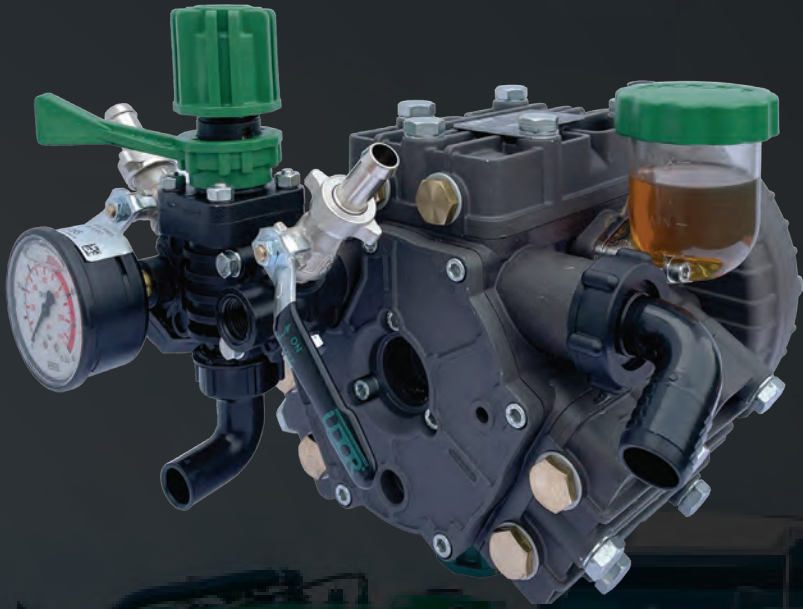
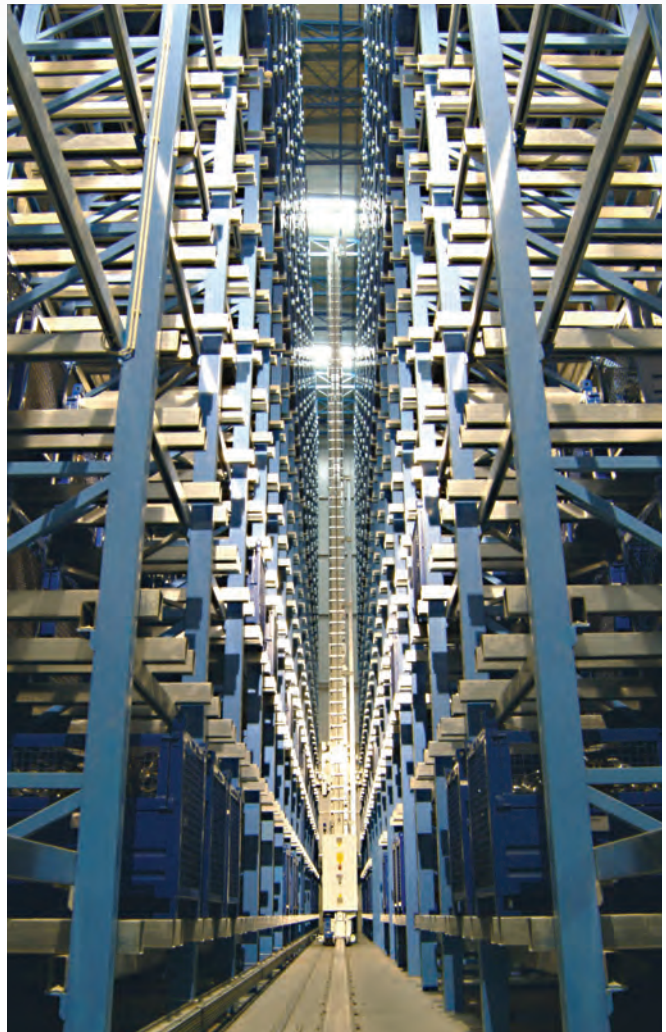


**UDOR<sup>®</sup>**  
**USA**

*World Leader in Diaphragm and Plunger Pumps*



**Diaphragm & GAMMA Series Plunger Pumps**  
**Pump & Accessory Catalog**





# APPLICATIONS



*AGRICULTURAL  
SPRAYING*



*LAWN CARE*



*HIGH PRESSURE  
WASHING*



*CAR WASHING*



*SEWAGE AND  
PIPE CLEANING*



*ROAD WASHING*



*FIRE FIGHTING*



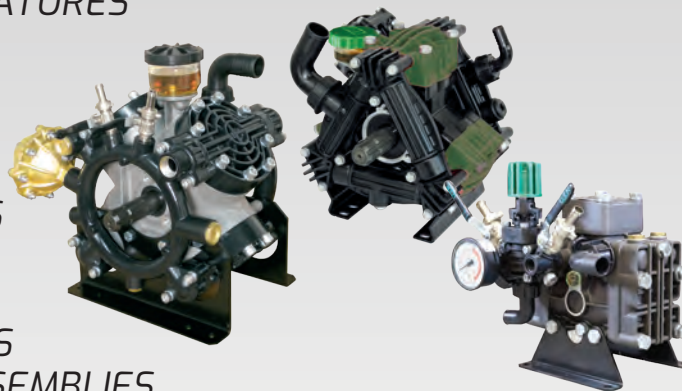
*DESALINATION*



*DEICING*

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# ACCESSORIES

# GREENTECH DIAHRAGMS

## GREENTECH

### Green Evolution. Green Diaphragm.

Designed and built with an innovative material and a better design, the new Greentech diaphragm is the result of the continuous commitment from our R&D and technical departments to improve UDOR pumps.

The new Greentech diaphragm will be recognizable by the new green color, which has always identified UDOR. The new and improved shape of the Greentech diaphragm guarantees less deformation and cavitation caused by use, as well as a greater mechanical strength and flexibility, thus ensuring less wear.

The Greentech diaphragm is more resistant to temperature variations and has an excellent compatibility with most chemicals, especially those used in agricultural spraying and lawn care.

As a result, our diaphragm pumps will be more reliable, longer-lasting and resistant thanks to the new Greentech diaphragm.



Endurance



Resistance



Chemical compatibility



Efficiency



Reliability



Mechanical strength



Greater flexibility and resistance



Increased resistance to temperature changes



# PUMP MODEL IDENTIFICATION

**Example:**

**ZETA**

**40**














**VAGR3/4**

Pump  
Series

Nominal  
Flow Rate  
(l/min)

Drive  
Configuration  
(See Below)

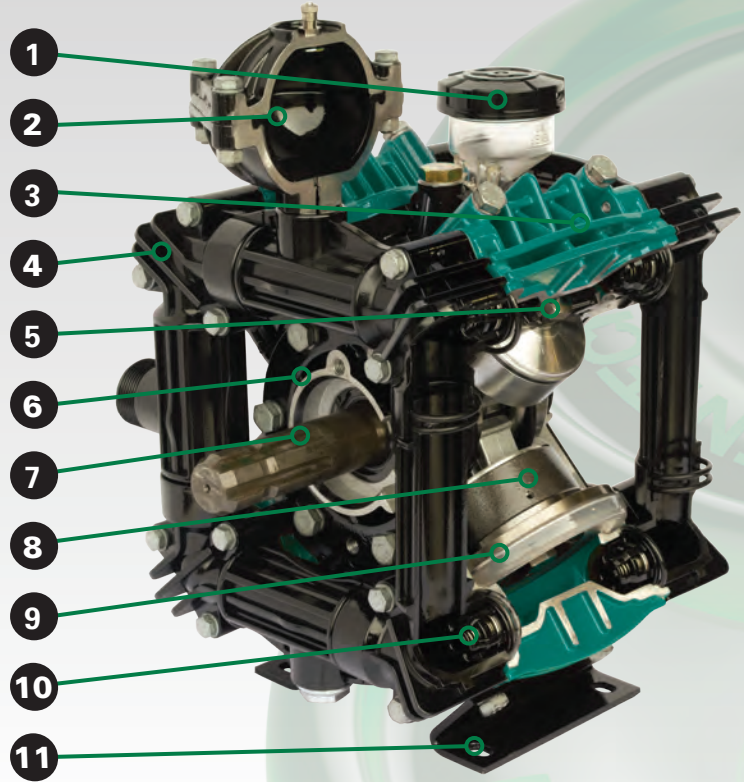
## Drive Configurations:

Drive	Description	Example
<b>1C</b>	1-3/8", 6-Spline Male PTO Shaft	
<b>VA</b>	Universal VA Drive Face	
<b>MI1</b>	2-Bolt A-Flange with 1" Hollow Shaft for Hydraulic Motor	
<b>GR</b>	25mm Solid Keyed Shaft to Accept Gear Reduction for 3/4" Shaft Gas Engines	
<b>GR3/4</b>	Gear Reduction for 3/4" Shaft Gas Engine Installed	
<b>VAGR3/4</b>	Universal VA Drive Face with Gear Reduction for 3/4" Shaft Gas Engine Installed	
<b>VAGR1</b>	Universal VA Drive Face with Gear Reduction for 1" Shaft Gas Engine Installed	
<b>TS1C</b>	Thru-Shaft. 1-3/8", 6-Spline Male PTO x 25mm Solid Keyed Shaft	
<b>TS2C</b>	Thru-Shaft. 1-3/8", 6-Spline Male PTO x 1-3/8", 6-Spline Male PTO	
<b>TSVA</b>	Thru-Shaft. 1-3/8", 6-Spline Male PTO Shaft x Universal VA Drive Face	
<b>TSFVA</b>	Thru-Shaft. 25mm Solid Keyed Shaft x Universal VA Drive Face with 6-Spline Female PTO Shaft	
<b>TSMFVA</b>	Thru-Shaft. 1-3/8", 6-Spline Male PTO Shaft x Universal VA Drive Face with 6-Spline Female PTO Shaft	
<b>TSMFVAGR1-1/8</b>	Thru-Shaft. 1-3/8", 6-Spline Male PTO Shaft x Universal VA Drive Face with 6-Spline Female PTO Shaft. Gear Reduction for 1-1/8" Shaft Gas Engine Installed	

# DIAPHRAGM PUMP FEATURES

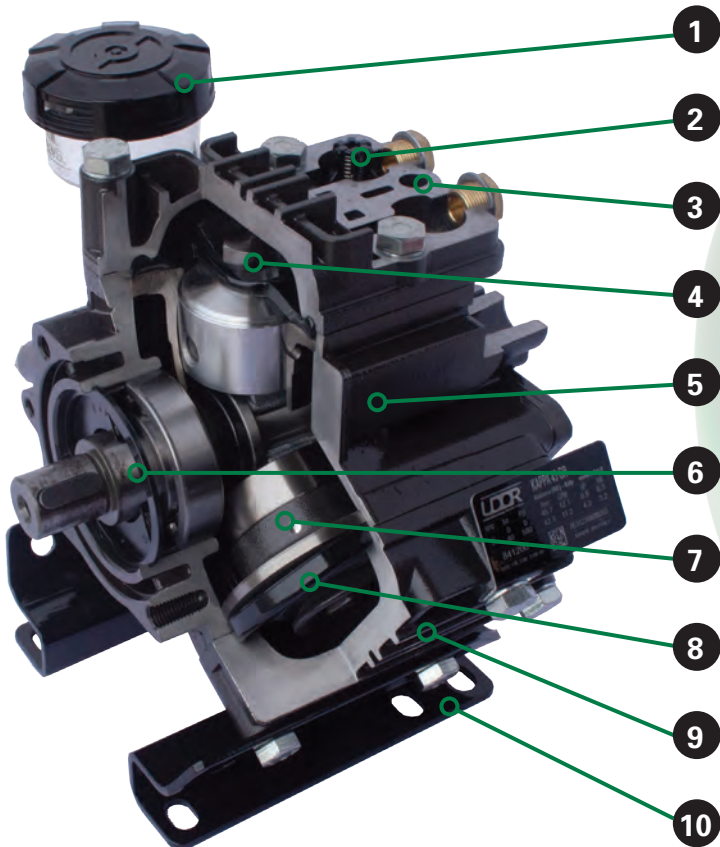
## ZETA Series Pumps

- 1 Oil Level Sight Glass / Reservoir
- 2 Pulsation Dampener
- 3 Plasticized Aluminum Heads
- 4 Glass-Filled Nylon Manifolds
- 5 1-Piece Stainless Steel Diaphragm Bolts
- 6 Anodized Die-Cast Aluminum Crankcase
- 7 Heat Treated, Bearing Supported Crankshaft
- 8 Heat Treated, Self-Lubricating Piston Sleeves
- 9 Udor **GREENTECH** Diaphragms
- 10 Stainless Steel Check Valves
- 11 Mounting Rails



## KAPPA Series Pumps

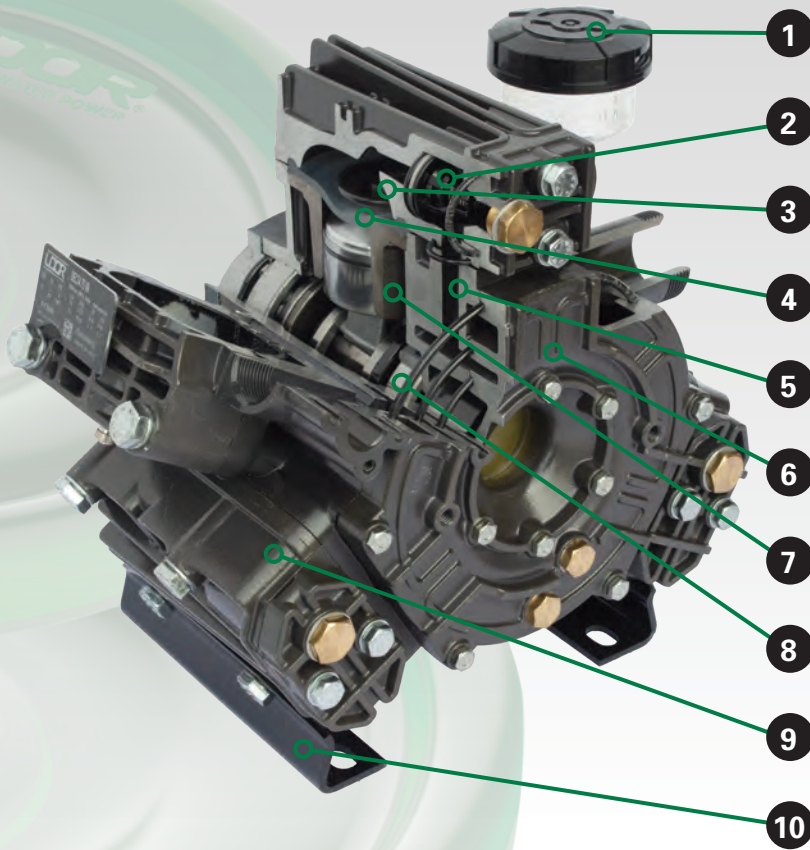
- 1 Oil Level Sight Glass / Reservoir
- 2 Stainless Steel Check Valves
- 3 Internally Manifolder Crankcase
- 4 1-Piece Stainless Steel Diaphragm Bolts
- 5 Anodized Die-Cast Aluminum Crankcase
- 6 Heat Treated, Bearing Supported Crankshaft
- 7 Heat Treated, Self-Lubricating Piston Sleeves
- 8 Udor **GREENTECH** Diaphragms
- 9 Anodized Aluminum Heads
- 10 Mounting Rails





# DIAPHRAGM PUMP FEATURES

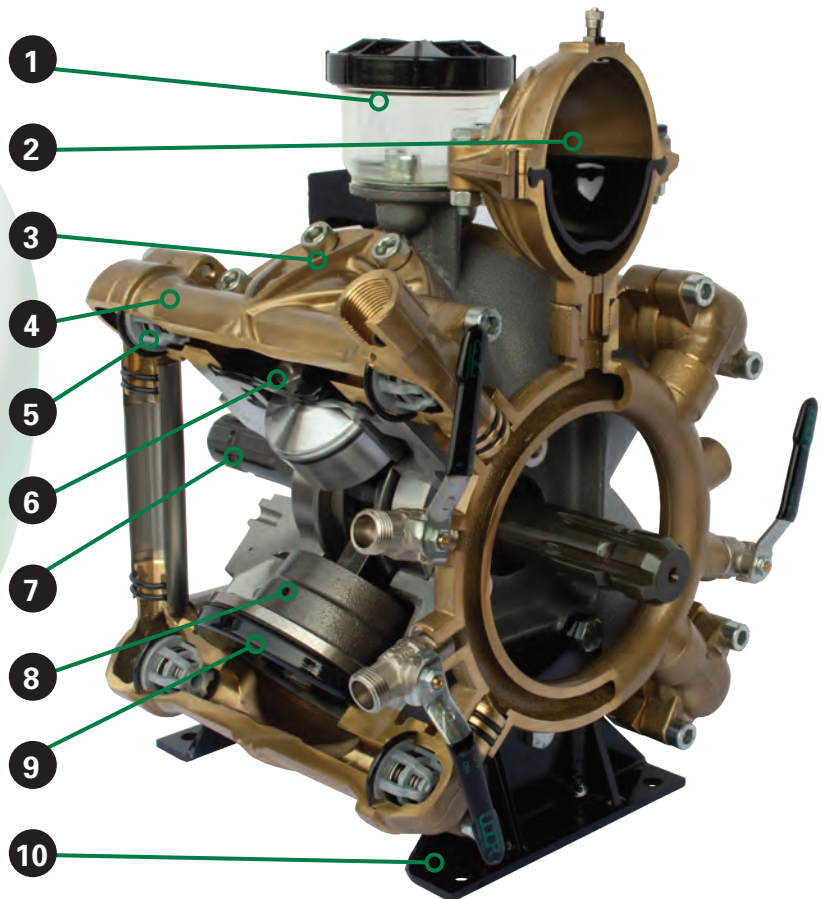
## DELTA Series Pumps



- 1 Oil Level Sight Glass / Reservoir
- 2 Stainless Steel Check Valves
- 3 1-Piece Stainless Steel Diaphragm Bolts
- 4 Udor **GREENTECH** Diaphragms
- 5 Internally Manifolded Crankcase
- 6 Anodized Die-Cast Aluminum Crankcase
- 7 Heat Treated, Self-Lubricating Piston Sleeves
- 8 Heat Treated, Bearing Supported Crankshaft
- 9 Anodized Aluminum Heads
- 10 Mounting Rails

## BETA Series Pumps

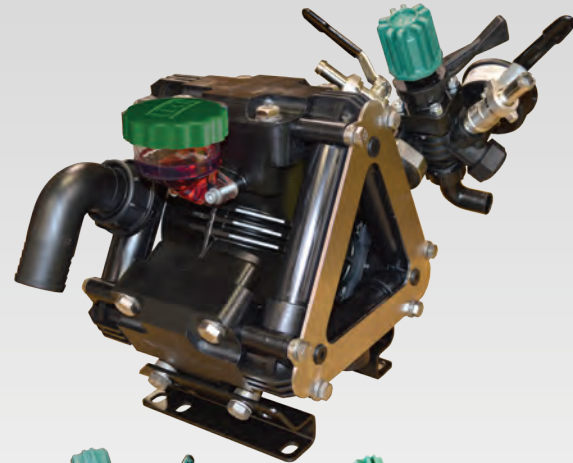
- 1 Oil Level Sight Glass / Reservoir
- 2 Pulsation Dampener
- 3 Brass Heads
- 4 Brass Manifolds
- 5 Stainless Steel Check Valves
- 6 1-Piece Stainless Steel Diaphragm Bolts
- 7 Heat Treated, Bearing Supported Crankshaft
- 8 Heat Treated, Self-Lubricating Piston Sleeves
- 9 Udor **GREENTECH** Diaphragms
- 10 Mounting Rails



# ZETA 40P / ZETA 85P

**ZETA 40P & ZETA 85P** low pressure 3-cylinder diaphragm pumps have poly heads, externally mounted manifolds and stainless-steel liquid handling parts and hardware components. A control valve with pressure gauge is standard on all models.

**ZETA 40P & ZETA 85P** pumps are excellent for the soft wash industry and other aggressive fluid applications.



**ZETA 40P VA**



**ZETA 40P VAGR3/4**



**ZETA-85P VA**



**ZETA 85P VAGR3/4**

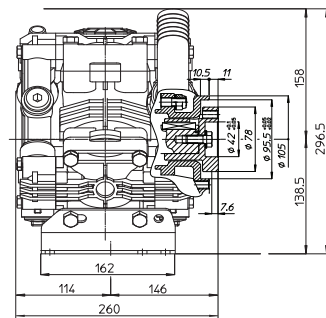
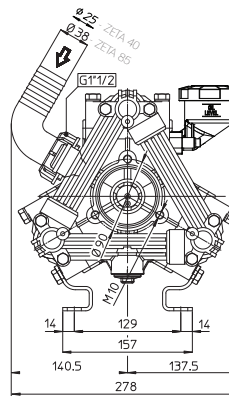
Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>ZETA 40P VA</b>	10.5	44	300	20	550	Universal VA Drive Face.	29 LBS
<b>ZETA 40P VAGR3/4</b>	10.5	44	300	20	550	Gear Reduction for 3/4" Shaft Gas Engine	36 LBS
<b>ZETA 85P VA</b>	22.0	85	300	20	550	Universal VA Drive Face.	29 LBS
<b>ZETA 85P VAGR3/4</b>	22.0	85	300	20	550	Gear Reduction for 3/4" Shaft Gas Engine	36 LBS

Specifications	ZETA 40P	ZETA 85P
Inlet Port	1-1/4" Hose Barb	1-1/2" Hose Barb
Outlet Ports - Valve	(2) 1/2" Hose Barb	(2) 1/2" Hose Barb
Bypass	3/4" Hose Barb	3/4" Hose Barb
Dims. - Pump Only		11"L x 11"W x 12"H
- GR Version		16"L x 11"W x 12"H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)	

**Lubrication:** Requires 39 oz. of Udor Lube 40W Premium Pump Oil. Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

### QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit - GREENTECH	6062.97
Diaphragm Bolt & Washer Kit	6062.48
Valve Kit	6062.H1
Regulator Repair Kit	6062.A9
Complete Repair Kit	8700.63CK



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

### Recommended Accessories and Drive Options



**6010.96**  
Control Unit  
Regulator w/Gauge



**5027.75**  
Gear Reduction  
3/4" Shaft Gas Engines



**7751.A3**  
1" Solid Keyed  
Shaft and Bolts



**UD1-1/4-16**  
1-1/4" HI-Flow Filter  
16 Mesh Screen



**UD1-1/2-16**  
1-1/2" HI-Flow Filter  
16 Mesh Screen



**15.5823**  
Udor Lube  
Premium Pump Oil

# ZETA 40 / ZETA 85



**ZETA 40 & ZETA 85** low pressure 3-cylinder diaphragm pumps have anodized aluminum bodies with plasticized aluminum heads, stainless steel valves and glass-filled nylon manifolds. A control valve with pressure gauge is standard on all models.

**ZETA 40 & ZETA 85** pumps are excellent for various horticultural and agricultural spraying applications.



ZETA 40



ZETA 40 VAGR3/4

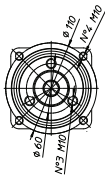
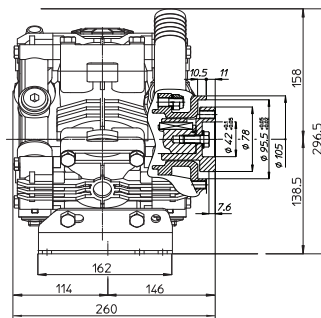
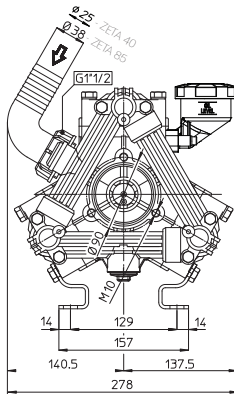


ZETA 85 VA



ZETA 85 VAGR3/4

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
ZETA 40 VA	10.5	44	300	20	550	Universal VA Drive Face.	29 LBS
ZETA 40 VAGR3/4	10.5	44	300	20	550	Gear Reduction for 3/4" Shaft Gas Engine	36 LBS
ZETA 85 VA	22.0	85	300	20	550	Universal VA Drive Face.	29 LBS
ZETA 85 VAGR3/4	22.0	85	300	20	550	Gear Reduction for 3/4" Shaft Gas Engine	36 LBS



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

Specifications	ZETA 40	ZETA 85
Inlet Port	1-1/4" Hose Barb	1-1/2" Hose Barb
Outlet Ports - Valve	(2) 1/2" Hose Barb	(2) 1/2" Hose Barb
Bypass	3/4" Hose Barb	3/4" Hose Barb
Dims. - Pump Only		11" L x 11" W x 12" H
- GR Version		16" L x 11" W x 12" H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)	

**Lubrication:** Requires 39 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

### QUICK REFERENCE SERVICE PARTS

Description	Part #	List Price
Diaphragm Kit - GREENTECH	6062.97	\$ 152.10
Diaphragm Bolt & Washer Kit	6062.48	\$ 82.70
Valve Kit	6062.D8	\$ 226.20
Regulator Repair Kit	6062.A9	\$ 66.44
Complete Repair Kit	8700.60CK	\$ 490.07

### Recommended Accessories and Drive Options



**6010.95**  
Control Unit  
Regulator w/Gauge



**5027.75**  
Gear Reduction  
3/4" Shaft Gas Engines



**7751.A3**  
1" Solid Keyed  
Shaft and Bolts



**UD1-1/4-16**  
1-1/4" HI-Flow Filter  
16 Mesh Screen



**UD1-1/2-16**  
1-1/2" HI-Flow Filter  
16 Mesh Screen



**15.5823**  
Udor Lube  
Premium Pump Oil

# ZETA 70

ZETA 70 low pressure 3-cylinder diaphragm pumps have anodized aluminum bodies with plasticized aluminum heads, stainless steel valves and glass-filled nylon manifolds.

ZETA 70 pumps are excellent for various horticultural and agricultural spraying applications.



ZETA 70 1C



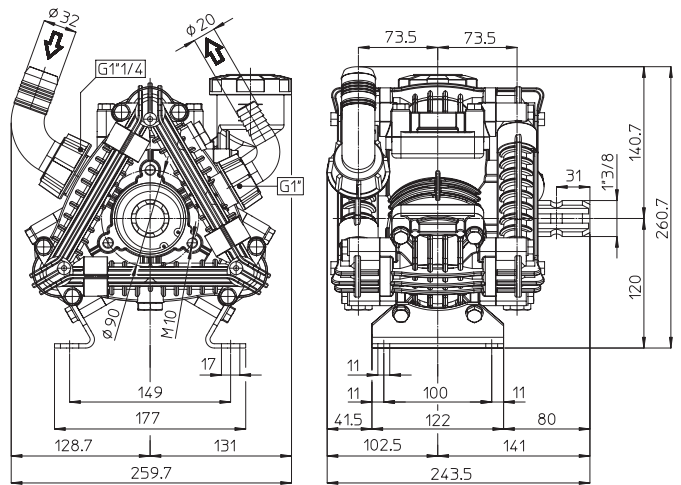
ZETA 70 TS1C

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
ZETA 70 1C	19.0	71	300	20	550	1-3/8" 6-Spline Male PTO Shaft	21 LBS
ZETA 70 TS1C	19.0	71	300	20	550	1-3/8" 6-Spline Male PTO x 25mm Solid Keyed Thru-Shaft	21 LBS

Specifications	ZETA 70
Inlet Port:	1-1/4" Hose Barb
Outlet Port:	3/4" Hose Barb
Dimensions	10.5" L x 10" W x 9" H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)
<b>Lubrication:</b>	Requires 20 oz. of Udor Lube 40W Premium Pump Oil. Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

**QUICK REFERENCE SERVICE PARTS**

Description	Part #
Diaphragm Kit - GREENTECH	6062.B8
Diaphragm Bolt & Washer Kit	6062.48
Valve Kit	6062.D8
Complete Repair Kit	8700.62CK



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

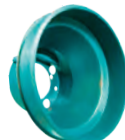
**Recommended Accessories and Drive Options**



6005.31/LP Control Unit Regulator



6005.31/LP-N Control Unit Regulator - NPT



1219.02 PTO Drive Safety Shield



UD1-1/2-16 1-1/2" HI-Flow Filter 16 Mesh Screen



15.5823 Udor Lube Premium Pump Oil

# ZETA 100



**ZETA 100** low pressure 3-cylinder diaphragm pumps have anodized aluminum bodies with plasticized aluminum heads, stainless steel valves and glass-filled nylon manifolds. A pulsation dampener standard on all models.

