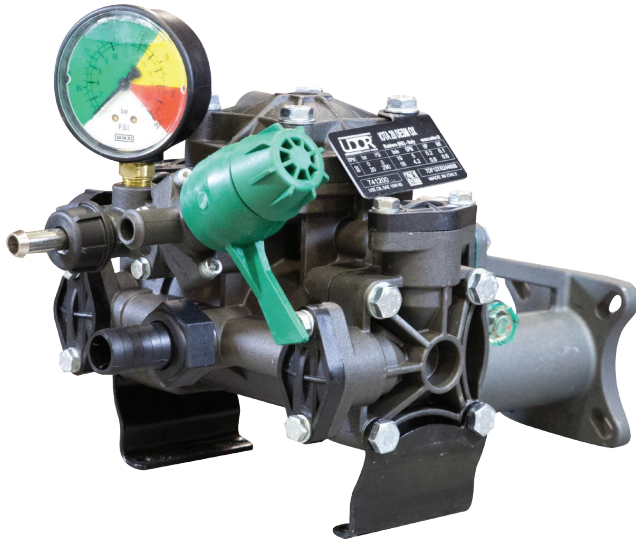




# IOTA 18/20/25

## 2-Cylinder, Low-Pressure Diaphragm Pumps



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.

Model	GPM	l/min	PSI	bar	RPM	Drive Configuration	Weight
IOTA 20	5.0	19.0	300	20	600	14 mm Tapered Shaft	9 LBS
IOTA 20 GR3/4	5.0	19.0	300	20	600	Gear Reduction for 3/4" Shaft Gas Engine, 4-6.5 HP	12 LBS
IOTA 25	7.0	24.0	300	20	600	25 mm Solid Keyed Shaft	10 LBS
IOTA 25 GR3/4	7.0	24.0	300	20	600	Gear Reduction for 3/4" Shaft Gas Engine, 4-6.5 HP	12 LBS
IOTA 18 M	4.8	18.0	200	20	600	115-Volt 1 HP Motor. Max 10 Amp	33 LBS
IOTA 18 E	-	-	-	-	-	Replacement Pump for IOTA-18/M	9 LBS
0908.31	-	-	-	-	-	Replacement Motor for IOTA-18/M	20 LBS

Specifications	IOTA 20	IOTA 25	Description	Part #
Inlet Port	3/4" Hose Barb	3/4" Hose Barb	Diaphragm Kit (GREENTECH)	6062.G1
Outlet Ports - Valve	1/2" Hose Barb	1/2" Hose Barb	Diaphragm Bolt & Washer Kit	6062.G2
Bypass	5/8" Hose Barb	5/8" Hose Barb	Valve Kit	6062.F9
Piston Diameter	44.0mm	44.0mm	Complete Repair Kit	8700.43CK
Crankshaft Stroke/Code	10.0mm / Y	13.0mm / W		
Dimensions	7.5"L x 12.5"W x 8.5"H			

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



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Scan this QR Code  
for More Information



