

## SPECIFICATIONS

FITTINGS	
<b>Housing</b>	Precision cold formed austenitic 304L stainless steel
<b>O-ring seal</b>	Material: "E" = EPDM , temperature range from -34°C to 110°C "V" = Viton , temperature range from -7°C to 149°C
<b>Pressure rate</b>	12.70 mm – 38.10 mm till 20 bar, 50.80 mm till 17 bar
<b>Dimensions</b>	12.70 x 1.24 to 50.80 x 1.65 for tubes and fittings
<b>Helium leak test</b>	Guaranteed leak rate of $1 \times 10^{-7}$ scc/sec He, 100% of the welded fittings are Helium leak tested
<b>Cleaning / Packing</b>	Fittings and tubes are cleaned for O <sub>2</sub> service and individually bagged

## TUBES

EVANS / DOCKWEILER 304L PLHT SERIES STAINLESS STEEL TUBES	
<b>Material</b>	Seamless or welded stainless 304L steel tube, depending of outer diameter
<b>Technical specification</b>	According to ASTM A269/EN 10217-7/EN 10216-6, Length: 5900 mm – 6090 mm (max. 10% short length possible)
<b>Dimensions</b>	12.70 x 1.24 to 50.80 x 1.65 for tubes and fittings
<b>Surface finish</b>	Inner diameter: 0.8 µm; outer diameter: not defined
<b>Treatment of the inner surface</b>	Cleaning and test procedures according to ASTM A632.S3
<b>Test procedures</b>	Verification of basic test certificates, verification of dimensions, visual inspection, measuring of surface roughness, endoscopy of bright finished tubes
<b>Marking</b>	Heat number, manufacturer, material, dimensions
<b>Documentation</b>	Inspection certificate 3.1 according to DIN EN 10204 for the prematerial
<b>Packing / Delivery</b>	Bright finished tubes closed with PE caps and bagged in Polyethylen PE. Delivery in tubular container or wooden crate



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# DOCKWEILER

TUBE SYSTEMS IN STAINLESS STEEL

## EVANS / DOCKWEILER

# PLHT PRESSFIT® TUBING SYSTEM

**INNOVATION IN GAS SUPPLY**



## EVANS / DOCKWEILER PLHT PRESSFIT® TUBING SYSTEM

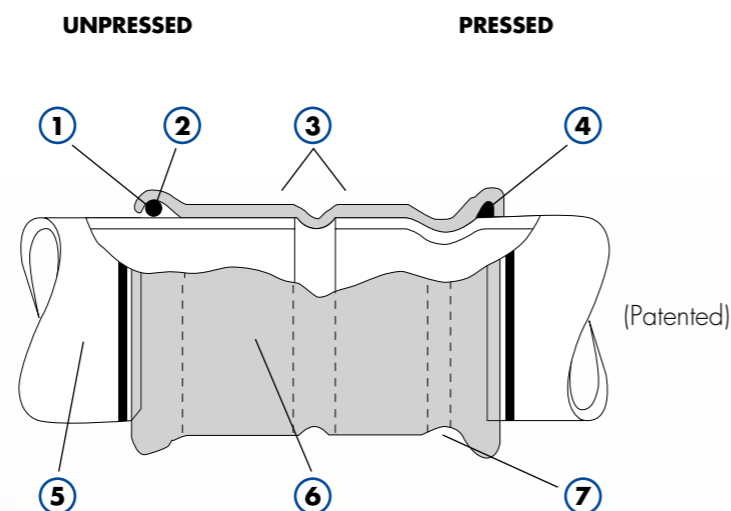
Today, installation companies are forced to offer and install the most economic system for various applications more than ever. The connection of the innovative **PLHT Pressfit® System** with the Dockweiler tube program offers totally new alternatives.

### USE / APPLICATION

Relaxed specifications for semiconductor grade compression air • Utility nitrogen • Argon • Oxygen Hydrogen • Also usable for PV medium purity requirements as well as in analytics

### CONCEPT / CONSTRUCTION

- ① O-ring
- ② O-ring pocket
- ③ Tube stop
- ④ O-Ring
- ⑤ Insertion mark
- ⑥ Housing
- ⑦ Pressfit tool indent



**O-ring** – The precisely molded synthetic rubber o-ring compresses against the outer tube diameter and the inner housing in order to guarantee a lifelong, leak-tight seal.

*Evans PLHT products must be used only on services compatible with o-ring and fitting materials.*

**Lubricant** – The fittings are delivered with o-rings that are lubricated with Evans 111®, a high purity lube. Evans 111® does not contain any hydrocarbons and is oxygen compatible with a vapor pressure rating of 10<sup>-7</sup> secc/sec HE. Therewith, it is ideally suited for the sophisticated applications of the semiconductor, solar, TFT/LCD as well as bio-pharmaceutical industries. The O-ring is guaranteed for total lifetime of installation.

**Tubing** – Dockweiler **TCC** and Vic-Evans 304L CFOS grade tubes guarantee a uniform and high quality press connection during assembly of the system.

**Tube stop** – An integrated inner tube stop determines the exact tube position.

**Housing** – Precision formed of 304/304L stainless steel, the housing incorporates the o-ring and the tube stop. This unique design guarantees a permanent engagement onto the tube after pressing with the Evans PLHT tool has been effected. Using available adapters and space saver fittings, the Evans fitting system allows for easy field makeup of fitting combinations for reduction of mechanical components and space.

**Insertion mark** – Enables visual verification of full tube insertion to ensure proper installation.

*Please note: Mark the tube! Tube end must be inserted into full contact with the tube stop to ensure full joint integrity. Always refer to the latest published "Tool Operation and Assembly Manual", available from Evans free of charge.*

**O-ring pocket** – Sized to contain the o-ring prior to the assembly, the o-ring pocket is deformed around the o-ring during the pressing operation to fully surround and compress it for complete leak-free sealing.

**Pressfit tool indent** – The Evans PLHT tool jaws engage the entire circumference of the bead on the fitting housing and uniformly compress it to indent the tube and provide a secure attachment of the tube to the fitting. The tube must be fully inserted into fitting to achieve proper assembly. The mechanical retention of the joint is given through the press tool indent. The separate o-ring seal is a completely encapsulated static seal. Both work independently of one another.



The Evans PLHT Pressfit System consists of tubes Dockweiler **TCC 304L** or Vic Evans as well as fittings acc. to the specification and a Pressfit tool. The tubes of these two manufacturers have been especially harmonized in material and tolerances to the fittings and thus ensure a uniform compression.

We cannot take over any guarantee for use of tubes originating from other manufacturers.

### ADVANTAGES

- **Fast and economical**
- **Space saving**
- **Usable in cases where welding is a problem**
- **Complete system**