**ZETA 100** pumps are excellent for various horticultural and agricultural spraying applications.



**ZETA 100 1C**



**ZETA 100 VA**

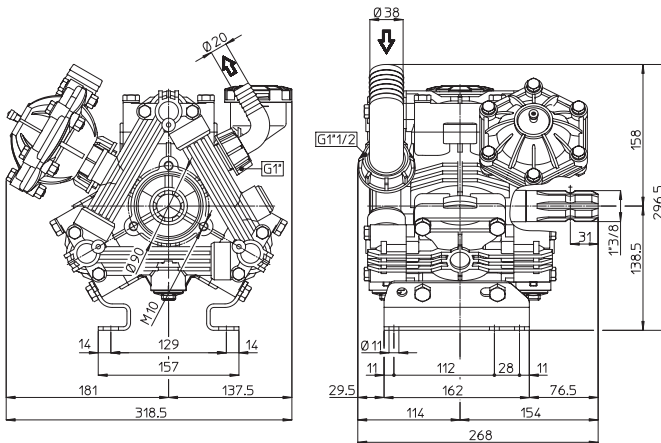


**ZETA 100 TS1C**



**ZETA 100 MI1**

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>ZETA 100 1C</b>	26.0	98	300	20	550	1-3/8" 6-Spline Male PTO Shaft	30 LBS
<b>ZETA 100 VA</b>	26.0	98	300	20	550	Universal VA Drive Face.	30 LBS
<b>ZETA 100 TS1C</b>	26.0	98	300	20	550	1-3/8" 6-Spline Male PTO x 25mm Solid Keyed Thru-Shaft	30 LBS
<b>ZETA 100 MI1</b>	26.0	98	300	20	550	2-Bolt, A-Flange, 1" Hollow Shaft for Hydraulic Motor	30 LBS



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

### Specifications ZETA 100

Inlet Port	1-1/2" Hose Barb
Outlet Port	3/4" Hose Barb
Dimensions	13"L x 11"W x 12"H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)

**Lubrication:** Requires 39 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

### QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	8700.10
Diaphragm Bolt & Washer Kit	6062.48
Valve Kit	6062.D8
Complete Repair Kit	8700.61CK

### Recommended Accessories and Drive Options



**6005.31/LP**  
Control Unit  
Regulator



**6005.31/LP-N**  
Control Unit  
Regulator - NPT



**1219.02**  
PTO Drive  
Safety Shield



**UD1-1/2-16**  
1-1/2" HI-Flow Filter  
16 Mesh Screen



**15.5823**  
Udor Lube  
Premium Pump Oil

# ZETA 120 / ZETA 140

**ZETA 120 & ZETA 140** low pressure 3-cylinder diaphragm pumps have anodized aluminum bodies with plasticized aluminum heads, stainless steel valves and glass-filled nylon manifolds.

**ZETA 120 & ZETA 140** pumps are excellent for various horticultural and agricultural spraying applications.



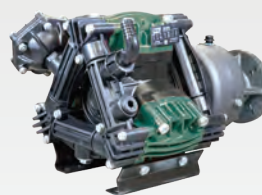
ZETA 120 VA



ZETA 120 1C / ZETA 140 1C



ZETA 120 VAGR3/4



ZETA 120 VAGR1

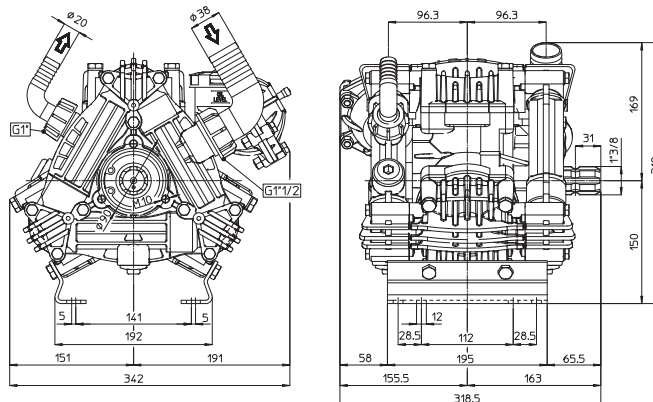


ZETA 120 TS1C / ZETA 140 TS1C

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
ZETA 120 VA	31.0	116	300	20	550	Universal VA Drive Face.	45 LBS
ZETA 120 1C	31.0	116	300	20	550	1-3/8" 6-Spline Male PTO Shaft	45 LBS
ZETA 120 TS1C	31.0	116	300	20	550	1-3/8" 6-Spline Male PTO x 25mm Solid Keyed Thru-Shaft	45 LBS
ZETA 120 VAGR3/4	31.0	116	300	20	550	Gear Reduction for 3/4" Shaft Gas Engine	55 LBS
ZETA 120 VAGR1	31.0	116	300	20	550	Gear Reduction for 1" Shaft Gas Engine	55 LBS
ZETA 140 1C	36.0	135	300	20	550	1-3/8" 6-Spline Male PTO Shaft	45 LBS
ZETA 140 TS1C	36.0	135	300	20	550	1-3/8" 6-Spline Male PTO x 25mm Solid Keyed Thru-Shaft	45 LBS

Specifications	ZETA 120	ZETA 140
Inlet Port	1-1/2" Hose Barb	1-1/2" Hose Barb
Outlet Port	3/4" Hose Barb	3/4" Hose Barb
Dimensions	12.5"L x 13.5"W x 12.5"H	
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)	

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



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

## QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit - GREENTECH	6062.H2
Diaphragm Bolt & Washer Kit	6062.16
Valve Kit	6062.D7
Complete Repair Kit	8700.04CK

## Recommended Accessories and Drive Options



**6005.31/LP-N**  
Control Unit  
Regulator



**5033.A4**  
Gear Reduction  
1" Shaft Gas Engines



**5027.75**  
Gear Reduction  
3/4" Shaft Gas Engines



**7751.A3**  
1" Solid Keyed  
Shaft and Bolts



**UD1-1/2-16**  
1-1/2" HI-Flow Filter  
16 Mesh Screen



**15.5823**  
Udor Lube  
Premium Pump Oil

# ZETA 170

**ZETA 170** low pressure 4-cylinder diaphragm pumps have anodized aluminum bodies with plasticized aluminum heads, stainless steel valves and glass-filled nylon manifolds. A pulsation dampener standard on all models.

**ZETA 170** pumps are excellent for various horticultural and agricultural spraying applications.



**ZETA 170 1C**

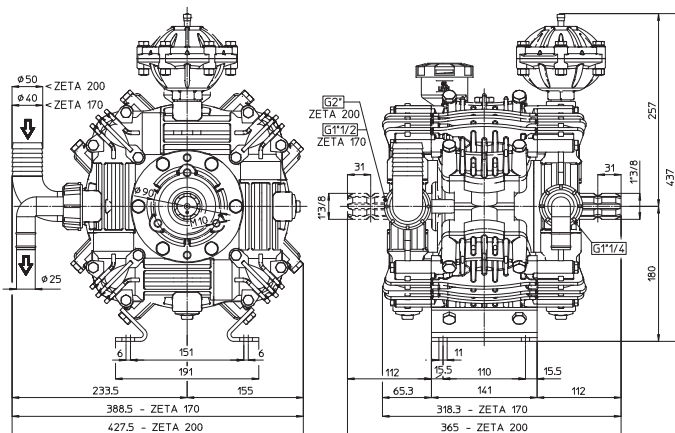


**ZETA 170 TS2C**



**ZETA-170 MI1**

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>ZETA 170 1C</b>	45.0	170	300	20	550	1-3/8" 6-Spline Male PTO Shaft	58 LBS
<b>ZETA 170 TS2C</b>	45.0	170	300	20	550	1-3/8" 6-Spline Male PTO Thru-Shaft	58 LBS
<b>ZETA 170 MI1</b>	45.0	170	300	20	550	2-Bolt, A-Flange, 1" Hollow Shaft for Hydraulic Motor	58 LBS



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

### Specifications **ZETA 170**

Inlet Port	1-1/2" Hose Barb
Outlet Port	1" Hose Barb
Dimensions	15.5" L x 12.5" W x 17.5" H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)
<b>Lubrication:</b>	Requires 44 oz. of Udor Lube 40W Premium Pump Oil. Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

### QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	6062.H3
Diaphragm Bolt/Washer Kit	6062.24
Valve Kit	6062.D5
Complete Repair Kit	8700.09CK

### Recommended Accessories and Drive Options



**OMP-100**  
HD Hydraulic Motor  
2-Bolt A-Flange Mount



**1219.15**  
Shaft Protector  
and Mounting Bolts



**1219.02**  
PTO Drive  
Safety Shield



**VRG-400**  
Pressure  
Regulator



**UD1-1/2-16**  
1-1/2" HI-Flow Filter  
16 Mesh Screen



**15.5823**  
Udor Lube  
Premium Pump Oil

# ZETA 200

**ZETA 200** low pressure 4-cylinder diaphragm pumps have anodized aluminum bodies with plasticized aluminum heads, stainless steel valves and glass-filled nylon manifolds. A pulsation dampener standard on all models.

**ZETA 200** pumps are excellent for various horticultural and agricultural spraying applications.


**ZETA 200 TS2C**

**ZETA 200 MI1**

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>ZETA 200 TS2C</b>	53.0	198	300	20	550	1-3/8" 6-Spline Male PTO Thru-Shaft	58 LBS
<b>ZETA 200 MI1</b>	53.0	198	300	20	550	2-Bolt, A-Flange, 1" Hollow Shaft for Hydraulic Motor	58 LBS

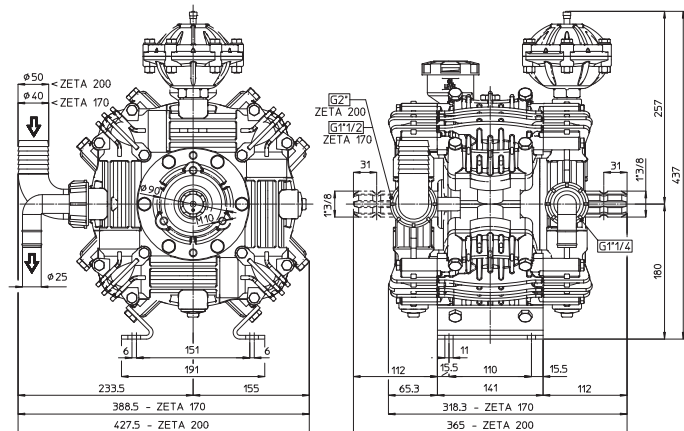
**Specifications ZETA 200**

Inlet Port	2" Hose Barb
Outlet Port	1" Hose Barb
Dimensions - Pump Only	15.5" L x 12.5" W x 17.5" H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)

**Lubrication:** Requires 44 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

**QUICK REFERENCE SERVICE PARTS**

Description	Part #
Diaphragm Kit (GREENTECH)	6062.H3
Diaphragm Bolt/Washer Kit	6062.D6
Valve Kit	6062.D5
Complete Repair Kit	8700.41CK



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

**Recommended Accessories and Drive Options**


**OMP-100**  
HD Hydraulic Motor  
2-Bolt A-Flange Mount



**1219.15**  
Shaft Protector  
and Mounting Bolts



**1219.02**  
PTO Drive  
Safety Shield



**VRG-400**  
Pressure  
Regulator



**15.5823**  
Udor Lube  
Premium Pump Oil



# ZETA 230 / ZETA 260



**ZETA 230 & 260** low pressure 6-cylinder diaphragm pumps have anodized aluminum bodies with plasticized aluminum heads, stainless steel valves and glass-filled nylon manifolds.

**ZETA 230 & 260** pumps are excellent for various horticultural and agricultural spraying applications.

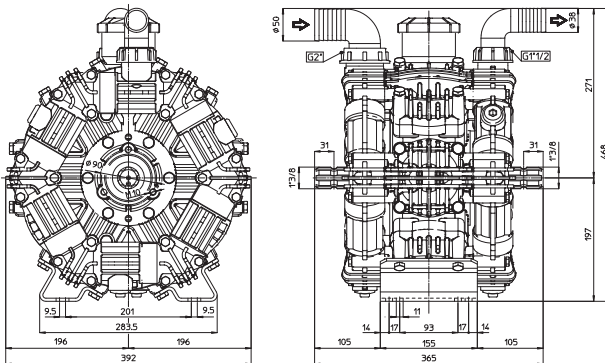


ZETA 230 TS2C / ZETA 260 TS2C



ZETA 260 MI1

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
ZETA 230 TS2C	61.0	228.0	300	20	550	1-3/8" 6-Spline Male PTO Thru-Shaft	80 LBS
ZETA 260 TS2C	68.0	256.0	300	20	550	1-3/8" 6-Spline Male PTO Thru-Shaft	80 LBS
ZETA 260 MI1	68.0	256.0	300	20	550	2-Bolt, A-Flange, 1" Hollow Shaft for Hydraulic Motor	80 LBS



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

Specifications	ZETA 230	ZETA 260
Inlet Port	2" Hose Barb	2" Hose Barb
Outlet Port	1-1/2" Hose Barb	1-1/2" Hose Barb
Dimensions	14.5" L x 15.5" W x 18.5" H	
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)	
<b>Lubrication:</b>	Requires 90 oz. of Udor Lube 40W Premium Pump Oil. Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.	

### QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	6062.H4
Diaphragm Bolt & Washer Kit	6062.28
Valve Kit	6062.D3
Complete Repair Kit	8700.44CK

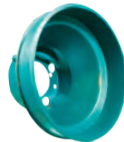
### Recommended Accessories and Drive Options



**OMP-100**  
HD Hydraulic Motor  
2-Bolt A-Flange Mount



**1219.15**  
Shaft Protector  
and Mounting Bolts



**1219.02**  
PTO Drive  
Safety Shield



**VRG-400**  
Pressure  
Regulator



**15.5823**  
Udor Lube  
Premium Pump Oil

# ZETA 300

**ZETA 300** low pressure 6-cylinder diaphragm pumps have anodized aluminum bodies with plasticized aluminum heads, stainless steel valves and glass-filled nylon manifolds.

**ZETA 300** pumps are excellent for various horticultural and agricultural spraying applications.



**ZETA 300 TS2C**



**ZETA 300 MI1**

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>ZETA 300 TS2C</b>	78.0	295.0	300	20	550	1-3/8" 6-Spline Male PTO Thru-Shaft	80 LBS
<b>ZETA 300 MI1</b>	78.0	295.0	300	20	550	2-Bolt, A-Flange, 1" Hollow Shaft for Hydraulic Motor	80 LBS

## Specifications

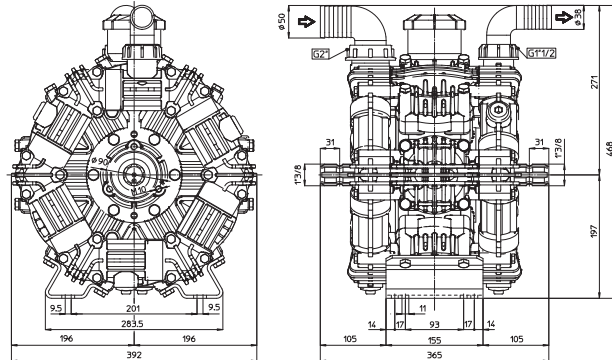
## ZETA 300

Inlet Port	2" Hose Barb
Outlet Port	1-1/2" Hose Barb
Dimensions	14.5" L x 15.5" W x 18.5" H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)

**Lubrication:** Requires 90 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

## QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	6062.H4
Diaphragm Bolt & Washer Kit	6062.D4
Valve Kit	6062.D3
Complete Repair Kit	8700.42CK



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

## Recommended Accessories and Drive Options



**OMP-100**  
HD Hydraulic Motor  
2-Bolt A-Flange Mount



**1219.15**  
Shaft Protector  
and Mounting Bolts



**1219.02**  
PTO Drive  
Safety Shield



**VRG-400**  
Pressure  
Regulator



**15.5823**  
Udor Lube  
Premium Pump Oil

# ZETA 350 / ZETA 400



**ZETA 350 & 400** low pressure 6-cylinder diaphragm pumps have anodized aluminum bodies with plasticized aluminum heads, stainless steel valves and glass-filled nylon manifolds.

**ZETA 350 & 400** pumps are excellent for various horticultural and agricultural spraying applications.

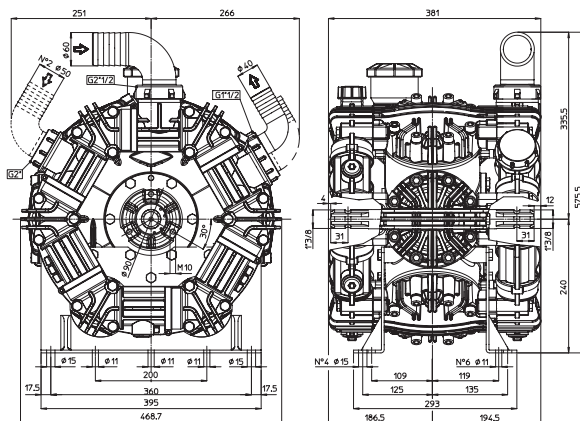


**ZETA 350 TS2C / ZETA 400 TS2C**



**ZETA 350 MI1**

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>ZETA 350 TS2C</b>	92.0	345.0	300	20	550	1-3/8" 6-Spline Male PTO Thru-Shaft	155 LBS
<b>ZETA 350 MI1</b>	92.0	345.0	300	20	550	2-Bolt, A-Flange, 1" Hollow Shaft for Hydraulic Motor	155 LBS
<b>ZETA 400 TS2C</b>	106.0	400.0	300	20	550	1-3/8" 6-Spline Male PTO Thru-Shaft	155 LBS



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

Specifications	ZETA 350	ZETA 400
Inlet Port	2" & 2-1/2" Hose Barb	2" & 2-1/2" Hose Barb
Outlet Port	(2)1-1/2" Hose Barb	(2)1-1/2" Hose Barb
Dimensions	20.5" L x 14.5" W x 23" H	
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)	

**Lubrication:** Requires 155 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

#### QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	6062.G1
Diaphragm Bolt & Washer Kit	6062.G2
Valve Kit	6062.F9
Complete Repair Kit	8700.43CK

#### Recommended Accessories and Drive Options

**GREENTECH**



**1219.15**  
Shaft Protector  
and Mounting Bolts



**1219.02**  
PTO Drive  
Safety Shield



**VRG-400**  
Pressure  
Regulator



**15.5823**  
Udor Lube  
Premium Pump Oil

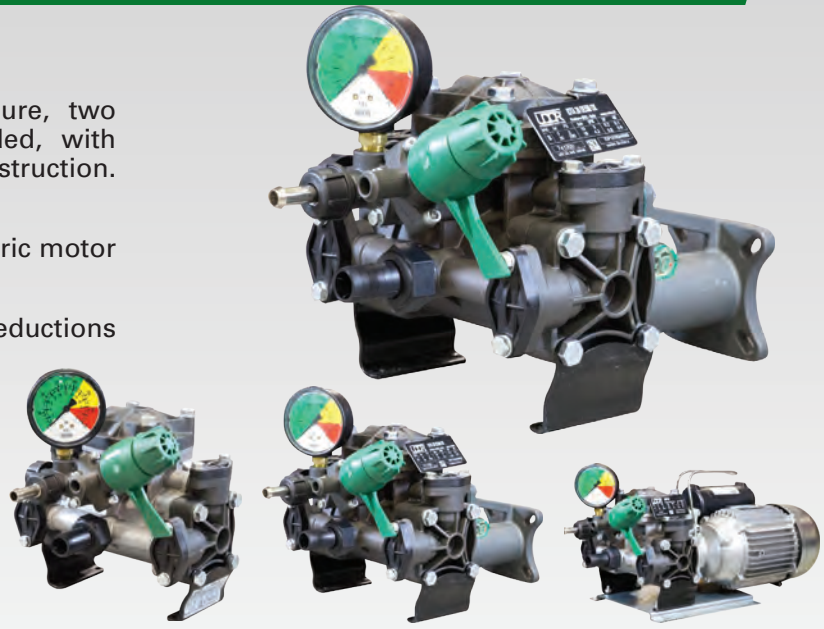
# IOTA 18 / IOTA 20 / IOTA 25

**IOTA 18, IOTA 20 & IOTA 25** low pressure, two diaphragm pumps are internally manifolded, with anodized aluminum and stainless steel construction. All models include pulsation dampener.

The **IOTA 18 M** includes a 1 HP, 115 volt electric motor and base plate.

The **IOTA 20 GR & IOTA 25 GR** include gear reductions for 3/4" shaft gasoline engines.

**IOTA 18, IOTA 20 & IOTA 25** pumps are excellent for various lawn care, horticultural, agricultural, nursery, pest control and turf spraying applications.



IOTA 20 / IOTA 25

IOTA 20 GR3/4 / IOTA 25 GR3/4

IOTA 18 M

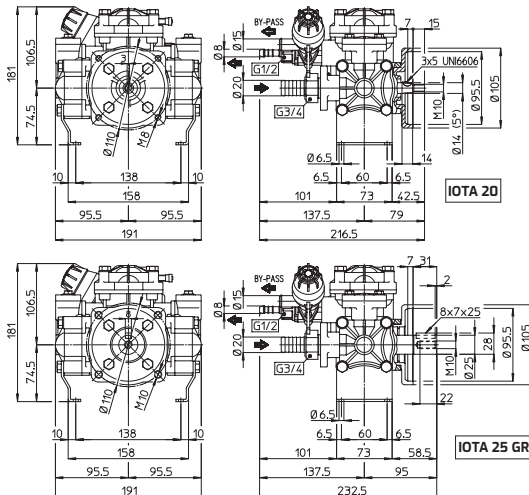
Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>IOTA 20</b>	5.0	19.0	300	20	600	2 Diaphragm. 14 mm Tapered Shaft	9 LBS
<b>IOTA 20 GR3/4</b>	5.0	19.0	300	20	600	2 Diaphragm. Gear Reduction for 3/4" Shaft Gas Engine	12 LBS
<b>IOTA 25</b>	7.0	24.0	300	20	600	2 Diaphragm. 25 mm Solid Keyed Shaft	10 LBS
<b>IOTA 25 GR3/4</b>	7.0	24.0	300	20	600	2 Diaphragm. Gear Reduction for 3/4" Shaft Gas Engine	12 LBS
<b>IOTA 18 M</b>	4.8	18.0	200	20	600	2 Diaphragm 115-Volt 1 HP Motor. Max 10 Amp	33 LBS
<b>IOTA 18 E</b>	-	-	-	-	-	Replacement Pump for IOTA-18/M	9 LBS
<b>0908.31</b>	-	-	-	-	-	Replacement Motor for IOTA-18/M	20 LBS

Specifications	IOTA 20	IOTA 25
Inlet Port	3/4" Hose Barb	3/4" Hose Barb
Outlet Ports	1/2" Hose Barb	1/2" Hose Barb
Bypass	5/8" Hose Barb	5/8" Hose Barb
Dimensions	7.5" L x 12.5" W x 8.5" H	
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)	

**Lubrication:** Requires 7 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

### QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	8700.01
Diaphragm Bolt & Washer Kit	6062.40
Valve Kit	6062.38
Regulator Repair Kit	8701.01
Complete Repair Kit	8700.01CK



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

### Recommended Accessories and Drive Options



5094.76

Gear Reduction/IOTA-20  
3/4" Shaft Gas Engine



5085.F7

Gear Reduction/IOTA-25  
3/4" Shaft Gas Engine



6010.23

Control Unit  
Regulator

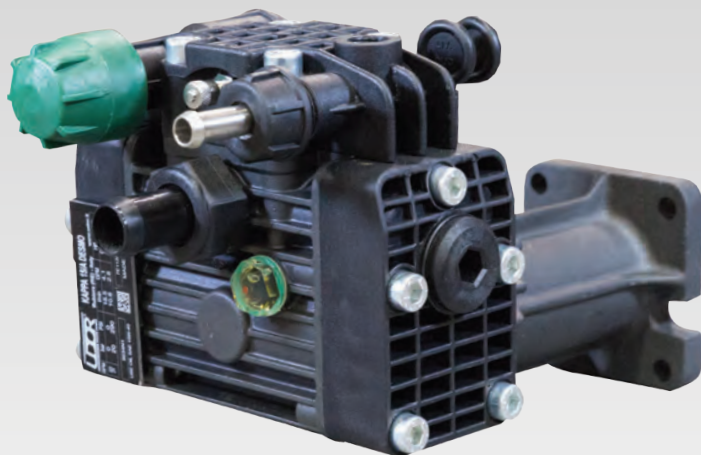


15.5823

Udor Lube  
Premium Pump Oil



# KAPPA 7 / KAPPA 15 / KAPPA 18



The **KAPPA 7DC, 15DC & 18DC** are internally manifolded, two diaphragm pumps with pulsation dampener, Anodized aluminum and glass-filled nylon construction. Additional pressure regulator required.