IOTA  
2024A

8700.01CK	
CODE	QTY
010202	2
030109	2
090308	1
090312	2
110110	4
110152	4
1101A2	1
1101G4	4
600621	4

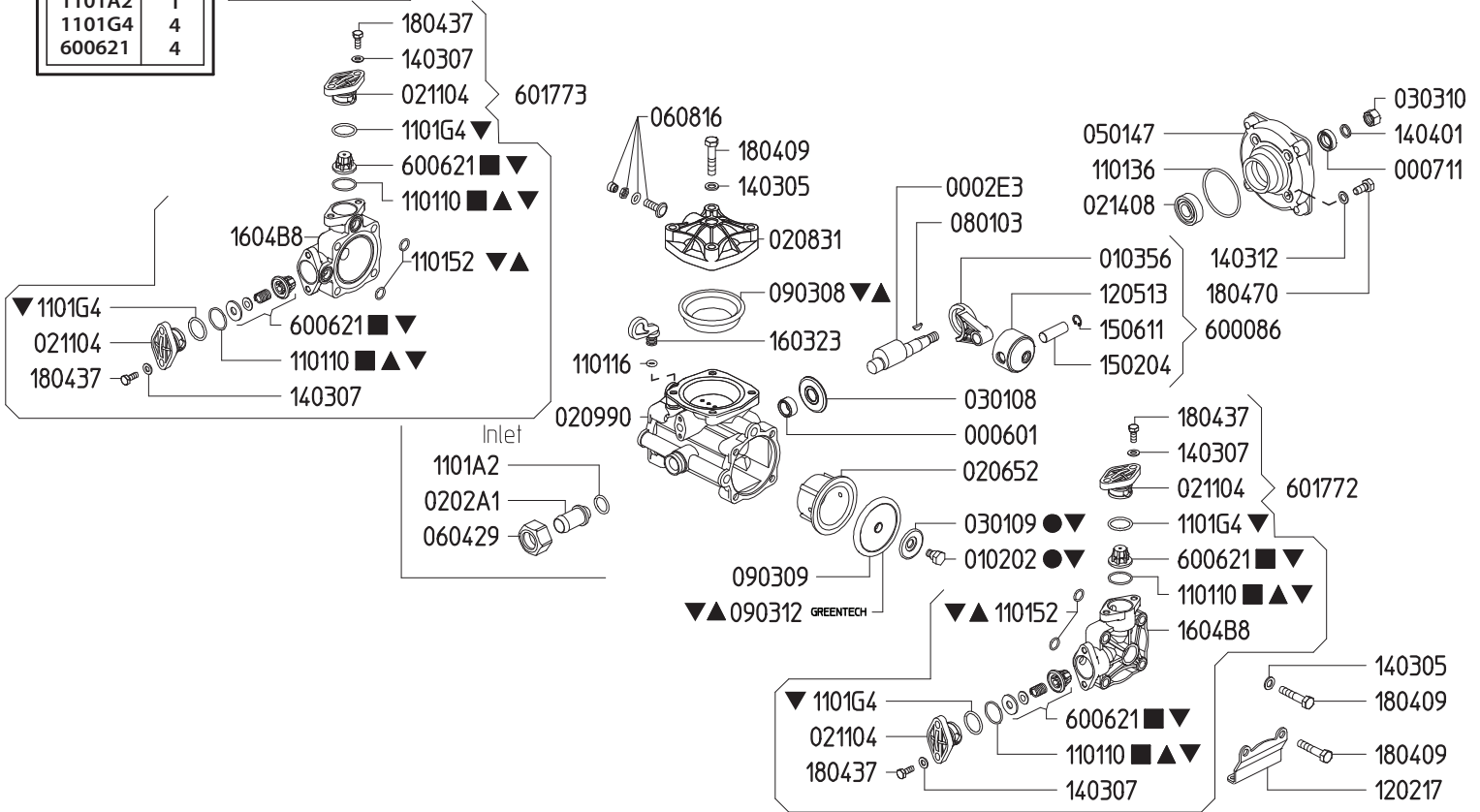
870001	
KIT 629	
CODE	QTY
090308	1
090312	2
110110	4
110152	4

606238	
KIT 537	
CODE	QTY
110110	4
600621	4

606240	
KIT 539	
CODE	QTY
010202	2
030109	2

Maximum Flow	4.8 GPM / 18 lpm
Maximum Pressure	290 PSI / 20 bar
Maximum RPM	600
Inlet Port - Hose Barb	3/4" HB
Outlet Ports - Hose Barb, Valve	3/8" HB
Bypass - Hose Barb	3/8" HB
Dimensions	7.5"L x 12.5"W x 8.5"H
Weight	33 lbs

