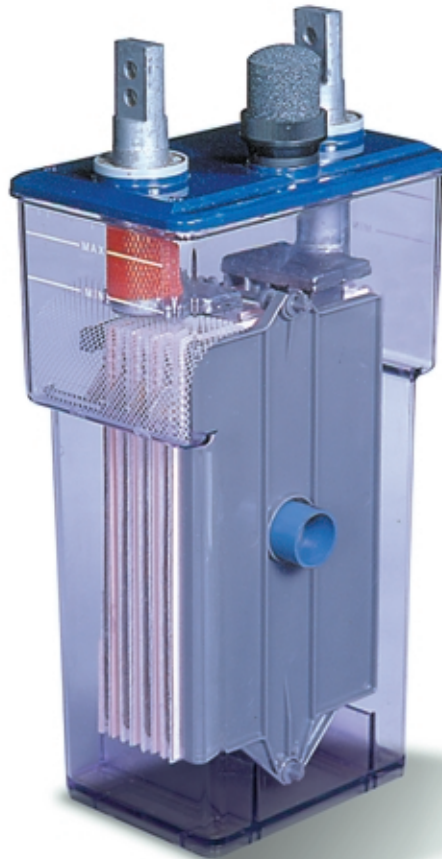


55 - 4030 A.H. Capacity
111 to 6125 Watts per Cell

DOUGLAS SAFE GUARD® FLATPLATE

Douglas SafeGuard® Flooded Flatplate is designed for reliability and long life in Telecom Central Office, Mobile Switching, Switchgear Operations, UPS back-up, and Emergency Lighting. The advantages of the Douglas SafeGuard® Flatplate battery are an increased capacity, reduced footprint, and extended watering intervals. The selenium-containing grid alloy and a special paste formulation allow a variety of cycling and float applications. The copper inserted posts optimize both complex load profiles requiring high performance rates, as well as long-duration discharges.



DESIGN FEATURES:

- **Post Seal.** Bridge-hung positive plates allow downward plate growth away from the post seal. Later in life post growth is allowed with compression-fitted rubber grommet seal that eliminates any acid leaks or post corrosion.
- **Terminal Post.** Heavy-duty 2-hole post with copper insert allows for very high discharge currents.
- **Plates.** Bridge-hung Positive plates are constructed of .197" (5mm) thick lead-antimony-tin selenium grids and finer oxides to bring longer life and high capacity. The bottom-supported Negative plates provide a perfect balance to maximize performance.
- **Separators.** High-quality Porvic 2 (sintered microporous PVC) form a diaphragm between the plates. The separators are chemically inert with a high degree of porosity, which ensures minimum internal resistance.
- **Electrolyte.** High-purity sulfuric acid at 1.215 Specific Gravity. (1.250 Specific Gravity for UPS applications on request). Good electrolyte reserve to extend maintenance interval.
- **Safety Vent.** Flame Arrestor protected.
- **Cover.** Flame Retardant ABS to UL 94 V-0, 28% LOI, permanently sealed to the container.
- **Container.** Transparent Styrene Acrylonitrile (SAN), ensures optimum visibility and very high insulating qualities which eliminates the need for separate cell insulators. Electrolyte level and cell condition clearly seen.
- **Inter-cell Connectors.** Heavy-duty Lead-Plated Copper minimize voltage drop in battery circuits while delivering maximum current flow.
- **Float Voltage.** Douglas SafeGuard® Flatplate batteries provide optimum performance when float charged at 2.21 to 2.22 VPC using 1.215 S.G. (Optional 1.250 S.G. use 2.25 to 2.26 VPC) for temperatures between 65° and 77° F. For installations where the battery will operate for extended periods outside of this range, see Installation and Operating Manual.
- **Installation.** Cells can be connected with plates edge-to-edge or face-to-face.

