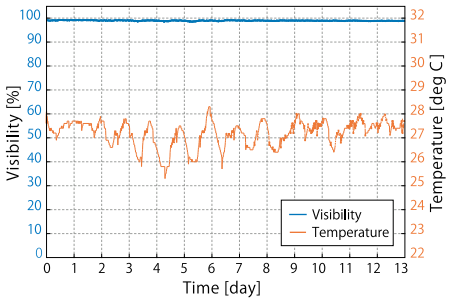
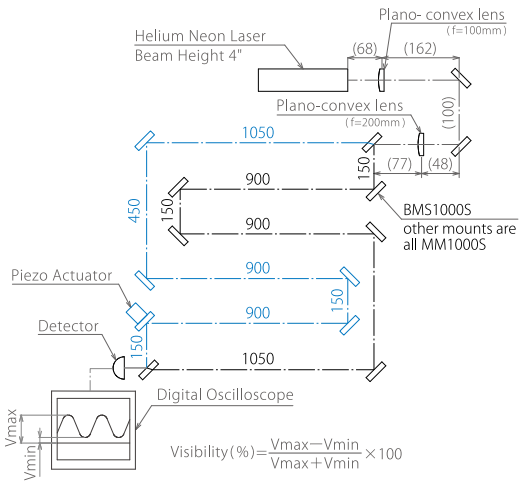
1" Beamsplitter Mount

BSM1000S

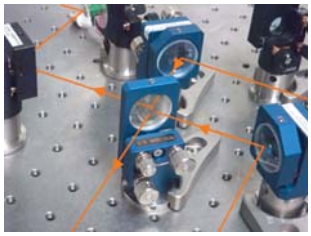


Test data



Test setup

FMD provides an ultrastable beamsplitter mount equipped with M-Ring mechanism. Visibility of Mach-Zehnder interferometer which consists of 12 pcs of BSM1000S is stable for a long time as shown in a test data.

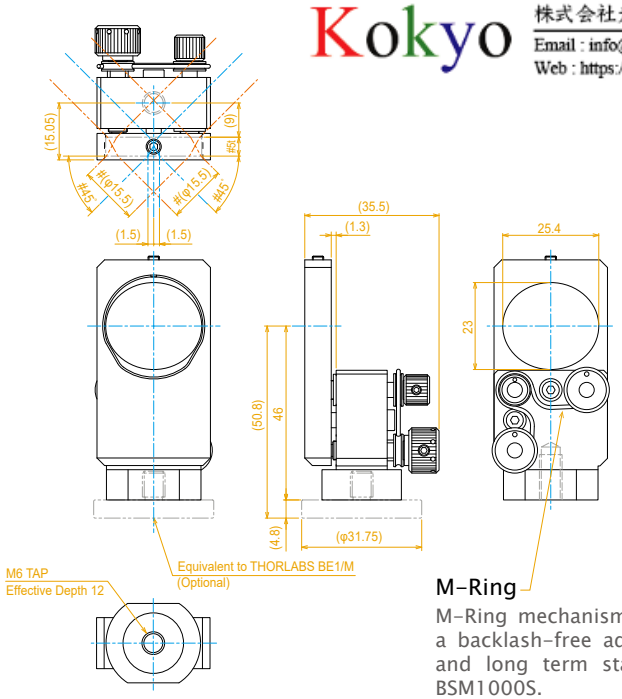


An example of the use of BSM1000S
(at Prof. Furusawa lab)

BSM1000S

1" Beamsplitter Mount

Kokyo 株式会社光響
Email : info@symphotony.com
Web : https://www.symphotony.com/



M-Ring

M-Ring mechanism enables a backlash-free adjustment and long term stability of BSM1000S.
(Patent No. 4963071, JP)

Material	Extra Super Duralumin (ESD)
Surface Finish	Anodized (color: FMD blue, sandblasted)
Thickness	35.5 mm
Weight	Approx. 70 g (except the optics)
Optics	ϕ1", thickness: 5 to 9.5 mm
Transmitted Light	ϕ23 mm (Straight) , ϕ15.5 mm (45°)
Mounting Method	M6 TAP (effective depth 12)
Adjustment Screw	0.15 mm pitch screws (170TPI)
Adjustment Angle	±3°
Angular Resolution Tilting Direction Rotating Direction	 0.00149° (26 μrad) when rotated 1°, 0.54° by one revolution 0.00125° (22 μrad) when rotated 1°, 0.45° by one revolution
Remarks	• Combination with BE1/M makes the height of light axis 2". Shown in the drawing. • Available to use for transmitted light (Bidirectional from both right and left-side in the same time) • M-Ring (Patent No. 4963071, JP) is equipped. • Soft-lock Mechanism is employed. (Patent application No. 2005-312867, JP) • Shipped with interferometeric stability data. • Ultra-fine adjustment with almost no backlash can be made by using the ϕ12 knobs attached to both tilting and rotating directions and the specially designed FMD tool SCR-ADJ.