Gap Conditioning Device **GCD 12**

Temperature control in the measuring gap

Accessory for Qualiscan QMS

Subject to technical changes!
Gap Conditioning Device GCD

Temperature control in the measuring gap

Benefits for the customer
- Defined temperature in the measuring gap
- Increases measuring accuracy
- Simultaneously cleans the measuring gap
- Prevents development of condensate

Product highlights
- Temperature control up to 250 °C
- Control accuracy +/- 1 °C
- Protection class IP65

Area of application

Some applications require a defined and constant temperature in the measuring gap across the transverse profile of the measuring gap to be able to ensure correct measuring.

Fig. 1: Sensor Gravimat DFI (example) with optional Gap Conditioning Device GCD

1 Gravimat DFI (example)
2 Gap Conditioning Device GCD
The Gap Conditioning Device GCD blows heated air into the measuring gap to reach the defined temperature. The temperature of the heating air can thereby be adjusted with a precision of 1 degree. The measuring gap is cleaned and kept clean at the same time by the steady flow of air. The air pressure of the heating air can be set with a pressure gauge.

The Gap Conditioning Device GCD is an optional add-on device for the respective measuring sensor used. It is installed in the running direction of the product upstream of the actual measuring sensor to thereby heat the measuring gap with the product running direction.

Air can be heated and the heating air temperature controlled with the Gap Conditioning Device GCD. Cooling is not possible with this device, even if lower temperatures than the ambient temperature can be set on the temperature controller. The minimum temperature depends on the ambient temperature and the temperature of the supplied compressed air. The temperature control of the heating air is factory set and limited to 250 °C; it is preset to 100 °C.

Because of the usually high temperature differences between product, room air and measuring equipment, the moisture in the room air often condensates since the dew point lies within the measuring gap. The measuring windows fog up from the condensate which may lead to wrong measuring results. The Gap Conditioning Device GCD prevents the formation of condensate through the temperature compensation in the measuring gap.
## Technical data

<table>
<thead>
<tr>
<th>Sensor</th>
<th>Gap Conditioning Device GCD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Heating air temperature</td>
<td>Max. 250 °C</td>
</tr>
<tr>
<td>Heating output</td>
<td>400 W</td>
</tr>
<tr>
<td>Control resolution</td>
<td>1 °C</td>
</tr>
<tr>
<td>Control accuracy</td>
<td>+/- 1 °C</td>
</tr>
<tr>
<td>Protection class</td>
<td>IP 65</td>
</tr>
</tbody>
</table>

11.06.2015 Gap Conditioning Device GCD 12
Fig. 5: Dimensional drawing of Gap Conditioning Device GCD, 91-017606-01
Monitoring and control systems, automation:

MAHLO ENSURES QUALITY. WORLDWIDE, IN YOUR VICINITY.

Best-possible technical support and transfer of know-how are written in capital letters at Mahlo. Thanks to an international network of agencies and service centres, customers have at their disposal competent support worldwide. We are there for you 365 days a year, 24 hours a day. Just get in touch with us!

✓ Over 40 service centres worldwide
✓ Service partners in over 100 countries
✓ Direct service and spare parts delivery within 24 h
✓ Remote diagnostic system
✓ Service Hotline: +49-180-5062456

www.mahlo.com