DOUGLAS SAFEGUARD®
FLOODED FLATPLATE


DOUGLAS BATTERY
Connect with a leader

DOUGLAS SAFEGUARD® FLATPLATE		Capacities, Weights, and Dimensions											
TELECOM MODEL	1.215 SG		1.250 SG		DIMENSIONS						NOMINAL FILLED WEIGHT		ACID VOLUME gallons
	NOMINAL AH CAPACITY	UPS MODEL	WATTS PER CELL TO 1.67 VPC	LENGTH		DEPTH		HEIGHT		lbs.	kg.		
				inches	mm	inches	mm	inches	mm				
DFF-50T	55	DCF-5W	123	5.28	134	8.00	203	16.67	423	27.5	11.8	1.43	
DFF-80T	82	DCF-7W	185	5.28	134	8.00	203	16.67	423	31.0	13.4	1.37	
DFF-110T	110	DCF-9W	246	5.28	134	8.00	203	16.67	423	34.1	14.8	1.32	
DFF-135T	137	DCF-11W	308	5.28	134	8.00	203	16.67	423	37.4	16.3	1.27	
DFF-160T	164	DCF-13W	369	5.28	134	8.00	203	16.67	423	40.7	17.8	1.22	
DFF-190T	192	DCF-15W	431	6.78	172	8.00	203	16.67	423	49.3	21.7	1.66	
DFF-210T	219	DCF-17W	492	6.78	172	8.00	203	16.67	423	52.7	23.2	1.61	
DFF-240T	247	DCF-19W	554	6.78	172	8.00	203	16.67	423	55.7	24.6	1.56	
DFF-270T	274	DCF-21W	615	* 8.00	203	8.27	210	16.67	423	66.3	28.7	2.01	
DFF-300T	301	DCF-23W	677	* 8.00	203	8.27	210	16.67	423	69.4	30.1	1.96	
DFF-320T	329	DCF-25W	738	* 8.00	203	9.77	248	16.67	423	79.1	34.5	2.40	
DFF-350T	356	DCF-27W	800	* 8.00	203	9.77	248	16.67	423	82.2	35.9	2.35	
DFF-380T	384	DCF-29W	861	* 8.00	203	9.77	248	16.67	423	85.5	37.4	2.32	
DFF-410T	411	DCF-31W	923	* 8.00	203	11.27	286	16.67	423	94.7	41.6	2.77	
DFF-430T	438	DCF-33W	985	* 8.00	203	11.27	286	16.67	423	97.8	43.0	2.72	
DFF-460T	466	DCF-35W	1046	* 8.00	203	14.26	362	16.67	423	108.2	47.7	3.20	
DFF-490T	493	DCF-37W	1108	* 8.00	203	14.26	362	16.67	423	111.7	49.3	3.14	
DFF-520T	521	DCF-39W	1169	* 8.00	203	14.26	362	16.67	423	114.8	50.7	3.09	
DFF-540T	548	DCF-41W	1231	* 8.00	203	14.26	362	16.67	423	118.1	52.2	3.04	
DFF-570T	575	DCF-43W	1292	* 8.00	203	14.26	362	16.67	423	121.4	53.7	2.99	
DFF-830T	830	DHF-15W	1261	9.02	230	14.50	368	26.52	682	192.2	87.1	7.50	
DFF-940T	948	DHF-17W	1441	9.02	230	14.50	368	26.52	682	202.2	91.6	7.27	
DFF-1060T	1067	DHF-19W	1622	9.02	230	14.50	368	26.52	682	212.4	96.3	7.08	
DFF-1180T	1182	DHF-21W	1801	9.02	230	14.50	368	26.52	682	223.1	101.1	6.87	
DFF-1300T	1304	DHF-23W	1982	12.00	305	14.50	368	26.52	682	276.0	125.0	10.10	
DFF-1420T	1422	DHF-25W	2162	12.00	305	14.50	368	26.52	682	286.2	129.7	9.90	
DFF-1540T	1541	DHF-27W	2342	12.00	305	14.50	368	26.52	682	298.1	135.1	9.70	
DFF-1650T	1659	DHF-29W	2522	12.00	305	14.50	368	26.52	682	308.6	139.8	9.51	
DFF-1770T	1778	DHF-31W	2703	12.00	305	14.50	368	26.52	682	317.7	143.9	9.30	
DFF-1890T	1896	DHF-33W	2882	14.02	356	14.50	368	26.52	682	354.8	160.8	9.70	
DFF-2010T	2015	DHF-35W	3063	14.02	356	14.50	368	26.52	682	364.7	165.3	11.20	
DFF-2130T	2133	DHF-37W	3242	14.02	356	14.50	368	26.52	682	375.2	170.0	11.00	
DFF-2250T	2252	DHF-39W	3423	14.02	356	14.50	368	26.52	682	387.5	175.6	10.81	
DFF-2370T	2370	DHF-41W	3603	14.02	356	14.50	368	26.52	682	395.5	179.2	10.62	
DFF-2480T	2489	DHF-43W	3783	* 14.50	368	17.01	432	26.52	682	442.2	200.4	13.84	
DFF-2600T	2608	DHF-45W	3963	* 14.50	368	17.01	432	26.52	682	453.5	205.5	13.63	
DFF-2720T	2726	DHF-47W	4144	* 14.50	368	17.01	432	26.52	682	463.7	210.1	13.45	
DFF-2840T	2845	DHF-49W	4323	* 14.50	368	17.01	432	26.52	682	474.0	214.8	13.26	
DFF-2960T	2963	DHF-51W	4504	* 14.50	368	17.01	432	26.52	682	484.2	219.4	13.05	
DFF-3080T	3082	DHF-53W	4684	* 14.50	368	20.06	509	26.52	682	535.2	242.5	16.27	
DFF-3200T	3200	DHF-55W	4864	* 14.50	368	20.06	509	26.52	682	545.7	247.2	16.06	
DFF-3310T	3319	DHF-57W	5044	* 14.50	368	20.06	509	26.52	682	555.5	251.7	15.88	
DFF-3430T	3437	DHF-59W	5225	* 14.50	368	20.06	509	26.52	682	565.7	256.3	15.69	
DFF-3550T	3556	DHF-61W	5404	* 14.50	368	20.06	509	26.52	682	565.8	260.9	15.51	
DFF-3670T	3674	DHF-63W	5585	* 14.50	368	23.05	585	26.52	682	631.0	285.9	18.76	
DFF-3790T	3793	DHF-65W	5764	* 14.50	368	23.05	585	26.52	682	641.3	290.6	18.55	
DFF-3910T	3911	DHF-67W	5945	* 14.50	368	23.05	585	26.52	682	651.4	295.2	18.36	
DFF-4030T	4030	DHF-69W	6125	* 14.50	368	23.05	585	26.52	682	662.6	300.2	18.18	

