

# NSB OPzV Batteries

## Tubular Gel Technology



NorthStar OPzV Batteries deliver high capacity 2V reserve power and deep cycle performance.



NorthStar OPzV Batteries are ideal for applications such as renewable energy, telecom backup, oil and gas, energy storage, railway, emergency lighting and switchgear.

- Designed by NorthStar
- High capacity
- Maintenance free - no need to refill water
- ABS container
- V0 material optional
- M10 brass terminal
- Operating temperature range: -20°C to +55°C (-4°F to 131°F)
- EUROBAT design life definition: Long Life (12 years)
- Low gassing enables low ventilation requirements
- Optional vent tubing adaptors available
- Shelf life of up to 24 months
- DIN 40742 compliant
- IEC 60896-21/22 compliant
- Not subject to road transport regulations (ADR) when packed properly

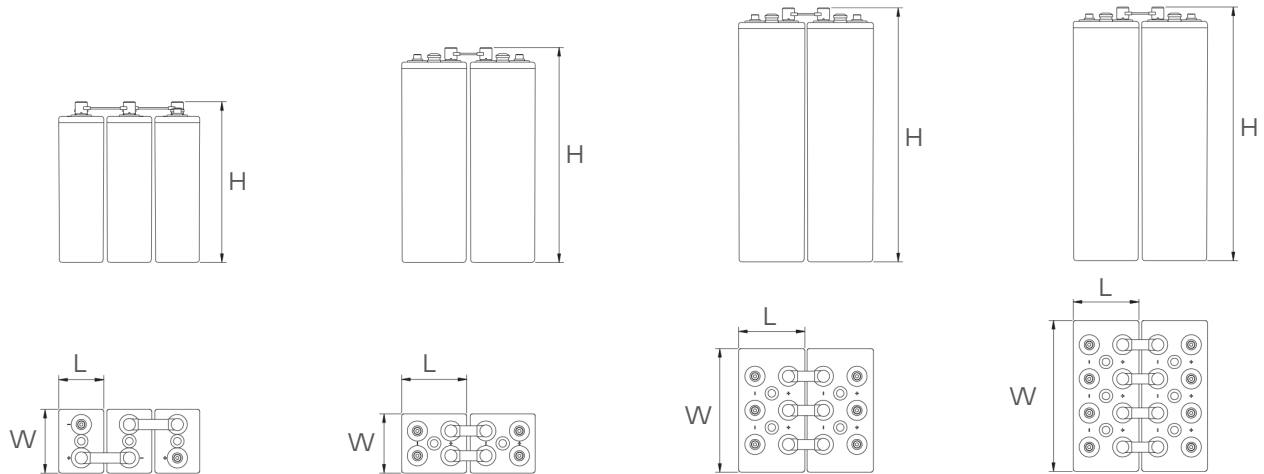
#### Electrical Data at 20°C (68°F)

Type	C <sub>1</sub> Ah	C <sub>2</sub> Ah	C <sub>3</sub> Ah	C <sub>5</sub> Ah	C <sub>8</sub> Ah	C <sub>10</sub> Ah
Ue (100%)/VPC	1.67	1.73	1.75	1.77	1.80	1.80
NSB 6 OPzV 300	182	243	272	298	316	335
NSB 5 OPzV 350	233	274	335	400	408	415
NSB 6 OPzV 420	280	330	404	482	492	500
NSB 7 OPzV 490	327	385	469	559	571	580
NSB 6 OPzV 600	392	473	555	631	676	710
NSB 8 OPzV 800	524	633	743	844	904	950
NSB 10 OPzV 1000	654	790	926	1053	1128	1185
NSB 12 OPzV 1200	784	946	1110	1261	1352	1420
NSB 12 OPzV 1500	895	1038	1282	1407	1492	1650
NSB 16 OPzV 2000	1191	1384	1709	1876	1989	2200
NSB 20 OPzV 2500	1488	1723	2129	2336	2477	2740
NSB 22 OPzV 2750	1641	1903	2350	2579	2735	3025
NSB 24 OPzV 3000	1790	2076	2564	2813	2983	3300

