

EJB602212 Junction Box

Installation & Maintenance Information

IF861

SAVE THESE INSTRUCTIONS FOR FUTURE REFERENCE

APPLICATION

The EJB602212 is used indoors or outdoors as a junction or pull box in threaded rigid conduit systems.

EJB602212 junction box is UL Classified and CSA Certified for Class I, Groups C&D; Class II, Groups E,F,G; and Class III

hazardous (classified) areas as defined by the National Electrical Code® and the Canadian Electrical Code®, and includes a gasket to meet UL Type 4 (NEMA 4) watertight requirements.

INSTALLATION

⚠ WARNING

Electrical power must be **OFF** before and during installation and maintenance.

1. EJB602212 junction box is furnished with or without drilled and tapped conduit openings. Drilling and tapping of conduit openings is subject to the limitations of maximum size and number of openings as well as spacings. Refer to the following drilling and tapping section. All machining must be done prior to installation.
2. Select a mounting location that will provide suitable strength and rigidity to support the enclosure and all contained wiring and control devices. Figure 1 shows the enclosure mounting dimensions.

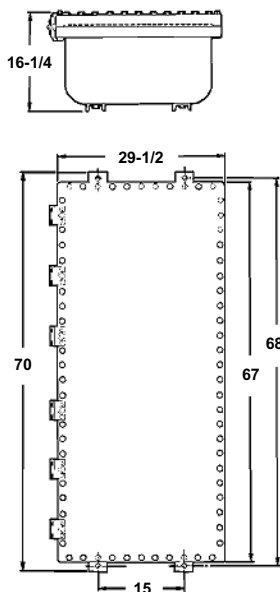


Figure 1

3. Securely fasten enclosure to the mounting location, then attach conduit system. Install approved conduit sealing fittings when required by Section 501-5 and/or 502-5 of the National Electrical Code and other applicable standards.

⚠ CAUTION

- Conduit sealing fittings are required on all conduit entrances (within 18" of the enclosure) when used in Class I, Division 1, Group C hazardous areas. For other sealing requirements, consult the National Electrical Code.
- All unused conduit openings must be closed with approved threaded plugs. Plug must engage a minimum of five full threads and be a minimum of 1/8" thick.

⚠ CAUTION

Use of hammers, screw drivers or other prying tools must not damage flat ground-joint surfaces of the enclosure or cover gasket.

4. Remove all cover bolts and open cover.
5. Pull wires into the enclosure, making sure they are long enough to make the required connections. Make all electrical connections.
6. Test wiring for correctness with continuity checks and also for unwanted grounds with insulation resistance tester.

⚠ CAUTION

Clean both ground-joint surfaces of the body and cover of any accumulated foreign matter before closing. Surfaces must seat fully against each other to provide a proper explosionproof seal.

7. Close cover and securely tighten all cover bolts to 400 inch lbs. torque. Use only bolts supplied with the enclosure.
8. Seal conduits entering the enclosure in accordance to Article 500 of the National Electrical Code.

BREATHER AND DRAIN

Junction boxes installed with breather and/or drain must be protected during hosedown operations. The junction box is watertight but the breather and drain are not.

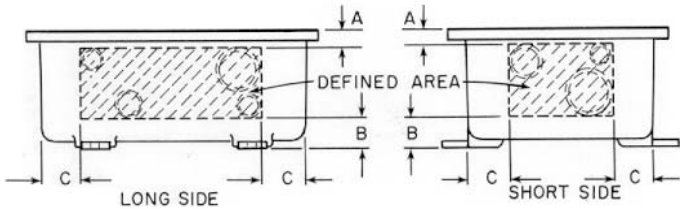
⚠ CAUTION

Check breather and/or drain or their carton label to be certain that they are suitable for the hazardous location (class and group) in which they are being installed.

DRILLING AND TAPPING FOR CONDUIT ENTRANCES

The location and maximum sizes of conduit openings must be in accordance with Table 1.

- Conduit entries must conform to NPT standard. A standard NPT plug gage must enter the tapped opening 1-1/2 turns past the gage notch. Openings are tapped deeper than standard NPT gage to ensure a minimum of five full threads engagement with standard NPT threaded conduit (refer to NEMA FB-1-4.01).
- To comply with National Electrical Code Section 346-8 requirement for a smooth entry of conduit into an enclosure, use Crouse-Hinds LNR conduit liners.



Catalog Number	Maximum Size of Drilled and Tapped Conduit Openings					Outline Dimensions Defined Area						
	Long Side			Short Side		A	B	C				
	No. of Openings	No. of Openings	No. of Openings	No. of Openings	No. of Openings							
EJB602212	1	2	3	4	5	1	2	3	4	2	3-3/8	3-3/8

Table 1

NOTE: When reducers are used, maximum conduit size will be one size smaller than the drilled and tapped opening shown in table.

