Press Fittings for Metal Pipes

This is a very reliable and fast method and can be applied to the metal pipes used for electro-pneumatic level gauging system.

Press fitting and pipe are pressed to form a very strong and permanent joint. This operation also deforms the factory-fitted seal ring in the end bead to ensure the connection remains tight.

The press fittings are installed by means of an electrical tool, which always gives the same pressing force.

The built-in o-rings guarantees absolute tightness. The fittings are very simple and much cheaper than any other couplings. This, together with very short connection time makes the entire installation very economical.

- Quick and easy installation carried out safely and reliably
- Permanent pipe connections that remain tight
- No fire risk during installation
- Corrosion resistant
- Vibration resistant
- Only one part, no risks for errors
- Automatic pressing by electrical tool, always the same pressing force

The press fittings are available in stainless steel (AISI 316) and copper.

Tool for press fittings

The pressing tool kit is delivered in case and contains:

- Battery powered pressing tool complete with one 12 V battery
- Battery charger 115 / 230 VAC
- Pressing jaws for 12 mm pipe
- Pressing jaws for 22 mm pipe
- Hand cutting tool
- Hand deburrer
- Marker tool

Features:

- Power 12 V, 300W, pressure force 100 kN
- Electronically controlled locking bolt
- Electronic monitoring of press operation with error indication
- Electronic switching to reverse when max pressing force is reached
- Automatic execution of press fitting process
- Force transmission via threaded ball spindle
- Battery for up to 80 press fitting joints
- Battery rapid charge
- Time per press fitting joint approximately 11 seconds

Measures L/W/H 520 / 380 / 180 mm
Weight 10 kg
Cut the pipe to desired length. Use pipe cutter or fine-toothed hacksaw.

Deburr the outside and inside of the pipe.

Mark insertion distance.

Check the o-ring.

Push turning slightly the pipe into the press fitting.

Check the insertion distance before pressing.

Insert jaws to the pressing tool matching the pipe.

Secure the jaws.

Press the fitting.

Prepare next connection.

Minimal distance $L_{\text{min}}$ between press fittings.
Trouble shooting pressing tool

Brief description of LED indicator

x = LED is on (steady)
b = LED flashing
- = LED is off

To rectify following faults, always:
1. Press Stop button (2).
2. Press Start button (1) until piston is fully retracted.

<table>
<thead>
<tr>
<th>Fault signals before press tool could start:</th>
</tr>
</thead>
<tbody>
<tr>
<td>green LED</td>
</tr>
<tr>
<td>-----------</td>
</tr>
<tr>
<td>-</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>b</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fault signals after press tool started and immediately retracted.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note</td>
</tr>
<tr>
<td>green LED</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>b</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fault signals after completing pressing.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note</td>
</tr>
<tr>
<td>green LED</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>b</td>
</tr>
</tbody>
</table>

- Return press tool to Novopress for inspection.

To rectify the following faults, always:
- Press Start button (1) until piston is fully retracted.

<table>
<thead>
<tr>
<th>Fault signals after press tool started.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Note</td>
</tr>
<tr>
<td>green LED</td>
</tr>
<tr>
<td>---------</td>
</tr>
<tr>
<td>- b</td>
</tr>
</tbody>
</table>

Replace Fittings

The press fittings are deformed at installation and cannot be repaired. At leaks or when necessary, cut out the defective fitting and replace by new one. If there is a lack of pipe, for example when the pipe is fixed, exchange the missing pipe by a short piece of new pipe with two fittings on both sides. The new pipe shall be long enough so it can be inserted without applying force.
Burrs must be well removed before press connectors are fitted.