



Enviro-Equipment Inc.
10120 Industrial Drive
Pineville NC 28134

Stock#: 285

Status: In stock

Dimensions: 15"x10"x13"

Weight: 83 lbs

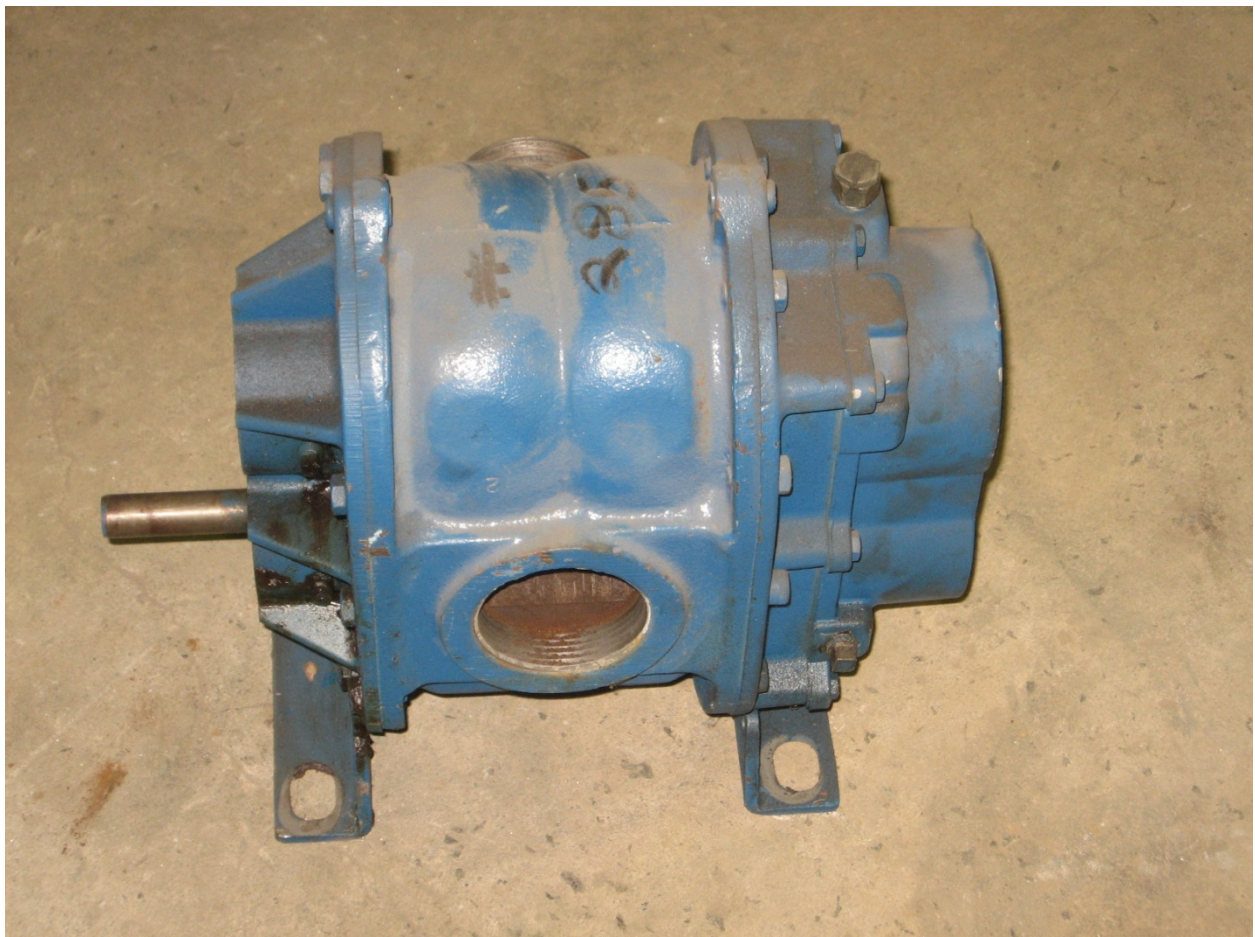
Description: Blower

MFG- Roots

Model- 36U-RAI

Serial- 93G60677

Port size- 2.5"

