

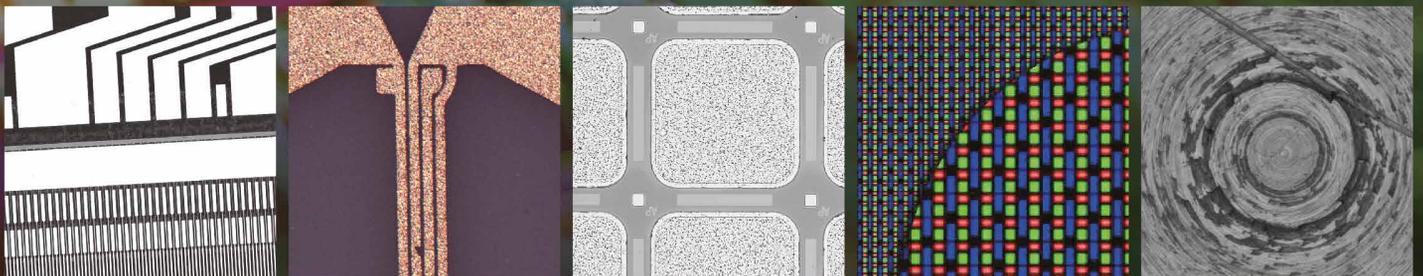
COLENS[®]

AOI
Lens

Ultra High Resolution



Provide More Subtle Optical Information



15 COLENS[®]
ANNIVERSARY
FOCUS ON MACHINE VISION *SINCE 2008*



About VICO

VICO is dedicated to promoting the development of machine vision/computer vision/digital imaging technology. The brands we distribute include COOLENS®, Carm®, Lontry®, etc., and are still expanding. Those of the most excellent quality manufactured in China in the vision area are our focus. The products involved include lenses, smart cameras, illuminations, cables, controllers, digital image test solutions, and more.

Our focus is to provide every single component needed to solve imaging applications in the industrial automation field, especially for precision equipment manufacturing in the intelligent manufacturing and robot industry.

Over the years, our expertise in developing innovative optical systems has helped our customers solve machine vision applications, which earned us a worldwide reputation as an excellent optical solutions provider.

Standard Product

VICO supplies more than 10 series of high-resolution lenses, suitable for various industrial cameras, widely applied in the field of positioning, identification, inspection, measurement, etc.,

Customization

Customization is VICO's key to success in the machine vision field. Our professional R&D engineering team, supply chain, assembly, and testing team enable us to quickly respond to customization requirements. We not only have thousands of customized lenses but are also able to provide the whole machine vision solution.

Complete Specifications And Sample Delivery Within One Day

HongKong

12/F, Kiu Fu Commercial BLDG, Wan Chai, Hong Kong, China

Shenzhen

5A-1303, LOGAN Business Center, LongHua Dist., Shenzhen, China

Korea

경기도 광명시 하안로 60, E905 호 (광명 SK 테크노파크)

Germany

Fabrikstraße 42, 47119 Duisburg, Germany

Contents

Product Selection Quick Reference Table

DTCM Series Magnification Crosstab	P06
AOI Application-Standard Model Quick Reference Table	P08

DTCM Series Matrix Bi-Telecentric Lenses

WD:73~465mm

DTCM125 Series (1/2.5")	0.024~0.277x	P10
DTCM120 Series (1/2")	0.027~0.308x	P15
DTCM118 Series (1/1.8")	0.03~0.346x	P20
DTCM230 Series (2/3")	0.038~0.438x	P25
DTCM110 Series (1")	0.055~0.638x	P30
DTCM111 Series (1.1")	0.061~0.708x	P35
DTCM430H Series (4/3")	0.079~0.75x	P40
DTCM175 Series (1.75")	0.097~1.115x	P45
DTCM210 Series (2")	0.110~0.917x	P50
DTCM71M Series (39mm)	0.130~1.038x	P55
DTCM35FH Series (35mm Full)	0.145~1.038x	P60
DTCM16K Series (59mm)	0.197~0.738x	P65
DTCM150M Series (67.6mm)	0.225~0.398x	P68

DTCA Series Ultra Resolution Bi-Telecentric Lenses

WD:60~378mm

DTCA230 Series (2/3")	0.166x~0.5x	P72
DTCA110 Series (1")	0.075x	P73
DTCA121 Series (1.2")	2x~4x	P73
DTCA175 Series (1.75")	0.46x~1.846x	P78
DTCA185 Series (1.85")	0.37x	P81

DTCA210 Series (2")	0.1536x~2.8x	P82
DTCA35F Series (35mm Full)	1x~5x	P84
DTCA16K Series (62mm)	0.705x~1x	P93
DTCA23K Series (82mm)	0.875x~1.3x	P93
DTCA24K Series (88mm)	0.96x~2x	P93

WWK Series C-Mount High Resolution Telecentric Lenses WD:108~220mm

WWK-110 (1")	0.275x~0.7x	P96
WWK-111V3 (1.1")	0.5x~8x	P102
WWK-230 (2/3")	0.22x~0.5x	P110

DTCL Series Telecentric Illuminators Beam Diameter:26-300mm

DTCL Series	Compatible with DTCM Series Lenses	P64
-------------	------------------------------------	------------

Featured Products and Modules

DTCM T90 Series Lenses	90-degree Steering Design	P14
Mounting Bracket	Vertical/Horizontal Bracket for Large Lenses	P19
Sham (Tilt-Shift) Lenses	Capture Images on the Side of the Products	P24
LTCM Series Lenses	Flat Telecentric Lenses for Line Scan	P29
LTCT Series Illuminators	Flat Telecentric Illuminators for Line Scan	P34
DTCA111-111 Series Lenses	Series Telecentric Illuminators	P39

360° View Lenses

PFA Series Modules	Eight Different Views of the Side Surfaces	P91
PRHI230 Series Lenses	Hole Inspection Lenses for 360° Inside View	P104
PRO230 Series Lenses	Catadioptric Lenses for 360° Top and Lateral View	P109

DTCM Series Magnification Crosstab

FOV (mm) Mag.(x) CCD Sensor	26	36	42	48	56	64H	72	80H	90	100H
DTCM125 (1/2.5" 7.2mm)	0.277	0.200	0.171	0.150	0.129	0.113	0.100	0.090	0.080	0.072
DTCM120 (1/2" 8.0mm)	0.308	0.222	0.190	0.167	0.143	0.125	0.111	0.100	0.089	0.080
DTCM118 (1/1.8" 9.0mm)	0.346	0.250	0.214	0.188	0.161	0.141	0.125	0.113	0.100	0.090
DTCM230 (2/3" 11.4mm)	0.438	0.317	0.271	0.238	0.204	0.178	0.158	0.142	0.127	0.114
DTCM110 (1" 16.6mm)	0.638	0.460	0.395	0.346	0.296	0.259	0.231	0.208	0.184	0.166
DTCM111 (1.1" 18.4mm)	0.708	0.511	0.438	0.383	0.329	0.288	0.256	0.230	0.204	0.184
DTCM430H (4/3" 23.6 mm)	0.908	0.656	0.562	0.492	0.421	0.369	0.328	0.295	0.262	0.236
DTCM175 (1.75" 29mm)	1.115	0.806	0.690	0.604	0.518	0.453	0.403	0.363	0.322	0.290
DTCM210 (2" 33mm)	x	0.917	0.786	0.688	0.589	0.516	0.458	0.413	0.367	0.330
DTCM71M (39mm)	x	1.083	0.929	0.813	0.696	0.609	0.542	0.488	0.433	0.390
DTCM35FH (43.6mm)	x	x	1.038	0.908	0.779	0.681	0.606	0.545	0.484	0.436
DTCM16K (59mm)	x	x	x	x	x	x	x	0.738	x	0.590
DTCM150M (67.6mm)	x	x	x	x	x	x	x	x	x	x
WD(mm)	73	110	118	128	138	158	178	228	208	238

Suggestion: Select DTCM telecentric lenses via "sensor" and "FOV".

e.g. if you use 1/2.5" camera, and the diagonal of your FOV is within 26mm, then we suggest you to use DTCM125-26.

	110	120H	136	150	170	190H	216	240H	258	300	Mount
	0.066	0.060	0.053	0.048	0.042	0.038	0.033	0.030	0.028	0.024	C
	0.073	0.067	0.059	0.053	0.047	0.042	0.037	0.033	0.031	0.027	C
	0.082	0.075	0.066	0.060	0.053	0.047	0.042	0.038	0.035	0.030	C
	0.104	0.095	0.084	0.076	0.067	0.060	0.053	0.048	0.044	0.038	C
	0.151	0.138	0.122	0.111	0.098	0.087	0.077	0.069	0.064	0.055	C
	0.167	0.153	0.135	0.123	0.108	0.097	0.085	0.077	0.071	0.061	C
	0.215	0.197	0.174	0.157	0.139	0.124	0.109	0.098	0.091	0.079	M42/M58
	0.264	0.242	0.213	0.193	0.171	0.153	0.134	0.121	0.112	0.097	M42/M58
	0.300	0.275	0.243	0.220	0.194	0.174	0.153	0.138	0.128	0.110	M42/M58
	0.355	0.325	0.287	0.260	0.229	0.205	0.181	0.163	0.151	0.130	M42/M58
	0.396	0.363	0.321	0.291	0.256	0.229	0.202	0.182	0.169	0.145	M58
	0.536	×	0.434	0.393	0.347	0.311	0.273	0.246	0.229	0.197	M72
	×	×	×	×	0.398	0.356	0.313	0.282	0.262	0.225	M72
	263	273	288	300	318	330	372	410	338	465	\

DTCM125 Series

DTCM120 Series

DTCM118 Series

DTCM230 Series

DTCM110 Series

DTCM111 Series

AOI Application Standard Model Reference Card

Product Selection
Quick Reference Table

Pixel Size	Resolution		18µm			15µm		
	Mag.β / Lens Model / Page		Mag.β	Lens Model	Page	Mag.β	Lens Model	Page
1.75" 12M 5.5µm			0.306x	DTCM175-100H-M58-AL	P47	0.367x	DTCA185-81-G-M58-AL	P81
1.85" 21M 4.5µm			0.250x	DTCM210-136-M58-AL	P52	0.300x	DTCM210-110-M58-AL	P52
1.2" 2.4.5M 2.74µm			0.152x	DTCM430H-150-M58-AL	P43	0.183x	DTCM430H-136-M58-AL	P43
1.1" 12M 3.45µm			0.192x	DTCM111-90-AL	P37	0.230x	WWK023-220-111	P106
1" 20M 2.74µm			0.152x	DTCM110-110-AL	P32	0.183x	DTCM110-90-AL	P32
1.1" 25M 2.5µm			0.139x	DTCM111-136-AL	P38	0.167x	DTCM111-110-AL	P37

Pixel Size	Resolution		12µm			10µm		
	Mag.β / Lens Model / Page		Mag.β	Lens Model	Page	Mag.β	Lens Model	Page
1.75" 12M 5.5µm			0.458x	DTCA175-61.4-G-M42-AL	P80	0.550x	DTCA175-51-G-M58-AL	P79
1.85" 21M 4.5µm			0.375x	DTCM210-90-M58-AL	P52	0.450x	DTCM210-72-M58-AL	P51
1.2" 2.4.5M 2.74µm			0.228x	DTCM430H-110-M58-AL	P42	0.274x	DTCM430H-90-M58-AL	P42
1.1" 12M 3.45µm			0.288x	DTCM111-64H-AL	P36	0.345x	WWK0345-220-111	P107
1" 20M 2.74µm			0.228x	WWK022-220-111	P106	0.274x	WWK0275-220-110	P106
1.1" 25M 2.5µm			0.208x	DTCM111-90-AL	P37	0.250x	DTCA121-80-G-AL	P77

Pixel Size	Resolution		8µm			6µm		
	Mag.β / Lens Model / Page		Mag.β	Lens Model	Page	Mag.β	Lens Model	Page
1.75" 12M 5.5µm			0.688x	DTCM175-42-M58-AL	P46	0.917x	DTCA175-28.2-128-M58-AL	P78
1.85" 21M 4.5µm			0.563x	DTCM210-64H-M58-AL	P51	0.75x	DTCA210-44.8-M58-AL	P83
1.2" 2.4.5M 2.74µm			0.343x	DTCM430H-72-M58-AL	P42	0.457x	DTCM430H-56-M58-AL	P41
1.1" 12M 3.45µm			0.431x	DTCM111-42-AL	P36	0.575x	WWK055-220-111	P109
1" 20M 2.74µm			0.343x	WWK0345-220-111	P107	0.457x	WWK046-220-110	P107
1.1" 25M 2.5µm			0.313x	DTCM111-64H-AL	P36	0.417x	DTCM111-48-AL	P36

1. The required lens magnification = camera pixel size / pixel resolution. For example, to find a lens that matches a 12MP, 1.75", 5.5µm pixel camera with 10µm resolution, use the formula to calculate the lens magnification: $5.5\mu\text{m}/10\mu\text{m} = 0.55$. Consult the table for available lens options and select the DTCA175-51-G-M58-AL lens. Go to the corresponding page to view the detailed parameters and drawings.
2. When there is no exact magnification match on the table, a lens with a similar magnification is recommended.

DTCM Series
Matrix Bi-Telecentric
Lenses

DTCA Series
Ultra Resolution
Bi-Telecentric Lenses

WWK Series
C-Mount High Resolution
Telecentric Lenses

DTCL Series
Telecentric Illuminators

Featured Products and
Modules

360° View Lenses

DTCM Series

Matrix Bi-Telecentric Lenses



Naming Rule

DTCM Series Diagonal of FOV is 56mm



CCD-1/2.5"

Back focal length is adjustable



Features

- The DTCM series is the ultimate bi-telecentric design with excellent imaging quality.
- The field of view ranges from a minimum of 26mm to a maximum of 300mm.
- Compatible with 5MP1/2.5"-150MP 67.6mm.
- Various specifications of C/M/F interface industrial cameras.
- The full series of 233 standard products and over 100 non-standard specifications cover various application scenarios.
- Large aperture, high telecentricity, ultra-low distortion, and large depth of field.

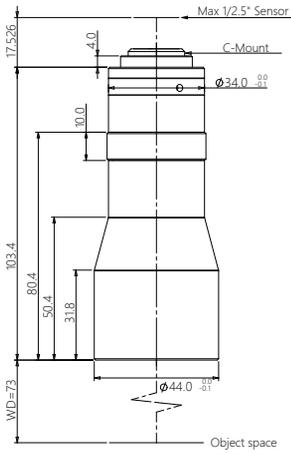
DTCM125 Series

For 1/2.5" Cameras



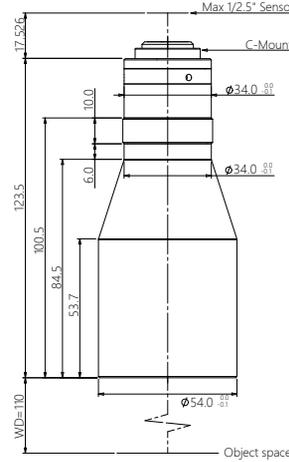
Lens Model	FOV (Φmm)	Mag. β(x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% max)	Telecentricity (° max)	I/O (mm)	Length (mm)	Mount	Weight (kg)
DTCM125-26	26	0.277	73±1	7.2(1/2.5")	4.2	>190	±5.7@F11	<0.1	<0.1	194±1	103.4	C	0.3
DTCM125-36	36	0.200	110±2	7.2(1/2.5")	4.2	>190	±11.0@F11	<0.1	<0.1	251±2	123.5	C	0.4
DTCM125-42	42	0.171	118±3	7.2(1/2.5")	4.2	>200	±15.0@F11	<0.1	<0.1	244±3	108.9	C	0.4
DTCM125-48	48	0.150	128±3	7.2(1/2.5")	4.2	>190	±19.5@F11	<0.1	<0.1	268±3	122.4	C	0.4
DTCM125-56-AL	56	0.129	138±3	7.2(1/2.5")	4.2	>200	±26.4@F11	<0.1	<0.1	301±3	145.0	C	0.7
DTCM125-64H-AL	64	0.113	158±3	7.2(1/2.5")	4.2	>200	±34.8@F11	<0.1	<0.1	333±3	157.5	C	0.8
DTCM125-72-AL	72	0.100	178±3	7.2(1/2.5")	4.2	>195	±44@F11	<0.1	<0.1	373±3	177.5	C	1.0
DTCM125-80H-AL	80	0.090	228±4	7.2(1/2.5")	4.2	>205	±54.3@F11	<0.1	<0.1	413±4	167.5	C	1.9
DTCM125-90-AL	90	0.080	208±3	7.2(1/2.5")	4.2	>200	±68.7@F11	<0.1	<0.1	428±3	202.5	C	1.7
DTCM125-100H-AL	100	0.072	238±4	7.2(1/2.5")	4.2	>210	±84.8@F11	<0.1	<0.1	501±4	245.3	C	3.1
DTCM125-110-AL	110	0.066	263±4	7.2(1/2.5")	4.2	>210	±101@F11	<0.1	<0.1	536±4	255.1	C	2.7
DTCM125-120H-AL	120	0.060	273±5	7.2(1/2.5")	4.2	>210	±122@F11	<0.1	<0.1	557±5	266.9	C	4.2
DTCM125-136-AL	136	0.053	288±5	7.2(1/2.5")	4.2	>210	±157@F11	<0.1	<0.1	646±5	340.1	C	4.2
DTCM125-150-AL	150	0.048	300±5	7.2(1/2.5")	4.2	>210	±190@F11	<0.1	<0.1	627±5	309.5	C	5.7
DTCM125-170-AL	170	0.042	318±5	7.2(1/2.5")	4.2	>210	±249@F11	<0.1	<0.1	707±5	371.4	C	6.5
DTCM125-190H-AL	190	0.038	330±5	7.2(1/2.5")	4.2	>210	±304@F11	<0.1	<0.1	746±5	398.8	C	9.6
DTCM125-216-AL	216	0.033	372±5	7.2(1/2.5")	4.2	>210	±404@F11	<0.1	<0.1	884±5	494.2	C	13.7
DTCM125-240H-AL	240	0.030	410±6	7.2(1/2.5")	4.2	>210	±489@F11	<0.1	<0.1	968±6	540.1	C	19.1
DTCM125-258-AL	258	0.028	338±5	7.2(1/2.5")	4.2	>210	±565@F11	<0.1	<0.1	771±5	415.5	C	24.3
DTCM125-300-AL	300	0.024	465±6	7.2(1/2.5")	4.2	>205	±763@F11	<0.1	<0.1	1101±6	618.5	C	46.6

DTCM125-26



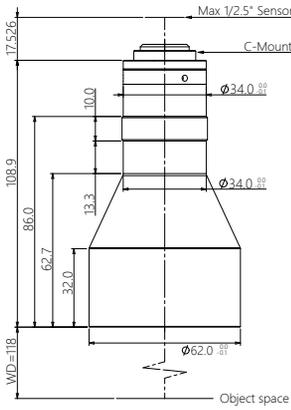
FOV(Φmm)	26
Mag.β(x)	0.277
WD(mm)	73±1
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>190
DOF(mm)	±5.7@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	194±1
Length(mm)	103.4
Mount	C
Weight(kg)	0.3
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	17.3x13.0
1/2.5" 9P001/31 (5.7x4.28)	20.6x15.5

DTCM125-36



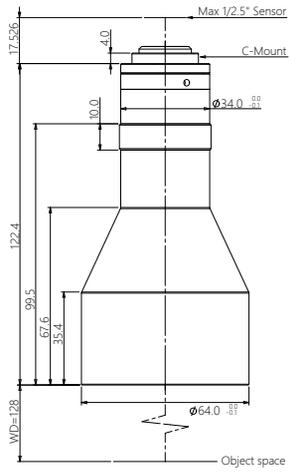
FOV(Φmm)	36
Mag.β(x)	0.200
WD(mm)	110±2
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>190
DOF(mm)	±11.0@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	251±2
Length(mm)	123.5
Mount	C
Weight(kg)	0.4
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	24.0x18.0
1/2.5" 9P001/31 (5.7x4.28)	28.5x21.4

DTCM125-42



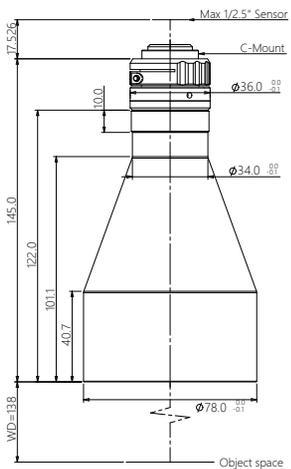
FOV(Φmm)	42
Mag.β(x)	0.171
WD(mm)	118±3
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>200
DOF(mm)	±15.0@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	244±3
Length(mm)	108.9
Mount	C
Weight(kg)	0.4
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	28.1x21.1
1/2.5" 9P001/31 (5.7x4.28)	33.3x25.0

DTCM125-48



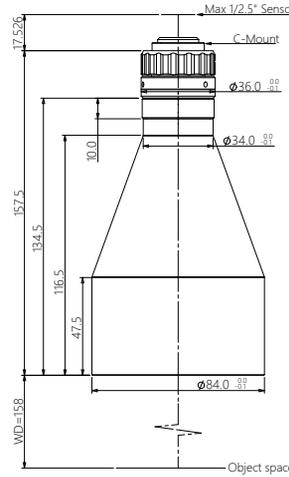
FOV(Φmm)	48
Mag.β(x)	0.150
WD(mm)	128±3
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>190
DOF(mm)	±19.5@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	268±3
Length(mm)	122.4
Mount	C
Weight(kg)	0.4
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	32.0x24.0
1/2.5" 9P001/31 (5.7x4.28)	38.0x28.5

DTCM125-56-AL



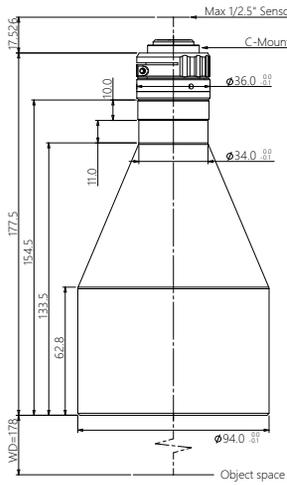
FOV(Φmm)	56
Mag.β(x)	0.129
WD(mm)	138±3
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>200
DOF(mm)	±26.4@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	301±3
Length(mm)	145.0
Mount	C
Weight(kg)	0.7
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	37.2x27.9
1/2.5" 9P001/31 (5.7x4.28)	44.2x33.2

DTCM125-64H-AL



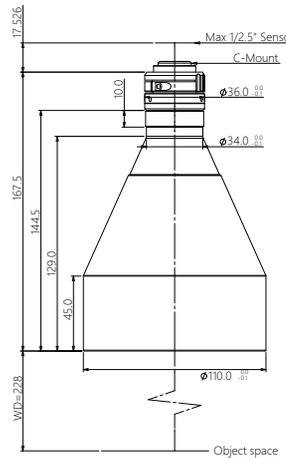
FOV(Φmm)	64
Mag.β(x)	0.113
WD(mm)	158±3
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>200
DOF(mm)	±34.8@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	333±3
Length(mm)	157.5
Mount	C
Weight(kg)	0.8
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	42.5x31.9
1/2.5" 9P001/31 (5.7x4.28)	50.4x37.9

DTCM125-72-AL



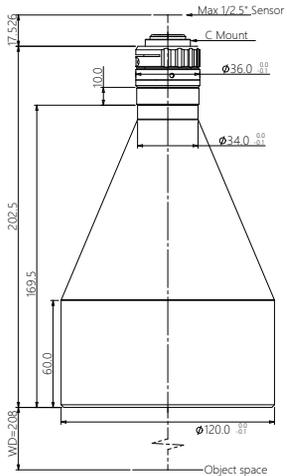
FOV(Φmm)	72
Mag.β(x)	0.100
WD(mm)	178±3
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>195
DOF(mm)	±44@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	373±3
Length(mm)	177.5
Mount	C
Weight(kg)	1.0
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	48.0x36.0
1/2.5" 9P001/31 (5.7x4.28)	57.0x42.8

DTCM125-80H-AL



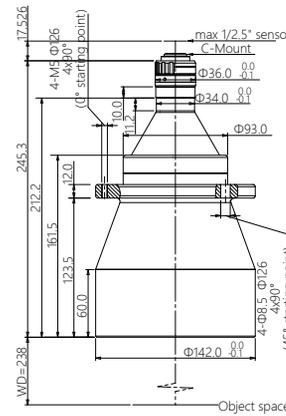
FOV(Φmm)	80
Mag.β(x)	0.090
WD(mm)	228±4
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>205
DOF(mm)	±54.3@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	413±4
Length(mm)	167.5
Mount	C
Weight(kg)	1.9
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	53.3x40.0
1/2.5" 9P001/31 (5.7x4.28)	63.3x47.6

DTCM125-90-AL



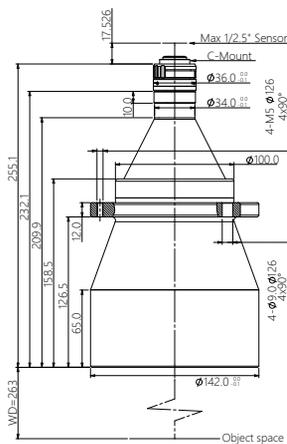
FOV(Φmm)	90
Mag.β(x)	0.080
WD(mm)	208±3
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>200
DOF(mm)	±68.7@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	428±3
Length(mm)	202.5
Mount	C
Weight(kg)	1.7
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	60.0x45.0
1/2.5" 9P001/31 (5.7x4.28)	71.3x53.5

DTCM125-100H-AL



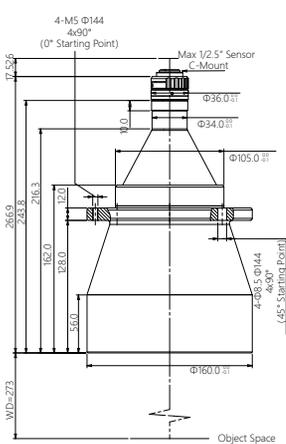
FOV(Φmm)	100
Mag.β(x)	0.072
WD(mm)	238±4
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	±84.8@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	501±4
Length(mm)	245.3
Mount	C
Weight(kg)	3.1
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	66.7x50.0
1/2.5" 9P001/31 (5.7x4.28)	79.2x59.4

DTCM125-110-AL



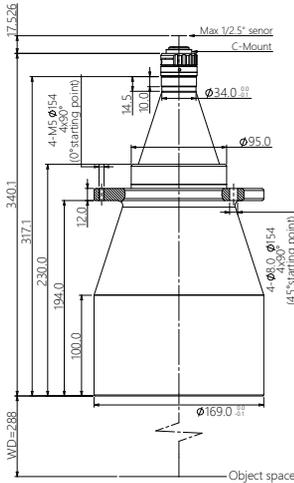
FOV(Φmm)	110
Mag.β(x)	0.066
WD(mm)	263±4
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	±101@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	536±4
Length(mm)	255.1
Mount	C
Weight(kg)	2.7
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	72.7x54.5
1/2.5" 9P001/31 (5.7x4.28)	86.4x64.8

DTCM125-120H-AL



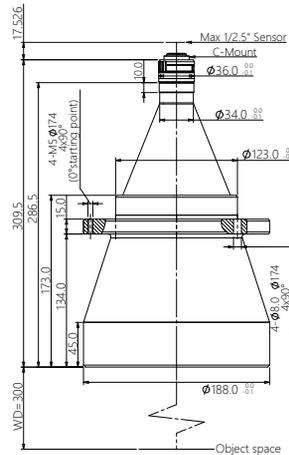
FOV(Φmm)	120
Mag.β(x)	0.060
WD(mm)	273±5
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	±122@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	557±5
Length(mm)	266.9
Mount	C
Weight(kg)	4.2
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	80.0x60.0
1/2.5" 9P001/31 (5.7x4.28)	95.0x71.3

DTCM125-136-AL



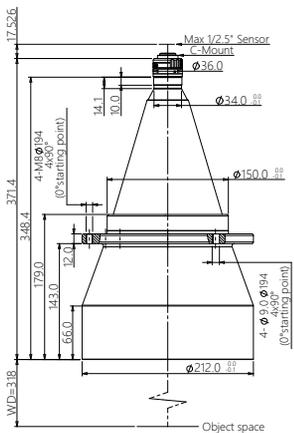
FOV(Φmm)	136
Mag.β(x)	0.053
WD(mm)	288±5
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	±157@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	646±5
Length(mm)	340.1
Mount	C
Weight(kg)	4.2
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	90.6x67.9
1/2.5" 9P001/31 (5.7x4.28)	107.5x80.8

DTCM125-150-AL



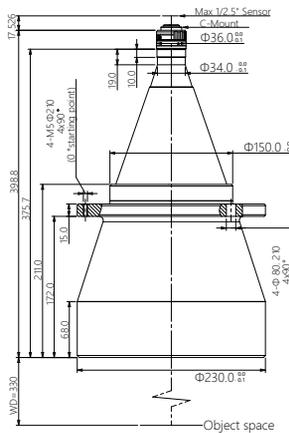
FOV(Φmm)	150
Mag.β(x)	0.048
WD(mm)	300±5
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	±190@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	627±5
Length(mm)	309.5
Mount	C
Weight(kg)	5.7
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	100.0x75.0
1/2.5" 9P001/31 (5.7x4.28)	118.8x89.2

DTCM125-170-AL



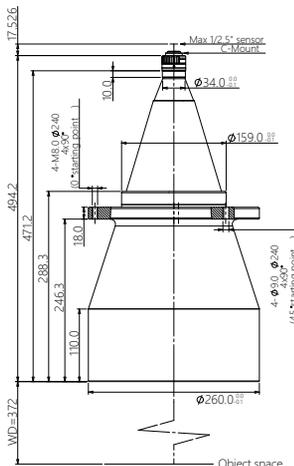
FOV(Φmm)	170
Mag.β(x)	0.042
WD(mm)	318±5
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	±249@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	707±5
Length(mm)	371.4
Mount	C
Weight(kg)	6.5
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	114.3x85.7
1/2.5" 9P001/31 (5.7x4.28)	135.7x101.9

DTCM125-190H-AL



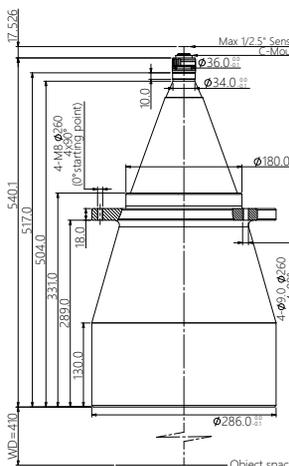
FOV(Φmm)	190
Mag.β(x)	0.038
WD(mm)	330±5
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	±304@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	746±5
Length(mm)	398.8
Mount	C
Weight(kg)	9.6
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	126.3x94.7
1/2.5" 9P001/31 (5.7x4.28)	150.0x112.6

DTCM125-216-AL



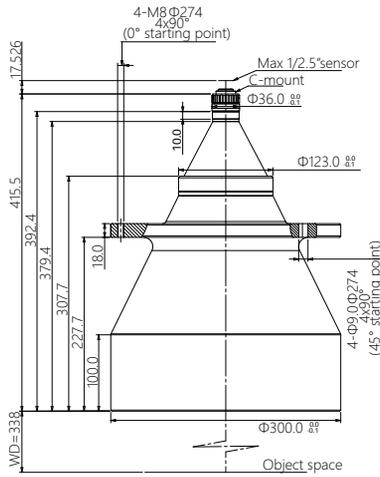
FOV(Φmm)	216
Mag.β(x)	0.033
WD(mm)	372±5
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	±404@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	884±5
Length(mm)	494.2
Mount	C
Weight(kg)	13.7
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	145.5x109.1
1/2.5" 9P001/31 (5.7x4.28)	172.7x129.7

DTCM125-240H-AL



FOV(Φmm)	240
Mag.β(x)	0.030
WD(mm)	410±6
Max Sensor Size(Φmm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	±489@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	968±6
Length(mm)	540.1
Mount	C
Weight(kg)	19.1
Field of View (mmxmm)	
1/3" AR130/RJ33 (4.8x3.6)	160.0x120.0
1/2.5" 9P001/31 (5.7x4.28)	190.0x142.7

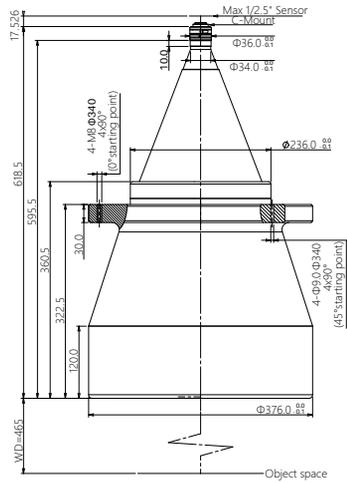
DTCM125-258-AL



FOV(ϕ mm)	258
Mag, $\beta(x)$	0.028
WD(mm)	338 \pm 5
Max Sensor Size(ϕ mm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	\pm 565@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	771 \pm 5
Length(mm)	415.5
Mount	C
Weight(kg)	24.3

Field of View (mmxmm)	
1/3° AR130/RJ33 (4.8x3.6)	171.4x128.6
1/2.5° 9P001/31 (5.7x4.28)	203.6x152.9

DTCM125-300-AL



FOV(ϕ mm)	300
Mag, $\beta(x)$	0.024
WD(mm)	465 \pm 6
Max Sensor Size(ϕ mm)	7.2(1/2.5")
F/#	4.2
MTF30(lp/mm)	>205
DOF(mm)	\pm 763@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1101 \pm 6
Length(mm)	618.5
Mount	C
Weight(kg)	46.6

Field of View (mmxmm)	
1/3° AR130/RJ33 (4.8x3.6)	200.0x150.0
1/2.5° 9P001/31 (5.7x4.28)	237.5x178.3

DTCM Series-T90 Corner Design

- Support internal 90-degree steering design.
- The highest matching 150 MegaPixels industrial camera.
- The field of view is up to 300mm (diagonal field of view).
- Save installation space and reduce equipment cost.



