

FHT 192

Wide Range Ionization Chamber



- 30 keV to 7 MeV energy range
- 100 nSv/h to 1 Sv/h dose rate range
- $\frac{3}{4}$ sphere angular response
- Integrated preamplifier fits to
 - FHT 6020 area monitors
 - FH 40 G survey meter
 - SVG2 military Radiac
- High dose option with remote preamplifier

The new FHT 192 is based on the famous PTB-approved medium-pressure chamber FHT 191 N, which is used as a reference standard detector by many organizations. The chamber geometry design offers both excellent angular dependence (-45° to $+90^\circ$) and energy dependence. The chamber is equipped with a styrofoam protection in order to minimize temperature change induced currents.

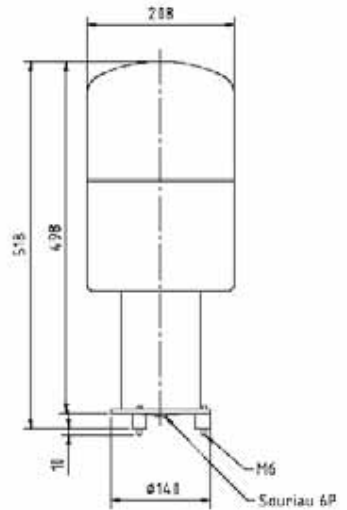
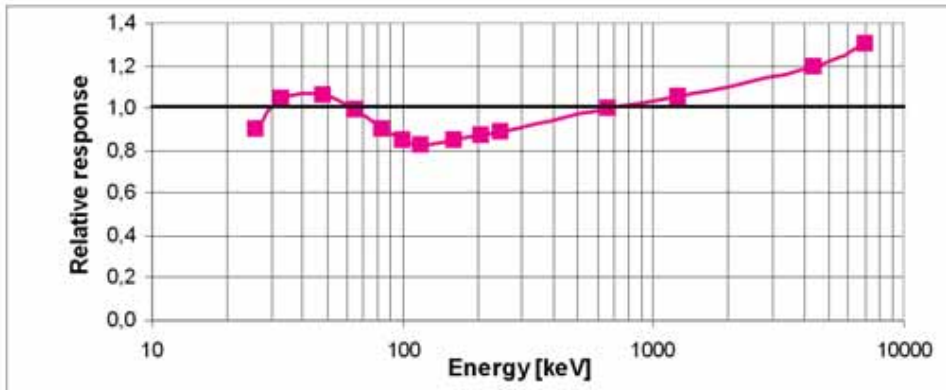
The FHT 192 Ionization chamber can be connected to either the FHT 6020 area monitor or the FH 40 G survey meter, for measurements at high energy accelerators or X-ray sources

FHT 6020 Area Monitor



FH 40 G Survey Meter

FHT 192 Ionization Chamber



SPECIFICATIONS

Detector type	Pressurized ionization chamber
Measured variable	Ambient equivalent dose rate $H^*(10)$
Measuring range	100 nSv h^{-1} - 1 Sv h^{-1}
Energy range	30 keV - 7 MeV ($\pm 30\%$)
Gamma- responsiveness	250 fA/ μ Sv h^{-1}
Angular acceptance	$-45^\circ < \Phi < +90^\circ$ (270° solid angle)
Overload	Up to 50 Sv/h overload indication
Operating gas (permanently filled)	Noble gas - nitrogen - mixture
Filling pressure	7000 hPa (absolute value)
Volume	4.25 liters

Length	500 mm (19.7") incl. polystyrene cap
Diameter	208 mm (8.2") incl. polystyrene cap
Weight	approx. 3.25 kg (7.1 lb)
Length detector part	270 mm (10.6")

For high dose applications the chamber and the preamplifier can be ordered as separate items:

FHT 190	pressurized ionization chamber	42535/10
FHT 642 I	wide range preamplifier for ionization chambers	42540/83
Connecting cable for FHT 642 I	5m	42540/8311

Standard connecting cable for the FH 40 G, FHT 6020 and SVG-2 are available. Maximal admissible cable length: 50 m (shielded standard cable, AWG26, 0.14 mm 2)

