

TECHNICAL SPECIFICATIONS



ENVELOPES

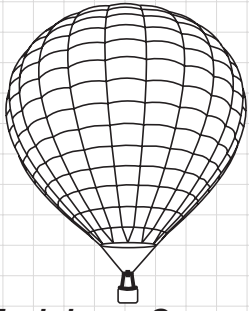
BASKETS

BURNERS

TANKS



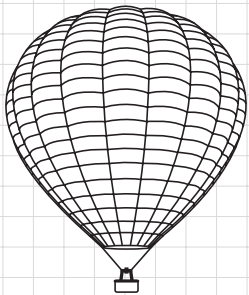
ENVELOPES (1)



Z-Series Like the N-Series, the Z-Series provides maximum visibility with a perfect, almost flat, surface to display even the largest and most complicated artwork. Computer-designed to a natural form which yields zero horizontal fabric stress, the loads are carried by closely spaced, vertical tapes.

Constructed from 24 gores – each from horizontally cut panels, the Z-Series envelope gives greater color pattern flexibility than the N-type, and is the premium choice for effective promotional use.

Model	Gores	Volume Cu. Ft.	F.A.I. Category	FAA	Envelope Weight		Height	Diam.	Top Panel
				Certified Weight	Standard	Top 1/3 Hyperlast			
Z-31	24	31,000	AX-5	620	130	155	43	40	I
Z-42	24	42,000	AX-5	840	140	155	47	45	K
Z-56	24	56,000	AX-6	1120	158	174	52	49	L
Z-60	24	60,000	AX-7	1200	165	179	53	50	M
Z-65	24	65,000	AX-7	1300	178	194	54	52	M
Z-70	24	70,000	AX-7	1400	196	216	53	54	N
Z-77	24	77,500	AX-7	1540	204	226	57	55	N
Z-90	24	90,000	AX-8	1800	229	245	60	58	O
Z-105	24	105,000	AX-8	2100	249	272	63	61	O
Z-120	24	120,000	AX-9	2400	270	299	66	63	Q
Z-133	24	130,000	AX-9	2660	287	318	68	66	Q
Z-140	24	140,000	AX-9	2800	300	330	69	67	Q
Z-145	24	145,000	AX-10	2900	305	337	70	67	R
Z-150	24	150,000	AX-10	3000	325	348	71	68	R
Z-160	24	160,000	AX-10	3200	328	358	72	70	R
Z-180	24	180,000	AX-10	3600	361	391	75	73	T
Z-210	24	210,000	AX-10	4200	396	434	79	76	T
Z-225	24	225,000	AX-11	4500	448	466	81	78	U
Z-250	24	250,000	AX-11	5000	476	508	83	81	U

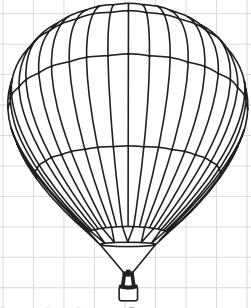


A-Series Purpose-built for passenger operations, the A-Series offers a range of envelopes that will lift from 5 to 18 persons. Twenty slightly bulbous gores provide tremendous strength without compromising the artwork potential. Its horizontally cut panels offer a huge variety of color patterns.

As with all Cameron models, the A-Series boast a large "loaded" mouth and a nomex Pressure Scoop, which together make even the windiest inflations easy.

Model	Gores	Volume Cu. Ft.	F.A.I. Category	FAA	Envelope Weight		Height	Diam.	Top Panel
				Certified Weight	Standard	Top 1/3 Hyperlast			
A-105	20	105,000	AX-8	2100	246	271	64	61	Q
A-120	20	120,000	AX-9	2400	269	297	65	63	R
A-140	20	140,000	AX-9	2800	297	328	69	66	S
A-160	20	160,000	AX-10	3200	334	366	73	71	T
A-180	20	180,000	AX-10	3600	368	401	76	74	U
A-210	20	210,000	AX-10	4200	417	451	81	77	V
A-250	20	250,000	AX-11	5000	468	498	86	81	X
A-300	20	300,000	AX-11	6000	516	552	89	84	Y
A-315	20	315,000	AX-11	6300	537	576	91	86	Z