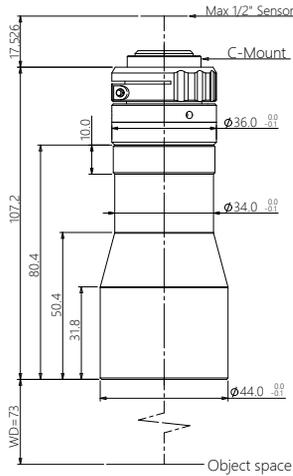
DTCM120 Series

For 1/2" Cameras



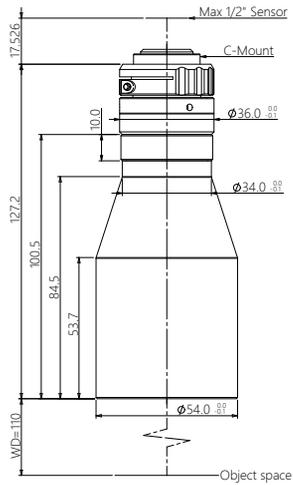
Lens Model	FOV (Φmm)	Mag. β(x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% max)	Telecentricity (° max)	I/O (mm)	Length (mm)	Mount	Weight (kg)
DTCM120-26-AL	26	0.308	73±1	8.0(1/2")	4.2	>175	±4.6@F11	<0.1	<0.1	198±1	107.2	C	0.3
DTCM120-36-AL	36	0.222	110±2	8.0(1/2")	4.2	>190	±8.9@F11	<0.1	<0.1	255±2	127.2	C	0.4
DTCM120-42-AL	42	0.190	118±3	8.0(1/2")	4.2	>210	±12.1@F11	<0.1	<0.1	248±3	112.7	C	0.4
DTCM120-48-AL	48	0.167	128±3	8.0(1/2")	4.2	>200	±15.7@F11	<0.1	<0.1	272±3	126.2	C	0.4
DTCM120-56-AL	56	0.143	138±3	8.0(1/2")	4.2	>210	±21.5@F11	<0.1	<0.1	304±3	148.7	C	0.6
DTCM120-64H-AL	64	0.125	158±3	8.0(1/2")	4.2	>220	±28.2@F11	<0.1	<0.1	337±3	161.2	C	0.8
DTCM120-72-AL	72	0.111	178±3	8.0(1/2")	4.2	>215	±35.7@F11	<0.1	<0.1	377±3	181.2	C	1.0
DTCM120-80H-AL	80	0.100	228±4	8.0(1/2")	4.2	>210	±44@F11	<0.1	<0.1	417±4	171.2	C	1.8
DTCM120-90-AL	90	0.089	208±3	8.0(1/2")	4.2	>210	±55.5@F11	<0.1	<0.1	432±3	206.2	C	1.6
DTCM120-100H-AL	100	0.080	238±4	8.0(1/2")	4.2	>210	±68.7@F11	<0.1	<0.1	505±4	249.0	C	3.0
DTCM120-110-AL	110	0.073	263±4	8.0(1/2")	4.2	>210	±82.6@F11	<0.1	<0.1	539±4	258.8	C	2.6
DTCM120-120H-AL	120	0.067	273±5	8.0(1/2")	4.2	>210	±99@F11	<0.1	<0.1	561±5	270.6	C	4.1
DTCM120-136-AL	136	0.059	288±5	8.0(1/2")	4.2	>215	±126@F11	<0.1	<0.1	649±5	343.8	C	4.2
DTCM120-150-AL	150	0.053	300±5	8.0(1/2")	4.2	>210	±156@F11	<0.1	<0.1	631±5	313.2	C	5.6
DTCM120-170-AL	170	0.047	318±5	8.0(1/2")	4.2	>210	±199@F11	<0.1	<0.1	711±5	375.1	C	6.4
DTCM120-190H-AL	190	0.042	330±5	8.0(1/2")	4.2	>210	±248@F11	<0.1	<0.1	750±5	402.5	C	9.6
DTCM120-216-AL	216	0.037	372±5	8.0(1/2")	4.2	>210	±321@F11	<0.1	<0.1	887±5	497.9	C	13.7
DTCM120-240H-AL	240	0.033	410±6	8.0(1/2")	4.2	>210	±397@F11	<0.1	<0.1	971±6	543.8	C	19.0
DTCM120-258-AL	258	0.031	338±5	8.0(1/2")	4.2	>210	±458@F11	<0.1	<0.1	775±5	419.2	C	24.3
DTCM120-300-AL	300	0.027	465±6	8.0(1/2")	4.2	>205	±603@F11	<0.1	<0.1	1105±6	622.2	C	46.5

DTCM120-26-AL



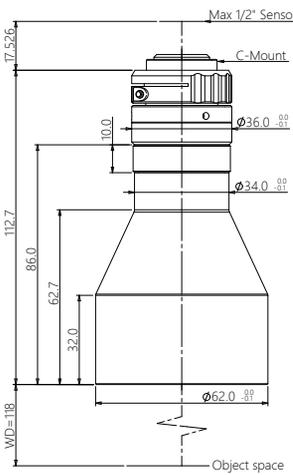
FOV(ϕ mm)	26
Mag. β (x)	0.308
WD(mm)	73 \pm 1
Max Sensor Size(ϕ mm)	8.0(1/2")
F/#	4.2
MTF30(lp/mm)	>175
DOF(mm)	\pm 4.6@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	198 \pm 1
Length(mm)	107.2
Mount	C
Weight(kg)	0.3
Field of View (mmxmm)	
1/2.5" 9P001/31 (5.7x4.28)	18.5x13.9
1/2.3" 9J003 (6.44x4.62)	20.9x15.0

DTCM120-36-AL



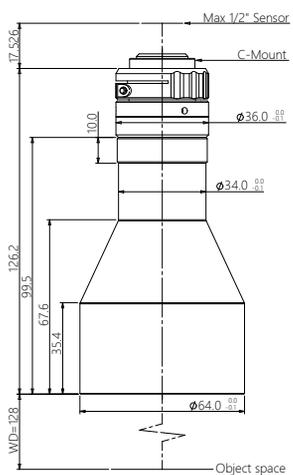
FOV(ϕ mm)	36
Mag. β (x)	0.222
WD(mm)	110 \pm 2
Max Sensor Size(ϕ mm)	8.0(1/2")
F/#	4.2
MTF30(lp/mm)	>190
DOF(mm)	\pm 8.9@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	255 \pm 2
Length(mm)	127.2
Mount	C
Weight(kg)	0.4
Field of View (mmxmm)	
1/2.5" 9P001/31 (5.7x4.28)	25.7x19.3
1/2.3" 9J003 (6.44x4.62)	29.0x20.8

DTCM120-42-AL



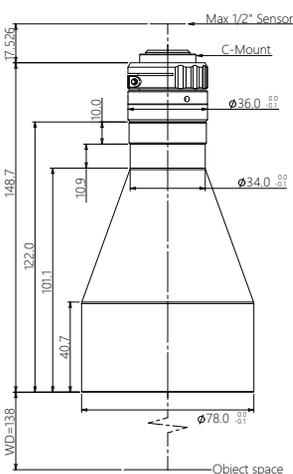
FOV(ϕ mm)	42
Mag. β (x)	0.190
WD(mm)	118 \pm 3
Max Sensor Size(ϕ mm)	8.0(1/2")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	\pm 12.1@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	248 \pm 3
Length(mm)	112.7
Mount	C
Weight(kg)	0.4
Field of View (mmxmm)	
1/2.5" 9P001/31 (5.7x4.28)	30.0x22.5
1/2.3" 9J003 (6.44x4.62)	33.9x24.3

DTCM120-48-AL



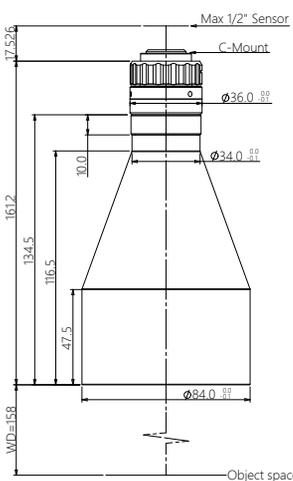
FOV(ϕ mm)	48
Mag. β (x)	0.167
WD(mm)	128 \pm 3
Max Sensor Size(ϕ mm)	8.0(1/2")
F/#	4.2
MTF30(lp/mm)	>200
DOF(mm)	\pm 15.7@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	272 \pm 3
Length(mm)	126.2
Mount	C
Weight(kg)	0.4
Field of View (mmxmm)	
1/2.5" 9P001/31 (5.7x4.28)	34.1x25.6
1/2.3" 9J003 (6.44x4.62)	38.6x27.7

DTCM120-56-AL



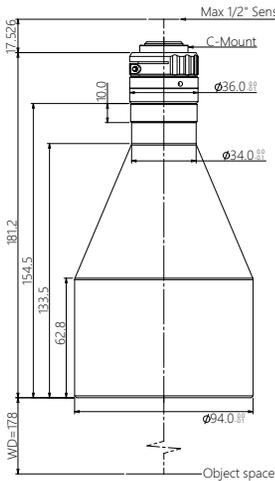
FOV(ϕ mm)	56
Mag. β (x)	0.143
WD(mm)	138 \pm 3
Max Sensor Size(ϕ mm)	8.0(1/2")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	\pm 21.5@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	304 \pm 3
Length(mm)	148.7
Mount	C
Weight(kg)	0.6
Field of View (mmxmm)	
1/2.5" 9P001/31 (5.7x4.28)	39.9x29.9
1/2.3" 9J003 (6.44x4.62)	45.0x32.3

DTCM120-64H-AL



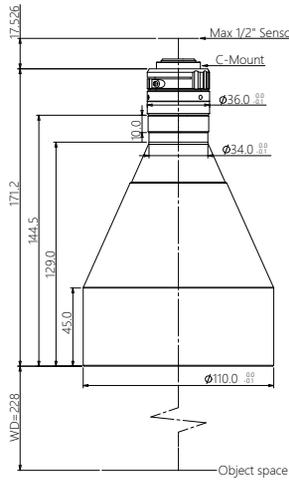
FOV(ϕ mm)	64
Mag. β (x)	0.125
WD(mm)	158 \pm 3
Max Sensor Size(ϕ mm)	8.0(1/2")
F/#	4.2
MTF30(lp/mm)	>220
DOF(mm)	\pm 28.2@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	337 \pm 3
Length(mm)	161.2
Mount	C
Weight(kg)	0.8
Field of View (mmxmm)	
1/2.5" 9P001/31 (5.7x4.28)	45.6x34.2
1/2.3" 9J003 (6.44x4.62)	51.5x37.0

DTCM120-72-AL



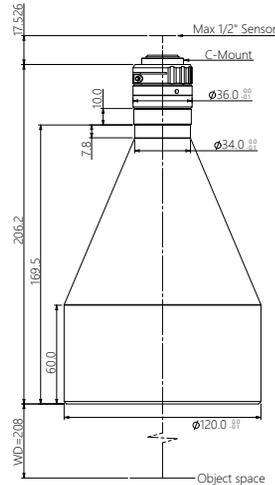
FOV(ϕ mm)	72
Mag. β (x)	0.111
WD(mm)	178 \pm 3
Max Sensor Size(ϕ mm)	8.0(1/2")
F/#	4.2
MTF30(lp/mm)	>215
DOF(mm)	\pm 35.7@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	377 \pm 3
Length(mm)	181.2
Mount	C
Weight(kg)	1.0
Field of View (mmxmm)	
1/2.5" 9P001/31 (5.7x4.28)	51.4x38.6
1/2.3" 9J003 (6.44x4.62)	58.0x41.6

DTCM120-80H-AL



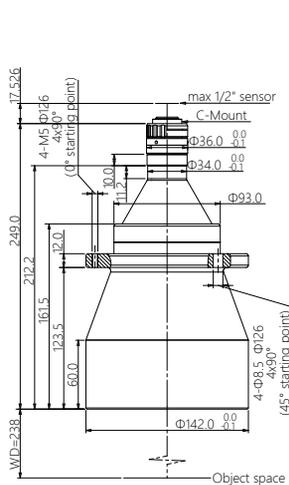
FOV(ϕ mm)	80
Mag. β (x)	0.100
WD(mm)	228 \pm 4
Max Sensor Size(ϕ mm)	8.0(1/2")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	\pm 44@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	417 \pm 4
Length(mm)	171.2
Mount	C
Weight(kg)	1.8
Field of View (mmxmm)	
1/2.5" 9P001/31 (5.7x4.28)	57.0x42.8
1/2.3" 9J003 (6.44x4.62)	64.4x46.2

DTCM120-90-AL



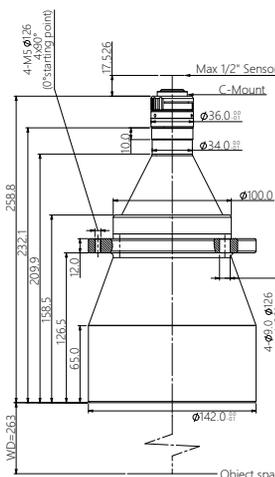
FOV(ϕ mm)	90
Mag. β (x)	0.089
WD(mm)	208 \pm 3
Max Sensor Size(ϕ mm)	8.0(1/2")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	\pm 55.5@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	432 \pm 3
Length(mm)	206.2
Mount	C
Weight(kg)	1.6
Field of View (mmxmm)	
1/2.5" 9P001/31 (5.7x4.28)	64.0x48.1
1/2.3" 9J003 (6.44x4.62)	72.4x51.9

DTCM120-100H-AL



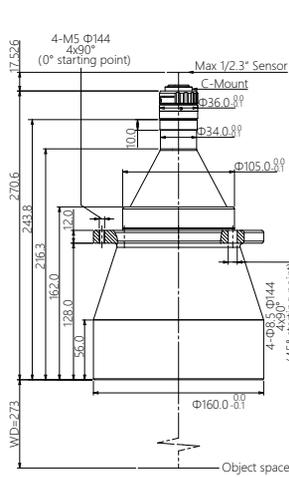
FOV(ϕ mm)	100
Mag. β (x)	0.080
WD(mm)	238 \pm 4
Max Sensor Size(ϕ mm)	8.0(1/2")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	\pm 68.7@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	505 \pm 4
Length(mm)	249.0
Mount	C
Weight(kg)	3.0
Field of View (mmxmm)	
1/2.5" 9P001/31 (5.7x4.28)	71.3x53.5
1/2.3" 9J003 (6.44x4.62)	80.5x57.8

DTCM120-110-AL



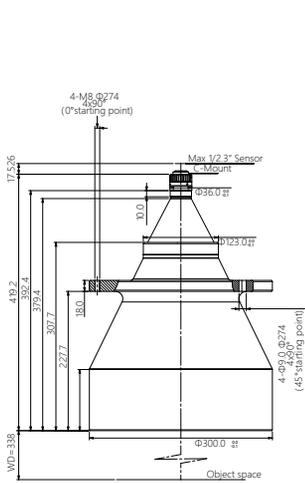
FOV(ϕ mm)	110
Mag. β (x)	0.073
WD(mm)	263 \pm 4
Max Sensor Size(ϕ mm)	8.0(1/2")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	\pm 82.6@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	539 \pm 4
Length(mm)	258.8
Mount	C
Weight(kg)	2.6
Field of View (mmxmm)	
1/2.5" 9P001/31 (5.7x4.28)	78.1x58.6
1/2.3" 9J003 (6.44x4.62)	88.2x63.3

DTCM120-120H-AL



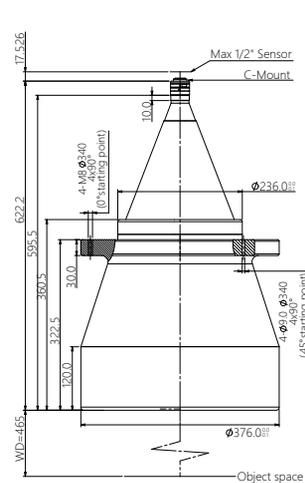
FOV(ϕ mm)	120
Mag. β (x)	0.067
WD(mm)	273 \pm 5
Max Sensor Size(ϕ mm)	8.0(1/2")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	\pm 99@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	561 \pm 5
Length(mm)	270.6
Mount	C
Weight(kg)	4.1
Field of View (mmxmm)	
1/2.5" 9P001/31 (5.7x4.28)	85.1x63.9
1/2.3" 9J003 (6.44x4.62)	96.1x69.0

DTCM120-258-AL



FOV(Φmm)	258
Mag.β(x)	0.031
WD(mm)	338±5
Max Sensor Size(Φmm)	8.0(1/2")
F/#	4.2
MTF30(lp/mm)	>210
DOF(mm)	±458@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	775±5
Length(mm)	419.2
Mount	C
Weight(kg)	24.3
Field of View (mmxmm)	
1/2.5° 9P001/31 (5.7x4.28)	183.9x138.1
1/2.3° 9J003 (6.44x4.62)	207.7x149.0

DTCM120-300-AL

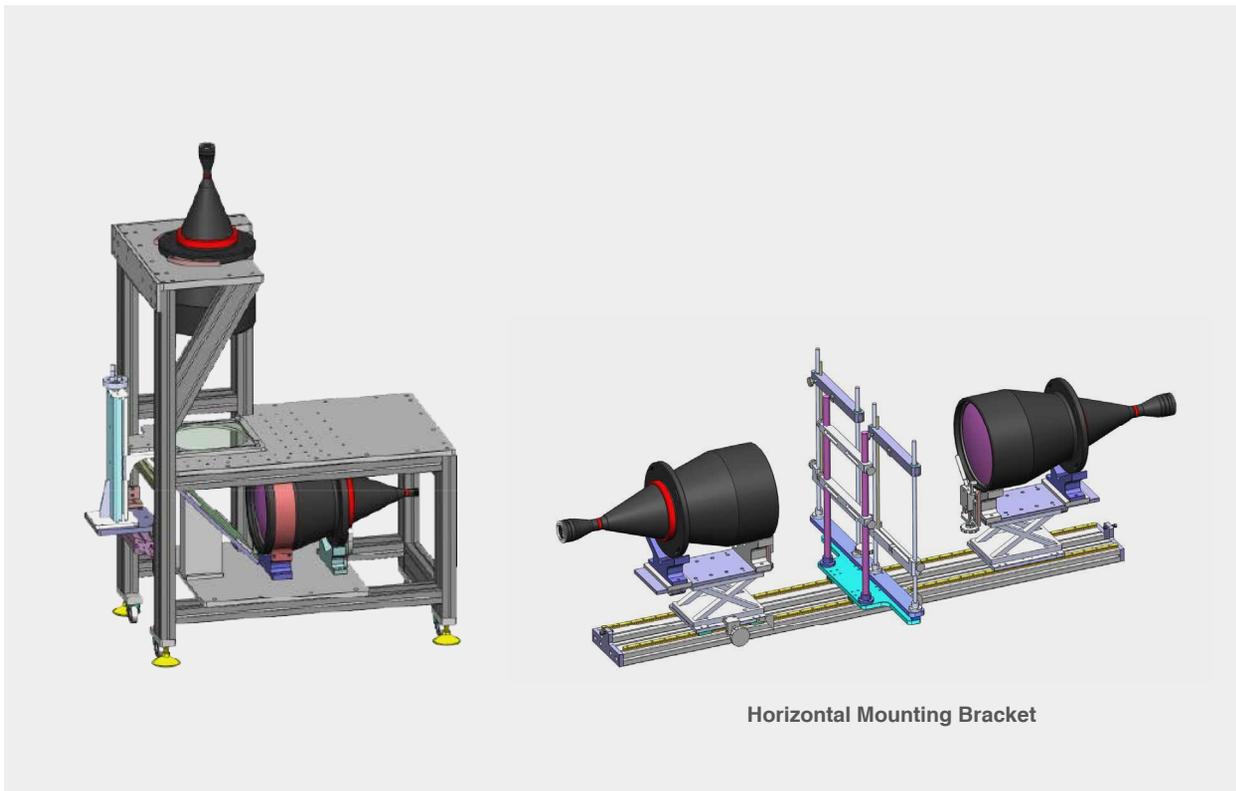


FOV(Φmm)	300
Mag.β(x)	0.027
WD(mm)	465±6
Max Sensor Size(Φmm)	8.0(1/2")
F/#	4.2
MTF30(lp/mm)	>205
DOF(mm)	±603@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1105±6
Length(mm)	622.2
Mount	C
Weight(kg)	46.5
Field of View (mmxmm)	
1/2.5° 9P001/31 (5.7x4.28)	211.1x158.5
1/2.3° 9J003 (6.44x4.62)	238.5x171.1

Vertical Mounting Bracket, Horizontal Mounting Bracket

Special Explanation

For large FOV telecentric lens, the volume and weight are usually large, it is necessary to ensure the installation is steady, VICO can offer kinds of mounting brackets and clamps.



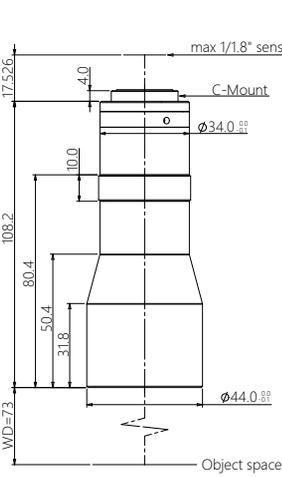
DTCM118 Series

For 1/1.8" Cameras



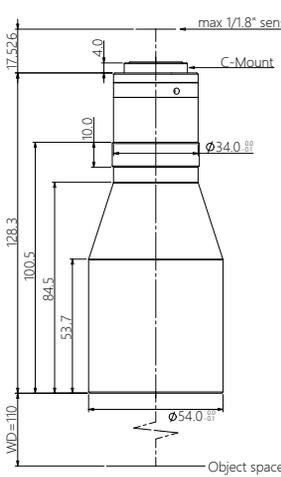
Lens Model	FOV (°mm)	Mag. β(x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% max)	Telecentricity (° max)	I/O (mm)	Length (mm)	Mount	Weight (kg)
DTCM118-26	26	0.346	73±1	9.0(1/1.8")	4.6	>170	±3.7@F11	<0.1	<0.1	199±1	108.2	C	0.3
DTCM118-36	36	0.250	110±2	9.0(1/1.8")	4.6	>180	±7.0@F11	<0.1	<0.1	256±2	128.3	C	0.4
DTCM118-42	42	0.214	118±3	9.0(1/1.8")	4.6	>195	±9.6@F11	<0.1	<0.1	249±3	113.8	C	0.4
DTCM118-48	48	0.188	128±3	9.0(1/1.8")	4.6	>190	±12.4@F11	<0.1	<0.1	273±3	127.3	C	0.4
DTCM118-56-AL	56	0.161	138±3	9.0(1/1.8")	4.6	>190	±17.0@F11	<0.1	<0.1	306±3	149.9	C	0.7
DTCM118-64H-AL	64	0.141	158±3	9.0(1/1.8")	4.6	>195	±22.3@F11	<0.1	<0.1	338±3	162.4	C	0.8
DTCM118-72-AL	72	0.125	178±3	9.0(1/1.8")	4.6	>195	±28.1@F11	<0.1	<0.1	378±3	182.4	C	1.1
DTCM118-80H-AL	80	0.113	228±4	9.0(1/1.8")	4.6	>195	±34.8@F11	<0.1	<0.1	418±4	172.4	C	1.9
DTCM118-90-AL	90	0.100	208±3	9.0(1/1.8")	4.6	>195	±44@F11	<0.1	<0.1	433±3	207.4	C	1.7
DTCM118-100H-AL	100	0.090	238±4	9.0(1/1.8")	4.6	>200	±54.3@F11	<0.1	<0.1	506±4	250.1	C	3.1
DTCM118-110-AL	110	0.082	263±4	9.0(1/1.8")	4.6	>200	±65.4@F11	<0.1	<0.1	541±4	260.0	C	2.7
DTCM118-120H-AL	120	0.075	273±5	9.0(1/1.8")	4.5	>200	±78.2@F11	<0.1	<0.1	562±5	271.7	C	4.2
DTCM118-136-AL	136	0.066	288±5	9.0(1/1.8")	4.6	>200	±101@F11	<0.1	<0.1	651±5	345.0	C	4.2
DTCM118-150-AL	150	0.060	300±5	9.0(1/1.8")	4.6	>200	±122@F11	<0.1	<0.1	632±5	314.4	C	5.7
DTCM118-170-AL	170	0.053	318±5	9.0(1/1.8")	4.6	>200	±157@F11	<0.1	<0.1	712±5	376.3	C	6.5
DTCM118-190H-AL	190	0.047	330±5	9.0(1/1.8")	4.6	>200	±199@F11	<0.1	<0.1	751±5	403.6	C	9.6
DTCM118-216-AL	216	0.042	372±5	9.0(1/1.8")	4.6	>200	±249@F11	<0.1	<0.1	889±5	499.1	C	13.7
DTCM118-240H-AL	240	0.038	410±6	9.0(1/1.8")	4.6	>200	±313@F11	<0.1	<0.1	972±6	544.9	C	19.1
DTCM118-258-AL	258	0.035	338±5	9.0(1/1.8")	4.6	>200	±362@F11	<0.1	<0.1	776±5	420.3	C	24.3
DTCM118-300-AL	300	0.030	465±6	9.0(1/1.8")	4.6	>190	±488@F11	<0.1	<0.1	1106±6	623.4	C	46.6

DTCM118-26



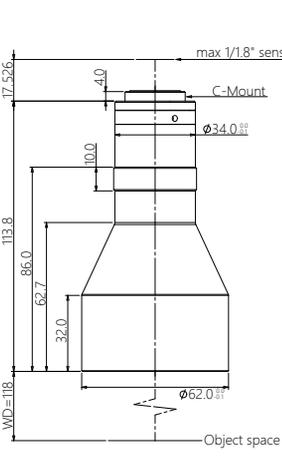
FOV(Φmm)	26
Mag.β(x)	0.346
WD(mm)	73±1
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>170
DOF(mm)	±3.7@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	199±1
Length(mm)	108.2
Mount	C
Weight(kg)	0.3
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	21.5x14.2
1/1.8" IMX252/265 (7.1x5.3)	20.5x15.3

DTCM118-36



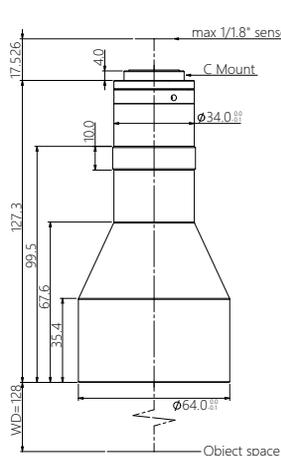
FOV(Φmm)	36
Mag.β(x)	0.250
WD(mm)	110±2
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>180
DOF(mm)	±7.0@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	256±2
Length(mm)	128.3
Mount	C
Weight(kg)	0.4
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	29.7x19.6
1/1.8" IMX252/265 (7.1x5.3)	28.4x21.2

DTCM118-42



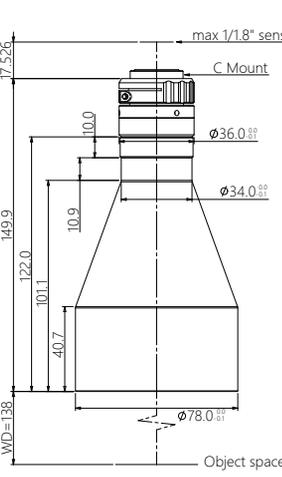
FOV(Φmm)	42
Mag.β(x)	0.214
WD(mm)	118±3
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>195
DOF(mm)	±9.6@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	249±3
Length(mm)	113.8
Mount	C
Weight(kg)	0.4
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	34.7x22.9
1/1.8" IMX252/265 (7.1x5.3)	33.2x24.8

DTCM118-48



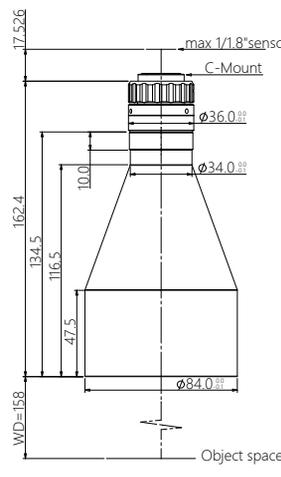
FOV(Φmm)	48
Mag.β(x)	0.188
WD(mm)	128±3
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>190
DOF(mm)	±12.4@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	273±3
Length(mm)	127.3
Mount	C
Weight(kg)	0.4
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	39.5x26.1
1/1.8" IMX252/265 (7.1x5.3)	37.8x28.2

DTCM118-56-AL



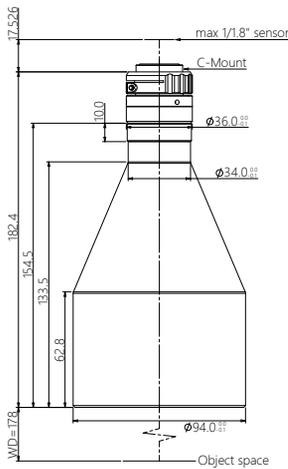
FOV(Φmm)	56
Mag.β(x)	0.161
WD(mm)	138±3
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>190
DOF(mm)	±17.0@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	306±3
Length(mm)	149.9
Mount	C
Weight(kg)	0.7
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	46.1x30.4
1/1.8" IMX252/265 (7.1x5.3)	44.1x32.9

DTCM118-64H-AL



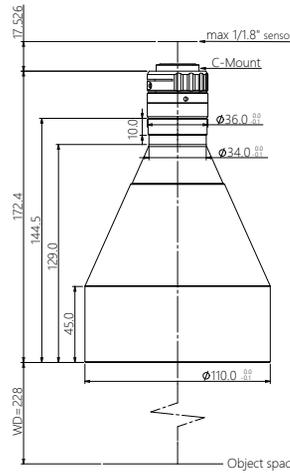
FOV(Φmm)	64
Mag.β(x)	0.141
WD(mm)	158±3
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>195
DOF(mm)	±22.3@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	338±3
Length(mm)	162.4
Mount	C
Weight(kg)	0.8
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	52.7x34.8
1/1.8" IMX252/265 (7.1x5.3)	50.4x37.6

DTCM118-72-AL



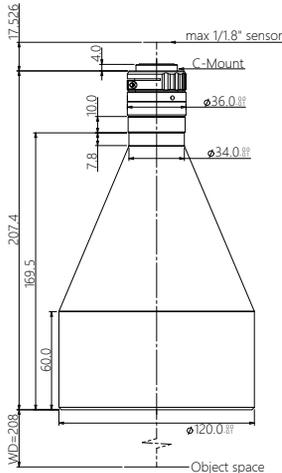
FOV(Φmm)	72
Mag.β(x)	0.125
WD(mm)	178±3
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>195
DOF(mm)	±28.1@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	378±3
Length(mm)	182.4
Mount	C
Weight(kg)	1.1
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	59.4x39.2
1/1.8" IMX252/265 (7.1x5.3)	56.8x42.4

DTCM118-80H-AL



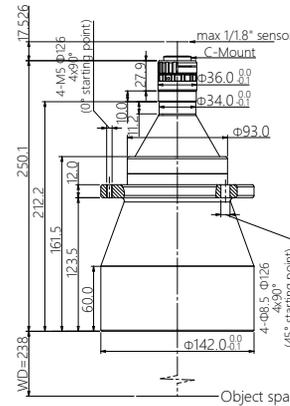
FOV(Φmm)	80
Mag.β(x)	0.113
WD(mm)	228±4
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>195
DOF(mm)	±34.8@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	418±4
Length(mm)	172.4
Mount	C
Weight(kg)	1.9
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	65.8x43.4
1/1.8" IMX252/265 (7.1x5.3)	62.8x46.9

DTCM118-90-AL



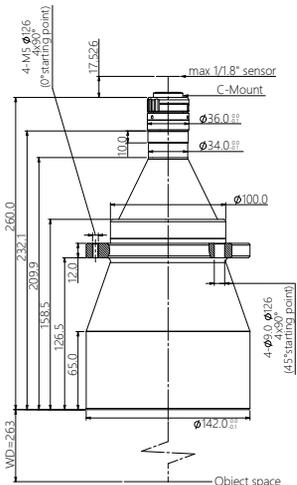
FOV(Φmm)	90
Mag.β(x)	0.100
WD(mm)	208±3
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>195
DOF(mm)	±44@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	433±3
Length(mm)	207.4
Mount	C
Weight(kg)	1.7
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	74.3x49.0
1/1.8" IMX252/265 (7.1x5.3)	71.0x53.0

DTCM118-100H-AL



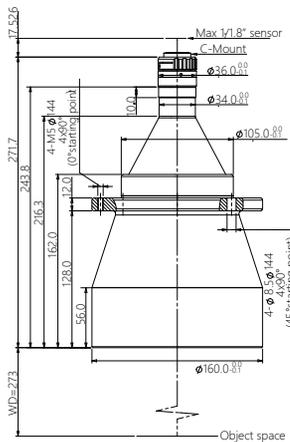
FOV(Φmm)	100
Mag.β(x)	0.090
WD(mm)	238±4
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>200
DOF(mm)	±54.3@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	506±4
Length(mm)	250.1
Mount	C
Weight(kg)	3.1
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	82.6x54.4
1/1.8" IMX252/265 (7.1x5.3)	78.9x58.9

DTCM118-110-AL



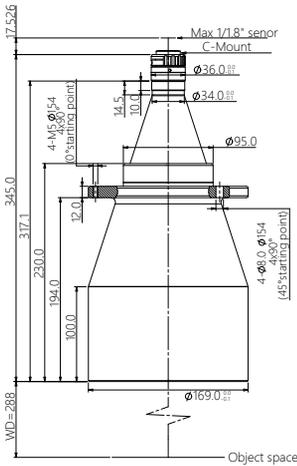
FOV(Φmm)	110
Mag.β(x)	0.082
WD(mm)	263±4
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>200
DOF(mm)	±65.4@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	541±4
Length(mm)	260.0
Mount	C
Weight(kg)	2.7
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	90.6x59.8
1/1.8" IMX252/265 (7.1x5.3)	86.6x64.6

