

FA and Machine Vision Lenses News from TAMRON

NEW RELEASE

Compact \$\phi\$29mm Machine-Vision Lenses **Compatible with 2/3" Imagers and 8-Mega Pixel Resolution**

- 2/3" 8mm F/2.4 (Model: MA23F08V) 2/3" 12mm F/2.4 (Model: MA23F12V)
- 2/3" 16mm F/2.4 (Model: MA23F16V) 2/3" 25mm F/2.4 (Model: MA23F25V)
- 2/3" 35mm F/2.4 (Model: MA23F35V) 2/3" 50mm F/2.8 (Model: MA23F50V)



For

IMX536 8-Mega

IMX546 2/3" 8-Mega

IMX566 2/3" 8-Mega

2.74 um

Main Features

- High Resolution and Contrast Unrivaled in the Industry
 - O Compatible with 2/3" imagers, supporting 2.74µm pixel-pitch and max 8-mega pixel resolution.
 - Offer resolution and contrast outperforming other ϕ 29mm machine-vision lenses.
- Industry-Leading Low Distortion (TV Distortion)
 - Significantly reduce TV distortion compared with previous models. (* MA23F08V: -0.6%, MA23F12V: 0.4%, MA23F16V: -0.05%, MA23F25V: -0.01%, MA23F35V: 0.04%, MA23F50V: 0.05%)
- High-Quality Performance at Close-up distances
 - O A new comprehensive lens design assures high contrast and resolution at commonly used close-up distances.
- New Robust Mechanism for Anti-Vibration and Anti-Shock
 - O A newly designed mechanism improves anti-vibration and anti-shock performance compared with previous models, limiting the optical(image) deflection to less than 10µm even for the severe impact of vibrations and shocks of max 10G of magnitude.
 - * [Compliant with IEC 60068-2-6/JIS C 60068-2-6] Vibration frequency 10-60Hz (amplitude 0.75mm), vibration frequency 60-500Hz (acceleration 100m/S2)
- A Common-use Setscrew is Attached as a Standard Accessory
 - A lock-screw provided with the models can be replaced with any embedding-type setscrew. This further reduces the overall diameter of the lens barrel for more compact installation.



■Specifications

Model		MA23F08V	MA23F12V	MA23F16V		
		TAMRON 1/14 Imm/24 (MAZINI)	77 AMRON 1/3 172m 1/7 t (7.2 TAMRON 2/21 16m3/2/11		
Imager Size		2/3"				
Mount Type		С				
Focal Length		8mm	12mm	16mm		
Aperture Range		F/2.4 ~ F/16				
Field of View Angle (Horizontal × Vertical)	2/3" (1:1)	53.1°×53.1°	36.0°×36.0°	27.0°×27.0°		
	2/3" (4:3)	58.9°×45.5°	40.2°×30.6°	30.2°×22.8°		
Focusing Range		0.1m ~ ∞				
Operation	Focus	Manual w/Lock				
	Iris	Manual w/Lock				
Filter Size		M34 P=0.5mm M27 P=0.5mm				
Wave Length		Visible Light				
TV Distortion		-0.6% *	0.4% *	-0.05% *		
Weight		84g	69g	59g		
Operating Temperature		−20°C ~ +60°C				

Model		MA23F25V	MA23F35V	MA23F50V	
		TAMRON 1/1 13 mm 1/2.4 C 4 11 3 11 11 11 11 11 11 11 11 11 11 11 1	7 TAMRON 1/13 32 mm 1/24 C	7AMRON 2/3 30mm 1/28 (M123 19)	
Imager Size		2/3"			
Mount Type		С			
Focal Length		25mm	35mm	50mm	
Aperture Range		F/2.4 ~ F/16		F/2.8 ~ F/16	
Field of View Angle (Horizontal × Vertical)	2/3" (1:1)	16.9°×16.9°	11.1°×11.1°	7.5°×7.5°	
	2/3" (4:3)	18.9°×14.3°	12.5°×9.4°	8.4°×6.4°	
Focusing Range		0.1m ~ ∞	0.2m ~ ∞	0.3m ~ ∞	
Operation	Focus	Manual w/Lock			
	Iris	Manual w/Lock			
Filter Size		M27 P=0.5mm			
Wave Length		Visible Light			
TV Distortion		-0.01% *	0.04% *	0.05% *	
Weight		55g	58g	74g	
Operating Temperature		-20°C ~ +60°C			

^{*} Design Value

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Management on Quality and Environment :

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