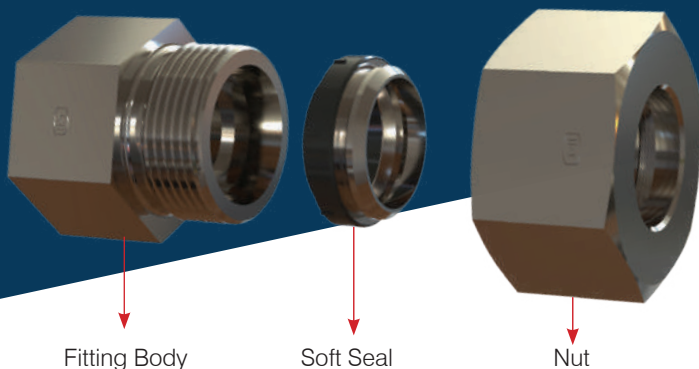


# SOFT SEAL FITTINGS

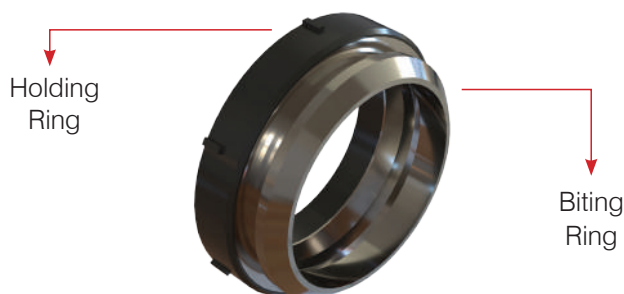


## Application

Hytech has designed a Soft Seal for metric tubes that are compatible with fittings based on standards like DIN 2353/ISO 8434-1 and available in 'L' and 'S' series. Soft Seal can be used in applications of up to 800 bar (S series) and 500 bar (L series).

## Construction

Soft Seal is made of two different rings combined, 1) Support Ring and 2) Biting Ring. Before assembly condition, there is a gap between these two rings. The tightening of the nut ensures the biting ring moves in an axial direction resulting in the closure of this gap. Overtightening is prevented by the special geometry of these two rings. Two separate rings altogether form an effective solution and hold the pressure. The Key feature of soft seal fittings is the elastomeric seals at all joints. The compression ratio of the elastomeric seal is designed in such a way that it assures an airtight sealed tube joint once assembled. This seal effectively compensates manufacturing tolerances between the tube and fitting cone. Unlike a conventional ferrule joint, a Soft Seal avoids leakage caused by dirt or scratches on the tube.

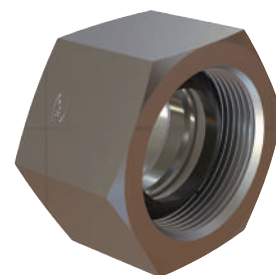


## Advantages

- Low tightening torque.
- Allowing the use of thin-walled tubes, reducing the overall system cost
- Re-usability/remake ability– replacement of support ring after service life or periodic maintenance frequency to continue the use of the Softseal.
- Available in Viton -SS combinations suitable for extreme weather conditions.
- Interchangeability with metric ferrules; keeping standard fitting common one can replace Ferrule and Nut from the conventional system.
- Better anti-loosening performance
- No special training is needed for the assembly of the ferrule, current assembly technicians can easily adapt.

## Soft Seal Functional Nut

The holding and biting rings are combined as a pair and are inserted into the internal thread of the nut; the tight assembly feature ensures they don't fall out. The holding ring and biting ring should not be lost or assembled in the wrong orientation, Assembly with the functional nut ensures correct orientation without getting loosened away by nominal forces. The functional nut is available in different material combinations as per Seal



- Carbon steel (Cr6 free plating) with NBR Soft Seal
- Stainless steel with Viton Soft Seal

## HY-TECH ENGINEERS LTD.

### Corporate Office & Plant

A-160 Main Road, Wagle Industrial Estate, Thane 400 604, India.  
Email: [marketing@hytechgroup.com](mailto:marketing@hytechgroup.com)  
Phone: 91-22-4097 1922

[www.hytechgroup.com](http://www.hytechgroup.com)

**Pune Plant 1:** Gut No. 325/326, Mumbai Bangalore Highway, Sangavi Road, Shirwal, Tal. Khandala, Dist. Satara 412 801 (Maharashtra).

**Pune Plant 2:** 26/1/1, Kawthe, Taluka Khandala, Dist. Satara 412 801 (Maharashtra).

**Pithampur Plant:** Plot No. 531 A & B Sector III, Pithampur, Dhar 454 774 (MP).

**Nashik Plant:** K-6, Ambad-Uttam Nagar Road, MIDC Ambad, Nashik 422 010 (Maharashtra).

**USA Warehouse:** 14501, Charter Walk Lane, Midlothian VA 23114, Virginia, USA.