



MH47504 - BAZR2

APPLICATIONS

- WIRELINE
- WIRELESS
- MICROWAVE
- MOBILE SWITCHING SYSTEMS
- PBX SYSTEMS
- BROADBAND HEADEND
- SWITCHGEAR
- DATA CENTERS
- ALTERNATIVE ENERGY

The Long Duration (LD) Valve Regulated Lead Acid batteries are designed to provide the latest advancement in plate and battery technology offering high energy densities, exceptional service life, low self discharge, high cycling capabilities and low float charge current characteristics.

LD VRLA batteries with optimized recombination technology and superior performance are specifically engineered and designed for Telecommunication applications.

LD VRLA batteries are manufactured in compliance with Telcordia NEBS, GR, and SR standards, IEC, BS, and UL safety and performance standards.

LD VRLA batteries can be integrated with Energy Storage Technologies modular, 4-post and industry standard 19" and 23" power distribution rack systems.

FEATURES

- 12-Year Design Life >20Ah; 8-Year Design Life <20Ah
- Initial capacity at 100%
- Absorbent Glass Mat (AGM) technology
- Recombination efficiency of 99.9%
- Flame Retardant ABS Cover and Container, UL94 V-0, LOI>28%
- 6 month of storage at 77°F (25°C) capacity > 86%
- Low pressure one-way flame arresting valve(s) UL924
- High reliability tongue-n-groove case to cover seal
- Proprietary 3 part post-to-cover seal ensuring operating service life integrity
- Copper alloy insert front and top terminals
- UL Recognized Component
- Classified as Nonspillable UN 2800 (no air, ground, or sea transportation restrictions)
- Monoblock 6v & 12v construction



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INDUSTRY COMPLIANCE

- NEBS Version 4, Level 3, EUROBAT Guide, BS6290 Part 4, IEC 60896-21/-22
- Telcordia GR-1089-CORE Issue 4, GR-63-CORE Issue 4, SR-4228, GR-1200-CORE Issue 1
- UL Recognized Component 924 & UL Certified Vertical Flame Test Rating 94V-0
- ISO9001:2000 ISO14001

SEISMIC

- NEBS Earthquake Risk Seismic Zone 4 Compliant
- Exceeds 1997 UBC Zone 4 seismic requirements for at or below grade installations
- Exceeds 2007 IBC requirements for 125% g level

TRANSPORTATION

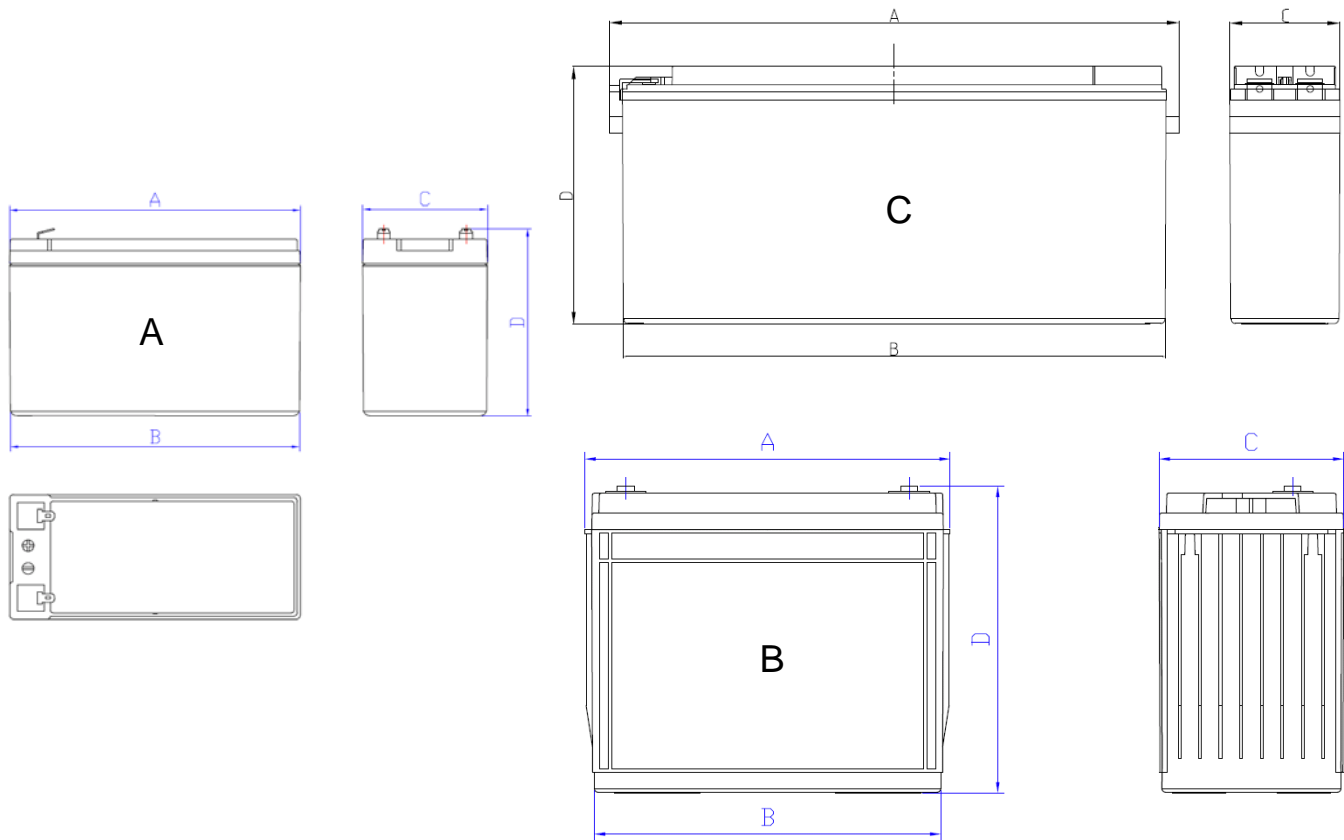
- Classified as Nonspillable UN 2800 and meet the Nonspillable criteria listed in DOT-CFR Title 49, 171-189 (d) (3) (i) and (ii) and exempt from CFR 49, Subchapter C requirements
- Meets transportation conditions of IMDG exemption 238, IATA/ICAO Special Provision A67 (Not Restricted)