#### Electrical Data at 25°C (77°F)

Type	C <sub>1</sub> Ah	C <sub>2</sub> Ah	C <sub>3</sub> Ah	C <sub>5</sub> Ah	C <sub>8</sub> Ah	C <sub>10</sub> Ah
Ue (100%)/VPC	1.67	1.73	1.75	1.77	1.80	1.80
NSB 6 OPzV 300	187	250	281	307	326	345
NSB 5 OPzV 350	240	283	346	413	421	428
NSB 6 OPzV 420	289	341	416	497	507	515
NSB 7 OPzV 490	337	397	483	577	588	598
NSB 6 OPzV 600	404	488	572	650	697	732
NSB 8 OPzV 800	541	653	766	870	932	979
NSB 10 OPzV 1000	674	814	955	1085	1163	1222
NSB 12 OPzV 1200	808	975	1143	1299	1392	1463
NSB 12 OPzV 1500	923	1070	1322	1450	1538	1701
NSB 16 OPzV 2000	1228	1427	1762	1934	2050	2268
NSB 20 OPzV 2500	1534	1777	2195	2408	2554	2825
NSB 22 OPzV 2750	1691	1962	2423	2659	2819	3119
NSB 24 OPzV 3000	1845	2140	2643	2900	3075	3402

### Terminal Positions



NSB 6 OPzV 300 -  
NSB 6 OPzV 600

NSB 8 OPzV 800 -  
NSB 12 OPzV 1500

NSB 16 OPzV 2000

NSB 20 OPzV 2500 -  
NSB 24 OPzV 3000

### Other Technical Data

Battery Size	Length		Width		Height over pillar		Height with connectors		Weight		Internal Resistance (mΩ)	Short Circuit Current (A)
	mm	in	mm	in	mm	in	mm	in	kg	lbs		
NSB 6 OPzV 300	147	5.79	208	8.19	367	14.45	392	15.43	26.3	58.0	0.69	2950
NSB 5 OPzV 350	126	4.96	208	8.19	483.5	19.04	509	20.02	29.1	64.2	0.62	3270
NSB 6 OPzV 420	147	5.79	208	8.19	483.5	19.04	509	20.02	36.2	79.1	0.54	3750
NSB 7 OPzV 490	168	6.61	208	8.19	483.5	19.04	509	20.02	41.7	91.1	0.46	4400
NSB 6 OPzV 600	147	5.79	208	8.19	656	25.83	681	26.81	50.0	110.4	0.51	3970
NSB 8 OPzV 800	212	8.35	193	7.60	657	25.87	682	26.85	66.3	146.3	0.39	5190
NSB 10 OPzV 1000	212	8.35	235	9.25	659	25.94	684	26.93	81.7	180.2	0.33	6130
NSB 12 OPzV 1200	212	8.35	277	10.91	658	25.91	683	26.89	97.0	213.1	0.28	7230
NSB 12 OPzV 1500	212	8.35	277	10.91	809	31.85	834	32.83	111.9	246.1	0.25	8090
NSB 16 OPzV 2000	215	8.46	400	15.75	784	30.87	809	31.85	155.6	343.1	0.21	9640
NSB 20 OPzV 2500	214	8.43	489	19.25	782	30.79	807	31.77	190.4	419.2	0.16	12650
NSB 22 OPzV 2750	214	8.43	578	22.76	784	30.87	809	31.85	216.4	477.1	0.13	15570
NSB 24 OPzV 3000	214	8.43	578	22.76	784	30.87	809	31.85	226.2	498.1	0.11	18400

**NorthStar Americas**

NorthStar Battery Company LLC  
4000 Continental Way  
Springfield, MO, 65803,  
United States of America  
info@northstarbattery.com  
Tel: +1 417 575 8200  
Fax: +1 417 575 8250

**NorthStar Europe**

SiteTel Sweden AB  
Haukadalsgatan 8A  
164 40 Kista  
Stockholm, Sweden  
europe@northstarsitetel.com  
Tel: +46 8 410 102 00  
Fax: +46 8 638 06 00

**NorthStar Middle East, Africa**

NorthStar Battery DMCC  
Office 702, Saba 1 Tower  
Jumeirah Lake Towers, Dubai  
United Arab Emirates  
mea@northstarsitetel.com  
Tel: +971 4 423 8060  
Fax: +971 4 423 8061

**NorthStar Asia-Pacific**

NS Asia Pacific Sdn. Bhd.  
B2-3A-13A, Solaris Dutamas  
No. 1, Jalan Dutamas 1, 50480  
Kuala Lumpur, Malaysia  
asia@northstarbattery.com  
Tel: +60 3 6419 0711

**NorthStar China**

Sitetel Sweden AB Shenzhen  
International Chamber of Commerce Tower  
Fuhua 3rd Road, Futian District  
Shenzhen, 518017, China  
china@northstarsitetel.com  
Tel: +86 755 23832313

All NorthStar batteries are compliant with:  
ISO 9001, ISO 14001 and ISO 18001.