**Trelleborg 160**

**Integrated Manhole Seal**

**Integrated seal for concrete manholes**

**KEY FEATURES & BENEFITS**
- Easy to center during jointing
- Compatible with standard spigot with shoulder
- Always the right seal in the correct place

**SEAL DESIGN & FUNCTION**

Trelleborg 160 is a one-piece integrated seal that is cast into the socket during manhole manufacture. It is specifically designed for use with the spigot design according to DIN V 4034-1.

Having this seal integrated in the concrete means you will always have the right seal in the correct place.

1. Forming part, made of hard rubber (63 IRHD) ensures a secure and accurate joint profile during casting.

2. Sealing part, made of soft rubber, (40 IRHD) is a combined lip and compression seal. The soft rubber has excellent flexibility to take up irregularities in the spigot surface.

3. Retaining sections are cast into the concrete during pipe manufacture and secure the seal in the correct position.

4. Slurry lips seal against the base ring (pallet) preventing concrete ingress during manhole manufacture. The lips are made of soft 40 IRHD rubber which gives an excellent seal against the base ring during casting.
**JOINT ASSEMBLY**

Apply lubricant to the spigot of the manhole. Spread evenly over the entire surface paying special attention to the top radius. Lubrication may also be applied to the seal to further assist jointing.

Center the socket over the spigot and lower the upper manhole element to complete the joint. Light weight elements may require an additional vertical force to fully close the joint.

**SIZE CHART**

<table>
<thead>
<tr>
<th>Pipe DN (mm)</th>
<th>Effective Profile Thickness (mm)</th>
<th>A (mm)</th>
<th>B (mm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1000</td>
<td>20.0</td>
<td>22.9</td>
<td>68.2</td>
</tr>
<tr>
<td>1200</td>
<td>24.0</td>
<td>22.0</td>
<td>71.3</td>
</tr>
<tr>
<td>1500</td>
<td>25.0</td>
<td>24.9</td>
<td>80.6</td>
</tr>
</tbody>
</table>

**APPROVALS**

- CE-marking
- BSI “Kitemark”
- BSI “Kitemark”
- Synthetic rubber (EPDM)
- Hardness 40±5 IRHD (Sealing part)
- Hardness 63±5 IRHD (Forming part)
- Protected against ozone

**STANDARDS**

- EN 681-1 WC
- FBS-QR
- ISO 9001

**MATERIAL**

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- BSI “Kitemark”
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- Hardness 40±5 IRHD (Sealing part)
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- Protected against ozone

Authorities we cooperate with: