

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 1/1 Lem 1/24 (MAINE) 3	TAMRON J/3 12m J/2 t (M12)	7. TAMRON 2/41 tem //24 (21/2)	
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 380mm 1/28 (M12319)	
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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Tamon is certified with international standards: ISO 9001 for quality and ISO 14001 for environmental management at its Head Office, domestic sales offices, China plant as well as production facilities in Aomori Factory, Japan, and is fully committed to striving for continued and sustainable improvement at all levels and facets of its business operations.