DTCM118-120H-AL



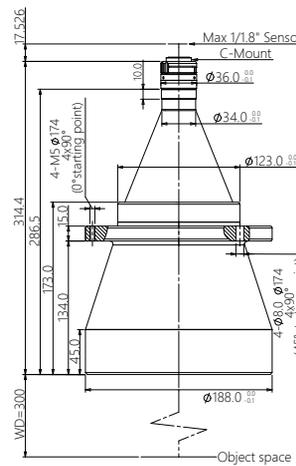
FOV(Φmm)	120
Mag.β(x)	0.075
WD(mm)	273±5
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.5
MTF30(lp/mm)	>200
DOF(mm)	±78.2@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	562±5
Length(mm)	271.7
Mount	C
Weight(kg)	4.2
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	99.1x65.3
1/1.8" IMX252/265 (7.1x5.3)	94.7x70.7

DTCM118-136-AL



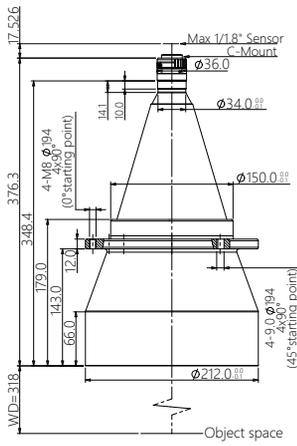
FOV(Φmm)	136
Mag.β(x)	0.066
WD(mm)	288±5
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>200
DOF(mm)	±101@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	651±5
Length(mm)	345.0
Mount	C
Weight(kg)	4.2
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	112.6x74.2
1/1.8" IMX252/265 (7.1x5.3)	107.6x80.3

DTCM118-150-AL



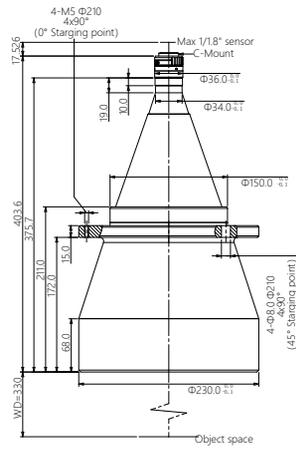
FOV(Φmm)	150
Mag.β(x)	0.060
WD(mm)	300±5
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>200
DOF(mm)	±122@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	632±5
Length(mm)	314.4
Mount	C
Weight(kg)	5.7
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	123.8x81.7
1/1.8" IMX252/265 (7.1x5.3)	118.3x88.3

DTCM118-170-AL



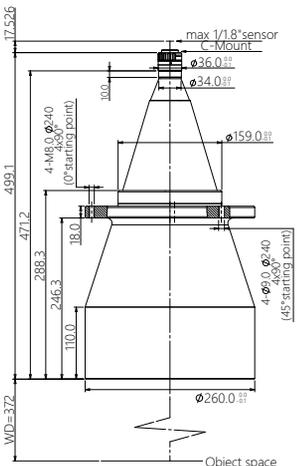
FOV(Φmm)	170
Mag.β(x)	0.053
WD(mm)	318±5
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>200
DOF(mm)	±157@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	712±5
Length(mm)	376.3
Mount	C
Weight(kg)	6.5
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	140.2x92.5
1/1.8" IMX252/265 (7.1x5.3)	134.0x100.0

DTCM118-190H-AL



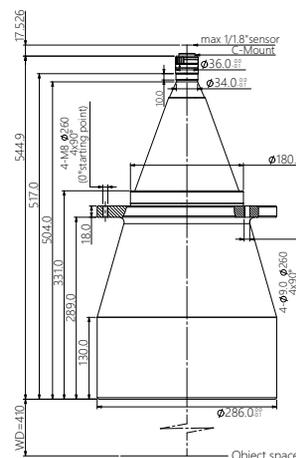
FOV(Φmm)	190
Mag.β(x)	0.047
WD(mm)	330±5
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>200
DOF(mm)	±199@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	751±5
Length(mm)	403.6
Mount	C
Weight(kg)	9.6
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	158.1x104.3
1/1.8" IMX252/265 (7.1x5.3)	151.1x112.8

DTCM118-216-AL



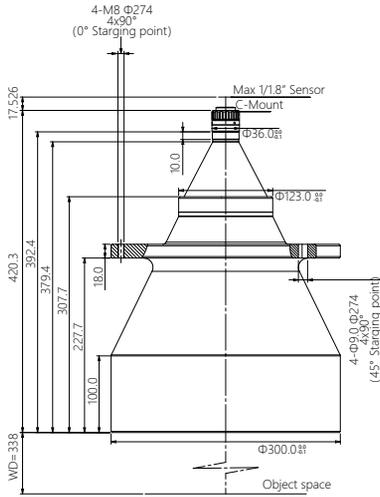
FOV(Φmm)	216
Mag.β(x)	0.042
WD(mm)	372±5
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>200
DOF(mm)	±249@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	889±5
Length(mm)	499.1
Mount	C
Weight(kg)	13.7
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	176.9x116.7
1/1.8" IMX252/265 (7.1x5.3)	169.0x126.2

DTCM118-240H-AL



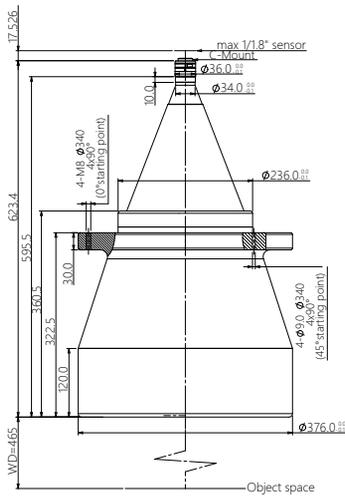
FOV(Φmm)	240
Mag.β(x)	0.038
WD(mm)	470±6
Max Sensor Size(Φmm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>200
DOF(mm)	±313@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	972±6
Length(mm)	544.9
Mount	C
Weight(kg)	19.1
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	195.5x128.9
1/1.8" IMX252/265 (7.1x5.3)	186.8x139.5

DTCM118-258-AL



FOV(ϕ mm)	258
Mag. β (x)	0.035
WD(mm)	338 \pm 5
Max Sensor Size(ϕ mm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>200
DOF(mm)	\pm 362@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	776 \pm 5
Length(mm)	420.3
Mount	C
Weight(kg)	24.3
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	212.3x140.0
1/1.8" IMX252/265 (7.1x5.3)	202.9x151.4

DTCM118-300-AL



FOV(ϕ mm)	300
Mag. β (x)	0.030
WD(mm)	465 \pm 6
Max Sensor Size(ϕ mm)	9.0(1/1.8")
F/#	4.6
MTF30(lp/mm)	>190
DOF(mm)	\pm 488@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	1106 \pm 6
Length(mm)	623.4
Mount	C
Weight(kg)	46.6
Field of View (mmxmm)	
1/1.8" IMX178 (7.43x4.9)	247.7x163.3
1/1.8" IMX252/265 (7.1x5.3)	236.7x176.7

Sham (Tilt-Shift) Lenses



Model: TCSM series

- Compatible with 16K, 1.1", 2" cameras.
- Applying Sham's law, the lens can also be installed on the side to capture high-definition images. Solved the problem that DLP projection cannot be projected on some transparent and highly reflective products. The projection of moiré fringes can be captured by lateral imaging.

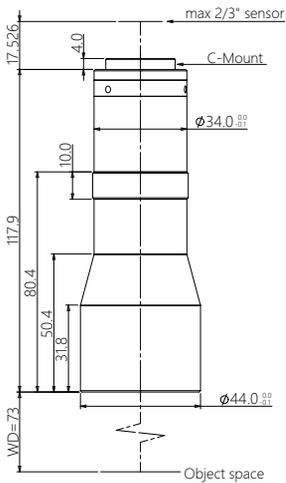
DTCM230 Series

For 2/3" Cameras



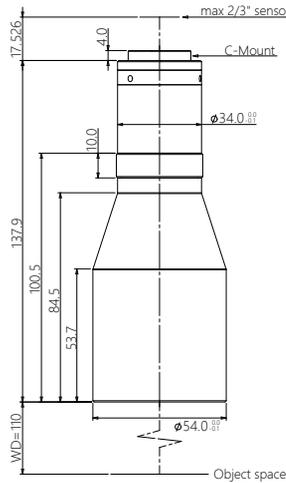
Lens Model	FOV (Φmm)	Mag. β(x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% max)	Telecentricity (° max)	I/O (mm)	Length (mm)	Mount	Weight (kg)
DTCM230-26	26	0.438	73±1	11.4(2/3")	6.0	>130	±2.3@F11	<0.1	<0.1	208±1	117.9	C	0.3
DTCM230-36	36	0.317	110±2	11.4(2/3")	5.4	>145	±4.3@F11	<0.1	<0.1	265±2	137.9	C	0.4
DTCM230-42	42	0.271	118±3	11.4(2/3")	4.9	>185	±6.0@F11	<0.1	<0.1	259±3	123.4	C	0.4
DTCM230-48	48	0.238	128±3	11.4(2/3")	5.4	>165	±7.7@F11	<0.1	<0.1	282±3	136.9	C	0.5
DTCM230-56-AL	56	0.204	138±3	11.4(2/3")	4.9	>180	±10.5@F11	<0.1	<0.1	315±3	159.5	C	0.7
DTCM230-64H-AL	64	0.178	158±3	11.4(2/3")	4.9	>180	±13.9@F11	<0.1	<0.1	348±3	172.0	C	0.8
DTCM230-72-AL	72	0.158	178±3	11.4(2/3")	4.9	>180	±17.6@F11	<0.1	<0.1	388±3	192.0	C	1.1
DTCM230-80H-AL	80	0.142	228±4	11.4(2/3")	4.9	>180	±21.7@F11	<0.1	<0.1	428±4	182.0	C	1.9
DTCM230-90-AL	90	0.127	208±3	11.4(2/3")	4.9	>180	±27.2@F11	<0.1	<0.1	443±3	217.0	C	1.7
DTCM230-100H-AL	100	0.114	238±4	11.4(2/3")	4.9	>185	±33.8@F11	<0.1	<0.1	515±4	259.7	C	3.1
DTCM230-110-AL	110	0.104	263±4	11.4(2/3")	4.9	>190	±40.7@F11	<0.1	<0.1	550±4	269.6	C	2.7
DTCM230-120H-AL	120	0.095	273±5	11.4(2/3")	4.9	>185	±48.7@F11	<0.1	<0.1	572±5	281.3	C	4.2
DTCM230-136-AL	136	0.084	288±5	11.4(2/3")	4.9	>185	±62.4@F11	<0.1	<0.1	659±5	354.6	C	4.3
DTCM230-150-AL	150	0.076	300±5	11.4(2/3")	4.9	>185	±76.1@F11	<0.1	<0.1	642±5	324.0	C	5.7
DTCM230-170-AL	170	0.067	318±5	11.4(2/3")	4.9	>180	±98@F11	<0.1	<0.1	721±5	385.9	C	6.5
DTCM230-190H-AL	190	0.060	330±5	11.4(2/3")	4.9	>180	±122@F11	<0.1	<0.1	761±5	413.2	C	9.7
DTCM230-216-AL	216	0.053	372±5	11.4(2/3")	4.9	>180	±157@F11	<0.1	<0.1	898±5	508.7	C	13.8
DTCM230-240H-AL	240	0.048	410±6	11.4(2/3")	4.9	>180	±195@F11	<0.1	<0.1	982±6	554.5	C	19.1
DTCM230-258-AL	258	0.044	338±5	11.4(2/3")	4.9	>180	±225@F11	<0.1	<0.1	785±5	429.9	C	24.3
DTCM230-300-AL	300	0.038	465±6	11.4(2/3")	4.9	>180	±304@F11	<0.1	<0.1	1116±6	633.0	C	46.6

DTCM230-26



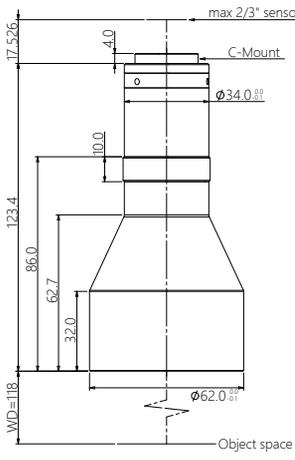
FOV(Φmm)	26
Mag.β(x)	0.438
WD(mm)	73±1
Max Sensor Size(Φmm)	11.4(2/3")
F/#	6.0
MTF30(lp/mm)	>130
DOF(mm)	±2.3@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	208±1
Length(mm)	117.9
Mount	C-Mount
Weight(kg)	0.3
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	16.4x12.3
1/1.7" IMX226 (7.5x5.6)	17.1x12.8
2/3" IMX250/264 (8.45x7.1)	19.3x16.2

DTCM230-36



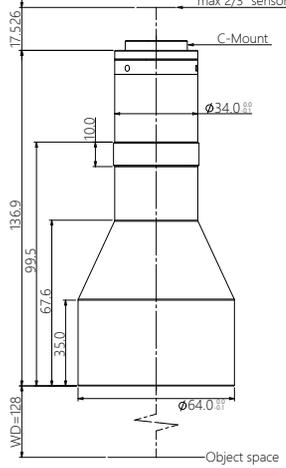
FOV(Φmm)	36
Mag.β(x)	0.317
WD(mm)	110±2
Max Sensor Size(Φmm)	11.4(2/3")
F/#	5.4
MTF30(lp/mm)	>145
DOF(mm)	±4.3@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	265±2
Length(mm)	137.9
Mount	C
Weight(kg)	0.4
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	22.7x17.0
1/1.7" IMX226 (7.5x5.6)	23.7x17.7
2/3" IMX250/264 (8.45x7.1)	26.7x22.4

DTCM230-42



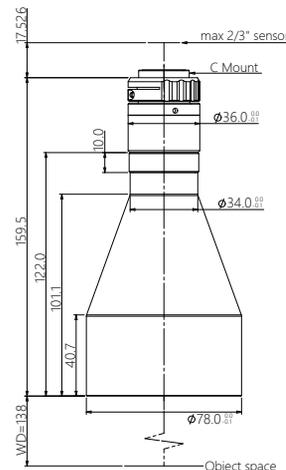
FOV(Φmm)	42
Mag.β(x)	0.271
WD(mm)	118±3
Max Sensor Size(Φmm)	11.4(2/3")
F/#	4.9
MTF30(lp/mm)	>185
DOF(mm)	±6.0@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	259±3
Length(mm)	123.4
Mount	C
Weight(kg)	0.4
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	26.6x19.9
1/1.7" IMX226 (7.5x5.6)	27.7x20.7
2/3" IMX250/264 (8.45x7.1)	31.2x26.2

DTCM230-48



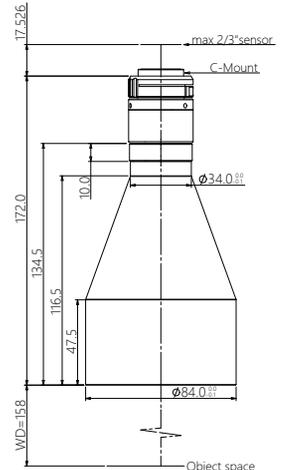
FOV(Φmm)	48
Mag.β(x)	0.238
WD(mm)	128±3
Max Sensor Size(Φmm)	11.4(2/3")
F/#	5.4
MTF30(lp/mm)	>165
DOF(mm)	±7.7@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	282±3
Length(mm)	136.9
Mount	C
Weight(kg)	0.5
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	30.3x22.7
1/1.7" IMX226 (7.5x5.6)	31.5x23.5
2/3" IMX250/264 (8.45x7.1)	35.5x29.8

DTCM230-56-AL



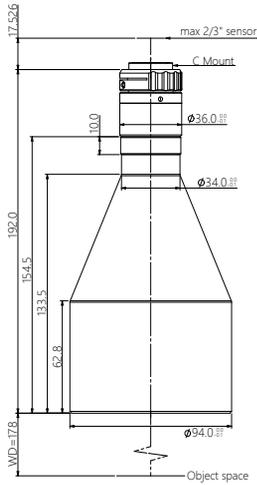
FOV(Φmm)	56
Mag.β(x)	0.204
WD(mm)	138±3
Max Sensor Size(Φmm)	11.4(2/3")
F/#	4.9
MTF30(lp/mm)	>180
DOF(mm)	±10.5@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	315±3
Length(mm)	159.5
Mount	C
Weight(kg)	0.7
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	35.3x26.5
1/1.7" IMX226 (7.5x5.6)	36.8x27.5
2/3" IMX250/264 (8.45x7.1)	41.4x34.8

DTCM230-64H-AL



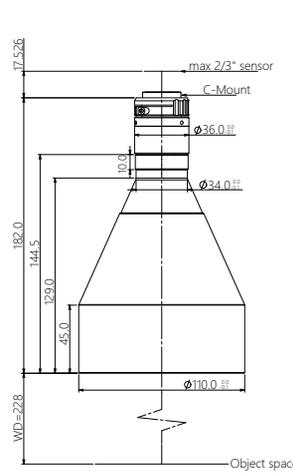
FOV(Φmm)	64
Mag.β(x)	0.178
WD(mm)	158±3
Max Sensor Size(Φmm)	11.4(2/3")
F/#	4.9
MTF30(lp/mm)	>180
DOF(mm)	±13.9@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	348±3
Length(mm)	172.0
Mount	C
Weight(kg)	0.8
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	40.4x30.3
1/1.7" IMX226 (7.5x5.6)	42.1x31.5
2/3" IMX250/264 (8.45x7.1)	47.5x39.9

DTCM230-72-AL



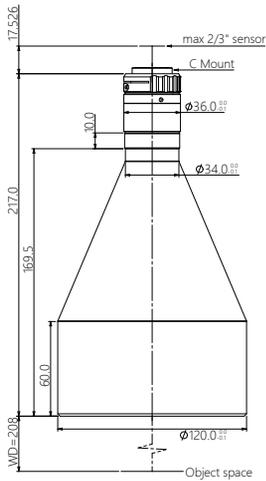
FOV(Φ mm)	72
Mag. β (x)	0.158
WD(mm)	178 \pm 3
Max Sensor Size(Φ mm)	11.4(2/3")
F/#	4.9
MTF30(lp/mm)	>180
DOF(mm)	\pm 17.6@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	388 \pm 3
Length(mm)	192.0
Mount	C
Weight(kg)	1.1
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	45.6x34.2
1/1.7" IMX226 (7.5x5.6)	47.5x35.4
2/3" IMX250/264 (8.45x7.1)	53.5x44.9

DTCM230-80H-AL



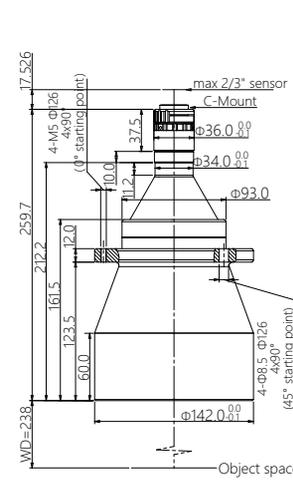
FOV(Φ mm)	80
Mag. β (x)	0.142
WD(mm)	228 \pm 4
Max Sensor Size(Φ mm)	11.4(2/3")
F/#	4.9
MTF30(lp/mm)	>180
DOF(mm)	\pm 21.7@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	428 \pm 4
Length(mm)	182.0
Mount	C
Weight(kg)	1.9
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	50.7x38.0
1/1.7" IMX226 (7.5x5.6)	52.8x39.4
2/3" IMX250/264 (8.45x7.1)	59.5x50.0

DTCM230-90-AL



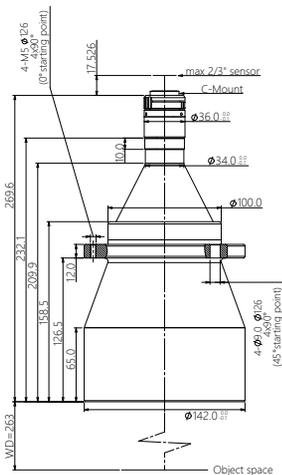
FOV(Φ mm)	90
Mag. β (x)	0.127
WD(mm)	208 \pm 3
Max Sensor Size(Φ mm)	11.4(2/3")
F/#	4.9
MTF30(lp/mm)	>180
DOF(mm)	\pm 27.2@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	443 \pm 3
Length(mm)	217.0
Mount	C
Weight(kg)	1.7
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	56.7x42.5
1/1.7" IMX226 (7.5x5.6)	59.1x44.1
2/3" IMX250/264 (8.45x7.1)	66.5x55.9

DTCM230-100H-AL



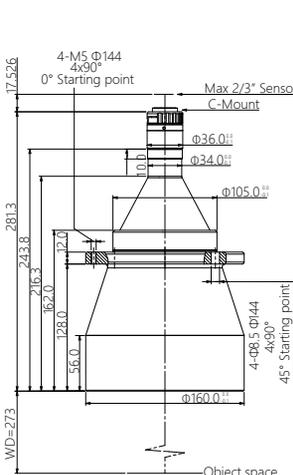
FOV(Φ mm)	100
Mag. β (x)	0.114
WD(mm)	238 \pm 4
Max Sensor Size(Φ mm)	11.4(2/3")
F/#	4.9
MTF30(lp/mm)	>185
DOF(mm)	\pm 33.8@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	515 \pm 4
Length(mm)	259.7
Mount	C
Weight(kg)	3.1
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	63.2x47.4
1/1.7" IMX226 (7.5x5.6)	65.8x49.1
2/3" IMX250/264 (8.45x7.1)	74.1x62.3

DTCM230-110-AL



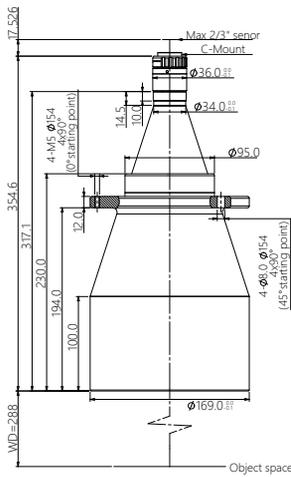
FOV(Φ mm)	110
Mag. β (x)	0.104
WD(mm)	263 \pm 4
Max Sensor Size(Φ mm)	11.4(2/3")
F/#	4.9
MTF30(lp/mm)	>190
DOF(mm)	\pm 40.7@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	550 \pm 4
Length(mm)	269.6
Mount	C
Weight(kg)	2.7
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	69.2x51.9
1/1.7" IMX226 (7.5x5.6)	72.1x53.8
2/3" IMX250/264 (8.45x7.1)	81.3x68.3

DTCM230-120H-AL



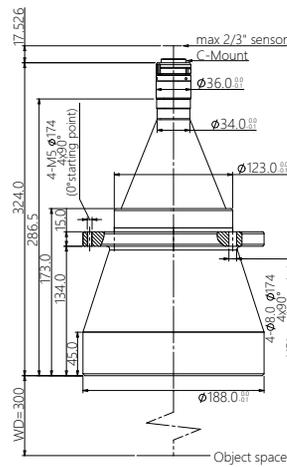
FOV(Φ mm)	120
Mag. β (x)	0.095
WD(mm)	273 \pm 5
Max Sensor Size(Φ mm)	11.4(2/3")
F/#	4.9
MTF30(lp/mm)	>185
DOF(mm)	\pm 48.7@F11
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	572 \pm 5
Length(mm)	281.3
Mount	C
Weight(kg)	4.2
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	75.8x56.8
1/1.7" IMX226 (7.5x5.6)	78.9x58.9
2/3" IMX250/264 (8.45x7.1)	88.9x74.7

DTCM230-136-AL



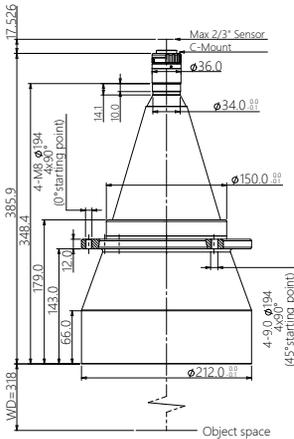
FOV(Φmm)	136
Mag.β(x)	0.084
WD(mm)	288±5
Max Sensor Size(Φmm)	11.4(2/3")
F/#	4.9
MTF30(lp/mm)	>185
DOF(mm)	±62.4@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	659±5
Length(mm)	354.6
Mount	C
Weight(kg)	4.3
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	85.7x64.3
1/1.7" IMX226 (7.5x5.6)	89.3x66.7
2/3" IMX250/264 (8.45x7.1)	100.6x84.5

DTCM230-150-AL



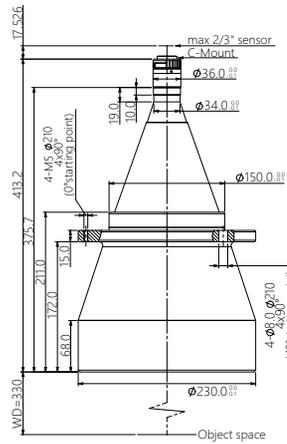
FOV(Φmm)	150
Mag.β(x)	0.076
WD(mm)	300±5
Max Sensor Size(Φmm)	11.4(2/3")
F/#	4.9
MTF30(lp/mm)	>185
DOF(mm)	±76.1@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	642±5
Length(mm)	324.0
Mount	C
Weight(kg)	5.7
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	94.7x71.1
1/1.7" IMX226 (7.5x5.6)	98.7x73.7
2/3" IMX250/264 (8.45x7.1)	111.2x93.4

DTCM230-170-AL



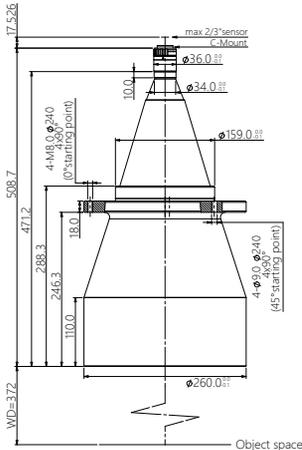
FOV(Φmm)	170
Mag.β(x)	0.067
WD(mm)	318±5
Max Sensor Size(Φmm)	11.4(2/3")
F/#	4.9
MTF30(lp/mm)	>180
DOF(mm)	±98@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	721±5
Length(mm)	385.9
Mount	C
Weight(kg)	6.5
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	107.5x80.6
1/1.7" IMX226 (7.5x5.6)	111.9x83.6
2/3" IMX250/264 (8.45x7.1)	126.1x106.0

DTCM230-190H-AL



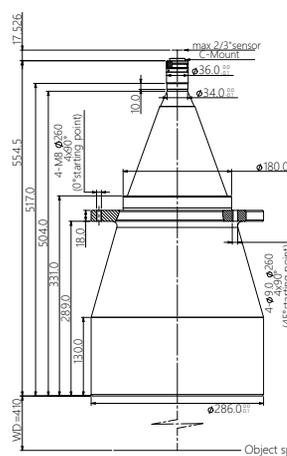
FOV(Φmm)	190
Mag.β(x)	0.060
WD(mm)	330±5
Max Sensor Size(Φmm)	11.4(2/3")
F/#	4.9
MTF30(lp/mm)	>180
DOF(mm)	±122@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	761±5
Length(mm)	413.2
Mount	C
Weight(kg)	9.7
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	120.0x90.0
1/1.7" IMX226 (7.5x5.6)	125.0x93.3
2/3" IMX250/264 (8.45x7.1)	140.8x118.3

DTCM230-216-AL



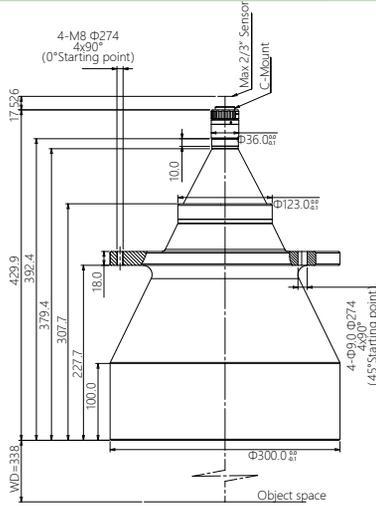
FOV(Φmm)	216
Mag.β(x)	0.053
WD(mm)	372±5
Max Sensor Size(Φmm)	11.4(2/3")
F/#	4.9
MTF30(lp/mm)	>180
DOF(mm)	±157@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	898±5
Length(mm)	508.7
Mount	C
Weight(kg)	13.8
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	135.8x101.9
1/1.7" IMX226 (7.5x5.6)	141.5x105.7
2/3" IMX250/264 (8.45x7.1)	159.4x134.0

DTCM230-240H-AL



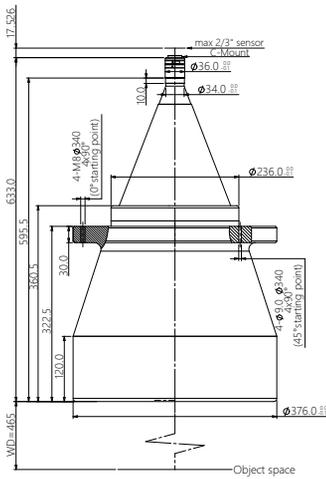
FOV(Φmm)	240
Mag.β(x)	0.048
WD(mm)	410±6
Max Sensor Size(Φmm)	11.4(2/3")
F/#	4.9
MTF30(lp/mm)	>180
DOF(mm)	±195@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	982±6
Length(mm)	554.5
Mount	C
Weight(kg)	19.1
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	150.0x112.5
1/1.7" IMX226 (7.5x5.6)	156.3x116.7
2/3" IMX250/264 (8.45x7.1)	176.0x147.9

DTCM230-258-AL



FOV(ϕ mm)	258
Mag. β (x)	0.044
WD(mm)	338 \pm 5
Max Sensor Size(ϕ mm)	11.4(2/3")
F/#	4.9
MTF30(lp/mm)	>180
DOF(mm)	\pm 225 @ F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	785 \pm 5
Length(mm)	429.9
Mount	C
Weight(kg)	24.3
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	163.6x122.7
1/1.7" IMX226 (7.5x5.6)	170.5x127.3
2/3" IMX250/264 (8.45x7.1)	192.0x161.4

DTCM230-300-AL



FOV(ϕ mm)	300
Mag. β (x)	0.038
WD(mm)	465 \pm 6
Max Sensor Size(ϕ mm)	11.4(2/3")
F/#	4.9
MTF30(lp/mm)	>180
DOF(mm)	\pm 304 @ F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1116 \pm 6
Length(mm)	633.0
Mount	C
Weight(kg)	46.6
Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	189.5x142.1
1/1.7" IMX226 (7.5x5.6)	197.4x147.4
2/3" IMX250/264 (8.45x7.1)	222.4x186.8

Flat Telecentric Lenses for Line Scan



Adopt a flat and compact design, which shortens the lens size and reduces its weight, making it ideal for measuring applications in most confined spaces.

The AL (adjustable back flange length) enables precise adjustment of the optimal focus position between the camera and the lens.