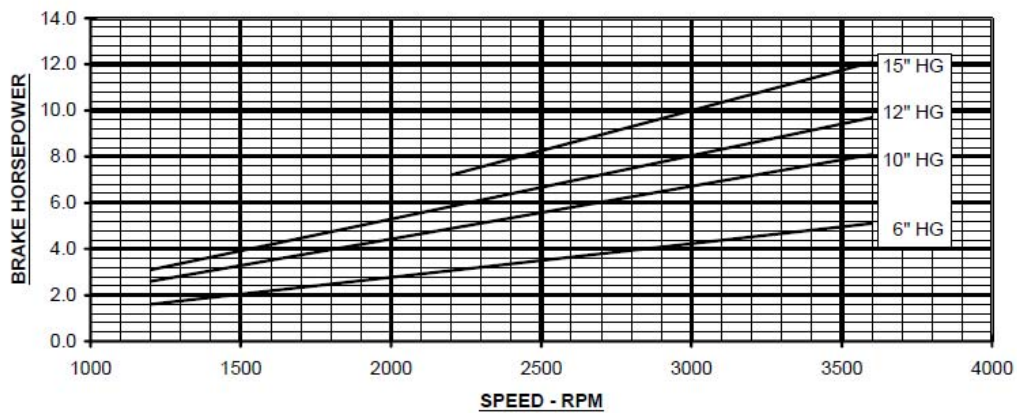
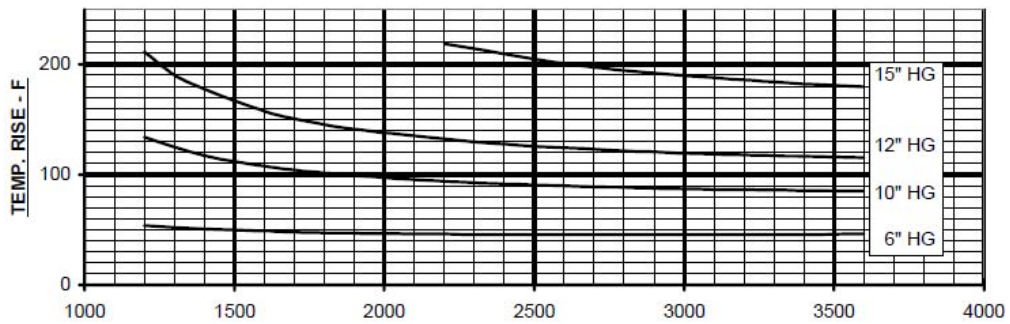
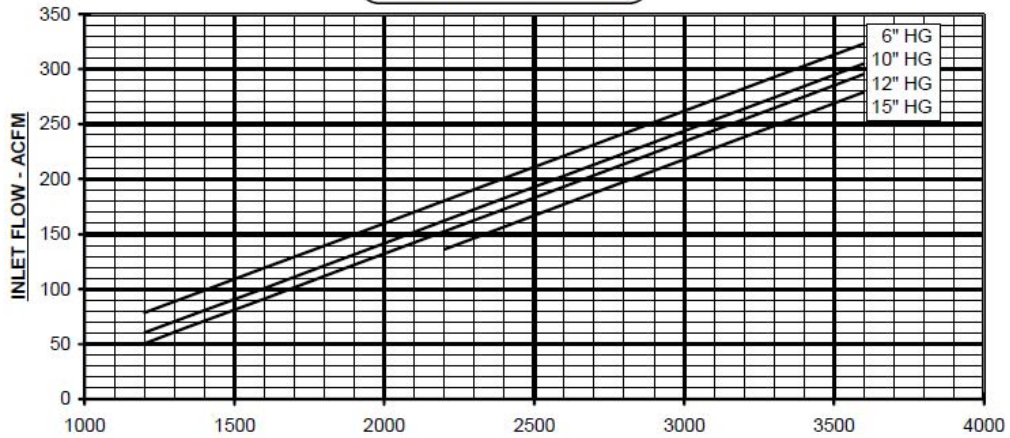