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

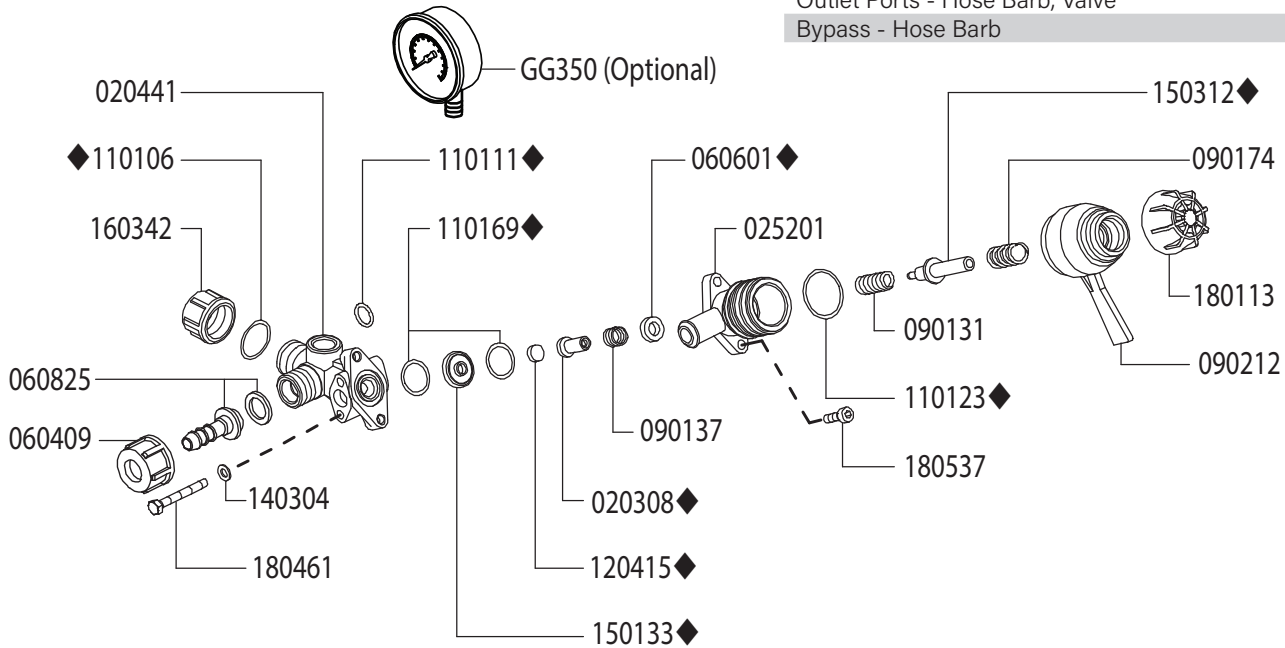


Revised 1-9-2024

Part #	Description	Qty	Part #	Description	Qty
0002.E3	SHAFT "IOTA 18"	1	1101.G4	O-RING - VALVE COVER ▼	4
0006.01	BUSHING D15	1	1202.17	BASE PLATE "IOTA 20/25"	2
0007.11	OIL SEAL D14	1	1205.13	ALUMINIUM PISTON D44 "IOTA 20/25"	2
0102.02	DIAPHRAGM BOLT "IOTA/KAPPA 15" ●▼	2	1403.05	WASHER M8	8
0103.56	CONNECTING ROD "IOTA 20/25"	2	1403.07	WASHER M6	8
0202.A1	HOSE BARB D20	1	1403.12	GASKET D8,5	4
0206.52	SLEEVE D44 "IOTA 18"	2	1404.01	GROWER WASHER D11	1
0208.31	ACCUMULATOR COVER "IOTA 20/25"	1	1502.04	PIN D12X35	2
0209.90	CRANKCASE "IOTA 20/25"	1	1506.11	SNAP RING D12	2
0211.04	COVER "IOTA 20/25"	4	1603.23	OIL PLUG W/O O-RING	1
0214.08	BALL BEARING D15	1	1604.B8	HEAD "IOTA 20/25"	2
0301.08	BEARING DISC "IOTA 20/25"	1	1804.09	HEX BOLT M8X40	12
0301.09	DIAPHRAGM DISC "IOTA 20/25" ●▼	2	1804.37	HEX BOLT M6X18	8
0303.10	HEX NUT M10X1X10	1	1804.70	HEX BOLT M8X18	4
0501.47	BEARING FLANGE "IOTA 20"	1	6000.86	ROD ASSY "IOTA 20/25" D44	2
0604.29	PLASTIC NUT G3/4	1	6006.21	VALVE ASSY "IOTA 20/25" W/T O-RING ■▼	4
0608.16	AIR VALVE ASSY	1	6017.72	RIGHT HEAD ASSY "IOTA 20/25"	1
0801.03	KEY 3X5 UNI6606 DIN6888	1	6017.73	LEFT HEAD ASSY "IOTA 20/25"	1
0903.08	ACCUMULATOR DIAPH "IOTA/KAPPA 25/55" ▼▲	1	6062.38	IN/OUTLET VALVE KIT "IOTA" (KIT 537)	1
0903.09	PISTON DIAPHRAGM BUNA-N D70	2	6062.40	DIAPHRAGM BOLT / WASHER (KIT 539)	1
0903.12	PISTON DIAPHRAGM GREENTECH D70 ▲▼	2	8700.01	DIAPHRAGM KIT GREENTECH (KIT 629)	1
1101.10	O-RING - VALVE ▼▲■	4	8700.01CK	COMPLETE REPAIR KIT	1
1101.16	O-RING - OIL PLUG / AIR VALVE	2	■	Parts in 6062.38 (Kit 537)	
1101.36	O-RING - BEARING FLANGE	1	●	Parts in 6062.40 (Kit 539)	
1101.52	O-RING - HEAD ▲▼	4	▲	Parts in 8700.01 (Kit 629)	
1101.A2	O-RING - INLET HOSE BARB ▼	1	▼	Parts in 8700.01 (Complete Repair Kit)	

