

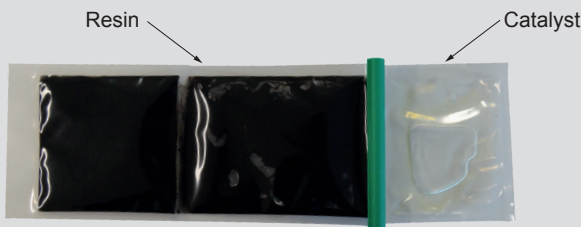
## Potting materials and instructions for In-Line and Plug configuration

### EPOXY RESIN POTTING MATERIAL

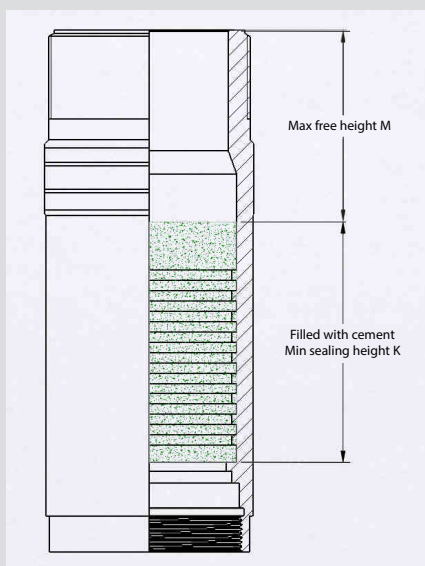
Glenair ITS-Ex series connectors equipped with an Ex barrier gland do not require potting. All other configurations, including mechanical cable clamp, basket weave backshell, and fixed flange receptacles must be potted for Ex certification. Connectors are supplied with a 2-part epoxy resin material for this purpose. This cement is both flame retardant and thermally conductive, fully cures at room temperature in 24 hours, and hardens after 4 hours. The material has a mix ratio by weight equal to 100 parts of resin to five parts of activation catalyst. The material is supplied in pre-measured flexible packs. It is the operator's responsibility to evaluate whether any caustic chemicals or other aggressive substances present in the facility might damage the performance of the potting material.

### MIXING INSTRUCTIONS

1. Check expiration date of potting material before proceeding
2. Wear appropriate eye protection
3. Connector and cable should be fully terminated and prepped for potting prior to material mixing
4. Follow all flexible pack mixing instructions, note mixing time is approximately 5 minutes



Fill Depth Illustration and Table



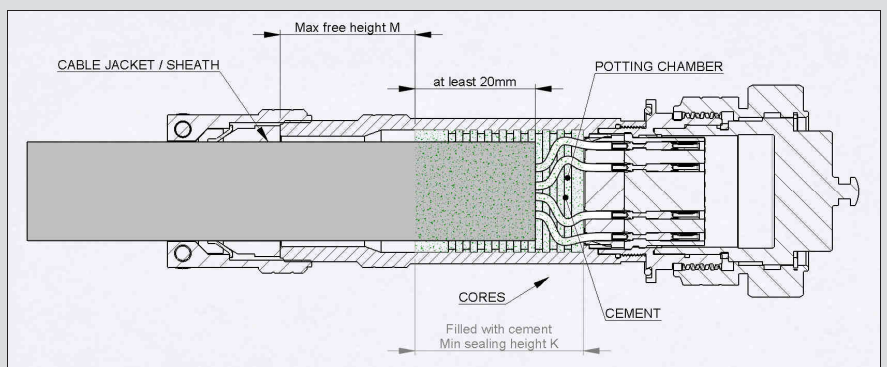
1. Remove the clip from plastic pouch.

2. Apply pressure to mix resin and catalyst.

3. Mix thoroughly on table edge or any 90 degree surface until well mixed.

4. Cut corner and dispense.

Illustration of Fill Depth in relation to Jacketed and Stripped Cable zones



Shell Size	36	28	18	16	10SL
Min sealing height K [mm]	61	60	57	60	32
Max free height M [mm]	65	48	23	18	23

## Potting materials and instructions for Panel Mount configuration

### POTTING INSTRUCTIONS

All sizes adapters (backshell) of this configuration, must be filled with cement (potted).

The material exclusively certified for use in filling this connector is the bi-component epoxy resin supplied with connector.

### WARNING

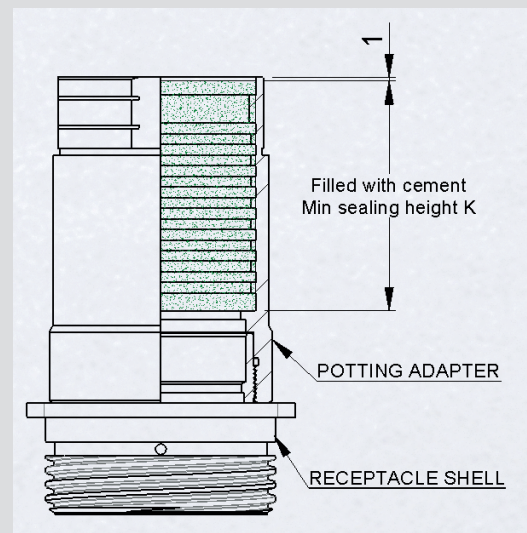
Do not use other cement than that supplied with connector.

