

**NGS**  
BATTERY

**NEO**

**DARE TO BE DARED**

The design of NEO battery is the assurance to optimum performance and dependability. The cell chemistry technology is designed to withstand vibration and any road condition. NEO battery is of superior design to meet the wide range of world most needed automotive batteries.



**CONSTRUCTION & CHARACTERISTIC**  
**LOW MAINTENANCE DRY-CHARGED BATTERY**

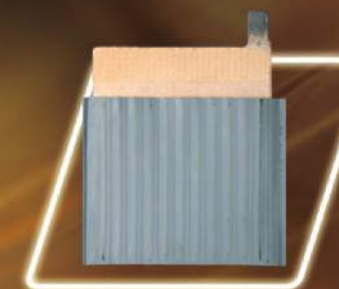


**HEAT SEALED COVER**

- Prevents the electrolyte contamination
- Adds strenght & rigidity

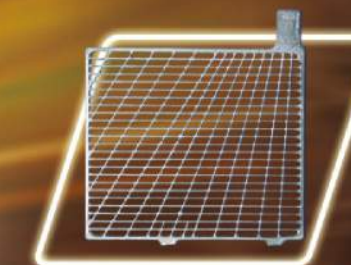
**WELL-WELDED PARTITION CONNECTORS**

- Shortened power path
- Reduce internal resistance



**MICRO-POROUS POLYETHYLENE ENVELOPE SEPARATORS**

- Encapsulates positive plate
- Prevents short circuits (against electrical shorts)
- Resistance against vibration
- Increases electrolyte capacity
- Anti-corrosion



**CASTED LOW ANTIMONIAL SELENIUM PLUS LEAD ALLOY GRIDS**

- Minimal water loss
- Reduce self-discharge
- Higher cold cranking performance & superior reserve capacity retention
- Efficient high rate charge acceptance
- Longer life time

**POLYPROPYLENE CONTAINER**

- High impact strenght
- Light in weight
- Lessens acid damage to cars from cranking or leaking
- Withstand road shocks & vibration



**GLASSMAT LAMINATED SEPARATOR**

For the heavy duty vehicle, truck and bus Batteries, the combination of PE & Glassmat Separator is the best fit to :

- Improves acid circulation around plates
- Withstand vibration for heavy duty off road application

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\*Averred by Time



The use of microporous envelope separator in NEO battery is to surround and encapsulate the positive from the nearest counter electrode and prevent the active material from falling to the bottom which creates short circuit. High purity active material is the assurance of high quality material to preclude the contamination of the battery. NEO battery overruns the conventional battery technology which apply the use of high antimonial content in the lead alloy. Low antimonial lead with selenium plus grid is designed to minimize the electrical resistance and to increase cranking performance. This important feature of the NEO battery will reduce the overcharge current significantly, reducing the rate at which water is lost during overcharge to produce low maintenance NEO battery as well as improving the stand characteristics.



