



Douglas Guardian® VRLA Batteries



Item number	Douglas Model	Nominal Voltage V	** Capacity (20 HR) AH	Dimensions								Weight		Terminals
				Length		Width		Height		Total Height		lbs.	kg.	
				in.	mm	in.	mm	in.	mm	in.	mm			
2100228	DG4-10F	4	10	4.00	101.5	1.97	50	3.70	94	3.94	100	2.87	1.30	F1
2100229	DG6-1F	6	1.1	1.97	50	1.65	42	2.01	51	2.24	57	0.62	0.28	F1
2100231	DG6-4F	6	4.5	2.76	70	1.85	47	3.94	100	4.17	106	1.79	0.81	F1
2100232	DG6-4E	6	4.5	2.64	67	2.64	67	3.93	100	4.64	118	1.79	0.81	E
2100234	DG6-5F	6	4.6	2.76	70	1.85	47	3.94	100	4.17	106	1.79	0.81	F1
2100233	DG6-7F	6	7	5.95	151	1.34	34	3.70	94	3.94	100	2.78	1.26	F1
2100264	DG6-8F	6	8.5	5.31	135	1.97	50	4.00	101.5	4.00	101.5	3.75	1.70	F1
2100236	DG6-9.5A	6	9.5	4.25	108	2.76	71	5.51	140	5.51	140	4.75	2.16	F1-F2+
2100263	DG6-9.5T	6	9.5	4.25	108	2.76	71	5.51	140	5.51	140	4.75	2.16	TH
2100250	DG6-9.5T2	6	9.5	4.25	108	2.76	71	5.51	140	5.51	141	4.75	2.16	TS
2100238	DG6-10F2	6	10	5.95	151	2.01	51	3.70	94	3.94	100	4.19	1.90	F2
2100239	DG6-12A	6	13	4.25	108	2.80	71	5.55	141	5.55	141	5.30	2.40	F1-F2+
2100245	DG6-36F2	6	36	6.34	161	3.43	87	6.42	163	6.65	169	13.67	6.20	F2
2100246	DG6-36NB	6	36	6.34	161	3.43	87	6.42	163	6.65	169	13.67	6.20	NB
2100247	DG12-1.2F	12	1.2	3.82	97	1.69	43	2.04	52	2.28	58	1.32	0.60	F1
2100237	DG12-4.5F	12	4.6	3.54	90	2.76	70	3.98	101	4.21	107	3.53	1.60	F1
2100252	DG12-7F	12	7	5.95	151	2.56	65	3.70	94	3.94	100	5.60	2.54	F1
2100253	DG12-7.2F2	12	7.6	5.95	151	2.56	65	3.70	94	3.94	100	5.73	2.60	F2
2100254	DG12-12F2	12	12	5.95	151	3.86	98	3.74	95	3.98	101	8.49	3.85	F1-F2+
2100235	DG12-18J	12	18	7.14	181.5	3.03	77	6.59	167.5	6.59	167.5	12.56	5.70	J
2100255	DG12-24J	12	24	6.97	177	6.56	166	4.92	125	4.92	125	18.09	8.20	J
2100262	DG12-32J	12	35	7.68	195	5.12	130	6.10	155	7.09	180	27.71	11.20	J
2100417	DG12-45UTR	12	45	8.98	228	5.39	137	8.27	210	8.51	216	41.89	19.00	UT *
2100418	DG12-55UTH	12	60	8.98	228	5.39	137	8.27	210	8.51	216	41.89	19.00	UT *
2100419	DG12-70UTH	12	65	10.24	260	6.62	168	8.12	206	8.74	222	44.10	20.00	UT *
2100420	DG12-80UTH	12	80	10.24	260	6.61	168	8.27	210	8.51	216	55.20	25.00	UT *
2100283	DG12-80M	12	80	10.24	260	6.61	168	8.27	210	8.51	216	55.20	25.00	M *
2100421	DG12-100UTH	12	100	12.05	306	6.61	168	8.27	210	8.51	216	66.20	30.00	UT *
2100444	DG12-100M	12	100	12.05	306	6.61	168	8.27	210	8.51	216	66.20	30.00	M *