**KAPPA 15 GR3/4** pumps include pulsation dampener, adjustable pressure regulator and gearbox for gas engines with 3/4" shaft

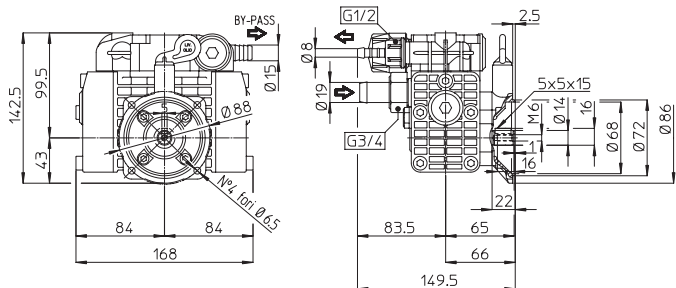


**KAPPA 7 DC, KAPPA 15 DC, KAPPA 18 DC**



**KAPPA 15 GR3/4**

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>KAPPA 7 DC</b>	2.0	7.6	275	20	1450	2 Diaphragm. Replacement Pump for KAPPA 7 12-Volt	14 LBS
<b>KAPPA 15 DC</b>	3.5	13.3	275	20	1450	2 Diaphragm. Replacement Pump for KAPPA 15 12-Volt	14 LBS
<b>KAPPA 18 DC</b>	4.2	16.0	275	20	1450	2 Diaphragm. Replacement Pump for KAPPA 18 12-Volt	14 LBS
<b>KAPPA 15 GR3/4</b>	3.5	13.3	275	20	1450	2 Diaphragm. Gear Reduction for 3/4" Shaft Gas Engine	17 LBS



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

## Specifications

	KAPPA 7	KAPPA 15	KAPPA 18
Inlet Port			3/4" Hose Barb
Outlet Ports			3/8" Hose Barb
Bypass			5/8" Hose Barb
Dimensions			7" L x 7.5" W x 6.5" H
Diaphragm Material			GREENTECH (Std) Buna-N (Opt)

**Lubrication:** Requires 4 oz. of Udor Lube 40W Premium Pump Oil. Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

## QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	8700.27
Diaphragm Bolt & Washer Kit	6062.04
Valve Kit	6062.02
Regulator Repair Kit	6062.A9
Complete Repair Kit	8700.27CK

## Recommended Accessories and Drive Options



**UD1/4-150**  
Control Unit  
Regulator



**5047.D7**  
Gear Reduction  
3/4" Shaft Gas Engine



**5020.02**  
Venturi Agitator  
1/2" MNPT Inlet



**163.604.4**  
**163.604.6**  
3/8" & 1/2" HB Elbow



**UD1-16**  
1" HI-Flow Filter  
16 Mesh Screen



**15.5823**  
Udor Lube  
Premium Pump Oil

# KAPPA 7 / KAPPA 15 / KAPPA 18

## PUMP/MOTOR ASSEMBLIES


**KAPPA 7 115-Volt**

**KAPPA 7 12-Volt  
KAPPA 15 12-Volt  
KAPPA 18 12-Volt**

**KAPPA 15 12-Volt HP  
KAPPA 18 12-Volt HP**

Model	GPM	l/min	PSI	bar	Amps	Drive Configuration	Weight
<b>KAPPA 7 115 Volt</b>	2.0	7.6	200	15.0	10	115-Volt TEFC Motor with On/Off	25 LBS
<b>KAPPA 7 12 Volt</b>	2.0	7.6	200	15.0	25	12-Volt DC Electric Motor	22 LBS
<b>KAPPA 15 12 Volt</b>	3.5	13.3	90	6.0	25	12-Volt DC Electric Motor	22 LBS
<b>KAPPA 15 12 Volt HP</b>	3.5	13.3	200	15.0	35	HD 12-Volt DC Electric Motor	35 LBS
<b>KAPPA 18 12 Volt</b>	4.2	16.0	70	5.0	28	12-Volt DC Electric Motor	22 LBS
<b>KAPPA 18 12 Volt HP</b>	4.2	16.0	150	10.0	35	HD 12-Volt DC Electric Motor	35 LBS
<b>0908.42</b>	-	-	-	-	-	Replacement Motor for KAPPA-7,15,18/12-Volt	
<b>0908.50</b>	-	-	-	-	-	Replacement Motor for KAPPA-15,18/12-Volt-HP	

Specifications	KAPPA 7	KAPPA 15	KAPPA 18
Inlet Port			3/4" Hose Barb
Outlet Ports			3/8" Hose Barb
Bypass			5/8" Hose Barb
Dimensions - Pump Only			7"L x 7.5"W x 6.5"H
Diaphragm Material			GREENTECH (Std) Buna-N (Opt)

**Lubrication:** Requires 4 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

### QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	8700.27
Diaphragm Bolt & Washer Kit	6062.04
Valve Kit	6062.02
Regulator Repair Kit	6062.A9
Complete Repair Kit	8700.27CK

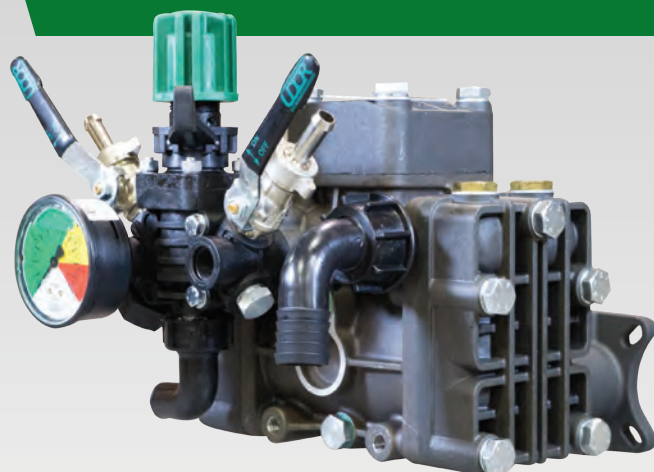
### Recommended Accessories and Drive Options


**UD1-16**  
1" Hi-Flow Filter  
16 Mesh Screen

**6010.23**  
Control Unit  
Regulator

**15.5823**  
Udor Lube  
Premium Pump Oil

# KAPPA 25



**KAPPA 25** 2-cylinder, medium pressure diaphragm pumps are internally manifolded with anodized aluminum construction and anodized aluminum and stainless steel liquid handling parts.

**KAPPA 25** pumps are excellent choices for various horticultural, agricultural, lawn care, nursery, pest control and turf spraying applications. They are also effectively used for aircraft de-icing, hydrostatic testing and cleaning applications.

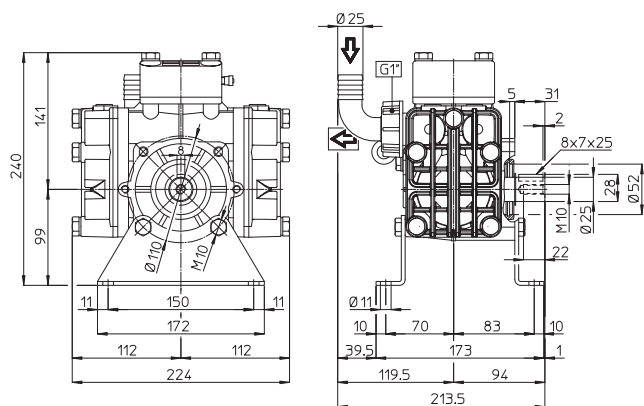


**KAPPA 25**



**KAPPA 25 GR3/4**

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>KAPPA 25</b>	7.0	26.5	350	24	550	25 mm Solid Keyed Shaft. Mounting Rails	18 LBS
<b>KAPPA 25 GR3/4</b>	7.0	26.5	350	24	550	Gear Reduction for 3/4" Shaft Gas Engine	28 LBS



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

### Specifications KAPPA-25

Inlet Port	1" Hose Barb
Outlet Ports	(2) 1/2" Hose Barb
Bypass	3/4" Hose Barb
Dimensions	8.5" L x 9.0" W x 9.5" H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)

**Lubrication:** Requires 12 oz. of Udor Lube 40W Premium Pump Oil. Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

### QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	6062.C1
Diaphragm Bolt/Washer Kit	6062.B4
Valve Kit	6062.42
Regulator Repair Kit	6062.A9
Complete Repair Kit	8700.65CK

### Recommended Accessories and Drive Options



**6010.95**  
Control Unit  
Regulator w/Gauge



**5085.F7**  
Gear Reduction  
3/4" Shaft Gas Engine



**5020.02**  
Venturi Agitator  
1/2" MNPT Inlet



**163.604.4**  
**163.604.6**  
3/8" & 1/2" HB Elbow



**UD1-16**  
1" HI-Flow Filter  
16 Mesh Screen

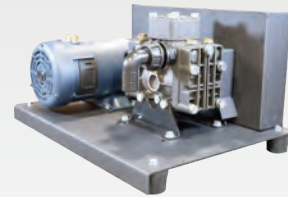
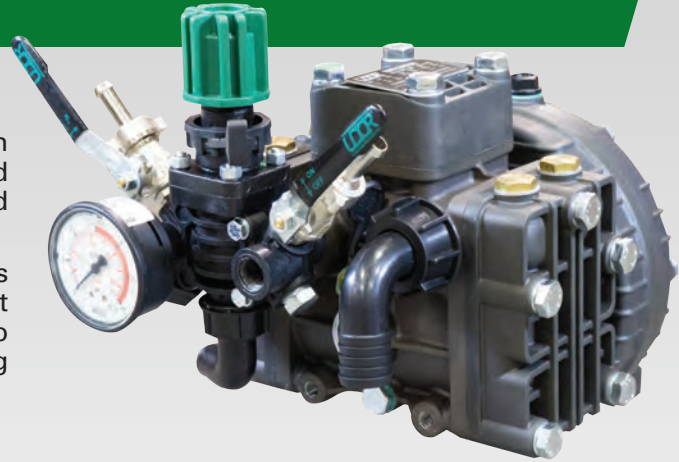


**15.5823**  
Udor Lube  
Premium Pump Oil

# KAPPA 32

**KAPPA 32** 2-cylinder, medium pressure diaphragm pumps are internally manifolded with anodized aluminum construction and anodized aluminum and stainless steel liquid handling parts.

**KAPPA 32** pumps are excellent choices for various horticultural, agricultural, lawn care, nursery, pest control and turf spraying applications. They are also effectively used for aircraft de-icing, hydrostatic testing and cleaning applications.


**KAPPA 32**
**KAPPA 32 GR3/4**
**KAPPA 32 12-VOLT, KAPPA 32 115-VOLT**

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>KAPPA 32</b>	9.5	36.0	560	38	550	25 mm Solid Keyed Shaft. Mounting Rails	18 LBS
<b>KAPPA 32 GR3/4</b>	9.5	36.0	560	38	550	Gear Reduction for 3/4" Shaft Gas Engine	28 LBS
<b>KAPPA 32 12-VOLT</b>	6.0	23.0	150	10	-	12-volt TEFC Motor. Super Duty Belt-Drive Base	-
<b>06-1080.48</b>	-	-	-	-	-	Replacement 12-Volt Motor for KAPPA-32/12-VOLT	-
<b>KAPPA 32 115-VOLT</b>	6.0	23.0	300	20	-	15-volt TEFC Motor. Super Duty Belt-Drive Base	-
<b>06-1160.68</b>	-	-	-	-	-	Replacement 115-Volt Motor for KAPPA-32/115-VOLT	-

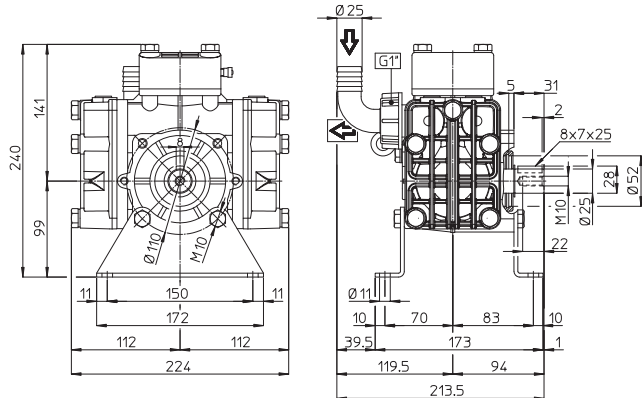
**Specifications**
**KAPPA 32**

Inlet Port	1" Hose Barb
Outlet Ports	(2) 1/2" Hose Barb
Bypass	3/4" Hose Barb
Dimensions	8.5" L x 9.0" W x 9.5" H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)

**Lubrication:** Requires 20 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

**QUICK REFERENCE SERVICE PARTS**

Description	Part #
Diaphragm Kit (GREENTECH)	6062.C1
Diaphragm Bolt/Washer Kit	6062.B4
Valve Kit	6062.42
Regulator Repair Kit	6062.A9
Complete Repair Kit	8700.65CK



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

**Recommended Accessories and Drive Options**


**6010.93**  
Control Unit  
Regulator w/Gauge



**5071.75**  
Gear Reduction  
3/4" Shaft Gas Engine



**5020.02**  
Venturi Agitator  
1/2" MNPT Inlet



**163.604.4**  
**163.604.6**  
3/8" & 1/2" HB Elbow



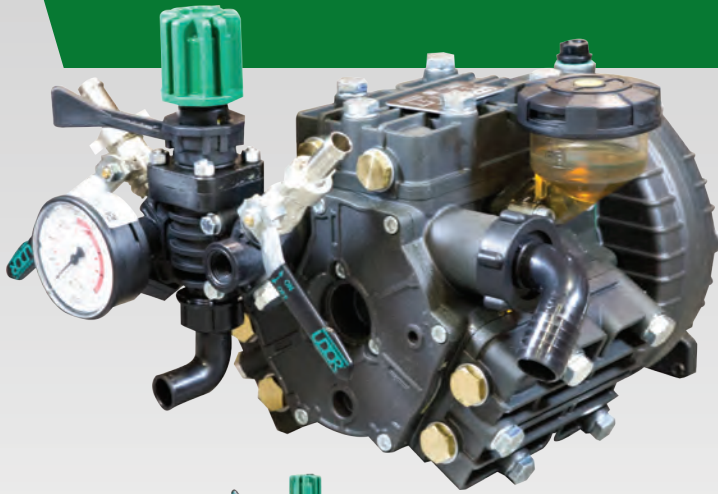
**UD1-16**  
1" HI-Flow Filter  
16 Mesh Screen



**15.5823**  
Udor Lube  
Premium Pump Oil



# KAPPA 43



**KAPPA 43** 3-cylinder, medium pressure diaphragm pumps are internally manifolded with anodized aluminum construction and anodized aluminum and stainless steel liquid handling parts.

**KAPPA 43** pumps are excellent choices for various horticultural, agricultural, lawn care, nursery, pest control and turf spraying applications. They are also effectively used for aircraft de-icing, hydrostatic testing and cleaning applications.



**KAPPA 43**

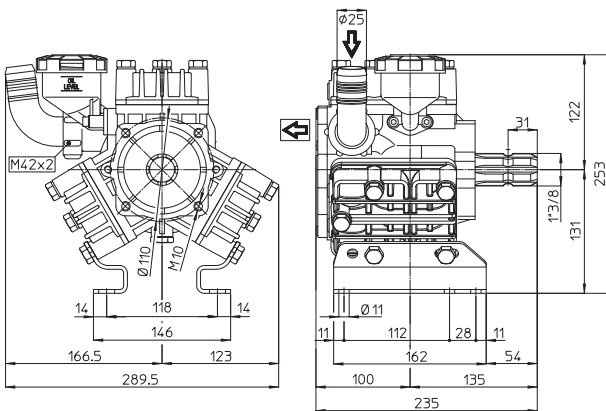


**KAPPA 43 GR3/4LP**



**KAPPA 43 GR3/4**

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>KAPPA 43</b>	10.5	40.0	560	38	550	25 mm Solid Keyed Shaft. Mounting Rails	29 LBS
<b>KAPPA 43 GR3/4LP</b>	10.5	40.0	350	24	550	Gear Reduction for 3/4" Shaft Gas Engine	39 LBS
<b>KAPPA 43 GR3/4</b>	10.5	40.0	560	38	550	Gear Reduction for 3/4" Shaft Gas Engine	39 LBS



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

## Specifications

## KAPPA 43

Inlet Port	1" Hose Barb
Outlet Ports	(2) 1/2" Hose Barb
Bypass	3/4" Hose Barb
Dimensions - Pump Only	9.5" L x 11.5" W x 10.0" H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)

**Lubrication:** Requires 20 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

## QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	8700.45
Diaphragm Bolt/Washer Kit	6062.48
Valve Kit	6062.46
Regulator Repair Kit	6062.A9
Complete Repair Kit	8700.45CK

## Recommended Accessories and Drive Options



**6010.93 / 6010.95**  
Control Unit  
Regulator w/Gauge



**5071.75**  
Gear Reduction  
3/4" Shaft Gas Engine



**5020.02**  
Venturi Agitator  
1/2" MNPT Inlet



**163.604.4**  
**163.604.6**  
3/8" & 1/2" HB Elbow



**UD1-16**  
1" HI-Flow Filter  
16 Mesh Screen



**15.5823**  
Udor Lube  
Premium Pump Oil

# KAPPA 55

**KAPPA 55** 3-cylinder, medium pressure diaphragm pumps are internally manifolded with anodized aluminum construction and anodized aluminum and stainless steel liquid handling parts.

**KAPPA 55** pumps are excellent choices for various horticultural, agricultural, lawn care, nursery, pest control and turf spraying applications. They are also effectively used for aircraft de-icing, hydrostatic testing and cleaning applications.



**KAPPA 55 VA**



**KAPPA 55 VAGR3/4**



**KAPPA 55 VAGR1**



**KAPPA 55 TSFVA**

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>KAPPA 55 VA</b>	15.0	57.0	560	38	550	Universal VA Drive Face. Mounting Rails	37 LBS
<b>KAPPA 55 VAGR3/4</b>	15.0	57.0	350	24	550	Gear Reduction for 3/4" Shaft Gas Engine	47 LBS
<b>KAPPA 55 VAGR1</b>	15.0	57.0	560	38	550	Gear Reduction for 1" Shaft Gas Engine	47 LBS
<b>KAPPA 55 TSFVA</b>	15.0	57.0	560	38	550	Universal VA Drive Face x 25 mm Solid Keyed Shaft	37 LBS

## Specifications

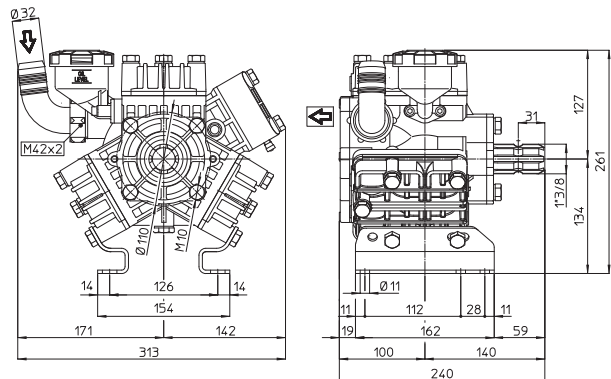
## KAPPA 55

Inlet Port	1-1/4" Hose Barb
Outlet Ports	(2) 1/2" Hose Barb
Bypass	3/4" Hose Barb
Dimensions	9.5" L x 12.5" W x 10.5" H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)

**Lubrication:** Requires 23 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

## QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	8700.26
Diaphragm Bolt/Washer Kit	6062.48
Valve Kit	6062.46
Regulator Repair Kit	8701.10
Complete Repair Kit	8700.26CK



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

## Recommended Accessories and Drive Options



**5033.A4**

Gear Reduction  
1" Shaft Gas Engine



**5027.75**

Gear Reduction  
3/4" Shaft Gas Engine



**6010.24**

Control Unit  
Regulator - 560 PSI



**7753.A6**

1-1/8" Male PTO  
Shaft and Bolts



**7751.A3**

1" Solid Keyed  
Shaft and Bolts



**15.5823**

Udor Lube  
Premium Pump Oil

# DELTA 40



**DELTA 40** 2-cylinder, medium pressure diaphragm pumps are internally manifolded with anodized aluminum construction and anodized aluminum and stainless steel liquid handling parts.

**DELTA 40** pumps are excellent choices for various horticultural, agricultural, lawn care, nursery, pest control and turf spraying applications. They are also effectively used for aircraft de-icing, hydrostatic testing and cleaning applications.



**DELTA 40**

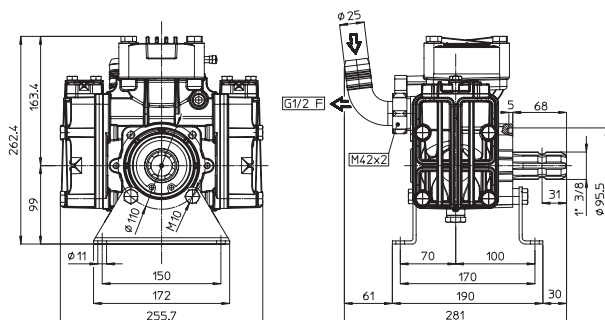


**DELTA 40 TSFVA**



**DELTA 40 GR3/4**

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>DELTA 40</b>	10.5	40.0	560	40	550	25 mm Solid Keyed Shaft. Mounting Rails	29 LBS
<b>DELTA 40 TSFVA</b>	10.5	40.0	560	40	550	25 mm Solid Keyed x Universal VA Drive Face. Mounting Rails	29 LBS
<b>DELTA 40 GR3/4</b>	10.5	40.0	560	40	550	Gear Reduction for 3/4" Shaft Gas Engine	39 LBS



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

## Specifications DELTA 40

Inlet Port	1" Hose Barb
Outlet Ports	(2) 1/2" Hose Barb
Bypass	3/4" Hose Barb
Dimensions	10.5" L x 11.5" W x 10.5" H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)

**Lubrication:** Requires 20 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

## QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	6062.G4
Diaphragm Bolt / Washer Kit	6062.B4
Valve Kit	6062.G3
Regulator Repair Kit	6062.A9
Complete Repair Kit	8700.85CK

## Recommended Accessories and Drive Options



**6010.24**  
Control Unit  
Regulator w/Gauge



**5071.75**  
Gear Reduction  
3/4" Shaft Gas Engine



**5020.02**  
Venturi Agitator  
1/2" MNPT Inlet



**163.604.4**  
**163.604.6**  
3/8" & 1/2" HB Elbow

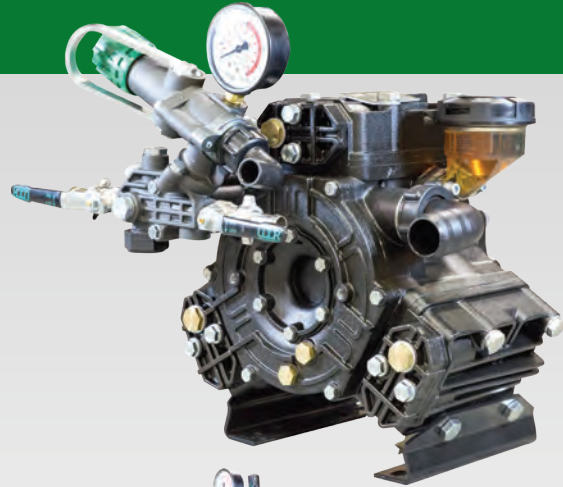


**UD1-16**  
1" HI-Flow Filter  
16 Mesh Screen



**15.5823**  
Udor Lube  
Premium Pump Oil

# DELTA 75



**DELTA 75** 3-cylinder, medium pressure diaphragm pumps are internally manifolded with anodized aluminum construction and anodized aluminum and stainless steel liquid handling parts.

**DELTA 75** pumps are excellent choices for various horticultural, agricultural, lawn care, nursery, pest control and turf spraying applications. They are also effectively used for aircraft de-icing, hydrostatic testing and cleaning applications.



**DELTA 75 VA**



**DELTA 75 VAGR1**



**DELTA 75 TSVA**

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>DELTA 75 VA</b>	20.0	79.0	560	38	550	Universal VA Drive Face. Mounting Rails	46 LBS
<b>DELTA 75 VAGR1</b>	20.0	79.0	560	38	550	Gear Reduction for 1" Shaft Gas Engine	58 LBS
<b>DELTA 75 TSVA</b>	20.0	79.0	560	38	550	Universal VA Drive Face x 1-3/8" 6-Spline Male PTO	46 LBS

## Specifications

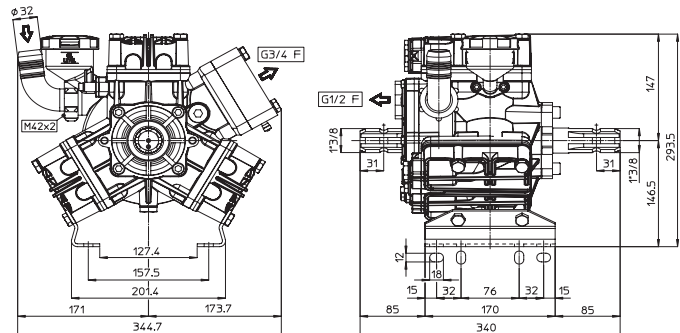
## DELTA 75

Inlet Port	1-1/4" Hose Barb
Outlet Ports	(2) 1/2" Hose Barb
Bypass	3/4" Hose Barb
Dimensions	13.5" L x 14.0" W x 12.0" H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)

**Lubrication:** Requires 23 oz. of Udor Lube 40W Premium Pump Oil. Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

## QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	6062.E4
Diaphragm Bolt / Washer Kit	6062.48
Valve Kit	6062.E6
Regulator Repair Kit	8701.02
Complete Repair Kit	8700.75CK



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

## Recommended Accessories and Drive Options



**6047.06**  
Control Unit  
Regulator - 560 PSI



**5034.B5**  
Gear Reduction  
1" Shaft Gas Engine



**7751.A3**  
1" Solid Keyed  
Shaft and Bolts



**7753.A6**  
1-1/8" Male PTO  
Shaft and Bolts



**1219.02**  
PTO Drive  
Safety Shield



**15.5823**  
Udor Lube  
Premium Pump Oil

# DELTA 100



**DELTA 100** 4-cylinder, medium pressure diaphragm pumps are internally manifolded with anodized aluminum construction and anodized aluminum and stainless steel liquid handling parts. Includes mounting rails and control unit with pressure gauge.

**DELTA 100** pumps are excellent choices for various horticultural, agricultural, lawn care, nursery, pest control and turf spraying applications. They are also effectively used for aircraft de-icing, hydrostatic testing and cleaning applications.



DELTA 100 1C



DELTA 100 VA



DELTA 100 VAGR1

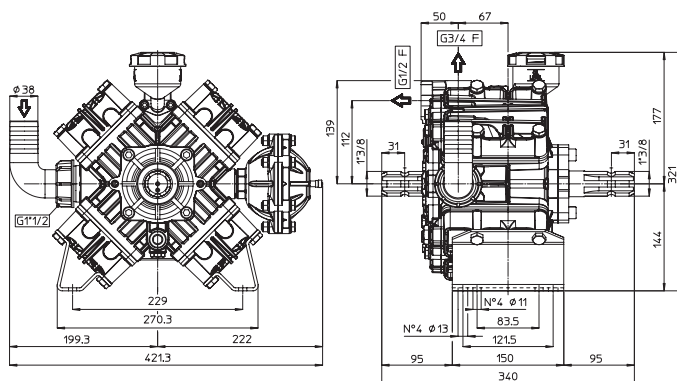


DELTA 100 TS2C



DELTA-100 TSVA

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>DELTA 100 1C</b>	26.0	104.0	560	40	550	1-3/8" 6-Spline Male PTO Shaft	51 LBS
<b>DELTA 100 VA</b>	26.0	104.0	560	40	550	Universal VA Drive Face. Mounting Rails	51 LBS
<b>DELTA 100 VAGR1</b>	26.0	104.0	560	40	550	Gear Reduction for 1" Shaft Gas Engine	51 LBS
<b>DELTA 100 TS2C</b>	26.0	104.0	560	40	550	1-3/8" 6-Spline Male PTO Thru-Shaft	72 LBS
<b>DELTA 100 TSVA</b>	26.0	104.0	560	40	550	Universal VA Drive Face x 1-3/8" 6-Spline Male PTO	51 LBS



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

## Specifications

## DELTA 100

Inlet Port	1-1/2" Hose Barb
Outlet Ports	(2) 3/4" Hose Barb,
Bypass	1" Hose Barb
Dimensions	13.5" L x 17.0" W x 13.0" H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)

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

## QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	8700.80
Diaphragm Bolt / Washer Kit	6062.12
Valve Kit	6062.E5
Regulator Repair Kit	8701.02
Complete Repair Kit	8700.80CK

## Recommended Accessories and Drive Options



**6047.06**  
Control Unit  
Regulator - 560 PSI



**5034.B5**  
Gear Reduction  
1" Shaft Gas Engine



**1219.02**  
PTO Drive  
Safety Shield



**7751.A3**  
1" Solid Keyed  
Shaft and Bolts



**7753.A6**  
1-1/8" Male PTO  
Shaft and Bolts



**15.5823**  
Udor Lube  
Premium Pump Oil

# DELTA 125

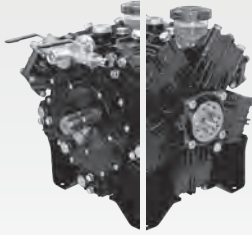


**DELTA 125** 5-cylinder, medium pressure diaphragm pumps are internally manifolded with anodized aluminum construction and anodized aluminum and stainless steel liquid handling parts.

