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

NGS® BATTERY

VIGOROUSLY LASTING

PT. INDOBATT INDUSTRI PERMAI
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INDOBATT
teruji waktu*
*Averred by Time

Certified Company
Cert No.: 16 100 0609

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

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

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

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

The use of microporous envelope separator in NGS 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.

NGS 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 NGS battery will reduce the overcharge current significantly, reducing the rate at which water is lost during overcharge to produce low maintenance NGS battery as well as improving the stand characteristics.

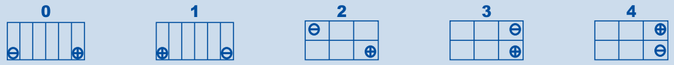
JIS SPECIFICATION

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)
Old Type	New Type				Length	Width	Height	T. Height			
NS40/L	32B20R/L	12	32	247	197	129	203	227	1/0	B	2.8
NS40Z/ZL	36B20R/L	12	35	274	197	129	203	227	1/0	B	2.8
N40/L	-	12	40	280	238	129	203	227	1/0	A	3.4
NS50/L	-	12	45	300	232	172	181	213	1/0	A	5.5
NS60/L	46B24R/L	12	45	325	238	129	203	227	1/0	B	3.0
NS60S/SL	46B24RS/LS	12	45	325	238	129	203	227	1/0	A	3.0
N50/L	48D26R/L	12	50	278	260	173	204	225	1/0	A	4.5
NS50Z/ZL	-	12	55	375	232	172	181	213	1/0	A	5.0
NS50P/PL	-	12	60	420	232	172	181	213	1/0	A	4.5
N50Z/ZL	55D26R/L	12	60	348	260	173	204	225	1/0	A	4.2
-	55D23R/L	12	60	348	232	173	204	225	1/0	A	4.4
NS70/L	65D26R/L	12	65	413	260	173	204	225	1/0	A	4.0
-	65D23R/L	12	65	413	232	173	204	225	1/0	A	4.0
N70/L	65D31R/L	12	70	389	306	173	204	225	1/0	A	5.5
N70Z/ZL	75D31R/L	12	75	447	306	173	204	225	1/0	A	5.0
NX120-7/L	95D31R/L	12	80	622	306	173	204	225	1/0	A	4.9
N100/L	95E41R/L	12	100	512	410	176	213	223	1/0	A	6.6
N100Z/ZL	105E41R/L	12	105	577	410	176	213	233	1/0	A	6.2
NS120/L	115E41R/L	12	115	651	410	176	213	233	1/0	A	6.0
N120/L	115F51R/L	12	120	638	505	182	213	257	4/3	A	9.1
NS150/L	145F51R/L	12	135	780	505	182	213	257	4/3	A	8.9
N135/L	-	12	135	820	508	222	213	257	4/3	A	11.4
N150/L	145G51R/L	12	150	754	508	222	213	257	4/3	A	11.0
N180/L	-	12	180	900	521	278	220	270	4/3	A	14.5
N200/L	190H52R/L	12	200	924	521	278	220	270	4/3	A	14.0
NX400-20/L	245H52R/L	12	245	1532	521	278	220	270	4/3	A	12.5