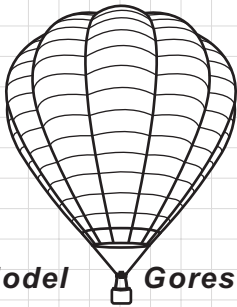
ENVELOPES (2)



N-Series The N-Series provides maximum visibility with a perfect, almost flat, surface to display even the largest and most complicated artwork. Made from vertically-oriented panels, computer-designed to a natural form which yields zero horizontal fabric stress, the loads are carried by closely spaced, vertical tapes.

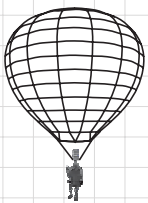
Constructed from 24 gores (28 to 32 on larger models), the N-Series envelope is the premium choice for effective promotional use.

Model	Gores	Volume Cu. Ft.	F.A.I. Category	FAA Certified Weight	Envelope Weight		Height	Diam.	Top Full Panel
					Standard	Hyperlast			
N-42	24	42,000	AX-5	840	140	155	47	45	D
N-56	24	56,000	AX-6	1120	158	174	52	49	D
N-65	24	65,000	AX-7	1300	178	194	54	52	D
N-70	24	70,000	AX-7	1400	196	216	53	54	D
N-77	24	77,500	AX-7	1540	204	226	57	55	D
N-90	24	90,000	AX-8	1800	229	245	60	58	D
N-90S	24	90,000	AX-8	1800	253	282	60	58	D
N-105	24	105,000	AX-8	2100	249	272	63	61	D
N-120	24	120,000	AX-9	2400	270	299	66	63	D
N-133	24	130,000	AX-9	2660	287	318	68	66	D
N-145	32	145,000	AX-10	2900	305	337	70	67	D
N-160	28	160,000	AX-10	3200	328	358	72	70	D
N-180	32	180,000	AX-10	3600	361	391	75	73	D
N-210	32	210,000	AX-10	3600	396	434	79	76	D



O-Series A slightly bulbous 12-gore design, the O-Series is ideally suited for fun-flying, passenger-carrying, or promotional work. It provides the ideal compromise between the engineering efficiency of larger gores, and the advertising effectiveness of the smoother N-Series envelopes.

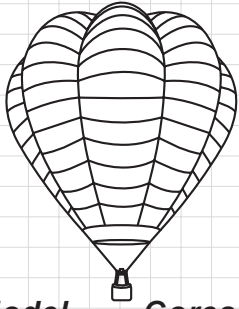
Model	Gores	Volume Cu. Ft.	F.A.I. Category	FAA Certified Weight	Envelope Weight		Height	Diam.	Top Full Panel
					Standard	Hyperlast			
O-42	12	42,000	AX-5	840	128	143	51	44	L
O-56	12	56,000	AX-6	1120	152	172	53	50	N
O-65	12	65,000	AX-7	1300	162	183	56	53	N
O-70	12	70,000	AX-7	1400	170	194	57	54	O
O-77	12	77,500	AX-7	1540	194	215	58	55	O
O-84	12	84,000	AX-8	1680	213	239	60	57	P
O-90	12	90,000	AX-8	1800	224	248	62	58	P
O-105	12	105,000	AX-8	2100	238	257	64	61	Q



Hopper (M-Series) The M-series is a smooth 16-gore envelope designed specifically for use as a one-person 'Hopper' envelope. It is ideally suited for artwork, and is designed to be lightweight and aesthetically pleasing. For use as a hopper it can be built from lightweight fabric as shown below.