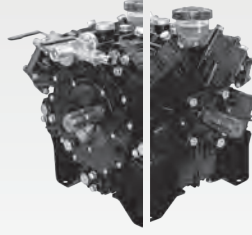
**DELTA 125** pumps are excellent choices for various horticultural, agricultural, lawn care, nursery, pest control and turf spraying applications. They are also effectively used for aircraft de-icing, hydrostatic testing and cleaning applications.



**DELTA 125 VA**



**DELTA 125 TSVA**



**DELTA 125 TS2C**



**DELTA 125 VAGR1**

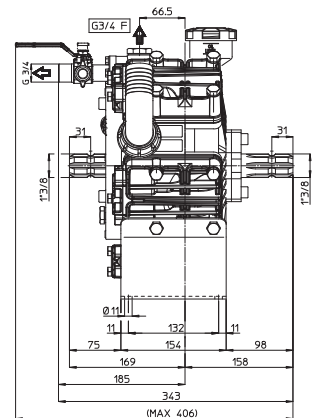
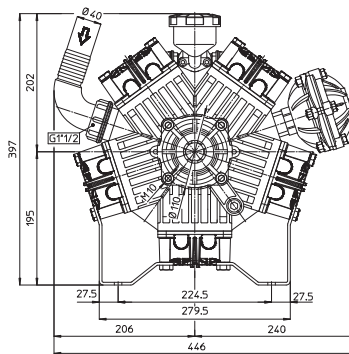
Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>DELTA 125 VA</b>	34.0	126.0	560	40	550	Universal VA Drive Face. Mounting Rails	65 LBS
<b>DELTA 125 TSVA</b>	34.0	126.0	560	40	550	Universal VA Drive Face x 1-3/8" 6-Spline Male PTO	65 LBS
<b>DELTA 125 TS2C</b>	34.0	126.0	560	40	550	1-3/8" 6-Spline Male PTO Thru-Shaft	65 LBS
<b>DELTA 125 VAGR1</b>	34.0	126.0	560	40	550	Gear Reduction for 1" Shaft Gas Engine	85 LBS

Specifications	DELTA 125
Inlet Port	1-1/4" Hose Barb
Outlet Ports	(2) 1/2" Hose Barb, 3/4" MBSP
Bypass	3/4" Hose Barb
Dimensions	14.0"L x 18.0"W x 16.0"H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)

**Lubrication:** Requires 69 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

### QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	6062.F7
Diaphragm Bolt / Washer Kit	6062.87
Valve Kit	6062.F8
Regulator Repair Kit	8701.02
Complete Repair Kit	8700.82CK



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

### Recommended Accessories and Drive Options



**6005.05**  
Control Unit  
Regulator



**5033.A4**  
Gear Reduction  
1" Shaft Gas Engine



**7751.A3**  
1" Solid Keyed  
Shaft and Bolts



**7753.A6**  
1-1/8" Male PTO  
Shaft and Bolts



**1219.02**  
PTO Drive  
Safety Shield



**15.5823**  
Udor Lube  
Premium Pump Oil

# DELTA 140



**DELTA 140** 3-cylinder, high pressure diaphragm pumps are internally manifolded with anodized aluminum construction and anodized aluminum and stainless steel liquid handling parts. Includes mounting rails and control unit with pressure gauge.

**DELTA 140** pumps are excellent choices for various horticultural, agricultural, lawn care, nursery, pest control and turf spraying applications. They are also effectively used for aircraft de-icing, hydrostatic testing and cleaning applications.

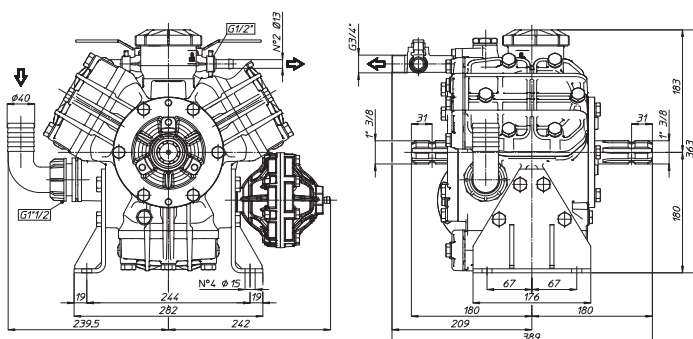


DELTA 140 TS2C

DELTA 140 TSMFVA

DELTA 140 GR1

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>DELTA 140 TS2C</b>	36.4	138.0	725	49	550	1-3/8" 6-Spline Male PTO Thru-Shaft	95 LBS
<b>DELTA 140 TSMFVA</b>	36.4	138.0	725	49	550	1-3/8" 6-Spline Male PTO x Universal VA Face	95 LBS
<b>DELTA 140 GR1</b>	36.4	138.0	725	49	550	Gear Reduction for Gas Engines with 1" Shaft	115 LBS



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

## Specifications

## DELTA 140

Inlet Port	1-1/2" Hose Barb
Outlet Ports	(2) 1/2" Hose Barb
Bypass	1" Hose Barb
Dimensions	19.0"L x 15.5"W x 14.5"H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)

**Lubrication:** Requires 54 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

## QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	6062.H5
Diaphragm Bolt / Washer Kit	6062.16
Valve Kit	6062.H6
Regulator Repair Kit	8701.02
Complete Repair Kit	8700.83CK

## Recommended Accessories and Drive Options



**6005.05**  
Control Unit  
Regulator



**5034.B5**  
Gear Reduction  
1" Shaft Gas Engine



**1219.15**  
Shaft Protector  
and Mounting Bolts



**UD1-1/2-16**  
1-1/2" HI-Flow Filter  
16 Mesh Screen



**7753.A6**  
1-1/8" Male PTO  
Shaft and Bolts



**15.5823**  
Udor Lube  
Premium Pump Oil

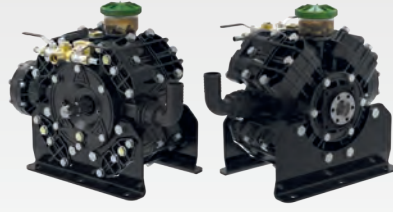
# DELTA 170

**DELTA 170** 4-cylinder, high pressure diaphragm pumps are internally manifolded with anodized aluminum construction and anodized aluminum and stainless steel liquid handling parts. Includes mounting rails and control unit with pressure gauge.

**DELTA 170** pumps are excellent choices for various horticultural, agricultural, lawn care, nursery, pest control and turf spraying applications. They are also effectively used for aircraft de-icing, hydrostatic testing and cleaning applications.



**DELTA 170 TS2C**



**DELTA 170 TSMFVA**



**DELTA 170 GR1-1/8**

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>DELTA 170 TS2C</b>	47.3	179.5	725	49	550	1-3/8" 6-Spline Male PTO Thru-Shaft	110 LBS
<b>DELTA 170 TSMFVA</b>	47.3	179.5	725	49	550	1-3/8" 6-Spline PTO x Universal VA Drive Face	110 LBS
<b>DELTA 170 GR1-1/8</b>	47.3	179.5	725	49	550	Gear Reduction for Gas Engines with 1-1/8" Shaft	130 LBS

### Specifications

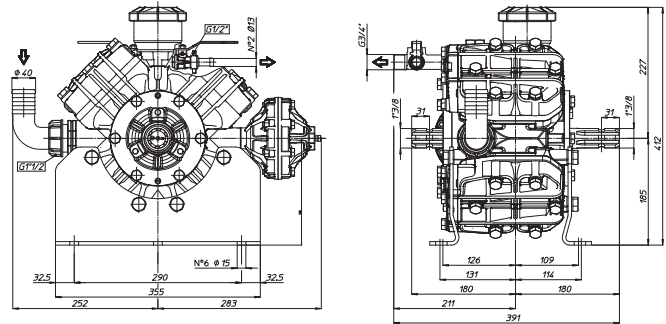
### DELTA-170

Inlet Port	1-1/2" Hose Barb
Outlet Ports	(2) 1/2" Hose Barb
Bypass	1" Hose Barb
Dimensions	15.5" L x 21.5" W x 16.5" H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)

**Lubrication:** Requires 67 oz. of Udor Lube 40W Premium Pump Oil. Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

### QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	6062.H7
Diaphragm Bolt / Washer Kit	6062.24
Valve Kit	6062.H8
Complete Repair Kit	8700.84CK



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

### Recommended Accessories and Drive Options



**6005.05**  
Control Unit  
Regulator



**5096.B5**  
Gear Reduction  
1-1/8" Shaft Gas Engine



**UD1-1/2-16**  
1-1/2" HI-Flow Filter  
16 Mesh Screen



**7753.A6**  
1-1/8" Male PTO  
Shaft and Bolts



**1219.15**  
Shaft Protector  
and Mounting Bolts



**15.5823**  
Udor Lube  
Premium Pump Oil



# OMEGA 139



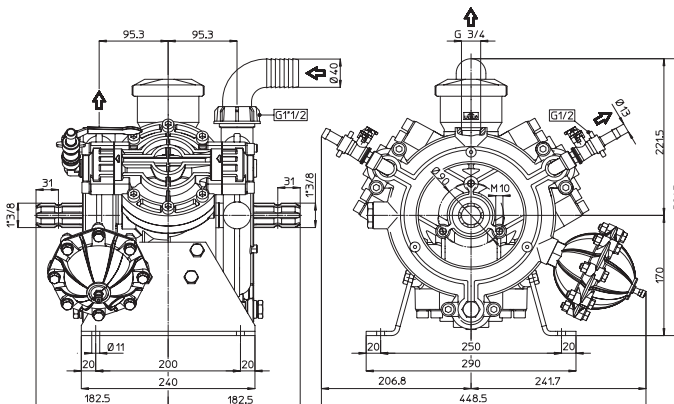
**OMEGA 139** 3-cylinder, high pressure, high volume diaphragm pumps are constructed of anodized aluminum, brass and stainless steel and have anodized aluminum, brass and stainless steel liquid handling parts. Includes mounting rails and control unit with pressure gauge. Simplicity of design and common parts allow for easy and economical maintenance.

**OMEGA 139** pumps are excellent choices for various horticultural and agricultural spraying applications.



**OMEGA 139 TS 2C**

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
OMEGA 139 TS2C	37.0	140.0	725	49	550	1-3/8" 6-Spline Male PTO Thru-Shaft	51 LBS



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

## Specifications

## OMEGA 139

Inlet Port	1-1/4" Hose Barb
Outlet Ports	(2) 1/2" Hose Barb
Bypass	1" Hose Barb
Dimensions	13"L x 7.85"W x 11.5"H
Diaphragm Material	GREENTECH (Std) Buna-N (Opt)

**Lubrication:** Requires 54 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

## QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	6062.E8
Diaphragm Bolt / Washer Kit	6062.16
Valve Kit	6062.D9
Complete Repair Kit	8700.30CK

## Recommended Accessories and Drive Options



**1219.15**  
Shaft Protector  
and Mounting Bolts



**1219.02**  
PTO Drive  
Safety Shield



**6005.05**  
Control Unit  
Regulator



**5020.02**  
Venturi Agitator  
1/2" MNPT Inlet



**UD1-1/2-16**  
1-1/2" HI-Flow Filter  
16 Mesh Screen

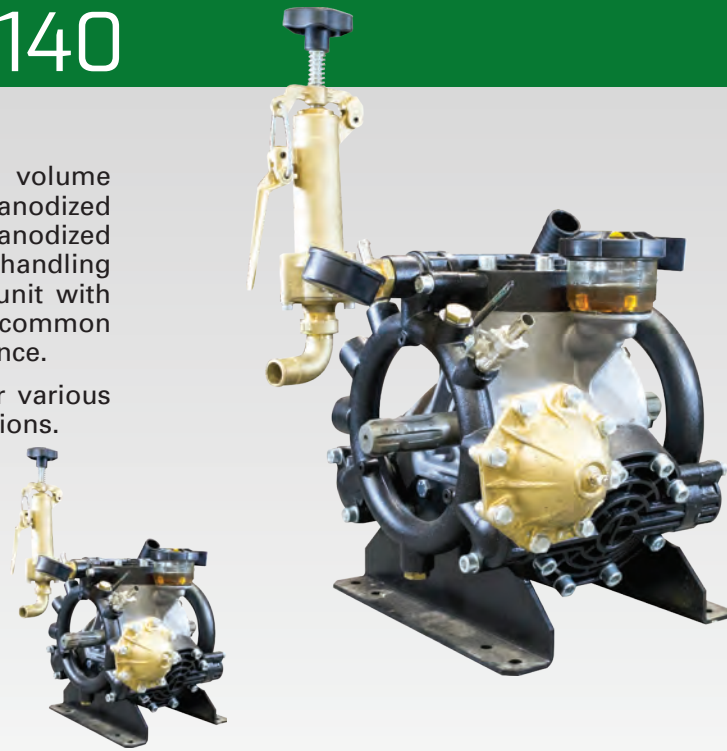


**15.5823**  
Udor Lube  
Premium Pump Oil

# OMEGA 140

**OMEGA 140** 3-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 control unit with pressure gauge. Simplicity of design and common parts allow for easy and economical maintenance.

**OMEGA 140** pumps are excellent choices for various horticultural and agricultural spraying applications.



**OMEGA 170 TS2C**

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>OMEGA 170 TS2C</b>	39.0	140	700	48	550	1-3/8" 6-Spline Male PTO Thru-Shaft	100 LBS

### Specifications

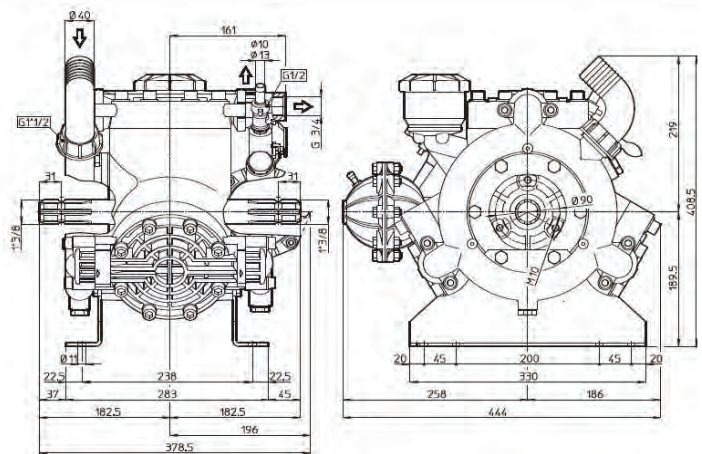
### OMEGA 170

Inlet Port	1-1/2" Hose Barb
Outlet Ports	(2) 3/4" Hose Barb
Bypass	1" Hose Barb
Dimensions	17.5"L x 14.9"W x 16.0"H
Diaphragm Material	GREENTECH (Standard)

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

### QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	8700.07
Diaphragm Bolt / Washer Kit	6062.36
Valve Kit	6062.E1
Complete Repair Kit	8700.07CK



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

### Recommended Accessories and Drive Options



**1219.15**  
Shaft Protector  
and Mounting Bolts



**1219.02**  
PTO Drive  
Safety Shield



**6005.05**  
Control Unit  
Regulator



**5020.02**  
Venturi Agitator  
1/2" MNPT Inlet

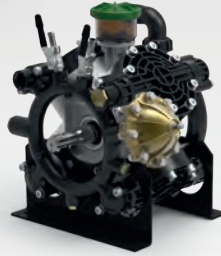


**UD1-1/2-16**  
1-1/2" HI-Flow Filter  
16 Mesh Screen



**15.5823**  
Udor Lube  
Premium Pump Oil

# OMEGA 170

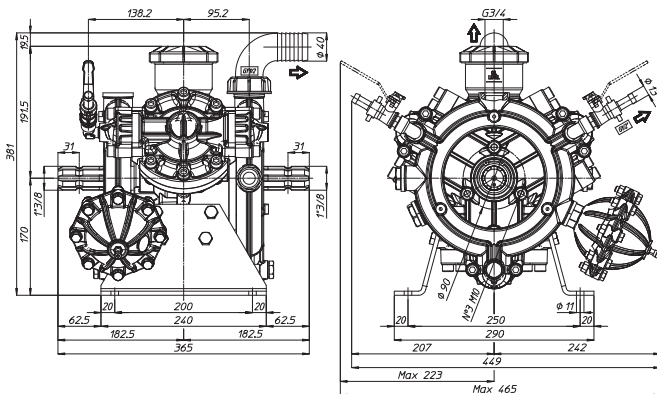


**OMEGA 170** 4-cylinder, high pressure, high volume diaphragm pumps are constructed of anodized aluminum, brass and stainless steel and have anodized aluminum, brass and stainless steel liquid handling parts. Includes mounting rails and control unit with pressure gauge. Simplicity of design and common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

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

## OMEGA 170 TS2C

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>OMEGA 170 TS2C</b>	46.0	174.5	700	48	550	1-3/8" 6-Spline Male PTO Thru-Shaft	120 LBS



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

### Specifications

### OMEGA 170

Inlet Port	1-1/2" Hose Barb
Outlet Ports	(2) 3/4" Hose Barb
Bypass	1" Hose Barb
Dimensions	16.8" L x 14.9" W x 17.2" 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.

### QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	8700.07
Diaphragm Bolt / Washer Kit	6062.36
Valve Kit	6062.E1
Complete Repair Kit	8700.07CK

### Recommended Accessories and Drive Options



**1219.15**  
Shaft Protector  
and Mounting Bolts



**1219.02**  
PTO Drive  
Safety Shield



**6005.05**  
Control Unit  
Regulator



**5020.02**  
Venturi Agitator  
1/2" MNPT Inlet



**UD1-1/2-16**  
1-1/2" HI-Flow Filter  
16 Mesh Screen

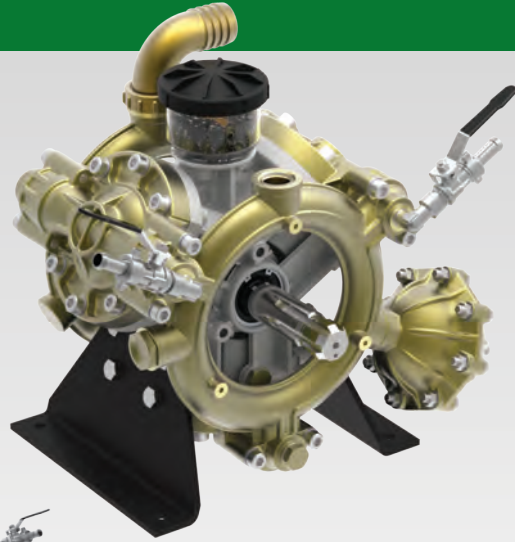


**15.5823**  
Udor Lube  
Premium Pump Oil

# BETA-S 135

**BETA-S 135** 3-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 control unit with pressure gauge. Simplicity of design and common parts allow for easy and economical maintenance.

**BETA-S 135** pumps are excellent choices for various horticultural and agricultural spraying applications.



**BETA-S 135 TS2C**

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>BETA-S 135 TS2C</b>	37.0	137.0	725	50	550	1-3/8" 6-Spline Male PTO Thru-Shaft	51 LBS

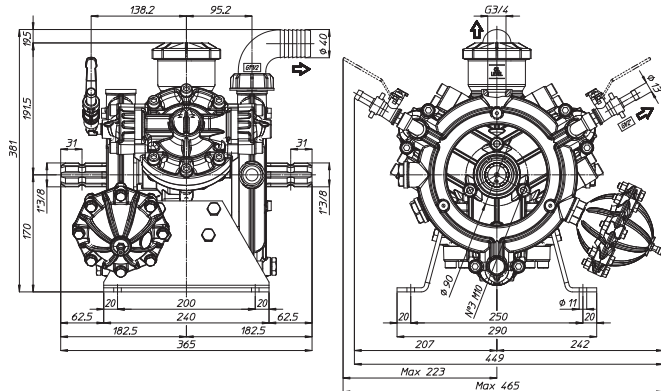
## Specifications BETA-S 135

Inlet Port	1-1/2" Hose Barb
Outlet Ports	(2) 3/4" Hose Barb
Bypass	1" Hose Barb
Dimensions	16" L x 15.5" W x 12.6" H
Diaphragm Material	GREENTECH (Standard)

**Lubrication:** Requires 54 oz. of Udor Lube 40W Premium Pump Oil. Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

## QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	6062.E8
Diaphragm Bolt / Washer Kit	6062.16
Valve Kit	6062.D9
Complete Repair Kit	8700.30CK



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

## Recommended Accessories and Drive Options



**1219.15**  
Shaft Protector and Mounting Bolts



**1219.02**  
PTO Drive Safety Shield



**6005.05**  
Control Unit Regulator



**5020.02**  
Venturi Agitator  
1/2" MNPT Inlet



**UD1-1/2-16**  
1-1/2" HI-Flow Filter  
16 Mesh Screen



**15.5823**  
Udor Lube Premium Pump Oil

# BETA 110

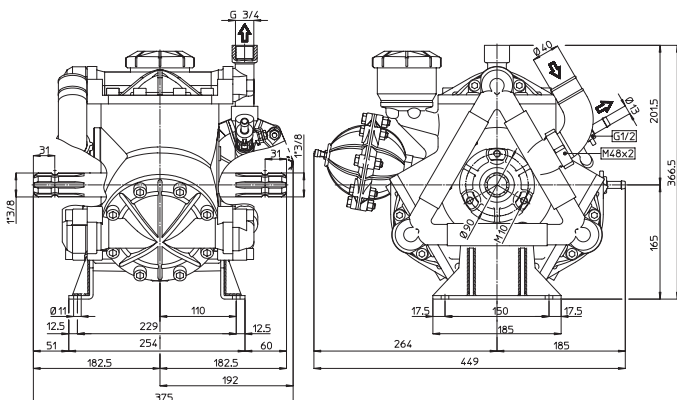


**BETA 110 TS2C**

**BETA 110** 3-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 control unit with pressure gauge. Simplicity of design and common parts allow for easy and economical maintenance.

**BETA 110** pumps are excellent choices for various horticultural and agricultural spraying applications.

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight	List Price
<b>BETA 110 TS2C</b>	34.0	128.0	725	50	550	1-3/8" 6-Spline Male PTO Thru-Shaft	120 LBS	\$ 4,207.55



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

## Specifications

## BETA 110

Inlet Port	1-1/2" Hose Barb
Outlet Ports	(3) 3/4" Hose Barb
Bypass	1" Hose Barb
Dimensions	16.8"L x 14.9"W x 17.2"H
Diaphragm Material	GREENTECH (Standard)

**Lubrication:** Requires 81 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

## QUICK REFERENCE SERVICE PARTS

Description	Part #	List Price
Diaphragm Kit (GREENTECH)	8700.06	\$ 187.77
Diaphragm Bolt / Washer Kit	6062.60	\$ 124.70
Valve Kit	6062.D9	\$ 281.40
Regulator Repair Kit	8701.03	\$ 111.96
Complete Repair Kit	8700.06CK	\$ 532.10

## Recommended Accessories and Drive Options



**1219.15**  
Shaft Protector  
and Mounting Bolts



**1219.02**  
PTO Drive  
Safety Shield



**6005.05**  
Control Unit  
Regulator



**5020.02**  
Venturi Agitator  
1/2" MNPT Inlet



**UD1-1/2-16**  
1-1/2" HI-Flow Filter  
16 Mesh Screen

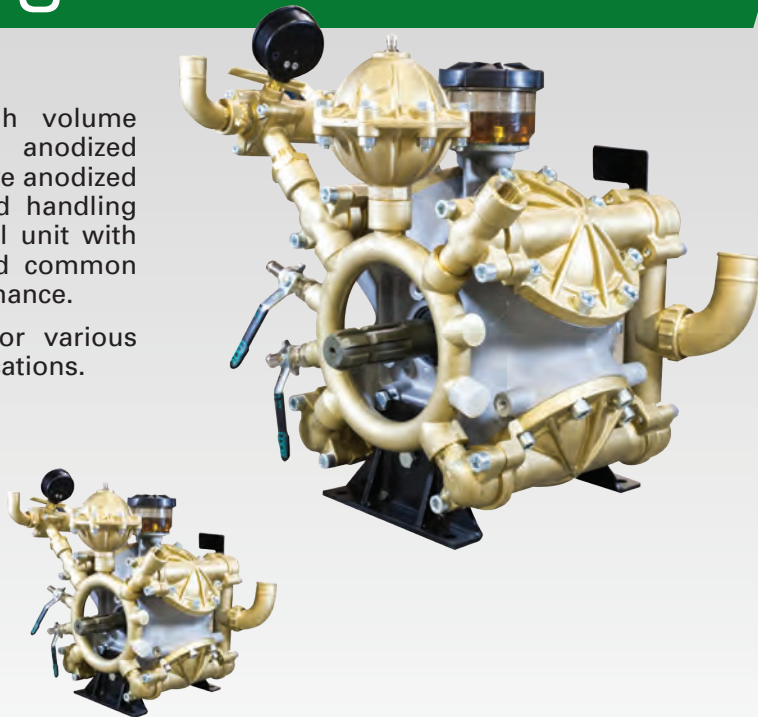


**15.5823**  
Udor Lube  
Premium Pump Oil

# BETA 170

**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 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.



**BETA 170 TS2C**

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

### Specifications

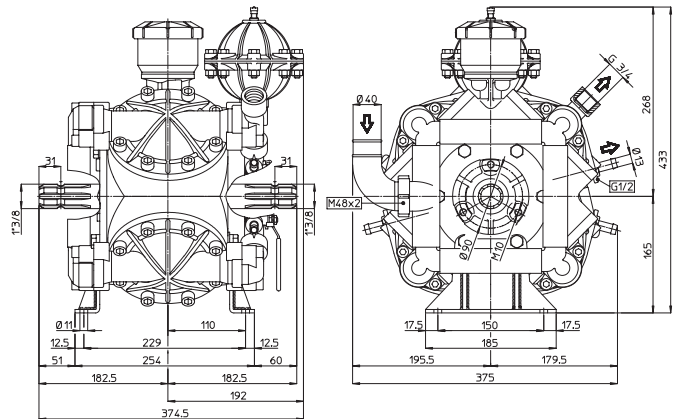
### BETA 170

Inlet Port	1-1/2" Hose Barb
Outlet Ports	(2) 1/2" Hose Barb, 3/4" NPT
Bypass	1" Hose Barb
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.

### QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	8700.07
Diaphragm Bolt / Washer Kit	6062.36
Valve Kit	6062.E1
Regulator Repair Kit	8701.03
Complete Repair Kit	8700.07CK



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

### Recommended Accessories and Drive Options



**1219.15**  
Shaft Protector  
and Mounting Bolts



**1219.02**  
PTO Drive  
Safety Shield



**6005.05**  
Control Unit  
Regulator



**5020.02**  
Venturi Agitator  
1/2" MNPT Inlet

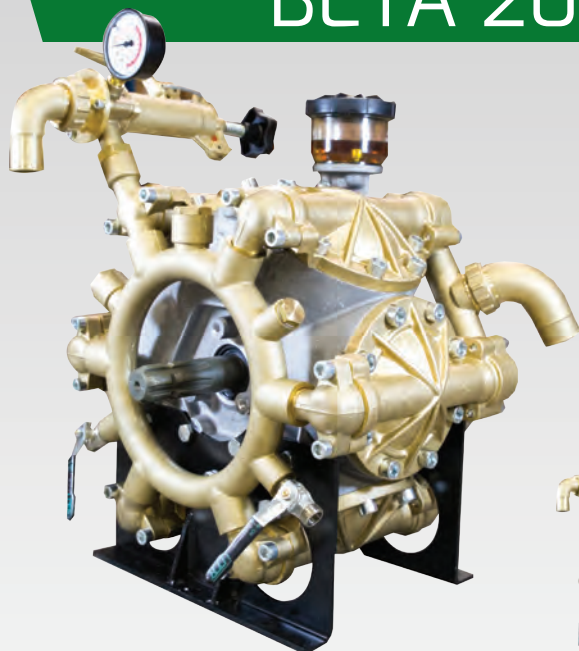


**UD1-1/2-16**  
1-1/2" HI-Flow Filter  
16 Mesh Screen



**15.5823**  
Udor Lube  
Premium Pump Oil

# BETA 200 / BETA 240



**BETA 200 & 240** 6-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 control unit with pressure gauge. Simplicity of design and common parts allow for easy and economical maintenance.

**BETA 200 & 240** pumps are excellent choices for various horticultural and agricultural spraying applications.

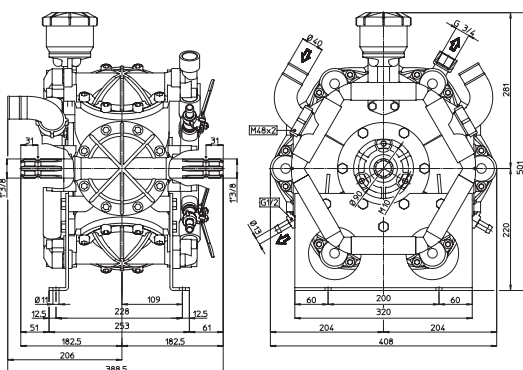


BETA 200 TS2C



BETA 240 TS2C

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
<b>BETA 200 TS2C</b>	56.0	218.0	725	50	550	1-3/8" 6-Spline Male PTO Thru-Shaft	200 LBS
<b>BETA 240 TS2C</b>	64.0	243.0	725	50	550	1-3/8" 6-Spline Male PTO Thru-Shaft	200 LBS



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

Specifications	BETA 200	BETA 240
Inlet Port	(2) 1-1/2" Hose Barb	
Outlet Ports	(2) 1/2" Hose Barb, 3/4" NPT	
Bypass	1-1/4" Hose Barb	
Dimensions	16.1" L x 15.3" W x 19.7" H	
Diaphragm Material	GREENTECH (Standard)	

**Lubrication:** Requires 170 oz. of Udor Lube 40W Premium Pump Oil.  
Alternate Oil: 30W non-detergent or 15W-40 non-detergent oil.

### QUICK REFERENCE SERVICE PARTS

Description	Part #
Diaphragm Kit (GREENTECH)	6062.C7
Diaphragm Bolt / Washer Kit	6062.64
Valve Kit	6062.E2
Regulator Repair Kit	8701.03
Complete Repair Kit	8700.55CK

### Recommended Accessories and Drive Options



**1219.15**  
Shaft Protector  
and Mounting Bolts



**1219.02**  
PTO Drive  
Safety Shield



**6005.08**  
Control Unit  
Regulator



**5020.02**  
Venturi Agitator  
1/2" MNPT Inlet



**UD1-1/2-16**  
1-1/2" HI-Flow Filter  
16 Mesh Screen



**15.5823**  
Udor Lube  
Premium Pump Oil











# GAMMA



- Anodized Aluminum Crankcase
- Solid Ceramic Plungers
- Stainless Steel Check Valves
- High Strength Aluminum Connecting Rods
- 1-1/4" Hose Barb Inlet. (2) 3/4" BSP-F Outlet
- 58 oz. Capacity Vented Oil Bath Crank Case
- Max Fluid Temp, 160°F

**TS 1C**  
1-3/8" PTO x  
35mm Keyed



**TS 2C**  
1-3/8" PTO x  
1-3/8" PTO



**TS GR**  
GR Model  
Replacement



## GAMMA Series Plunger Pumps

1-3/8" 6-Spline PTO Thru-Shaft

	Model	GPM	l/min	PSI	bar	Power Req.	Seal Kit	Valve Kit	Wt.
600 RPM	GAMMA 62 TS 1C	17.7	67.0	725	50	9 EBHP	6062.A1 (Kit 600)	6062.65 (564)	49 lbs
	GAMMA 62 TS 2C	17.7	67.0	725	50	9 EBHP	6062.A1 (Kit 600)	6062.65 (564)	49 lbs
	GAMMA 62 TS GR	17.7	67.0	725	50	9 EBHP	6062.A1 (Kit 600)	6062.65 (564)	49 lbs



## GAMMA Series Gear Reduction, Gas Engine Models

1" Hollow Shaft. 6.4:1 Gear Reduction

	Model	GPM	l/min	PSI	bar	Power Req.	Seal Kit	Valve Kit	Wt.
Gear Reduction	GAMMA 62/GR	17.7	67.0	725	50	9-13 HP Gas	6062.A1 (Kit 600)	6062.65 (564)	64 lbs
	GAMMA 62/GR-18	17.7	67.0	725	50	16-20 HP Gas	6062.A1 (Kit 600)	6062.65 (564)	70 lbs

- Anodized Aluminum Crankcase
- High Strength Aluminum Connecting Rods
- Solid Ceramic Plungers
- Stainless Steel Check Valves

- 1-1/2" Hose Barb Inlet.
- (2) 3/4" BSP-F Outlet
- 128 oz. Capacity Vented Oil Bath Crank Case
- Max Fluid Temp, 160°F

**TS 1C**  
1-3/8" PTO x  
35mm Keyed



**TS 2C**  
1-3/8" PTO x  
1-3/8" PTO



## GAMMA Series Plunger Pumps

1-3/8" 6-Spline PTO Thru-Shaft

	Model	GPM	l/min	PSI	bar	Power Req.	Seal Kit	Valve Kit	Wt.
600 RPM	GAMMA 85 TS 1C	22.6	85.0	870	60	13.5 EBHP	6062.50 (549)	6062.49 (548)	83 lbs
	GAMMA 85 TS 2C	22.6	85.0	870	60	13.5 EBHP	6062.50 (549)	6062.49 (548)	83 lbs
	GAMMA 105 TS 1C	28.6	108.0	870	60	17 EBHP	6062.50 (549)	6062.49 (548)	83 lbs
	GAMMA 105 TS 2C	28.6	108.0	870	60	17 EBHP	6062.50 (549)	6062.49 (548)	83 lbs
	GAMMA 125 TS 1C	35.1	133.0	870	60	21 EBHP	6062.50 (549)	6062.49 (548)	83 lbs
	GAMMA 125 TS 2C	35.1	133.0	870	60	21 EBHP	6062.50 (549)	6062.49 (548)	83 lbs

# GAMMA



- Anodized Aluminum Crankcase
- High Strength Aluminum Connecting Rods
- Solid Ceramic Plungers
- Stainless Steel Check Valves
- 1-1/2" Hose Barb Inlet.
- (2) 3/4" BSP-F Outlet
- 128 oz. Capacity Vented Oil Bath Crank Case
- Max Fluid Temp, 160°F

**TS 2C**  
1-3/8" PTO x  
1-3/8" PTO



## GAMMA Series Plunger Pumps 1-3/8" 6-Spline PTO Thru-Shaft

	Model	GPM	l/min	PSI	bar	Power Req.	Seal Kit	Valve Kit	Wt.
<b>600 RPM</b>	<b>GAMMA 155 TS 2C</b>	40.4	153.0	725	50	20 EBHP	6062.G5 (665)	6061.Q4 (205)	84 lbs



- Anodized Aluminum Crankcase
- High Strength Aluminum Connecting Rods
- Solid Ceramic Plungers
- Stainless Steel Check Valves

- 2" Hose Barb Inlet.
- (4) 3/4" BSP-F Outlet
- 65 oz. Capacity Vented Oil Bath Crank Case
- Max Fluid Temp, 160°F

**TS 1C**  
1-3/8" PTO x  
35mm Keyed



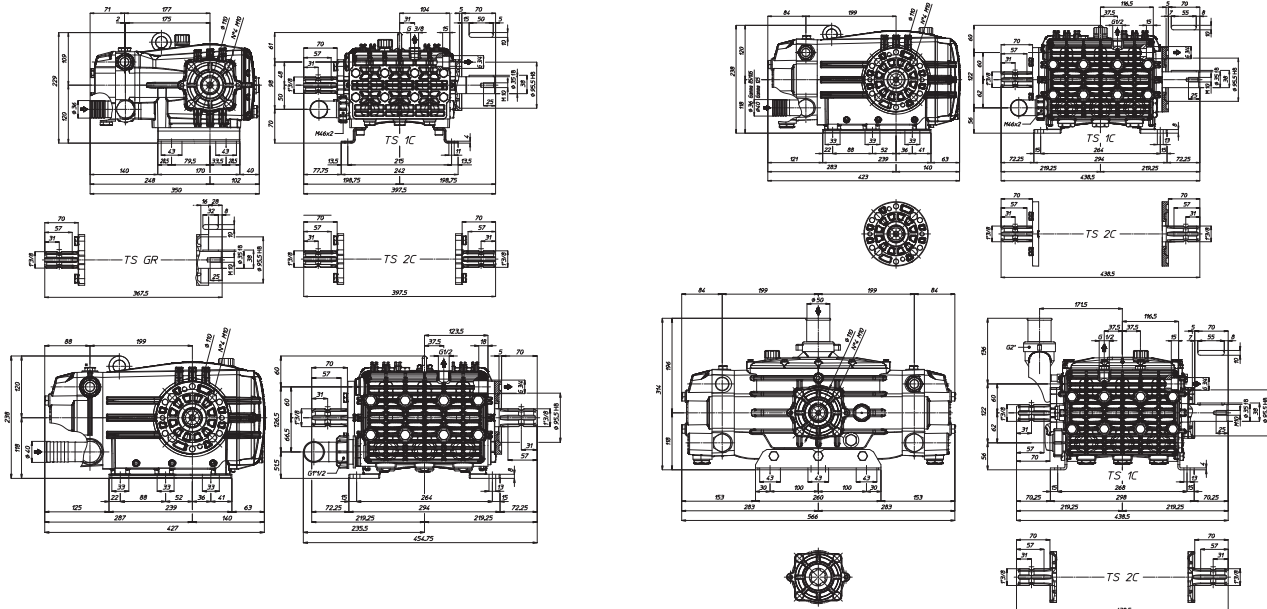
**TS 2C**  
1-3/8" PTO x  
1-3/8" PTO



## GAMMA Series Plunger Pumps 1-3/8" 6-Spline PTO Thru-Shaft

	Model	GPM	l/min	PSI	bar	Power Req.	Seal Kit	Valve Kit	Wt.
<b>600 RPM</b>	<b>GAMMA 162 TS 1C</b>	43.3	164.0	870	60	25.5 EBHP	6062.71 (570)	6062.70 (569)	115 lbs
	<b>GAMMA 162 TS 2C</b>	43.3	164.0	870	60	25.5 EBHP	6062.71 (570)	6062.70 (569)	115 lbs
	<b>GAMMA 202 TS 1C</b>	55.0	208.0	870	60	32 EBHP	6062.71 (570)	6062.70 (569)	140 lbs
	<b>GAMMA 202 TS 2C</b>	55.0	208.0	870	60	32 EBHP	6062.71 (570)	6062.70 (569)	115 lbs
	<b>GAMMA 242 TS 1C</b>	63.4	240.0	870	60	37 EBHP	6062.71 (570)	6062.70 (569)	115 lbs
	<b>GAMMA 242 TS 2C</b>	63.4	240.0	870	60	37 EBHP	6062.71 (570)	6062.70 (569)	115 lbs

### Dimensional Drawings



# HYDRAULIC DRIVE

## ZETA SERIES HYDRAULIC DRIVE PUMP/MOTOR ASSEMBLIES



ZETA-40E/HYD



ZETA-85/HYD



ZETA-120/HYD



ZETA-170/HYD

Model	GPM	l/min	PSI	bar	RPM	Hydraulic Requirements	Hyd. Motor	Weight
ZETA-40E/HYD	10.5	40	300	20	550	8.0 GPM @ 800 PSI	OMP-50	LBS
ZETA-40P/HYD	10.5	40	300	20	550	8.0 GPM @ 800 PSI	OMP-50	
ZETA-85/HYD	22.0	83	300	20	550	8.0 GPM @ 800 PSI	OMP-50	
ZETA-85P/HYD	22.0	83	300	20	550	8.0 GPM @ 800 PSI	OMP-50	
ZETA-120/HYD	31.0	117	300	20	550	14.0 GPM @ 1000 PSI	OMP-100	
ZETA-170/HYD	45.0	170	300	20	550	14.0 GPM @ 1200 PSI	OMP-100	

## KAPPA SERIES HYDRAULIC DRIVE PUMP/MOTOR ASSEMBLIES



KAPPA-43/HYD



KAPPA-55/HYD



KAPPA-121/HYD

Model	GPM	l/min	PSI	bar	RPM	Hydraulic Requirements	Hyd. Motor	Weight
KAPPA-43/HYD	10.5	40	560	38	550	8.0 GPM @ 800 PSI	OMP-50	LBS
KAPPA-55/HYD	15.0	57	560	38	550	8.0 GPM @ 1000 PSI	OMP-50	
KAPPA-121/HYD	35.0	133	700	48	550	14.0 GPM @ 1600 PSI	OMP-100	

## DELTA SERIES HYDRAULIC DRIVE PUMP/MOTOR ASSEMBLIES



DELTA-40/HYD



DELTA-75/HYD



DELTA-100/HYD

Model	GPM	l/min	PSI	bar	RPM	Hydraulic Requirements	Hyd. Motor	Weight
DELTA-40/HYD	10.5	40	560	38	550	8.0 GPM @ 800 PSI	OMP-50	LBS
DELTA-75/HYD	20.0	76	560	38	550	14.0 GPM @ 1800 PSI	OMP-100	
DELTA-100/HYD	26.0	100	700	48	550	14.0 GPM @ 1800 PSI	OMP-100	

## GAMMA SERIES HYDRAULIC DRIVE PUMP/MOTOR ASSEMBLIES



GAMMA-62/CC-HYD



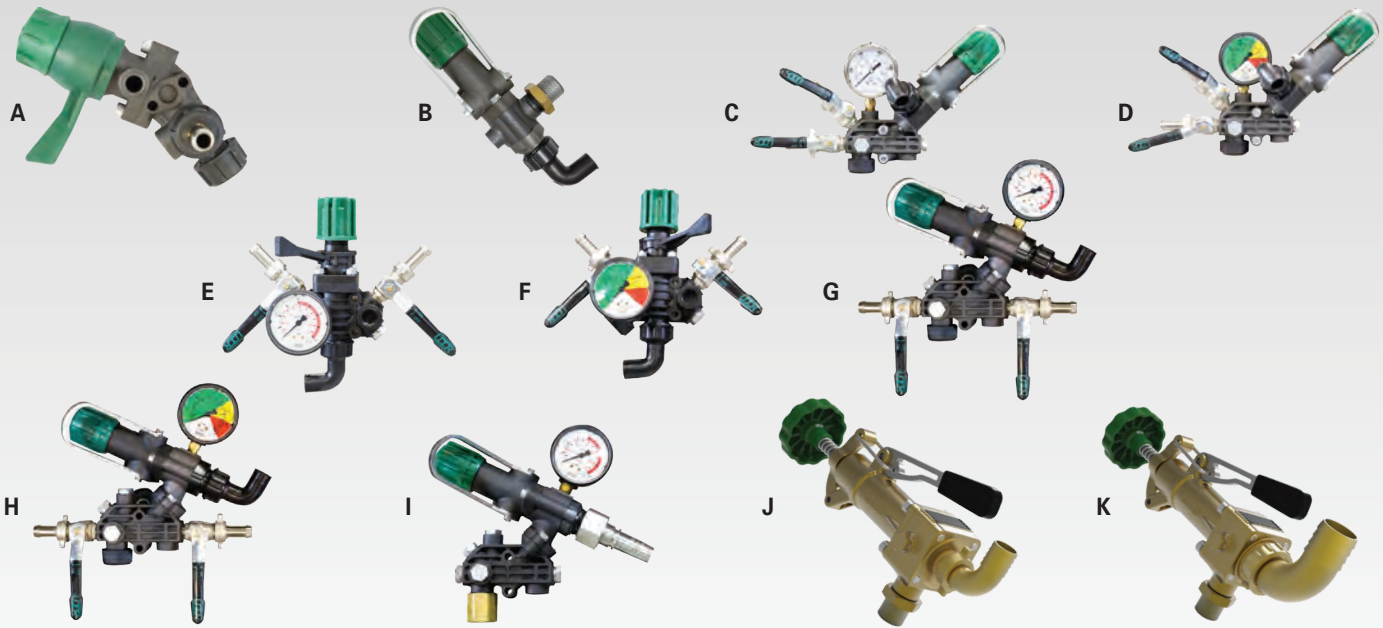
GAMMA-105/CC-HYD

Model	GPM	l/min	PSI	bar	RPM	Hydraulic Requirements	Hyd. Motor	Weight
GAMMA-62/CC-HYD	17.7	67	725	50	600	14.0 GPM @ 1400 PSI	OMP-100	75 LBS
GAMMA-105/CC-HYD	26.0	100	850	58	600	14.0 GPM @ 1800 PSI	OMP-100	100 LBS

# ACCESSORIES



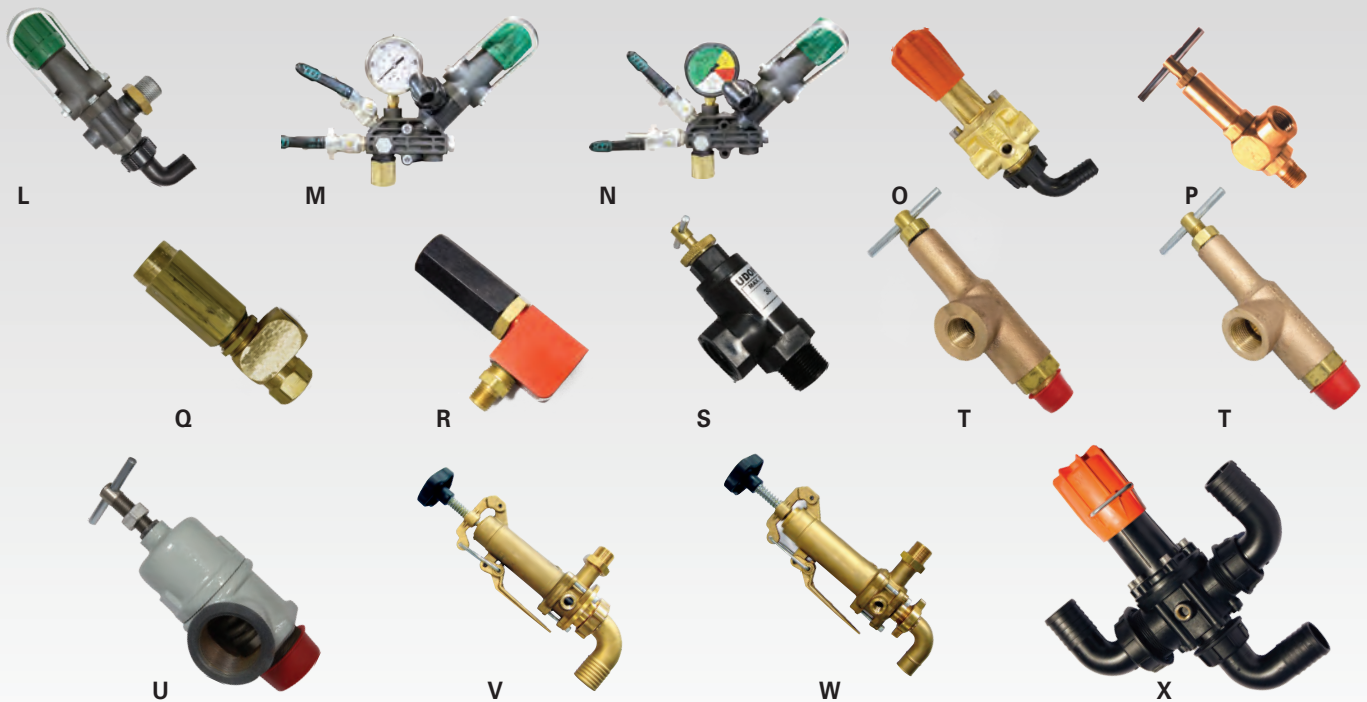
# REGULATORS - Pump Mounted



	Model	GPM	l/min	PSI	bar	Inlet	Outlet	Bypass
A	6010.23	5.0	19.0	275	19	-	3/8" Hose Barb	-
	8701.01	Repair Kit for 6010.23						
B	6005.31	32.0	121.0	600	41	3/4" Male BSP	-	3/4" Hose Barb
	8701.25	Repair Kit for 6005.31						
B	6005.31/LP	32.0	121.0	350	24	3/4" Male BSP	-	3/4" Hose Barb
	8701.25	Repair Kit for 6005.31/LP						
C	6010.24	27.0	102.0	560	38	-	(2) 1/2" Hose Barb	3/4" Hose Barb
	8701.10	Repair Kit for 6010.24						
D	6010.24/LP	27.0	102.0	350	24	-	(2) 1/2" Hose Barb	3/4" Hose Barb
	8701.10	Repair Kit for 6010.24/LP						
E	6010.93	27.0	102.0	560	38	-	(2) 1/2" Hose Barb	3/4" Hose Barb
	6062.A9	Repair Kit for 6010.93						
F	6010.95	27.0	102.0	350	24	-	(2) 1/2" Hose Barb	3/4" Hose Barb
	6062.A9	Repair Kit for 6010.95						
F	6010.96	27.0	102.0	350	24	-	(2) 1/2" Hose Barb	3/4" Hose Barb
	6062.A9	Repair Kit for 6010.96						
G	6047.06	27.0	102.0	560	38	-	(2) 1/2" Hose Barb	3/4" Hose Barb
	8701.02	Repair Kit for 6047.06						
H	6047.06/LP	27.0	102.0	350	24	-	(2) 1/2" Hose Barb	3/4" Hose Barb
	8701.02	Repair Kit for 6047.06/LP						
I	6047.06/IND	27.0	102.0	350	24	-	3/4" FPT	3/4" Hose Barb
	8701.02	Repair Kit for 6047.06/IND						
J	6005.05	47.3	179.2	1200	81	3/4" Male BSP	-	1" Hose Barb
	6062.54	Repair Kit for 6005.05 / 6005.08						
K	6005.08	66.0	250.0	1200	81	3/4" Male BSP	-	1-1/2" Hose Barb
	6062.54	Repair Kit for 6005.05 / 6005.08						

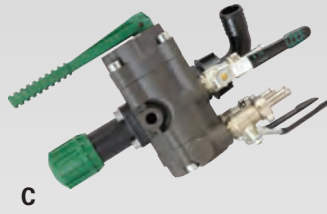
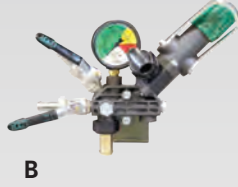
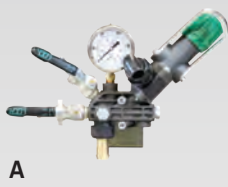


# Universal - REGULATORS



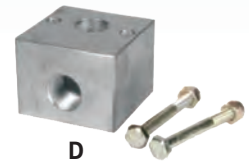
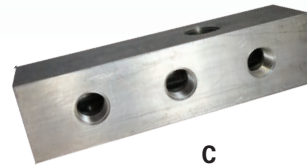
	Model	GPM	l/min	PSI	bar	Inlet	Outlet	Bypass
L	<b>6005.31/N</b>	32.0	121.0	600	41	3/4" MPT	-	3/4" Hose Barb
	<b>8701.25</b>	Repair Kit for 6005.31/N						
L	<b>6005.31/LP-N</b>	32.0	121.0	350	24	3/4" MPT	-	3/4" Hose Barb
	<b>8701.25</b>	Repair Kit for 6005.31/LP-N						
M	<b>6010.25/HP</b>	27.0	102.0	560	38	3/4" FPT	(2) 1/2" Hose Barb	-
	<b>8701.10</b>	Repair Kit for 6010.25/HP						
N	<b>6010.25</b>	27.0	102.0	350	24	3/4" FPT	(2) 1/2" Hose Barb	-
	<b>8701.10</b>	Repair Kit for 6010.25						
O	<b>1238.N4</b>	40.0	152.0	400	27	3/4" MPT	-	3/4" Hose Barb
	<b>1238.N4/K</b>	Repair Kit for 1238.N4						
P	<b>UD1/4-150</b>	4.5	17.0	150	10	1/4" MPT	-	3/8" FPT
Q	<b>UD500F</b>	7.0	26.5	500	34	3/8" FPT	-	3/8" FPT
Q	<b>UD550F</b>	7.0	26.5	1000	68	3/8" FPT	-	3/8" FPT
Q	<b>UD555F</b>	7.0	26.5	2000	136	3/8" FPT	-	3/8" FPT
R	<b>UD1/4-300</b>	4.5	17.0	300	20	1/4" MPT	-	3/8" FPT
R	<b>UD3/4-60/P</b>	30.0	113.7	70	5	3/4" MPT	-	3/4" FPT
S	<b>UD3/4-250/P</b>	30.0	113.7	250	17	3/4" MPT	-	3/4" FPT
T	<b>UD1/2-300</b>	20.0	75.8	300	20	1/2" MPT	-	1/2" FPT
U	<b>15-2740</b>	80.0	303.2	300	20	1-1/4" MPT	-	1-1/4" FPT
V	<b>UD3/4-300</b>	30.0	113.7	300	20	3/4" MPT	-	3/4" FPT
W	<b>6005.14/N</b>	66.0	250.0	1160	79	3/4" MPT	-	1-1/4" Hose Barb
	<b>8701.03</b>	Repair Kit for 6015.14/N						
X	<b>6005.15/N</b>	40.0	152	1160	79	3/4" MPT	-	1" Hose Barb
	<b>8701.03</b>	Repair Kit for 6015.15/N						
Y	<b>VRG-400</b>	106.0	402.0	290	20	2" Hose Barb	1-1/2" Hose Barb	1-1/2" Hose Barb

# REGULATORS - Remote Mounted



	Model	GPM	l/min	PSI	bar	Inlet	Outlet	Bypass
A	6010.26/HP	27.0	102.0	560	38	3/4" Hose Barb	(2) 1/2" Hose Barb	1" Hose Barb
	8701.10	Repair Kit for 6010.26/HP						
B	6010.26	27.0	102.0	350	24	3/4" Hose Barb	(2) 1/2" Hose Barb	1" Hose Barb
	8701.10	Repair Kit for 6010.26						
C	6004.06	32.0	121.0	600	41	3/4" Hose Barb	(2) 1/2" Hose Barb	1" Hose Barb
	6062.56	Repair Kit for 6004.06						
D	SB3	40.0	152.0	1160	79	3/4" MPT	-	1" Hose Barb
	SB3/KIT	Repair Kit for SB3						

## REGULATOR ACCESSORIES



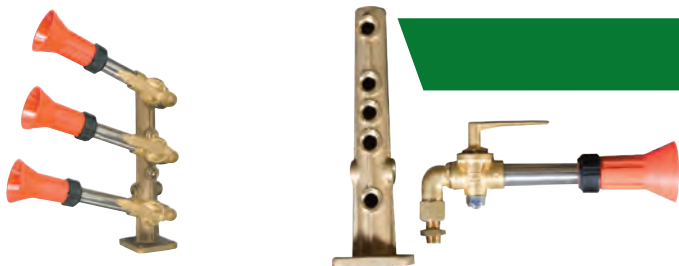
	Model	Description
A	7704.05	For use with standard pumps for remote mounting 6010.24/LP, 6047.06/LP or 6010.95 control units Includes 3/4" hose barb outlet for pump and 3/4" hose barb inlet for control unit.. Max 350 PSI
B	7704.07	For use with standard pumps for remote mounting 6010.24, 6047.06 or 6010.93 control units Includes 3/4" MPT outlet for pump and 3/4" FPT inlet for control unit.. Max 560 PSI
C	7705.00	Aluminum Mounting Block. (4) 3/4" FNPT, (3) 1/2" FNPT, (1) 1/4" FNPT Port. MAX. 2000 PSI
D	7705.10	Plated Steel Remote Mounting Block, 3/8" FNPT x 3/8" FNPT Ports. MAX. 4000 PSI
D	7705.20	Plated Steel Remote Mounting Block, 1/2" FNPT x 1/2" FNPT Ports. MAX. 4000 PSI
E	0508.11	Bypass adapter for 6005.14/15 regulators. Converts hose barb end to 1-1/4" FNPT.
F	1291.B9	3/4" Plated Steel Bypass Hose Barb. Std. on 6047.06/IND Control Unit. Fits 6010.24 & 6047.06
G	162.604.2	3/8" Straight Hose Barb. 1/2" Fly Nut. Use as Outlet on Most Control Units or Spray Gun Inlet.
G	162.604.4	1/2" Straight Hose Barb. 1/2" Fly Nut. Use as Outlet on Most Control Units or Spray Gun Inlet.
H	163.604.2	3/8" 90 Hose Barb. 1/2" Fly Nut. Use as Outlet on Most Control Units or Spray Gun Inlet.
H	163.604.6	1/2" 90 Hose Barb. 1/2" Fly Nut. Use as Outlet on Most Control Units or Spray Gun Inlet.