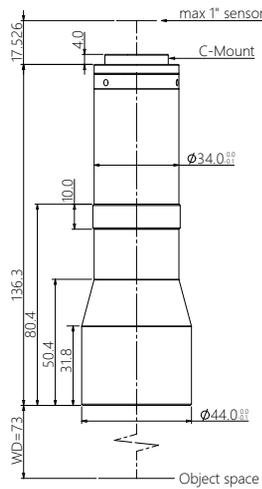
DTCM110 Series

For 1" Cameras



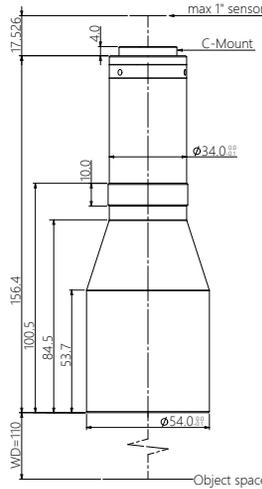
Lens Model	FOV (°mm)	Mag. β(x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% max)	Telecentricity (° max)	I/O (mm)	Length (mm)	Mount	Weight (kg)
DTCM110-26	26	0.638	73±1	16.6(1")	8.7	>90	±1.6@F16	<0.1	<0.1	227±1	136.3	C	0.4
DTCM110-36	36	0.460	110±2	16.6(1")	7.8	>100	±3.0@F16	<0.1	<0.1	284±2	156.4	C	0.5
DTCM110-42	42	0.395	118±3	16.6(1")	6.5	>130	±4.1@F16	<0.1	<0.1	278±3	141.9	C	0.5
DTCM110-48	48	0.346	128±3	16.6(1")	6.5	>130	±5.3@F16	<0.1	<0.1	301±3	155.4	C	0.5
DTCM110-56-AL	56	0.296	138±3	16.6(1")	6.5	>130	±7.3@F16	<0.1	<0.1	334±3	178.0	C	0.8
DTCM110-64H-AL	64	0.259	158±3	16.6(1")	6.5	>130	±9.5@F16	<0.1	<0.1	366±3	190.5	C	0.9
DTCM110-72-AL	72	0.231	178±3	16.6(1")	6.5	>135	±12.0@F16	<0.1	<0.1	406±3	210.5	C	1.2
DTCM110-80H-AL	80	0.208	228±4	16.6(1")	6.5	>135	±14.8@F16	<0.1	<0.1	446±4	200.5	C	2.0
DTCM110-90-AL	90	0.184	208±3	16.6(1")	6.5	>135	±18.9@F16	<0.1	<0.1	461±3	235.5	C	1.8
DTCM110-100H-AL	100	0.166	238±4	16.6(1")	6.5	>140	±23.2@F16	<0.1	<0.1	534±4	278.2	C	3.2
DTCM110-110-AL	110	0.151	263±4	16.6(1")	6.5	>140	±28.1@F16	<0.1	<0.1	569±4	288.1	C	2.8
DTCM110-120H-AL	120	0.138	273±5	16.6(1")	6.5	>140	±33.4@F16	<0.1	<0.1	590±5	299.8	C	4.3
DTCM110-136-AL	136	0.122	288±5	16.6(1")	6.5	>140	±43.0@F16	<0.1	<0.1	679±5	373.0	C	4.3
DTCM110-150-AL	150	0.111	300±5	16.6(1")	6.5	>145	±52.8@F16	<0.1	<0.1	660±5	342.4	C	5.8
DTCM110-170-AL	170	0.098	318±5	16.6(1")	6.5	>140	±66.6@F16	<0.1	<0.1	740±5	404.3	C	6.6
DTCM110-190H-AL	190	0.087	330±5	16.6(1")	6.5	>140	±84.6@F16	<0.1	<0.1	779±5	431.7	C	9.7
DTCM110-216-AL	216	0.077	372±5	16.6(1")	6.5	>140	±107.9@F16	<0.1	<0.1	917±5	527.1	C	13.9
DTCM110-240H-AL	240	0.069	410±6	16.6(1")	6.5	>140	±134.4@F16	<0.1	<0.1	1001±6	573.0	C	19.2
DTCM110-258-AL	258	0.064	338±5	16.6(1")	6.5	>140	±156.3@F16	<0.1	<0.1	804±5	448.4	C	24.4
DTCM110-300-AL	300	0.055	465±6	16.6(1")	6.5	>135	±211.6@F16	<0.1	<0.1	1134±6	651.5	C	46.7

DTCM110-26



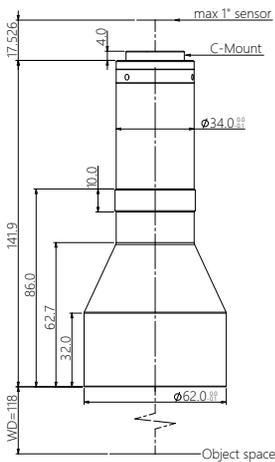
FOV(Φmm)	26
Mag.β(x)	0.638
WD(mm)	73±1
Max Sensor Size(Φmm)	16.6(1")
F/#	8.7
MTF30(lp/mm)	>90
DOF(mm)	±1.6@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	227±1
Length(mm)	136.3
Mount	C
Weight(kg)	0.4
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	19.5x15.4
1" IMX255 (14.19x7.51)	22.2x11.8
1" IMX183 (13.13x8.76)	20.6x13.7

DTCM110-36



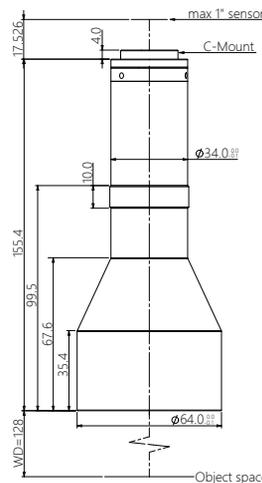
FOV(Φmm)	36
Mag.β(x)	0.460
WD(mm)	110±2
Max Sensor Size(Φmm)	16.6(1")
F/#	7.8
MTF30(lp/mm)	>100
DOF(mm)	±3.0@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	284±2
Length(mm)	156.4
Mount	C
Weight(kg)	0.5
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	27.0x21.4
1" IMX255 (14.19x7.51)	30.8x16.3
1" IMX183 (13.13x8.76)	28.5x19.0

DTCM110-42



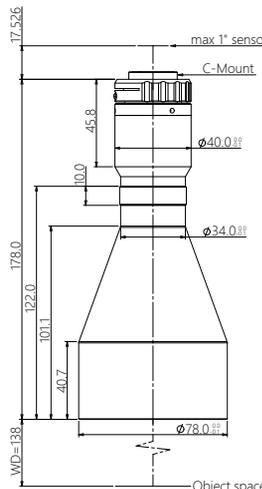
FOV(Φmm)	42
Mag.β(x)	0.395
WD(mm)	118±3
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>130
DOF(mm)	±4.1@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	278±3
Length(mm)	141.9
Mount	C
Weight(kg)	0.5
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	31.5x24.9
1" IMX255 (14.19x7.51)	35.9x19.0
1" IMX183 (13.13x8.76)	33.2x22.2

DTCM110-48



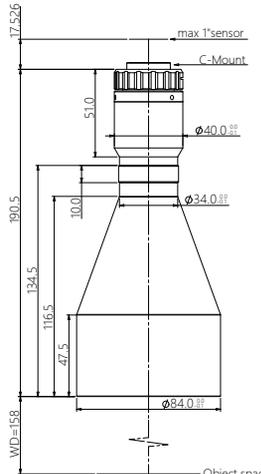
FOV(Φmm)	48
Mag.β(x)	0.346
WD(mm)	128±3
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>130
DOF(mm)	±5.3@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	301±3
Length(mm)	155.4
Mount	C
Weight(kg)	0.5
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	35.9x28.4
1" IMX255 (14.19x7.51)	41.0x21.7
1" IMX183 (13.13x8.76)	37.9x25.3

DTCM110-56-AL



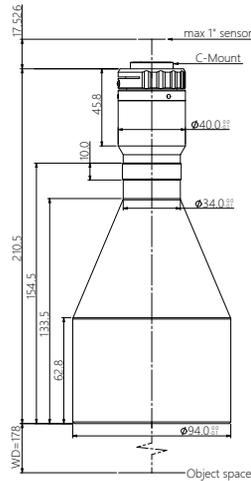
FOV(Φmm)	56
Mag.β(x)	0.296
WD(mm)	138±3
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>130
DOF(mm)	±7.3@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	334±3
Length(mm)	178.0
Mount	C
Weight(kg)	0.8
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	42.0x33.2
1" IMX255 (14.19x7.51)	47.9x25.4
1" IMX183 (13.13x8.76)	44.4x29.6

DTCM110-64H-AL



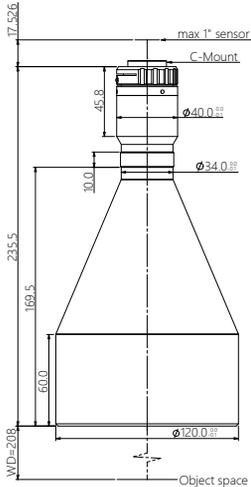
FOV(Φmm)	64
Mag.β(x)	0.259
WD(mm)	158±3
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>130
DOF(mm)	±9.5@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	366±3
Length(mm)	190.5
Mount	C
Weight(kg)	0.9
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	48.0x38.0
1" IMX255 (14.19x7.51)	54.8x29.8
1" IMX183 (13.13x8.76)	50.7x33.8

DTCM110-72-AL



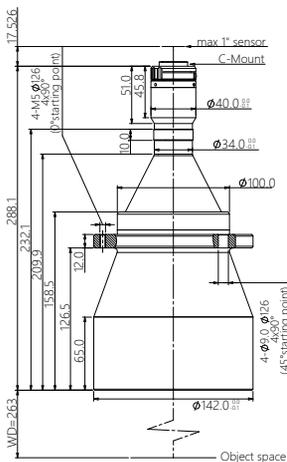
FOV(Φmm)	72
Mag.β(x)	0.231
WD(mm)	178±3
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>135
DOF(mm)	±12.0@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	406±3
Length(mm)	210.5
Mount	C
Weight(kg)	1.2
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	53.8x42.6
1" IMX255 (14.19x7.51)	61.4x32.5
1" IMX183 (13.13x8.76)	56.8x37.9

DTCM110-90-AL



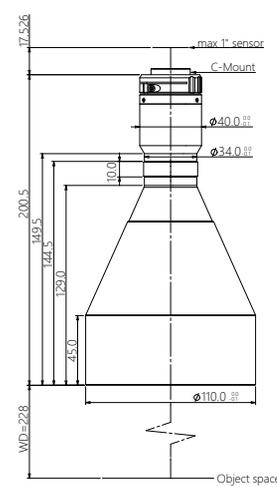
FOV(Φmm)	90
Mag.β(x)	0.184
WD(mm)	208±3
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>135
DOF(mm)	±18.9@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	461±3
Length(mm)	235.5
Mount	C
Weight(kg)	1.8
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	67.6x53.4
1" IMX255 (14.19x7.51)	77.1x40.8
1" IMX183 (13.13x8.76)	71.4x47.6

DTCM110-110-AL



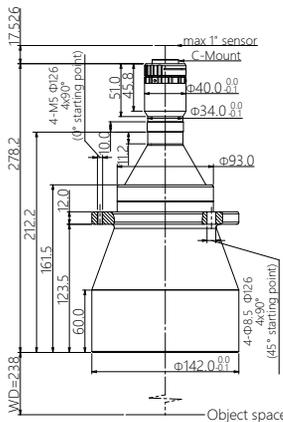
FOV(Φmm)	110
Mag.β(x)	0.151
WD(mm)	263±4
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>140
DOF(mm)	±28.1@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	569±4
Length(mm)	288.1
Mount	C
Weight(kg)	2.8
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	82.3x65.1
1" IMX255 (14.19x7.51)	94.0x49.7
1" IMX183 (13.13x8.76)	87.0x58.0

DTCM110-80H-AL



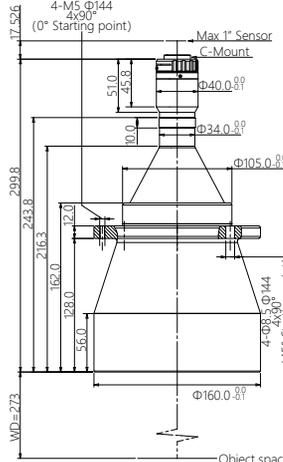
FOV(Φmm)	80
Mag.β(x)	0.208
WD(mm)	228±4
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>135
DOF(mm)	±14.8@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	446±4
Length(mm)	200.5
Mount	C
Weight(kg)	2.0
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	59.8x47.3
1" IMX255 (14.19x7.51)	68.2x36.1
1" IMX183 (13.13x8.76)	63.1x42.1

DTCM110-100H-AL



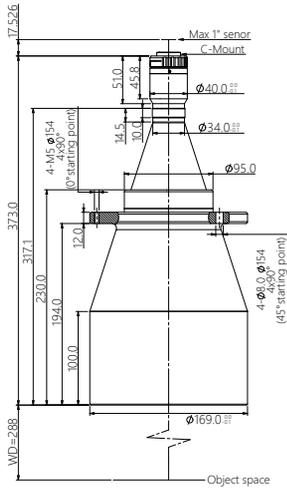
FOV(Φmm)	100
Mag.β(x)	0.166
WD(mm)	238±4
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>140
DOF(mm)	±23.2@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	534±4
Length(mm)	278.2
Mount	C
Weight(kg)	3.2
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	74.9x59.2
1" IMX255 (14.19x7.51)	85.5x45.2
1" IMX183 (13.13x8.76)	79.1x52.8

DTCM110-120H-AL



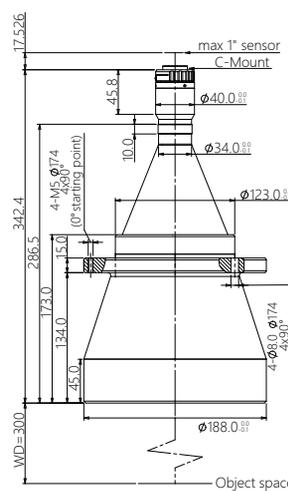
FOV(Φmm)	120
Mag.β(x)	0.138
WD(mm)	273±5
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>140
DOF(mm)	±33.4@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	590±5
Length(mm)	299.8
Mount	C
Weight(kg)	4.3
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	90.1x71.2
1" IMX255 (14.19x7.51)	102.8x54.4
1" IMX183 (13.13x8.76)	95.1x63.5

DTCM110-136-AL



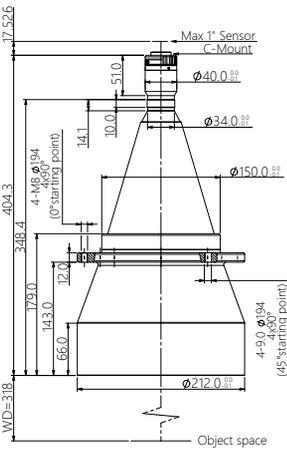
FOV(Φmm)	136
Mag.β(x)	0.122
WD(mm)	288±5
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>140
DOF(mm)	±43.0@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	679±5
Length(mm)	373.0
Mount	C
Weight(kg)	4.3
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	101.9x80.6
1" IMX255 (14.19x7.51)	116.3x61.6
1" IMX183 (13.13x8.76)	107.6x71.8

DTCM110-150-AL



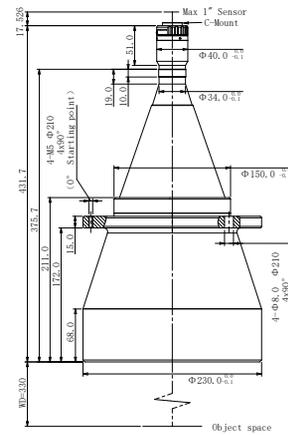
FOV(Φmm)	150
Mag.β(x)	0.111
WD(mm)	300±5
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>145
DOF(mm)	±52.8@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	660±5
Length(mm)	342.4
Mount	C
Weight(kg)	5.8
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	112.0x88.6
1" IMX255 (14.19x7.51)	127.8x67.7
1" IMX183 (13.13x8.76)	118.3x78.9

DTCM110-170-AL



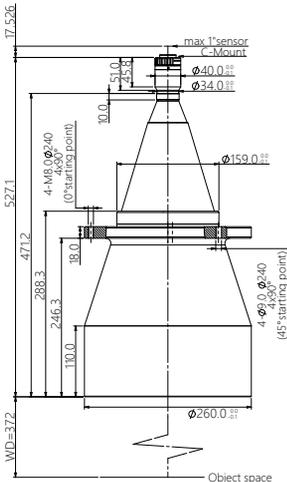
FOV(Φmm)	170
Mag.β(x)	0.098
WD(mm)	318±5
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>140
DOF(mm)	±66.6@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	740±5
Length(mm)	404.3
Mount	C
Weight(kg)	6.6
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	126.8x100.3
1" IMX255 (14.19x7.51)	144.8x76.6
1" IMX183 (13.13x8.76)	134.0x89.4

DTCM110-190H-AL



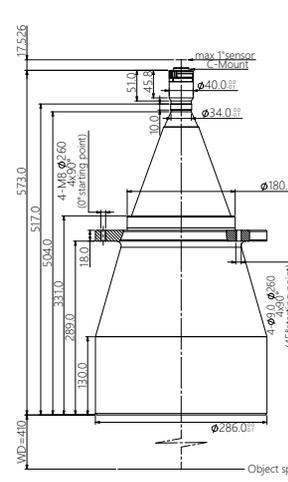
FOV(Φmm)	190
Mag.β(x)	0.087
WD(mm)	330±5
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>140
DOF(mm)	±84.6@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	779±5
Length(mm)	431.7
Mount	C
Weight(kg)	9.7
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	142.9x113.0
1" IMX255 (14.19x7.51)	163.1x86.3
1" IMX183 (13.13x8.76)	150.9x100.7

DTCM110-216-AL



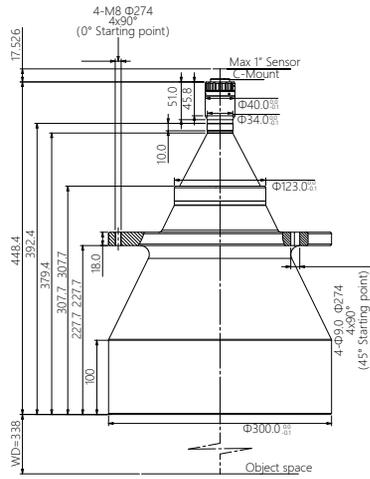
FOV(Φmm)	216
Mag.β(x)	0.077
WD(mm)	372±5
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>140
DOF(mm)	±107.9@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	917±5
Length(mm)	527.1
Mount	C
Weight(kg)	13.9
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	161.4x127.7
1" IMX255 (14.19x7.51)	184.3x97.5
1" IMX183 (13.13x8.76)	170.5x113.8

DTCM110-240H-AL



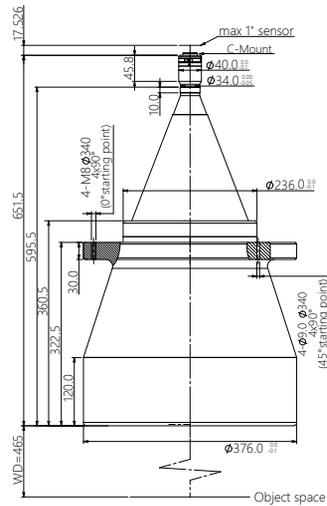
FOV(Φmm)	240
Mag.β(x)	0.069
WD(mm)	410±6
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>140
DOF(mm)	±134.4@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1001±6
Length(mm)	573.0
Mount	C
Weight(kg)	19.2
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	180.1x142.5
1" IMX255 (14.19x7.51)	205.7x108.8
1" IMX183 (13.13x8.76)	190.3x127.0

DTCM110-258-AL



FOV(Φmm)	258
Mag,β(x)	0.064
WD(mm)	338±5
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>140
DOF(mm)	±156.3@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	804±5
Length(mm)	448.4
Mount	C
Weight(kg)	24.4
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	194.2x153.6
1" IMX255 (14.19x7.51)	221.7x117.3
1" IMX183 (13.13x8.76)	205.2x136.9

DTCM110-300-AL



FOV(Φmm)	300
Mag,β(x)	0.055
WD(mm)	465±6
Max Sensor Size(Φmm)	16.6(1")
F/#	6.5
MTF30(lp/mm)	>135
DOF(mm)	±211.6@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1134±6
Length(mm)	651.5
Mount	C
Weight(kg)	46.7
Field of View (mmxmm)	
1" PYTHON5000 (12.43x9.83)	226.0x178.7
1" IMX255 (14.19x7.51)	258.0x136.5
1" IMX183 (13.13x8.76)	238.7x159.3

Flat Telecentric Illuminators for Line Scan



By adopting a flat and compact design, this telecentric lighting shortens its size and reduces its weight, making it a perfect fit for measurement applications in most confined spaces.

Designed specifically for use with flat line scan telecentric lenses to achieve backlighting, optimizing imaging accuracy and enhancing imaging performance

DTCM111 Series

For 1.1" Cameras



Lens Model	FOV (°mm)	Mag. β(x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% max)	Telecentricity (° max)	I/O (mm)	Length (mm)	Mount	Weight (kg)
DTCM111-26-AL	26	0.708	73±1	18.4(1.1")	9.6	>75	±1.6@F20	<0.1	<0.1	238±1	147.7	C	0.4
DTCM111-36-AL	36	0.511	110±2	18.4(1.1")	8.7	>85	±3.0@F20	<0.1	<0.1	295±2	167.7	C	0.6
DTCM111-42-AL	42	0.438	118±3	18.4(1.1")	7.2	>115	±3.3@F16	<0.1	<0.1	289±3	153.2	C	0.5
DTCM111-48-AL	48	0.383	128±3	18.4(1.1")	7.2	>115	±4.3@F16	<0.1	<0.1	312±3	166.7	C	0.6
DTCM111-56-AL	56	0.329	138±3	18.4(1.1")	6.2	>145	±4.0@F11	<0.1	<0.1	345±3	189.2	C	0.8
DTCM111-64H-AL	64	0.288	158±3	18.4(1.1")	6.2	>150	±7.8@F16	<0.1	<0.1	377±3	201.7	C	0.9
DTCM111-72-AL	72	0.256	178±3	18.4(1.1")	6.2	>145	±6.7@F11	<0.1	<0.1	417±3	221.7	C	1.2
DTCM111-80H-AL	80	0.230	228±4	18.4(1.1")	6.2	>145	±12.1@F16	<0.1	<0.1	457±4	211.7	C	2.0
DTCM111-90-AL	90	0.204	208±3	18.4(1.1")	6.2	>145	±10.5@F11	<0.1	<0.1	472±3	246.7	C	1.8
DTCM111-100H-AL	100	0.184	238±4	18.4(1.1")	6.2	>120	±13.0@F11	<0.1	<0.1	545±5	289.5	C	3.2
DTCM111-110-AL	110	0.167	263±4	18.4(1.1")	6.2	>150	±18.7@F11	<0.1	<0.1	580±4	299.3	C	2.8
DTCM111-120H-AL	120	0.153	273±5	18.4(1.1")	6.2	>150	±18.7@F11	<0.1	<0.1	602±5	311.0	C	4.3
DTCM111-136-AL	136	0.135	288±5	18.4(1.1")	6.2	>150	±24.1@F11	<0.1	<0.1	690±5	384.3	C	4.3
DTCM111-150-AL	150	0.123	300±5	18.4(1.1")	6.2	>145	±29@F11	<0.1	<0.1	671±5	353.7	C	5.8
DTCM111-170-AL	170	0.108	318±5	18.4(1.1")	6.2	>150	±37.7@F11	<0.1	<0.1	751±5	415.6	C	6.6
DTCM111-190H-AL	190	0.097	330±5	18.4(1.1")	6.2	>150	±46.7@F11	<0.1	<0.1	791±5	443.0	C	9.7
DTCM111-216-AL	216	0.085	372±5	18.4(1.1")	6.2	>150	±60.9@F11	<0.1	<0.1	928±5	538.4	C	13.9
DTCM111-240H-AL	240	0.077	410±6	18.4(1.1")	6.2	>150	±109@F16	<0.1	<0.1	1012±6	584.2	C	19.2
DTCM111-258-AL	258	0.071	338±5	18.4(1.1")	6.2	>150	±86.5@F11	<0.1	<0.1	815±5	459.7	C	24.4
DTCM111-300-AL	300	0.061	465±6	18.4(1.1")	6.2	>145	±118@F11	<0.1	<0.1	1145±6	662.7	C	46.7

DTCM Series
Magnification Crosstab

DTCM125 Series

DTCM120 Series

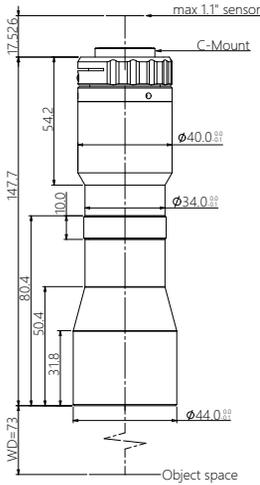
DTCM118 Series

DTCM230 Series

DTCM110 Series

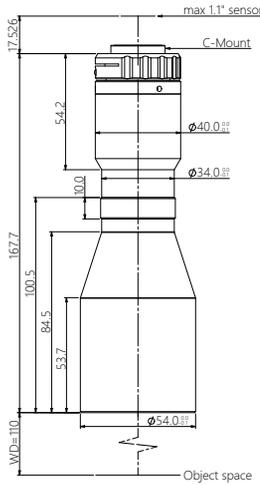
DTCM111 Series

DTCM111-26-AL



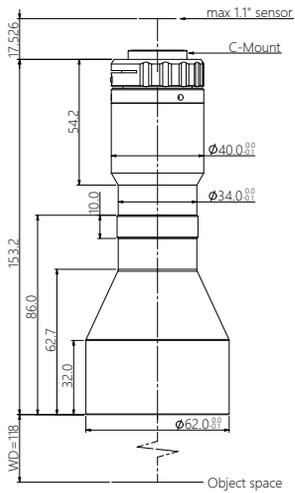
FOV(Φmm)	26
Mag.β(x)	0.708
WD(mm)	73±1
Max Sensor Size(Φmm)	18.4(1.1")
F/#	9.6
MTF30(lp/mm)	>75
DOF(mm)	±1.6@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	238±1
Length(mm)	147.7
Mount	C
Weight(kg)	0.4
Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	18.5x12.4
1.1" IMX253 (14.19x10.38)	20.0x14.7

DTCM111-36-AL



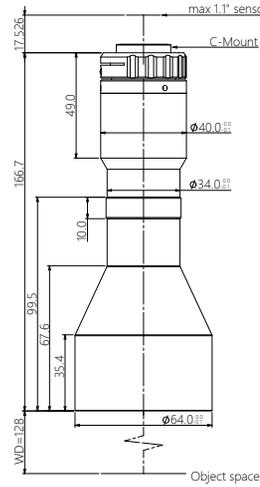
FOV(Φmm)	36
Mag.β(x)	0.511
WD(mm)	110±2
Max Sensor Size(Φmm)	18.4(1.1")
F/#	8.7
MTF30(lp/mm)	>85
DOF(mm)	±3.0@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	295±2
Length(mm)	167.7
Mount	C
Weight(kg)	0.6
Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	25.7x17.1
1.1" IMX253 (14.19x10.38)	27.8x20.3

DTCM111-42-AL



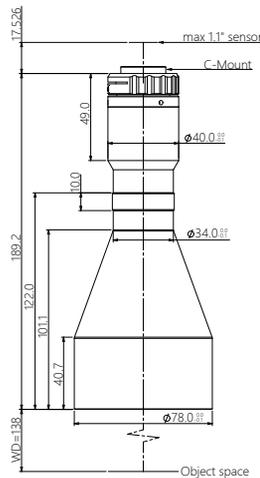
FOV(Φmm)	42
Mag.β(x)	0.438
WD(mm)	118±3
Max Sensor Size(Φmm)	18.4(1.1")
F/#	7.2
MTF30(lp/mm)	>115
DOF(mm)	±3.3@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	289±3
Length(mm)	153.2
Mount	C
Weight(kg)	0.5
Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	30.0x20.0
1.1" IMX253 (14.19x10.38)	32.4x23.7

DTCM111-48-AL



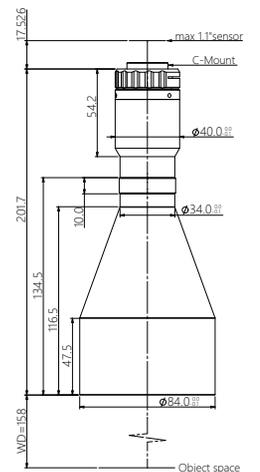
FOV(Φmm)	48
Mag.β(x)	0.383
WD(mm)	128±3
Max Sensor Size(Φmm)	18.4(1.1")
F/#	7.2
MTF30(lp/mm)	>115
DOF(mm)	±4.3@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	312±3
Length(mm)	166.7
Mount	C
Weight(kg)	0.6
Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	34.3x22.9
1.1" IMX253 (14.19x10.38)	37.0x27.1

DTCM111-56-AL



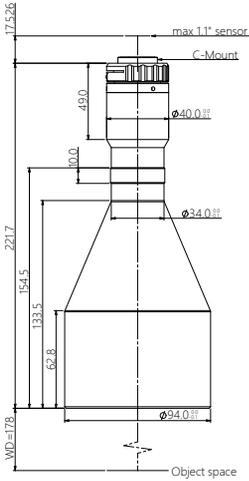
FOV(Φmm)	56
Mag.β(x)	0.329
WD(mm)	138±3
Max Sensor Size(Φmm)	18.4(1.1")
F/#	6.2
MTF30(lp/mm)	>145
DOF(mm)	±4.0@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	345±3
Length(mm)	189.2
Mount	C
Weight(kg)	0.8
Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	39.9x26.6
1.1" IMX253 (14.19x10.38)	43.1x31.6

DTCM111-64H-AL



FOV(Φmm)	64
Mag.β(x)	0.288
WD(mm)	158±3
Max Sensor Size(Φmm)	18.4(1.1")
F/#	6.2
MTF30(lp/mm)	>150
DOF(mm)	±7.8@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	377±3
Length(mm)	201.7
Mount	C
Weight(kg)	0.9
Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	45.6x30.4
1.1" IMX253 (14.19x10.38)	49.3x36.0

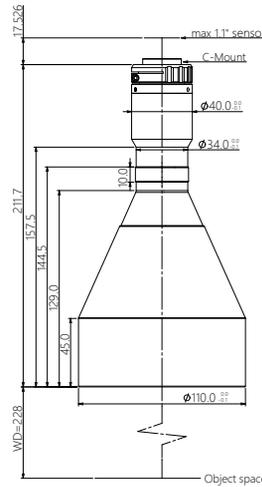
DTCM111-72-AL



FOV(Φmm)	72
Mag.β(x)	0.256
WD(mm)	178±3
Max Sensor Size(Φmm)	18.4(1.1")
F/#	6.2
MTF30(lp/mm)	>145
DOF(mm)	±6.7@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	417±3
Length(mm)	221.7
Mount	C
Weight(kg)	1.2

Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	51.3x42.2
1.1" IMX253 (14.19x10.38)	55.4x40.5

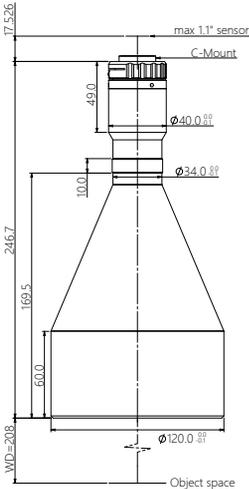
DTCM111-80H-AL



FOV(Φmm)	80
Mag.β(x)	0.230
WD(mm)	228±4
Max Sensor Size(Φmm)	18.4(1.1")
F/#	6.2
MTF30(lp/mm)	>145
DOF(mm)	±12.1@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	457±4
Length(mm)	211.7
Mount	C
Weight(kg)	2.0

Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	57.1x38.1
1.1" IMX253 (14.19x10.38)	61.7x45.1

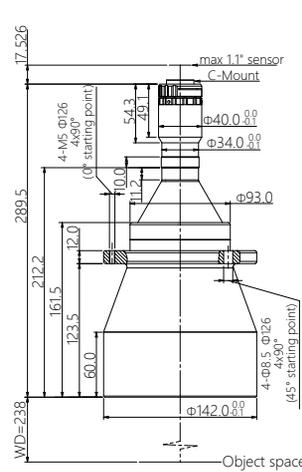
DTCM111-90-AL



FOV(Φmm)	90
Mag.β(x)	0.204
WD(mm)	208±3
Max Sensor Size(Φmm)	18.4(1.1")
F/#	6.2
MTF30(lp/mm)	>145
DOF(mm)	±10.5@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	472±3
Length(mm)	246.7
Mount	C
Weight(kg)	1.8

Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	64.4x42.9
1.1" IMX253 (14.19x10.38)	69.6x50.9

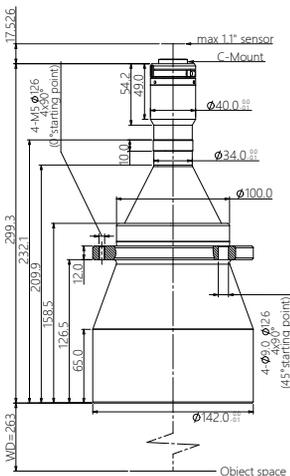
DTCM111-100H-AL



FOV(Φmm)	100
Mag.β(x)	0.184
WD(mm)	238±4
Max Sensor Size(Φmm)	18.4(1.1")
F/#	6.2
MTF30(lp/mm)	>120
DOF(mm)	±13.0@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	545±4
Length(mm)	289.5
Mount	C
Weight(kg)	3.2

Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	71.4x47.6
1.1" IMX253 (14.19x10.38)	77.1x56.4

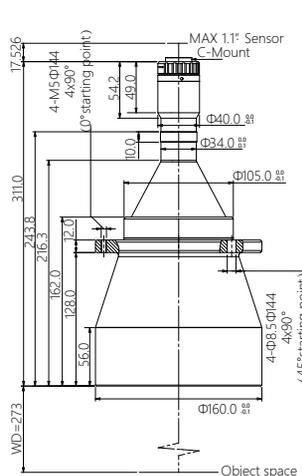
DTCM111-110-AL



FOV(Φmm)	110
Mag.β(x)	0.167
WD(mm)	263±4
Max Sensor Size(Φmm)	18.4(1.1")
F/#	6.2
MTF30(lp/mm)	>150
DOF(mm)	±15.8@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	580±4
Length(mm)	299.3
Mount	C
Weight(kg)	2.8

Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	78.6x52.5
1.1" IMX253 (14.19x10.38)	85.0x62.2

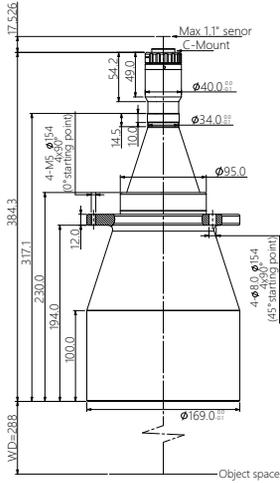
DTCM111-120H-AL



FOV(Φmm)	120
Mag.β(x)	0.153
WD(mm)	273±5
Max Sensor Size(Φmm)	18.4(1.1")
F/#	6.2
MTF30(lp/mm)	>150
DOF(mm)	±18.7@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	602±5
Length(mm)	311.0
Mount	C
Weight(kg)	4.3

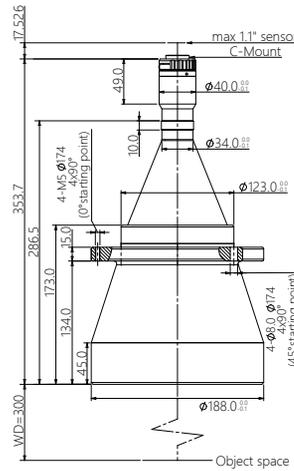
Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	85.8x57.3
1.1" IMX253 (14.19x10.38)	92.7x67.8

DTCM111-136-AL



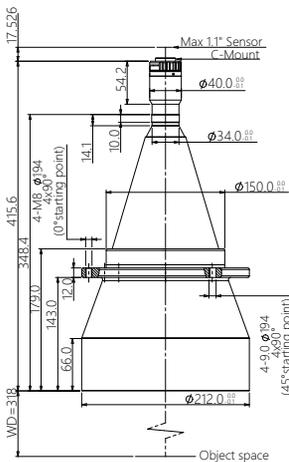
FOV(Φmm)	136
Mag.β(x)	0.135
WD(mm)	288±5
Max Sensor Size(Φmm)	18.4(1.1")
F/#	6.2
MTF30(lp/mm)	>150
DOF(mm)	±24.1 @F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	690±5
Length(mm)	384.3
Mount	C
Weight(kg)	4.3
Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	97.3x64.9
1.1" IMX253 (14.19x10.38)	105.1x76.9