Enviro-Equipment Inc.
10120 Industrial Drive
Pineville NC 28134

PERFORMANCE BASED ON AIR,
INLET AT 68°F
DISCHARGE PRESSURE = 30" HG ABS.
DECEMBER 2004

VACUUM PERFORMANCE
FRAME 36 U-RAI
MAX. VACUUM = 15" HG
MAX. SPEED = 3600 RPM

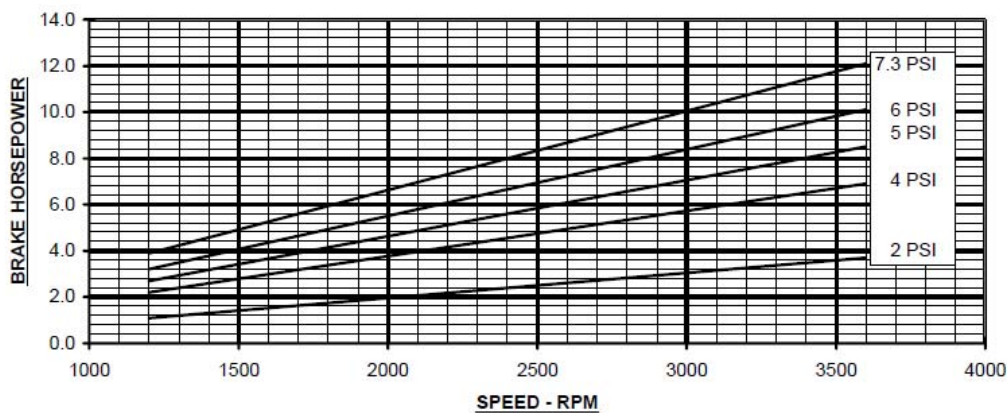
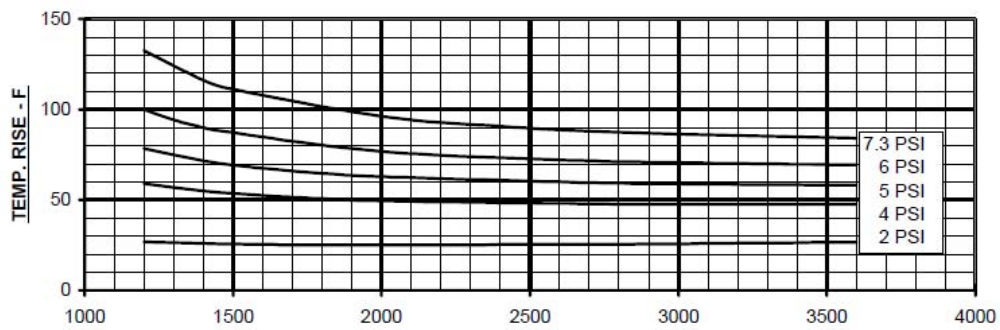
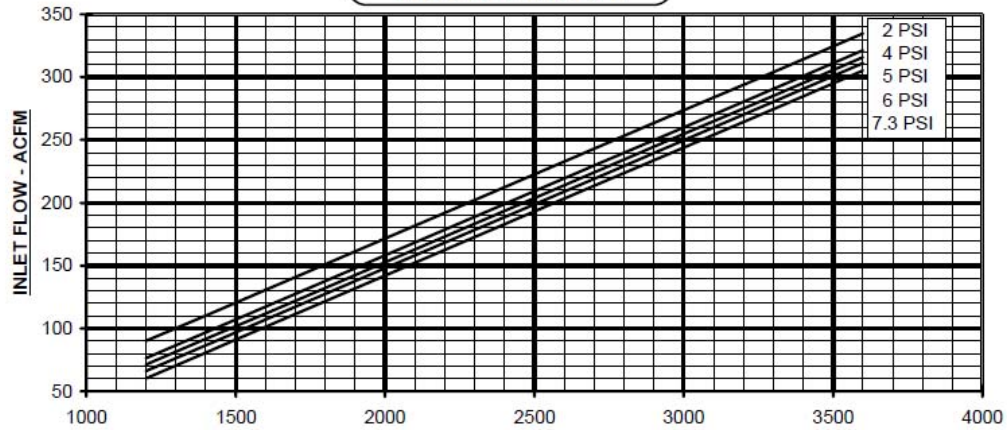




