

Automatic Shutters High Power Laser Shutter Unit

SSH
SHPS

SSH

RoHS Catalog Code W4045

Application Systems

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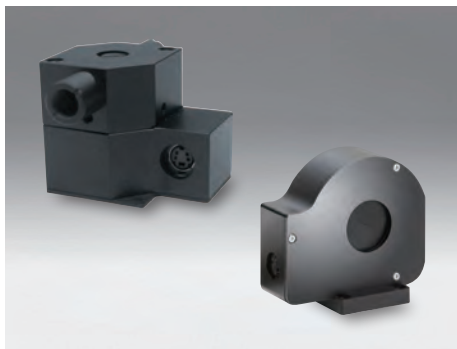
Beam Shaping Diffusers

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Shutter

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These electromagnetic shutters are intended for applications including remote on/off of laser light and for timed exposures. Please connect a dedicated controller to use these shutters.

- SSH-S is intended for small diameter laser beams ($\phi 4\text{mm}$ or less) while SSH-25RA is intended for use with large diameter imaging lens systems ($\phi 24\text{mm}$ or less).
- Typical applications include holography, exposure of photosensitive materials and as safety measures of laser optical systems.
- By removing the post, the shutters can be installed directly on a baseplate with M3 threads.
- Shutters can be operated with a PC via the two-axis shutter controller (SSH-C2B).



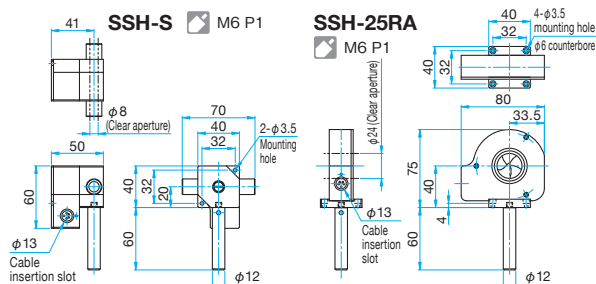
Guide

- ▶ We can change the post length. Please specify the post length when you place an order, then we will deliver the product after replacing the post with one with your specified length. Replacement of the post is free of charge, but we may charge the difference in price depending on the length. Please contact our International Sales Division for more information.

Attention

- ▶ Automatic shutter holders cannot be used with high power lasers or high power pulse lasers. Please use high power laser shutters (SHPS).
- ▶ Please always use these automatic shutters with the dedicated controller. Otherwise, these shutters may not operate properly.
- ▶ SSH-25RA cannot operate with the old type shutter controllers (SSH-C4B, SSH-C1R). SSH-S can operate with SSH-C4B.
- ▶ These shutters and controllers do not come with cables.
- ▶ Please order the dedicated cables along with them.

Outline Drawing



Specifications

Primary material: Aluminum
Finish: Black Anodized

Part Number	Shutter Type	Aperture Diameter [mm]	Compatible Controller	Shutter Speed [s]	Weight [kg]
SSH-S	Solenoid type	$\phi 8$	SSH-C2B	about 0.7 – 0.28	
SSH-25RA	Leaf type	$\phi 25$	SSH-C2B	0.1 – 0.5	

SHPS

RoHS Catalog Code W4110



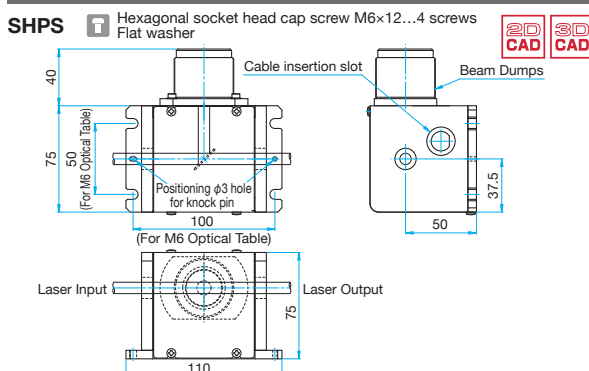
These electromagnetic shutters switch an optical path using a laser mirror for high power, and are compatible with high power pulse lasers. Selection of a wavelength that is a multiple of YAG laser frequency is possible.

- Typical application is as external shutters used in experiments where stable laser oscillation is required.
- When the power supply is cut off or the wiring is disconnected, laser light is shut off for safety.
- While the shutter is closed, laser light is safely terminated by beam dumps.

Guide

- ▶ We can make this product compatible with wavelengths or beam diameters not listed in the catalog.
- ▶ Please order the dedicated shutter controller (SSH-C2B) along with this product.

Outline Drawing



Attention

- ▶ The dedicate cable (SSH-CA2-LOAA) is not included. Please order the cable along with the controller.
- ▶ Before ordering this product, please make sure that the energy density of your laser does not exceed the laser damage threshold.
- ▶ Please always use this shutter unit with the dedicated controller. Otherwise, these shutters may not operate properly.
- ▶ When the shutter is closed, the sound of metal being hit might come out from the beam dumps. The sound is caused by a shock wave generated when laser light converts to heat on the metal surface. It is not the sound of a mirror breaking in the shutter unit.
- ▶ The beam dumps might become very hot when a high power laser is used. Please be careful of burns.

Specifications

Primary material: Aluminum
Finish: Black Anodized

Part Number	Wavelength Range [nm]	Aperture Diameter [mm]	Laser Damage Threshold (Typical) [J/cm^2]	Laser Power Limit [W]	Shutter Speed [ms]	Weight [kg]
SHPS-266	266	$\phi 8$	5	<20	about 200	about 0.8
SHPS-355	355	$\phi 8$	8	<20	about 200	about 0.8
SHPS-532	532	$\phi 8$	26.5	<20	about 200	about 0.8
SHPS-1064	1064	$\phi 8$	28	<20	about 200	about 0.8