Construction:

- The leakage detector detects in a fully automatic manner, any leakages at the KEG-fitting.
- The KEG-infeed, positioning, centering and coupling of the sniffing head, as well as the de-coupling and further KEG-transport are effected fully-automatic.
- The leakage detector will be integrated into new or already existing KEG-conveyor systems. It includes all electric and pneumatic parts required for its operation.
- By means of integrated control soft- and hardware the sniffing process is effected fully-automatic.
- The base frame and all important mechanical elements are made of welded stainless steel.
Operation of the full-automatic leakage (CO₂) detector A 1/1

The leakage (CO₂) detector is a fully-automatic machine for detecting CO₂-leakages at the kegs’ fitting by a detecting process as explained below.

The keg stopping and separating device in front of the machine will assign one keg to the detecting stations. The kegs to be checked are transported into the leakage (CO₂) detector by the existing or by new keg-conveyors. Photo cells and centering devices place each keg directly under the detecting heads. Then detecting head is lowered until it surrounds the fitting completely.

Now the detection process starts.
During this process the activated leakage detector is operated by infrared light in such a way that it detects CO₂ leakages escaping from the fitting.

If the detection process shows that the detected CO₂-leakage is below the pre-selected limit, the keg is considered to be good.
The detection heads move upwards and the kegs are released for subsequent processes.

If the detected CO₂-leakage exceeds the pre-selected limit, the keg is considered to be leaking.

Sometimes leakages are such that beer escapes out of the fitting.
In this case the detecting heads are rinsed by a short hot water flush in order to avoid contaminations and to keep the fitting clean once the untight KEGs left the machine.
After the hot water flush the detecting heads are dried by sterile air.

The leaking keg is rejected by the existing or by a new reject device.
Leaking kegs should always be checked and - if necessary - repaired before they are returned to the production cycle.
Technical Data leakage (CO₂) detector A 1/1

Capacity
- approx. 250 KEG/h
- (higher performance on inquiry)

Stations
- Detecting head 1: leakage detecting

Dimensions
- length L: 1,210 mm
- width B: 700 mm
- height H: 2,235 mm ± 50 mm
- transport height: 800 mm ± 50 mm

Connections
- media-connections: DN 10
- control-air-connection: socket ¾"

Electrical Connections
- voltage: 230/400 V, 50 Hz
- connection power: 0,5 kW

The noise level is in accordance with CE-Norms for prevention of accidents, less than 85 dB A.
### Consumption- and connection values of the requires media

<table>
<thead>
<tr>
<th>media</th>
<th>pressure and temperature</th>
<th>consumption/KEG</th>
</tr>
</thead>
<tbody>
<tr>
<td>□ hot water</td>
<td>2 - 3 bar Ü, 80 - 95 °C (ring pipe)</td>
<td>0,2 l (only by leaky KEGs)</td>
</tr>
<tr>
<td>□ compressed air (oil free)</td>
<td>4 - 10 bar Ü</td>
<td>0,1 m³</td>
</tr>
<tr>
<td>□ sterile air</td>
<td>1,5 - 3,0 bar Ü</td>
<td>0,02 - 0,04 m³ (only by leaky KEGs)</td>
</tr>
</tbody>
</table>

**Attention!**

We assume that pressure reducing valves are installed. These media should be adjustable within the range of pressure indicated.

---

### Leakage (CO₂) detector A 1/1

**processing program at a capacity of 250 KEG/h**

<table>
<thead>
<tr>
<th>Total:</th>
<th>14 sec</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Detection head 1:</strong></td>
<td></td>
</tr>
<tr>
<td>KEG-in feeding and positioning</td>
<td>3 sec</td>
</tr>
<tr>
<td>Leakage detection</td>
<td>10 sec</td>
</tr>
<tr>
<td>KEG-out feeding</td>
<td>1 sec</td>
</tr>
</tbody>
</table>

If some KEG was leaky it will be done a hot-water and sterile air rinse of the corresponding detection head.
pictures of the leakage (CO₂) detector A 1/1:

picture 1 - front view

picture 2 - side view

picture 3 - detection head