

## 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:

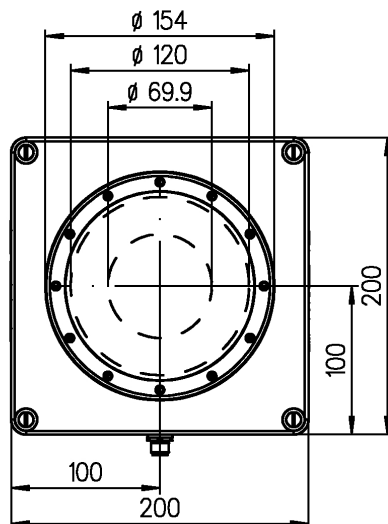
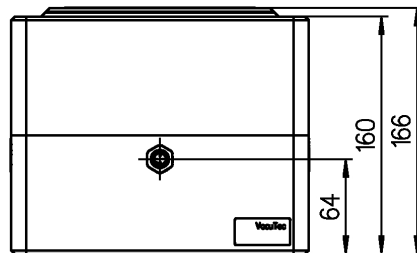
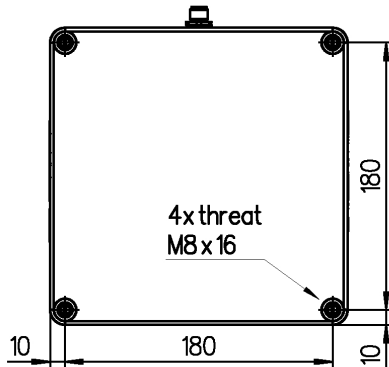
- Screw off enclosure AH200 top cover and reconnect green/yellow wire
- Screw off smaller clamping ring from enclosure AH200 top cover
- Change protection foil (Order-No.: 290 00 28 / 12 pcs.)
- Slightly pressed smaller clamping ring on protection foil and put it plane
- Assemble smaller clamping ring
- Cut the overlapped foil with a scalpel or sharp edged knife
- Connect green/yellow wire and close enclosure AH200



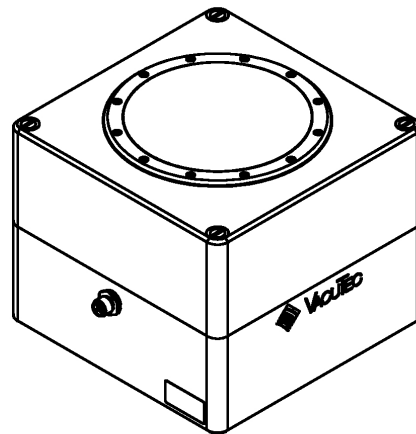
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### Mechanical Data



all dimensions in mm



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## Technical Data

Supply voltage	+ 9 ... + 36 V DC
Working temperature range	+ 10 ... + 50 °C
Storage temperature range	0 ... + 60 °C
enclosure	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

Pole-Nr.	description	notice
1	V <sub>s</sub>	+ 9 ... + 36 V / 2W (supply voltage)
2	V-IK	measuring signal Ionisation chamber 0 ... + 10 V
3	V-Temp.	measuring signal temperature 0 ... + 1 V
4	V-Mon-HV	measuring signal HV-Monitor 0 ... + 5 V
5	GND	GND for supply voltage, measuring signals and enclosue

# **Typ 70 290**

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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