DTCM111-150-AL



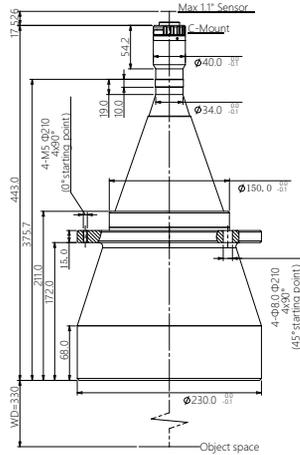
FOV(Φmm)	150
Mag.β(x)	0.123
WD(mm)	300±5
Max Sensor Size(Φmm)	18.4(1.1")
F/#	6.2
MTF30(lp/mm)	>145
DOF(mm)	±29 @F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	671±5
Length(mm)	353.7
Mount	C
Weight(kg)	5.8
Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	106.7x71.2
1.1" IMX253 (14.19x10.38)	115.4x84.4

DTCM111-170-AL



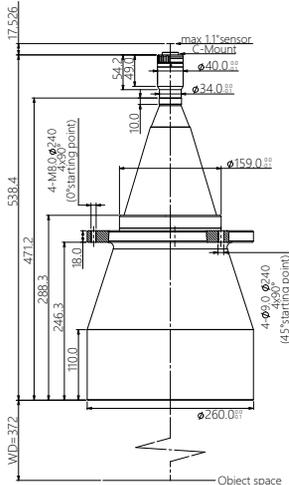
FOV(Φmm)	170
Mag.β(x)	0.108
WD(mm)	318±5
Max Sensor Size(Φmm)	18.4(1.1")
F/#	6.2
MTF30(lp/mm)	>150
DOF(mm)	±37.7 @F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	751±5
Length(mm)	415.6
Mount	C
Weight(kg)	6.6
Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	121.6x81.1
1.1" IMX253 (14.19x10.38)	131.4x96.1

DTCM111-190H-AL



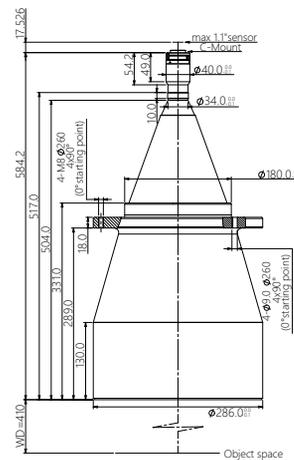
FOV(Φmm)	190
Mag.β(x)	0.097
WD(mm)	330±5
Max Sensor Size(Φmm)	18.4(1.1")
F/#	6.2
MTF30(lp/mm)	>150
DOF(mm)	±46.7 @F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	791±5
Length(mm)	443.0
Mount	C
Weight(kg)	9.7
Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	135.4x90.3
1.1" IMX253 (14.19x10.38)	146.3x107.0

DTCM111-216-AL



FOV(Φmm)	216
Mag.β(x)	0.085
WD(mm)	372±5
Max Sensor Size(Φmm)	18.4(1.1")
F/#	6.2
MTF30(lp/mm)	>150
DOF(mm)	±60.9 @F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	928±5
Length(mm)	538.4
Mount	C
Weight(kg)	13.9
Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	154.5x103.1
1.1" IMX253 (14.19x10.38)	166.9x122.1

DTCM111-240H-AL



FOV(Φmm)	240
Mag.β(x)	0.077
WD(mm)	410±6
Max Sensor Size(Φmm)	18.4(1.1")
F/#	6.2
MTF30(lp/mm)	>150
DOF(mm)	±109 @F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1012±6
Length(mm)	584.2
Mount	C
Weight(kg)	19.2
Field of View (mmxmm)	
1" IMX183 (13.13x8.76)	170.5x113.8
1.1" IMX253 (14.19x10.38)	184.3x134.8

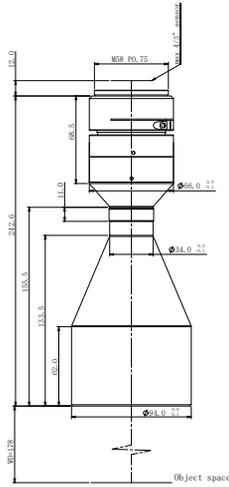
DTCM430H Series

For 4/3" Cameras



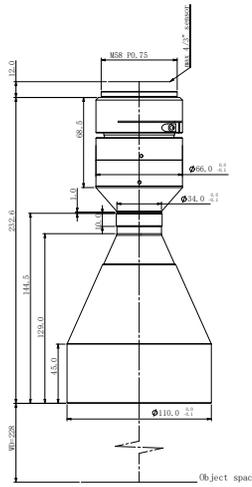
Lens Model	FOV (°mm)	Mag. β(x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% max)	Telecentricity (° max)	I/O (mm)	Length (mm)	Mount	Weight (kg)
DTCM430H-26-M58-AL	26	0.908	73±1	23.6(4/3")	12.3	>68	±1.0@F20	<0.1	<0.1	254±1	168.5	M42/M58	0.8
DTCM430H-36-M58-AL	36	0.656	110±2	23.6(4/3")	11.1	>77	±1.9@F20	<0.1	<0.1	311±2	188.6	M42/M58	0.9
DTCM430H-42-M58-AL	42	0.562	118±3	23.6(4/3")	9.3	>96	±2.5@F20	<0.1	<0.1	304±3	174.1	M42/M58	0.9
DTCM430H-48-M58-AL	48	0.492	128±3	23.6(4/3")	9.3	>92	±3.3@F20	<0.1	<0.1	328±3	187.6	M42/M58	0.9
DTCM430H-56-M58-AL	56	0.421	138±3	23.6(4/3")	7.9	>112	±3.6@F16	<0.1	<0.1	360±3	210.1	M42/M58	1.2
DTCM430H-64H-M58-AL	64	0.369	158±3	23.6(4/3")	6.9	>126	±5.9@F20	<0.1	<0.1	393±3	222.6	M42/M58	1.3
DTCM430H-72-M58-AL	72	0.328	178±3	23.6(4/3")	6.9	>132	±6.0@F16	<0.1	<0.1	433±3	242.6	M42/M58	1.5
DTCM430H-80H-M58-AL	80	0.295	228±4	23.6(4/3")	4.6	>174	±9.2@F20	<0.1	<0.1	473±4	232.6	M42/M58	2.4
DTCM430H-90-M58-AL	90	0.262	208±3	23.6(4/3")	6.2	>144	±9.3@F16	<0.1	<0.1	488±3	267.6	M42/M58	2.2
DTCM430H-100H-M58-AL	100	0.236	238±4	23.6(4/3")	5.6	>164	±14.4@F20	<0.1	<0.1	560±4	310.3	M42/M58	3.5
DTCM430H-110-M58-AL	110	0.215	263±4	23.6(4/3")	5.0	>164	±13.9@F16	<0.1	<0.1	595±4	320.2	M42/M58	3.2
DTCM430H-120H-M58-AL	120	0.197	273±5	23.6(4/3")	4.6	>182	±16.5@F16	<0.1	<0.1	617±5	331.9	M42/M58	4.7
DTCM430H-136-M58-AL	136	0.174	288±5	23.6(4/3")	4.6	>184	±21.3@F16	<0.1	<0.1	705±5	405.2	M42/M58	4.7
DTCM430H-150-M58-AL	150	0.157	300±5	23.6(4/3")	7.9	>116	±25.9@F16	<0.1	<0.1	687±5	374.6	M42/M58	6.2
DTCM430H-170-M58-AL	170	0.139	318±5	23.6(4/3")	4.6	>188	±33.2@F16	<0.1	<0.1	766±5	436.5	M42/M58	7.0
DTCM430H-190H-M58-AL	190	0.124	330±5	23.6(4/3")	4.6	>176	±41.5@F16	<0.1	<0.1	806±5	463.8	M42/M58	10.1
DTCM430H-216-M58-AL	216	0.109	372±5	23.6(4/3")	4.6	>186	±53.6@F16	<0.1	<0.1	943±5	559.3	M42/M58	14.2
DTCM430H-240H-M58-AL	240	0.098	410±6	23.6(4/3")	4.6	>174	±82.7@F20	<0.1	<0.1	1027±6	605.1	M42/M58	19.6
DTCM430H-258-M58-AL	258	0.091	338±5	23.6(4/3")	4.6	>166	±76.5@F16	<0.1	<0.1	831±5	480.5	M42/M58	24.7
DTCM430H-300-M58-AL	300	0.079	465±6	23.6(4/3")	4.6	>176	±103@F16	<0.1	<0.1	1161±6	683.6	M42/M58	47.0

DTCM430H-72-M58-AL



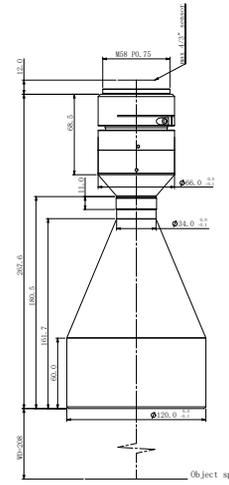
FOV(φmm)	72
Mag,β(x)	0.328
WD(mm)	178±3
Max Sensor Size(φmm)	23.6(4/3")
F/#	6.9
MTF30(lp/mm)	>132
DOF(mm)	±6.0@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	433±3
Length(mm)	242.6
Mount	M42/M58
Weight(kg)	1.5
Field of View (mmxmm)	
4/3" Keyence21M(17.86x14.32)	54.5x43.7
4/3" PYTHON 12K(18.43x13.82)	56.2x42.1
4/3" CMV8000(18.48x13.73)	56.3x41.9

DTCM430H-80H-M58-AL



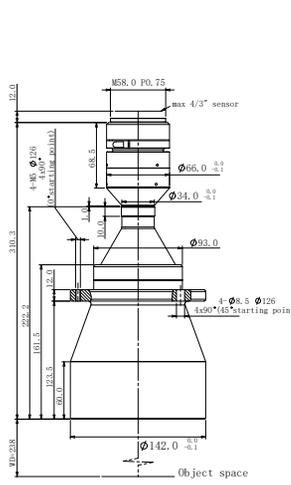
FOV(φmm)	80
Mag,β(x)	0.295
WD(mm)	228±4
Max Sensor Size(φmm)	23.6(4/3")
F/#	4.6
MTF30(lp/mm)	>174
DOF(mm)	±9.2@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	473±4
Length(mm)	232.6
Mount	M42/M58
Weight(kg)	2.4
Field of View (mmxmm)	
4/3" Keyence21M(17.86x14.32)	60.5x48.5
4/3" PYTHON 12K(18.43x13.82)	62.5x46.8
4/3" CMV8000(18.48x13.73)	62.6x46.5

DTCM430H-90-M58-AL



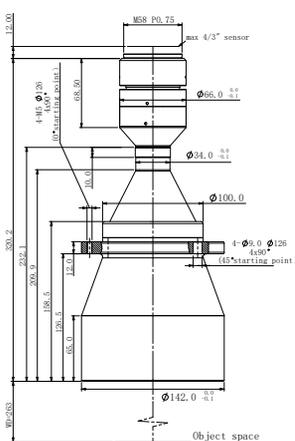
FOV(φmm)	90
Mag,β(x)	0.262
WD(mm)	208±3
Max Sensor Size(φmm)	23.6(4/3")
F/#	6.2
MTF30(lp/mm)	>144
DOF(mm)	±9.3@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	488±3
Length(mm)	267.6
Mount	M42/M58
Weight(kg)	2.2
Field of View (mmxmm)	
4/3" Keyence21M(17.86x14.32)	68.2x54.7
4/3" PYTHON 12K(18.43x13.82)	70.3x52.7
4/3" CMV8000(18.48x13.73)	70.5x52.4

DTCM430H-100H-M58-AL



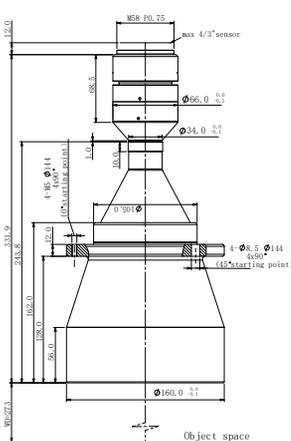
FOV(φmm)	100
Mag,β(x)	0.236
WD(mm)	238±4
Max Sensor Size(φmm)	23.6(4/3")
F/#	5.6
MTF30(lp/mm)	>164
DOF(mm)	±14.4@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	560±4
Length(mm)	310.3
Mount	M42/M58
Weight(kg)	3.5
Field of View (mmxmm)	
4/3" Keyence21M(17.86x14.32)	75.7x60.7
4/3" PYTHON 12K(18.43x13.82)	78.1x58.6
4/3" CMV8000(18.48x13.73)	78.3x58.2

DTCM430H-110-M58-AL



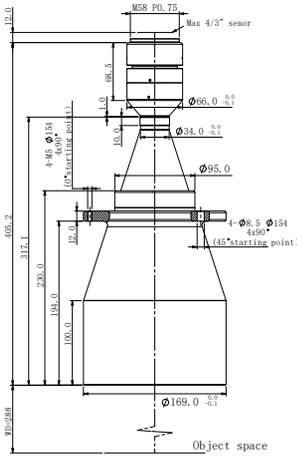
FOV(φmm)	110
Mag,β(x)	0.215
WD(mm)	263±4
Max Sensor Size(φmm)	23.6(4/3")
F/#	5.0
MTF30(lp/mm)	>164
DOF(mm)	±13.9@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	595±4
Length(mm)	320.2
Mount	M42/M58
Weight(kg)	3.2
Field of View (mmxmm)	
4/3" Keyence21M(17.86x14.32)	83.1x66.7
4/3" PYTHON 12K(18.43x13.82)	85.7x64.3
4/3" CMV8000(18.48x13.73)	85.9x63.9

DTCM430H-120H-M58-AL



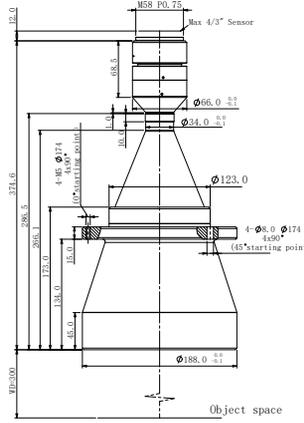
FOV(φmm)	120
Mag,β(x)	0.197
WD(mm)	273±5
Max Sensor Size(φmm)	23.6(4/3")
F/#	4.6
MTF30(lp/mm)	>182
DOF(mm)	±16.5@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	617±5
Length(mm)	331.9
Mount	M42/M58
Weight(kg)	4.7
Field of View (mmxmm)	
4/3" Keyence21M(17.86x14.32)	90.7x72.7
4/3" PYTHON 12K(18.43x13.82)	93.6x70.2
4/3" CMV8000(18.48x13.73)	93.8x69.7

DTCM430H-136-M58-AL



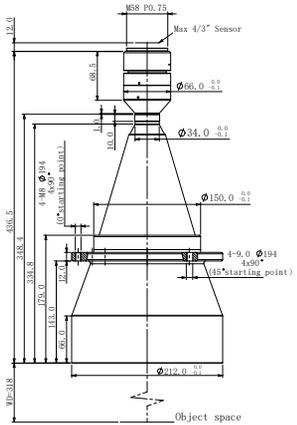
FOV(φmm)	136
Mag.β(x)	0.174
WD(mm)	288±5
Max Sensor Size(φmm)	23.6(4/3")
F/#	4.6
MTF30(lp/mm)	>184
DOF(mm)	±21.3@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	705±5
Length(mm)	405.2
Mount	M42/M58
Weight(kg)	4.7
Field of View (mmxmm)	
4/3" Keyence21M(17.86x14.32)	102.6x82.3
4/3" PYTHON 12K(18.43x13.82)	105.9x79.4
4/3" CMV8000(18.48x13.73)	106.2x78.9

DTCM430H-150-M58-AL



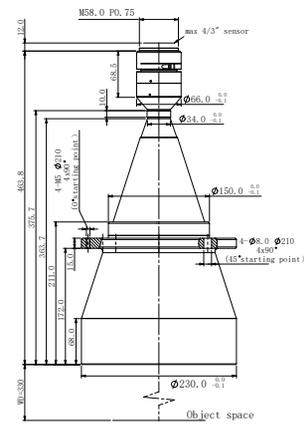
FOV(φmm)	150
Mag.β(x)	0.157
WD(mm)	300±5
Max Sensor Size(φmm)	23.6(4/3")
F/#	7.9
MTF30(lp/mm)	>116
DOF(mm)	±25.9@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	687±5
Length(mm)	374.6
Mount	M42/M58
Weight(kg)	6.2
Field of View (mmxmm)	
4/3" Keyence21M(17.86x14.32)	113.8x91.2
4/3" PYTHON 12K(18.43x13.82)	117.4x88.0
4/3" CMV8000(18.48x13.73)	117.7x87.5

DTCM430H-170-M58-AL



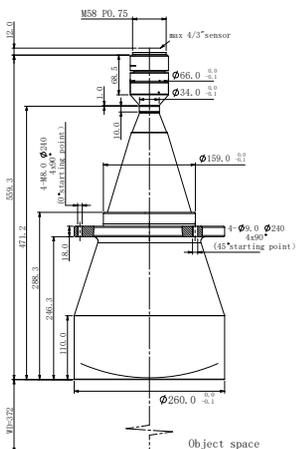
FOV(φmm)	170
Mag.β(x)	0.139
WD(mm)	318±5
Max Sensor Size(φmm)	23.6(4/3")
F/#	4.6
MTF30(lp/mm)	>188
DOF(mm)	±33.2@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	766±5
Length(mm)	436.5
Mount	M42/M58
Weight(kg)	7.0
Field of View (mmxmm)	
4/3" Keyence21M(17.86x14.32)	128.5x103.0
4/3" PYTHON 12K(18.43x13.82)	132.6x99.4
4/3" CMV8000(18.48x13.73)	132.9x98.8

DTCM430H-190H-M58-AL



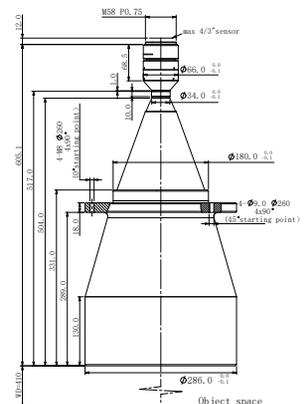
FOV(φmm)	190
Mag.β(x)	0.124
WD(mm)	330±5
Max Sensor Size(φmm)	23.6(4/3")
F/#	4.6
MTF30(lp/mm)	>176
DOF(mm)	±41.5@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	806±5
Length(mm)	463.8
Mount	M42/M58
Weight(kg)	10.1
Field of View (mmxmm)	
4/3" Keyence21M(17.86x14.32)	144.0x115.5
4/3" PYTHON 12K(18.43x13.82)	131.6x111.5
4/3" CMV8000(18.48x13.73)	149.0x110.7

DTCM430H-216-M58-AL



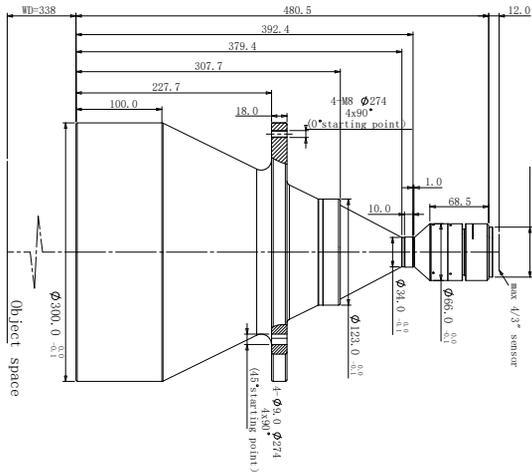
FOV(φmm)	216
Mag.β(x)	0.109
WD(mm)	372±5
Max Sensor Size(φmm)	23.6(4/3")
F/#	4.6
MTF30(lp/mm)	>186
DOF(mm)	±53.6@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	943±5
Length(mm)	559.3
Mount	M42/M58
Weight(kg)	14.2
Field of View (mmxmm)	
4/3" Keyence21M(17.86x14.32)	163.9x131.4
4/3" PYTHON 12K(18.43x13.82)	169.1x126.8
4/3" CMV8000(18.48x13.73)	169.5x125.9

DTCM430H-240H-M58-AL



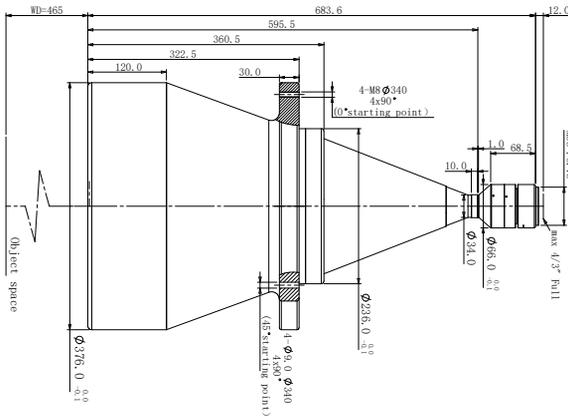
FOV(φmm)	240
Mag.β(x)	0.098
WD(mm)	410±6
Max Sensor Size(φmm)	23.6(4/3")
F/#	4.6
MTF30(lp/mm)	>174
DOF(mm)	±82.7@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1027±6
Length(mm)	605.1
Mount	M42/M58
Weight(kg)	19.6
Field of View (mmxmm)	
4/3" Keyence21M(17.86x14.32)	182.2x146.1
4/3" PYTHON 12K(18.43x13.82)	188.1x141.0
4/3" CMV8000(18.48x13.73)	188.6x140.1

DTCM430H-258-M58-AL



FOV(ϕ mm)	258
Mag, β (x)	0.091
WD(mm)	338 \pm 5
Max Sensor Size(ϕ mm)	23.6(4/3")
F/#	4.6
MTF30(lp/mm)	>166
DOF(mm)	\pm 76.5@F16
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	831 \pm 5
Length(mm)	480.5
Mount	M42/M58
Weight(kg)	24.7
Field of View (mmxmm)	
4/3" Keyence 21M(17.86x14.32)	196.3x157.4
4/3" PYTHON 12K(18.43x13.82)	202.5x151.9
4/3" CMV8000(18.48x13.73)	203.1x150.9

DTCM430H-300-M58-AL



FOV(ϕ mm)	300
Mag, β (x)	0.079
WD(mm)	465 \pm 6
Max Sensor Size(ϕ mm)	23.6(4/3")
F/#	4.6
MTF30(lp/mm)	>176
DOF(mm)	\pm 103@F16
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	1161 \pm 6
Length(mm)	683.6
Mount	M42/M58
Weight(kg)	47.0
Field of View (mmxmm)	
4/3" Keyence 21M(17.86x14.32)	226.1x181.3
4/3" PYTHON 12K(18.43x13.82)	233.3x174.9
4/3" CMV8000(18.48x13.73)	233.9x173.8

DTCM175 Series

For 1.75" Cameras



Lens Model	FOV (°mm)	Mag. β(x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% max)	Telecentricity (° max)	I/O (mm)	Length (mm)	Mount	Weight (kg)
DTCM175-26-M58-AL	26	1.115	73±1	29(1.75")	15.0	>50	±0.6@F20	<0.1	<0.1	274±1	189.2	M42/M58	0.8
DTCM175-36-M58-AL	36	0.806	110±2	29(1.75")	13.5	>60	±1.2@F20	<0.1	<0.1	331±2	209.3	M42/M58	1.0
DTCM175-42-M58-AL	42	0.690	118±3	29(1.75")	11.4	>70	±1.6@F20	<0.1	<0.1	325±3	194.8	M42/M58	0.9
DTCM175-48-M58-AL	48	0.604	128±3	29(1.75")	11.3	>70	±2.2@F20	<0.1	<0.1	348±3	208.3	M42/M58	1.0
DTCM175-56-M58-AL	56	0.518	138±3	29(1.75")	9.7	>85	±3.0@F20	<0.1	<0.1	381±3	230.8	M42/M58	1.2
DTCM175-64H-M58-AL	64	0.453	158±3	29(1.75")	8.5	>100	±3.1@F16	<0.1	<0.1	413±3	243.3	M42/M58	1.3
DTCM175-72-M58-AL	72	0.403	178±3	29(1.75")	8.5	>105	±3.9@F16	<0.1	<0.1	453±3	263.3	M42/M58	1.6
DTCM175-80H-M58-AL	80	0.363	228±4	29(1.75")	6.8	>130	±4.9@F16	<0.1	<0.1	493±4	253.3	M42/M58	2.4
DTCM175-90-M58-AL	90	0.322	208±3	29(1.75")	8.5	>100	±6.1@F16	<0.1	<0.1	508±3	288.3	M42/M58	2.2
DTCM175-100H-M58-AL	100	0.290	238±4	29(1.75")	6.8	>132	±7.6@F16	<0.1	<0.1	581±4	331.0	M42/M58	3.6
DTCM175-110-M58-AL	110	0.264	263±4	29(1.75")	6.8	>120	±9.2@F16	<0.1	<0.1	616±4	340.9	M42/M58	3.2
DTCM175-120H-M58-AL	120	0.242	273±5	29(1.75")	6.8	>130	±11.0@F16	<0.1	<0.1	638±5	352.6	M42/M58	4.7
DTCM175-136-M58-AL	136	0.213	288±5	29(1.75")	6.8	>125	±14.1@F16	<0.1	<0.1	726±5	425.8	M42/M58	4.7
DTCM175-150-M58-AL	150	0.193	300±5	29(1.75")	9.7	>90	±21.5@F20	<0.1	<0.1	707±5	395.2	M42/M58	6.2
DTCM175-170-M58-AL	170	0.171	318±5	29(1.75")	6.8	>125	±21.9@F16	<0.1	<0.1	787±5	457.2	M42/M58	7.0
DTCM175-190H-M58-AL	190	0.153	330±5	29(1.75")	6.8	>135	±27.3@F16	<0.1	<0.1	827±5	484.5	M42/M58	10.1
DTCM175-216-M58-AL	216	0.134	372±5	29(1.75")	6.8	>125	±35.6@F16	<0.1	<0.1	964±5	579.9	M42/M58	14.3
DTCM175-240H-M58-AL	240	0.121	410±6	29(1.75")	6.8	>125	±43.7@F16	<0.1	<0.1	1048±6	625.8	M42/M58	19.6
DTCM175-258-M58-AL	258	0.112	338±5	29(1.75")	6.8	>130	±50.7@F16	<0.1	<0.1	851±5	501.2	M42/M58	24.7
DTCM175-300-M58-AL	300	0.097	465±6	29(1.75")	8.5	>105	±68@F16	<0.1	<0.1	1181±6	704.3	M42/M58	47.1

DTCM430H Series

DTCM175 Series

DTCM210 Series

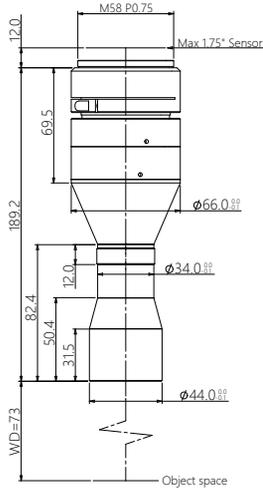
DTCM71M Series

DTCM35FH Series

DTCM16K Series

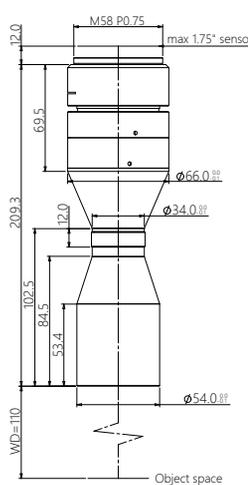
DTCM150M Series

DTCM175-26-M58-AL



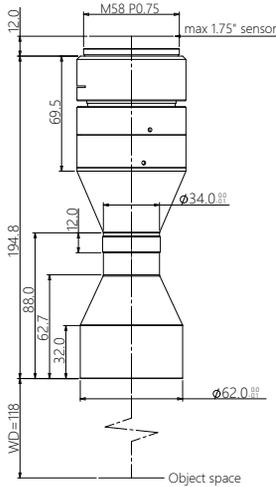
FOV(Φmm)	26
Mag,β(x)	1.115
WD(mm)	73±1
Max Sensor Size(Φmm)	29(1.75")
F/#	15.0
MTF30(lp/mm)	>50
DOF(mm)	±0.6@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	274±1
Length(mm)	189.2
Mount	M42/M58
Weight(kg)	0.8
Field of View (mmxmm)	
1.75° CMV12000(22.53x16.90)	20.2x15.2
1.75° PYTHON16k(18.43x18.43)	16.5x16.5
1.75° LineScan-4k(28.8mm)	25.8

DTCM175-36-M58-AL



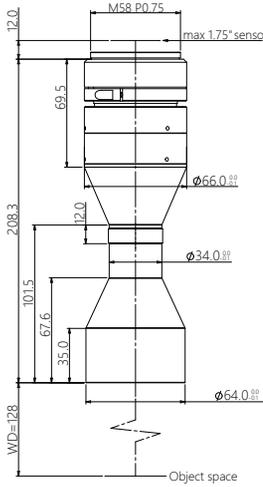
FOV(Φmm)	36
Mag,β(x)	0.806
WD(mm)	110±2
Max Sensor Size(Φmm)	29(1.75")
F/#	13.5
MTF30(lp/mm)	>60
DOF(mm)	±1.2@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	331±2
Length(mm)	209.3
Mount	M42/M58
Weight(kg)	1.0
Field of View (mmxmm)	
1.75° CMV12000(22.53x16.90)	28.0x21.0
1.75° PYTHON16k(18.43x18.43)	22.9x22.9
1.75° LineScan-4k(28.8mm)	35.7

DTCM175-42-M58-AL



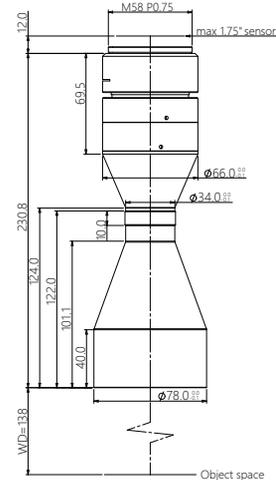
FOV(Φmm)	42
Mag,β(x)	0.690
WD(mm)	118±3
Max Sensor Size(Φmm)	29(1.75")
F/#	11.4
MTF30(lp/mm)	>70
DOF(mm)	±1.6@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	325±3
Length(mm)	194.8
Mount	M42/M58
Weight(kg)	0.9
Field of View (mmxmm)	
1.75° CMV12000(22.53x16.90)	32.7x24.5
1.75° PYTHON16k(18.43x18.43)	26.7x26.7
1.75° LineScan-4k(28.8mm)	41.7

DTCM175-48-M58-AL



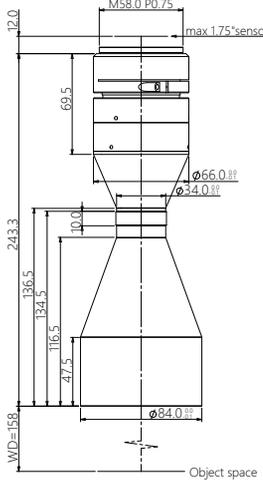
FOV(Φmm)	48
Mag,β(x)	0.604
WD(mm)	128±3
Max Sensor Size(Φmm)	29(1.75")
F/#	11.3
MTF30(lp/mm)	>70
DOF(mm)	±2.2@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	348±3
Length(mm)	208.3
Mount	M42/M58
Weight(kg)	1.0
Field of View (mmxmm)	
1.75° CMV12000(22.53x16.90)	37.3x28.0
1.75° PYTHON16k(18.43x18.43)	30.5x30.5
1.75° LineScan-4k(28.8mm)	47.7

DTCM175-56-M58-AL



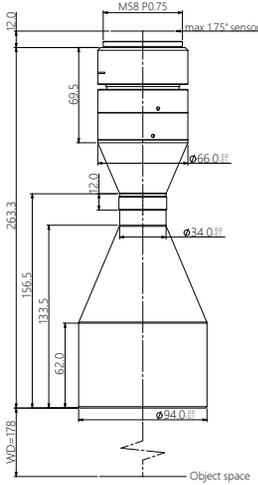
FOV(Φmm)	56
Mag,β(x)	0.518
WD(mm)	138±3
Max Sensor Size(Φmm)	29(1.75")
F/#	9.7
MTF30(lp/mm)	>85
DOF(mm)	±3.0@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	381±3
Length(mm)	230.8
Mount	M42/M58
Weight(kg)	1.2
Field of View (mmxmm)	
1.75° CMV12000(22.53x16.90)	43.5x32.6
1.75° PYTHON16k(18.43x18.43)	35.6x35.6
1.75° LineScan-4k(28.8mm)	55.6

DTCM175-64H-M58-AL



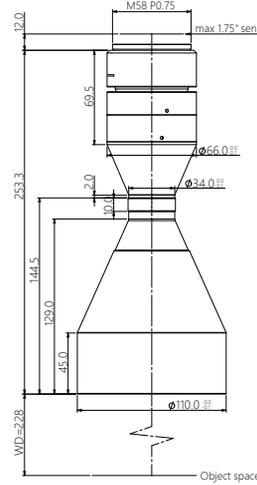
FOV(Φmm)	64
Mag,β(x)	0.453
WD(mm)	158±3
Max Sensor Size(Φmm)	29(1.75")
F/#	8.5
MTF30(lp/mm)	>100
DOF(mm)	±3.1@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	413±3
Length(mm)	243.3
Mount	M42/M58
Weight(kg)	1.3
Field of View (mmxmm)	
1.75° CMV12000(22.53x16.90)	49.7x37.3
1.75° PYTHON16k(18.43x18.43)	40.7x40.7
1.75° LineScan-4k(28.8mm)	63.6