## Adjustable Pressure Regulator

Maximum Flow	5.0 GPM / 19 lpm
Maximum Pressure	275 PSI / 19 bar
Inlet Port - Hose Barb	-
Outlet Ports - Hose Barb, Valve	3/8" HB
Bypass - Hose Barb	-



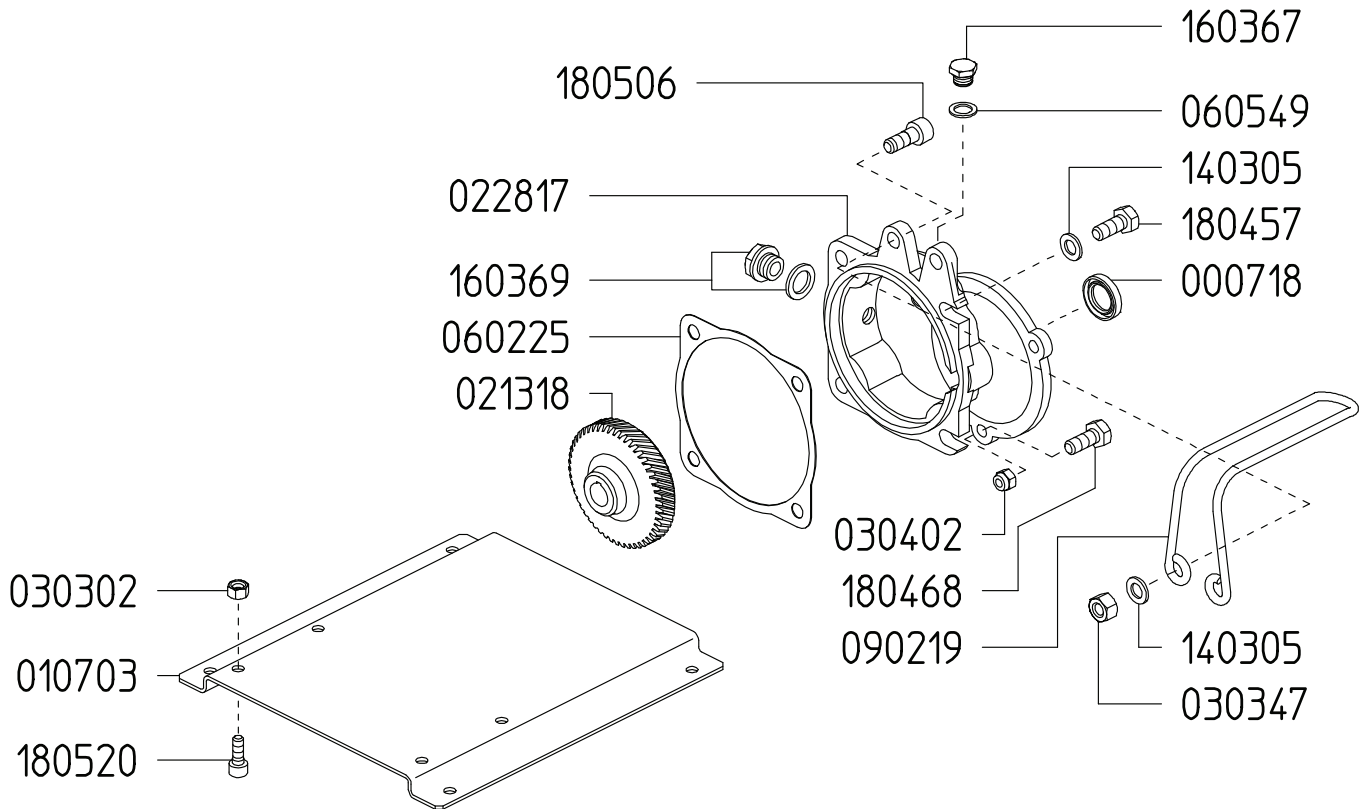
Revised 11-17-2023

Part #	Description	Qty
0203.08	VALVE COLLAR ◆	1
0204.41	VALVE BODY	1
0252.01	BYPASS BODY	1
0604.09	DISCHARGE BARB NUT	1
0606.01	SEAL ◆	1
0608.25	DISCHARGE BARB	1
0901.06	SPRING	1
