

# SONY

## SEL100F28GM

### Full-frame Smooth Trans Focus lens

A unique 100mm mid-telephoto lens featuring STF™ (Smooth Trans Focus) technology that can elevate portraits and subjects that benefit from smooth background bokeh to new artistic heights while boasting G Master™ resolution. It also offers close-up capability with up to 0.25x magnification and fast, precise and quiet autofocus. Optical SteadyShot™ image stabilization minimizes blur.



### Key Features

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#### Unique Smooth Trans Focus G Master™

G Master design combines extraordinary sharpness and smooth Bokeh in one lens. STF (Smooth Trans Focus) realizes an ultimate collaboration of impressive bokeh and high resolution that only Sony can offer. It is not easy to achieve spatial frequency of 50 line pairs per millimeter at a lens' widest aperture and produce smooth beautiful bokeh at the same time, but that is Sony's baseline for G Master design. Unprecedented resolution and other demanding design parameters yield outstanding reproduction of the most detailed subjects and scenes with superior contrast throughout every frame. G Master resolution is simply the highest in its class.

#### Apodization element eliminates distortion of defocused highlights

A unique feature of the STF lens is the special optical apodization (APD) element which produces exceptionally smooth background and foreground bokeh. The APD element acts as a graduated neutral density filter, with light transmissivity highest at the center and then gradually decreasing towards the periphery to ensure extraordinarily smooth bokeh. The APD element ensures equally smooth foreground and background defocus, without double-line effects.

#### Direct Drive SSM (DDSSM) for fast, quiet, precise focusing

The SEL100F28GM lens supports both contrast AF and focal-plane phase detection AF, and has a high-precision Direct Drive Super Sonic Motor (DDSSM) system that ensures exceptionally fast, quiet and accurate AF performance. The focusing system's double linear motor takes on the vital role of providing high-speed actuation for the AF contrast detection system when shooting video.

#### Selectable Macro mode – two lenses in one.

Besides being a perfect portrait lens, the SEL100F28GM incorporates a convenient ring-switch on the lens barrel to select from full range to a macro range. With close-up focus capability up to 1.87ft. (0.57m) min. and 0.25x max. magnification. It's like having two lenses in one.

#### Significantly reduces blur

High-performance Optical SteadyShot™ image stabilization is built right into the lens for sharp, blur-free images with a wide range of subjects. The stabilization lens is driven by a linear motor for fast, precise stabilization. Additionally, 5-axis image stabilization becomes available when used with  $\alpha$  series cameras that feature built-in image stabilization.

#### Manual aperture ring w/ selectable on/off click for stills or movie

A responsive manual aperture ring offers positive action that will satisfy professional photographers and moviemakers alike. The aperture ring click stops can be switched on or off as required. "Off" is the preferred setting for moviemaking since it results in the least aperture operation noise. When "On" the ring provides tactile feedback that is useful when shooting stills. Since this lens incorporates an apodization (ADP) lens element, the aperture ring is calibrated for F-stops and T-stops.

#### 11-blade circular aperture contributes to gorgeous bokeh

The 11-blade circular aperture maximizes the beauty of this large-aperture prime-lens, contributing to impressive images in which the subject stands out against a smoothly defocused foreground and background bokeh as well as perfectly round points of defocused light. Conventional aperture blades have flat sides creating unappealing, polygonal shaped defocused points of light.  $\alpha$  lenses overcome this problem through a unique design that keeps the aperture almost perfectly circular from its wide-open setting to when it is closed by 2 stops. Smoother, more natural defocusing can be obtained as a result.

**Aspherical lens dramatically reduces spherical aberration**

Aspherical lens design dramatically reduces spherical aberration while also reducing lens size and weight. Spherical aberration is a slight misalignment of the light rays projected on the image plane. This is caused by differences in refraction at different points on conventional spherical lenses which degrade image quality in large-aperture lenses. Specially shaped “aspherical” elements near the diaphragm restore alignment of light rays at the image plane, maintaining high sharpness and contrast even at maximum aperture and can also be used at other points in the optical path to reduce distortion. Well-designed aspherical elements can reduce the total number of elements required in the lens, thus reducing overall size and weight.

