COOLENS®

DTCA175-15.7-M42-AL
High Performance AOI Telecentric Lens

DTCA Series Features:
- DTCA 35F series lenses are designed specially for compatibility with large sensor.

- Support newest developments in machine vision field: 35Full(44mm) camera and 65Mp , 71Mp camera.

- Extreme imaging aperture, extraordinary aberration correction, diffraction limited imaging resolution.

- Adjustable aperture, good telecentricity, near zero distortion, for high quality imaging.

Optical Specifications	
Magnification (x)	1.846
Object Field of View (Φmm)	15.7
Working Distance (mm)	71
Max Sensor Size (Φmm)	29(1.75")
Best Aperture (F/#)	20
Telecentricity typical (max) (deg)	<0.1
Distortion typical (max) (%)	<0.1
MTF30 (lp/mm)	>45
Depth of Field (mm)	0.5
N.A	0.0461
Object side resolution (μm)	7.28
Length of I/O (mm)	400

Field of View (mm × mm)	
1.75" CMV12000 (22.53x16.90)	12.2x9.2
1.75" PYTHON16k (18.43x18.43)	9.98x9.98
1.75" LineScan-4k (28.8mm)	15.6
Mechanical Specifications	
Mount	M42
Length (mm)	311.9
Weight (kg)	1.25
Coaxial Light	No
Iris	No

Notes:

1. Depth of Field is calculated value, this value could be used for imaging test, but to get sharp image in application, half of calculated value is suggested.

2. Length of I/O = WD + Length + Back Focal Length.