* Represents batteries that are supplied with handles

** AH based on 1.75Vpc @ 77°F (25°C). All data is subject to change. Effective January 19, 2006



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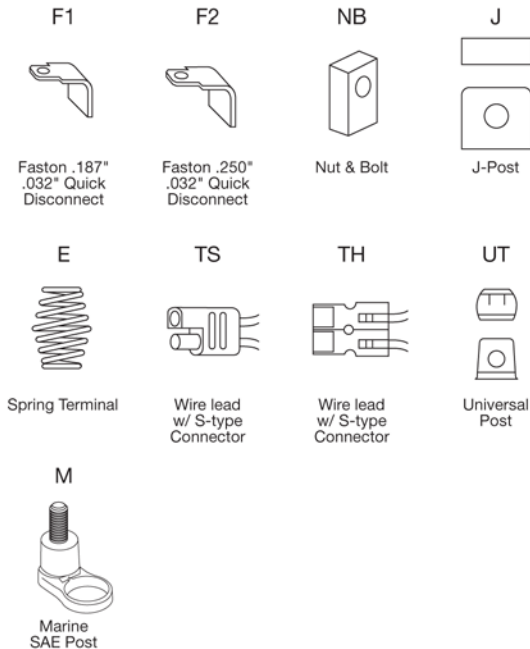
RELIABLE POWER.

When You Need It. Wherever You Need It.

The need for batteries continues to grow. From toys, alarm systems, emergency lighting, machine operation, wheelchairs, medical equipment, telecommunications and UPS systems, just to name a few, the Douglas Guardian® line offers the right battery for your application needs. There are 4, 6 and 12 volt models that range from 1 Ah to 100 Ah. The valve regulated, spill-proof construction of the Guardian® line allows trouble-free safe operation in any position. Guardian® batteries use state of the art design, high-grade materials and a controlled plate manufacturing process to provide excellent capacity output per cell. Reliable power. When you need it! Wherever you need it!

- Maintenance-Free, Spill-Resistant Construction** - Never need to add water. Battery can be installed in any position without fear of leakage.
- Longer Service Life** - Heavy-duty lead calcium alloy provides longer life and an extra margin of performance.
- Longer Shelf Life** - A fully charged battery can be stored up to a year without recharging. (Under normal operating conditions at room temperature).
- Wide Operating Temperatures** - The Guardian Battery will operate from -40°C (-40°F) to 60°C (140°F) when fully charged.
- High Recovery Capacity From Deep Discharge** - Special separators, advanced high density plate composition combined with balanced electrolyte have greatly improved recovery time.
- No Memory Effect** - Delivers full capacity when required whether used in cyclic or stand-by applications.
- Universal Terminal** - Available on some models to replace both the "J" and "S" terminals.
- Fold-Down Suitcase Handle** - See product photo. Handle may be folded in either direction for maximum fit and ease of storage. See chart on back for availability.

Terminal Types



Charge Voltage. Guardian batteries perform well both at low and high temperatures. For maximum life, temperature compensation is recommended when the operating temperature is outside the range of 68° to 77°F (20° to 25°C).

Storage. The shelf life of Guardian batteries is affected by temperature. The lower the storage temperature, the longer the shelf life. A low self-discharge rate (about 3% capacity per month) permits storage of fully charged batteries for up to 1 year at room temperature before charging is required.

Recharging. Recharge time depends on the current available and the depth of discharge. The initial charge current should not exceed 3 X C₂₀ Amps and the charging voltage should conform to the table below. The battery is fully charged when the current drops to approximately 0.01 x C₂₀ Amps (1.0% of rated capacity).

RECOMMENDED CHARGE VOLTAGE

Float Use 2.25-2.30 Vpc	Cycle Use 2.40-2.45 Vpc
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