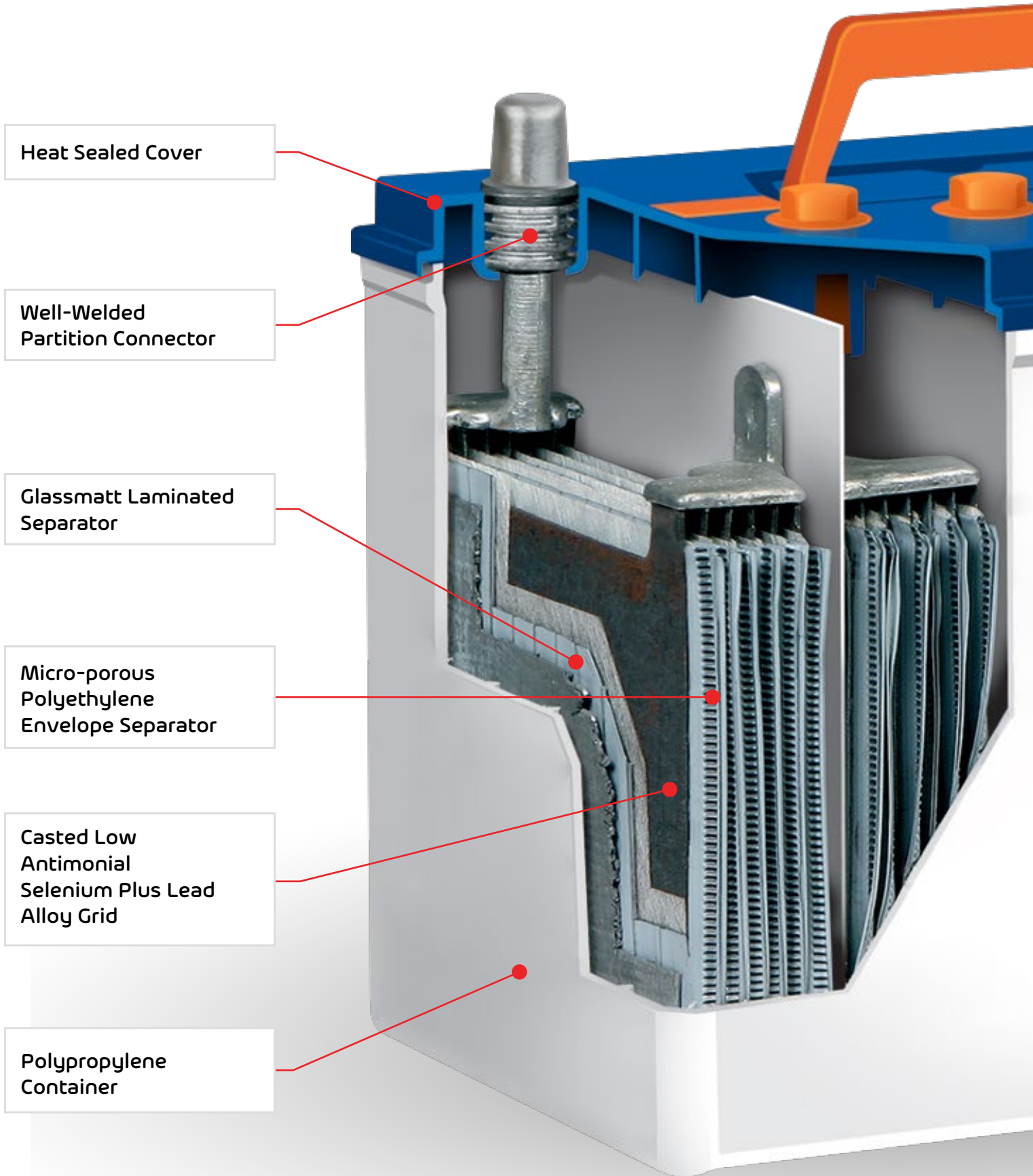


New Indobatt

Battery Construction





Polypropylene Container

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



Heat Sealed Cover

- Prevent the electrolyte contamination
- Add strength & rigidity



Well-welded Partition Connector

- Shortened power path
- Reduce internal resistance



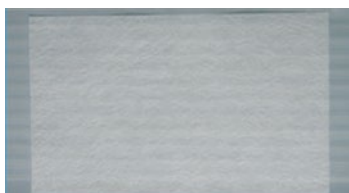
Casted Low Antimonial Selenium Plus Lead Alloy Grid