**F2.8 max aperture maintains exposure and depth of field**

F2.8 max aperture maintains exposure and depth of field. When changing your aperture to defocus the background, the areas out of the focal plane appear blurred. This ‘bokeh’ effect of the blurred background is enhanced with circular aperture blades used in this lens.

**Focus hold button, programmable for multiple functions**

The focus hold button not only performs its primary function to lock focus when recomposing, but can be customized to a number of other functions depending on your needs. In addition to Focus Hold, these custom functions include: Eye AF, AF On, Aperture Preview, Shot Result Preview or Bright Monitoring.

**Super ED glass w/ multi-coating reduces flare and ghosting**

The refined optical design includes an ED (Extra-low Dispersion) glass element which dramatically reduces chromatic aberration and provides superior contrast across the entire image, even at large aperture settings, resulting in corner-to-corner sharpness.

**Dust and moisture resistant for robust reliability<sup>1</sup>**

The dust and moisture resistance design makes this lens appropriate for heavy-duty outdoor use, especially when combined with a camera that employs weather resistant measures<sup>1</sup>.

**Nano AR coating suppresses reflections, flare and ghosting**

Sony’s original Nano AR Coating technology minimizes flare and ghosting, for dynamic range that achieves lifelike detail and gradation with advanced camera sensors. This precisely defined regular nano-structure allows accurate light transmission, contributing to high-quality images, even more so than with lenses that use coatings with an irregular nano-structure. The reflection suppression characteristic of the Nano AR Coating is superior to conventional anti-reflective coatings, providing a notable improvement in clarity, contrast, and overall image quality.

**Instant auto/manual focus selection**

Instantly and quickly switch between auto and manual focus via an AM/MF switch on the side of the lens. This makes operation faster and easier as you let the camera and lens focus for you, or decide to take control and manually focus on the precise point you chose.

**Internal Focus maintains lens dimensions**

Only the middle groups of the optical system move to achieve focus, so the overall length of the lens does not change when focusing. This is especially important when using for video recording. Other important benefits include fast autofocus and a short minimum focusing distance. Also, the filter thread at the front of the lens does not rotate, which is convenient when using a polarizing filter.

**Specifications**

Internal Information	
Mount rubber ring	Yes
Lens Specifications	

35mm equivalent focal-length (APS-C) (mm)	150
Angle of view (35mm)	24°
Angle of view (APS-C)	16°
Circular aperture	Yes
Dimensions dia. x length (in.)	3-3/8 x 4-3/4 inches
Dimensions dia. x length (mm)	85.2 x 118.1 mm
Filter diameter (mm)	72
Focal-length (mm)	100
Format	35mm full frame
Hood type	Round shape, bayonet type
Image stabilization (SteadyShot)	Optical SteadyShot
Lens construction (groups-elements)	10-13 *excluding APD element
Lens mount	Sony E-mount
Maximum aperture (F)	F 2.8 (T5.6)
Maximum magnification ratio (x)	0.14 (With the macro switching ring set to ""0.85m-∞"") 0.25 (With the macro switching ring set to ""0.57m-1.0m"")
Minimum aperture (F)	F 20 (T22)
Minimum focus distance (ft)	2.79 (With the macro switching ring set to ""0.85m-∞"") 1.87 (With the macro switching ring set to ""0.57m-1.0m"")
Minimum focus distance (m)	0.85 (With the macro switching ring set to ""0.85m-∞"") 0.57 (With the macro switching ring set to ""0.57m-1.0m"")
Model name	SEL100F28GM
Number of aperture blade	11
Product name	FE 100 mm F2.8 STF GM OSS
Type	Interchangeable lens
Weight (approx.) (g)	700 g
Weight (approx.) (oz.)	24.7 oz
Accessories	
Supplied Accessories	Hood (ALC-SH147) Lens front cap (ALC-F72S) Lens rear cap (ALC-R1EM) Case

1. Although the design is dust and moisture resistant, absolute protection from dust and moisture is not guaranteed.  
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