Enviro-Equipment Inc.
 10120 Industrial Drive
 Pineville NC 28134

PERFORMANCE BASED ON AIR,
 INLET AT 14.7 PSIA & 68°F
 DECEMBER 2004

PRESSURE PERFORMANCE
FRAME 36 U-RAI
 MAX. PRESSURE RISE = 7.3 PSI
 MAX. SPEED = 3600 RPM



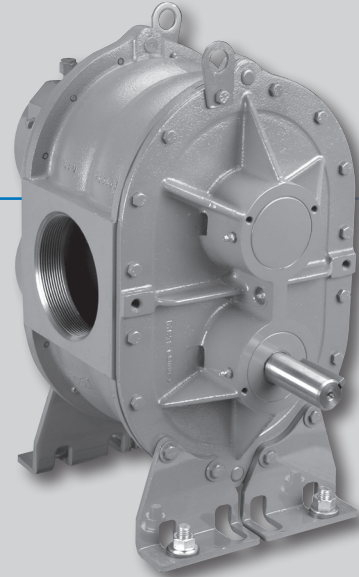
ROOTS™ UNIVERSAL RAI®

Rotary Positive Displacement Blowers

Specifications Frames 22 thru 718

DESIGN AND CONSTRUCTION FEATURES

- Steel detachable mounting feet
- Rigid one-piece cast iron casing
- Anti-friction bearings
- Thrust control
- Splash oil lubricated spur timing gears
- Connections in standard pipe sizes
- Balanced, precision machined bi-lobe impellers
- Ground steel shafts



Basic Blower Description

Universal RAI blowers are heavy duty blowers designed with detachable rugged steel mounting feet that permit easy in-field adaptability to either vertical or horizontal installation requirements.

Because of the detachable mounting feet, these units can be easily adapted to any of four drive shaft positions - right hand, left hand, bottom or top. The compact, sturdy design is engineered for continuous service when operated in accordance with speed and pressure ratings.

The basic model consists of a cast iron casing and cast iron involute impellers. Carburized and ground alloy steel spur timing gears are secured to the steel shafts with a taper mounting and locknut. Oversized antifriction bearings are used, with a cylindrical roller bearing at the drive shaft to withstand V-belt pull. The Universal RAI features thrust control, with splash oil lube on the gear end and grease lube on the drive end.

Available accessories include driver, relief valve, inlet and discharge silencers, inlet filter, check valve, extended base, v-belt or flexible coupling and drive guards.

Strongest Warranty in the Industry

ROOTS™ Universal RAI® blowers are warranted for two years plus an additional 6 months for shipping and construction where required. ROOTS synthetic oil is recommended for longer lubricant life.