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



Micro-porous Polyethylene Envelope Separator

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



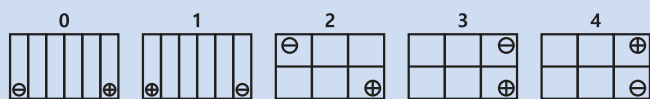
Glassmatt Laminated Separator

The combination of PE & Glassmat Separator is the best fit to improve acid circulation around plates and withstand vibration for heavy duty of road application.

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 | 32B20R/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 | 1/0 | 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 |

CELL LAYOUT

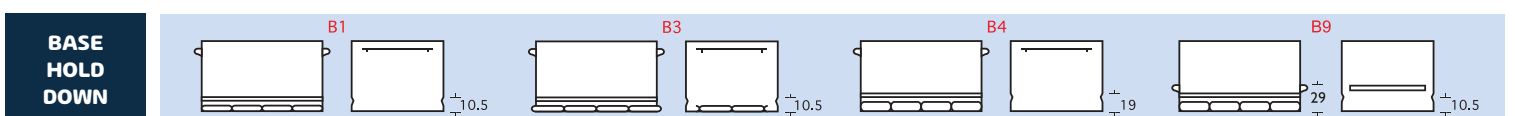


TERMINAL DESIGN



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) | Base Hold Down | Remarks |
|--------------------|-------------------|---------|-----------------------------|---------------------------------|-----------------------------|-------|-----------|--------------|-----------------|---------------------------|----------------|---------|
| Old Type | Central Vent Type | | | | Length | Width | T. Height | | | | | |
| 56420 | - | 12 | 64 | 380 | 278 | 175 | 175 | 0 | A | 4 | B4 | CV |
| 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 | 234 | 0 | A | 5,5 | B3 | CV |
| 59615 | - | 12 | 96 | 360 | 344 | 171 | 237 | 0 | A | 6 | - | - |
| 60026 | - | 12 | 100 | 360 | 410 | 172 | 237 | 0 | A | 6,1 | - | - |
| 60035 | - | 12 | 100 | 360 | 410 | 172 | 190 | 1 | A | 6,1 | - | - |
| 60038 | - | 12 | 100 | 500 | 353 | 175 | 223 | 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 | 233 | 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 | 11,5 | - | - |



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) | Base Hold Down | Remarks |
|--------------------|-------------------|---------|-----------------------------|--------------------------------|-----------------------------|-------|-----------|--------------|-----------------|---------------------------|----------------|---------|
| Old Type | Central Vent Type | | | | Length | Width | T. Height | | | | | |
| 53520 | - | 12 | 35 | 15 | 197 | 129 | 227 | 0 | B | 2,5 | - | - |
| 53521 | - | 12 | 35 | 15 | 197 | 129 | 227 | 0 | A | 2,5 | - | - |
| 53522 | - | 12 | 35 | 150 | 200 | 128 | 224 | 1 | B | 2,5 | - | - |
| 53621 | 53646 | 12 | 36 | 150 | 208 | 175 | 175 | 0 | A | 2,7 | B4 | - |
| 53653 | - | 12 | 36 | 175 | 208 | 175 | 175 | 0 | A | 2,7 | B1 | CV |
| 54045 | - | 12 | 40 | 175 | 208 | 175 | 175 | 0 | A | 2,5 | B4 | CV |
| 54312 | 54317 | 12 | 43 | 220 | 208 | 175 | 175 | 0 | E | 2,5 | B3 | - |
| 54315 | - | 12 | 43 | 200 | 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 |

REMARKS

1. All batteries are well equipped with handle.
2. The dimension mentioned corresponds to JIS and DIN standards.