

## Technical Data Sheet

### Ionisation Chamber LB 6701H-H10

#### Application

Dose rate probe for photon radiation in Health Physics applications.

#### Measured Quantity

Ambient dose equivalent  $H^*(10)$  or

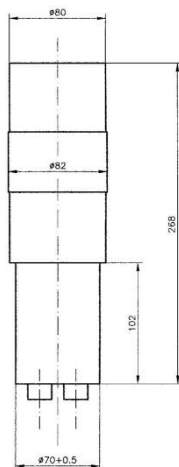
Ambient dose rate equivalent  $\dot{H}^*(10)$

#### Construction

The Ionisation Chamber is made from Aluminum with a Nitrogen gas filling at 1 bar and a radiation resistance up to  $10^6$  Gy. The chamber current is proportional to the dose rate, this current is converted into a +5 V Norm pulse frequency in the Current/Frequency converter LB3857.

The Current/Frequency converter can be connected to a standard Data Logger using the connection cable Id.Nr. 74553.

A  $^{90}\text{Sr}$  check source with 50 kBq activity is built in the Ionisation Chamber to continuously monitor the proper functioning of the system.



#### Technical Data

##### Measuring Range

100  $\mu\text{Sv/h}$  – 100 Sv/h (0°C to +50°C)

10  $\mu\text{Sv/h}$  – 100 Sv/h (+10°C to +40°C)

##### Energy Range

45 keV – 1,3 MeV

with regard to Cs-137 and  $^{60}\text{Co}$

##### Calibration Factor

1.4 fA/ $\mu\text{Sv/h}$

##### Output pulse I-F-Converter

Polarity: positive

Amplitude: +5 V in 50  $\Omega$

Pulse Width: 3 - 5  $\mu\text{s}$

Frequency range: 100 kHz

##### High Voltage

1000 Volt

##### Operating Conditions

Temperature: 0°C to +50°C

Rel. humidity: 20% to 80%

Storage temp.: 0°C to 60°C

Altitude: <2000m

##### Protection Degree

IP 54

##### Dimensions

- Ionisation chamber: 80 mm  $\varnothing$  x 268 mm

- I-F-Converter

Connection box: 217 x 81 x 76 mm

