



ELM-25-2.8-18-C

Lens module specifications

Effective focal length	26.6	mm
F/#	2.8	(Variable)
Maximum sensor format	1.1	inch
Maximum image circle (Φ)	18	mm
Lifecycles (10-90% sinusoidal)	>1'000'000'000	cycles
FOV	Diagonal	36.5 °
	Horizontal	30 °
	Vertical	22 °
Back Focal Length	11.01	mm
Optical Distortion	< -2	%
Pixel size recommended	2.4	μm
Wavelength range	486-656	nm
Relative illumination	> 65	%
Max chief ray angle	11.0	°
Working distance range	200 - infinity	mm
Mount	C-mount	
Total Track Length	86.23	mm
Dimension (Φ x L)	47.4x74.0	mm

Focus tunable lens specifications

EL-16-40-TC-VIS-5D

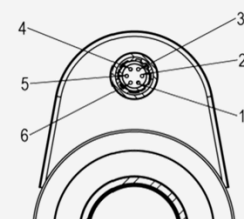
Focal power range (@30°C) ³	-2 to +3	dpt
Wavefront error (at 525 nm & 0 mA)	<0.25/<0.5	λRMS
Optical axis vertical / horizontal		
Operating temperature	-20 to +65	°C
Storage temperature	-40 to +85	°C
Temperature sensor & memory	STTS2004	(STMicroelectronics)

Electrical specifications

Control current (typical)	-250 to +250	mA
Absolute max. control current	-500 to 500	mA
Power consumption	0 to 0.7 (nominal) 0 to 2.8 (absolute max.)	W
Motor coil resistance @ 30°C	12	Ω
Absolute maximum voltage (coil)	10	V
Absolute maximum voltage (temp. sensor)	4.3	V

Hirose connector (HR10G-7R-6P)

	Function	Sensor pins
Pin 1	Control current +	-
Pin 2	Control current -	-
Pin 3	Ground	1-4
Pin 4	Power (3.3V)	8
Pin 5	I ² C SCL	6
Pin 6	I ² C SDA	5



Controller

The liquid lens is controlled with electrical current and must be operated by a suitable lens controller. Hirose cables and liquid lens controllers are sold separately. The following controllers are considered fully compatible with ELM-25-2.8-18-C:

- Optotune embedded controller ECC-1C
- Optotune lens driver EL-E-4i
- Optotune industrial controller ICC-4C-500



Additional selection of controllers is available at <https://www.optotune.com/controllers>

Mechanical drawings

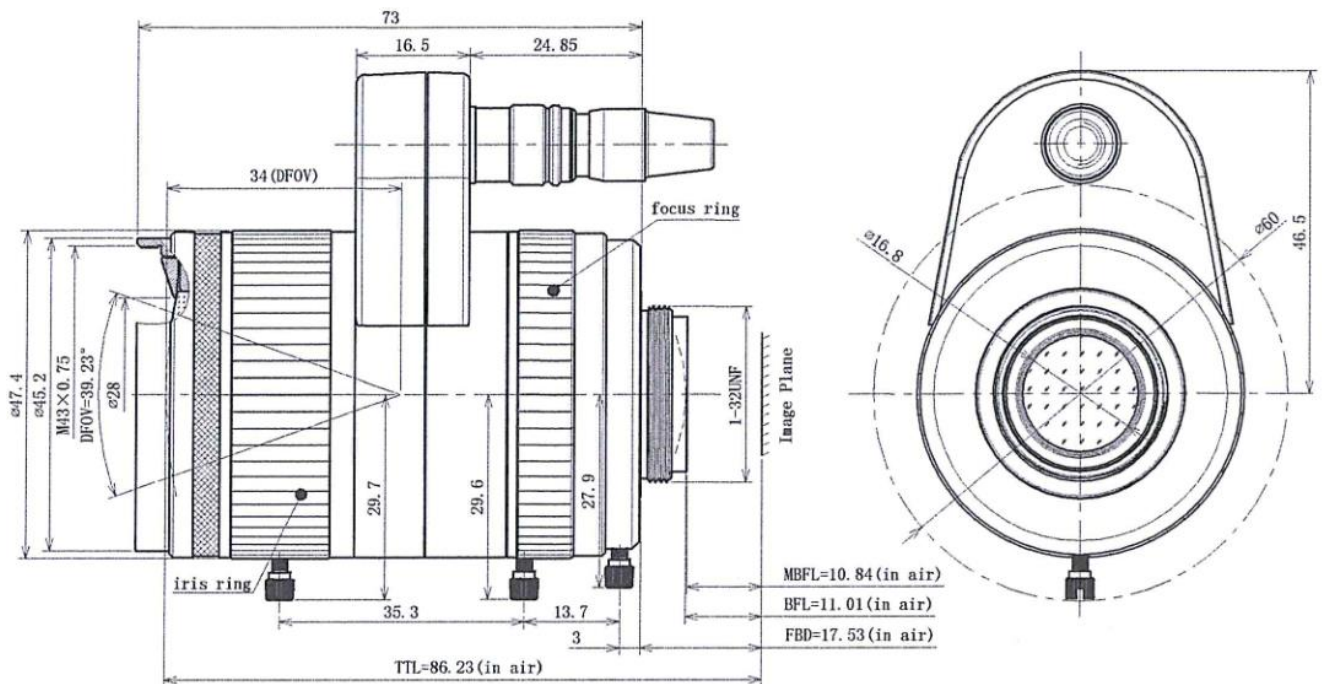


Figure 1: Mechanical drawing of the ELM-25-2.8-18-C

For more information on optical, mechanical and electrical parameters, please contact sales@optotune.com.