DTCM175-72-M58-AL



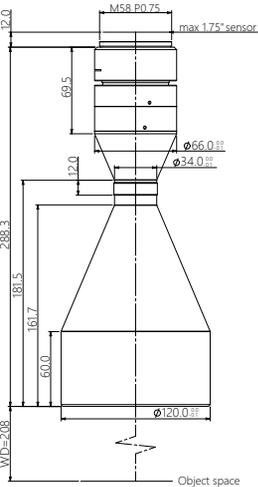
FOV(Φmm)	72
Mag.β(x)	0.403
WD(mm)	178±3
Max Sensor Size(Φmm)	29(1.75")
F/#	8.5
MTF30(lp/mm)	>105
DOF(mm)	±3.9@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	453±3
Length(mm)	263.3
Mount	M42/M58
Weight(kg)	1.6
Field of View (mmxmm)	
1.75" CMV12000(22.53x16.90)	55.9x41.9
1.75" PYTHON16k(18.43x18.43)	45.7x45.7
1.75" LineScan-4k(28.8mm)	71.5

DTCM175-80H-M58-AL



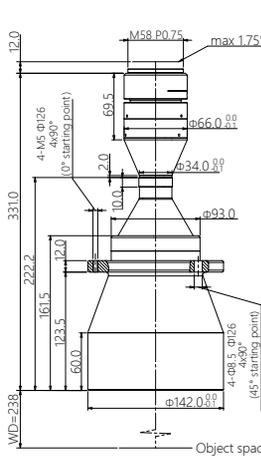
FOV(Φmm)	80
Mag.β(x)	0.363
WD(mm)	228±4
Max Sensor Size(Φmm)	29(1.75")
F/#	6.8
MTF30(lp/mm)	>130
DOF(mm)	±4.9@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	493±4
Length(mm)	253.3
Mount	M42/M58
Weight(kg)	2.4
Field of View (mmxmm)	
1.75" CMV12000(22.53x16.90)	62.1x46.6
1.75" PYTHON16k(18.43x18.43)	50.8x50.8
1.75" LineScan-4k(28.8mm)	79.3

DTCM175-90-M58-AL



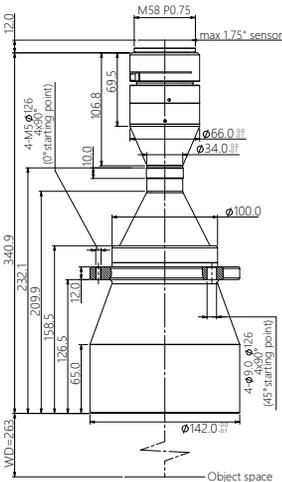
FOV(Φmm)	90
Mag.β(x)	0.322
WD(mm)	208±3
Max Sensor Size(Φmm)	29(1.75")
F/#	8.5
MTF30(lp/mm)	>100
DOF(mm)	±6.1@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	508±3
Length(mm)	288.3
Mount	M42/M58
Weight(kg)	2.2
Field of View (mmxmm)	
1.75" CMV12000(22.53x16.90)	70.0x52.5
1.75" PYTHON16k(18.43x18.43)	57.2x57.2
1.75" LineScan-4k(28.8mm)	89.4

DTCM175-100H-M58-AL



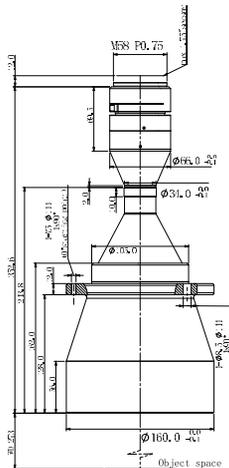
FOV(Φmm)	100
Mag.β(x)	0.290
WD(mm)	238±4
Max Sensor Size(Φmm)	29(1.75")
F/#	6.8
MTF30(lp/mm)	>132
DOF(mm)	±7.6@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	581±4
Length(mm)	331.0
Mount	M42/M58
Weight(kg)	3.6
Field of View (mmxmm)	
1.75" CMV12000(22.53x16.90)	77.7x58.3
1.75" PYTHON16k(18.43x18.43)	63.6x63.6
1.75" LineScan-4k(28.8mm)	99.3

DTCM175-110-M58-AL



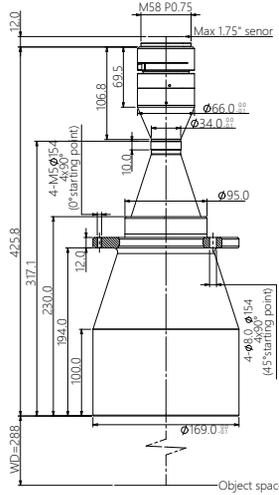
FOV(Φmm)	110
Mag.β(x)	0.264
WD(mm)	263±4
Max Sensor Size(Φmm)	29(1.75")
F/#	6.8
MTF30(lp/mm)	>120
DOF(mm)	±9.2@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	616±4
Length(mm)	340.9
Mount	M42/M58
Weight(kg)	3.2
Field of View (mmxmm)	
1.75" CMV12000(22.53x16.90)	85.3x64.0
1.75" PYTHON16k(18.43x18.43)	69.8x69.8
1.75" LineScan-4k(28.8mm)	109.1

DTCM175-120H-M58-AL



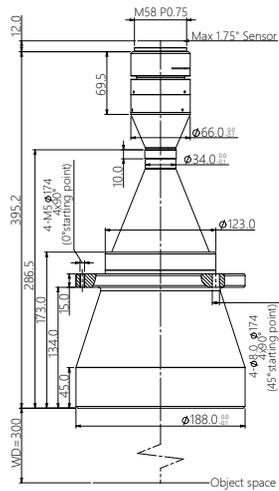
FOV(Φmm)	120
Mag.β(x)	0.242
WD(mm)	273±5
Max Sensor Size(Φmm)	29(1.75")
F/#	6.8
MTF30(lp/mm)	>130
DOF(mm)	±11.0@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	638±5
Length(mm)	352.6
Mount	M42/M58
Weight(kg)	4.7
Field of View (mmxmm)	
1.75" CMV12000(22.53x16.90)	93.1x69.8
1.75" PYTHON16k(18.43x18.43)	76.2x76.2
1.75" LineScan-4k(28.8mm)	119.0

DTCM175-136-M58-AL



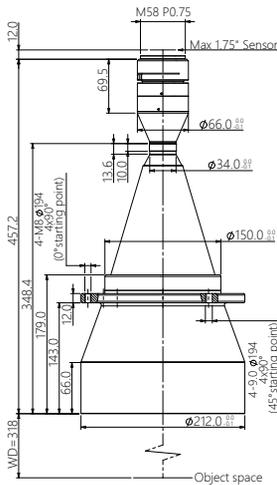
FOV(ϕ mm)	136
Mag. β (x)	0.213
WD(mm)	288 \pm 5
Max Sensor Size(ϕ mm)	29(1.75°)
F/#	6.8
MTF30(lp/mm)	>125
DOF(mm)	\pm 14.1@F16
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	726 \pm 5
Length(mm)	425.8
Mount	M42/M58
Weight(kg)	4.7
Field of View (mmxmm)	
1.75° CMV12000(22.53x16.90)	105.8x79.3
1.75° PYTHON16k(18.43x18.43)	86.5x86.5
1.75° LineScan-4k(28.8mm)	135.2

DTCM175-150-M58-AL



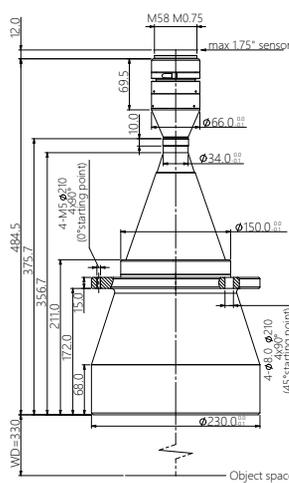
FOV(ϕ mm)	150
Mag. β (x)	0.193
WD(mm)	300 \pm 5
Max Sensor Size(ϕ mm)	29(1.75°)
F/#	9.7
MTF30(lp/mm)	>90
DOF(mm)	\pm 21.5@F20
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	707 \pm 5
Length(mm)	395.2
Mount	M42/M58
Weight(kg)	6.2
Field of View (mmxmm)	
1.75° CMV12000(22.53x16.90)	116.7x87.6
1.75° PYTHON16k(18.43x18.43)	95.5x95.5
1.75° LineScan-4k(28.8mm)	149.2

DTCM175-170-M58-AL



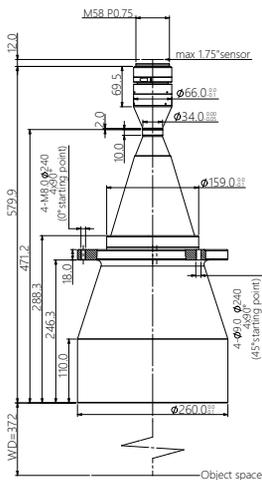
FOV(ϕ mm)	170
Mag. β (x)	0.171
WD(mm)	318 \pm 5
Max Sensor Size(ϕ mm)	29(1.75°)
F/#	6.8
MTF30(lp/mm)	>125
DOF(mm)	\pm 21.9@F16
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	787 \pm 5
Length(mm)	457.2
Mount	M42/M58
Weight(kg)	7.0
Field of View (mmxmm)	
1.75° CMV12000(22.53x16.90)	131.8x98.8
1.75° PYTHON16k(18.43x18.43)	107.8x107.8
1.75° LineScan-4k(28.8mm)	168.4

DTCM175-190H-M58-AL



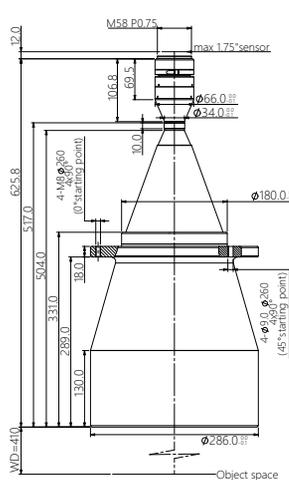
FOV(ϕ mm)	190
Mag. β (x)	0.153
WD(mm)	330 \pm 5
Max Sensor Size(ϕ mm)	29(1.75°)
F/#	6.8
MTF30(lp/mm)	>135
DOF(mm)	\pm 27.3@F16
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	827 \pm 5
Length(mm)	484.5
Mount	M42/M58
Weight(kg)	10.1
Field of View (mmxmm)	
1.75° CMV12000(22.53x16.90)	147.3x110.5
1.75° PYTHON16k(18.43x18.43)	120.5x120.5
1.75° LineScan-4k(28.8mm)	188.2

DTCM175-216-M58-AL



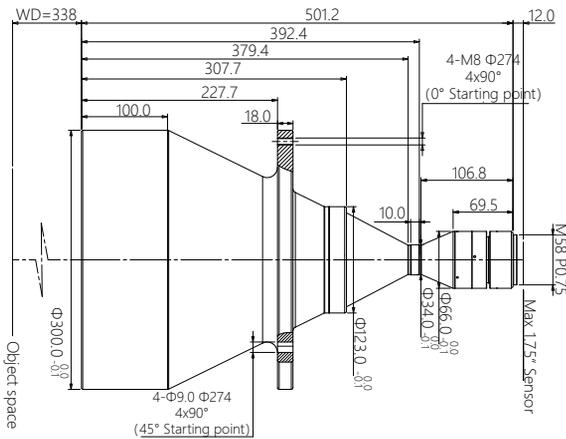
FOV(ϕ mm)	216
Mag. β (x)	0.134
WD(mm)	372 \pm 5
Max Sensor Size(ϕ mm)	29(1.75°)
F/#	6.8
MTF30(lp/mm)	>125
DOF(mm)	\pm 35.6@F16
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	964 \pm 5
Length(mm)	579.9
Mount	M42/M58
Weight(kg)	14.3
Field of View (mmxmm)	
1.75° CMV12000(22.53x16.90)	168.1x126.1
1.75° PYTHON16k(18.43x18.43)	137.5x137.5
1.75° LineScan-4k(28.8mm)	214.9

DTCM175-240H-M58-AL



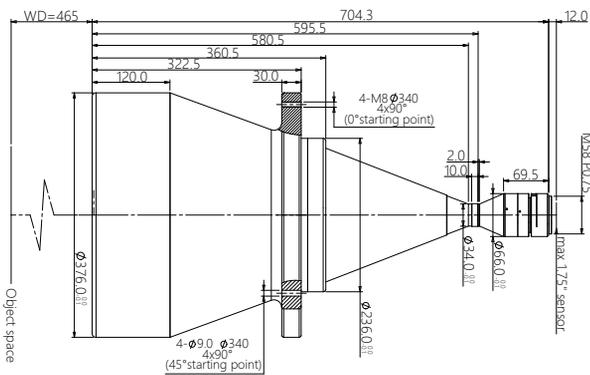
FOV(ϕ mm)	240
Mag. β (x)	0.121
WD(mm)	410 \pm 6
Max Sensor Size(ϕ mm)	29(1.75°)
F/#	6.8
MTF30(lp/mm)	>125
DOF(mm)	\pm 43.7@F16
Distortion(% max)	<0.1
Telecentricity($^{\circ}$ max)	<0.1
I/O(mm)	1048 \pm 6
Length(mm)	625.8
Mount	M42/M58
Weight(kg)	19.6
Field of View (mmxmm)	
1.75° CMV12000(22.53x16.90)	186.2x139.7
1.75° PYTHON16k(18.43x18.43)	152.3x152.3
1.75° LineScan-4k(28.8mm)	238.0

DTCM175-258-M58-AL



FOV(Φ mm)	258
Mag. β (x)	0.112
WD(mm)	338 \pm 5
Max Sensor Size(Φ mm)	29(1.75")
F/#	6.8
MTF30(lp/mm)	>130
DOF(mm)	± 50.7 @ F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	851 \pm 5
Length(mm)	501.2
Mount	M42/M58
Weight(kg)	24.7
Field of View (mmxmm)	
1.75° CMV12000(22.53x16.90)	201.2x150.9
1.75° PYTHON16k(18.43x18.43)	64.6x164.6
1.75° LineScan-4k(28.8mm)	257.1

DTCM175-300-M58-AL



FOV(Φ mm)	300
Mag. β (x)	0.097
WD(mm)	465 \pm 6
Max Sensor Size(Φ mm)	29(1.75")
F/#	8.5
MTF30(lp/mm)	>105
DOF(mm)	± 68 @ F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1181 \pm 6
Length(mm)	704.3
Mount	M42/M58
Weight(kg)	47.1
Field of View (mmxmm)	
1.75° CMV12000(22.53x16.90)	232.3x174.2
1.75° PYTHON16k(18.43x18.43)	190.0x190.0
1.75° LineScan-4k(28.8mm)	296.9

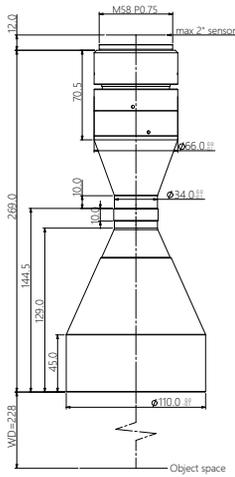
DTCM210 Series

For 2" Cameras



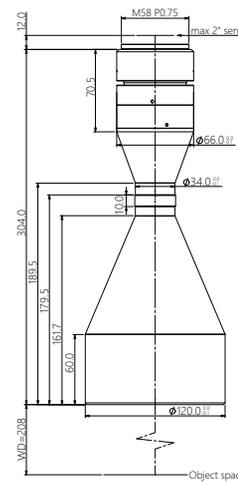
Lens Model	FOV (Φ mm)	Mag. $\beta(x)$	WD (mm)	Sensor Size (Φ mm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% max)	Telecentricity (° max)	I/O (mm)	Length (mm)	Mount	Weight (kg)
DTCM210-36-M58-AL	36	0.917	110±2	33(2")	15.5	>50	±0.9@F20	<0.1	<0.1	347±2	225.0	M42M58	1.0
DTCM210-42-M58-AL	42	0.786	118±3	33(2")	12.9	>65	±1.2@F20	<0.1	<0.1	341±3	210.5	M42M58	1.0
DTCM210-48-M58-AL	48	0.688	128±3	33(2")	12.9	>60	±1.7@F20	<0.1	<0.1	364±3	224.0	M42M58	1.0
DTCM210-56-M58-AL	56	0.589	138±3	33(2")	11.1	>75	±2.3@F20	<0.1	<0.1	397±3	246.5	M42M58	1.3
DTCM210-64H-M58-AL	64	0.516	158±3	33(2")	9.7	>90	±3.3@F22	<0.1	<0.1	429±3	259.0	M42M58	1.4
DTCM210-72-M58-AL	72	0.458	178±3	33(2")	9.7	>90	±3.8@F20	<0.1	<0.1	469±3	279.0	M42M58	1.6
DTCM210-80H-M58-AL	80	0.413	228±4	33(2")	7.8	>110	±3.8@F16	<0.1	<0.1	509±4	269.0	M42M58	2.5
DTCM210-90-M58-AL	90	0.367	208±3	33(2")	8.6	>100	±4.7@F16	<0.1	<0.1	524±3	304.0	M42M58	2.3
DTCM210-100H-M58-AL	100	0.330	238±4	33(2")	7.8	>118	±5.9@F16	<0.1	<0.1	597±4	346.7	M42M58	3.6
DTCM210-110-M58-AL	110	0.300	263±4	33(2")	7.8	>110	±7.1@F16	<0.1	<0.1	632±4	356.6	M42M58	3.3
DTCM210-120H-M58-AL	120	0.275	273±5	33(2")	7.8	>115	±8.5@F16	<0.1	<0.1	653±5	368.3	M42M58	4.8
DTCM210-136-M58-AL	136	0.243	288±5	33(2")	7.8	>110	±10.8@F16	<0.1	<0.1	742±5	441.5	M42M58	4.8
DTCM210-150-M58-AL	150	0.220	300±5	33(2")	11.1	>80	±16.5@F20	<0.1	<0.1	723±5	410.9	M42M58	6.3
DTCM210-170-M58-AL	170	0.194	318±5	33(2")	7.8	>110	±17.0@F16	<0.1	<0.1	803±5	472.9	M42M58	7.1
DTCM210-190H-M58-AL	190	0.174	330±5	33(2")	7.8	>115	±21.1@F16	<0.1	<0.1	842±5	500.2	M42M58	10.2
DTCM210-216-M58-AL	216	0.153	372±5	33(2")	7.8	>115	±27.3@F16	<0.1	<0.1	980±5	595.6	M42M58	14.3
DTCM210-240H-M58-AL	240	0.138	410±6	33(2")	7.8	>110	±33.9@F16	<0.1	<0.1	1064±6	641.5	M42M58	19.6
DTCM210-258-M58-AL	258	0.128	338±5	33(2")	7.8	>110	±39.1@F16	<0.1	<0.1	867±5	516.9	M42M58	24.8
DTCM210-300-M58-AL	300	0.110	465±6	33(2")	7.8	>115	±52.8@F16	<0.1	<0.1	1197±6	720.0	M42M58	47.1

DTCM210-80H-M58-AL



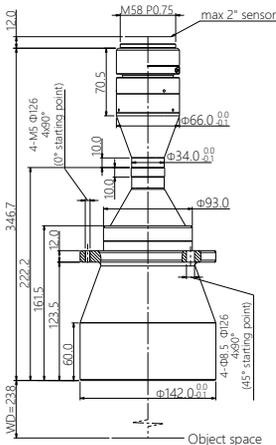
FOV(Φmm)	80
Mag,β(x)	0.413
WD(mm)	228±4
Max Sensor Size(Φmm)	33(2")
F/#	7.8
MTF30(lp/mm)	>110
DOF(mm)	±3.8@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	509±4
Length(mm)	269.0
Mount	M42/M58
Weight(kg)	2.5
Field of View (mmxmm)	
2" DALSA 12M(24.58x18.43)	59.5x44.6
2" PYTHON 25K(23.04x23.04)	55.8x55.8

DTCM210-90-M58-AL



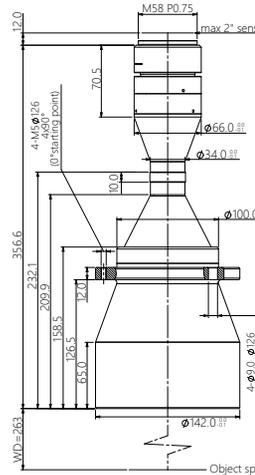
FOV(Φmm)	90
Mag,β(x)	0.367
WD(mm)	208±3
Max Sensor Size(Φmm)	33(2")
F/#	8.6
MTF30(lp/mm)	>100
DOF(mm)	±4.7@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	524±3
Length(mm)	304.0
Mount	M42/M58
Weight(kg)	2.3
Field of View (mmxmm)	
2" DALSA 12M(24.58x18.43)	67.0x50.2
2" PYTHON 25K(23.04x23.04)	62.8x62.8

DTCM210-100H-M58-AL



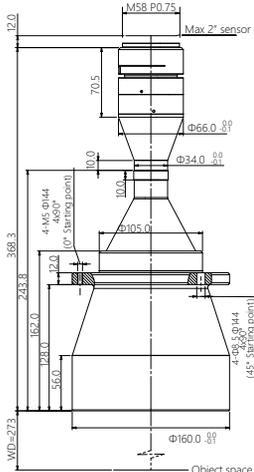
FOV(Φmm)	100
Mag,β(x)	0.330
WD(mm)	238±4
Max Sensor Size(Φmm)	33(2")
F/#	7.8
MTF30(lp/mm)	>118
DOF(mm)	±5.9@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	597±4
Length(mm)	346.7
Mount	M42/M58
Weight(kg)	3.6
视野范围 (mmxmm)	
2" DALSA 12M(24.58x18.43)	74.5x55.8
2" PYTHON 25K(23.04x23.04)	69.8x69.8

DTCM210-110-M58-AL



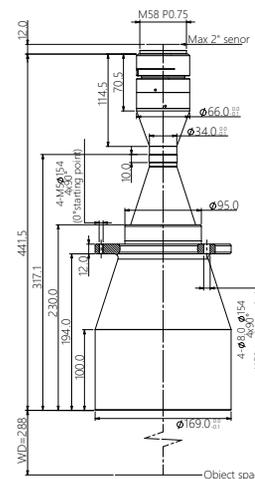
FOV(Φmm)	110
Mag,β(x)	0.300
WD(mm)	263±4
Max Sensor Size(Φmm)	33(2")
F/#	7.8
MTF30(lp/mm)	>110
DOF(mm)	±7.1@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	632±4
Length(mm)	356.6
Mount	M42/M58
Weight(kg)	3.3
视野范围 (mmxmm)	
2" DALSA 12M(24.58x18.43)	81.9x61.4
2" PYTHON 25K(23.04x23.04)	76.8x76.8

DTCM210-120H-M58-AL



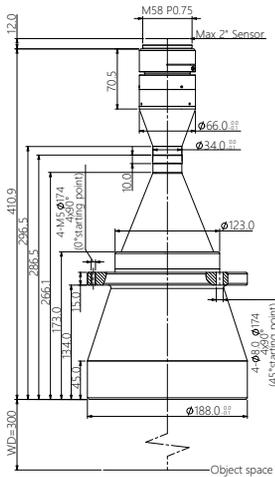
FOV(Φmm)	120
Mag,β(x)	0.275
WD(mm)	273±5
Max Sensor Size(Φmm)	33(2")
F/#	7.8
MTF30(lp/mm)	>115
DOF(mm)	±8.5@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	653±5
Length(mm)	368.3
Mount	M42/M58
Weight(kg)	4.8
视野范围 (mmxmm)	
2" DALSA 12M(24.58x18.43)	89.4x67.0
2" PYTHON 25K(23.04x23.04)	83.8x83.8

DTCM210-136-M58-AL



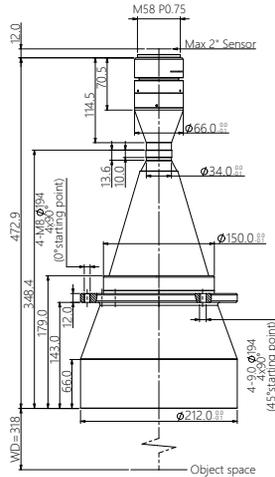
FOV(Φmm)	136
Mag,β(x)	0.243
WD(mm)	288±5
Max Sensor Size(Φmm)	33(2")
F/#	7.8
MTF30(lp/mm)	>110
DOF(mm)	±10.8@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	742±5
Length(mm)	441.5
Mount	M42/M58
Weight(kg)	4.8
视野范围 (mmxmm)	
2" DALSA 12M(24.58x18.43)	101.2x75.8
2" PYTHON 25K(23.04x23.04)	94.8x94.8

DTCM210-150-M58-AL



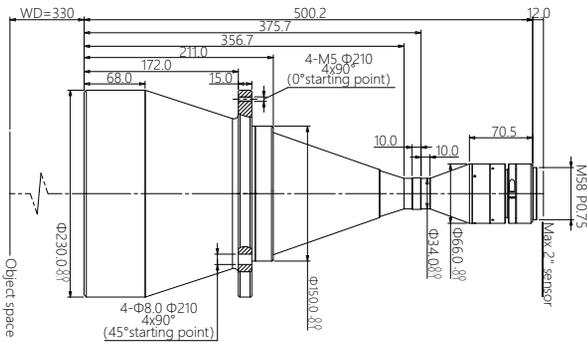
FOV(Φmm)	150
Mag.β(x)	0.220
WD(mm)	300±5
Max Sensor Size(Φmm)	33(2")
F/#	11.1
MTF30(lp/mm)	>80
DOF(mm)	±16.5@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	723±5
Length(mm)	410.9
Mount	M42/M58
Weight(kg)	6.3
Field of View (mmxmm)	
2" DALSA 12M(24.58x18.43)	111.7x83.8
2" PYTHON 25K(23.04x23.04)	104.7x104.7

DTCM210-170-M58-AL



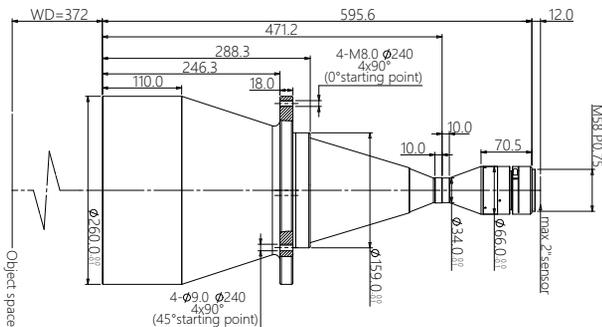
FOV(Φmm)	170
Mag.β(x)	0.194
WD(mm)	318±5
Max Sensor Size(Φmm)	33(2")
F/#	7.8
MTF30(lp/mm)	>110
DOF(mm)	±17.0@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	803±5
Length(mm)	472.9
Mount	M42/M58
Weight(kg)	7.1
Field of View (mmxmm)	
2" DALSA 12M(24.58x18.43)	126.7x95.0
2" PYTHON 25K(23.04x23.04)	118.8x118.8

DTCM210-190H-M58-AL



FOV(Φmm)	190
Mag.β(x)	0.174
WD(mm)	330±5
Max Sensor Size(Φmm)	33(2")
F/#	7.8
MTF30(lp/mm)	>115
DOF(mm)	±21.1@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	842±5
Length(mm)	500.2
Mount	M42/M58
Weight(kg)	10.2
Field of View (mmxmm)	
2" DALSA 12M(24.58x18.43)	141.3x105.9
2" PYTHON 25K(23.04x23.04)	132.4x132.4

DTCM210-216-M58-AL



FOV(Φmm)	216
Mag.β(x)	0.153
WD(mm)	372±5
Max Sensor Size(Φmm)	33(2")
F/#	7.8
MTF30(lp/mm)	>115
DOF(mm)	±27.3@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	980±5
Length(mm)	595.6
Mount	M42/M58
Weight(kg)	14.3
Field of View (mmxmm)	
2" DALSA 12M(24.58x18.43)	160.7x120.5
2" PYTHON 25K(23.04x23.04)	150.6x150.6

DTCM430H Series

DTCM175 Series

DTCM210 Series

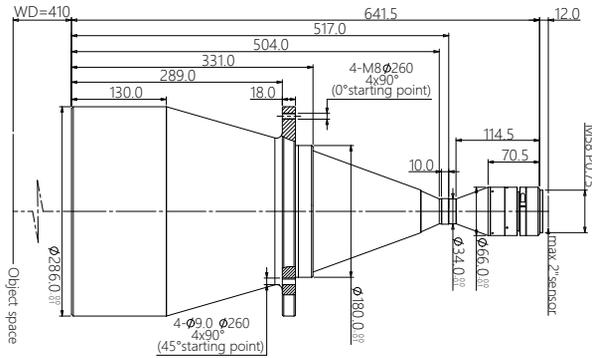
DTCM71M Series

DTCM35FH Series

DTCM16K Series

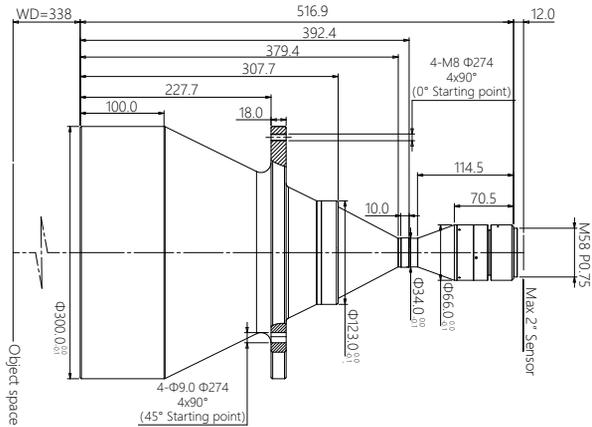
DTCM150M Series

DTCM210-240H-M58-AL



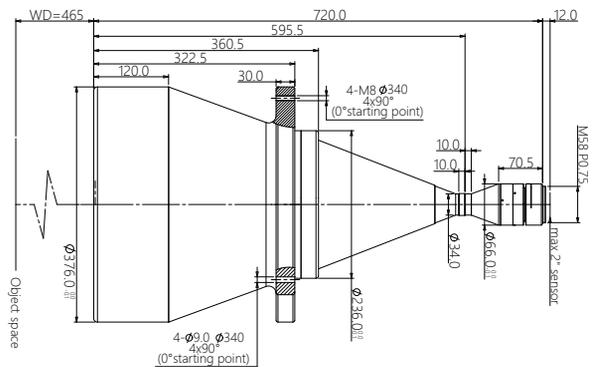
FOV(Φmm)	240
Mag.β(x)	0.138
WD(mm)	410±6
Max Sensor Size(Φmm)	33(2°)
F/#	7.8
MTF30(lp/mm)	>110
DOF(mm)	±33.9@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1064±6
Length(mm)	641.5
Mount	M42/M58
Weight(kg)	19.6
Field of View (mmxmm)	
2° DALSA 12M(24.58x18.43)	178.1x133.6
2° PYTHON 25K(23.04x23.04)	167.0x167.0

DTCM210-258-M58-AL



FOV(Φmm)	258
Mag.β(x)	0.128
WD(mm)	338±5
Max Sensor Size(Φmm)	33(2°)
F/#	7.8
MTF30(lp/mm)	>110
DOF(mm)	±39.1@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	867±5
Length(mm)	516.9
Mount	M42/M58
Weight(kg)	24.8
Field of View (mmxmm)	
2° DALSA 12M(24.58x18.43)	192.0x144.0
2° PYTHON 25K(23.04x23.04)	180.0x180.0

DTCM210-300-M58-AL



FOV(Φmm)	300
Mag.β(x)	0.110
WD(mm)	465±6
Max Sensor Size(Φmm)	33(2°)
F/#	7.8
MTF30(lp/mm)	>115
DOF(mm)	±52.8@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1197±6
Length(mm)	720.0
Mount	M42/M58
Weight(kg)	47.1
Field of View (mmxmm)	
2° DALSA 12M(24.58x18.43)	223.5x167.5
2° PYTHON 25K(23.04x23.04)	223.5x167.5

