Graphite-Monochromator 151

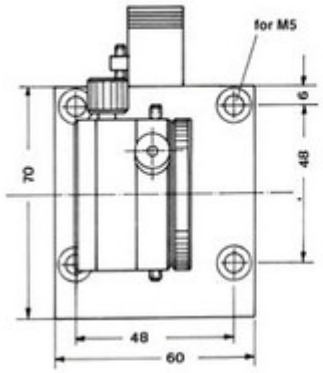
The Graphite-Monochromator 151 contains a highly oriented pyrolytic graphite crystal (HOPG) mounted in a compact metal housing.

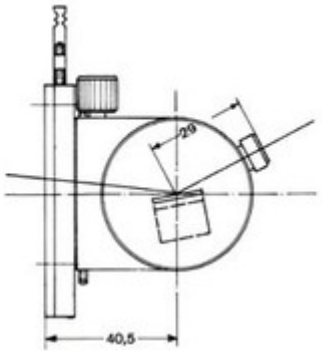
Inside the radiation-proof housing the crystal can be manually adjusted to the ideal Bragg-angle for the used X-ray wave length. The diffracted beam is made directly visible by a fluorescent screen on a small lead glass window.

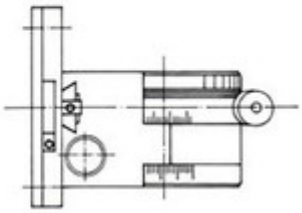
Adjustable entry and exit slits ensure a precise limitation of the X-ray beam path. A wide variety of adaptor plates is available for the mounting of the monochromator on the tube hoods of all standard manufacturers.

Crystal data:

Dimensions 12mm x 12mm x 1mm
Surface orientaded to (002) plane
2d=6.714 A
Mosaic-diffraction angle width 0.4° +/- 0.1°







Some crystal (Θ) and exit window (2Θ) settings:
Graphite 002 oriented, 2 d = 6,7140 Å, O° take off angle.

	$K_{\alpha 1}$	Θ	2Θ
Ag	*0,5608*	*4,804*	*9,608*
Mo	*0,7107*	*6,1*	*12,2*
Cu	*1,5418*	*13,3*	*26,6*
Co	*1,7902*	*15,5*	*31,0*
Fe	*1,9373*	*16,8*	*33,6*
Cr	*2,2909*	*20,0*	*40,0*