Instructions for installation and operation

Drilling jig

For a later setting up of a measuring place
Dear customer,
Thank you very much for deciding in favour of the drilling jig for setting up a measuring place. Please read this instruction and installation manual carefully before installation and initiation and observe our notes. Only a careful observation of the described instructions and notes grants a proper function of the drilling jig and a riskless operation.

1 Contact
Advice
Sale
Service
Seminars

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2 Safety

Please check whether this manual corresponds with the instruments type. Please observe all notes indicated in this instruction manual. It contains essential information which has to be observed during installation, operation and maintenance. Therefore this instruction manual has to be read categorically by the technician as well as by the responsible user / qualified personnel before installation, initiation and maintenance. This instruction manual has to be available at the operation site of the drilling jig at any time. Regional respectively national regulations have to be observed in addition to this instruction manual if necessary.

In case of any obscurities or questions with regards to this manual or to the instrument please contact BEKO Technologies Corp..

Warning!
Compressed air!
Contact with quickly or abruptly escaping compressed air or bursting parts of the system may cause severe injuries or death.

Measures:
- Do not exceed the maximum operation pressure of 145 psig!
- Wear protective goggles!
- Only use pressure-tight installation material!
- Avoid persons or objects being hit by escaping compressed air!

Warning!
Inadmissible operating parameters!
Undercutting respectively exceeding of limit values may cause danger to persons and material and may lead to functional and operational disturbances.

Measures:
- Make sure that the drilling jig is only operated within the admissible limit values.
- Careful observation of the performance data in connection with the application.

Further safety instructions:
- Installation should only be carried out by authorized qualified persons
- Observe all safety regulations for works at compressed air carrying lines
- The drilling jig has to be mounted pressure-tightly
- Use slowly running drilling machine with corresponding safety installations
- National (safety) regulations have to be observed also during installation and operation
3 Field of application

- The drilling jig is designed for the later setting up of a measuring place in a pressurized line. For the drilling under pressure we recommend two possibilities:
  - Welding of a ½” BSP nozzle for mounting a ball valve
  - Previous installation of a spot drilling collar with ½” BSP ball valve

4 Drilling after welding on a nozzle

1. Weld on the nozzle.

2. Mount the ½” ball valve pressure-tightly

3. Screw-on the drilling jig pressure-tightly onto the ball valve.
   (If necessary remove existing chippings from the drilling jig)
4. Install drilling machine
5. Open ball valve
6. Drill the hole with low speed level. Please observe during drilling: Pull back the drill shortly approx. every 10 seconds so that the chippings are fed to the collection container (sinter filter).
7. When the pipe is drilled through pull back the drill as far as it will go.
8. Close the ball valve
9. Disassemble drilling jig

**Before carrying out the next step please observe implicitly:**
Wear protective goggles!
Attach a compact cloth at the outlet of the ball valve before opening the ball valve for protection against out coming chippings.

10. Open the ball valve once again and blow out the chippings
11. Screw off the sinter filter from the lateral air outlet, take out the chippings and close the air outlet.

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5  **Drilling upon installation of a spot drilling collar**

Installation of the spot drilling collar please see instruction manual “Spot drilling collars“

1. Install spot drilling collar according to mounting instructions
2. Mount ½” BSP ball valve pressure-tightly
3. Screw the drilling jig pressure-tightly onto the ball valve.
   (remove any existing chippings from the drilling jig before doing so)
4. Install drilling machine
5. Open ball valve
6. Drill the hole with low speed level.
   Please observe during drilling: Pull back the drill shortly approx. every 10 seconds so that the
   chippings are forwarded to the collection container (sinter filter).
7. When the pipe is drilled through pull back the drill as far as it will go.
8. Close the ball valve
9. Disassemble drilling jig

Before carrying out the next step please observe implicitly:
Wear protective goggles!
Attach a compact cloth at the outlet of the ball valve before opening the
ball valve for protection against out coming chippings.