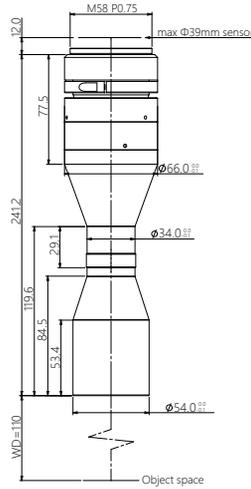
DTCM71M Series

For 39mm Cameras



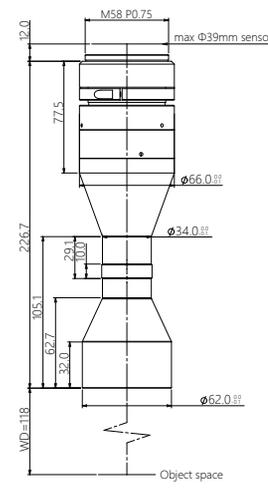
Lens Model	FOV (°mm)	Mag. β(x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% max)	Telecentricity (° max)	I/O (mm)	Length (mm)	Mount	Weight (kg)
DTCM71M-36-M58-AL	36	1.083	110±2	39	18.3	>43	±0.65@F20	<0.1	<0.1	363±2	241.2	M42/M58	1.1
DTCM71M-42-M58-AL	42	0.929	118±3	39	15.3	>55	±0.9@F20	<0.1	<0.1	357±3	226.7	M42/M58	1.0
DTCM71M-48-M58-AL	48	0.813	128±3	39	15.3	>50	±1.2@F20	<0.1	<0.1	380±3	240.2	M42/M58	1.1
DTCM71M-56-M58-AL	56	0.696	138±3	39	13.1	>65	±1.6@F20	<0.1	<0.1	413±3	262.7	M42/M58	1.3
DTCM71M-64H-M58-AL	64	0.609	158±3	39	11.5	>70	±2.4@F22	<0.1	<0.1	445±3	275.2	M42/M58	1.4
DTCM71M-72-M58-AL	72	0.542	178±3	39	11.5	>75	±2.7@F20	<0.1	<0.1	485±3	295.2	M42/M58	1.7
DTCM71M-80H-M58-AL	80	0.488	228±4	39	6.6	>130	±2.7@F16	<0.1	<0.1	525±4	285.2	M42/M58	2.5
DTCM71M-90-M58-AL	90	0.433	208±3	39	10.2	>85	±4.2@F20	<0.1	<0.1	540±3	320.2	M42/M58	2.3
DTCM71M-100H-M58-AL	100	0.390	238±4	39	9.2	>102	±4.2@F16	<0.1	<0.1	613±4	362.9	M42/M58	3.7
DTCM71M-110-M58-AL	110	0.355	263±4	39	8.3	>95	±5.1@F16	<0.1	<0.1	648±4	372.8	M42/M58	3.3
DTCM71M-120H-M58-AL	120	0.325	273±5	39	7.6	>115	±6.1@F16	<0.1	<0.1	670±5	384.5	M42/M58	4.8
DTCM71M-136-M58-AL	136	0.287	288±5	39	7.1	>120	±7.8@F16	<0.1	<0.1	758±5	457.8	M42/M58	4.8
DTCM71M-150-M58-AL	150	0.260	300±5	39	13.1	>70	±11.8@F20	<0.1	<0.1	739±5	427.2	M42/M58	6.3
DTCM71M-170-M58-AL	170	0.229	318±5	39	6.5	>125	±8.4@F11	<0.1	<0.1	819±5	489.1	M42/M58	7.1
DTCM71M-190H-M58-AL	190	0.205	330±5	39	6.5	>135	±10.5@F11	<0.1	<0.1	858±5	516.4	M42/M58	10.2
DTCM71M-216-M58-AL	216	0.181	372±5	39	6.5	>135	±13.4@F11	<0.1	<0.1	996±5	611.9	M42/M58	14.4
DTCM71M-240H-M58-AL	240	0.163	410±6	39	7.5	>130	±24.3@F16	<0.1	<0.1	1080±6	657.7	M42/M58	19.7
DTCM71M-258-M58-AL	258	0.151	338±5	39	6.5	>130	±19.3@F11	<0.1	<0.1	883±5	533.1	M42/M58	24.8
DTCM71M-300-M58-AL	300	0.130	465±6	39	6.5	>130	±26@F11	<0.1	<0.1	1213±6	736.2	M42/M58	47.2

DTCM71M-36-M58-AL



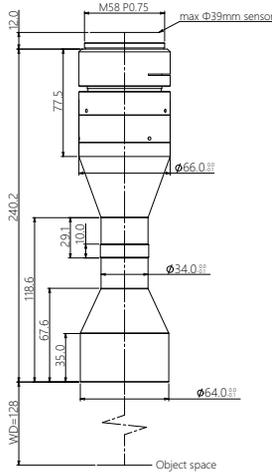
FOV(Φmm)	36
Mag.β(x)	1.083
WD(mm)	110±2
Max Sensor Size(Φmm)	39
F/#	18.3
MTF30(lp/mm)	>43
DOF(mm)	±0.65@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	363±2
Length(mm)	241.2
Mount	M42/M58
Weight(kg)	1.1
Field of View (mmxmm)	
CHR 70M (31.0x21.7)	28.6x20.0

DTCM71M-42-M58-AL



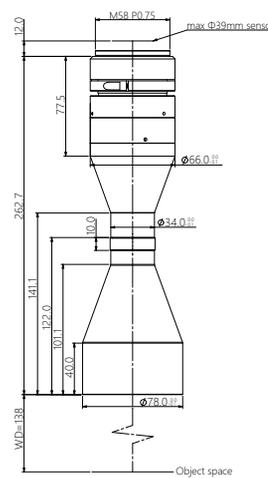
FOV(Φmm)	42
Mag.β(x)	0.929
WD(mm)	118±3
Max Sensor Size(Φmm)	39
F/#	15.3
MTF30(lp/mm)	>55
DOF(mm)	±0.9@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	357±3
Length(mm)	226.7
Mount	M42/M58
Weight(kg)	1.0
Field of View (mmxmm)	
CHR 70M (31.0x21.7)	33.4x23.4

DTCM71M-48-M58-AL



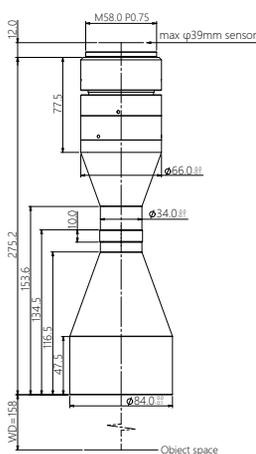
FOV(Φmm)	48
Mag.β(x)	0.813
WD(mm)	128±3
Max Sensor Size(Φmm)	39
F/#	15.3
MTF30(lp/mm)	>50
DOF(mm)	±1.2@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	380±3
Length(mm)	240.2
Mount	M42/M58
Weight(kg)	1.1
Field of View (mmxmm)	
CHR 70M (31.0x21.7)	38.1x26.7

DTCM71M-56-M58-AL



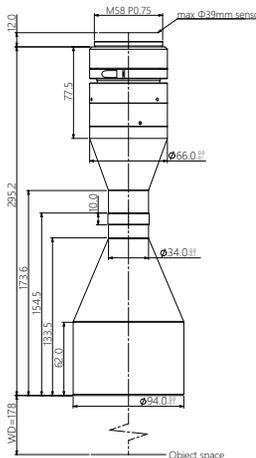
FOV(Φmm)	56
Mag.β(x)	0.696
WD(mm)	138±3
Max Sensor Size(Φmm)	39
F/#	13.1
MTF30(lp/mm)	>65
DOF(mm)	±1.6@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	413±3
Length(mm)	262.7
Mount	M42/M58
Weight(kg)	1.3
Field of View (mmxmm)	
CHR 70M (31.0x21.7)	44.5x31.2

DTCM71M-64H-M58-AL



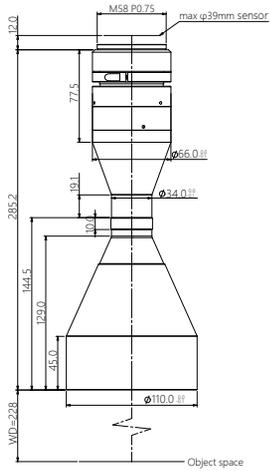
FOV(Φmm)	64
Mag.β(x)	0.609
WD(mm)	158±3
Max Sensor Size(Φmm)	39
F/#	11.5
MTF30(lp/mm)	>70
DOF(mm)	±2.4@F22
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	445±3
Length(mm)	275.2
Mount	M42/M58
Weight(kg)	1.4
Field of View (mmxmm)	
CHR 70M (31.0x21.7)	50.9x35.6

DTCM71M-72-M58-AL



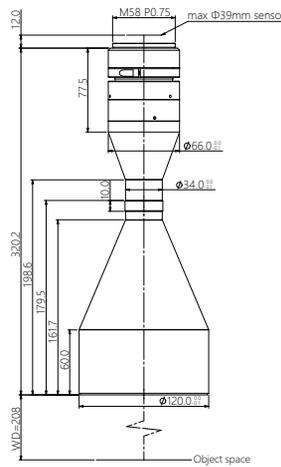
FOV(Φmm)	72
Mag.β(x)	0.542
WD(mm)	178±3
Max Sensor Size(Φmm)	39
F/#	11.5
MTF30(lp/mm)	>75
DOF(mm)	±2.7@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	485±3
Length(mm)	295.2
Mount	M42/M58
Weight(kg)	1.7
Field of View (mmxmm)	
CHR 70M (31.0x21.7)	57.2x40.0

DTCM71M-80H-M58-AL



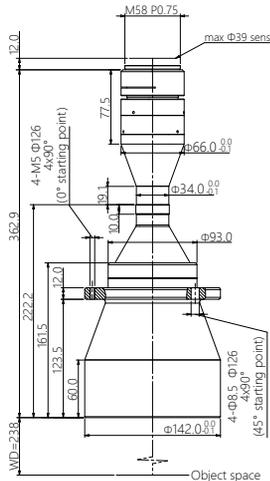
FOV(Φmm)	80
Mag.β(x)	0.488
WD(mm)	228±4
Max Sensor Size(Φmm)	39
F/#	6.6
MTF30(lp/mm)	>130
DOF(mm)	±2.7@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	525±4
Length(mm)	285.2
Mount	M42/M58
Weight(kg)	2.5
Field of View (mmxmm)	
CHR 70M (31.0x21.7)	63.5x44.5

DTCM71M-90-M58-AL



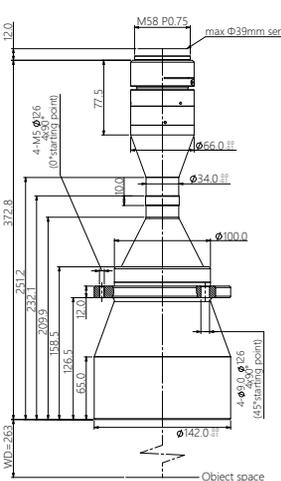
FOV(Φmm)	90
Mag.β(x)	0.433
WD(mm)	208±3
Max Sensor Size(Φmm)	39
F/#	10.2
MTF30(lp/mm)	>85
DOF(mm)	±4.2@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	540±3
Length(mm)	320.2
Mount	M42/M58
Weight(kg)	2.3
Field of View (mmxmm)	
CHR 70M (31.0x21.7)	71.6x50.1

DTCM71M-100H-M58-AL



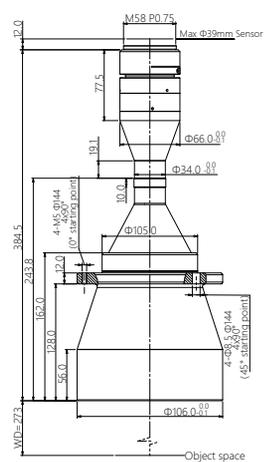
FOV(Φmm)	100
Mag.β(x)	0.390
WD(mm)	238±4
Max Sensor Size(Φmm)	39
F/#	9.2
MTF30(lp/mm)	>102
DOF(mm)	±4.2@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	613±4
Length(mm)	362.9
Mount	M42/M58
Weight(kg)	3.7
Field of View (mmxmm)	
CHR 70M (31.0x21.7)	79.5x55.6

DTCM71M-110-M58-AL



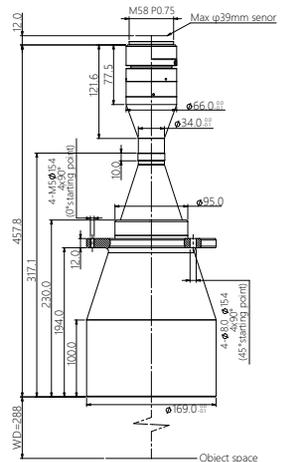
FOV(Φmm)	110
Mag.β(x)	0.355
WD(mm)	263±4
Max Sensor Size(Φmm)	39
F/#	8.3
MTF30(lp/mm)	>95
DOF(mm)	±5.1@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	648±4
Length(mm)	372.8
Mount	M42/M58
Weight(kg)	3.3
Field of View (mmxmm)	
CHR 70M (31.0x21.7)	87.3x61.1

DTCM71M-120H-M58-AL



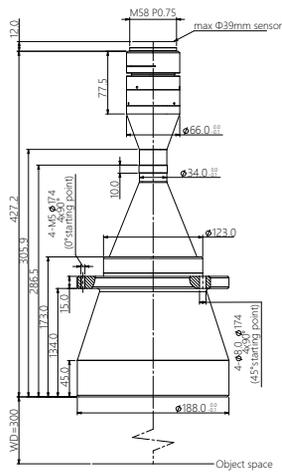
FOV(Φmm)	120
Mag.β(x)	0.325
WD(mm)	273±5
Max Sensor Size(Φmm)	39
F/#	7.6
MTF30(lp/mm)	>115
DOF(mm)	±6.1@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	670±5
Length(mm)	384.5
Mount	M42/M58
Weight(kg)	4.8
Field of View (mmxmm)	
CHR 70M (31.0x21.7)	95.4x66.8

DTCM71M-136-M58-AL



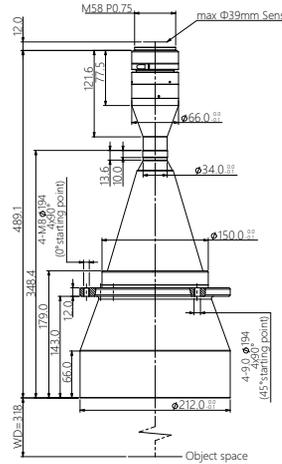
FOV(Φmm)	136
Mag.β(x)	0.287
WD(mm)	288±5
Max Sensor Size(Φmm)	39
F/#	7.1
MTF30(lp/mm)	>120
DOF(mm)	±7.8@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	758±5
Length(mm)	457.8
Mount	M42/M58
Weight(kg)	4.8
Field of View (mmxmm)	
CHR 70M (31.0x21.7)	108.0x75.6

DTCM71M-150-M58-AL



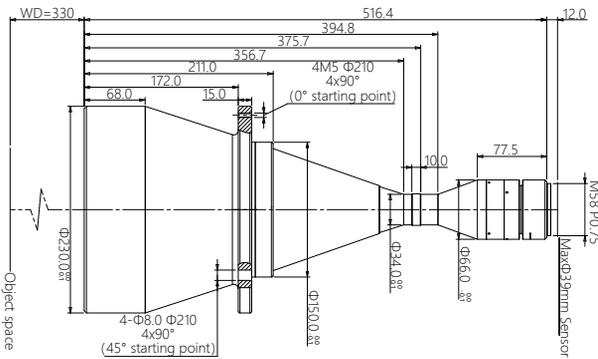
FOV(Φmm)	150
Mag,β(x)	0.260
WD(mm)	300±5
Max Sensor Size(Φmm)	39
F/#	13.1
MTF30(lp/mm)	>70
DOF(mm)	±11.8@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	739±5
Length(mm)	427.2
Mount	M42/M58
Weight(kg)	6.3
Field of View (mmxmm)	
CHR 70M (31.0x21.7)	119.2x83.5

DTCM71M-170-M58-AL



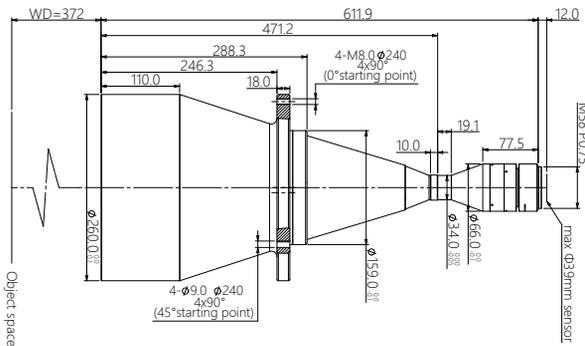
FOV(Φmm)	170
Mag,β(x)	0.229
WD(mm)	318±5
Max Sensor Size(Φmm)	39
F/#	6.5
MTF30(lp/mm)	>125
DOF(mm)	±8.4@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	819±5
Length(mm)	489.1
Mount	M42/M58
Weight(kg)	7.1
Field of View (mmxmm)	
CHR 70M (31.0x21.7)	135.4x94.8

DTCM71M-190H-M58-AL



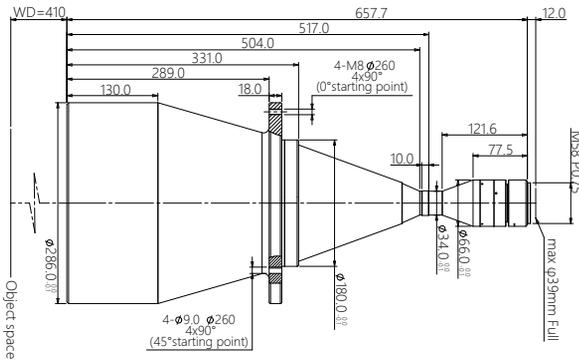
FOV(Φmm)	190
Mag,β(x)	0.205
WD(mm)	330±5
Max Sensor Size(Φmm)	39
F/#	6.5
MTF30(lp/mm)	>135
DOF(mm)	±10.5@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	858±5
Length(mm)	516.4
Mount	M42/M58
Weight(kg)	10.2
Field of View (mmxmm)	
CHR 70M (31.0x21.7)	151.2x105.9

DTCM71M-216-M58-AL



FOV(Φmm)	216
Mag,β(x)	0.181
WD(mm)	372±5
Max Sensor Size(Φmm)	39
F/#	6.5
MTF30(lp/mm)	>135
DOF(mm)	±13.4@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	996±5
Length(mm)	611.9
Mount	M42/M58
Weight(kg)	14.4
Field of View (mmxmm)	
CHR 70M (31.0x21.7)	171.3x119.9

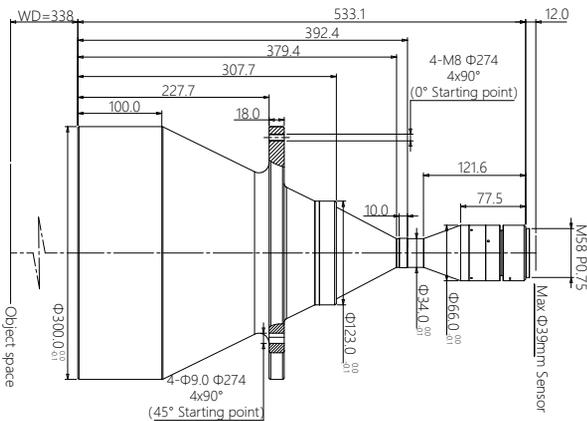
DTCM71M-240H-M58-AL



FOV(Φmm)	240
Mag,β(x)	0.163
WD(mm)	410±6
Max Sensor Size(Φmm)	39
F/#	7.5
MTF30(lp/mm)	>130
DOF(mm)	±24.3@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1080±6
Length(mm)	657.7
Mount	M42/M58
Weight(kg)	19.7

Field of View (mmxmm)	
CHR 70M (31.0x21.7)	190.2x133.1

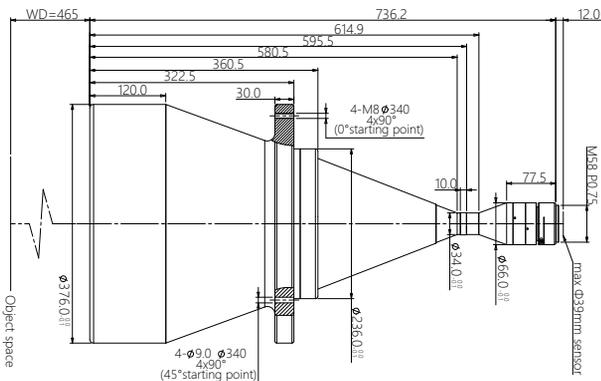
DTCM71M-258-M58-AL



FOV(Φmm)	258
Mag,β(x)	0.151
WD(mm)	338±5
Max Sensor Size(Φmm)	39
F/#	6.5
MTF30(lp/mm)	>130
DOF(mm)	±19.3@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	883±5
Length(mm)	533.1
Mount	M42/M58
Weight(kg)	2.48

Field of View (mmxmm)	
CHR 70M (31.0x21.7)	205.3x143.7

DTCM71M-300-M58-AL



FOV(Φmm)	300
Mag,β(x)	0.130
WD(mm)	465±6
Max Sensor Size(Φmm)	39
F/#	6.5
MTF30(lp/mm)	>130
DOF(mm)	±26@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1213±6
Length(mm)	736.2
Mount	M42/M58
Weight(kg)	47.2

Field of View (mmxmm)	
CHR 70M (31.0x21.7)	238.5x166.9

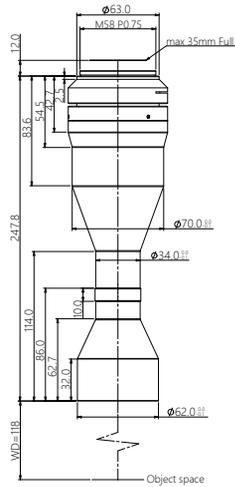
DTCM35FH Series

For 35mm Full Cameras



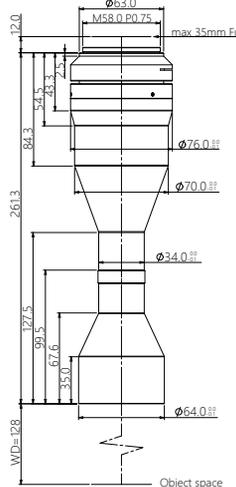
Lens Model	FOV (Φmm)	Mag. β(x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% max)	Telecentricity (° max)	I/O (mm)	Length (mm)	Mount	Weight (kg)
DTCM35FH-42-M58-AL	42	1.038	118±3	43.6(35mm Full)	17.1	>50	±0.7@F20	<0.1	<0.1	378±3	247.8	M58	1.2
DTCM35FH-48-M58-AL	48	0.908	128±3	43.6(35mm Full)	17.1	>50	±1.0@F20	<0.1	<0.1	401±3	261.3	M58	1.2
DTCM35FH-56-M58-AL	56	0.779	138±3	43.6(35mm Full)	14.6	>60	±1.3@F20	<0.1	<0.1	434±3	283.8	M58	1.5
DTCM35FH-64H-M58-AL	64	0.681	158±3	43.6(35mm Full)	12.8	>65	±1.7@F20	<0.1	<0.1	466±3	296.3	M58	1.5
DTCM35FH-72-M58-AL	72	0.606	178±3	43.6(35mm Full)	12.8	>70	±2.2@F20	<0.1	<0.1	506±3	316.3	M58	1.8
DTCM35FH-80H-M58-AL	80	0.545	228±4	43.6(35mm Full)	7.3	>115	±2.2@F16	<0.1	<0.1	546±4	306.3	M58	2.7
DTCM35FH-90-M58-AL	90	0.484	208±3	43.6(35mm Full)	11.4	>75	±3.4@F20	<0.1	<0.1	561±3	341.3	M58	2.4
DTCM35FH-100H-M58-AL	100	0.436	238±4	43.6(35mm Full)	10.3	>91	±4.2@F20	<0.1	<0.1	634±4	384.0	M58	3.8
DTCM35FH-110-M58-AL	110	0.396	263±4	43.6(35mm Full)	9.3	>90	±4.1@F16	<0.1	<0.1	669±6	393.9	M58	3.4
DTCM35FH-120H-M58-AL	120	0.363	273±5	43.6(35mm Full)	8.5	>105	±4.9@F16	<0.1	<0.1	691±5	405.6	M58	5.0
DTCM35FH-136-M58-AL	136	0.321	288±5	43.6(35mm Full)	7.9	>110	±6.2@F16	<0.1	<0.1	779±6	478.9	M58	5.0
DTCM35FH-150-M58-AL	150	0.291	300±5	43.6(35mm Full)	14.6	>63	±9.3@F20	<0.1	<0.1	760±5	448.3	M58	6.4
DTCM35FH-170-M58-AL	170	0.256	318±5	43.6(35mm Full)	6.0	>130	±6.7@F11	<0.1	<0.1	840±5	510.2	M58	7.5
DTCM35FH-190H-M58-AL	190	0.229	330±5	43.6(35mm Full)	6.0	>135	±8.4@F11	<0.1	<0.1	880±5	537.5	M58	10.6
DTCM35FH-216-M58-AL	216	0.202	372±5	43.6(35mm Full)	10.4	>90	±19.6@F20	<0.1	<0.1	1017±5	633.0	M58	14.7
DTCM35FH-240H-M58-AL	240	0.182	410±6	43.6(35mm Full)	6.0	>130	±13.3@F11	<0.1	<0.1	1101±6	678.8	M58	20.0
DTCM35FH-258-M58-AL	258	0.169	338±5	43.6(35mm Full)	6.0	>120	±15.1@F11	<0.1	<0.1	906±5	556.2	M58	25.4
DTCM35FH-300-M58-AL	300	0.145	465±6	43.6(35mm Full)	6.7	>130	±20.9@F11	<0.1	<0.1	1234±6	757.3	M58	47.5

DTCM35FH-42-M58-AL



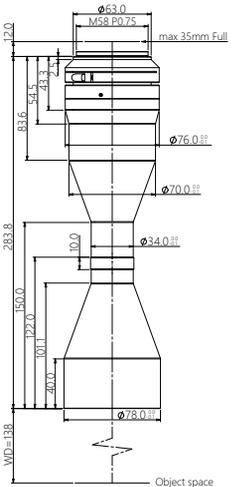
FOV(φmm)	42
Mag.(x)	1.038
WD(mm)	118±3
Max Sensor Size(φmm)	43.6(35mm Full)
F/#	17.1
MTF30(lp/mm)	>50
DOF(mm)	±0.7@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	378±3
Length(mm)	247.8
Mount	M58
Weight(kg)	1.2
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	35.1x26.6
KAI29050/2 (36.17x24.11)	34.8x23.2
KAI43142 (36.18x24.12)	34.9x23.2

DTCM35FH-48-M58-AL



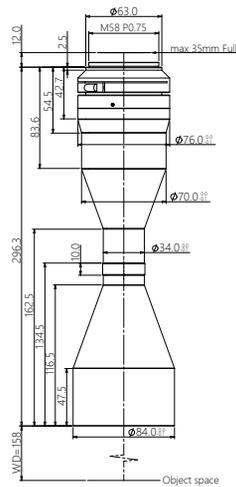
FOV(φmm)	48
Mag.(x)	0.908
WD(mm)	128±3
Max Sensor Size(φmm)	43.6(35mm Full)
F/#	17.1
MTF30(lp/mm)	>50
DOF(mm)	±1.0@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	401±3
Length(mm)	261.3
Mount	M58
Weight(kg)	1.2
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	40.1x30.4
KAI29050/2 (36.17x24.11)	39.8x26.6
KAI43142 (36.18x24.12)	39.8x26.6

DTCM35FH-56-M58-AL



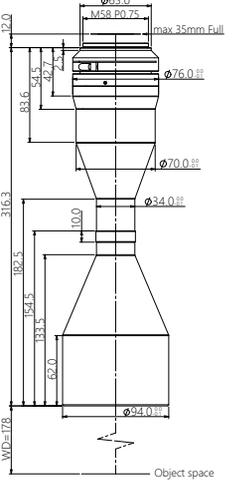
FOV(φmm)	56
Mag.(x)	0.779
WD(mm)	138±3
Max Sensor Size(φmm)	43.6(35mm Full)
F/#	14.6
MTF30(lp/mm)	>60
DOF(mm)	±1.3@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	434±3
Length(mm)	283.8
Mount	M58
Weight(kg)	1.5
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	46.8x35.5
KAI29050/2 (36.17x24.11)	46.4x30.9
KAI43142 (36.18x24.12)	46.4x31.0

DTCM35FH-64H-M58-AL



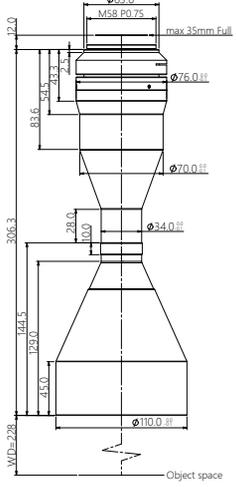
FOV(φmm)	64
Mag.(x)	0.681
WD(mm)	158±3
Max Sensor Size(φmm)	43.6(35mm Full)
F/#	12.8
MTF30(lp/mm)	>65
DOF(mm)	±1.7@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	466±3
Length(mm)	296.3
Mount	M58
Weight(kg)	1.5
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	53.5x40.6
KAI29050/2 (36.17x24.11)	53.1x35.4
KAI43142 (36.18x24.12)	53.1x35.4

DTCM35FH-72-M58-AL



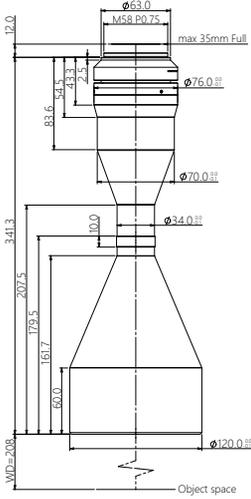
FOV(φmm)	72
Mag.(x)	0.606
WD(mm)	178±3
Max Sensor Size(φmm)	43.6(35mm Full)
F/#	12.8
MTF30(lp/mm)	>70
DOF(mm)	±2.2@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	506±3
Length(mm)	316.3
Mount	M58
Weight(kg)	1.8
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	60.1x45.6
KAI29050/2 (36.17x24.11)	59.7x39.8
KAI43142 (36.18x24.12)	59.7x39.8

DTCM35FH-80H-M58-AL



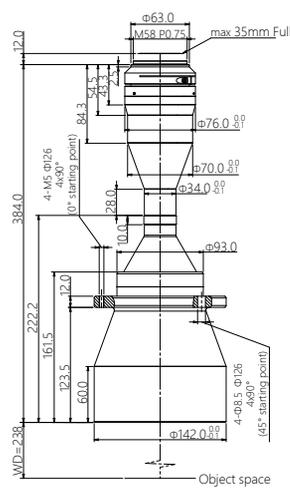
FOV(φmm)	80
Mag.(x)	0.545
WD(mm)	228±4
Max Sensor Size(φmm)	43.6(35mm Full)
F/#	7.3
MTF30(lp/mm)	>115
DOF(mm)	±2.2@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	546±4
Length(mm)	306.3
Mount	M58
Weight(kg)	2.7
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	66.8x50.7
KAI29050/2 (36.17x24.11)	66.4x44.2
KAI43142 (36.18x24.12)	66.4x44.3

DTCM35FH-90-M58-AL



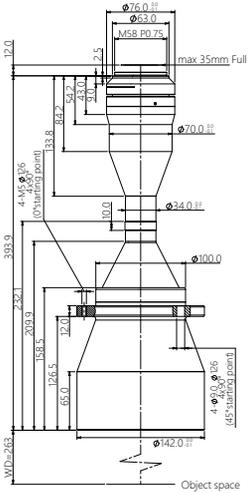
FOV(Φmm)	90
Mag.(x)	0.484
WD(mm)	208±3
Max Sensor Size(Φmm)	43.6(35mm Full)
F/#	11.4
MTF30(lp/mm)	>75
DOF(mm)	±3.4@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	561±3
Length(mm)	341.3
Mount	M58
Weight(kg)	2.4
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	75.3x57.1
KAI29050/2 (36.17x24.11)	74.7x49.8
KAI43142 (36.18x24.12)	74.8x49.8

DTCM35FH-100H-M58-AL



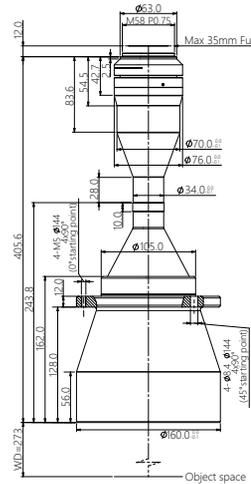
FOV(Φmm)	100
Mag.(x)	0.436
WD(mm)	238±4
Max Sensor Size(Φmm)	43.6(35mm Full)
F/#	10.3
MTF30(lp/mm)	>91
DOF(mm)	±4.2@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	634±4
Length(mm)	384.0
Mount	M58
Weight(kg)	3.8
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	83.6x63.3
KAI29050/2 (36.17x24.11)	83.0x55.3
KAI43142 (36.18x24.12)	83.0x55.3

DTCM35FH-110-M58-AL



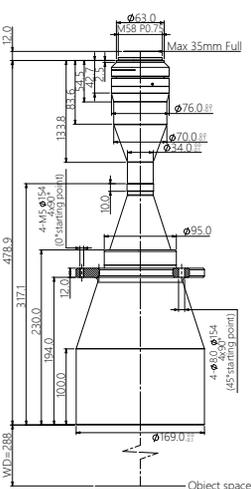
FOV(Φmm)	110
Mag.(x)	0.396
WD(mm)	263±4
Max Sensor Size(Φmm)	43.6(35mm Full)
F/#	9.3
MTF30(lp/mm)	>90
DOF(mm)	±4.1@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	669±4
Length(mm)	393.9
Mount	M58
Weight(kg)	3.4
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	92.0x69.7
KAI29050/2 (36.17x24.11)	91.3x60.9
KAI43142 (36.18x24.12)	91.4x60.9

DTCM35FH-120H-M58-AL



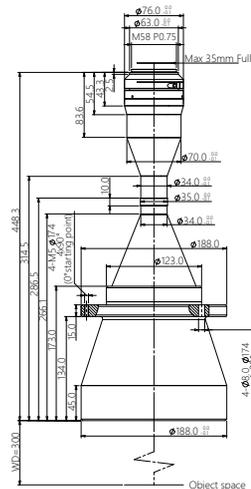
FOV(Φmm)	120
Mag.(x)	0.363
WD(mm)	273±5
Max Sensor Size(Φmm)	43.6(35mm Full)
F/#	8.5
MTF30(lp/mm)	>105
DOF(mm)	±4.9@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	691±5
Length(mm)	405.6
Mount	M58
Weight(kg)	5.0
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	100.4x76.1
KAI29050/2 (36.17x24.11)	99.6x66.4
KAI43142 (36.18x24.12)	99.7x66.4

DTCM35FH-136-M58-AL



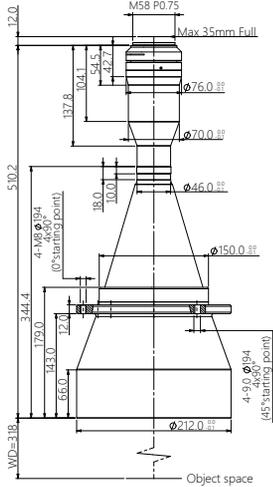
FOV(Φmm)	136
Mag.(x)	0.321
WD(mm)	288±5
Max Sensor Size(Φmm)	43.6(35mm Full)
F/#	7.9
MTF30(lp/mm)	>110
DOF(mm)	±6.2@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	779±6
Length(mm)	478.9
Mount	M58
Weight(kg)	5.0
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	113.5x86.0
KAI29050/2 (36.17x24.11)	112.7x75.1
KAI43142 (36.18x24.12)	112.7x75.1

