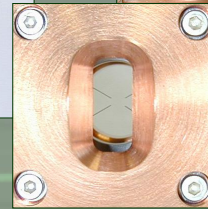
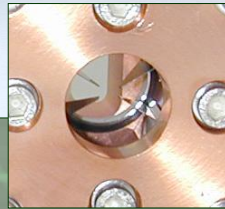
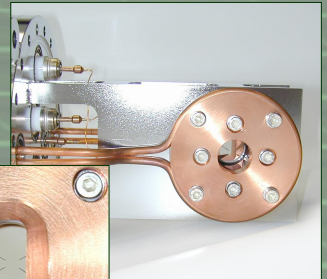
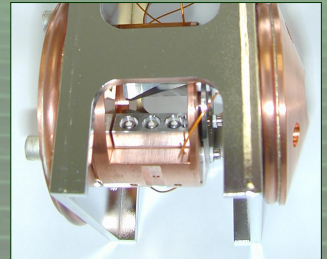
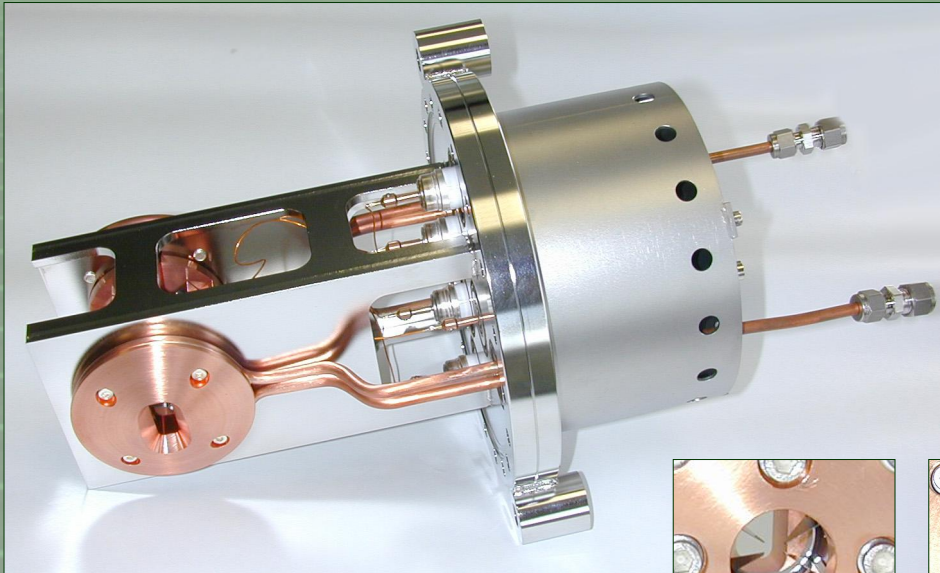


Beam Position Monitor for ID Radiation



The beam position monitors are based on a development by Dr. Karsten Holldack, BESSY Berlin, in collaboration with FMB.

The beam position monitors use up to four blades, whose narrow fronts are oriented towards the radiation source, to scan the off-axis radiation of the undulator and determine on-line the position of the centre of the insertion device radiation from the emitted signals. The size and the geometry of the blades will be adapted to the beam characteristics at the place of the position monitor in order to achieve a maximum photocurrent yield at a maximum sensibility and without the disturbing dipole background. The blades for insertion device applications consist of tungsten and will be actively cooled via heat conducting ceramics to resist the thermal load of the ID radiation.

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Beam Position Monitor for ID Radiation

Technical Data.

Detector head

OFHC-Copper

Blades

0,2 mm thick, Tungsten

AlN insulators, ZrO washers

0.5 mm AlN, ZrO-washers

Base flange

NW 150 CF

Stand

Steel, sand filled, polystyrole-insulated

Vertical / horizontal stroke

Up to 20 mm

Electronics

4 channel-current to DC converter LCAD4,
internal BIAS supply
additional threshold electrode

As options available

Vacuum chamber with bellows
x,y stage
Colum

FMB GmbH