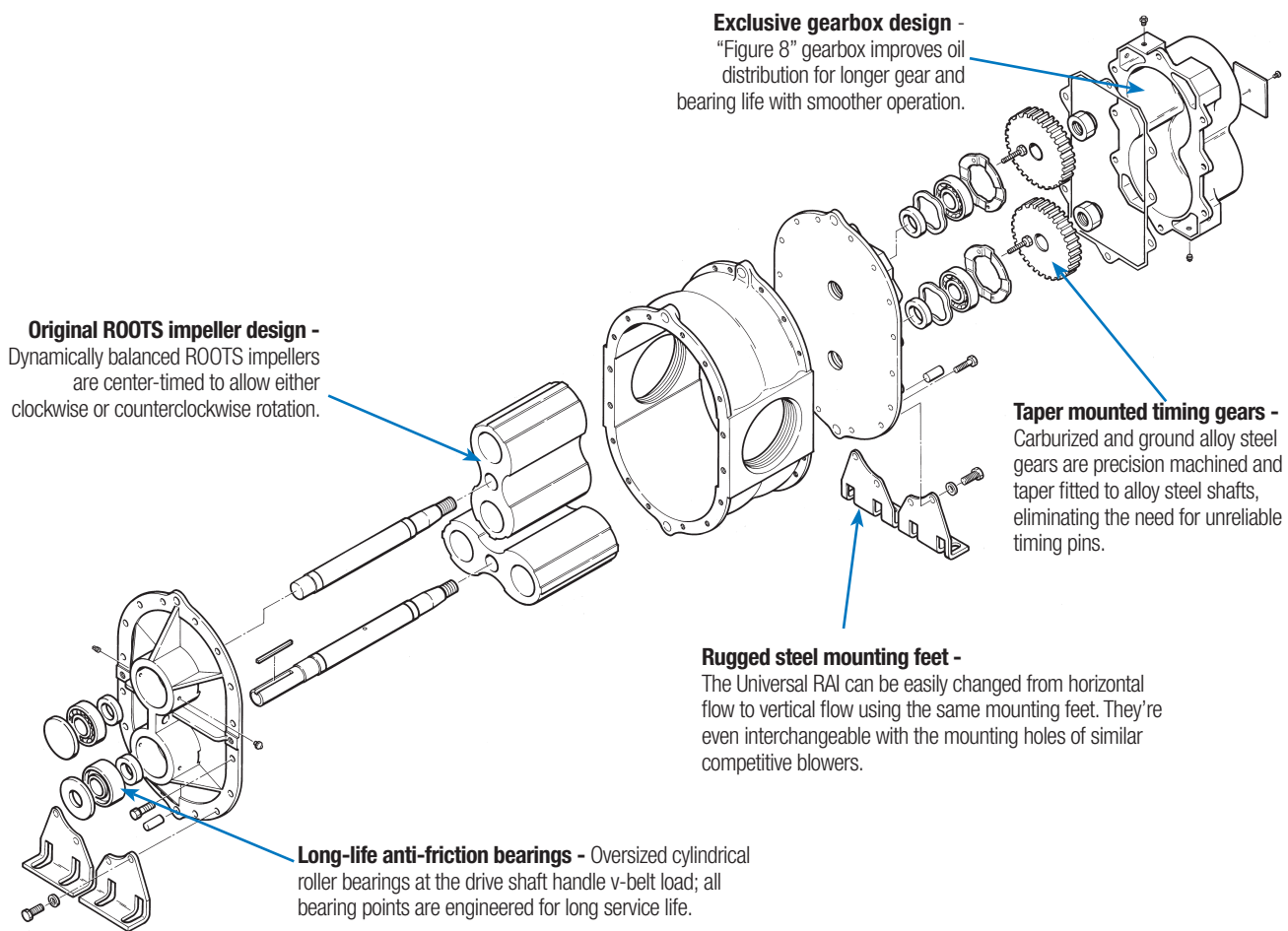
Vertical Gear End



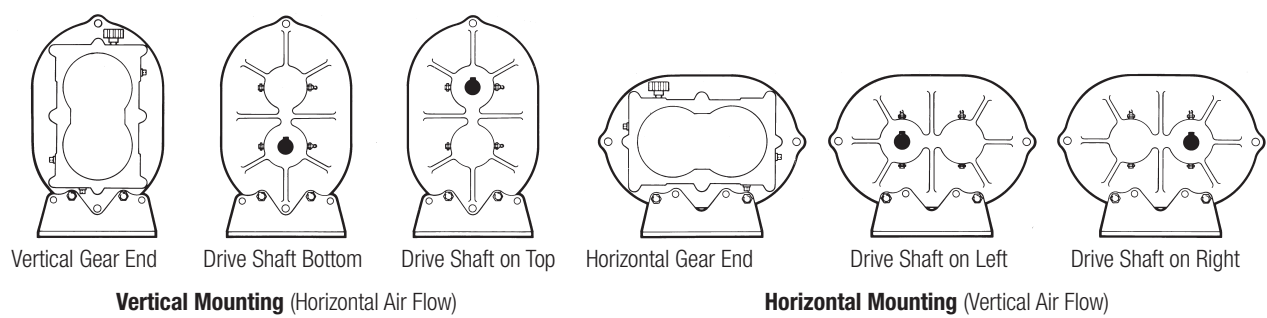
Horizontal Gear End



Horizontal Drive End

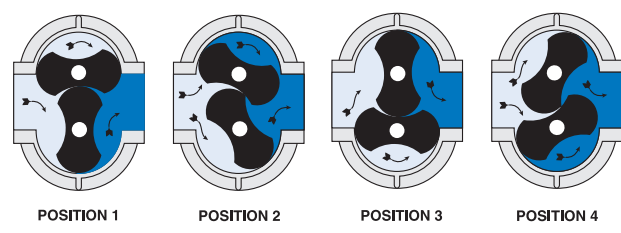


Versatile mounting - You can mount the Universal RAI in multiple positions to accommodate your specific needs. With your choice of 17 frame sizes, there's a URAI that fits right into your OEM or replacement application.

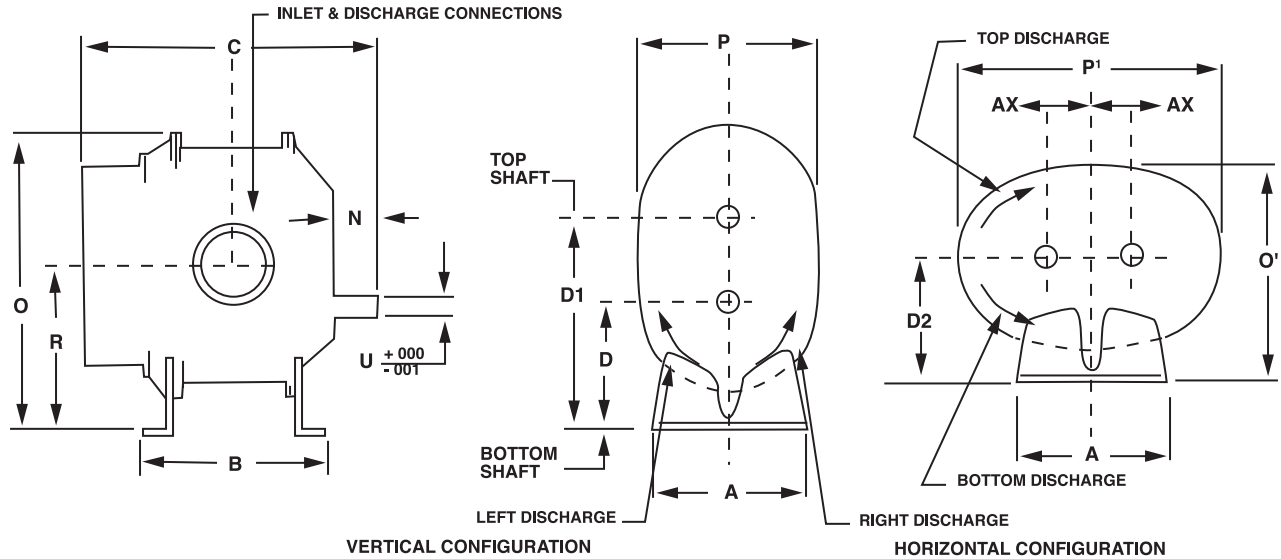


Bi-Lobe Operating Principle

Two figure-eight lobe impellers mounted on parallel shafts rotate in opposite directions. As each impeller passes the blower inlet, it traps a finite volume of air and carries it around the case to the blower outlet, where the air is discharged. With constant speed operation, the displaced volume is essentially the same regardless of pressure, temperature or barometric pressure. Timing gears control the relative position of the impellers to each other and maintain small but finite clearances. This allows operation without lubrication being required inside the lobe cavity.



