

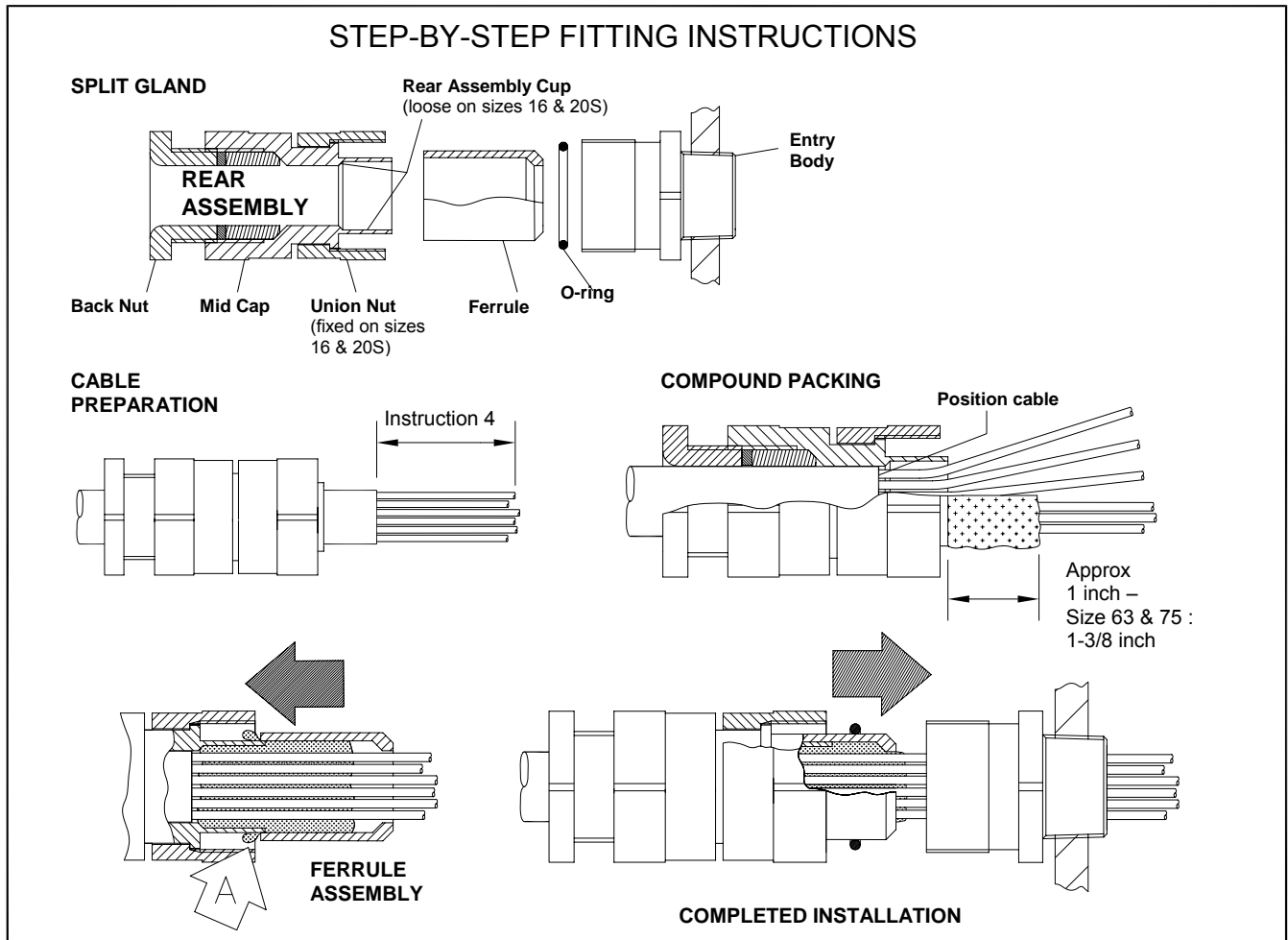


**Brief Description**

Peppers UL-U\*\* Compound-filled cable glands are for outdoor use in the appropriate Hazardous Locations with unarmored Marine Shipboard cables. They give environmental protection Type 4X.

**Warning**

PLEASE STUDY CAREFULLY BOTH PAGES OF THESE INSTRUCTIONS BEFORE INSTALLATION. These glands should not be used in any application other than those mentioned here or in our Data Sheets, unless Peppers states in writing that the product is suitable for such application. Peppers can take no responsibility for any damage, injury or other consequential loss caused where the glands are not installed or used according to these instructions. This leaflet is not intended to advise on the selection of cable glands. Further guidance can be found in the National Electric Code, clause 500



**STEP-BY-STEP FITTING INSTRUCTIONS**

- 1 Split gland as shown
- 2 Fit Entry Body to enclosure using wrench. **Do not exceed max torque for enclosure**
- 3 Slide Rear Assembly (Back Nut, Mid Cap and Union Nut) onto cable as shown. Put Ferrule and O-ring to one side
- 4 **CABLE PREPARATION**  
Strip jacket so that cores are fully exposed in the compound chamber, length to suit installation. Remove protective foils, and any cords/fillers from around and between the cores level with the trimmed jacket. Take care not to cut the insulating sleeves of the cores. Using Listed sleeving, pigtail and sleeve any screens to be passed through compound and Entry Body