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



DIN SPECIFICATION

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
Type	Central Vent Type				Length	Width	T. Height					
53520	-	12	35	150	197	129	227	0	B	2.5	-	-
53521	-	12	35	150	197	129	227	0	A	2.5	-	-
53522	-	12	35	150	200	128	224	1	B	2.5	-	-
53621	53646	12	36	175	208	175	175	0	A	2.7	B4	-
53653	-	12	36	175	208	175	175	0	A	2.7	B1	CV
54045	-	12	40	220	208	175	175	0	A	2.5	B4	CV
54312	54317	12	43	200	208	175	175	0	E	2.5	B3	-
54315	-	12	43	210	208	175	175	0	E	2.7	B3	-
54434	54459	12	44	210	208	175	190	0	A	3	B3	-
54449	54464	12	44	210	208	175	190	1	A	3	B3	-
54459	-	12	44	210	208	175	190	0	A	3	B3	CV
54464	-	12	44	210	208	175	190	1	A	3	B3	CV
54523	-	12	45	190	238	129	227	0	A	3.8	-	-
54524	-	12	45	190	238	129	227	1	A	3.8	-	-
54533	54519	12	45	220	240	175	175	0	A	3.7	B4	-
54551	-	12	45	190	238	129	227	1	B	3.8	-	-
55040	-	12	50	265	240	175	175	0	A	3.5	B3	CV
55414	-	12	54	265	278	175	175	0	A	4.5	B4	CV
55421	-	12	54	300	240	175	175	0	A	3.9	B3	-
55422	-	12	54	300	240	175	175	1	A	3.3	B3	-
55423	55427	12	54	300	240	175	175	0	E	4.4	B3	CV
55523	-	12	55	225	240	175	190	0	E	3.3	B3	CV
55530	55559	12	55	255	240	175	190	0	A	3.8	B3	-
55531	-	12	55	255	240	175	190	0	E	3.8	B3	-
55548	55565	12	55	255	240	175	190	1	A	3.8	B3	-
56048	-	12	60	270	270	173	225	0	A	4.5	B9	-
56049	-	12	60	270	270	173	225	1	A	4.5	B9	-
56068	-	12	60	240	232	173	225	0	A	3.8	-	-
56069	-	12	60	240	232	173	225	1	A	3.8	-	-
56216	56219	12	62	280	240	175	190	0	A	3.4	B3	-
56318	-	12	63	300	278	175	175	0	A	3.7	B4	CV
56323	-	12	63	360	278	175	175	0	E	4	B3	CV
56420	-	12	64	380	278	175	175	0	A	4	B4	CV

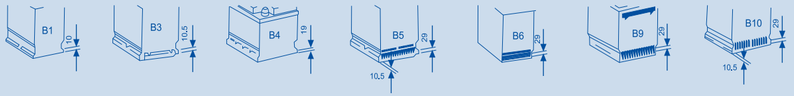
Battery Type (DIN)		Voltage	Capacity at 20 Hr Rate (AH)	Cranking Ampere at-18° C (Amp)	Max. Overall Dimension (mm)			Cell Lay-Out	Terminal Design	Approx. Acid Volume (Ltr)	Base Hold Down	Remarks
Type	Central Vent Type				Length	Width	T. Height					
56530	-	12	65	320	278	175	175	0	A	4.2	B3	CV
56618	56638	12	66	300	278	175	190	0	A	4.5	B3	-
56619	-	12	66	300	278	175	190	0	E	4.2	B3	-
56633	-	12	66	300	278	175	190	1	A	4.5	B3	CV
56818	-	12	68	400	278	175	190	0	E	4	B3	CV
56821	-	12	68	400	278	175	175	0	E	4	B3	CV
57024	-	12	70	315	270	173	225	1	A	4.2	B9	-
57029	-	12	70	315	270	173	225	0	A	4.2	B9	-
57217	57220	12	72	420	278	175	190	0	A	4.2	B3	-
57218	-	12	72	420	278	175	190	0	E	4.2	B3	CV
57512	-	12	75	280	306	173	225	0	A	5	-	-
57513	-	12	75	280	306	173	225	1	A	5	-	-
58024	-	12	80	300	278	175	190	0	A	4.3	B3	-
58815	58827	12	88	395	353	175	190	0	A	5.2	B3	-
59216	59217	12	92	450	353	175	190	0	A	5.3	B3	-
59218	-	12	92	450	353	175	190	0	A	5.5	B3	CV
59615	-	12	96	360	344	171	234	0	A	6	-	-
60026	-	12	100	360	410	172	237	0	A	6.1	-	-
60035	-	12	100	360	410	172	237	1	A	6.1	-	-
60038	-	12	100	500	353	175	190	0	A	6.1	B3	CV
62034	-	12	120	420	513	189	223	3	A	8.5	-	-
62038	-	12	120	420	513	189	223	4	A	8.5	-	-
64020	-	12	140	460	513	189	223	3	A	9.4	-	-
64317	-	12	143	540	514	223	223	3	A	11	-	-
66514	-	12	165	540	514	223	223	3	A	11.7	-	-
67018	-	12	170	600	514	223	223	3	A	11.6	-	-
68021	-	12	180	570	518	276	240	3	A	11.5	-	-
68034	-	12	180	600	514	223	223	3	A	11	-	-
70027	-	12	200	630	518	291	240	3	A	11.5	-	-
70029	-	12	200	630	518	291	240	4	A	11.5	-	-
71014	-	12	210	700	518	291	240	3	A	11.3	-	-
73011	-	12	230	745	518	291	240	3	A	11.2	-	-

TERMINAL DESIGN

REMARKS

1. Most batteries are well-equipped with handle.
2. 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