**Flexible, all stainless-steel union, with bi-labial dynamic sealing mechanism for the connection and repair of drinking water pipes.**

1. **Definitions and use.**

Flexible HERMETICA type unions are joints for the connection and repair of pipes made of any kind of material (asbestos cement, cast iron, steel, GRP, PVC, PEAD, etc...)\* that can be opened completely and that warranty tightness through their bi-labial sealing mechanism. These flexible connections are indicated for pipe networks that transport raw water, potable water and waste water.

Applications are:

* Connection and installation of:
  + Pipes (of the same or different material)
  + Accessories of regulation and shutting down.
  + Accessories of instrumentation.
  + Pieces of metal work.
* Pipe repair.
  + Cracks, perforations, transversal sections with angular offset, displacements.

1. **Material specifications:**
   1. CASING: Stainless steel AISI-304L (or stainless steel AISI-316L). The reinforcement sheet, located in the area of the locks, is welded to casing by electrofusion. The casing will never be perforated to fix its elements. On it, its reference is imprinted with laser to control traceability of the casing and the reinforcement sheet.
   2. SCREWS: Stainless steel AISI-304L (or stainless steel AISI-316L), coated with PTFE. Brass washer under the screw’s head and O-ring to prevent falling out. At least one of the screws has a guiding screw tip, being 30mm longer than the others.
   3. SHAFTS: Massive, in stainless steel AISI-304L (or stainless steel AISI-316L), mechanized for optimal screw head seating. Blocking system on its end by an O-ring.
   4. TIGTHENING SLEEVE: bi-labial EPDM joint according regulation EN 681-1. Certified for the compatibility with potable water according to ACS, WRAS, DM 174:2004, RD 140/2003 regulations. Indelible marking with an identification code. Hardness 70 Shore A.
2. **Configuration.**

LOCKS:

Joints from 60 mm to 88 mm have 1 lock and a width of 135mm and can be opened completely.

Joints from 88 mm to 148 mm have 2 locks and a width of 135mm and can be opened completely.

Joints from 148mm onwards have 2 locks and a width of 200mm and can be opened completely.

Joints from 350mm onwards have 2 locks and a width of 135mm, 200mm or 370mm and can be opened completely.

SCREWS PER LOCK:

In width 135mm, there are two (2) DIN 912 units per lock.

In width 200mm, there are three (3) DIN 912 units per lock.

In width 370mm, there are five (5) DIN 912 units per lock.

NOMINAL WIDTH:

Standardized widths are: 135mm, 200mm and 370mm.

1. **Tolerances**

* Warranty of use with any diameter: The joints that are offered should be available for any outside diameter from 60mm onwards.
* Overlapping of diameters: Will not be higher than 2mm between references.

1. **Identification.**

Each flexible union will bear the following information for identification:

* Manufacturer’s code or reference.
* Working range of diameters.
* Working pressure rating (bar/psi).
* Test pressure = 1.5 times working pressure rating (bar/psi).
* Torque (Nm / Lbf/in)
* Quality of the components.
* Fitting instructions.
* Traceability system.
* Manufacturer’s name and number of identification.