

# Near Ultra-violet (NUV) Objective Lens

# PAL-NUV-B

RoHS

This objective lens can be used for laser machining using pulsed laser of THG (355nm) YAG laser. Chromatic aberration is suppressed in both the visible and UV laser wavelength, achieving a high transmittance.

- With its long working distance and field curvature corrected, its natural observation image is obtained to the periphery of the visual field.
- With its long working infinity correction function; this objective lens can be used for a laser system and coaxial observation.
- It is also used for the observation of near ultra-violet light.
- This objective lens can be used with a pulse laser of visible light (532nm).
- Laser Damage Threshold (Typical) 0.05J/cm<sup>2</sup> (355nm), 0.1J/cm<sup>2</sup> (532nm) (Laser pulse width 10ns, repetition frequency 20Hz)



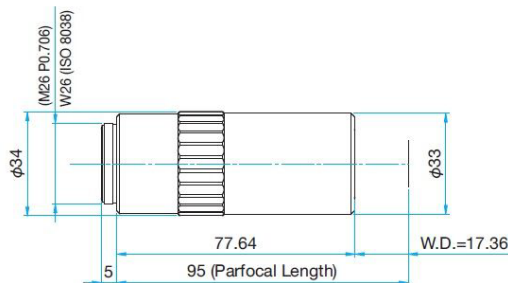
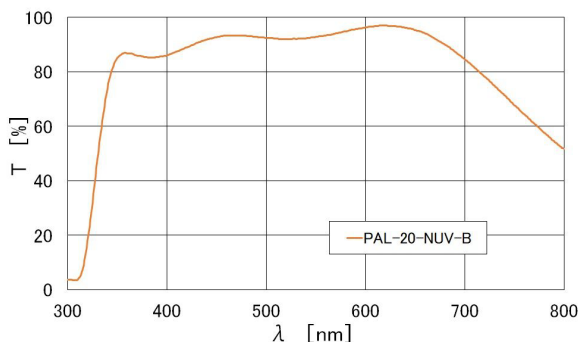
## Guide

- ▶ Available fixed objective lens holder (LHO-26). WEB Reference Catalog Code/W4024
- ▶ When the objective lens is fixed to a 2 axis holder, please consult our Sales Division.
- ▶ For laser processing

## Attention

- ▶ When an objective lens is used in laser processing, use the diameter of the incident beam to extend to a size of half the pupil diameter (1/e<sup>2</sup>). A small light spot cannot be achieved when the incident beam is too narrow. Please note if there is a laser energy density increase, there will be a high possibility of damage to the objective lens.
- ▶ The surface of an objective lens can be contaminated by debris during processing. To avoid this

Typical Transmittance Data T : Transmission



## Specifications

Part Number	Item name	Magnification	Focal length f [mm]	N.A.	Working Distance W.D.*2 [mm]	Resolution*1 [μm]	Focal depth*1 [μm]	Real field of view [mm]		Weight [kg]
								(Eyepiece φ24mm)	(1/2" CCD)	
PAL-20-NUV-B	LCD MPlanApo NUV 20x	20 ×	10	0.4	17.36	0.7	1.7	φ1.2	0.24 × 0.32	0.29

※1; Resolution and focal depth are calculated value at wavelength of 0.55μm.  
 ※2; Working distance: value at air