Bulkhead adapter for panel mount receptacle should be filled to within about 1mm of the top. Potting flush with end of adapter is acceptable; care must be exercised so that the potting compound does not contaminate the bulkhead threads, or spill onto surfaces of the receptacle flange.

The goal is to have all the volume filled without interrupting the cable grommet from seating when the strain relief nut is installed.

Shell Size	36	28	16	14S	10SL
Min sealing height K [mm]	65	65	58	34	37

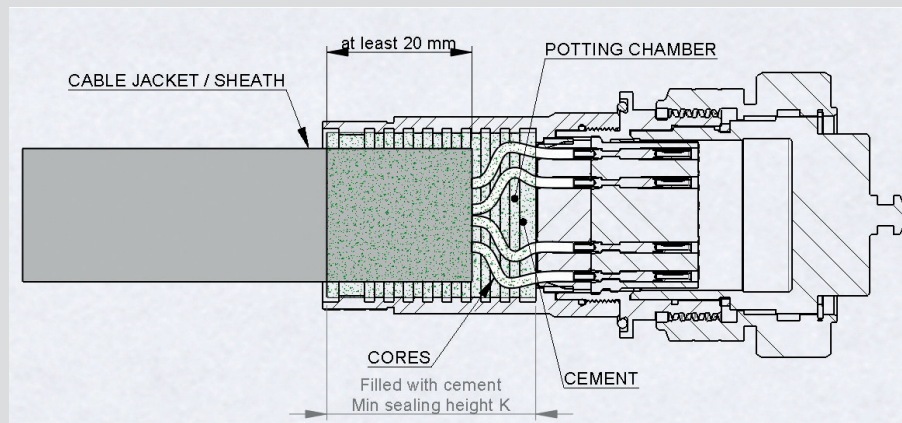
Potting/Cable adapter (backshell), filling depth



Verify the reached level of potting while curing to meet recommended end limits as shown in pictures above; potting is critical to assure explosion proof barrier.

The sealed length part of cable jacket and cores inside potting would be as follows.

Sealed length part of cable jacket / sheath and cores inside potting

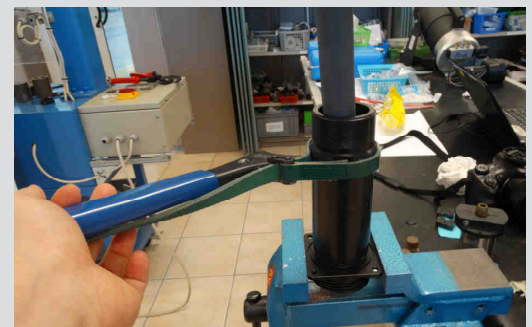


## Potting materials and instructions

### POTTING CHAMBER TO CONNECTOR ASSEMBLY

See ITS-Ex instruction manual D500500000 for In-Line and D500500002 for Panel Mount version, for best practice recommendations on connector termination, wiring, and assembly. Prior to completing potting step, properly assemble mechanical cable clamps, basket weave backshells, and cable glands to ITS-Ex series connectors follow these instructions.

1. Mount receptacle connector or plug body in an appropriate fixture such as a vice with smooth face or soft jaws (see illustration, right).
2. Apply thread locking compound (Loctite 242 blue or equivalent) to all backshell-to-connector threads.
3. Hand-tighten backshell accessory to connector.
4. Use a strap wrench or correctly sized flat wrench to tighten accessory fitting to connector according to torque values referenced in instruction manual D500500000 for In-Line and D500500002 for Panel Mount version (see illustration, right).



### POTTING INSTRUCTIONS

1. Use only Glenair supplied 2-part epoxy resin for potting of ITS-Ex series connectors.
2. Fill potting chamber area behind wire terminations to the volume depths recommended in the illustrations and tables on opposite page. The goal is to fill as much of the potting area as required with material but to not inhibit the action and the performance of the cable sealing gland, follower, and clamp.
3. Glenair recommends when potting mated pairs of Series ITS-Ex connectors, always pot the connector with the female (socket) insert first. Once the socket side is set, backpot the male (pin) insert connector while mated with its corresponding pair. This will ensure correct axial alignment of the pin contacts in relation to socket contacts.
4. Throughout the potting process, the receptacle flange should be rigidly fixed in a vertical position as illustrated below. The fixture must be capable of holding the mated connector pair rigidly for a minimum of 4 hours at room temperature. The exiting conductor / cable should be fixed in line above the connector pair during the entire curing process.
5. Cut a corner of the cement flexible pack and completely fill a needle-equipped syringe applicator (for more information, please contact the factory).
6. Fill the potting chamber to the recommended depth, being careful to fill progressively from the wire grommet end towards the mouth of the backshell. Cement volume usage is approximated in the table below.



Shell Size	Approx. cement usage in a cable adapter
10SL	14.5 grams, about 0.50 ounces
14S	16 grams, about 0.56 ounces
16	50 grams, about 1.76 ounces
18	62.5 grams, about 2.20 ounces
28	110 grams, about 3.90 ounces
36	173 grams, about 6.10 ounces