Mega Pixel

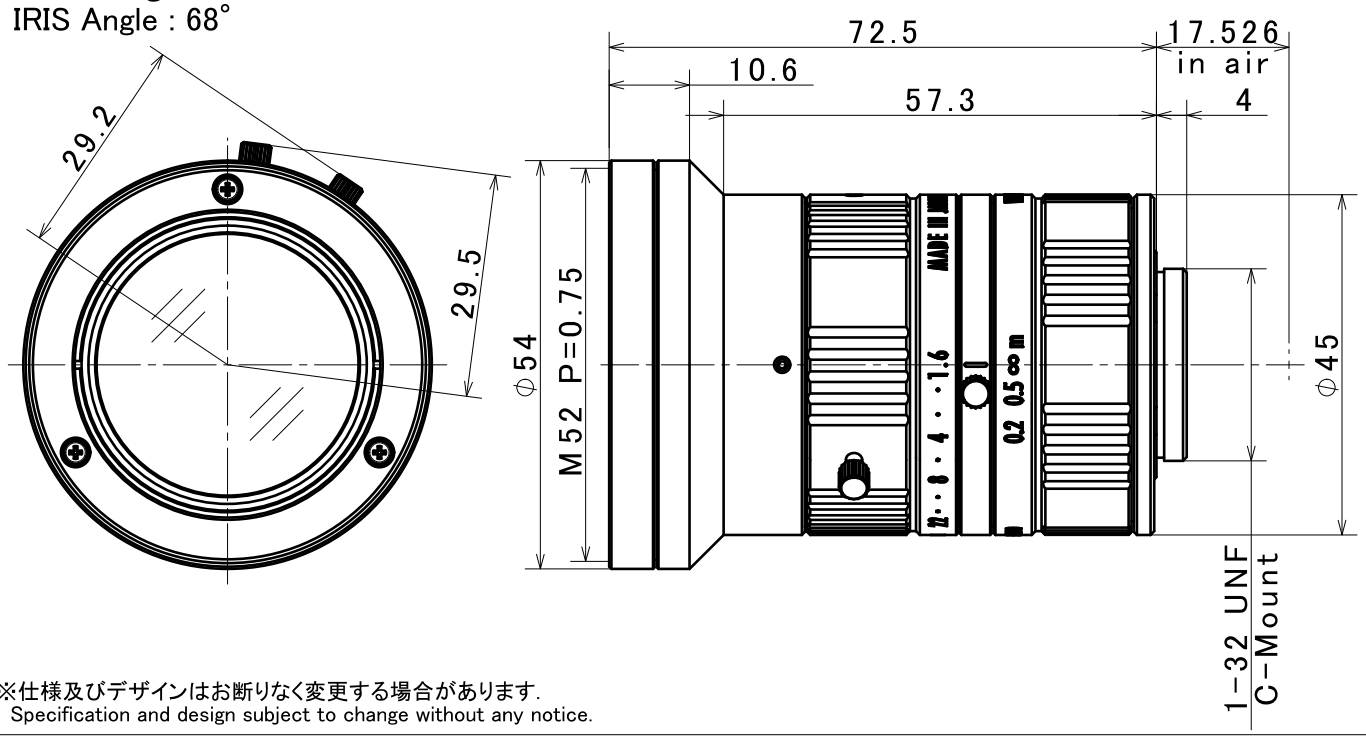
SMA11F12

Imager Size	イメージャーサイズ		1″
Mount Type	マウント		C
Focal Length	焦点距離		12 mm
Aperture Range	絞り範囲		F/1.6 ～ F/22 T/1.8 ～ T/24.7
Field of View Angle (Horizontal x Vertical)	画角 (水平x垂直)	1″	57.9° x 44.6°
		2/3″	41.1° x 31.1°
		1/2″	30.2° x 24.3°
Focus Range	フォーカス範囲		0.2 m ～ ∞
Operation	操作方式 Focus フォーカス		Manual w/lock 手動 ロック付き
	IRIS 絞り		Manual w/lock 手動 ロック付き
FilterSize	フィルター径		M52 P=0.75
Wave Length	対応波長		400 ～ 1700nm WBC-V-SWIR (Wide Band Coating – Visible– Short Wave Infrared)
TV Distortion	歪曲		-1.2%(*)
Weight	質量		260g
Operating Temprature	動作温度範囲		-20℃ ～ +60℃

Drawing 外観図面

＊ 設計値/Design Value

Focus Angle : 81°
IRIS Angle : 68°



※仕様及びデザインはお断りなく変更する場合があります.
Specification and design subject to change without any notice.

