



JGW-T1503941-v1

KAGRA

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PR2/PR3/PRM First Contact Pattern

Mark Barton

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JGW-DCC

This is an internal working note
of the KAGRA collaboration.

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1 Introduction

1.1 Purpose and Scope

Describes limits on First Contact application area for PR optics.

1.2 References

1.3 Version history

8/13/2015: -v1.

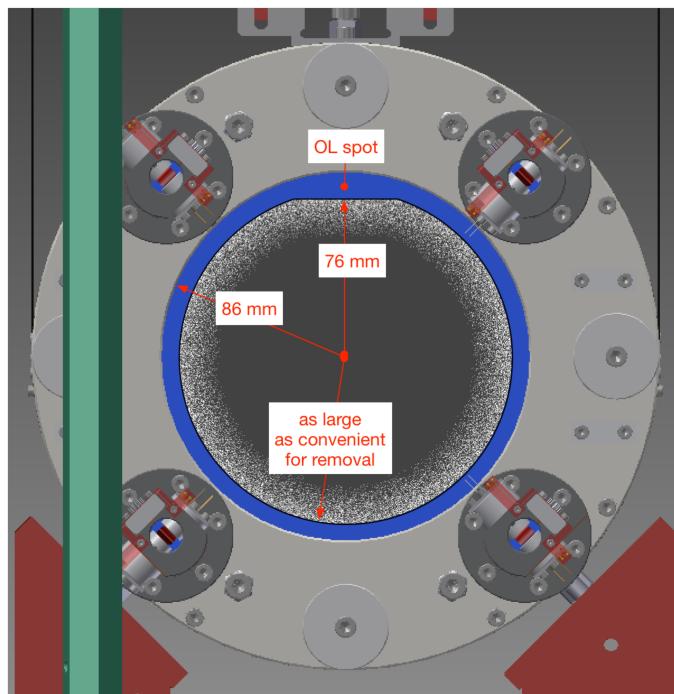
2 First Contact

2.1 AR side

VIS plans to check the pitch of the optic several times during the assembly of the suspension using an optical lever reflecting off the rear side. It is important to leave a clear area near the edge of the exposed section of the optic. **VIS requests a clear area at least 10 mm wide at the top of this area** - see Figure 1.

Apart from that, the First Contact can be applied as widely as the Optics Group thinks suitable, considering the difficulty of getting it off again when the edges are close to the flange of the Recoil Mass.

Figure 1: AR side of optic with key dimensions and requested stay-clear zone for optical lever



2.2 HR side

The VIS group has no particular requests for the First Contact on the HR side of the optic, but the key dimensions are shown in Figure 2.

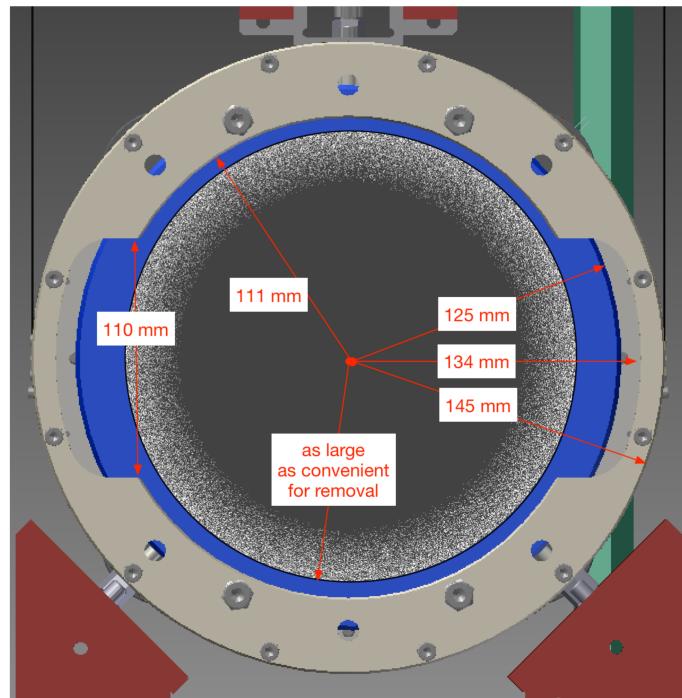


Figure 2: HR side of optic with key dimensions. If desired, the First Contact can also be applied to the areas at the side where the cut-outs in the flange are.