# SPRAY GUNS

## TRIGGER SPRAY GUNS



	Model	GPM	l/min	PSI	bar	Inlet	Outlet
A	<b>1238.M8</b>	5.0	19.5	300	20	3/8" Hose Barb	1/4" FNPT
	<b>8711.03</b>	Repair Kit for 1238.M8 Spray Gun					
B	<b>29.1903.7</b>	18.0	68.2	700	48	1/2" FNPT	1/2" FNPT
	<b>8711.03</b>	Repair Kit for 29.1903.7 Spray Gun					
C	<b>15.0003.13</b>	18.0	68.2	400	27	1/2" FNPT	1/2" FNPT
	<b>8711.07</b>	Repair Kit for 5.0003.13 Spray Gun					
D	<b>1215.29</b>	16.0	60.6	350	24	1/2" FNPT	Adjustable Pattern
E	<b>23.208.84</b>	18.0	68.2	700	48	1/2" FNPT	1/2" FNPT
	<b>8711.03</b>	Repair Kit for 23.208.84 Spray Gun					
F	<b>1215.18</b>	10.0	37.9	4000	272	3/8" FNPT	1/4" FNPT
	<b>1215.18K</b>	Repair Kit for 1215.18 Spray Gun					
G	<b>1215.26</b>	10.5	39.8	5800	395	3/8" FNPT	1/4" FNPT
		Repair Kit for 1215.26 Spray Gun					
H	<b>1215.31</b>	13.0	49.3	5000	340	3/8" FNPT	1/4" FNPT
		Repair Kit for 1215.31 Spray Gun					
I	<b>ST3002</b>	25.0	94.8	7000	476	1/2" FNPT	1/2" FNPT
	<b>ST3002K</b>	Repair Kit for ST3002 Spray Gun					
J	<b>1215.38</b>	53.0	201	3000	204	3/4" FNPT	1/2" FNPT
		Repair Kit for 1215.38 Spray Gun					



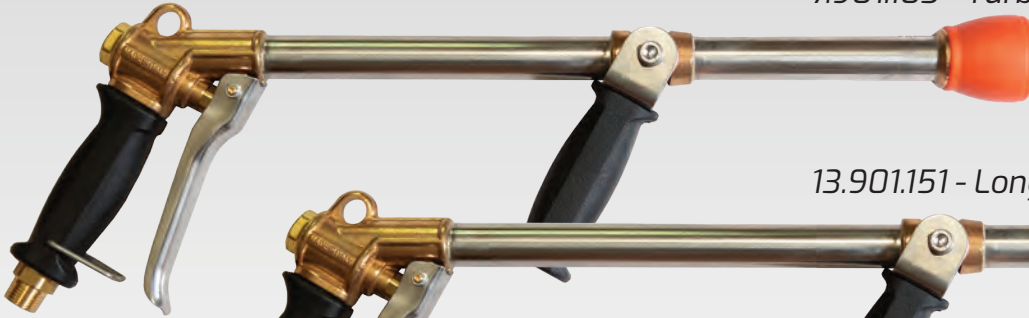
## COLUMN SPRAYERS

Model	GPM	l/min	PSI	bar	Description
<b>1238.G4</b>	50.0	189.5	850	58	Column Mounted Spray Gun. Adjustable Pattern. 360° Rotation
<b>1238.G3</b>	Brass Spray Column. Holds up to Five (5) Column Mounted Spray Guns. (Sold Separately)				

# SPRAY GUNS

## TURBINE / LONG RANGE SPRAY GUNS

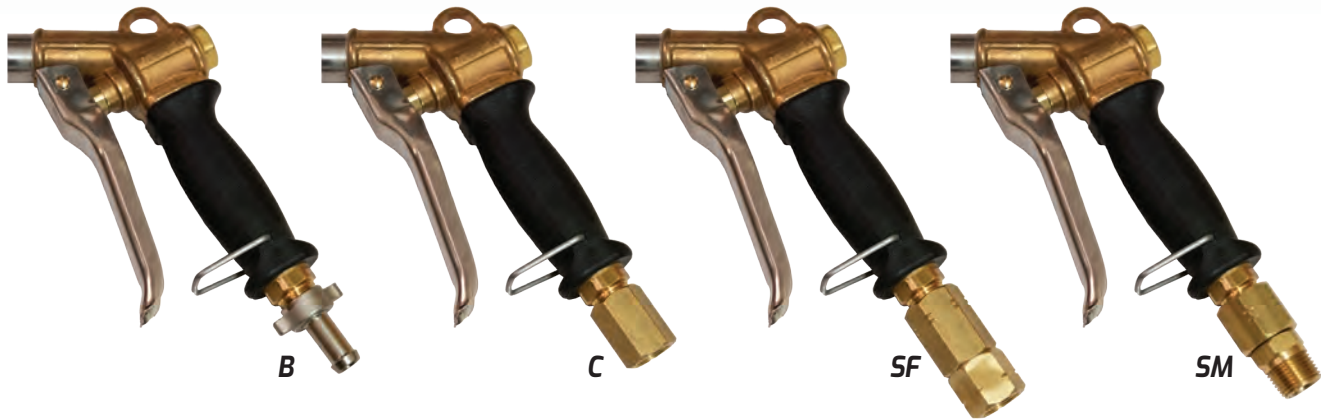
7.901.103 - Turbine Spray Gun



13.901.151 - Long Range Spray Gun



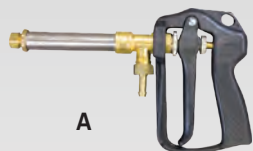
## OPTIONAL INLET FITTINGS



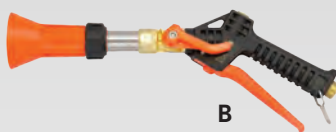
Model	GPM	l/min	PSI	bar	Description
7.901.103	25.0	95.0	850	58	High Performance Gun with 17" Barrel. 4.5 mm Orifice
7.901.103B					High Performance Turbine Spray Gun with 1/2" Hose Barb Inlet Fitting
7.901.103C					High Performance Turbine Spray Gun with 1/2" Female NPT Inlet Fitting
7.901.103SF					High Performance Turbine Spray Gun with 1/2" Female NPT Swivel Inlet Fitting
7.901.103SM					High Performance Turbine Spray Gun with 1/2" Male NPT Swivel Inlet Fitting
13.901.151	30.0	114.0	850	58	High Performance Gun with 21" Barrel. 3.5 mm Orifice
13.901.151B					High Performance Long Range Spray Gun with 1/2" Hose Barb Inlet Fitting
13.901.151C					High Performance Long Range Spray Gun with 1/2" Female NPT Inlet Fitting
13.901.151SF					High Performance Long Range Spray Gun with 1/2" Female NPT Swivel Inlet Fitting
13.901.151SM					High Performance Long Range Spray Gun with 1/2" Male NPT Swivel Inlet Fitting
KIT-10/11					Repair Kit for 7.901.106 Spray Gun

# SPRAY GUNS

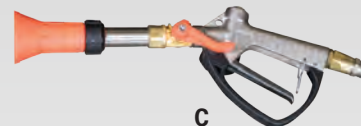
## COMPLETE SPRAY GUNS



A



B



C

	Model	GPM	l/min	PSI	bar	Description
A	35.901.16	5.0	19.0	600	41	Economy Spray Gun. 7" Barrel. 2.3 Tip. Adjustable Pattern
	35.302.18	Repair Kit for 35.901.16 Spray Gun				
B	26.901.162	15.0	57.0	850	58	High Performance Gun with 8" Barrel. 2.3 mm Orifice
	8711.03	Repair Kit for 26.901.162 Spray Gun				
C	26.901.400	15.0	57.0	850	58	High Perf. Gun, 8" Barrel, 1/2" MBSP Inlet 2.3 mm Orifice
	8711.03	Repair Kit for 26.901.400 Spray Gun				

## SPRAY TIP PERFORMANCE

## HIGH PERFORMANCE SPRAY GUNS

Model	Orifice (mm)	Material	Gallons per Minute / Maximum Spray Distance in Feet				
			100 PSI	200 PSI	400 PSI	600 PSI	800 PSI
68.1802.51	1.5	Ceramic	.78 / 17	1.1 / 20	1.5 / 23	1.8 / 25	2.1 / 27
68.1802.52	1.8	Ceramic	1.1 / 19	1.6 / 21	2.3 / 24	2.6 / 26	2.9 / 28
68.1802.53	2.0	Ceramic	1.4 / 21	2.0 / 24	2.8 / 26	3.4 / 29	3.8 / 32
68.1802.54	2.3	Ceramic	2.0 / 24	2.5 / 29	4.0 / 34	5.0 / 42	5.5 / 45
68.1802.16	2.5	Ceramic	2.5 / 23	3.0 / 28	4.5 / 32	5.5 / 40	6.5 / 44
68.1802.17	3.0	Ceramic	3.0 / 28	4.5 / 29	6.5 / 34	8.0 / 41	9.0 / 44
13.1802.73	3.5	S/S	4.5 / 31	6.0 / 36	8.5 / 41	11.0 / 50	12.0 / 54
13.1802.58	4.0	S/S	5.0 / 35	7.5 / 38	10.0 / 43	13.5 / 53	14.5 / 59
13.1802.59	4.5	S/S	6.5 / 37	9.0 / 39	12.5 / 44	16.5 / 54	18.0 / 62
13.1802.60	5.0	S/S	7.5 / 33	10.0 / 41	14.0 / 47	18.5 / 59	21.0 / 67
13.1802.61	5.5	S/S	8.0 / 35	11.5 / 42	16.0 / 47	21.0 / 59	23.0 / 70
13.1802.75	6.0	S/S	9.0 / 38	12.5 / 44	18.0 / 54	23.0 / 66	26.0 / 74
13.1802.74	7.0	S/S	9.5 / 21	13.5 / 47	19.0 / 57	24.0 / 70	27.0 / 77

## ECONOMY SPRAY GUNS

Model	Orifice (mm)	Gallons per Minute / Maximum Spray Distance in Feet					
		40 PSI	100 PSI	200 PSI	300 PSI	400 PSI	500 PSI
68.1802.47	1.5	.50 / 14	.78 / 17	1.1 / 20	1.3 / 22	1.5 / 23	1.7 / 24
68.1802.48	1.8	.70 / 17	1.1 / 19	1.6 / 21	1.9 / 23	2.3 / 24	2.5 / 26
68.1802.55	2.0	.89 / 19	1.4 / 21	2.0 / 24	2.5 / 24	2.8 / 26	3.2 / 27
68.1802.68	2.3	1.3 / 22	2.0 / 24	2.8 / 24	3.4 / 26	4.0 / 27	4.4 / 29

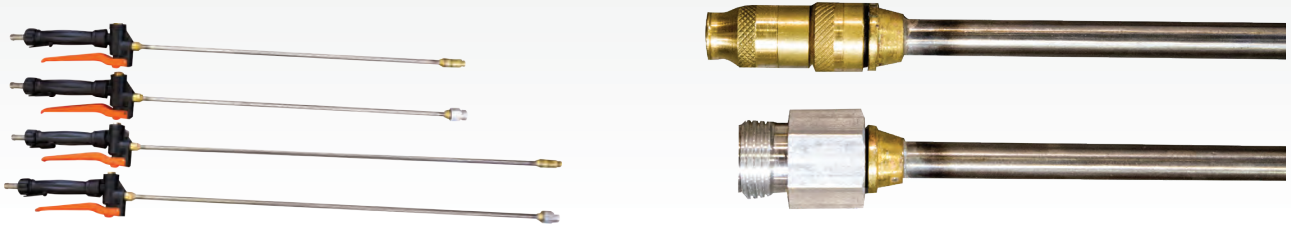
# SPRAY COMPONENTS

## ROOT FEEDER



	Model	GPM	l/min	PSI	bar	Inlet	Description
A	34.1302.2	20.0	76	450	30	1/2" FPT Swivel	Root Feeder. 3/4" SS Tubing. 4-Hole Injector Nozzle
	8711.03	Repair Kit for 34.1302.2 Root Feeder					
B	34.1803.26	Replacement Injection Nozzle for Root Feeder					

## SPOT SPRAY GUNS



	Model	GPM	l/min	PSI	bar	Wand Length	Description
	4.802.14	5.0	19	300	20	20"	Poly Trigger Valve. 3/8" Hose Barb Inlet. Adjustable Nozzle
	4.802.18	5.0	19	300	20	20"	Poly Trigger Valve. 3/8" Hose Barb Inlet. 11/16" Male Adapter
	4.802.24	5.0	19	300	20	28"	Poly Trigger Valve. 3/8" Hose Barb Inlet. Adjustable Nozzle
	4.802.20	5.0	19	300	20	28"	Poly Trigger Valve. 3/8" Hose Barb Inlet. 11/16" Male Adapter
	8711.03	Repair Kit for 4.802.XX Spray Gun Assemblies					

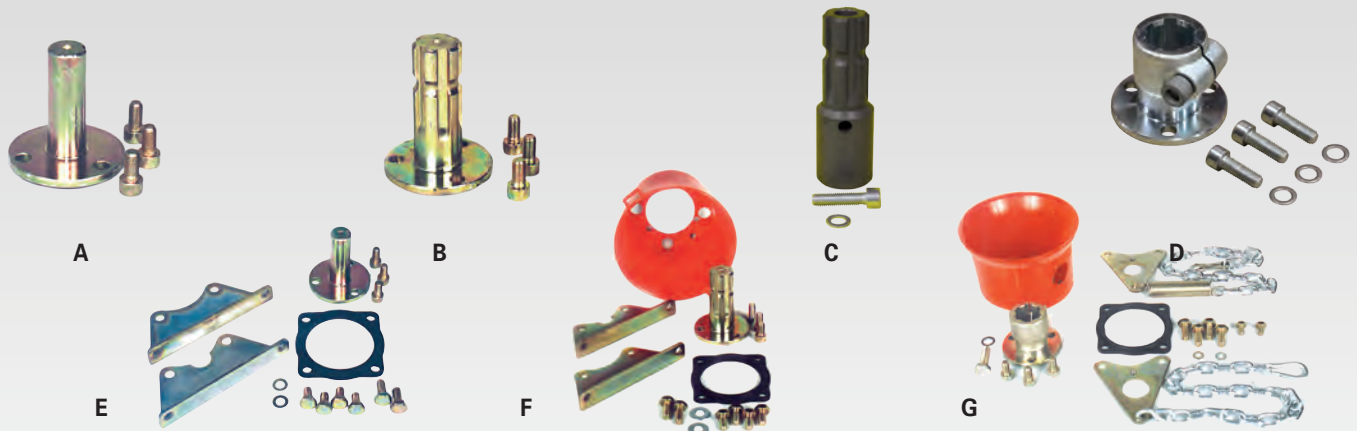
## SPOT SPRAY GUN w/ SHIELD



	Model	GPM	l/min	PSI	bar	Wand Length	Description
	4.802.30	5.0	19	300	20	28"	Poly Trigger Valve. 3/8" HB Inlet. Spray Shield. 8002 Nozzle
	8711.03	Repair Kit for 4.802.XX Spray Gun Assemblies					
	1238.C1	Spray Shield with 8002 Spray Tip. 14"L x 5"W x 7"H. 1/4" FNPT Inlet.					

# DRIVE COMPONENTS

## SHAFT ADAPTER KITS

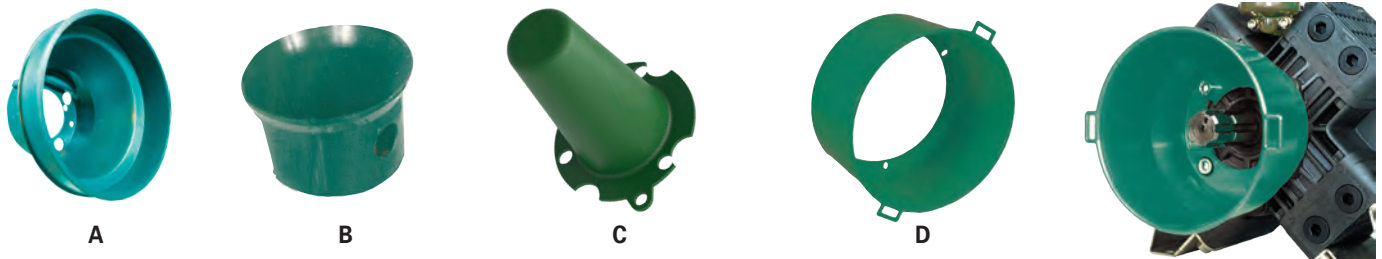


	Model	Description	Pump Application
A	7750.31	3/4" Solid Keyed Shaft	IOTA-17/20
A	7751.A3	1" Solid Keyed Shaft (* Requires 0501.05 adapter. See Below.)	IOTA-17/20*, KAPPA-55 DELTA-75/100, ZETA-40/85/120
*	0501.05	Crankshaft Adapter to use 7751.A3 Shaft on IOTA-17/20	
B	7753.A8	1-3/8" 6-Spline Male PTO Shaft	KAPPA-55, DELTA-75/100, ZETA-40/85/120
C	0005.22	1-3/8" 6-Spline Male PTO x 25 mm Hollow Shaft	KAPPA-40/TS, KAPPA-55/TS
D	0905.09K	1-3/8" 6-Spline Female PTO Coupler	KAPPA-30/40
E	7751.A9	3/4" Solid Keyed Shaft with Mounting Rails	KAPPA-30/40
E	7751.A1	1" Solid Keyed Shaft with Mounting Rails	KAPPA-30/40
F	7702.01	1-3/8" 6-Spline Male PTO Shaft with Mounting Rails and Safety Shield	KAPPA-30/40
G	7752.A2	1-3/8" 6-Spline Female PTO Coupler with Torque Arms, Chains and Safety Shield.	IOTA-17/20*, KAPPA-30/40/55 DELTA-75, ZETA-40/85

## SAFETY SHIELDS

### FOR YOUR PROTECTION

We Recommend Safety Shields for ALL PTO Drive and Thru-Shaft Applications



	Model	Description
A	1219.02	Shield for Male PTO Drive Applications
B	1219.04	Shield for Female PTO Drive Applications
C	1219.15	Shield for Male Thru-Shaft Applications
D	1219.25	For ZETA-85/100/120/140 C-Series Pumps

# DRIVE COMPONENTS

## GEAR REDUCTIONS



Model	Pump Series	Power	Gear Ratio	Oil Capacity	Engine Shaft
<b>5047.D7</b>	KAPPA-15	3 - 5 HP		3 oz.	3/4"

\* Use only 80/90W Gear Oil in Udor Gear Reductions



Model	Pump Series	Power	Gear Ratio	Oil Capacity	Engine Shaft
<b>5028.76</b>	IOTA-17	3 - 5 HP		3 oz.	3/4"
<b>5094.76</b>	IOTA-20	3 - 5 HP		3 oz.	3/4"
<b>5085.F7</b>	KAPPA-25	3 - 5 HP		3 oz.	3/4"

\* Use only 80/90W Gear Oil in Udor Gear Reductions



Model	Pump Series	Power	Gear Ratio	Oil Capacity	Engine Shaft
<b>5027.75</b>	KAPPA-30/40/55 ZETA-40/85/120	3.5 - 6.5 HP		16 oz.	3/4"
<b>5071.75</b>	KAPPA-33/43/53 DELTA-40, ZETA-40	3.5 - 6.5 HP		16 oz.	3/4"

\* Use only 80/90W Gear Oil in Udor Gear Reductions



Model	Pump Series	Power	Gear Ratio	Oil Capacity	Engine Shaft
<b>5033.A4</b>	KAPPA-55/75 DELTA-75, ZETA-120	8 - 16 HP	6.4 : 1	17.25 oz.	1"
<b>5053.E5</b>	GAMMA-62	8 - 16 HP	6.4 : 1	17.25 oz.	1"

\* Use only 80/90W Gear Oil in Udor Gear Reductions



Model	Pump Series	Max. Power	Gear Ratio	Oil Capacity	Engine Shaft
<b>5034.B5</b>	DELTA-100, KAPPA-121	16 - 22 HP	1.48 : 1	20.3 oz.	1"
<b>5063.B5</b>	GAMMA-62	16 - 22 HP	6.4 : 1	28.0 oz.	1"
<b>5096.B5</b>	KAPPA-151	25-36 HP	2.21 : 1	20.3 oz.	1-1/8"

\* Use only 80/90W Gear Oil in Udor Gear Reductions

## BELT DRIVE BUSHINGS



A



B



C

	Model	Description
	<b>10H6</b>	1-3/8", 6-Spline H-Bushing for Pulley Driving Pumps with 6-Spline Male PTO Shaft. 2 Groove Max
A	<b>10H24</b>	24 mm H-Bushing for Pulley Driving Pumps with 24 mm Solid Shaft
A	<b>10H25</b>	25 mm H-Bushing for Pulley Driving Pumps with 25 mm Solid Shaft
B	<b>10Q1</b>	1-3/8", 6-Spline Q-Bushing for Pulley Driving GAMMA & GAMMA-B Pumps. 3 Groove Max
	<b>10Q135</b>	35 mm Q-Bushing for Pulley Driving PENTA, NX AND VX Series Pumps. 4 Groove Max
C	<b>10Q2</b>	1-3/8", 6-Spline Q-Bushing for Pulley Driving GAMMA & GAMMA-B Pumps. 5 Groove Max



# DRIVE COMPONENTS

## HYDRAULIC DRIVE COMPONENTS



A



B



C



D

Model		Description
A	<b>OMP-50</b>	Heavy-duty Hydraulic Gear Motor with 2-Bolt A-mount Flange, 1/2" Female Top Ports and 1/ Solid Keyed Shaft. Hydraulic Requirements - 8.0 GPM. 1000 PSI Max.
A	<b>OMP-100</b>	Heavy-duty Hydraulic Gear Motor with 2-Bolt A-mount Flange, 1/2" Female Top Ports and 1/ Solid Keyed Shaft. Hydraulic Requirements - 14.0 GPM. 1800 PSI Max.
B	<b>4155.00</b>	Hyd. Motor Mounting Kit. Fits DELTA-70/100
B	<b>4155.01</b>	Hyd. Motor Mounting Kit. Fits ZETA-40/85/120, KAPPA-55
C	<b>4155.02</b>	Hyd. Motor Mounting Kit. Fits GAMMA-62/CC, GAMMA105/CC
D	<b>4155.03</b>	Hyd. Motor Mounting Kit. Fits ZETA-120/C, ZETA-140/C
	<b>4205.00</b>	Hyd. Motor Mounting Kit. Fits KAPPA-25/32, DELTA-40
	<b>4206.00</b>	Hyd. Motor Mounting Kit. Fits KAPPA-43

## CHAIN COUPLERS

Used to Drive 540 PRM Male Shaft Pumps with 6:1 Gear Reduced Gas Engines.