Trade Size of Conduit (Inch)	Number of Threads per Inch	Maximum Number of Threads
1/2	14	7
3/4	14	7
1	11-1/2	8
1-1/4	11-1/2	8
1-1/2	11-1/2	8
2	11-1/2	8
2-1/2	8	9
3	8	9
3-1/2	8	9
4	8	9
5	8	9
6	8	9

Table 2

The minimum center-to-center distance of drilled and tapped conduit openings for conduit using reducers, conduit bushings and/or unions not directly adjacent to each other must be in accordance with Table 3.

CAUTION

- Additional spacing may be required if conduit fittings are located adjacent to each other.
- If reducers are used, the spacing is to be based on the trade size of the outside thread of the reducer, not the trade size of the conduit.

Conduit Size	DRILLED AND TAPPED CONDUIT OPENINGS MINIMUM CENTER-TO-CENTER DISTANCE (IN.)												
	1/2	3/4	1	1-1/4	1-1/2	2	2-1/2	3	3-1/2	4	5	6	
1/2	1-1/2												
3/4	1-5/8	1-3/4											
1	1-3/4	1-7/8	2										
1-1/4	2	2-1/8	2-1/4	2-1/2									
1-1/2	2-1/8	2-1/4	2-3/8	2-5/8	2-3/4								
2	2-3/8	2-1/2	2-5/8	2-7/8	3	3-1/4							
2-1/2	2-3/4	2-7/8	3-1/8	3-1/4	3-3/8	3-5/8	3-7/8						
3	3-1/8	3-1/4	3-3/8	3-1/2	3-5/8	4	4-1/4	4-5/8					
3-1/2	3-3/8	3-1/2	3-5/8	3-7/8	4	4-1/4	4-1/2	4-7/8	5-1/8				
4	3-3/4	3-7/8	4	4-1/8	4-1/4	4-1/2	4-7/8	5-1/8	5-3/8	5-3/4			
5	4-3/4	4-7/8	5	5-1/8	5-1/4	5-1/2	5-3/4	6-1/8	6-3/8	6-5/8	7-1/4		
6	5-1/4	5-3/8	5-1/2	5-3/4	5-7/8	6-1/8	6-3/8	6-5/8	6-7/8	7-1/8	7-3/4	8-1/4	

Table 3

The minimum center-to-center distance of drilled and tapped openings for conduit fittings located immediately adjacent to each other is determined as follows:

1. **For conduit with non-interfering sealing fittings** — The center-to-center distance is the total of: 1/2 the outside diameter (O.D.) of the larger conduit; 1/4 inch clearance; and the turning radius of the sealing fitting used in the smaller conduit.
2. **For conduit with adjacent sealing fittings** — The center-to-center distance is the total of: the turning radius of the smaller sealing fitting; 1/2 the outside diameter (O.D.) of the adjacent sealing fitting and 1/4 inch clearance.
3. **For conduit with adjacent unions** — The center-to-center distance is the total of: the turning radius of both unions; and 1/4 inch clearance.

CAUTION

Sealing fittings must be installed with access allowing the dams to be made and the sealing compound to be properly poured.

WARNING

Always disconnect primary power source before opening enclosure for inspect or service.

MAINTENANCE

1. Frequent inspection should be made. A schedule for maintenance check should be determined by the environment and frequency of use. It is recommended that it should be at least once a year.
2. Perform visual, electrical and mechanical checks on all components on a regular basis.
 - Visually check for undue heating evidenced by discoloration of wires or other components, damaged or worn parts, or leakage evidenced by water or corrosion in the interior.
 - Electrically check to make sure that all connections are clean and tight and that contacts in the components make or break as required.
 - Mechanically check that all parts are properly assembled, and operating mechanisms move freely.
3. Do not attempt field replacement or repair of cover gasket. Instead, remove damaged gasket and continue to use cover without gasket. This will assure safety for use in Class I and Class II hazardous (classified) locations. However, the enclosure **will not** be raintight.

CAUTION

Clean both ground-joint surfaces of body and cover of any accumulated foreign matter before closing. Surfaces must seat fully against each other to provide a proper explosion-proof seal.

All statements, technical information and recommendations contained herein are based on information and tests we believe to be reliable. The accuracy or completeness thereof are not guaranteed. In accordance with Crouse-Hinds "Terms and Conditions of Sale", and since conditions of use are outside our control, the purchaser should determine the suitability of the product for his intended use and assumes all risk and liability whatsoever in connection therewith.