Replaceable Sealing Element for BIW Surface Connectors





Sealing system ensures optimal performance

When surface connectors are installed, cables are often installed in conduit or are buried in the ground. It can be time consuming to remove and replace these cables. If Surface Connectors appear to be in good condition, they are sometimes re-used.

The face of the surface connector can be easily inspected to ensure that it is clean, dry, and free of damage or distorted sealing cones. Should the connector face exhibit damage or distortion, then it will not be re-used. The seal that keeps moisture out of the connector interface is located under the coupling ring. This seal can be difficult to inspect.



The surface connector's bronze coupling ring (shown above) has been removed to show the bronze connector body and the Removable Seal Element (steel color)

BIW connectors that have previously been supplied with Lip Seals. Many connectors with lip seals have recently been modified, and the rubber molded lip seal has been replaced with a metal Replaceable Sealing Element ("RSE"). Surface Connectors supplied with RSE's are completely interchangeable with lip seal connectors.

Each RSE has three O-ring seals. One outer O-ring provides sealing between the RSE and the surface connector housing; two inner O-rings provide sealing to the top lip on the metal shell of the mating wellhead feedthru penetrator.

New surface connectors come with the RSE and sealing O-rings factory installed. RSE kits are supplied with the replaceable sealing element, with pre-installed O-ring seals, and the removal and installation tool.

The photo on the right shows the Replaceable Sealing Element (RSE).
[1] The thread engages with the metal body of the surface connector.

- [2] The O-ring on the outside provides sealing to the shell.
- [3] The two O-rings on the inside surface will seal to the lip on the wellhead penetrator.
- [4] The indented notches on the left edge engage with a special tool.
- [5] This tool allows the used RSE to be removed and a new RSE installed.





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Remove Seal Element



Insert RSE Tool and use a wrench to loosen the seal element.



Once the Seal Element has been loosened with a wrench, it can be unthreaded by hand.

Replace Seal Element



Using the RSE Tool, insert a new Seal Element and thread it by hand.



Use a wrench to firmly tighten the Seal Element.

Please contact BIW for the part number of RSE Kit for your surface connector