Model	Gores	Volume Cu. Ft.	F.A.I. Category	FAA Certified Weight	Light- weight	Envelope Weight		Height	Diam.	Top Full Panel
						Standard	Hyperlast			
M-34	16	34,000	AX-5	680	96	120	135	43	41	K

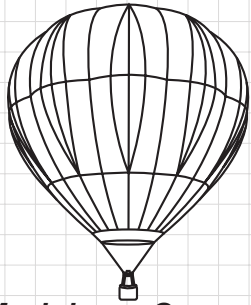
ENVELOPES (3)



V-Series

Engineering efficiency, light weight, and its unique "tear-drop" shape, make the V-Series envelopes a favorite the world over. Its eight bulbous gores allow for simple artwork, while the numerous horizontally cut panels offer virtually unlimited color patterns without the need for special cuts.

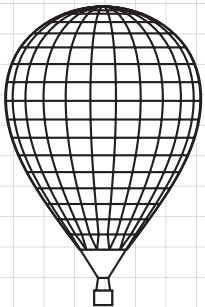
Model	Gores	Volume Cu. Ft.	F.A.I. Category	FAA Certified Weight	Envelope Weight		Height	Diam.	Top Full Panel
					Standard	Top 1/3 Hyperlast			
V-31	8	31,000	AX-4	620	96	111	48	41	M
V-56	8	56,000	AX-6	1120	156	173	52	51	N
V-65	8	65,000	AX-7	1300	168	186	55	54	N
V-77	8	77,500	AX-7	1540	182	199	57	57	O
V-90	8	90,000	AX-8	1800	201	225	60	60	P



Concept-Series

The Concept series of envelopes offer the versatility of low cost, light-weight, semi-smooth gores (12 on the C-60 and C-80, 16 on the C-100) and the performance of a Cameron. Whether you're a serious competitor, fun flyer, or small passenger operator, there's a Concept model available to suit your needs.

Model	Gores	Volume Cu. Ft.	F.A.I. Category	FAA Certified Weight	Envelope Weight		Height	Diam.	Top Full Panel
					Standard	Top 1/3 Hyperlast			
C-60L	12	60,000	AX-7	1200	108	-	56	48	D
C-60	12	60,000	AX-7	1200	151	156	56	48	D
C-80	12	80,000	AX-8	1600	176	181	61	53	D
C-100	16	100,000	AX-8	2000	218	224	65	57	D



ZL-Series 'Racer'

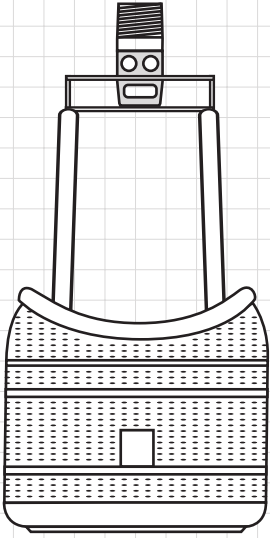
The ZL Racer is Cameron's exciting new breed of competition balloon. Designed to be very responsive without any loss of directional stability, the ZL responds quickly to the pilot's controls for pinpoint accuracy. The racer will transition quickly (from level to climb or descent, etc.) as commanded, but incredibly it achieves this with increased fuel economy and lower operating temperatures.

The ZL's 24 gores and super-smooth shape are ideal for company logos (as well as being aerodynamically 'slippery'), yet retains a more elegant balloon shape.

Model	Gores	Volume Cu. Ft.	F.A.I. Category	FAA Certified Weight	Envelope Weight		Height	Diam.	Top Full Panel
					Standard	Top 1/3 Hyperlast			
ZL-56	24	56,000	AX-6	1120	155	170	72.4	45.5	M
ZL-60	24	60,000	AX-7	1200	165	178	73.8	46.6	N
ZL-65	24	65,000	AX-7	1300	175	190	75.3	47.8	N
ZL-70	24	70,000	AX-7	1400	180	198	77.2	49.0	O

All weights shown are typical base weights and will vary according to installed options. For lifting capacities under specific atmospheric conditions, refer to the appropriate lift chart. Note for horizontally cut envelopes there may be additional partial (less than full height) panels above the panels shown in this chart. When designing your color pattern, consult the factory for the current details.

