



Vincent Associates 803 Linden Avenue, Rochester, NY 14625  
 web www.uniblitz.com e-mail vincentassociates@uniblitz.com toll-free 800.828.6972

## FEATURES

- Small form factor, a 90 mm aperture fits into a 7-inch diameter housing!
- Multi-bladed design in combination with the UNIBLITZ actuator, and a state of the art damping system provide increased reliability over other designs of this type.
- Reflective stainless steel blades available as with Vincent LS, VS, CS45, and CS65 series.
- Can be driven with our existing VMM/VCM drive units. Special driver not required.
- Available housed or un-housed for OEM applications.
- #103 Mounting Ring available for universal mounting applications.
- Electronic Synchronization System option available.
- Exposure repetition rates from DC to 1 Hz.
- Design, accuracy, and reliability that you have come to know as with all other UNIBLITZ products!

The CS90 is the third release in the new UNIBLITZ® CS series. The small form factor allows a 90 mm aperture to be installed into applications not presently accessible with existing UNIBLITZ VS series shutters. As with the CS45 and CS65, the CS90 has been designed to provide accurate, repeatable exposures for a wide variety of applications. The small form factor allows a 90 mm aperture to be installed into a seven-inch diameter housing. To increase the unit's flexibility, the shutter can be supplied in an un-housed version for OEM applications or in situations inaccessible to most shutters due to spatial limitations.

The device incorporates a dual actuator system. This dual actuator system incorporates the drive circuit for the auxiliary actuator onto the device, allowing the shutter to be controlled with existing UNIBLITZ drive units. As an option, the shutter can be equipped the electronic synchronization system.

When gating high intensity light sources, the CS90 can be equipped with polished stainless steel reflective blades. This option protects the shutter blades from the light source's damaging effects by reflecting the energy away from the blade surface. Look for future availability of "Z" (AlSiO) and "ZM" (AlMgF<sub>2</sub>) coated blades in this device.

To further enhance the flexibility of the CS90; an optional #103 mounting ring is available to allow the shutter to be easily mounted in many non-specific applications. Additional information regarding the #103 mounting ring can be found in the specific data sheet entitled "MICROSCOPE & VIDEO MOUNTING SYSTEMS" or on-line under "products", "Mounting Systems".

## ELECTRICAL

	Primary Actuator	Auxiliary Actuator***
Coil Res.:	12 ohms	12 ohms
Pulse Voltage to Open	+70VDC	+7.0 VDC**
Hold Volt.:	+7VDC/+5VDC*	N/A

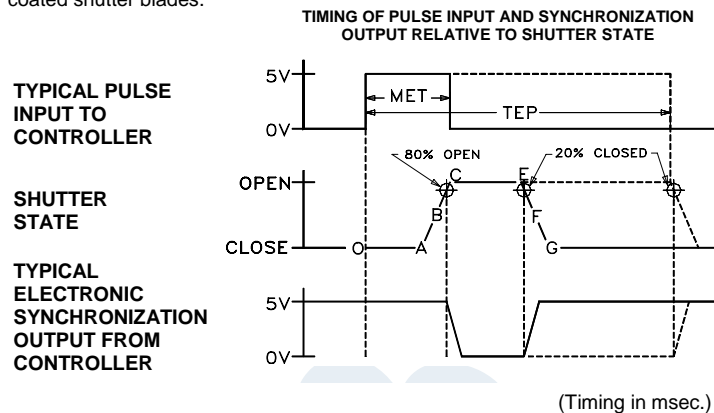
\* VMM dual hold level driver system included in UNIBLITZ VMM/VCM shutter controller.  
 \*\* Not including device drops.  
 \*\*\* Drive system on board for auxiliary actuator. When using UNIBLITZ drive system (i. e. VMM OR VCM series). 7.0VDC is supplied. OEM user please contact factory when using user supplied drive system for typical circuit.

## MECHANICAL

Operating Temp.	0°C to +80°C
Max. Frequency of Operat.	1Hz
Max. Opening Bounce	15%
Max. Closing Bounce	5%
Number of Blades	6

## TIMING

Typical timing values (msec.) using UNIBLITZ drive equipment and measured with UNIBLITZ shutters equipped with standard TEFLON® coated shutter blades.



(Timing in msec.)

O-A Delay time on opening after current is applied	15.0
A-C Transfer time on opening	60.0
O-C Total opening time	75.0
B-F Min. equivalent exp. time	115.0
C-E Min. dwell time with min. input pulse	60.0
E-G Transfer time on closing	50.0
A-G Total window time	170.0
MET: Min. exposure time	70.0
TEP: Typical exposure pulse	>70.0

The question regarding enhancement of shutter speed with the application of user supplied lubricants has been repeatedly asked. It is our experience that lubricating the shutter blades will actually slow the shutter down and eventually render the shutter inoperable. UNDER NO CIRCUMSTANCES SHOULD ANY TYPE OF LUBRICANT BE APPLIED TO THE SHUTTER BLADE AREA.

## HOW TO ORDER (AVAILABILITY APRIL 2004)

**CS90S 3 T 0 -103**

APERTURE SIZE	HOUSING	BLADE FINISH	SOLID STATE SYNCHRONIZATION	MOUNTING OPTIONS
CS90S - 90mm	1 - UNCASED 3- #3 CASE	T - TEFLON COATED S - POLISHED STAINLESS	0 - OMIT SYNC. 1 - SOLID STATE SYNC.	- 103 MOUNTING RING

