MEASURING HEAD  70 290

Typ 70 290
Order-No. 290 00 33

Technical property and application
Ionisation chamber measuring heads predominantly are used for detector by radiation thickness and area weight measurement.
Specially, in measuring head 70 290 (Order-No.: 290 00 33) are integrated:
- Ionisation chamber 70 195 (Order-No.: 195 00 01)
- Amplifier 70 932 (Order-No.: 932 00 33) with high voltage supply and temperature sensor

Indication
The radiation entry window should be protected against mechanical demands and damage.
For window cleaning, please use a damp cloth with raw spirits and dry it with hot air.

Radiation protection
For high level radiation protection are recommended a radiation source with strong beam towards the radiation entry window.

Change and repair of radiation entry window
By damage or demolition of radiation entry window must be change the protection foil.
To do this:
- Screw off enclosure AH200 top cover and reconnect green/yellow wire
- Screw off smaller clamping ring from enclosure AH200 top cover
- Change protection foil (Order-No.: 290 00 28 / 12 pcs.)
- Slightly pressed smaller clamping ring on protection foil and put it plane
- Assemble smaller clamping ring
- Cut the overlapped foil with a scalpel or sharp edged knife
- Connect green/yellow wire and close enclosure AH200

We reserve the right to alter the specifications.
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Mechanical Data

We reserve the right to alter the specifications.
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**Technical Data**

Supply voltage: +9 ... +36 V DC

Working temperature range: +10 ... +50 °C
Storage temperature range: 0 ... +60 °C

closure: ROLEC Aluminium enclosure alunorm AH 200

degree of protection: IP66

color: RAL 1003

entry window: foil PETP metallised 25µm Aluminium

mass: 4.4 kg

Connector: fitting male connector M12, 5-pole

**Connection**

Supply voltage and measuring signals: fitting male connector M12, 5-pole

<table>
<thead>
<tr>
<th>Pole-Nr.</th>
<th>description</th>
<th>notice</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>V_s</td>
<td>+9 ... +36 V / 2W (supply voltage)</td>
</tr>
<tr>
<td>2</td>
<td>V-IK</td>
<td>measuring signal Ionisation chamber 0 ... +10 V</td>
</tr>
<tr>
<td>3</td>
<td>V-Temp.</td>
<td>measuring signal temperature 0 ... +1 V</td>
</tr>
<tr>
<td>4</td>
<td>V-Mon-HV</td>
<td>measuring signal HV-Monitor 0 ... +5 V</td>
</tr>
<tr>
<td>5</td>
<td>GND</td>
<td>GND for supply voltage, measuring signals and enclosure</td>
</tr>
</tbody>
</table>
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Ionisation chamber 70 195   (195 00 01)

Technical Data

→ see data sheet   Ionisation chamber 70 195   (195 00 01)

Amplifier 70 932   (932 00 33)

The amplifier 70 932 has the following functions:
- Current-voltage-conversion and amplification of Ionisation chamber current
- High voltage supply for Ionisation chamber
- Monitor of high voltage supply
- Temperature measurement

Technical Data

→ see data sheet   Amplifier 70 932   (932 00 33)
Typ 70 290
Order-No. 290 00 33

Schematics