Outline Drawing and Dimensions



Universal RAI® Blower Dimensions

Frame Size	A	B	C	Drive Shaft Location			N	O	O'	P	P'	R	U	Keyway	Inlet & Disch. Dia.	AX	Approx Net Wt. (lbs.)
				D	D1	D2											
22	5.13	5.00	9.75	3.75	6.25	3.75	2.50	9.63	6.88	6.25	9.25	5.00	.625	.188 x .094	1.0 NPT	1.25	32
24	5.13	7.00	11.75	3.75	6.25	3.75	2.50	9.63	6.88	6.25	9.25	5.00	.625	.188 x .094	2.0 NPT	1.25	43
32	7.25	6.75	11.25	5.00	8.50	5.00	2.44	12.81	8.88	7.75	12.13	6.75	.750	.188 x .094	1.25 NPT	1.75	69
33	7.25	7.63	12.13	5.00	8.50	5.00	2.44	12.81	8.88	7.75	12.13	6.75	.750	.188 x .094	2.0 NPT	1.75	74
36	7.25	10.00	14.63	5.00	8.50	5.00	2.56	12.81	8.88	7.75	12.13	6.75	.750	.188 x .094	2.5 NPT	1.75	102
42	8.00	7.25	13.00	6.25	10.25	6.25	3.18	15.06	10.63	8.75	13.63	8.25	.875	.188 x .094	1.5 NPT	2.00	88
45	8.00	10.00	15.50	6.25	10.25	6.25	2.94	15.06	10.63	8.75	13.63	8.25	.875	.188 x .094	2.5 NPT	2.00	109
47	8.00	11.75	17.63	6.25	10.25	6.25	3.31	15.06	10.50	8.50	13.63	8.25	.875	.188 x .094	3.0 NPT	2.00	128
53	10.50	8.38	15.38	6.25	11.25	6.75	3.68	17.38	11.88	10.25	17.25	8.75	1.125	.250 x .125	2.5 NPT	2.50	143
56	10.50	11.00	18.00	6.25	11.25	6.75	3.38	17.38	12.25	11.00	17.25	8.75	1.125	.250 x .125	4.0 NPT	2.50	170
59	10.50	14.00	21.18	6.25	11.25	6.75	3.88	17.38	12.25	11.00	17.25	8.75	1.125	.250 x .125	4.0 NPT	2.50	204
65	11.00*	10.00	18.38	8.75	14.75	8.75	3.56	21.63	15.13	12.75	19.75	11.75	1.375	.312 x .156	3.0 NPT	3.00	245
68	11.00*	13.00	21.38	8.75	14.75	8.75	3.69	21.63	15.13	12.75	19.75	11.75	1.375	.312 x .156	5.0 NPT	3.00	285
615	11.00*	20.00	28.38	8.75	14.75	8.75	3.69	21.63	16.25	15.00	19.75	11.75	1.375	.312 x .156	6.0 FLG	3.00	425
76	14.00**	11.75	19.94	11.00	18.00	11	4.06	26.13	20.69	19.38	23.25	14.50	1.562	.375 x .188	4.0 NPT	3.50	400
711	14.00**	16.75	25.19	11.00	18.00	11	4.31	26.13	19.50	17.00	23.25	14.50	1.562	.375 x .188	6.0 FLG	3.50	530
718	14.00**	23.75	32.19	11.00	18.00	11	4.31	26.13	19.50	17.00	23.25	14.50	1.562	.375 x .188	8.0 FLG	3.50	650

*17.00 in horizontal configuration

**21.00 in horizontal configuration

Dresser Roots

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