XC012E0000-01

TAMRON

TAMRON
Focus on the Future

FA and Machine Vision Lenses News from TAMRON

NEW RELEASE

A New Model of Industrial Lenses Covering a Wide Spectral Band from Visible-Light to SWIR Band

- 1" 12mm F/1.6 (Model: SMA11F12)
- 1" 16mm F/1.6 (Model: SMA11F16)
- 1" 25mm F/1.6 (Model: SMA11F25)

NEW

Model: SMA11F12 Model: SMA11F16 Model: SMA11F25

For
IMX990
IMX991

For
5μm

Main Features

Significant Reduction of Focus-Shift in between the Visible-Light and the SWIR Bands

- Focus-shift occurring in between different bands is effectively reduced over the whole spectrum corresponding to the wavelength of 400 nm to 1700 nm.
- The new lens offers an optimum optical component for machine-vision cameras operating in the visible light band, industrial-use cameras operating in the SWIR band, and industrial-use cameras operating in both bands.

Industry-Leading Spectrum Transmittance

- Tamron' s new proprietary lens coating technology assures an approx. 80% constant spectrum transmittance over the whole spectrum from the visible-light to the SWIR* band.
  * Band corresponding to the wavelength of 400 – 1700nm

Enhanced Imaging Performance at Close-Up Distances

- The image contrast is substantially enhanced at commonly used close-up distances.
- The new lens is compatible with imagers with a pixel-pitch 5μm.
  The lens is also compatible with IMX990/IMX991*.
  * Products of Sony Semiconductor Solutions Corporation

TAMRON
Focus on the Future

■Shooting image sample

Visible light	SWIR band (Using a SWIR camera)

Sample Image 1

Salt Suger Salt Suger

■Specifications

Model		SMA11F12	SMA11F16	SMA11F25
Imager Size		1"		
Mount Type		C		
Focal Length		12mm	16mm	25mm
Aperture Range		F/1.6 ～ F/22		
Field of View Angle (Horizontal × Vertical)	1"	57.9°×44.6°	44.1°×33.7°	29.1°×21.9°
	1/2"	30.2°×24.3°	22.7°×18.1°	14.7°×11.7°
Focusing Range		0.2m ～ ∞		
Operation	Focus	Manual w/lock		
	Iris	Manual w/lock		
Filter Size		M52 P=0.75mm	M49 P=0.75mm	M46 P=0.75mm
Wave Length		Visible Light～SWIR		
TV Distortion		−1.2% ✻	−1% ✻	−1% ✻
Weight		260g		
Operating Temperature		−20℃ ～ +60℃		

✻ Design Value

TAMRON CO., LTD. http://www.tamron.biz/en/
1385, Hasunuma, Minuma-ku, Saitama-shi, Saitama 337-8556 JAPAN
Tel: +81-48-684-9129 Fax: +81-48-683-8594

TAMRON USA, INC. http://www.tamron-usa.com
10 Austin Boulevard, Commack, NY 11725, USA Tel: +1-631-858-8400 Fax: +1-631-543-3963

TAMRON Europe GmbH. http://www.tamron.de
Robert Bosch-Str. 9, 50769 Cologne, GERMANY Tel: +49-221-669544-0 Fax: +49-221-669544-404

TAMRON INDUSTRIES (HONG KONG) LIMITED http:// www.tamron.com.hk
Unit 908, 9/F, Elite Centre, 22 Hung To Road, Kwun Tong, Kowloon, Hong Kong Tel: +852-2721-7797 Fax: +852-2620-1631

TAMRON (Russia) LLC. http://www.tamron.ru
Unikon Business Center 5F No. 9, Plekhanova Street 4a, Moscow, 111123, Russian Federation
Tel: +7-495-970-0112 Fax: +7-495-970-0112

TAMRON OPTICAL (SHANGHAI) CO., LTD. http://www.tamron.com.cn
Room 1707, Ruijin Building, No.205, Maoming South Road, Shanghai, 200020, CHINA
Tel: +86-21-5102-8880

TAMRON INDIA PRIVATE LIMITED http://www.tamron.in
805, 806 & 807 8th floor, Vatika City Point, MG Road, Gurgaon-122001, Hayana, India
Tel: +91-124-41-168-12 Fax: +91-124-40-822-72

● Specifications subject to change without notice