Model	Description
<b>CD5/8X3/4</b>	Chain Coupler - 5/8" Female x 3/4" Female
<b>CD15/16X3/4</b>	Chain Coupler - 15/16" Female x 3/4" Female
<b>CD3/4X1</b>	Chain Coupler - 3/4" Female x 1" Female
<b>CD1X1</b>	Chain Coupler - 1" Female x 1" Female
<b>CD1-3/8X1</b>	Chain Coupler - 1-3/8" 6-Spline Female x 1" Female
<b>CD1-3/8X1-3/8</b>	Chain Coupler - 1-3/8" 6-Spline Female x 1-3/8" 6-Spline Female
<b>CD25X25</b>	Chain Coupler - 25mm Female x 25mm Female

## MISC. DRIVE COMPONENTS



D



E

Model		Description
D	<b>0632.15</b>	Coupler Set. 1-3/8", 6-Spline Female x 1-1/4" Female. For Driving Pumps w/ Hydraulic motors or Truck PTO's
E	<b>6914.83</b>	1/4" x 2-1/4" Heat Treated Engine Key for use on 8 - 35 HP Gas Engines
E	<b>6914.84</b>	3/8" x 4-7/8" Heat Treated Engine Key
E	<b>6921.91</b>	3/16" x 1-3/4" Heat Treated Engine Key for use on 2.5 - 6.5 HP Gas Engines

# ACCESSORIES

## POLYPROPYLENE INLET FILTERS


**A**

**B**

Model		Description
<b>A</b>	<b>UD1-32</b>	Inlet Filter. 32 Mesh. 1" FNPT Ports
<b>B</b>	<b>UD1-1/4-32</b>	Inlet Filter. 32 Mesh. 1-1/4" FNPT Ports
<b>B</b>	<b>UD1-1/2-32</b>	Inlet Filter. 32 Mesh. 1-1/2" FNPT Ports
-	<b>3260.02</b>	Replacement 32 Mesh Screen for 1-1/4" & 1-1/2" Filters
-	<b>3260.04</b>	Replacement 32 Mesh Screen for 1" Filters

## HIGH PRESSURE FILTERS

High pressure, self cleaning strainer features brass construction, (2) 3/4" FNPT inlet & (2) 3/4" FNPT outlet ports. 40 mesh reinforced stainless screen is standard. 9" L including flush valve. 3" Diameter. Has mounting bracket with two 3/8" holes. 40 GPM Max. 1000 PSI Max.


**C**

Model		Description
<b>C</b>	<b>144.504.6</b>	Discharge Filter. 40 Mesh. 3/4" FNPT Ports
-	<b>144.203.11</b>	Replacement High Pressure Filter Screen
-	<b>219P12</b>	3/4" MNPT Allen Plug
-	<b>209P12/8</b>	3/4" MNPT x 1/2" FNPT Reducer Bushing

## PRESSURE GAUGES



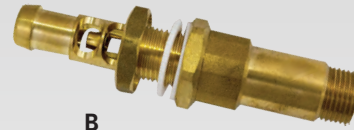
Model	Description
<b>GG350</b>	Gauge, Stainless Steel Case, Glycerin Filled. Bottom Mount, 350 PSI Max.
<b>GG350BM</b>	Gauge, Stainless Steel Case, Glycerin Filled. Back Mount, 350 PSI Max.
<b>GG1000</b>	Gauge, Stainless Steel Case, Glycerin Filled. Bottom Mount, 1000 PSI Max.
<b>GG1000BM</b>	Gauge, Stainless Steel Case, Glycerin Filled. Back Mount, 1000 PSI Max.
<b>GG1500</b>	Gauge, Stainless Steel Case, Glycerin Filled. Bottom Mount, 1500 PSI Max.
<b>GG3000</b>	Gauge, Stainless Steel Case, Glycerin Filled. Bottom Mount, 3000 PSI Max.
<b>GG4000</b>	Gauge, Stainless Steel Case, Glycerin Filled. Bottom Mount, 4000 PSI Max.

# ACCESSORIES

## VENTURI AGITATORS



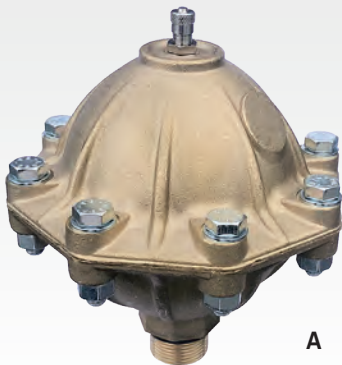
A



B

	Model	GPM	l/min	PSI	bar	Description
A	5020.02	8.0	30	400	30	High Pressure Polypropylene Venturi Agitator. 3.0 mm Stainless Steel Orifice. 1/2" MPT Inlet. Venturi Action Triples Agitation Flow.
B	163.1.2	3.5	13	700	50	High Pressure Brass Venturi Agitator. 1.8 mm Ceramic Orifice. 1/2" MPT Inlet. Venturi Action Triples Agitation Flow.

## PULSATION DAMPENERS



A



B

	Model	GPM	l/min	PSI	bar	Description
A	6031.02	52.0	200	850	60	Pulsation Dampener, Brass. 3/4" Male BSP Inlet
B	6031.09	40.0	150	400	30	Pulsation Dampener, Anodized Aluminum. 3/4" Male BSP Inlet



## POP-OFF VALVES

High Pressure Pop-Off Valves to Protect System Against Over-Pressurization

Model	GPM	l/min	PSI	bar	Relief		Description
					PSI	bar	
0637.08	25.0	95	600	40	720	50	Safety Pop-Off kValve. 3/8" MPT Inlet. 1/2" Hosebarb Outlet
0637.12	50.0	190	750	51	850	58	Safety Pop-Off kValve. 1/2" MPT Inlet. 3/4" Hosebarb Outlet



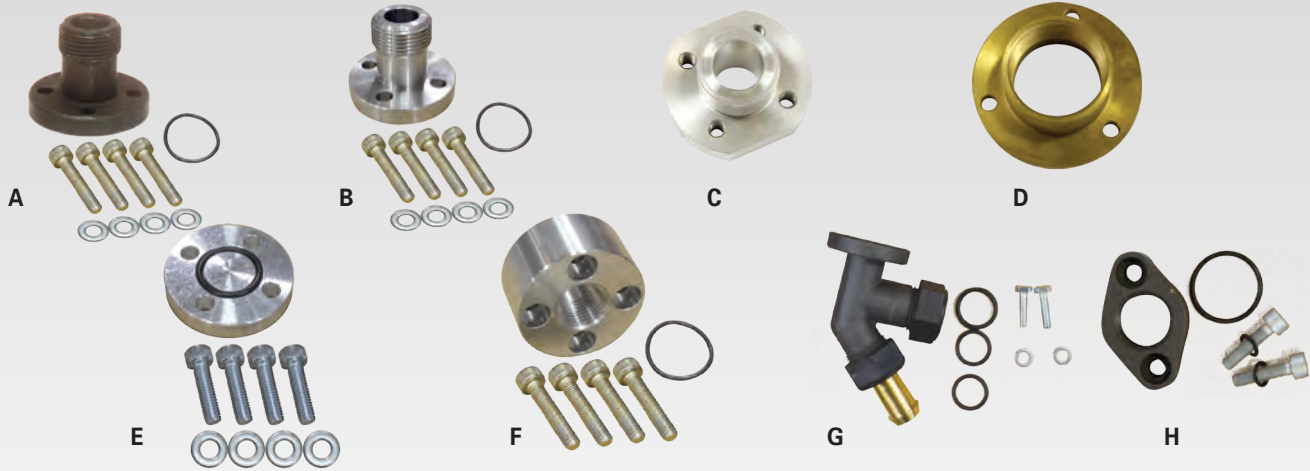
## PUMP SAVER VALVE

Diaphragm Pump Saver Valve is mounted on a T-fitting between the inlet fitting on the pump & the filter or ball valve on the intake line, to relieve excess intake vacuum due to a closed ball valve or plugged filter, preventing premature failure of the diaphragms. Brass body, stainless steel spring, polypropylene piston & Viton o-ring.

Model	Description
9500.00	Diaphragm Pump Saver Valve. 3/4" MPT Inlet. Vacuum Adjustment Range 1-12" VAC

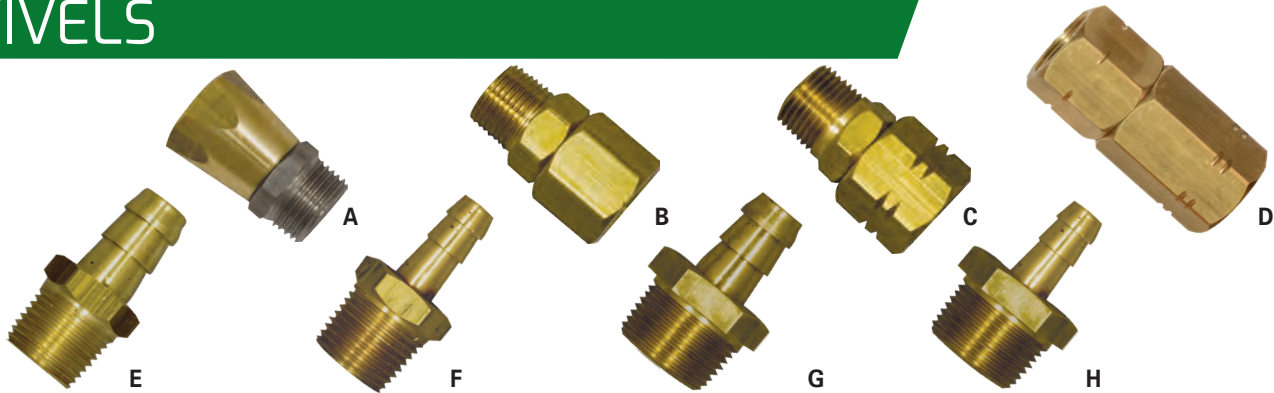
# FITTINGS

## FITTINGS & ADAPTERS



	Model	Description
A	0508.03K	3/4" Discharge Adapter Kit
B	0508.03KSS	3/4" Discharge Adapter Kit / Stainless Steel
C	0508.10	Stainless steel 3/4" MPT adapter to mount 6010.95 & 6010.96 control unit on ZETA 40/85 pumps
D	0508.11	Brass 1-1/4" FPT By-pass adapter for 6005.14 & 6005.15 regulators
E	0508.12K	Block-off Plate Kit
F	0508.15K	1/2" Female Discharge Port Adapter Kit
G	8704.07	Discharge Port Kit
H	8704.29	Outlet Adapter - 1/2"

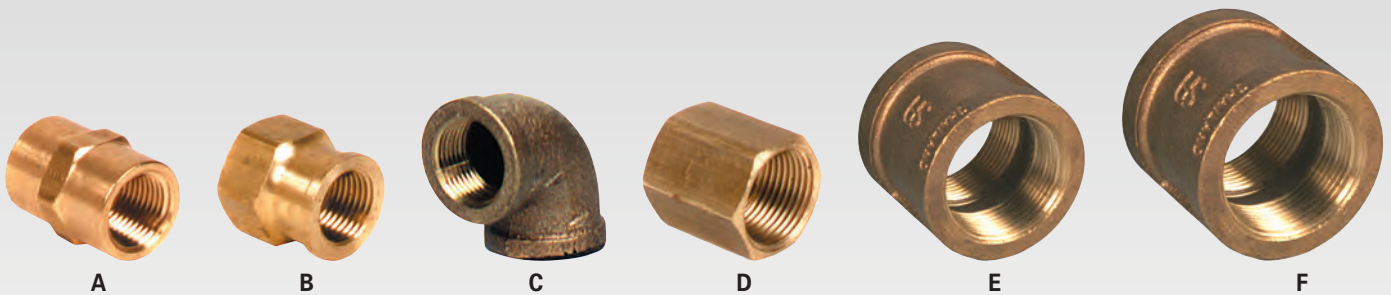
## SWIVELS



	Model	Description
A	26.1502.45	Brass Swivel. 1/2" FBSP x 1/2" MBSP. Fits Std & Ind Turbo Gun. Max. 1000 PSI
B	9016F6M	Brass Swivel. 3/8" FNPT x 3/8" MNPT. 1000 PSI
C	9018F8M	Brass Swivel. 1/2" FNPT x 1/2" MNPT. 1000 PSI
C	9018F8M/T	Brass Swivel. 1/2" Female BSP x 1/2" MNPT for 7.901.103 & 13.901.151. 1000 PSI
D	9018F8F	Brass Swivel. 1/2" FNPT x 1/2" FNPT 1000 PSI
D	9018F8F/T	Brass Swivel. 1/2" Female BSP x 1/2" FNPT for 7.901.103 & 13.901.151. 1000 PSI
E	7016.00	Brass Hose Barb Swivel. 1/2" MNPT x 1/2" Hose Barb. Max. 350 PSI
F	7016.01	Brass Hose Barb Swivel. 1/2" MNPT x 3/8" Hose Barb. Max. 350 PSI
G	7016.02	Brass Hose Barb Swivel. 3/4" MNPT x 1/2" Hose Barb. Max. 350 PSI
H	7016.03	Brass Hose Barb Swivel. 3/4" MNPT x 3/8" Hose Barb. Max. 350 PSI

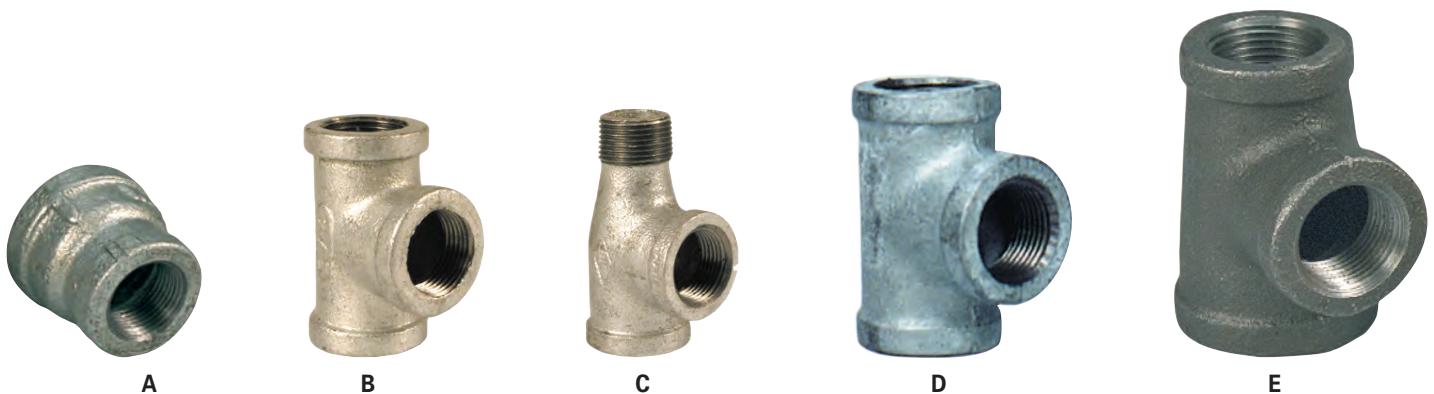
# FITTINGS

## BRASS PIPE FITTINGS



Model	Description
<b>A 207P8</b>	1/2" Female BSP x 1/2" FNPT. Can be used as a discharge port on KAPPA-7/15/18 or IOTA-17/18/20
<b>B 207P12/8</b>	1/2" Female BSP x 3/4" FNPT. Can be used as a 3/4" FNPT inlet on UDOR high performance spray guns
<b>C 207P12/90</b>	3/4" Female BSP x 3/4" FNPT Elbow. Installs on 3/4" Male BSP port on 6010.24, 6010.93, 6010.95 and 6047.06 control units to provide 3/4" FNPT discharge port.
<b>D 207P12</b>	3/4" Female BSP x 3/4" FNPT Coupler. Installs on 3/4" Male BSP port on 6010.24, 6010.93, 6010.95 and 6047.06 control units to provide 3/4" FNPT discharge port.
<b>E 207P14</b>	1-1/4" Female BSP x 1-1/4" FNPT Elbow. Installs on 1-1/4" Male BSP port on KAPPA-43/55 and DELTA 40/75 pumps to provide 1-1/4" FNPT discharge port
<b>F 207P16</b>	1-1/2" Female BSP x 1-1/2" FNPT Elbow. Installs on DELTA-100, KAPPA-121/151, BETA110/150/200/240 & OMEGA140/170 pumps to provide 1-1/2" FNPT discharge port

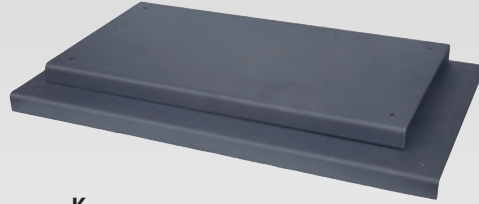
## GALVANIZED STEEL PIPE FITTINGS



Model	Description
<b>G 207P12/40</b>	1" Female BSP x 3/4" FNPT. Installs on 1" Male BSP discharge port on ZETA-120/140 pumps to provide 3/4" FNPT discharge port.
<b>H 207P12/1</b>	3/4" FNPT Tee. Can be used as a discharge port on KAPPA-121/GR & KAPPS/151/CC pumps
<b>I 207P12/2</b>	3/4" MNPT x 3/4" FNPT x 3/4" Female BSP Tee. Can be used as a discharge port on KAPPA-121/CC & KAPPA/151/CC pumps
<b>J 207P12/3</b>	3/4" FNPT x 3/4" FNPT x 3/4" Female BSP Tee. Installs on 3/4" Male BSP port on 6010.24, 6010.93, 6010.95 and 6047.06 control units to provide multiple 3/4" FNPT discharge ports.
<b>K 207P14/3</b>	3/4" FNPT x 3/4" FNPT x 1" Female BSP Tee. Installs on 1" Male BSP port on ZETA120/140 pumps to provide multiple 3/4" FNPT discharge ports.

# PARTS & ACCESSORIES

## MOUNTING HARDWARE


**J**

**K**

	Model	Description
A	<b>C5429</b>	Rubber Bushing w/ Molded-in Washer 1-3/4" H x 1-7/8" D for Pump, Base Plate or Engine Support
A	<b>C8076</b>	Rubber Bushing with Molded In Washer 3/4" H x 1-1/4" D for Pump, Base Plate or Engine Support
B	<b>9700.00</b>	Base Plate - 14" x 26"
B	<b>9700.10</b>	Base Plate - 17" x 30"
B	<b>9700.20</b>	Base Plate - 14" x 20"
B	<b>9700.25</b>	Base Plate - 25" x 36"
B	<b>9700.40</b>	Base Plate - 20" x 30"

## SPRAY BOOM HINGES


**C**

**D**

	Model	Description
C	<b>6035.02</b>	Spray Boom Hinge. Breakaway Design. Ramp Action Repositioning. Dbl Action Folding. For 1" Sq Tubing
D	<b>6035.18</b>	Spray Boom Hinge. Breakaway Design. Dbl Action Folding. Replacement Hinge for UDOR Spray Booms.

## UDOR LUBE

SAE 40W non-detergent lubricant. Specially formulated for use in UDOR diaphragm and plunger pumps.

- Non-Detergent. Non-Foaming
- Rust Inhibitors
- Anti-wear Agents
- Resists Breakdown Due to Oxidation



	Model	Description
	<b>15.5823</b>	UDOR LUBE - 1 Quart Bottle
	<b>15.5823G</b>	UDOR LUBE - 1 Gallon Bottle
	<b>15.5823S</b>	UDOR LUBE - Synthetic / Low Temp - 1 Quart Bottle

# NOTES

# TERMS & CONDITIONS

## **UDOR USA SALES POLICY**

UDOR USA reserves the right to refuse to conduct business with any company that is not in good credit standing or that is not determined to be a qualified equipment manufacturer, wholesaler or distributor.

## **SHIPPING STOCK ORDERS**

All orders shipped by UPS or truck freight only. All UPS freight charges are prepaid and added to the invoice.

## **ORDER PROCEDURE**

To eliminate any ordering errors, we highly recommend faxed orders. Our toll free fax line is open 24 hours a day 1-800-732-2670. Phone order lines are open Monday-Friday 8:00 a.m. - 5:00 p.m. central time 651-785-0666.

## **MINIMUM ORDER**

UDOR USA has a \$25.00 net minimum order requirement.

## **DROP SHIPS**

All drop ships carry a \$10.00 drop ship fee.

## **OPEN CREDIT TERMS & CONDITIONS**

After submitting a signed credit application and receiving credit approval in writing from the UDOR USA credit department open terms are NET 30 unless otherwise specified by UDOR USA.

## **FORMS OF PAYMENT**

Open credit: after the submission and approval of a UDOR USA credit application; credit cards: VISA & Mastercard are accepted.

## **PAST DUE INVOICES**

Receiving open credit terms form UDOR USA is a result of good faith and your ability to meet payment terms. Invoices are considered past due 31 days after the invoice date, unless otherwise specified by UDOR USA. You will receive a friendly reminder of past due invoices by our credit department.

## **RETURNED CHECKS**

A \$35.00 fee will be charged on all returned checks to UDOR USA by our bank for any reason.



# TROUBLESHOOTING GUIDE

**REFER TO THE PROPER PUMP BREAKDOWN AND DIAPHRAGM PUMP SERVICE GUIDE BEFORE PERFORMING ANY MAINTENANCE OR SERVICING OF THE PUMP. [www.udorusa.com](http://www.udorusa.com)**

UDOR diaphragm and plunger pumps “pump volume”, not pressure. The pressure is determined by adjusting the pressure regulating valve and selecting the proper orifice size of spray nozzle or nozzles.

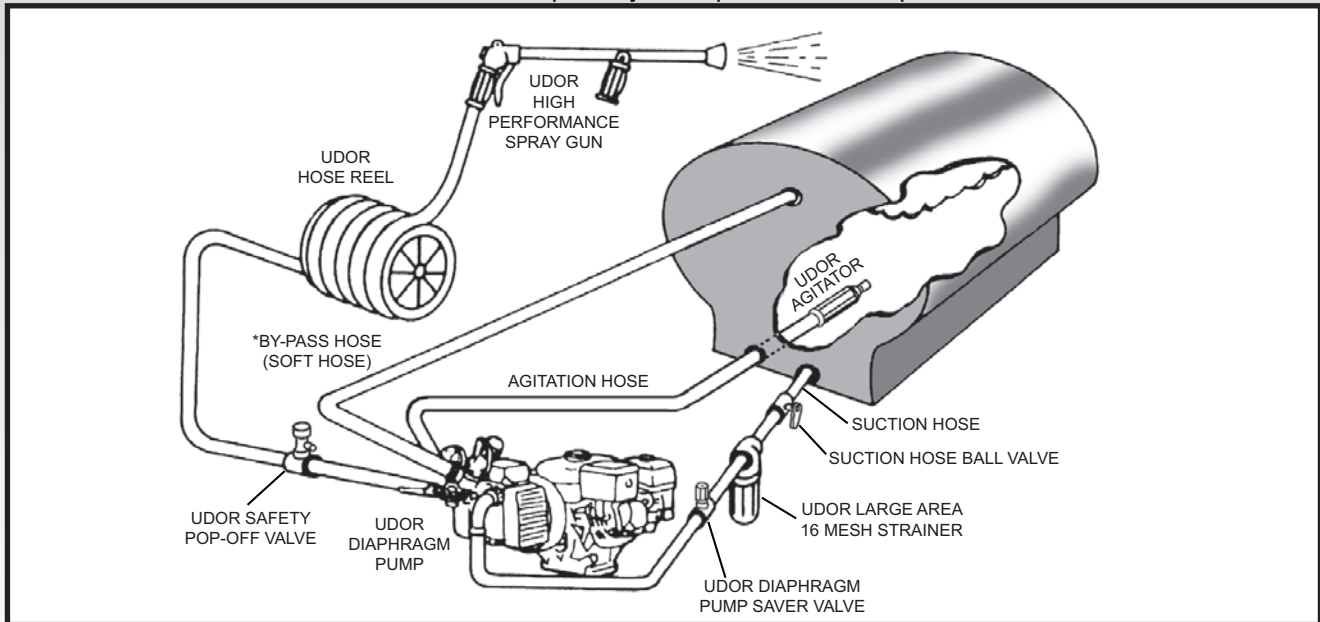
NEVER run any UDOR diaphragm pump without a pressure regulating valve installed on the pump or in the discharge plumbing.

PROBLEM	CAUSE	REMEDY
<ul style="list-style-type: none"> <li>• NO PRESSURE</li> <li>• VERY LITTLE PRESSURE</li> <li>• PRESSURE DROPS BELOW WORKING RANGE WHEN RELIEF VALVE IS OPEN TO BOOM OR GUN</li> </ul>	<ol style="list-style-type: none"> <li>1) Plugged filter* restricting flow</li> <li>2) Suction hose obstruction</li> <li>3) Collapsed suction hose inside or outside tank restricting flow</li> <li>4) Pump drawing air through suction line hoses or fittings</li> <li>5) Pressure relief valve stuck or worn</li> <li>6) Excessive tank foam due to low tank volume</li> <li>7) Nozzle volume is greater than pump capacity</li> <li>8) One or more pump valves / check valves seating improperly</li> </ol>	<ul style="list-style-type: none"> <li>• Clean filter screen</li> <li>• Clear obstruction</li> <li>• Replace collapsed hose</li> <li>• Examine hoses and fittings, ensure air tight fit and no leaks</li> <li>• Repair or replace relief valve</li> <li>• Refill tank</li> <li>• Reduce nozzle orifice size or number of nozzles used</li> <li>• Clean or replace pump valves / check valves</li> </ul>
<ul style="list-style-type: none"> <li>• PRESSURE GAUGE FLUCTUATES WILDLY</li> <li>• EXCESSIVE PULSATION</li> </ul>	<ol style="list-style-type: none"> <li>1) Pulsation dampener pressure too low or too high</li> <li>2) Pump drawing air through suction line hoses or fittings</li> <li>3) Plugged filter* restricting flow</li> <li>4) Air not entirely evacuated from pump cavity</li> </ol>	<ul style="list-style-type: none"> <li>• Adjust pulsation dampener pressure (Refer to pulsation dampener setting on Pump Operation Sheet)</li> <li>• Examine hoses and fittings, ensure air tight fit and no leaks</li> <li>• Clean filter screen</li> <li>• Run pump with an open discharge to totally evacuate air</li> </ul>
<ul style="list-style-type: none"> <li>• PUMP DOES NOT DRAW WATER</li> </ul>	<ol style="list-style-type: none"> <li>1) Pump drawing air through suction line hoses or fittings</li> <li>2) Plugged filter* restricting flow</li> <li>3) One or more pump valves / check valves seating improperly</li> </ol>	<ul style="list-style-type: none"> <li>• Examine hoses and fittings, ensure air tight fit and no leaks</li> <li>• Clean filter screen</li> <li>• Clean or replace pump valves / check valves</li> </ul>
<ul style="list-style-type: none"> <li>• PUMP OIL HAS MILKY COLOR OR OIL PLUG POPS OUT</li> </ul>	<ol style="list-style-type: none"> <li>1) One or more diaphragms have ruptured</li> </ol>	<ul style="list-style-type: none"> <li>• Replace all diaphragms</li> <li>• Clean filter screen</li> </ul>
<p>* NOTE - Only use filter screens that are between 10 &amp; 20 mesh. Never use a fine filter screen on the inlet side of a diaphragm pump.</p>		

**WARNING!: DO NOT PUMP OR FLUSH PUMP WITH ANY FLAMMABLE, EXPLOSIVE, CAUSTIC OR CORROSIVE FLUIDS. DO NOT USE ANY OF THESE PRODUCTS IN AN EXPLOSIVE ATMOSPHERE. FAILURE TO FOLLOW THIS WARNING CAN RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE AND WILL VOID ANY AND ALL WARRANTIES.**

# INSTALLATION GUIDE

These are basic tank feed plumbing diagrams and are not recommended for all systems. Consult UDOR USA for specific system requirements and components.



