

### Fixed-Focal Lenses for Machine Vision Use: Full 6-Mega-Pixel Resolution for 1/1.7" Imagers In a Compact Size of $\phi 29\text{mm}$

- 1/1.7" 6mm F/2.4 (Model: M117FM06)
- 1/1.7" 8mm F/2.4 (Model: M117FM08)

NEW



Model: M117FM06

Model: M117FM08

For

**IMX178** 1/1.8" 6-Mega

2.4  $\mu\text{m}$

#### Main Features

##### > Unrivalled High Contrast and High Resolution in the Industry

- The new lenses are compatible with 1/1.7" 2.74 $\mu\text{m}$  pixel-pitch 6-mega (max) pixel imagers, while assuring the highest resolution and contrast in  $\phi 29\text{mm}$  machine-vision lenses.  
(\* $\phi 29\text{mm}$ : Excluding the objective-end of the lens)

##### > Industry-leading Low Distortion (TV Distortion)

- Tamron's state-of-the-art optics technology achieves drastic improvement in TV distortion compared with previous models. (\* M117FM06: -1.5%, M117FM08: -1.0%)

##### > High-Quality Imaging at Close-Shooting Distances



- The new lens provides high-quality imaging in commonly used close-up distances.

##### > Rugged Mechanical Design for Anti-Vibration and Shock

- Newly designed mechanism improves anti-vibration and shock performance compared with previous models. Even under a severe machine-vision setup with as much as max 10G vibrations and shocks, the new mechanism limits optical (image) deflection within 10 $\mu\text{m}$ .  
\*Vibration frequency 10-60Hz (amplitude 0.75mm), vibration frequency 60-200Hz (acceleration 100m/s<sup>2</sup>), and number of cycles: 50 cycles.

##### > A Commonly used Setscrew is Included as a Standard Accessory

- A lock-screw used in previous models can be replaced with an embedding-type setscrew, reducing the diameter of the lens barrel for further compact installation.

Model		M117FM06	M117FM08
			
<b>Imager Size</b>		1/1.7"	
<b>Mount Type</b>		C	
<b>Focal Length</b>		6mm	8mm
<b>Aperture Range</b>		F/2.4 ~ F/16	
<b>Field of View Angle (Horizontal × Vertical)</b>	1/1.7"	65.0°×50.5°	52.2°×39.5°
	1/1.8"	64.2°×44.9°	50.9°×35.1°
<b>Focusing Range</b>		0.1m ~ ∞	
<b>Operation</b>	<b>Focus</b>	Manual w/lock	
	<b>Iris</b>	Manual w/lock	
<b>Filter Size</b>		M34 P=0.5	M30.5 P=0.5
<b>Wave Length</b>		Visible Light	
<b>TV Distortion</b>		-1.5%	-1.0%
<b>Weight</b>		50g	48g
<b>Operating Temperature</b>		-20°C ~ +60°C	

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**Management on Quality and Environment :**

Tamron is certified with international standards: ISO 9001 for quality and ISO 14001 for environmental management at its headquarters, domestic sales offices, China plant as well as three production facilities in Aomori, Japan, and is fully committed to striving for continued and sustainable improvement at all levels and facets of its business operations.