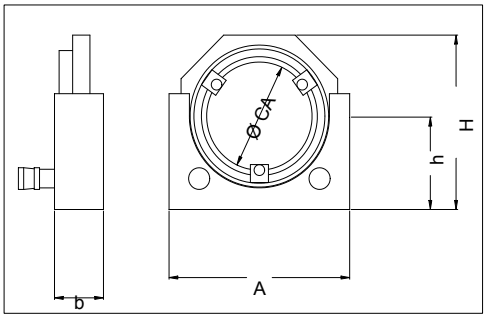
Gimbal Mirror Mounts<300mm

OS mounts were developed to support mirrors such as off-axis paraboloids, spheres and flats in applications where stability is important. Four sizes are manufactured for mirror diameters from 100mm to 254mm whilst intermediate sizes can be accommodated with custom made step down/aperture rings. Component thicknesses were selected to adhere to traditional 6:1 diameter :thickness ratios. Differential micrometers give coarse and fine control over tilt in two orthogonal directions of +-2.7 degrees for the larger sizes and up to +-6 degrees for the smallest. Sensitivity is better than 3 arc seconds.
The mount base plate (which is detachable if required) can secure down through slotted holes to any standard optical table. Special base plates can be provided for rotary movement or further height adjustment.
Mirrors are retained in the inner cell by means of three clamp screws, or silicone may be used if desired. The mounts, constructed of cast aluminium and finished in tough black, are provided with a mirror cover.
For off-axis paraboloids we can fit a small alignment flat set perpendicularly to the optical axis in our laboratory. This defines the axis to aid the user in setting up.

Cat.No	Dia.	CA	Max Dia	Max t	tilt	*S*
OS-100	100	90	101.6	28	+6	2.7
OS-150	150	145	152.4	38	+-4	2.1
OS-200	200	185	203.2	44	+-3.5	1.6
OS-250	250	240	254.0	54	+-2.7	1.3

CA= clear aperture, tilt gives range in degrees, *S* is sensitivity in arc secs.



Dia.	A	H	b	h
100	180	180	60	90
150	240	236	65	120
200	295	294	85	150
250	348	350	90	180

To ensure stress free mounting, we recommend that customers purchase mirrors and mounts together from us. We will then take responsibility for fitting the mirror and supplying test results in after coating and mounting.
For mirrors of 300mm to 600mm please see our continuation data sheet.
For applications requiring 360 rotation in two axes, see our OS-W series mounts.