# JIS SPECIFICATION

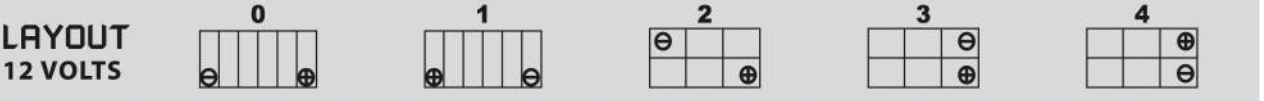
# DIN SPECIFICATION

Battery Type (JIS)		Voltage	Capacity at 20 Hr Rate (AH)	Cranking Ampere at -18° C (Amp)	Max. Overall Dimension (mm)				Cell Lay-Out	Terminal Design	Approx. Acid Volume (Ltr)	Battery Type (DIN)		Voltage	Capacity at 20 Hr Rate (AH)	Cranking Ampere at -18° C (Amp)	Max. Overall Dimension (mm)			Cell Lay-Out	Terminal Design	Approx. Acid Volume (Ltr)	Base Hold Down	Remarks	Battery Type (DIN)		Voltage	Capacity at 20 Hr Rate (AH)	Cranking Ampere at -18° C (Amp)	Max. Overall Dimension (mm)			Cell Lay-Out	Terminal Design	Approx. Acid Volume (Ltr)	Base Hold Down	Remarks	
Old Type	New Type				Type	Central Vent Type	Length	Width				Height	T. Height				Type	Central Vent Type	Length						Width	T. Height				Type	Central Vent Type	Length						Width
NS40/L	32B20R/L	12	32	247	197	129	203	227	1/0	B	2.8	53520	-	12	35	150	197	129	227	0	B	2.5	-	-	56530	-	12	65	320	278	175	175	0	A	4.2	B3	CV	
NS40Z/ZL	36B20R/L	12	35	274	197	129	203	227	1/0	B	2.7	53521	-	12	35	150	197	129	227	0	A	2.5	-	-	56618	56638	12	66	300	278	175	190	0	A	4.5	B3	-	
N40/L	-	12	40	280	238	129	203	227	1/0	A	3.4	53522	-	12	35	150	200	128	224	1	B	2.5	-	-	56619	-	12	66	300	278	175	190	0	E	4.2	B3	-	
NS50/L	-	12	45	300	232	172	181	213	1/0	A	5.5	53621	53646	12	36	175	208	175	175	0	A	2.7	B4	-	56633	-	12	66	300	278	175	190	1	A	4.5	B3	CV	
NS60/L	46B24R/L	12	45	325	238	129	203	227	1/0	B	3.0	53653	-	12	36	175	208	175	175	0	A	2.7	B1	CV	56818	-	12	68	400	278	175	190	0	E	4	B3	CV	
NS60S/SL	46B24RS/LS	12	45	325	238	129	203	227	1/0	A	3.0	54045	-	12	40	220	208	175	175	0	A	2.5	B4	CV	56821	-	12	68	400	278	175	175	0	E	4	B3	CV	
N50/L	48D26R/L	12	50	278	260	173	204	225	1/0	A	5.4	54312	54317	12	43	200	208	175	175	0	E	2.5	B3	-	57024	-	12	70	315	270	173	225	1	A	4.2	B9	-	
NS50Z/ZL	-	12	55	375	232	172	181	213	1/0	A	5.0	54315	-	12	43	210	208	175	175	0	E	2.7	B3	-	57029	-	12	70	315	270	173	225	0	A	4.2	B9	-	
NS50P/PL	-	12	60	420	232	172	181	213	1/0	A	4.5	54434	54459	12	44	210	208	175	190	0	A	3	B3	-	57217	57220	12	72	420	278	175	190	0	A	4.2	B3	-	
N50Z/ZL	55D26R/L	12	60	348	260	173	204	225	1/0	A	4.8	54449	54464	12	44	210	208	175	190	1	A	3	B3	-	57218	-	12	72	420	278	175	190	0	E	4.2	B3	CV	
-	55D23R/L	12	60	348	232	173	204	225	1/0	A	4.4	54459	-	12	44	210	208	175	190	0	A	3	B3	CV	57512	-	12	75	280	306	173	225	0	A	5	-	-	
NS70/L	65D26R/L	12	65	413	260	173	204	225	1/0	A	4.6	54464	-	12	44	210	208	175	190	1	A	3	B3	CV	57513	-	12	75	280	306	173	225	1	A	5	-	-	
-	65D23R/L	12	65	413	232	173	204	225	1/0	A	4.0	54523	-	12	45	190	238	129	227	0	A	3.8	-	-	58024	-	12	80	300	278	175	190	0	A	4.3	B3	-	
N70/L	65D31R/L	12	70	389	306	173	204	225	1/0	A	6.2	54524	-	12	45	190	238	129	227	1	A	3.8	-	-	58815	58827	12	88	395	353	175	190	0	A	5.2	B3	-	
N70Z/ZL	75D31R/L	12	75	447	306	173	204	225	1/0	A	5.8	54533	54519	12	45	220	240	175	175	0	A	3.5	B4	-	59216	59217	12	92	450	353	175	190	0	A	5.3	B3	-	
NX120-7/L	95D31R/L	12	80	622	306	173	204	225	1/0	A	6	54551	-	12	45	190	238	129	227	1	B	3.8	-	-	59218	-	12	92	450	353	175	190	0	A	5.5	B3	CV	
N100/L	95E41R/L	12	100	512	410	176	213	223	1/0	A	7.4	55040	-	12	50	265	240	175	175	0	A	3.5	B3	CV	59615	-	12	96	360	344	171	234	0	A	6	-	-	
N100Z/ZL	105E41R/L	12	105	577	410	176	213	233	1/0	A	6.2	55414	-	12	54	265	278	175	175	0	A	4.5	B4	CV	60026	-	12	100	360	410	172	237	0	A	6.1	-	-	
NS120/L	115E41R/L	12	115	651	410	176	213	233	1/0	A	6.0	55421	-	12	54	300	240	175	175	0	A	3.9	B3	-	60035	-	12	100	360	410	172	237	1	A	6.1	-	-	
N120/L	115F51R/L	12	120	638	505	182	213	257	4/3	A	10.1	55422	-	12	54	300	240	175	175	1	A	3.3	B3	-	60038	-	12	100	500	353	175	190	0	A	6.2	B3	CV	
NS150/L	145F51R/L	12	135	780	505	182	213	257	4/3	A	8.9	55423	55427	12	54	300	240	175	175	0	E	4.4	B3	CV	62034	-	12	120	420	513	189	223	3	A	8.5	-	-	
N135/L	-	12	135	820	508	222	213	257	4/3	A	11.4	55523	-	12	55	225	240	175	190	0	E	3.3	B3	CV	62038	-	12	120	420	513	189	223	4	A	8.5	-	-	
N150/L	145G51R/L	12	150	754	508	222	213	257	4/3	A	13.5	55530	55559	12	55	255	240	175	190	0	A	3.8	B3	-	64020	-	12	140	460	513	189	223	3	A	9.4	-	-	
N180/L	-	12	180	900	521	278	220	270	4/3	A	14.5	55531	-	12	55	255	240	175	190	0	E	3.8	B3	-	64317	-	12	143	540	514	223	223	3	A	11	-	-	
N200/L	190H52R/L	12	200	924	521	278	220	270	4/3	A	18.0	55548	55565	12	55	255	240	175	190	1	A	3.8	B3	-	66514	-	12	165	540	514	223	223	3	A	11.7	-	-	
NX400-20/L	245H52R/L	12	245	1532	521	278	220	270	4/3	A	12.5	56048	-	12	60	270	270	173	225	0	A	4.5	B9	-	67018	-	12	170	600	514	223	223	3	A	11.6	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	56049	-	12	60	270	270	173	225	1	A	4.5	B9	-	68021	-	12	180	570	518	276	240	3	A	11.5	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	56068	-	12	60	240	232	173	225	0	A	3.8	-	-	68034	-	12	180	600	514	223	223	3	A	11	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	56069	-	12	60	240	232	173	225	1	A	3.8	-	-	70027	-	12	200	630	518	291	240	3	A	11.5	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	56216	546219	12	62	280	240	175	190	0	A	3.4	B3	-	70029	-	12	200	630	518	291	240	4	A	11.5	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	56318	-	12	63	300	278	175	175	0	A	3.7	B4	CV	71014	-	12	210	700	518	291	240	3	A	11.3	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	56323	-	12	63	360	278	175	175	0	E	4	B3	CV	73011	-	12	230	745	518	291	240	3	A	11.2	-	-	
-	-	-	-	-	-	-	-	-	-	-	-	56420	-	12	64	380	278	175	175	0	A	4	B4	CV	-	-	-	-	-	-	-	-	-	-	-	-	-	-