SPECIFICATIONS

Float Charging Voltage	Equalize /Cycle or Freshening at Installation Charging Voltage
2.25Vpc to 2.27Vpc @ 77°F (25°C)	2.35Vpc to 2.40Vpc @ 77°F (25°C)
See Operations and Maintenance Manual for specific guidelines and recharge times	
Charging Temperature Compensation	-2 mV/cell/°F > 77°F (-3.6 mV/cell /°C > 25°C)
	+2 mV/cell/°F < 77°F (+3.6 mV/cell/°C < 25°C)
Maximum AC Ripple (Charger)	Maximum Charge Current
0.5% RMS, 1.5% peak-to-peak for float charge voltage for best results	C ₅ Rate Amps (5 hour rate @ 1.75vpc)
Electrolyte	Self Discharge Rate
Absorbed 1.300 s.g. H ₂ SO ₄	<2% per month at 77°F (25°C)
Relief Valve	Self Resealing; Operates at 2 to 3 psi and is complete with integral flame arrestor
Terminal Type	Torque / Retorque
M6-F (<70Ah)	60 in-lbs (7 Nm) / 48 in-lbs (5.6 Nm)
M6-M / M6-F (>70Ah)	90 in-lbs (10 Nm) / 78 in-lbs (8 Nm)
M6-M (Male)	60 in-lbs (7 Nm) / 48 in-lbs (5.6 Nm)
M8-F(Female) / M8-M (Male)	90 in-lbs (10 Nm) / 78 in-lbs (8 Nm)
Operating Temperature Range	
Nominal	Discharge
+74°F (24°C) to 80°F (27°C)	-40°F (-40°C) to +140°F (60°C)
Charge	Storage Temperature Range
-20°F (-28°C) to +122°F (50°C)	-4°F (-20°C) to +104°F (40°C)

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PHYSICAL PROPERTIES - DIMENSIONS



Model No.	V	Ah @ 8 hr to 1.75 77°F	Length (A)		Length Base (B)		Width (C)		Total Height (D)		Weight		Term. Type	Batt. Type
			in	mm	in	mm	in	mm	in	mm	lbs.	kg		
LD12-7	12	7.4	5.94	151	-	-	2.56	65	3.98	101	4.74	2.2	F2	A
LD12-28 ‡	12	28	6.50	165	-	-	4.93	125	6.89	175	22.0	10.0	M6-F	B
LD12-30 ‡	12	32	7.70	196	-	-	5.10	130	7.10	180	23.2	10.5	M6-F	B
LD12-45 ‡	12	52	9.02	229	-	-	5.44	138	8.46	215	40.0	18.0	M6-F	B
LD12-70	12	72	10.20	259	-	-	6.65	169	8.41	215	52.0	23.5	M6-F	B
LD12-80	12	86	12.09	307	-	-	6.65	169	8.50	216	64.0	29.0	M6-F	B
LD12-90 ‡	12	94	12.02	305	-	-	6.62	168	8.35	212	70.0	32.0	M6-F	B
LD12-100	12	96	12.64	321	-	-	6.78	172	8.75	222	70.4	32.0	M6-F	B
LD12-125	12	128	13.43	341	12.90	328	6.80	172.5	11.34	288	91.3	41.5	M6-F	B
LD6-200	6	200	12.68	322	-	-	6.93	176	9.09	231	70.6	32.0	M6-F	B

‡ Batteries available with SLC Harness (-S to suffix) or with a Charge Controller Harness (-C to suffix)

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PHYSICAL PROPERTIES - DIMENSIONS