Sport Baskets



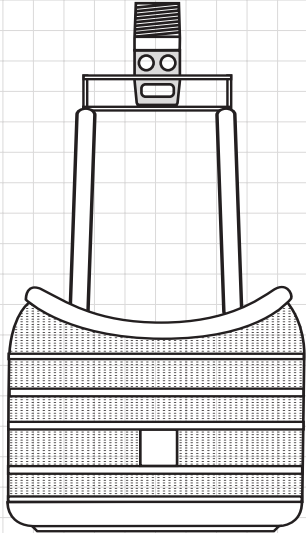
Sport models feature "Double Weave" construction and 5 bands of accent weave. Toggle handles on all sides make ground handling easy.

Thick scuff-leather and hardwood skids protect the basket on hard landings, while the all-weave construction absorbs the shock imposed by windy landings. Aircraft-grade stainless steel cables spread and support the load while ensuring complete redundancy.

Options include custom single or multi-color accent weave, cushion floor, suede or smooth leather bolster and upright covers.

Dimensions

Model	Width	Length	Height		Handles		Steps	Average Capacity (persons)	Typical Weight	Typical Envelope Volumes
			End	Side	Int.	Ext.				
36x42S	36	42	44	41	4	8	1	1-2	122	42-65
42x50S	42	50	46	41	4	8	1	1-4	130	56-90
42x58S	42	58	46	41	4	8	1	2-5	140	77-105



Aristocrat Baskets

Available in four sizes, these classic handcrafted baskets possess all that the Sport series offers, plus the following superior features: (1) detailed "Single-Weave" construction; (2) integral interior and exterior rope handles that make passengers more comfortable and ground handling easier for crew; (3) integral tank strap holes; (4) numerous entry/exit steps for passenger convenience; and (5) your choice of cordura or suede bolster and upright covers.

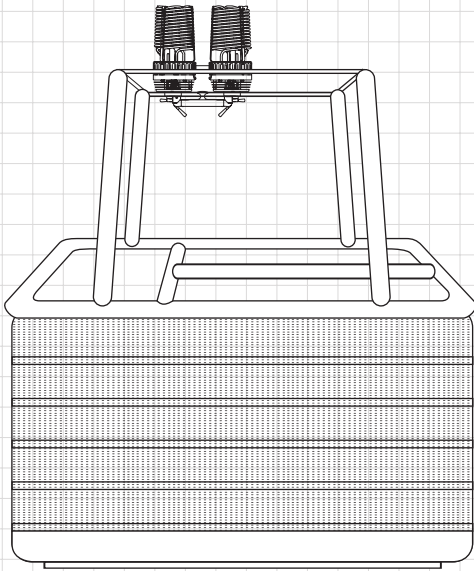
Options include custom single or multi-color accent weave, cushion floor, custom color suede or smooth leather bolster and upright covers.

Dimensions

Model	Width	Length	Height		Handles		Steps	Average Capacity (persons)	Typical Weight	Typical Envelope Volumes
			End	Side	Int.	Ext.				
42x52	42	52	46	41	4	8	2	1-4	140	56-90
42x58	42	58	46	41	4	8	2	2-5	144	77-105
46x62	46	62	46	41	6	8	4	4-6	162	105-140
48x72	48	72	51	41	8	10	4	5-8	210	120-180

External dimensions are 'clearance' dimensions. The basket weight is the typical weight before the addition of any optional items (such as padded walls).

PARTITIONED BASKETS

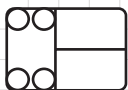


Eleven standard models of “T” and “Double T” partition baskets offer features that benefit both operator and passengers.