10. Open the ball valve once again and blow out the chippings
11. Screw off the sinter filter from the lateral air outlet, take out the chippings and close the air outlet

6 Technical data

<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Diameter of drill</td>
<td>.512&quot; (13.0 mm)</td>
</tr>
<tr>
<td>Length of drill</td>
<td>17.72&quot; (450 mm)</td>
</tr>
<tr>
<td>Material of drill</td>
<td>HSS/ E</td>
</tr>
<tr>
<td>Max. operating pressure</td>
<td>145 psig</td>
</tr>
<tr>
<td>Dimensions</td>
<td>17.72&quot; x 1.58&quot; x 1.77&quot; (450x40x45)mm</td>
</tr>
<tr>
<td>Housing material</td>
<td>Al</td>
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</table>
7 Scope of delivery

**Drilling jig**
Drilling jig including drill Ø13 0530 1108

**Spot Drilling Collar**
incl. ball valve ½" BSP, I/O

<table>
<thead>
<tr>
<th>For pipe outer diameters from – to</th>
<th>Order no.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.02&quot; – 1.18&quot; (026 – 030 mm)</td>
<td>0500 0447</td>
</tr>
<tr>
<td>1.26&quot; – 1.42&quot; (032 – 036 mm)</td>
<td>0500 0446</td>
</tr>
<tr>
<td>1.42&quot; – 1.57&quot; (036 – 040 mm)</td>
<td>0500 0448</td>
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<tr>
<td>1.57&quot; – 1.73&quot; (040 – 044 mm)</td>
<td>0500 0449</td>
</tr>
<tr>
<td>1.89&quot; – 2.05&quot; (048 – 052 mm)</td>
<td>0500 0450</td>
</tr>
<tr>
<td>1.97&quot; – 2.24&quot; (050 – 057 mm)</td>
<td>0500 0451</td>
</tr>
<tr>
<td>2.20&quot; – 2.48&quot; (056 – 063 mm)</td>
<td>0500 0452</td>
</tr>
<tr>
<td>2.28&quot; – 2.56&quot; (058 – 065 mm)</td>
<td>0500 0453</td>
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<tr>
<td>2.64&quot; – 2.91&quot; (067 – 074 mm)</td>
<td>0500 0454</td>
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<tr>
<td>2.87&quot; – 3.15&quot; (073 – 080 mm)</td>
<td>0500 0455</td>
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<tr>
<td>2.99&quot; – 3.27&quot; (076 – 083 mm)</td>
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<tr>
<td>3.23&quot; – 3.50&quot; (082 – 089 mm)</td>
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<tr>
<td>3.43&quot; – 3.70&quot; (087 – 094 mm)</td>
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<td>3.58&quot; – 3.86&quot; (091 – 098 mm)</td>
<td>0500 0459</td>
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<td>3.74&quot; – 4.02&quot; (095 – 102 mm)</td>
<td>0500 0460</td>
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<tr>
<td>4.02&quot; – 4.41&quot; (102 – 112 mm)</td>
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<td>4.25&quot; – 4.65&quot; (108 – 118 mm)</td>
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<tr>
<td>4.65&quot; – 5.04&quot; (118 – 128 mm)</td>
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<td>4.92&quot; – 5.32&quot; (125 – 135 mm)</td>
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<td>5.20&quot; – 5.59&quot; (132 – 142 mm)</td>
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<tr>
<td>5.43&quot; – 5.83&quot; (138 – 148 mm)</td>
<td>0500 0466</td>
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<td>5.71&quot; – 6.10&quot; (145 – 155 mm)</td>
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<td>5.95&quot; – 6.34&quot; (151 – 161 mm)</td>
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<td>6.26&quot; – 6.69&quot; (159 – 170 mm)</td>
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<td>6.58&quot; – 6.97&quot; (167 – 177 mm)</td>
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<td>6.93&quot; – 7.32&quot; (176 – 186 mm)</td>
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<td>7.60 – 7.99&quot; (193 – 203 mm)</td>
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<td>7.87&quot; – 8.27&quot; (200 – 210 mm)</td>
<td>0500 0473</td>
</tr>
<tr>
<td>8.23&quot; – 8.62&quot; (209 – 219 mm)</td>
<td>0500 0474</td>
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*Other diameters on request*

**Leak detector**
LD 300 leak detector 0601 0103
Telescope bar 3 x 120 cm 0530 0102
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