# JIS MOTORCYCLE SPECIFICATION

Battery Type (JIS)	Capacity at 20 Hr Rate	Max. Overall Dimension (mm)			Assembly Figure	Approx. Acid Volume (Ltr)
		Length	Width	T. Height		
iB4L-B	4	120	70	92		0.30
iB5L-B	5	120	61	130		0.41

## LAYOUT 12 VOLTS



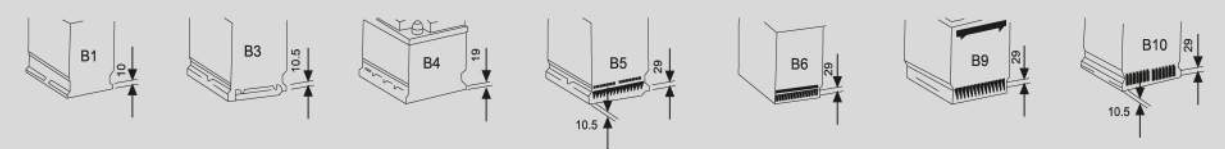
## TERMINAL DESIGN



## REMARKS

- Most batteries are well-equipped with handle.
- The dimension mentioned corresponds to JIS and DIN standards. The products' dimension are in tolerated dimension under JIS and DIN standards.

## BASE HOLD DOWN



## GLOSSARY

- CV : Central Vent
- AH : Amp-hour