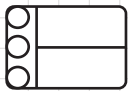
Knowing that your passengers are divided into manageable groups in comfortable tall-sided compartments adds a great deal of confidence to those ‘quick’ landings. You’ll also like the all-woven floor that absorbs shock on hard landings, multi-height steps that ease entry and exit, and numerous internal handles positioned for security. Passenger comfort is further enhanced by optional padded sidewalls and cushion floors.

These heavy-duty baskets are remarkably light weight (thanks to the all-woven floor design) making ground handling easy. The top quality rattan, thick scuff leather, hardwood skids, and rugged stainless steel top frame form a basket that is strong, durable, and attractive.

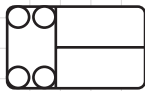
Mounted on the burner frame, our tether lugs are set to the perfect angle for inflation harnesses, while double corner lugs distribute the load for additional redundancy.



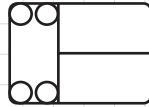
ALPHA 1



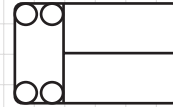
ALPHA 2



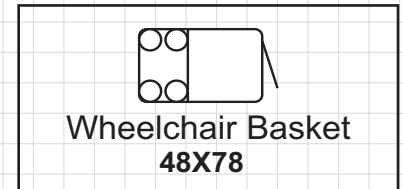
ALPHA +



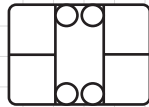
BRAVO



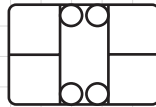
DELTA 1



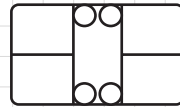
Wheelchair Basket
48X78



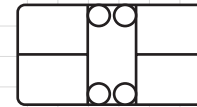
CHARLIE



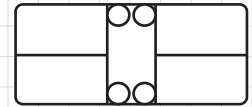
CHARLIE +



DELTA 2



ECHO



FOXTROT

54x76

54x88

66x90

66x90

66x105

66x110

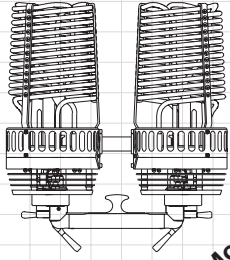
66x120

66x147

Model		Typical Envelope	Pass. Capacity	Pass. Num.	Pass. W x L	Pilot Comp. W x L	Basket Dimensions W x L x H	Weight**
ALPHA 1	T	120-133	5-6	2	23 x 40	31 x 47	54 x 76 x 52	290
ALPHA 2	T	120-133	5-6	2	23 x 52	19 x 47	54 x 76 x 52	290
ALPHA+	T	120-145	6	2	23 x 55	31 x 47	54 x 88 x 52	340
BRAVO	T	140-180	8-10	2	55 x 30	31 x 61	66 x 90 x 52	422
CHARLIE	TT	160-180	8-10	4	27 x 30	31 x 61	66 x 90 x 52	428
CHARLIE +	TT	160-180	8-10	4	30 x 30	31 x 61	66 x 96 x 52	428
DELTA 1	T	180-210	10-12	2	74 x 30	31 x 61	66 x 110 x 52	468
DELTA 2	TT	180-210	10-12	4	34 x 30	31 x 61	66 x 105 x 52	476
ECHO	TT	250-300	12-15	4	41 x 30	31 x 61	66 x 120 x 52	545
ECHO+	TT	250-300	12-16	4	46 x 30	31 x 61	66 x 130 x 52	570
FOXTROT	TT	300-315	15-18	4	55 x 30	31 x 61	66 x 147 x 52	644
WHEELCHAIR	I	105-140	2-6	1	42 x 42	31 x 42	48 x 78 x 46	270

Compartment dimensions are center-to-center of the basket top frame and are rounded to the nearest inch. For interior dimensions subtract approximately 1.5 inches. External dimensions are ‘clearance’ dimensions. **The basket weight is the typical weight before the addition of any optional items (such as padded walls).

