

NOVA Energy & Automation



Product Specifications

Specialty Junction Boxes

Model JB

A 3D perspective view of a complex geometric structure. It consists of several interconnected rectangular blocks in shades of blue and grey, creating a series of interconnected volumes and voids. The lighting creates soft shadows and highlights, giving it a three-dimensional appearance.

03 January 2012

Product Description

1. Specialty Junction Boxes

Nova Junction Boxes are custom manufactured by size, material, NEMA rating, and application to provide an exact fit for your installation.

Common materials include (but not limited to): Standard 14 Gauge A36 Galvanized steel, Load Bearing 1/4" Plated Steel, 304 & 316 Stainless Steel, and 12 or 18 Gauge 3003 Aluminum.

Common applications include:

Wall mount boxes optional accessories include flush or surface covers, split cover plate, grommets openings, gasketed cover, hinged cover, locks, and internal dividers.

Load Bearing Floor Boxes optional accessories include split cover plate, grommets openings, gasketed cover, Hinged Cover, Locks, and internal dividers.

NEMA Ratings: Each box can be manufactured as NEMA 1, NEMA 3R, NEMA 4X, NEMA 12

ETL listed to UL 870 standards to conform to NEC.

2. Part Number Nomenclature

| Nomenclature | JB | LL | WW | HH | CC | XX | YY | ZZZ |
|--------------|--------------|--------|-------|--------|-------|----------|----------|----------|
| Description | JUNCTION BOX | LENGTH | WIDTH | HEIGHT | COVER | OPTION 1 | OPTION 2 | OPTION 3 |
| example | JB | 06 | 06 | 04 | FC | SP | DV | GO |

3. Enclosure Size

Length, Width, and Height can be fabricated to any specified size, the standard product list (note 8) includes commonly fabricated sizes. Custom fabrication can be made up to 1/8" tolerance.

4. Cover Specification

Surface mounted covers (SC) are measured to the exact length and width of the box.

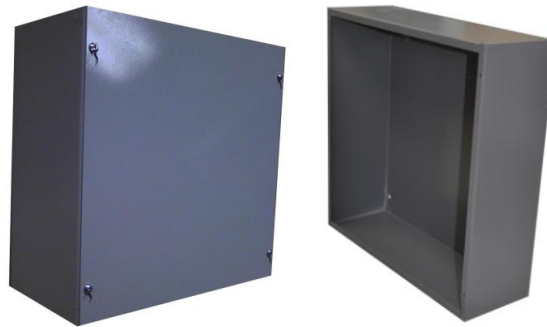


Figure 1: Surface Mount Enclosure

Flush mounted covers (FC) provide an overlap around the box to assist with installing boxes in drywall. A flush cover will be 2" wider and 2" longer than in surface mount cover



Figure 2: Flush Mount Enclosure

Floor box covers (FL) provide a 1/4" plated steel load bearing cover. The floor box specification also includes welded seams to resist moisture.



Figure 3: Load Bearing Floor Boxes

Hinged covers (HC) are provided with a stainless steel piano hinge continuously across the length of the box.

5. Option 1 Specifications (XX)

Split cover (SP) is an option available which provides a 2 piece cover plate to assist with routing multiple cables in a single box.



Figure 4: Split Cover Enclosure

Aluminum (AL) is a material option which provides an complete non ferrous enclosure (including hardware) for use in MRI installations.



Figure 5: Aluminum Enclosure

Stainless Steel (SS) is a material option typically used in outdoor or industrial applications. The stainless steel specification also includes welded seams to resist moisture.

6. Option 2 Specifications (YY)

Internal Divider (DV) or 2 internal dividers (2DV) can be added to any box to assist with separation of cables.

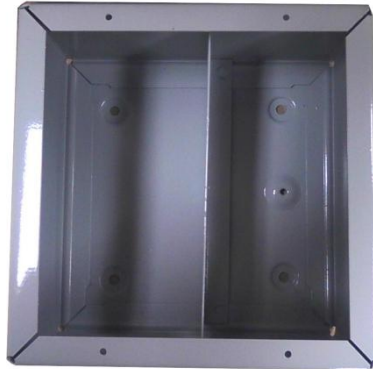


Figure 6: Divided Enclosure

Nema 3R (3R) is an application specification which provides an overlapping cover and gasketing for use outdoors.

Nema 4X (4X) is an application specification combined with a stainless steel enclosure this provides gasketing, no holes, additional mounting brackets, and welded seams for use in applications that regularly washdown or are corrosive.

Nema 12 (12) is an application specification which provides gasketing, no holes, additional mounting brackets, and welded seams for use in applications that protect wire against exposure to oil and other contaminants.

7. Option 3 Specifications (ZZ)

Grommet Opening (GO) provides a cut out in the cover of the enclosure. The edges of the cut out are wrapped with grommet material to protect wires from damage.

Locking Cover (LC) replaces the standard screw hardware with a 1/4 turn key locking mechanism.