Nominal capacity is based on 8-hour rate to 1.75 Vpc @ 77° F (25° C). Weight 5%.

All data subject to change without notice.

All models have a .25" cell spacing (cover-to-cover is the closest dimension).

Standard plate arrangement is face-to-face plates (where you can see the edges of the plates).

To keep the rack length small, cells marked * will have edge-to-edge plate arrangement (where you see only the face of the last plate).

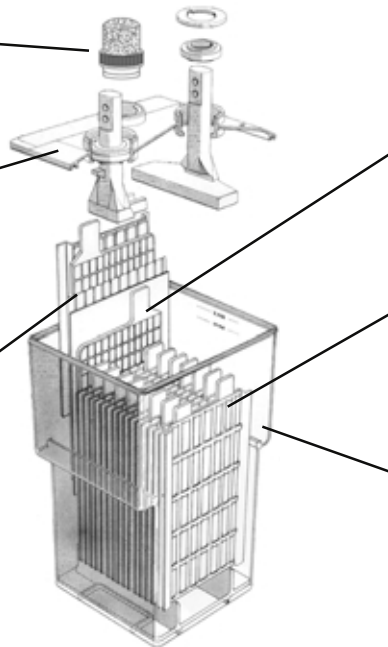
Flame Arrestor Vent Plugs,

which are provided, effectively return acid spray to the cell, yet allow free exit of oxygen and hydrogen gasses.

Cell Lids

are molded from ABS Flame Retardant to UL 94 V-0, 28% LOI, permanently sealed to the container.

Separators of glass fibre matting and Porvic 2 (sintered microporous PVC), which form a complete diaphragm between the plates. This method of dual separations ensures retention of positive active material while affording minimum internal resistance.



Positive Plates are constructed of thick industrial pasted grid alloys, in a long-life paste formulation, suitable for float and cycling applications.

Negative Plates are of industrial pasted grid construction, for balanced performance and life.

Visual Inspection Containers, molded from transparent styrene acrylonitrile (SAN), ensure optimum visibility and very high insulating qualities which eliminate the need for separate cell insulators.

ISO 9001 / QS-9000



Registered Company