BURNERS



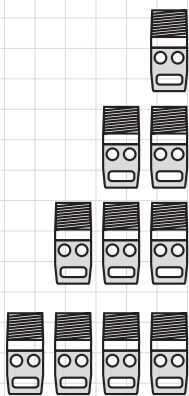
Monoblock Construction
Double-Seal™ Blast Valves
Replaceable Jets
Crossflow Valve
of Pilot Lights
Vapor Pilot Light
Liquid Pilot Light
Piezo Ignitors
Whisper™ Burners
Adjustable burner frame option
Gimbal Style
Gimbal Angle (front/back)
Gimbal Angle (left/right)
Weight (lb)

Ultra Single	✓	✓	✓		2	opt.	✓	1	2	✓	std.	180°	100°	36	
Ultra Double	✓	✓	✓	✓	2	opt.	✓	2	2	✓	ctr.	180°	60°	54	
Ultra Triple	✓	✓	✓	✓	3	opt.	✓	3	3		ctr.	180°	60°	98	
Ultra Quad	✓	✓	✓	✓	4	opt.	✓	4	4		ctr.	180°	60°	116	
Sirocco Double	✓	✓			2	n/a	✓	2	2	✓	ctr.	180°	60°	54	
Sirocco Triple	✓	✓			3	n/a	✓	3	3		ctr.	180°	60°	98	
Sirocco Quad	✓	✓			4	n/a	✓	4	4		ctr.	180°	60°	116	
Super Double*	✓	✓	✓	✓	2		✓	2	2	✓	std.	180°	70°	54	
MK IV Std. Single**			✓		1		✓	n/a	1	1	✓	std.	180°	100°	36
Mk IV Std. Double**			✓	✓	2		✓	n/a	2	1	✓	std.	180°	100°	54

* Special-Order item only

** No longer available, but shown for comparison

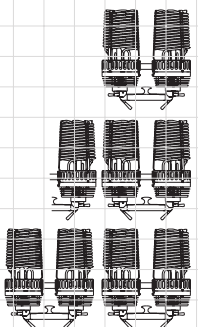
Ultra Burners



- Aluminum monoblock manifold and Double-Seal™ blast valve for leak-free operation
- Two liquid pilot lights—vapor optional
- Two constant reading pressure gauges
- Two quiet auxiliary triple-seal Whisper™ burners—separate fuel path for redundancy
- Piezo electronic ignitor(s) [only 1 on the single burner]
- Two separate simultaneous fuel delivery systems—fuel both blast valves at the same time
- In-line pilot light fuel filters that are pilot-replaceable
- CrossFire™ crossflow valve for one hand operation of both burners with a single blast valve (n/a on single burner)
- Lubrication ports into the valve body allow the pilot to easily lubricate the valve stem without disassembly or a repair station

- Anodized aluminum UltraGrip™ cross bar offers both toggle or squeeze blast valve operation, plus one hand burn/gimbal action
- Pilot-replaceable jets for customized performance tuning
- Stainless steel can and coil construction
- 9,000 psi burst -pressure fuel hoses
- Stainless steel frame that allows full burner gimbal (single burner only)
- Central block gimbal system (double, triple and quad burners)
- On large partitioned basket frames: Anodized aluminum heat shields, tether lugs and 8 carabiner attachment points