0901.31	SPRING	1
0901.37	SPRING	1
0901.74	SPRING	1
0902.12	REGULATOR HANDLE	1
1101.06	O-RING ◆	1
1101.11	O-RING ◆	1
1101.23	O-RING ◆	1

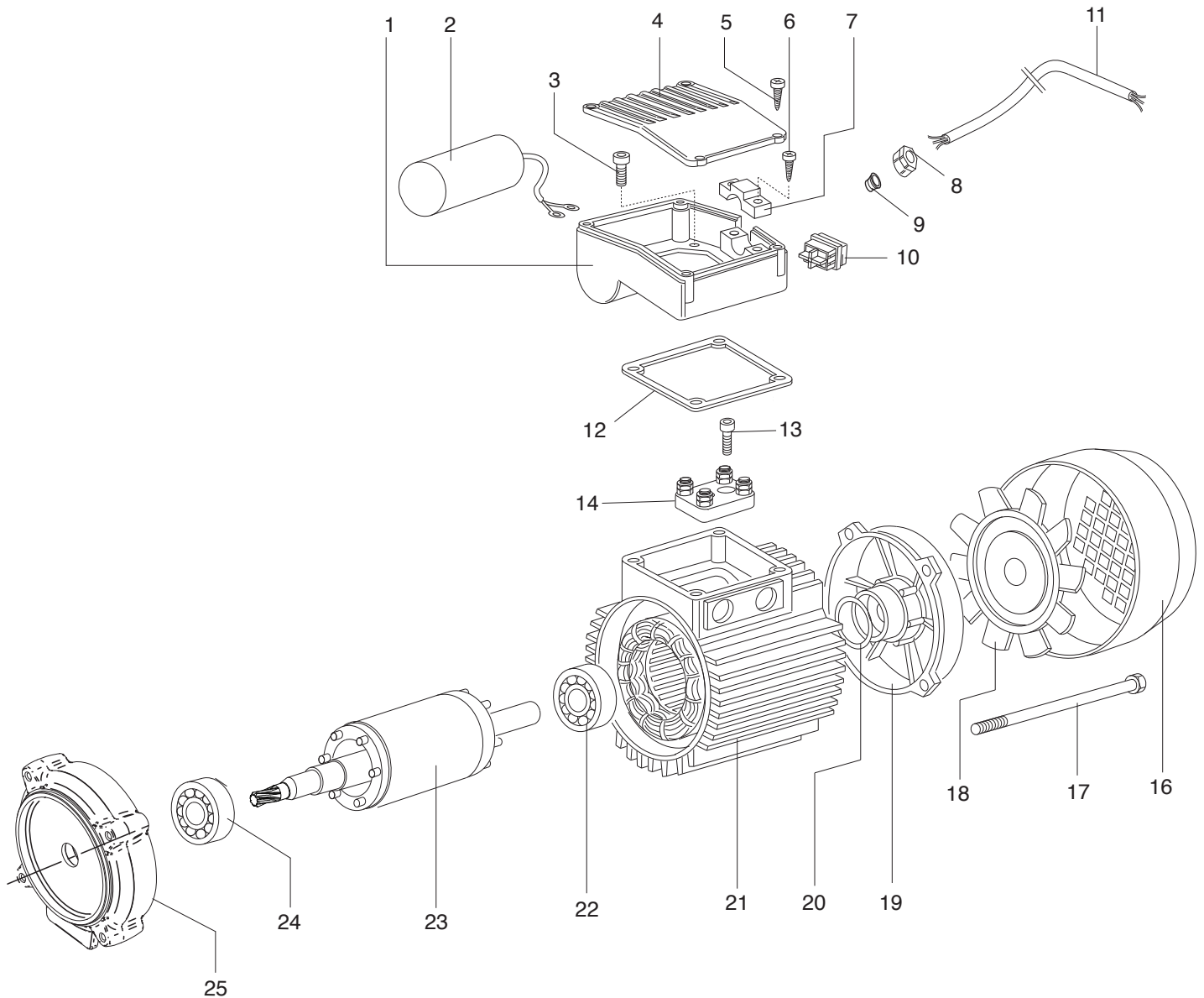
Part #	Description	Qty
1101.69	O-RING ◆	2
1204.15	POPPET ◆	1
1403.04	WASHER	2
1501.33	SEAT ◆	1
1503.12	STEM ◆	1
1603.42	CAP	1
1801.13	ADJUSTMENT KNOB	1
1804.61	BOLT	2
1805.37	BOLT	2
GG350	LOW PRESSURE GAUGE (OPTIONAL)	1
8701.01	REPAIR KIT	1