8. Standard Product List

| Length | Base Part Number | Cover | Option 1 | Option 2 | Option 3 |
|--------------|------------------|------------------|--------------|-----------------------|----------|
| Nomenclature | JB LL WW HH | CC | XX | YY | ZZ |
| 4" | JB040202 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 4" | JB040404 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 4" | JB040804 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 6" | JB060604 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 6" | JB060606 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 8" | JB080804 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 8" | JB080806 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 8" | JB080808 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 8" | JB081616 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 8" | JB082206 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 9" | JB091506 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 10" | JB100604 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 10" | JB100804 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 10" | JB101004 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 10" | JB101006 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 12" | JB120606 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 12" | JB120806 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 12" | JB121204 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 12" | JB121206 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 12" | JB121208 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 12" | JB121210 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 12" | JB121212 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 12" | JB121216 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 12" | JB121218 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 12" | JB121604 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 12" | JB121606 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 14" | JB141404 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 14" | JB141406 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 16" | JB160808 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 16" | JB161604 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 16" | JB161606 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 16" | JB161608 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 16" | JB161610 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 16" | JB161612 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 18" | JB180604 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 18" | JB181004 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 18" | JB181006 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |
| 18" | JB181206 | - FC, SC, FL, HC | - SP, AL, SS | - DV, 2DV, 3R, 4X, 12 | - GO, LC |

| | | | | | | | | | |
|--------|----------|---|----------------|---|------------|---|---------------------|---|--------|
| 18" | JB181804 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 18" | JB181806 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 18" | JB181808 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 20" | JB202004 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 24" | JB241208 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 24" | JB241210 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 24" | JB241212 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 24" | JB241608 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 24" | JB241806 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 24" | JB241810 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 24" | JB241812 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 24" | Jb242404 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 24" | JB242406 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 24" | JB242408 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 24" | JB242412 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 24" | JB242418 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 24" | JB243635 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 30" | JB301206 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 30" | JB301608 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 30" | JB303006 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| 36" | JB361206 | - | FC, SC, FL, HC | - | SP, AL, SS | - | DV, 2DV, 3R, 4X, 12 | - | GO, LC |
| custom | | | | | | | | | |

9. Packaging

Materials are packaged with the information necessary to expedite the delivery to the correct person, in the correct room, and in the correct location. All items are individually labelled with Drawing reference notes.

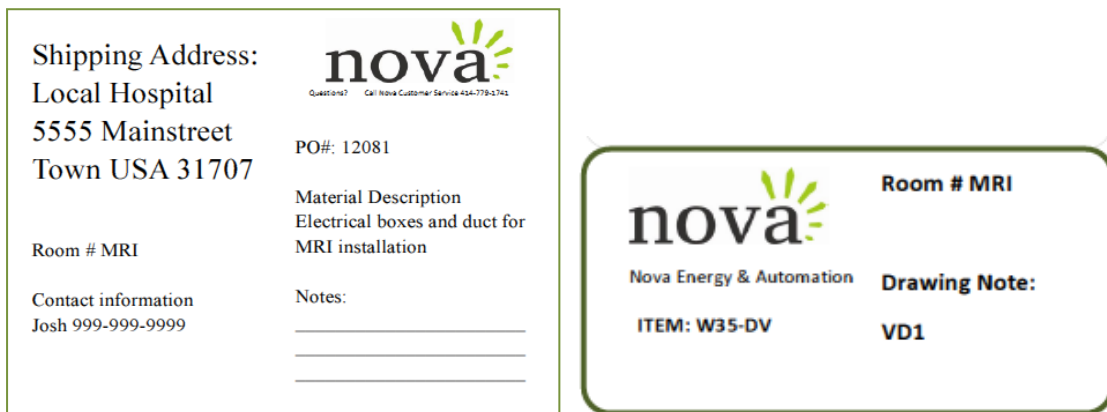


Figure 22: Sample Labels (Pallet and Component)

10. Product Service and Technical Assistance

Nova Automation, LLC
Milwaukee WI 53210
PH# 414-939-6682
Website: www.NovaAutomation.net

11. Warranty

This limited warranty set forth below is given by Nova Automation (“Seller”) with respect to the electrical equipment (“Product”) packaged with this limited warranty. The Product, when delivered to you in new condition in its original packaging, is warranted against defects in materials or workmanship as follows: For a period of three (3) years from the date of original purchase, defective parts or a defective Product returned to a Seller, or its authorized service providers, as applicable, and proven to be defective upon inspection, will be repaired, or exchanged for a new Product, as determined by the Seller, or the authorized service provider.

This limited warranty covers all defects encountered in normal use of the Product, and does not apply in the following cases: Loss of or damage to the Product due to abuse, mishandling, alteration, accident, electrical current fluctuations, failure to follow operating, maintenance or environmental instructions prescribed by Seller, failure to follow Sellers installation instructions, or service performed by someone other than Seller or its authorized service provider.

Nova assumes no responsibility for labor or freight costs incurred in connection with the installation, removal, or replacement of products determined to be defective or any consequential or incidental damages arising from the use of the product. Nova Automations entire liability on any claim of loss or damage resulting from a defective product is limited to the replacement of the product.

WARRANTY IS VOID IF PRODUCT IS NOT USED FOR THE PURPOSE FOR WHICH IT WAS MANUFACTURED.