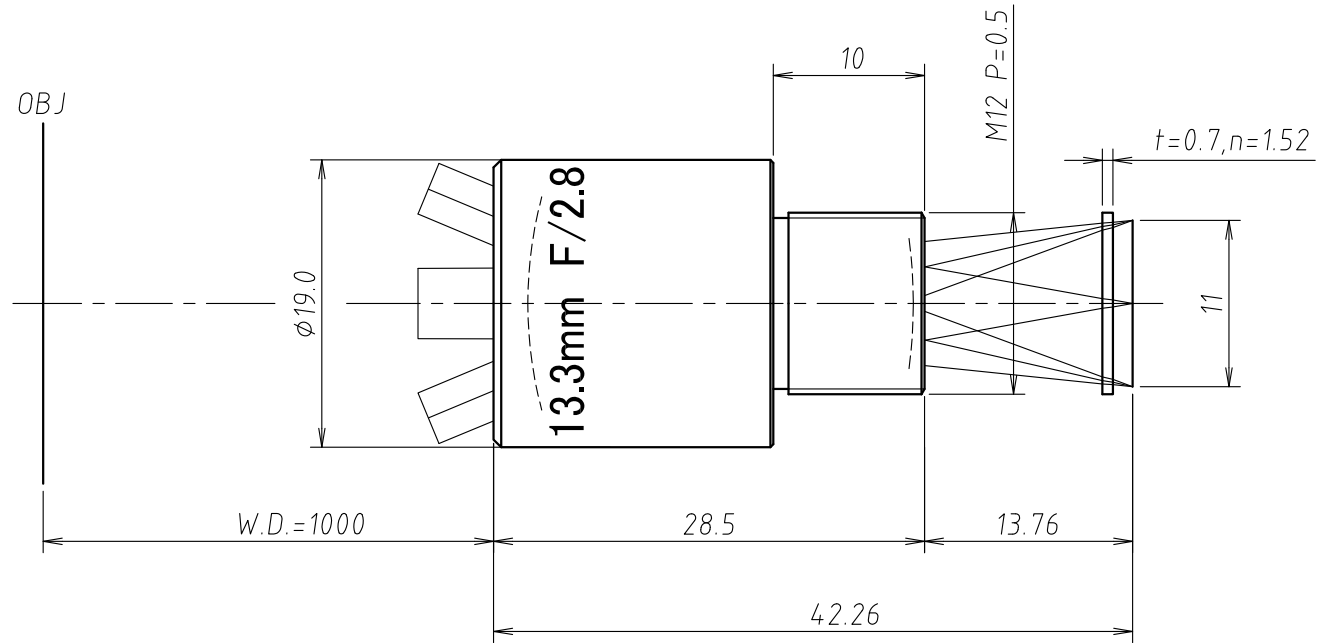


Lens Specification	
Focal length	13.30mm ±5%
Back focal length	14.13mm ±5%
Mechanical back	13.76mm at WD=1000
Aperture ratio	F/2.8
Image size	2/3"(6.6mmx8.8mm)
Magnification	-0.0132x
Distortion	-1.44%
Angle of view at W.D.=1000mm	
Vertical	27.8°
Horizontal	36.7°
Diagonal	45.3°
Resolution	
Center	200LP/mm
Corner	160LP/mm
Pupil positions	
Entrance pupil	12.19mm (Front lens)
Exit pupil	-21.95mm (Image plane)
Principal points	
Object space	17.38mm (Front lens)
Image space	-13.44mm (Image plane)
Coating	
All surfaces are antireflection coated.	

Specifications above are design specifications.

Note:



**UNIVERSE KOGAKU (AMERICA), INC.**

116 Audrey Avenue, Oyster Bay, New York 11771  
Phone: (516)624-2444/Fax: (516)624-3109

④		TITLE	13.3mm F/2.8 High Resolution M12-Mount Lens.	DRAWN	M.M.
③		P/NO.	KA133M12	CHECKED	H.K.
②		Mfg.NO.	KA133B-Y01-0	UOI	KA133M12
①	03/29/2018			SHEET	1 OF 1
				REV	A