◆ Parts included in repair kit #8701.01

1. Before operating or re-operating the pump, push the manual dump valve lever (0902.12) counter-clockwise to the dump position. **FAILURE TO DO SO WILL VOID PUMP WARRANTY.**
2. Turn the pressure adjustment knob (1801.13) counter-clockwise to relieve spring tension.  
NOTE: Step 2 applies only to initial start-up, and is not necessary in daily operation of pump.
3. Start unit and let run until air is evacuated from system, when only liquid is expelled from the bypass line
4. Turn dump valve lever clockwise to ON position. Open spray gun or spray boom and turn the pressure adjustment knob clockwise until desired operating pressure is achieved.



Ref #	Description	Qty	Ref #	Description	Qty
0007.18	Seal	1	0902.19	Handle	1
0107.03	Base Plate	1	1403.05	Washer	4
0213.18	Gear, IOTA-18/M	1	1603.67	Oil Fill Plug	1
0228.17	Gear Housing	1	1603.69	Oil Sight Gauge	1
0303.47	Hex Nut M8x8	2	1804.57	Hex Bolt	6
0303.02	Hex Nut	4	1804.68	Hex Bolt	2
0304.02	Ny-Lock Nut	3	1805.06	Allen Bolt	2
0602.25	Gasket	1	1805.20	Allen Bolt	4
0605.49	Gasket	1			



Ref #	Description	Qty
1	SWITCH BOX	1
2	CAPACITOR - 02-1238.33	1
3	SCREW	4
4	SWITCH BOX	1
5	SCREW	5
6	SCREW	2
7	CABLE LOCKER	1
8	THREADED RING	1
9	RUBBER CONICAL GROMMET	1
10	MAIN SWITCH - 02-12/15HP1	1
11	CABLE	1
12	GASKET	1
13	SCREW	1

