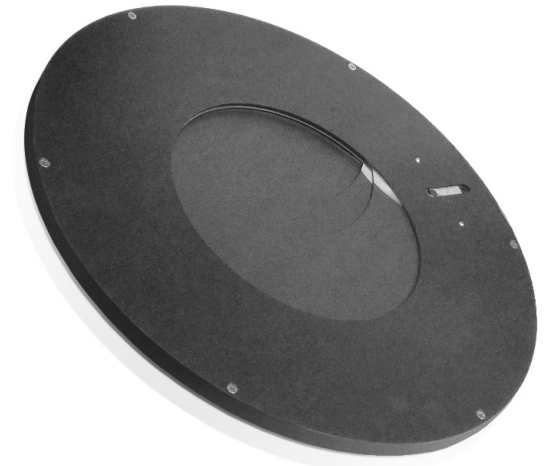


# PRELIMINARY DATASHEET

*This document is preliminary and therefore contains information and technical data that is subject to change.*

## Uniblitz® MS150B

150mm Bi-Stable Optical Shutter - Patent Pending



## Overview

The Uniblitz MS150B is a 150mm bi-stable shutter suitable for large scale imagers or where a large optical path needs to be reduced to zero transmittance. The shutter's lifetime is around 500,000 cycles - high for an aperture of its size - and its blades are low mass, highly emissive, and positioned to avoid collisions during operation. With the on-board drive circuit, a user must only provide a +12VDC power supply and a pulse width determined (+5V TTL) exposure pulse. Bi-stable shutter devices, like the MS150B, require no power to hold the blades in either the open or closed state.

**Need Support?** Please [visit our website](#) or email us at [info@uniblitz.com](mailto:info@uniblitz.com).

Tel: 585-385-5930 | Toll-Free: 800-828-6972 | Fax: 585-385-6004 | 803 Linden Ave. Rochester, NY 14625

Updated 8/19 | Datasheet Version 5.3 | ©2019 Vincent Associates

## Key Features

- Large 150mm aperture
- Operates in all orientations
- On-board drive circuit and dual synchronization system
- Stainless steel & aluminum construction
- **RoHS Compliant**
- Transfer time on opening:  
**225.0 milliseconds**
- Transfer time on closing:  
**225.0 milliseconds**

# Product Options

**MS150B** ② ③ ④

Ex: MS150B1C2

① Shutter Series:

- **MS150B**

② Housing:

- **1: Un-housed**

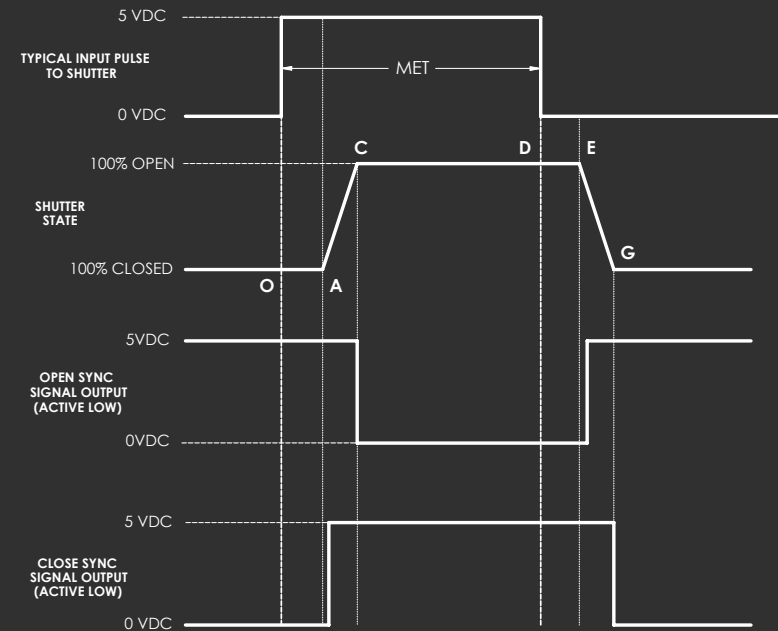
③ Blade Option:

- **C: Carbon-impregnated PET**

④ Electronic Sync:

- **2: Included (Dual Synchronization System)**

# Shutter Timing



## MS150B

Time (msec.)

O - A	Delay time on opening after current applied	13.0
A - C	Transfer time on opening	225.0
D - E	Delay time on closing after current applied	13.0
E - G	Transfer time on closing	225.0
MET	Min. exposure time	300.0
TEP	Typical exposure pulse	>300.0

# Technical Specifications

Supply Voltage Required	Supply Current Recommended	Pulse Width Determined Exposure	Min. Pulse Width for Full Open
+12 VDC	2.0 A	Active High +5V TTL	300 msec.

Series	Weight	Operating Temp.	Max. Freq. of Operation	Number of Shutter Blades
MS150B	62.40 oz (1.77 kg)	-40 - +65 °C	1 Hz	4

## Optical Specifications

The MS150B shutter blades are made of a carbon-impregnated PET (polyethylene terephthalate) base material <sup>1</sup> that is ideal for optics applications requiring high emissivity and optical density.

See [www.uniblitz.com/wp-content/uploads/2017/03/C\\_emissivity.pdf](http://www.uniblitz.com/wp-content/uploads/2017/03/C_emissivity.pdf) for specific emissivity data.

<sup>1</sup> Because the material is a thermoplastic polymer, maximum surface temperature should not exceed 100°C. For applications requiring higher heat resistance, please contact a technical representative for alternative blade materials.

# Technical Drawing - MS150B (Preliminary)