**NOTE:** All plumbing accessories should be the same or greater diameter as the feed line. All ball valves should be full port valves only.

On any tank feed system each pump must be fed by its own separate feed line only. Never feed multiple pumps with one common feed line.

**FEED TANK SIZE:** A recommended minimum feed tank size is 6-10 times the maximum GPM output rating of the pump or pumps being used.

**SAMPLE:** 10 GPM PUMP x 6 = 60 GALLON MINIMUM FEED TANK SIZE.

USE BLUE THREADLOCKER OR EQUIVALENT ON ALL PLUMBING COMPONENTS, FITTINGS AND ACCESSORIES.

**WARNING!** UDOR Diaphragm Pumps are positive displacement pumps, therefore a properly designed pressure relief valve or pressure regulating valve must be installed on the pump or in the discharge plumbing. A secondary safety relief valve is also recommended. Failure to install a pressure relief valve or pressure regulating valve could result in personal injury, property damage or damage to the pump or system and void any warranty. In no way does UDOR USA assume any liability or responsibility for the construction or operation of a customer's or potential customer's high pressure system.

**\* IMPORTANT**

**INSTRUCTIONS:**

**FAILURE TO FOLLOW THESE IMPORTANT INSTRUCTIONS WILL VOID ANY AND ALL WARRANTY.**

- KEEP SUCTION HOSE BALL VALVE OPEN WHENEVER SYSTEM IS BEING OPERATED.
- BY-PASS HOSE MUST BE OPEN AND UNRESTRICTED AT ALL TIMES.
- MAKE SURE ALL FEED TANKS HAVE PROPER BAFFLES AND VENTING.
- NEVER INSTALL AN AGITATOR OR BALL VALVE ON THE BY-PASS HOSE; USE SOFT HOSE ONLY.
- NEVER RUN ANY PUMP WITHOUT A PRESSURE RELIEF VALVE OR PRESSURE REGULATING VALVE INSTALLED.
- ALWAYS KEEP THE BY-PASS LINE AS FAR AWAY AS POSSIBLE FROM THE SUCTION HOSE LINE TO PREVENT AIREATION OR CAVITATION OF THE FLUID BEING PUMPED.
- ONLY USE FILTER SCREENS THAT ARE BETWEEN 10 & 20 MESH ON THE INLET SIDE OF THE PUMP. NEVER USE A FINE FILTER SCREEN ON THE INLET SIDE OF A DIAPHRAGM PUMP.

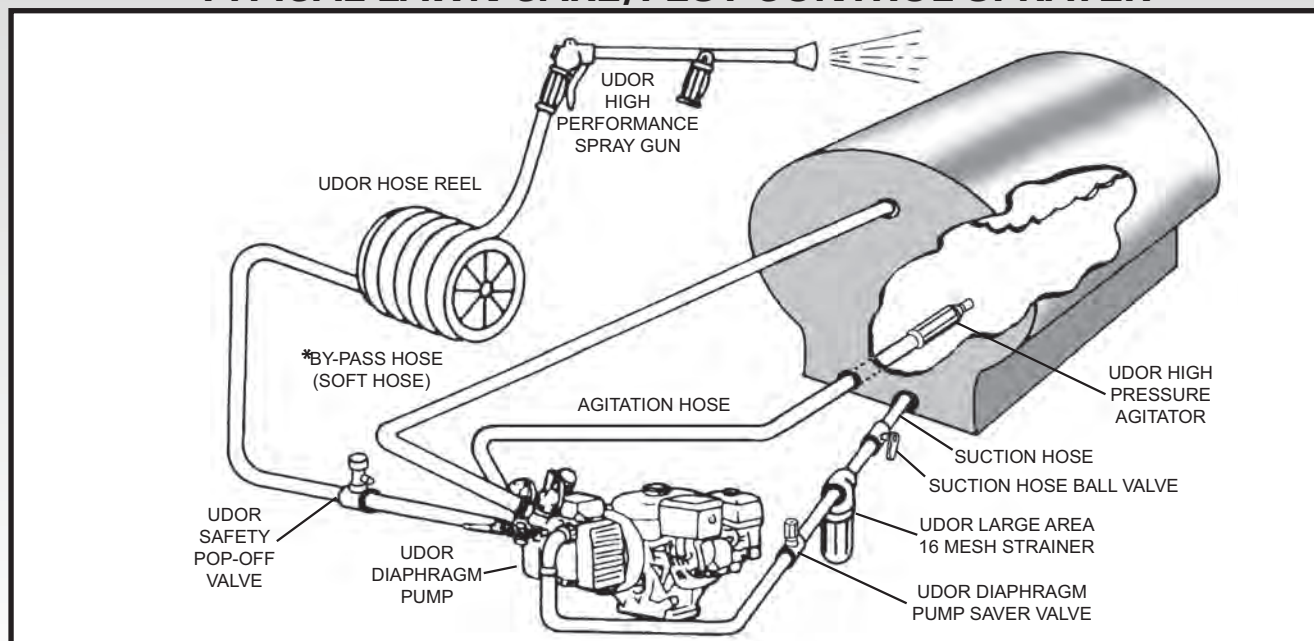
**NOTE:** Protect the pump and system from freezing. If freezing conditions exist, flush the pump, all hoses and complete system with a 50/50 mixture of anti-freeze and water. **\*\* DO NOT RUN PUMP WITH FROZEN FLUID \*\***

**WARNING!** DO NOT PUMP OR FLUSH PUMP WITH ANY FLAMMABLE, EXPLOSIVE, CAUSTIC OR CORROSIVE FLUIDS. DO NOT USE ANY OF THESE PRODUCTS IN AN EXPLOSIVE ATMOSPHERE. FAILURE TO FOLLOW THIS WARNING CAN RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE AND WILL VOID ANY AND ALL WARRANTIES.

**\*\*SEE NEXT PAGE FOR MORE PLUMBING DIAGRAMS\*\***

# INSTALLATION GUIDE

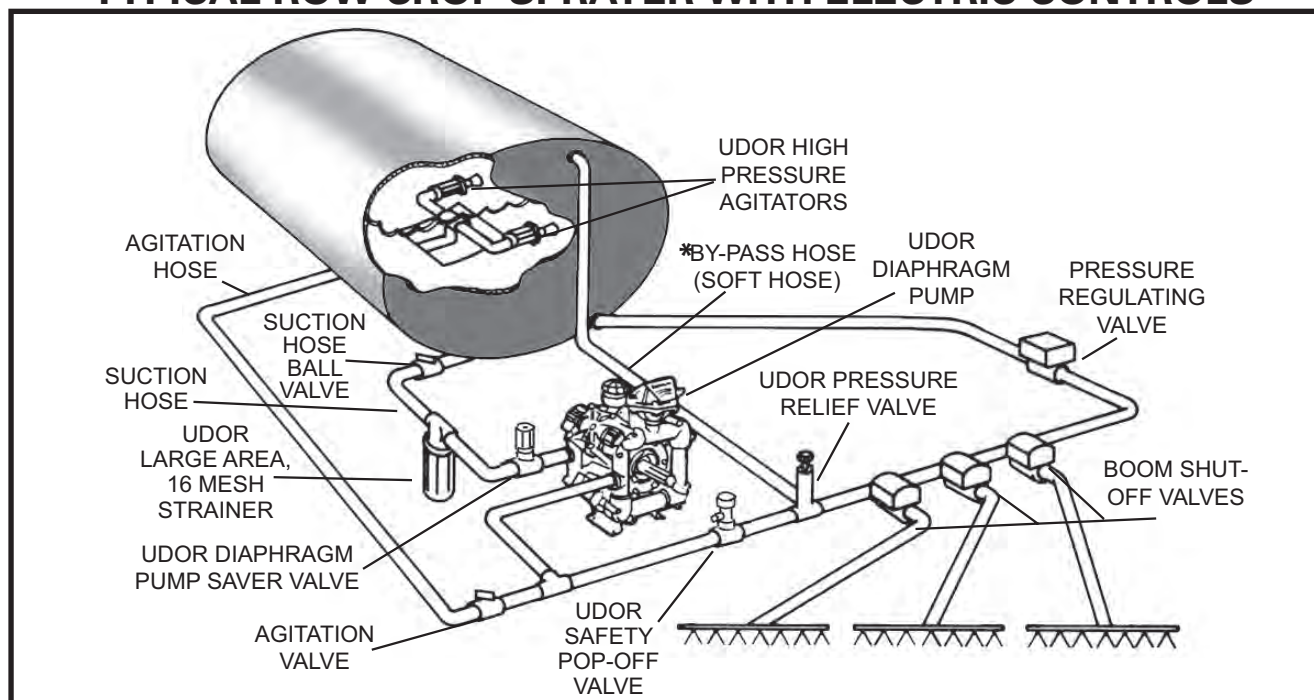
## BASIC DIAPHRAGM PUMP PLUMBING DIAGRAM FOR A TYPICAL LAWN CARE/PEST CONTROL SPRAYER



**By-pass hoses must be open and unrestricted at all times. Never install an agitator on the by-pass line.**

**These are basic tank feed plumbing diagrams and are not recommended for all systems. Consult UDOR USA for specific system requirements and components.**

## BASIC DIAPHRAGM PUMP PLUMBING DIAGRAM FOR A TYPICAL ROW CROP SPRAYER WITH ELECTRIC CONTROLS



**By-pass hoses must be open and unrestricted at all times. Never install an agitator on the by-pass line.**

# PUMP OPERATIONS

**CAREFULLY READ AND FOLLOW THESE INSTRUCTIONS BEFORE OPERATING YOUR UDOR PUMP. FAILURE TO FOLLOW THESE INSTRUCTIONS MAY DAMAGE PUMP AND VOID WARRANTY.**

**WARNING!:** UDOR Diaphragm Pumps are positive displacement pumps, therefore a properly designed pressure relief valve or pressure regulating valve must be installed on the pump or in the discharge plumbing. A secondary safety relief valve is also recommended. Failure to install a pressure relief valve or pressure regulating valve could result in personal injury, property damage or damage to the pump or system and void any warranty. In no way does UDOR USA assume any liability or responsibility for the construction or operation of a customer's or potential customer's high pressure system.

**REFER TO THE PROPER PUMP BREAKDOWN AND DIAPHRAGM PUMP SERVICE GUIDE BEFORE PERFORMING ANY MAINTENANCE OR SERVICING OF THE PUMP. [www.udorusa.com](http://www.udorusa.com)**

## **1. HOW THE PUMP WORKS (The diaphragm is what separates the pump oil from the spray material.)**

Each piston DOWNSTROKE lowers the piston-attached diaphragm, drawing spray material into pump head. As the piston passes below cylinder sleeve side openings, oil is pulled into lower diaphragm cavity. During each piston UPSTROKE the cushion of oil between the piston and the diaphragm hydraulically pushes and cushions the diaphragm as the piston tops out. This discharges the fluid in the pump head. The lower diaphragm cavity oil cushion also lubricates the diaphragm and piston ensuring minimal mechanical wear. REMEMBER: low oil level causes excessive mechanical wear on diaphragms and internal components. The transparent oil sight gauge makes oil checks easy. Keep filled to mark on sight gauge.

## **2. PRESSURE REGULATING VALVE**

A proper pressure regulating valve directs the fluid in your system and also provides a by-pass or return feature for the fluid to travel when the discharge flow of the pump is shut off. Never run any UDOR Diaphragm Pump without a pressure regulating valve installed on the pump or in the discharge plumbing. Always start the pump with the pressure regulating valve in full by-pass or with minimal spring tension on the pressure adjustment knob or handle.

## **3. BEFORE OPERATING SYSTEM**

Open suction valve and check tightness of suction lines, fittings and filter.

## **4. DO NOT RUN PUMP WITH A STARVED SUCTION**

The diaphragm pump will not suffer if run dry due to an empty tank. However, a "starved" suction due to a clogged strainer or a closed suction valve will cause premature failure of the pump diaphragms. NOTE: Only use filter screens that are between 10 & 20 mesh. Never use a fine filter screen on the inlet side of a diaphragm pump.

## **5. SUCTION VALVE (To prevent pump damage, shut down system before closing suction valve.)**

This valve is in the system to close off tank flow for emergency system repair or if strainer screen requires unexpected cleaning after a tank refill. (Strainer screen should be cleaned just before each tank refill.)

## **6. MAINTAIN PROPER OIL LEVEL**

The crankcase oil plays a dual role. It lubricates all moving parts and is hydraulically functional in the pumping capacity. Oil supports the diaphragm during each pressure stroke. It is important to maintain the recommended oil level, marked on the oil sight gauge. Only use UDOR LUBE premium pump oil. For any pump with a gear reduction, make sure the gear box is filled to the center of the sight glass or to the level plug with 90 wt. gear lube before operating.

## **7. PUMP VALVES OR CHECK VALVES**

Every UDOR Diaphragm Pump has two valves per cylinder or head assembly. One valve lets fluid "IN" each head assembly (suction) and the other valve lets fluid "OUT" of each head assembly (discharge). Pay very close attention to valve placement when reinstalling the head assemblies during diaphragm replacements, pump maintenance or when servicing the pump.

## **8. PRESSURE GAUGE**

Install pressure gauge as close as possible to the outlet or discharge of the pump, or on the high pressure manifold. This is extremely important for adjusting pressure regulating devices and for proper sizing of nozzle or restricting orifice. The pump is rated for a maximum pressure, which should be read at the pump only, not at the gun or nozzle.

## **9. DO NOT OVER SPEED PUMP**

UDOR diaphragm pumps are designed to operate at or below a specific RPM. Over speeding will cause valves and diaphragms to prematurely fail and could cause other internal damage. Refer to the performance chart of your specific pump for maximum operating RPM. Most UDOR Diaphragm Pumps are rated at 540 RPM max.

## **10. PULSATION DAMPENER INTRODUCTION**

It is the nature of diaphragm pumps to have some pulsation. This is caused by sudden changes in piston direction. The pulsation dampener has one function in the pumping system: to reduce pulsation by providing a cushion of air to bump against. The UDOR pulsation dampener uses a rubber bladder to separate the air cushion from the solution being pumped.

## **11. PULSATION DAMPENER SETTING**

The basic rule is to fill the pulsation dampener to twenty percent (20%) of the system working pressure. If you have your spraying pressure set at 100 psi, the setting for the pulsation dampener should be 20 psi. Always shut down the pump before adding air to the pulsation dampener or checking its pressure. Air supply can be from a compressor or a manual type pump. The dome containing air is small. Take care to apply the pressure gauge evenly on the air valve to prevent air from leaking out of the pulsation dampener. It is not uncommon to lose 5-10 psi when checking pulsation dampener pressure. NOTE: 2-cylinder diaphragm pumps may require more air than 20% of operating pressure. 20 psi is the minimum pulsation dampener pressure. DO NOT RUN PUMP WITH LESS THAN 20 PSI IN THE PULSATION DAMPENER.

**WARNING!:** DO NOT PUMP OR FLUSH PUMP WITH ANY FLAMMABLE, EXPLOSIVE, CAUSTIC OR CORROSIVE FLUIDS. DO NOT USE ANY OF THESE PRODUCTS IN AN EXPLOSIVE ATMOSPHERE. FAILURE TO FOLLOW THIS WARNING CAN RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE AND WILL VOID ANY AND ALL WARRANTIES.

PUMP OPERATIONS UDOR DIAPHRAGM PUMPS

# MAINTENANCE PROCEDURES

REFER TO THE PROPER PUMP BREAKDOWN AND DIAPHRAGM PUMP SERVICE GUIDE BEFORE PERFORMING ANY MAINTENANCE OR SERVICING OF THE PUMP. [www.udorusa.com](http://www.udorusa.com)

Establishing and following a maintenance schedule is a good investment. It will add greatly to the longevity of your pump and your sprayer.

## UDOR DIAPHRAGM PUMP MAINTENANCE PROCEDURES

- STEP NO. 1** "AFTER EACH USE" Flush pump with clean water. Most diaphragm "attacks" occur when chemicals are left sitting in the pump. These few minutes of cleaning are well spent, extending diaphragm life and minimizing chemical buildup throughout the system
- STEP NO. 2** "AFTER EVERY 500 HOURS OF USE OR AT SEASON'S END" (whichever comes first). Install a new set of diaphragms. Inspect pump valves / check valves for spring fatigue and seat wear. Change oil using UDOR LUBE premium pump oil or a non-detergent 30 weight oil: rotate shaft while filling. This evacuates most unwanted air pockets. Run pump for five minutes under "no-load" condition or in full by-pass only. This evacuates remaining air pockets from diaphragm cavity. Re-check oil level. \*Refer to proper pump breakdown and Diaphragm Pump Service Guide before installing new diaphragms or servicing the pump.
- STEP NO. 3** "WINTER STORAGE" Perform Step 1 (above), then, with tank empty and suction and discharge valves "open," run pump one minute to ensure complete drainage of pump heads and lines. Re-circulate anti-freeze at low pressure only and leave in system to complete winterizing procedure.
- STEP NO. 4** "RE-STARTING AFTER WINTER STORAGE" Before re-starting the pump after anti-freezing, make sure to purge all anti-freeze from pump and complete system at low pressure only. Anti-freeze will foam under high pressure and can cause severe damage to the pump and pressure regulator. Failure to follow this step will void any and all warranty.
- NOTE:** Allow anti-freeze to replace any possible water in hoses and booms. If a handgun is in the system, run anti-freeze through the hose and handgun into tank lid opening to clear and/or dilute water. (Depending on the length of hose and size of tank, more than one gallon of anti-freeze may be required to protect the system from freezing). **\*\*DO NOT RUN PUMP WITH FROZEN FLUID\*\***-

**WARNING!:** DO NOT PUMP OR FLUSH PUMP WITH ANY FLAMMABLE, EXPLOSIVE, CAUSTIC OR CORROSIVE FLUIDS. DO NOT USE ANY OF THESE PRODUCTS IN AN EXPLOSIVE ATMOSPHERE. FAILURE TO FOLLOW THIS WARNING CAN RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE AND WILL VOID ANY AND ALL WARRANTIES.

# SERVICE GUIDE

## 1. DRAIN CRANKCASE OIL

Drain pump crankcase by removing the oil drain plug located at the bottom of the pump. Also remove the oil fill cap or plug. NOTE: On older pump models that DO NOT have the oil drain plug, oil needs to be drained after the head, diaphragm and piston sleeve have been removed. NOTE: When re-installing piston sleeves, the oil holes must always align parallel with the pump crankshaft.

## 2. EXTERNAL MANIFOLD REMOVAL

If your pump has external manifolds, these must be removed prior to head removal.

## 3. HEAD REMOVAL

Remove the head bolts, and then remove the pump heads which may require some "light" prying.

## 4. DIAPHRAGM REMOVAL

Turn crankshaft to bring piston up to the top of its stroke, remove the diaphragm bolt and washer, then remove the diaphragm.

## 5. CRANKCASE CLEANING

To properly clean the crankcase you need to remove the piston sleeves and wash the crankcase with parts washing solution or equivalent. Before re-installing the piston sleeves, apply a light coating of oil to both the pistons and sleeves. NOTE: Make sure the oil holes in the piston sleeve align parallel with the pump crankshaft.

## 6. INSTALLING NEW DIAPHRAGMS

Install the diaphragm bolt and washer into the new diaphragm. Install this assembly to the piston, flat side of the diaphragm down. Use blue threadlocker or equivalent on the diaphragm bolt. Then torque to the recommended specs. Now rotate crankshaft to bring the piston and diaphragm to the bottom of its stroke. Then seat the outside edge of the diaphragm into the pump body.

## 7. HEAD INSTALL

When reinstalling the pump heads, it is very IMPORTANT to make sure that the pump valves or check valves are installed correctly. For each cylinder or head assembly there are two valves, one valve lets fluid "IN" the head assembly (suction), the other valve lets fluid "OUT" of the head assembly (discharge). PAY VERY CLOSE ATTENTION TO THIS! Then torque pump heads to rated torque specs. WARNING: Never run any UDOR diaphragm pump with the pump valves or check valves installed incorrectly. Failure to follow this warning could result in personal injury, property damage or damage to the pump and will void any and all warranties.

## 8. INSTALLING PULSATION DAMPENING DIAPHRAGM

Bleed off the air in the chamber and then remove the cover bolts, cover and diaphragm. Install the new diaphragm dome down. Reinstall cover and torque to recommended specs. Recharge dampener with air to 20% of the pumps operating pressure.

## 9. REFILL PUMP CRANKCASE

Check the oil drain plug, making sure that it is installed in the crankcase. Fill the pump with UDOR LUBE premium pump oil or SAE 30 weight non-detergent oil to the recommended mark on the oil sight glass/gauge; about halfway on the oil sight glass/gauge. Rotate the crankshaft while filling to eliminate air pockets.

## 10. INITIAL START UP

Run pump for five minutes under NO Load condition or in full by-pass only. This will evacuate any remaining air pockets in the crankcase. Turn pump off and re-check oil level. Refill as necessary to proper oil level.

**IMPORTANT:** During initial start up, monitor the oil color. If it turns milky white, the diaphragms were not seated or installed correctly.

**WARNING!:** UDOR Diaphragm Pumps are positive displacement pumps, therefore a properly designed pressure relief valve or pressure regulating valve must be installed on the pump or in the discharge plumbing. A secondary safety relief valve is also recommended. Failure to install a pressure relief valve or pressure regulating valve could result in personal injury, property damage or damage to the pump or system and void any warranty. In no way does UDOR USA assume any liability or responsibility for the construction or operation of a customer's or potential customer's high pressure system.

# RETURN POLICY

- 1) A Return Merchandise Authorization (RMA) number is required for all products being returned for warranty evaluation, repair or credit. To obtain an RMA number, please contact UDOR USA customer service at 651-785-0666.
- 2) All products returned for credit are subject to a minimum 10 percent restocking fee based on product evaluation.
- 3) Flush pump to remove any and all chemicals. Drain all pump oil and gear lube.
- 4) The RMA number must appear on the outside of all packages being returned.
- 5) All RMA numbers will be valid for 60 days from date issued. If product is not received within 60 days a new RMA number must be issued.
- 6) Freight for return product is the responsibility of the customer; all products returned must be freight prepaid. Ship to:

UDOR USA  
500 Apollo Drive  
Lino Lakes, MN 55014

Any collect shipments or any product returned without an RMA number will be refused and returned to sender.

- 7) Any product being returned for warranty evaluation must not be disassembled. Disassembly of the product will void any and all warranties.
- 8) UDOR USA will repair or replace products qualified as defective upon inspection that are judged to be defective due to workmanship or material failure under UDOR USA limited product warranty.
- 9) Customers requiring immediate product replacement for items submitted for warranty evaluation will be invoiced at current price. Limited product warranty will apply to all return products.
- 10) Any product that has been left here past 60 days after contact from UDOR USA will become property of UDOR USA and will be properly disposed.

**NOTE:**

All pumps and accessories being returned to UDOR USA for repair or warranty evaluation must be flushed of any and all chemicals. This also pertains to crankcases that have contaminated oil. Any pump received that has not been properly flushed will be immediately returned to sender freight collect. This policy has been put into place to protect our personnel from possible exposure to hazardous or unknown substances.

# PRODUCT WARRANTY

In the course of marketing or servicing the customer or potential customer's needs, UDOR USA will use its best judgment in its product recommendations. However, the ultimate responsibility for product application decisions shall rest with the customer. The sole and only warranty made by UDOR USA is the limited warranty described below.

## LIMITED PRODUCT WARRANTY UDOR Diaphragm Pumps and Gamma Series Plunger Pumps & Accessories

**UDOR Diaphragm Pumps and GAMMA Series Plunger Pumps** are warranted by the manufacturer to the original purchaser to be free from defects in materials and workmanship under normal use and service for a period of one (1) year.

**UDOR Accessories** are warranted to be free from defects in materials and workmanship under normal use and service for a period of ninety (90) days.

**"Normal use and service"** is defined as applications not in excess of recommended maximum speeds, pressures, temperatures or vacuums, only handling fluids which are compatible with pump or accessory materials and maintaining proper oil change intervals.

**"Proper oil change intervals"** for Plunger Pumps is changing PUMP OIL after the first 50 hour break-in period, and after every 500 hours of use thereafter using UDOR LUBE Premium Pump Oil and UDOR USA original equipment parts.

**"Proper oil change intervals"** for Diaphragm Pumps is changing pump oil and diaphragms at the end of the spraying season or after 500 hours of use, whichever comes first using UDOR LUBE Premium Pump Oil and UDOR USA original equipment parts.

This Warranty DOES NOT APPLY to freight damage, damage due to freezing, running pump dry (plunger pumps only) or improper lubrication of crankcase, normal wear of moving parts, damage due to misuse or misapplication, defects caused by the fault or negligence of the buyer or third party, or damage due to use of parts or accessories not obtained from or approved by UDOR USA.

This Warranty also does not apply to any pump or accessory which has been altered or modified to affect its performance or reliability or any pump or accessory that has been returned disassembled.

This Warranty excludes "normal wear items" such as elastomers, diaphragms, seals and valves.

All pumps and accessories being returned to UDOR USA for repair or warranty evaluation must be flushed of any and all chemicals. This also pertains to crankcases that have contaminated oil. Any pump received that has not been properly flushed will be immediately returned to sender freight collect. This policy has been put into place to protect our personnel from possible exposure to hazardous or unknown substances.

All warranty evaluation returns must be accompanied by the original purchase invoice and a RMA number. If invoice is not included, UDOR USA will determine warranty by manufacturer's serial number and date of manufacture on the pump label. Any collect shipments or any product returned without a RMA number will be refused and returned to sender.

UDOR USA's obligation under this warranty is limited to repair or replacement of product in question, at UDOR's option, upon return of the product, freight prepaid, to UDOR USA. UDOR USA agrees to be responsible for return shipping costs ONLY on any approved warranty repair or replacement product via ground transportation ONLY. This warranty is in lieu of all other warranties expressed or implied, including any warranty of merchantability and any warranty of fitness for a particular purpose.

**IN NO EVENT SHALL UDOR USA BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES OR EXPENSES OF ANY KIND. This includes lost income, travel time and expenses, lodging expenses, labor expenses, down time, shipping costs and any other INCIDENTAL or CONSEQUENTIAL damages or expenses.**

The only and total liability of UDOR USA under this limited warranty or in any claim regarding or involving UDOR USA is expressly limited to the repair, replacement or purchase price of the product.

**WARNING!: DO NOT PUMP OR FLUSH PUMP WITH ANY FLAMMABLE, EXPLOSIVE, CAUSTIC OR CORROSIVE FLUIDS.**

**DO NOT USE ANY OF THESE PRODUCTS IN AN EXPLOSIVE ATMOSPHERE.**

**FAILURE TO FOLLOW THIS WARNING CAN RESULT IN PERSONAL INJURY OR PROPERTY DAMAGE AND WILL VOID ANY AND ALL WARRANTIES.**

This Warranty supersedes any and all previous Warranties.



# MORE PRODUCTS

# UDOR<sup>®</sup> USA Plunger Pumps



PN-SERIES



NK-SERIES



BK-SERIES



PENTA SERIES



CK-SERIES



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# BOOMINATOR<sup>®</sup>

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See our full line at [www.boominator.com](http://www.boominator.com)



**UDOR**<sup>®</sup>  
**USA**

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