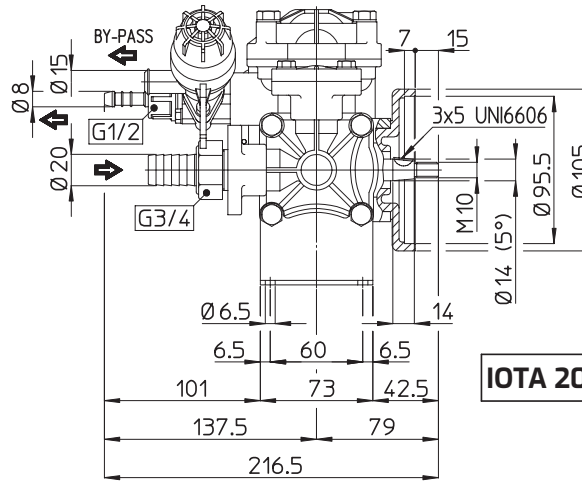
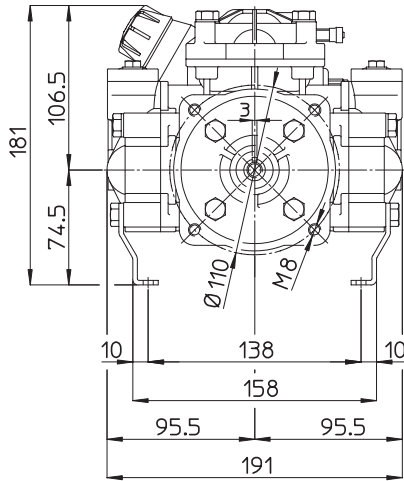
Ref #	Description	Qty
14	TERMINAL BLOCK	1
16	FAN COVER - 02-12/14HP1	1
17	TIE-BEAM	4
18	FAN - 02-12/14HP1	1
19	SHIELD	1
20	SPRING WASHER	1
21	STATOR	1
22	BALL BEARING	1
23	ROTOR	1
24	BALL BEARING	1
25	SHIELD	1
N/S	MOTOR BASE - 02-1238.H2	1

# IOTA 18/20/25 DIMENSIONS

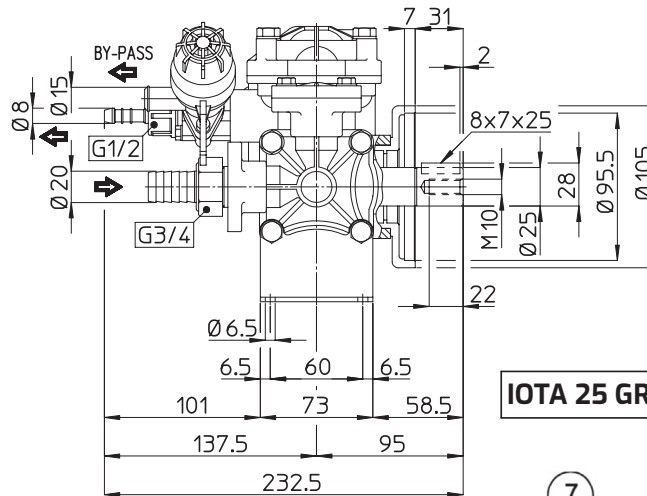
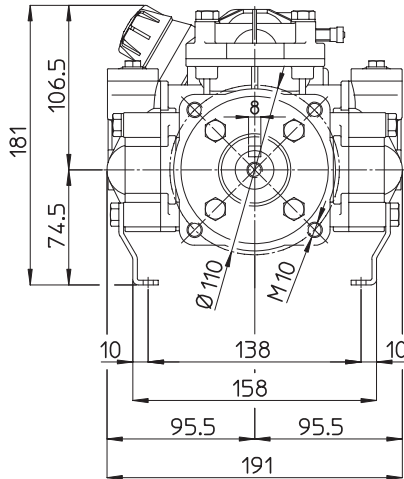
Dimensional Drawings are  
Shown in Millimeters.  
To Convert to Inches,  
Multiply Dimension x 0.03937

Specifications	IOTA 20	IOTA 25
Inlet Port - Hose Barb	3/4" HB	3/4" HB
Outlet Ports - Hose Barb	1/2" HB	1/2" HB
Bypass - Hose Barb	5/8" HB	5/8" HB
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.



**IOTA 20**



**IOTA 25 GR**

## TORQUE SPECS

Ref.	Description	Ft./lb.	Nm
1	Diaphragm Bolts (Use Loctite 243)	10	14
2	Head Bolts	18	25
3	Pulsation Dampener Bolts	18	25
4	Inlet Flange Bolts	-	-
5	Bearing Flange Bolts	18	25
6	Oil Cup Bolts	-	-