Sirocco Burners

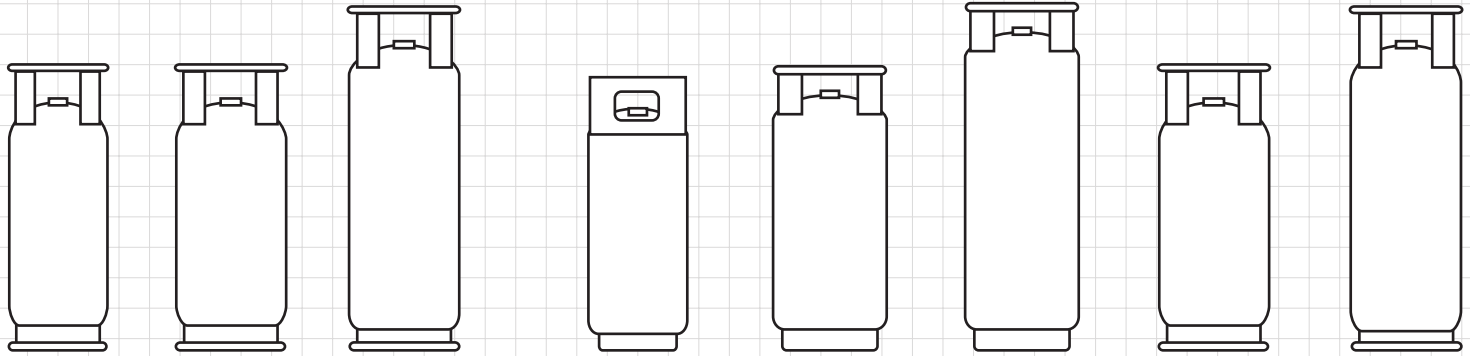


- Anodized aluminum monoblock manifold and Double-Seal™ blast valve for leak-free operation
- Two liquid pilot lights
- Two constant reading pressure gauges
- Two quiet auxiliary triple-seal Whisper™ burners—separate fuel path for redundancy
- Two piezo electronic ignitors
- Two separate simultaneous fuel delivery systems—fuel both blast valves at the same time
- In-line pilot light fuel filters that are pilot-replaceable
- Lubrication ports into the valve body allow the pilot to easily lubricate the valve stem without disassembly or a repair station
- Anodized aluminum color-coded UltraGrip™ cross bar

- with squeeze-action blast valve operation, plus one hand burn/gimbal action
- Two ring-jets that outperform hundreds of conventional jets
- Pencil-thin blue flame pattern
- Lower radiant heat
- Lower noise output
- FastFire™ handle for simultaneous operation of both blast valves
- Extended pressure range allows for operation in colder weather
- Nine additional boost-jets™ that operate automatically when fuel pressure drops to boost output
- Frame and gimbal features per the Ultra series of burners

Fuel Tanks

Tool-free ACME fittings, equipped with check-valves



11-gal.
Stainless

15-gal.
Stainless

20-gal.
Stainless

10-gal.
Aluminum

15-gal.
Stainless (US)

20-gal.
Stainless (US)

15-gal.
Titanium

20-gal.
Titanium

Tank	Height in.	Diameter in.	Usable Vol. gal.	Empty Wt. lb. slave / mast.	Full Wt. lb. slave / mast.	Padded Collar
11 gal. Stainless	36	12.25	11.1	33 / 35	80 / 82	✓
15 gal. Stainless	36.5	14.3	14.8	45 / 47	108 / 110	✓
20 gal. Stainless**	43	14.3	19.1	53 / 55	133 / 135	✓
10 gal. Aluminum*	34	12.25	9.95	28 / 30	70 / 72	
15 gal. Stainless* (US Spec.)	36	14	15	57 / 59	120 / 122	
20 gal. Stainless* ** (US Spec.)	44	14	20	66 / 68	151 / 153	
15 gal. Titanium*	36.5	14.3	15	28 / 30	91 / 93	✓
20 gal. Titanium* **	43	14.3	19.5	37 / 39	120 / 122	✓

All weights include valves and padded cover

* Not currently available but still in circulation

**Available for partitioned baskets only

Tank Valves

Tool-free ACME fittings, equipped with check-valves

Rego Valve

- Hand Turn Valve. Tool-Free connect-disconnect
- Anti stem-leak backstop seal
- ACME fitting complete with check-valves

Quarter Turn Valve

- 90 Degree handle on/off operation
- Tool-free connect/disconnect
- ACME fitting complete with check valves

Manifolds

2-Tank Manifold

Weight: 4lb
 Monoblock construction (machined from solid block of aluminum) with anodized finish
 Tool-free connect-disconnect

3-Tank Manifold (not available on all models)

Weight: 6lb
 Tool-free connect-disconnect