PLHT - Pressfit® System

Innovation in gas supply

SPECIFICATIONS

FITTINGS	
Housing	Precision cold formed austenitic 304L stainless steel
O-ring seal	Material: "E" = EPDM , temperature range from -34°C to 110°C "V" = Viton , temperature range from -7°C to 149°C
Pressure rate	12.70 mm – 38.10 mm till 20 bar, 50.80 mm till 17 bar
Dimensions	12.70 x 1.24 to 50.80 x 1.65 for tubes and fittings
Helium leak test	Guaranteed leak rate of 1x10 - 7 scc/sec He, 100% of the welded fittings are Helium leak tested
Cleaning / Packing	Fittings and tubes are cleaned for O2 service and individually bagged

Tubes

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

THE EVANS / DOCKWEILER PLHT-PRESSFIT® 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.

ADVANTAGES

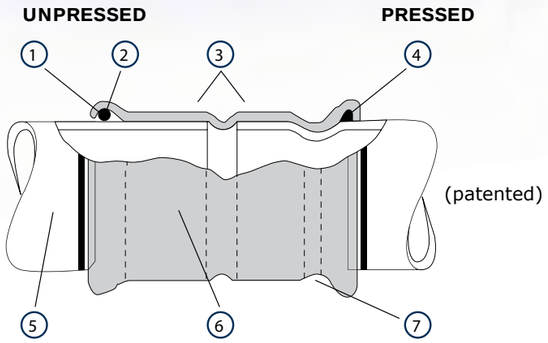
- Fast and economical
- Space saving
- Usable in cases where welding is a problem
- Complete system

USE / APPLICATION

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

CONCEPT / CONSTRUCTION

❶ O-Ring
❷ O-Ring pocket
❸ Tube stop
❹ O-Ring
❺ Insertion mark
❻ Housing
❼ Pressfit tool indent



(patented)

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 - 7 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 isgiven 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.

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