810.01	BOLT - STAINLESS STEEL	1
GG1500	HIGH PRESSURE GAUGE (OPTIONAL)	1
6062.54	REPAIR KIT (KIT 553)	

■ Parts Included in Repair Kit #6062.54 (KIT 553)

### OPERATING INSTRUCTIONS

1. Before operating or re-operating pump, lift R.V. Handle (0902.05) so pump will start at zero pressure.  
**FAILURE TO DO SO WILL VOID PUMP WARRANTY.**
2. Turn Pressure Adjustment Knob (1801.02) counter-clockwise to relieve spring tension. (Step 2 is only necessary on initial start-up and is not necessary for daily operation.)
3. Start unit and let run until air is evacuated from system, when only liquid is expelled from the bypass line.
4. Return R.V. Handle (0902.05) to down position. Open spray gun or spray boom and turn adjustment knob (1801.02) clockwise until desired operating pressure is achieved.

All Dimensions are WITHOUT Control Unit or Regulator

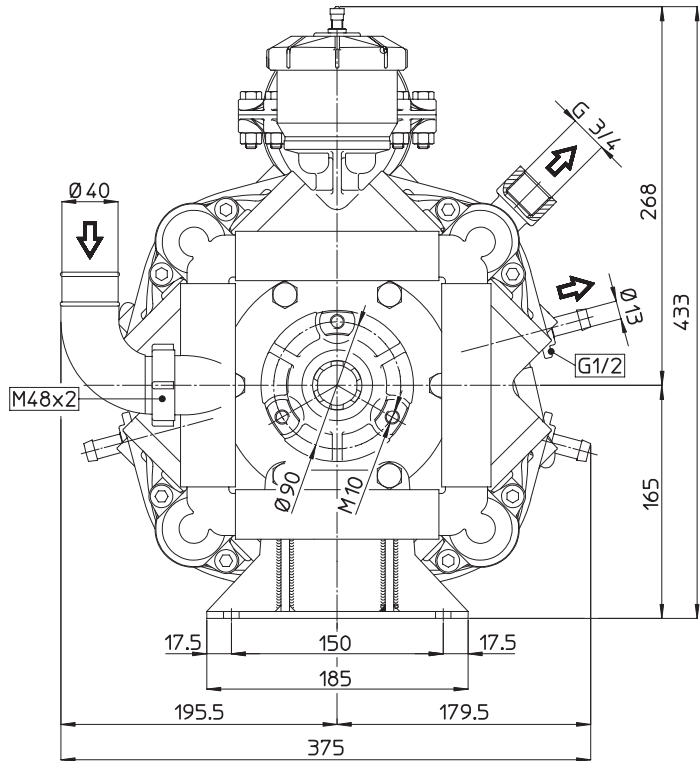
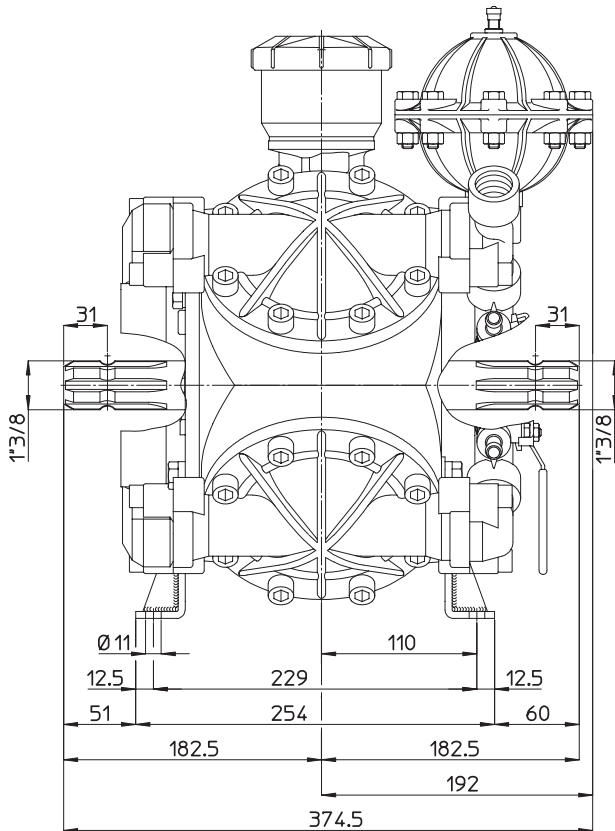
Dimensional Drawings are Shown in Millimeters. To Convert to Inches, Multiply Dimension x 0.03937

### Specifications

### BETA 170

Inlet Port - Hose Barb	1-1/2" HB
Outlet Ports - Hose Barb	(2) 1/2" HB
Bypass - Hose Barb	1" HB
Dimensions	16"L x 15.5"W x 12.6"H
Diaphragm Material	GREENTECH (Standard)

**Lubrication:** Requires 91 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.



## TORQUE SPECS

Ref.	Description	Ft./lb.	Nm
1	Diaphragm Bolts (Use Loctite 243)	22	30
2	Head Bolts	37	50
3	Pulsation Dampener Bolts	20	28
4	Bearing Flange Bolts	25	34
5	Oil Cup Bolts	7	10
6	Manifold Bolts - Aluminum/Brass	22	30