Model No.	V	Ah @ 8 hr 1.75 vpc 77°F	Length (A)		Length Base (B)		Width (C)		Total Height (D)		Weight		Term. Type	Batt. Type
			in	mm	in	mm	in	mm	in	mm	lbs.	kg		
LD12-55F	12	53	10.91	227	10.91	227	4.17	106	8.75	223	40	18	M6-F	C
LD12-90F	12	87	15.55	395	14.25	362	4.13	105	10.63	270	67	30	M6-F	C
LD12-100F	12	105	15.51	394	15.51	394	4.33	110	11.26	286	71	32	M6-F	C
LD12-105F	12	104	20	508	20	508	4.33	110	9.29	236	72	33	M6-F	C
LD12-120F	12	120	21.7	552	21.7	552	4.33	110	9.41	239	80	36	M6-F	C
LD12-125FS	12	126	17.02	433	16.41	417	6.81	173	9.37	238	84	38	M6-M	C
LD12-150F	12	150	21.7	552	21.7	552	4.33	110	11.3	288	100	45	M6-F	C
LD12-155F	12	155	21.7	552	21.7	552	4.33	110	11.3	288	107	49	M6-M	C
LD12-155FW	12	155	22.4	560	20.7	526	4.9	125	12.4	316	110	50	M6-F	C
LD12-160FS	12	157	17.02	433	16.41	417	6.81	173	9.37	238	110	50	M6-M	C
LD12-170F	12	171	22.4	560	20.7	526	4.9	125	12.4	316	115	52	M6-F	C
LD12-180F	12	181	22.4	560	20.7	526	4.9	125	12.4	316	119	54	M6-F	C
LD12-190F	12	191	22.4	560	20.7	526	4.9	125	12.4	316	132	60	M6-F	C
LD12-200F	12	200	21.97	558	20.87	530	4.90	125	12.45	316	137	62	M6-F	C
LD12-250F	12	250	27.1	688	25.8	655	5.2	132	12.4	316	163	74	M8-M	C

Constant Current Discharge in Amps at 77°F (25°C)

Model No.	Operating Time (hours)										
	0.5	1	1.5	2	3	4	5	6	8	10	20
LD12-7	8.4	5.1	4.1	3.1	1.9	1.6	1.3	1.2	0.9	0.7	0.4
LD12-28	31.4	18.9	15.2	11.4	7.1	5.8	4.6	4.6	3.5	2.7	1.4
LD12-30	32.3	21.0	17.0	12.9	8.5	7.0	6.2	5.2	4.0	3.3	1.7
LD12-45	55.9	36.3	29.7	22.9	15.2	12.8	10.0	8.7	6.6	5.6	2.9
LD12-70	80.3	47.6	38.5	29.3	19.3	15.9	12.5	11.8	9.0	7.6	3.9
LD12-80	98.0	57.2	46.2	35.1	23.1	19.1	14.9	14.2	10.8	9.1	4.7
LD12-90	106.8	62.2	50.2	38.2	25.2	20.8	16.3	15.4	11.8	9.9	5.1
LD12-100	109.0	63.5	51.3	39.0	25.7	21.2	16.6	15.7	12.0	10.1	5.2
LD12-125	146.0	85.1	68.7	52.3	34.4	28.4	22.2	21.1	16.1	13.5	7.0
LD6-200	233.7	135.8	109.6	83.4	54.9	45.3	35.5	33.7	25.7	21.6	11.1

LD12-55F	61.1	35.0	28.2	21.4	14.1	11.7	9.1	8.3	6.6	5.5	2.9
LD12-90F	101.6	59.4	42.7	33.9	24.5	19.5	16.5	14.1	10.9	9.1	4.9
LD12-100F	118.7	69.4	49.9	39.6	32.9	25.4	21.0	18.3	13.1	10.9	5.8
LD12-105F	116.0	70.0	50.4	40.0	28.9	23.0	19.5	16.7	13.0	10.7	5.7
LD12-120F	139.1	81.4	58.5	46.4	33.6	26.7	22.6	19.3	14.9	12.5	6.6
LD12-125FS	147.6	86.4	62.1	49.2	35.7	28.3	24	20.6	15.8	13.3	7.0
LD12-150F	174.1	101.8	73.2	58.1	42.1	33.4	28.3	24.2	18.7	15.6	8.3
LD12-155F	180.5	105.5	75.9	60.2	43.6	34.7	29.3	25.1	19.4	16.2	8.6
LD12-155FW	180.5	105.5	75.9	60.2	43.6	34.7	29.3	25.1	19.4	16.2	8.6
LD12-160FS	182.3	106.6	76.7	60.8	44.1	35.1	29.7	25.4	19.6	16.4	8.8
LD12-170F	198.5	116.1	83.4	66.3	48.0	38.1	32.3	27.6	21.3	17.8	9.5
LD12-180F	209.7	122.7	88.2	70.0	50.7	40.3	34.1	29.2	22.5	18.8	10.0
LD12-190F	221.2	129.3	93	73.8	53.5	42.5	35.9	30.8	23.8	19.8	10.6
LD12-200F	232.9	136.2	97.9	77.7	56.4	44.8	37.8	32.5	25.1	20.9	11.2
LD12-250F	289.6	169.3	121.8	96.6	70.1	55.7	47	40.5	31.2	26	13.9

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