**HEALTH AND SAFETY WARNING** The resin used in the compound can cause eye and skin irritation. For your personal protection, wear the gloves supplied while mixing and applying. The uncured compound should not be allowed to come into contact with foodstuffs.  
**A COMPREHENSIVE SAFETY DATA SHEET PROVIDED BY THE COMPOUND MANUFACTURER IS AVAILABLE ON REQUEST**

- 5 Check compound has not passed its "Use By" date. It has a work life of about 45 minutes at 60-80°F (16-27°C), during which time it can be worked and shaped. It gradually stiffens and then hardens. Full cure takes 24 hours at 60-80°F (16-27°C), but takes longer at lower temperatures. E.g. at 40°F (5°C) full cure takes about seven days. Mix the putty and pack the fitting at 68°F (20°C).
- 6 Trim any hardened pieces from ends of stick. Mix the compound by rolling, folding and breaking. Ease mixing by cutting large sticks in half. Fully mixed compound has a uniform yellow color with no streaks
- 7 Support the cable and Rear Assembly. Tighten the Back Nut so that the jacket seal grips the cable slightly. Ensure that the Rear Assembly is positioned so that the cable jacket is just behind the Rear Assembly cup (see diagram). Splay out the cores.

**UL-U\* Marine Shipboard Cable Gland – ASSEMBLY INSTRUCTIONS FOR SAFE USE**

- 8 Starting at the middle, fill the Rear Assembly cup by packing small amounts of rolled-out compound around and between the cores. Re-straighten each core and work outwards until all gaps are filled. Pack around the outside of the outer cores. Push compound down to make sure the Rear Assembly cup is filled.
- 9 Similarly build up compound in and around the protruding cores. Apply the compound in rolled-out strips wherever possible so that unbroken layers are formed. Where joins occur in the fill or there are suspected holes, work the compound together to ensure a gas-tight seal. The cylinder of compound should project approx 1 in (or 1½ in for sizes 63 & 75 - see diagram). Retrieve Ferrule and pass it over cores. Locate and press Ferrule onto Cone, and remove squeezed-out compound (arrow A). Pass cores through O-ring and Entry Body. Fit O-ring over Ferrule. Engage Ferrule in Entry Body and screw on Union Nut. Tighten with wrench to close up the Ferrule Assembly
- 10 Slacken off Union Nut to inspect Cable Unit. Where the cores exit the Ferrule, projecting compound must not foul the Entry Body. Bundle cores with cable-tie, cord or tape so they are not disturbed. Leave to cure. Cores may be disturbed after 1 hour.
- 11 Re-assemble Cable Unit to Entry Body and tighten Union Nut using wrench. Hold Mid Cap with wrench and tighten Back Nut onto cable. Ensure jacket seal makes full contact with cable, then tighten Back Nut 1 extra turn.

**Gland trade sizes, cable sizes (inch) & construction**

Gland Size	Trade Size	Max No of Cores	Jacket size	
			Min	Max
16	½ in	1	0.139	0.331
20S	½ in	4	0.189	0.461
20	½ in	8	0.374	0.551
25	¾ in	16	0.461	0.787
32	1 in	30	0.713	1.035
40	1¼ in	60	0.89	1.268
50S	2 in	5	1.11	1.504
50	2 in	5	1.303	1.736
63S	2½ in	4	1.547	1.972
63	2½ in	4	1.839	2.205
75S	3 in	4	2.059	2.441
75	3 in	4	2.283	2.677

**Installation Guidance**

Point	Advice
1	This product is intended for Marine Shipboard Class I Division 2 Group ABCD applications, using Marine Shipboard cables and installed according to National Electric Code clause 500, US Coast Guard Electrical Engineering Regulations and Ship Safety Electrical Standards.
2	Installation should only be carried out by a competent electrician, skilled in cable gland installation.
3	NO INSTALLATION SHOULD BE CARRIED OUT UNDER LIVE CONDITIONS.
4	Once installed do not dismantle except for occasional inspection. The gland is not serviceable and spare parts are not supplied.
5	Parts are not interchangeable with any other design. If manufacturers' parts are mixed, certification will be invalidated.
6	Do not damage enclosure entry threads on assembly. Check the number of full turns of thread engaged is 5 (8 for parallel threads)

**Interpretation of Markings.** Markings on the outside of this gland carry the following meanings: -

Cable Gland Type & Size	
UL	Product range
U	Barrier gland for unarmored cable with jacket seal Cable Seal Type :- Epoxy resin-based cement
B	Main component material : B = brass; S = stainless steel
20S	Gland size
1/2NPT	Trade size
4X	Ingress and corrosion protection rating

Hazardous Location codes	
CLI DIV2 ABCD	Ignitable gas mixtures present which can include:- Group A – acetylene; Group B – hydrogen; Group C – ethylene; Group D - propane
-25 +85°C	Operating temperature range -25°C to +85°C (-13°F to +185°F)