DTCM35FH-150-M58-AL



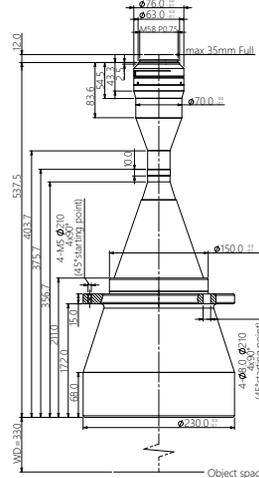
FOV(Φmm)	150
Mag.(x)	0.291
WD(mm)	300±5
Max Sensor Size(Φmm)	43.6(35mm Full)
F/#	14.6
MTF30(lp/mm)	>63
DOF(mm)	±9.3@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	760±5
Length(mm)	448.3
Mount	M58
Weight(kg)	6.4
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	125.2x94.9
KAI29050/2 (36.17x24.11)	124.3x82.9
KAI43142 (36.18x24.12)	124.3x82.9

DTCM35FH-170-M58-AL



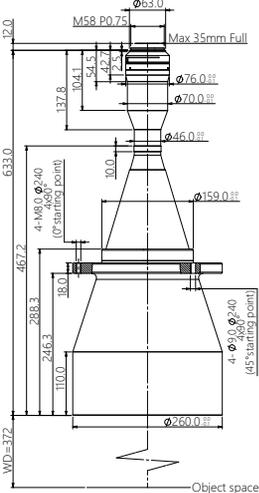
FOV(Φmm)	170
Mag.(x)	0.256
WD(mm)	318±5
Max Sensor Size(Φmm)	43.6(35mm Full)
F/#	6.0
MTF30(lp/mm)	>130
DOF(mm)	±6.7@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	840±5
Length(mm)	510.2
Mount	M58
Weight(kg)	7.5
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	142.3x107.9
KAI29050/2 (36.17x24.11)	141.3x94.2
KAI43142 (36.18x24.12)	141.3x94.2

DTCM35FH-190H-M58-AL



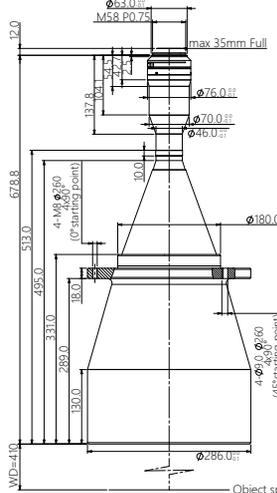
FOV(Φmm)	190
Mag.(x)	0.229
WD(mm)	330±5
Max Sensor Size(Φmm)	43.6(35mm Full)
F/#	6.0
MTF30(lp/mm)	>135
DOF(mm)	±8.4@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	880±5
Length(mm)	537.5
Mount	M58
Weight(kg)	10.6
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	159.1x120.6
KAI29050/2 (36.17x24.11)	157.9x105.3
KAI43142 (36.18x24.12)	158.0x105.3

DTCM35FH-216-M58-AL



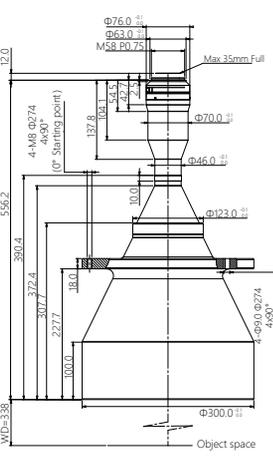
FOV(Φmm)	216
Mag.(x)	0.202
WD(mm)	372±5
Max Sensor Size(Φmm)	43.6(35mm Full)
F/#	10.4
MTF30(lp/mm)	>90
DOF(mm)	±19.6@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1017±5
Length(mm)	633.0
Mount	M58
Weight(kg)	14.7
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	180.3x136.7
KAI29050/2 (36.17x24.11)	179.1x119.4
KAI43142 (36.18x24.12)	179.1x119.4

DTCM35FH-240H-M58-AL



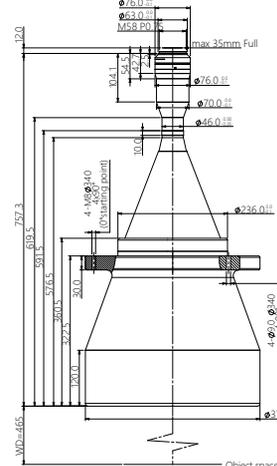
FOV(Φmm)	240
Mag.(x)	0.182
WD(mm)	410±6
Max Sensor Size(Φmm)	43.6(35mm Full)
F/#	6.0
MTF30(lp/mm)	>130
DOF(mm)	±13.3@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1101±6
Length(mm)	678.8
Mount	M58
Weight(kg)	20.0
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	200.2x151.8
KAI29050/2 (36.17x24.11)	198.7x132.5
KAI43142 (36.18x24.12)	198.8x132.5

DTCM35FH-258-M58-AL



FOV(Φmm)	258
Mag.(x)	0.169
WD(mm)	338±5
Max Sensor Size(Φmm)	43.6(35mm Full)
F/#	6.0
MTF30(lp/mm)	>120
DOF(mm)	±15.1@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	906±5
Length(mm)	556.2
Mount	M58
Weight(kg)	25.4
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	215.6x163.4
KAI29050/2 (36.17x24.11)	214.0x142.7
KAI43142 (36.18x24.12)	214.1x142.7

DTCM35FH-300-M58-AL



FOV(Φmm)	300
Mag.(x)	0.145
WD(mm)	465±6
Max Sensor Size(Φmm)	43.6(35mm Full)
F/#	6.7
MTF30(lp/mm)	>130
DOF(mm)	±20.9@F11
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1234±6
Length(mm)	757.3
Mount	M58
Weight(kg)	47.5
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	251.2x190.5
KAI29050/2 (36.17x24.11)	249.4x166.3
KAI43142 (36.18x24.12)	249.5x166.3

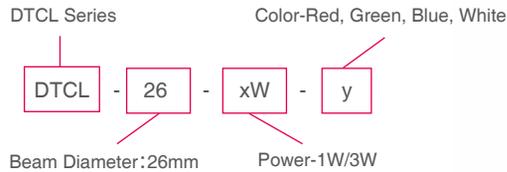
Telecentric LED Lighting

Model: DTCL Series

Features

- Specially developed for backlights which is for the objects in spected by telecentric lens.
- More accurate imaging compared with diffusing light resource by decreasing diffuse reflection on edge.
- Develop Telecentricity and DoF for the telecentric lens.
- Equipped with multiple wavelengths. 1W/3W power available. Built-in device for brightness adjustment.

Name Rule



Model	Beam Diameter (mm)	Color				Optical Spec. (mm)	Mechanical Spec. (mm)		Compatible Telecentric Lens
		Red 630nm	Green 520nm	Blue 460nm	white	WD (mm)	Length (mm)	Diameter (mm)(mm)	
DTCL-26-xW-y	26	√	√	√	√	23-46	124.8	44	DTCMxxx-26
DTCL-36-xW-y	36	√	√	√	√	36-72	144.9	54	DTCMxxx-36
DTCL-42-xW-y	42	√	√	√	√	40-80	130.4	62	DTCMxxx-42
DTCL-48-xW-y	48	√	√	√	√	43-86	143.9	64	DTCMxxx-48
DTCL-56-xW-y	56	√	√	√	√	46-92	166.4	78	DTCMxxx-56
DTCL-64H-xW-y	64	√	√	√	√	63-126	178.9	84	DTCMxxx-64H
DTCL-72-xW-y	72	√	√	√	√	59-119	198.9	94	DTCMxxx-72
DTCL-80H-xW-y	80	√	√	√	√	76-152	188.8	110	DTCMxxx-80H
DTCL-90-xW-y	90	√	√	√	√	69-139	223.9	120	DTCMxxx-90
DTCL-100H-xW-y	100	√	√	√	√	86-172	266.6	142	DTCMxxx-100H
DTCL-110-xW-y	110	√	√	√	√	90-180	276.5	142	DTCMxxx-110
DTCL-120H-xW-y	120	√	√	√	√	93-186	288.2	160	DTCMxxx-120H
DTCL-136-xW-y	136	√	√	√	√	95-190	361.5	169	DTCMxxx-136
DTCL-150-xW-y	150	√	√	√	√	100-200	332.1	188	DTCMxxx-150
DTCL-170-xW-y	170	√	√	√	√	110-210	392.8	212	DTCMxxx-170
DTCL-190H-xW-y	190	√	√	√	√	110-220	420.1	230	DTCMxxx-190H
DTCL-216-xW-y	216	√	√	√	√	120-250	515.6	260	DTCMxxx-216
DTCL-240H-xW-y	240	√	√	√	√	135-270	561.4	286	DTCMxxx-240H
DTCL-258-xW-y	258	√	√	√	√	145-290	436.8	300	DTCMxxx-258
DTCL-300-xW-y	300	√	√	√	√	155-310	639.9	376	DTCMxxx-300

DTCM16K Series

For 59mm Cameras



DTCM430H Series

DTCM175 Series

DTCM210 Series

DTCM71M Series

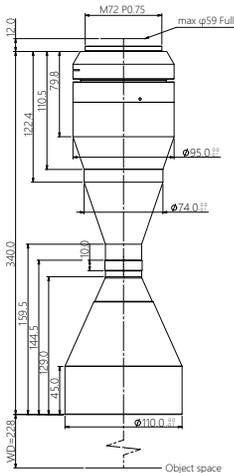
DTCM35FH Series

DTCM16K Series

DTCM150M Series

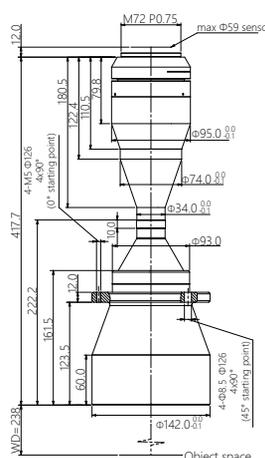
Lens Model	FOV (Φmm)	Mag. β(x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% max)	Telecentricity (° max)	I/O (mm)	Length (mm)	Mount	Weight (kg)
DTCM16K-80H-AL	80	0.738	228±4	59	9.9	>85	±1.6@F22	<0.1	<0.1	580±4	340.0	M72	3.4
DTCM16K-100H-AL	100	0.590	238±4	59	13.9	>67	±2.3@F20	<0.1	<0.1	668±4	417.7	M72	3.1
DTCM16K-110-AL	110	0.536	263±4	59	12.6	>60	±2.8@F20	<0.1	<0.1	703±4	427.6	M72	4.1
DTCM16K-136-AL	136	0.434	288±5	59	10.7	>80	±4.2@F20	<0.1	<0.1	813±5	512.6	M72	5.7
DTCM16K-150-AL	150	0.393	300±5	59	19.8	>45	±5.1@F20	<0.1	<0.1	794±5	482.0	M72	7.1
DTCM16K-170-AL	170	0.347	318±5	59	8.7	>90	±5.3@F16	<0.1	<0.1	874±5	543.9	M72	8.0
DTCM16K-190H-AL	190	0.311	330±5	59	8.7	>100	±6.6@F16	<0.1	<0.1	913±5	571.2	M72	11.1
DTCM16K-216-AL	216	0.273	372±5	59	8.7	>95	±8.6@F16	<0.1	<0.1	1051±5	666.7	M72	15.2
DTCM16K-240H-AL	240	0.246	410±6	59	8.7	>100	±14.6@F22	<0.1	<0.1	1135±6	712.5	M72	20.5
DTCM16K-258-AL	258	0.229	338±5	59	8.7	>100	±12.2@F16	<0.1	<0.1	940±5	589.8	M72	25.8
DTCM16K-300-AL	300	0.197	465±6	59	9.0	>95	±20.6@F20	<0.1	<0.1	1268±6	791.0	M72	48.0

DTCM16K-80H-AL



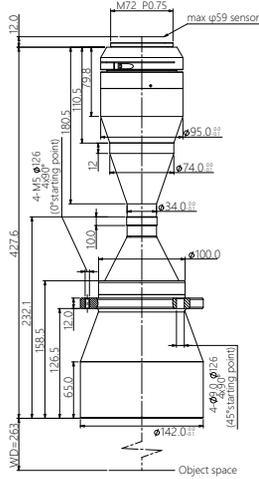
FOV(Φmm)	80
Mag. (x)	0.738
WD(mm)	228±4
Max Sensor Size(Φmm)	59
F/#	9.9
MTF30(lp/mm)	>85
DOF(mm)	±1.6@F22
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	580±4
Length(mm)	340.0
Mount	M72
Weight(kg)	3.4
Field of View (mmxmm)	
KAI-47051 (48.7x29.0)	66.0x39.3
Linescan-16K (57.4mm)	77.8
Linescan-8K (57.4mm)	77.8

DTCM16K-100H-AL



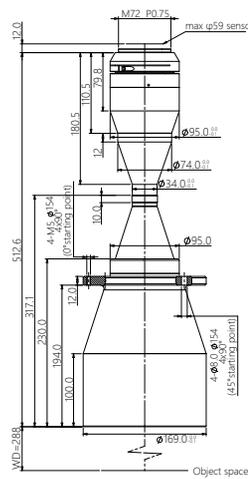
FOV(Φmm)	100
Mag. (x)	0.590
WD(mm)	238±4
Max Sensor Size(Φmm)	59
F/#	13.9
MTF30(lp/mm)	>67
DOF(mm)	±2.3@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	668±4
Length(mm)	417.7
Mount	M72
Weight(kg)	3.1
Field of View (mmxmm)	
KAI-47051 (48.7x29.0)	82.5x49.2
Linescan-16K (57.4mm)	97.3
Linescan-8K (57.4mm)	97.3

DTCM16K-110-AL



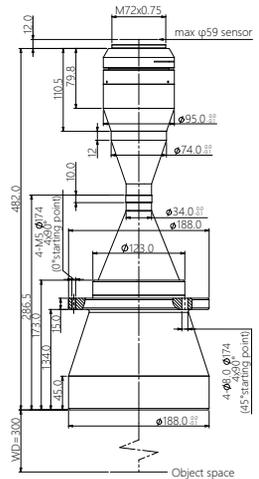
FOV(Φmm)	110
Mag.(x)	0.536
WD(mm)	263±4
Max Sensor Size(Φmm)	59
F/#	12.6
MTF30(lp/mm)	>60
DOF(mm)	±2.8@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	703±4
Length(mm)	427.6
Mount	M72
Weight(kg)	4.1
Field of View (mmxmm)	
KAI-47051 (48.7x29.0)	90.9x54.1
Linescan-16K (57.4mm)	107.1
Linescan-8K (57.4mm)	107.1

DTCM16K-136-AL



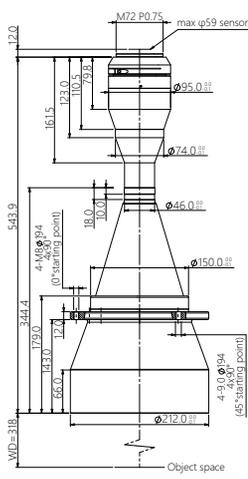
FOV(Φmm)	136
Mag.(x)	0.434
WD(mm)	288±5
Max Sensor Size(Φmm)	59
F/#	10.7
MTF30(lp/mm)	>80
DOF(mm)	±4.2@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	813±5
Length(mm)	512.6
Mount	M72
Weight(kg)	5.7
Field of View (mmxmm)	
KAI-47051 (48.7x29.0)	112.2x66.8
Linescan-16K (57.4mm)	132.3
Linescan-8K (57.4mm)	132.3

DTCM16K-150-AL



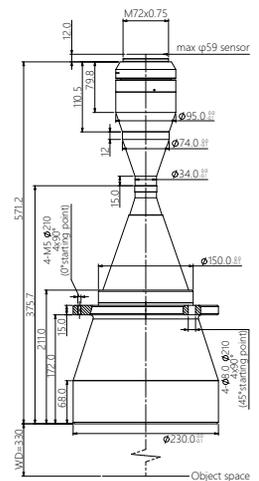
FOV(Φmm)	150
Mag.(x)	0.393
WD(mm)	300±5
Max Sensor Size(Φmm)	59
F/#	19.8
MTF30(lp/mm)	>45
DOF(mm)	±5.1@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	794±5
Length(mm)	482.0
Mount	M72
Weight(kg)	7.1
Field of View (mmxmm)	
KAI-47051 (48.7x29.0)	123.9x73.8
Linescan-16K (57.4mm)	146.1
Linescan-8K (57.4mm)	146.1

DTCM16K-170-AL



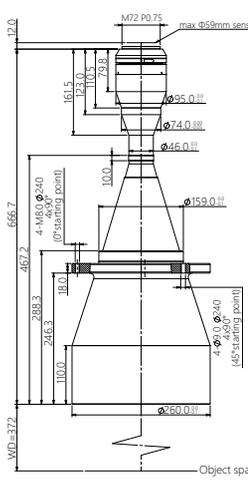
FOV(Φmm)	170
Mag.(x)	0.347
WD(mm)	318±5
Max Sensor Size(Φmm)	59
F/#	8.7
MTF30(lp/mm)	>90
DOF(mm)	±5.3@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	874±5
Length(mm)	543.9
Mount	M72
Weight(kg)	8.0
Field of View (mmxmm)	
KAI-47051 (48.7x29.0)	140.3x83.6
Linescan-16K (57.4mm)	165.4
Linescan-8K (57.4mm)	165.4

DTCM16K-190H-AL



FOV(Φmm)	190
Mag.(x)	0.311
WD(mm)	330±5
Max Sensor Size(Φmm)	59
F/#	8.7
MTF30(lp/mm)	>100
DOF(mm)	±6.6@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	913±5
Length(mm)	571.2
Mount	M72
Weight(kg)	11.1
Field of View (mmxmm)	
KAI-47051 (48.7x29.0)	156.6x93.2
Linescan-16K (57.4mm)	184.6
Linescan-8K (57.4mm)	184.6

DTCM16K-216-AL



FOV(Φmm)	216
Mag.(x)	0.273
WD(mm)	372±5
Max Sensor Size(Φmm)	59
F/#	8.7
MTF30(lp/mm)	>95
DOF(mm)	±8.6@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1051±5
Length(mm)	666.7
Mount	M72
Weight(kg)	15.2
Field of View (mmxmm)	
KAI-47051 (48.7x29.0)	178.4x106.2
Linescan-16K (57.4mm)	210.3
Linescan-8K (57.4mm)	210.3

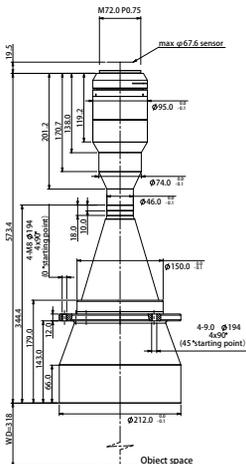
DTCM150M Series

For 67.6mm Cameras



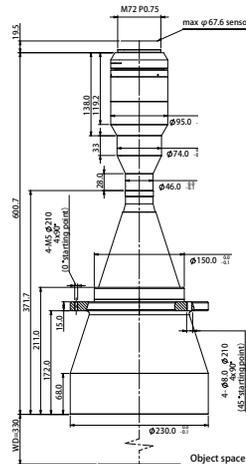
Lens Model	FOV (Φmm)	Mag. β(x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% max)	Telecentricity (° max)	I/O (mm)	Length (mm)	Mount	Weight (kg)
DTCM150M-170-M72-19.5-AL	170	0.398	318±5	67.6	9.4	>88	±2.4@F9.4	<0.1	<0.1	911±5	573.4	M72	8.0
DTCM150M-190H-M72-19.5-AL	190	0.356	330±5	67.6	9.4	>95	±3.0@F9.4	<0.1	<0.1	950±5	600.7	M72	11.1
DTCM150M-216-M72-19.5-AL	216	0.313	372±5	67.6	7.9	>100	±3.2@F16	<0.1	<0.1	1088±5	696.1	M72	15.2
DTCM150M-240H-M72-19.5-AL	240	0.282	410±6	67.6	9.4	>88	±8.0@F16	<0.1	<0.1	1172±6	742	M72	20.5
DTCM150M-258-M72-19.5-AL	258	0.262	338±5	67.6	8.8	>95	±5.1@F8.8	<0.1	<0.1	977±5	619.4	M72	25.8
DTCM150M-300-M72-19.5-AL	300	0.225	465±6	67.6	6.6	>98	±5.2@F6.6	<0.1	<0.1	1305±6	820.5	M72	48.0

DTCM150M-170-M72-19.5-AL



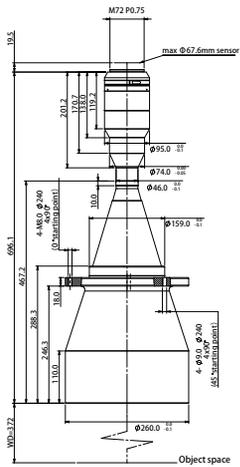
FOV(Φmm)	170
Mag.(x)	0.398
WD(mm)	318±5
Max Sensor Size(Φmm)	67.6
F/#	9.4
MTF30(lp/mm)	>88
DOF(mm)	±2.4@F9.4
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	911±5
Length(mm)	573.4±5
Mount	M72
Weight(kg)	8.0
Field of View (mmxmm)	IMX411(53.42x40mm)
	134.2x100.5

DTCM150M-190H-M72-19.5-AL



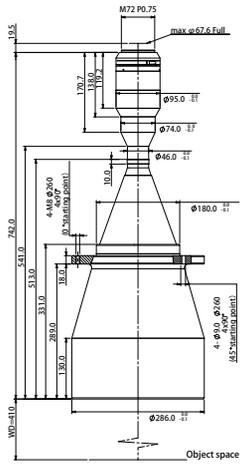
FOV(Φmm)	190
Mag.(x)	0.356
WD(mm)	330±5
Max Sensor Size(Φmm)	67.6
F/#	9.4
MTF30(lp/mm)	>95
DOF(mm)	±3.0@F9.4
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	950±5
Length(mm)	600.7
Mount	M72
Weight(kg)	11.1
Field of View (mmxmm)	IMX411(53.42x40mm)
	150.1x112.4

DTCM150M-216-M72-19.5-AL



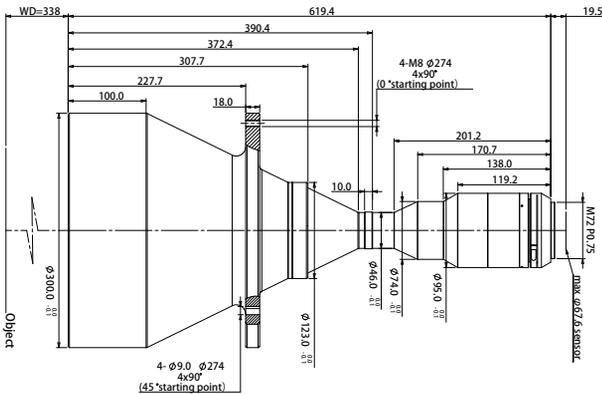
FOV(Φmm)	216
Mag.(x)	0.313
WD(mm)	372±5
Max Sensor Size(Φmm)	67.6
F/#	7.9
MTF30(lp/mm)	>100
DOF(mm)	±3.2@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1088±5
Length(mm)	696.1
Mount	M72
Weight(kg)	15.2
Field of View (mmxmm)	
IMX411(53.42x40mm)	170.6x127.8

DTCM150M-240H-M72-19.5-AL



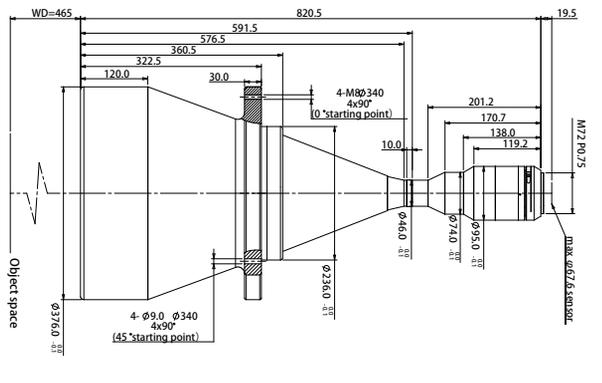
FOV(Φmm)	240
Mag.(x)	0.282
WD(mm)	410±6
Max Sensor Size(Φmm)	67.6
F/#	9.4
MTF30(lp/mm)	>88
DOF(mm)	±8.0@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1172±6
Length(mm)	742
Mount	M72
Weight(kg)	20.5
Field of View (mmxmm)	
IMX411(53.42x40mm)	189.4x141.8

DTCM150M-258-M72-19.5-AL



FOV(Φmm)	258
Mag.(x)	0.262
WD(mm)	338±5
Max Sensor Size(Φmm)	67.6
F/#	8.8
MTF30(lp/mm)	>95
DOF(mm)	±5.1@F8.8
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	977±5
Length(mm)	619.4
Mount	M72
Weight(kg)	25.8
Field of View (mmxmm)	
IMX411(53.42x40mm)	203.9x152.7

DTCM150M-300-M72-19.5-AL



FOV(Φmm)	300
Mag.(x)	0.225
WD(mm)	465±6
Max Sensor Size(Φmm)	67.6
F/#	6.6
MTF30(lp/mm)	>98
DOF(mm)	±5.2@F6.6
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
I/O(mm)	1305±6
Length(mm)	820.5
Mount	M72
Weight(kg)	48.0
Field of View (mmxmm)	
IMX411(53.42x40mm)	237.4x177.8

DTCA Series

Ultra Resolution Bi-Telecentric Lenses



Naming Rule

Ultra-high performance
industrial lens
series products

The Diagonal
Of FOV 11mm

Adjustable
Iris

Back Focal Length is
Adjustable

DTCA 35F - 11 C - G - M58 - AL

Up to 35mm Full Sensor

Built-in Coaxial
Lighting

Mount



Features

- The DTCA series is specially designed for high-resolution especially large-target imaging systems
- Support the latest 24k line scan and 150 MegaPixels area scan cameras in the industry
- Large NA value, extraordinary aberration correction
- Optionally equipped with adjustable aperture and built-in coaxial lighting
- Large aperture, high telecentricity, ultra-low distortion, and large depth of field

DTCA Series

Adjustable Iris,

with Coaxial Light



Lens Model	FOV (Φmm)	Mag. β(x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% Max)	Telecentricity (° Max)	NA	Length (mm)	Mount	Iris	Coaxial Light
DTCA230-22L	22	0.5	65±1	11.0(2/3")	5.0	>160	±0.8@F5.0	<0.1	<0.1	0.05	106.7	C	NO	NO
DTCA230-22C	22	0.5	65±1	11.0(2/3")	5.0	>160	±0.8@F5.0	<0.1	<0.1	0.05	106.7	C	NO	YES
DTCA230-27.5	27.5	0.4	85±2	11.0(2/3")	4.5	>205	±1.1@F4.5	<0.03	<0.1	0.044	142.4	C	NO	NO
DTCA230-27.5C	27.5	0.4	85±2	11.0(2/3")	4.5	>205	±1.1@F4.5	<0.03	<0.1	0.044	142.4	C	NO	YES
DTCA230-37	37	0.3	110±2	11.0(2/3")	3.75	>220	±1.7@F3.75	<0.1	<0.1	0.04	145.5	C	YES	NO
DTCA230-37C	37	0.3	110±2	11.0(2/3")	3.75	>220	±1.7@F3.75	<0.1	<0.1	0.04	145.5	C	YES	YES
DTCA230-66	66	0.166	173±3	11.0(2/3")	3.3	>260	±4.8@F3.3	<0.1	<0.1	0.025	146.5	C	YES	NO
DTCA110-215-AL	215	0.075	220±3	16.0(1")	4.35	>195	±30.9@F4.35	<0.05	<0.1	0.008	322.2	C	NO	NO
DTCA121-5	5	4.0	45±1	20(1.2")	11.7	>73	±0.03@F11.7	<0.08	<0.1	0.17	180.5	C	NO	NO
DTCA121-5-G	5	4.0	45±1	20(1.2")	11.7-32	72-31	±0.03@F11.7	<0.08	<0.1	0.17-0.0623	180.5	C	YES	NO
DTCA121-5CL	5	4.0	45±1	20(1.2")	11.7	>73	±0.03@F11.7	<0.08	<0.1	0.17	180.5	C	NO	YES
DTCA121-6.6	6.6	3.025	61±1	20(1.2")	9.4	>96	±0.05@F6.6	0.06	0.005	0.16	206.2	C	NO	NO
DTCA121-6.6CL	6.6	3.025	61±1	20(1.2")	9.4	>96	±0.05@F6.6	0.06	0.005	0.16	206.2	C	NO	YES
DTCA121-7.3	7.3	2.74	63±1	20(1.2")	8.5	>105	±0.05@F7.3	0.02	0.03	0.16	188.3	C	NO	NO
DTCA121-7.3CL	7.3	2.74	63±1	20(1.2")	8.5	>105	±0.05@F7.3	0.02	0.03	0.16	188.3	C	NO	YES
DTCA121-10	10	2.0	63±1	20(1.2")	6.6	>142	±0.07@F6.6	<0.2	<0.1	0.15	179	C	NO	NO
DTCA121-10CL	10	2.0	63±1	20(1.2")	6.6	>142	±0.07@F6.6	<0.2	<0.1	0.15	179	C	NO	YES

DTCA230 Series

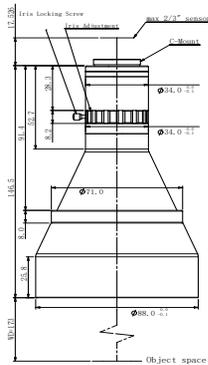
DTCA110 Series

DTCA121 Series

DTCA175 Series

DTCA185 Series

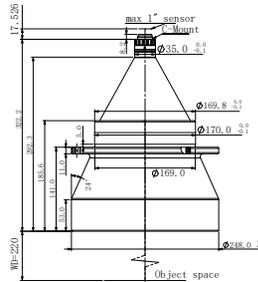
DTCA230-66



FOV(Φmm)	66
Mag.(x)	0.166
WD(mm)	173±3
Max Sensor Size(Φmm)	11.0(2/3")
F/#	3.3
MTF30(lp/mm)	>260
DOF(mm)	±4.8@F3.3
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
NA	0.025
Length(mm)	146.5
Mount	C
Iris	YES
Coaxial Light	NO

Field of View (mmxmm)	
1/1.8" EV76C570 (7.2x5.4)	43.4x32.5
1/1.7" IMX226 (7.5x5.6)	45.2x33.7
2/3" IMX250/264 (8.45x7.1)	50.9x42.8

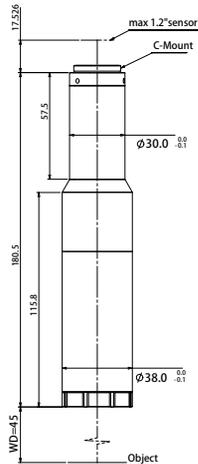
DTCA110-215-AL



FOV(Φmm)	215
Mag.(x)	0.075
WD(mm)	220±3
Max Sensor Size(Φmm)	16.0(1")
F/#	4.35
MTF30(lp/mm)	>195
DOF(mm)	±30.9@F4.35
Distortion(% max)	<0.05
Telecentricity(° max)	<0.1
NA	0.00857
Length(mm)	322.2
Mount	C
Iris	NO
Coaxial Light	NO

Field of View (mmxmm)	
1" PYTHON 5000 (12.43x9.83)	165.7x131.1
1" IMX255 (14.19x7.51)	189.2x100.1
1" IMX183 (13.13x8.76)	175.1x116.8

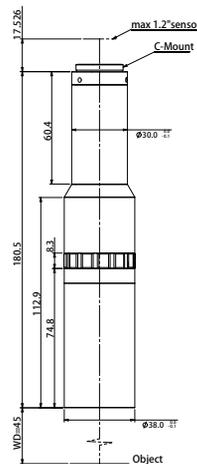
DTCA121-5



FOV(Φmm)	5
Mag.(x)	4.000
WD(mm)	45±1
Max Sensor Size(Φmm)	20(1.2")
F/#	11.7
MTF30(lp/mm)	>73
DOF(mm)	±0.03@F11.7
Distortion(% max)	<0.08
Telecentricity(° max)	<0.1
NA	0.17
Length(mm)	180.5
Mount	C
Iris	NO
Coaxial Light	NO

Field of View (mmxmm)	
1.2" IMX530/540 (14.6X12.6)	3.65x3.15

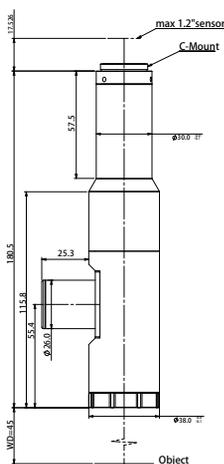
DTCA121-5-G



FOV(Φmm)	5
Mag.(x)	4.000
WD(mm)	45±1
Max Sensor Size(Φmm)	20(1.2")
F/#	11.7-Close
MTF30(lp/mm)	>73
DOF(mm)	±0.03@F11.7
Distortion(% max)	<0.08
Telecentricity(° max)	<0.1
NA	0.17-0.06237
Length(mm)	180.5
Mount	C
Iris	YES
Coaxial Light	NO

Field of View (mmxmm)	
1.2" IMX530/540 (14.6X12.6)	3.65x3.15

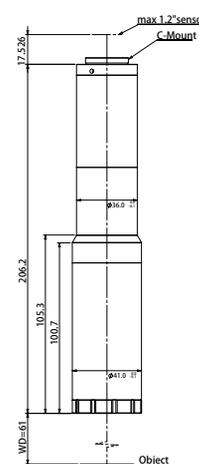
DTCA121-5CL



FOV(Φmm)	5
Mag.(x)	4.000
WD(mm)	45±1
Max Sensor Size(Φmm)	20(1.2")
F/#	11.7
MTF30(lp/mm)	>73
DOF(mm)	±0.03@F11.7
Distortion(% max)	<0.08
Telecentricity(° max)	<0.1
NA	0.17
Length(mm)	180.5
Mount	C
Iris	NO
Coaxial Light	YES

Field of View (mmxmm)	
1.2" IMX530/540 (14.6X12.6)	3.65x3.15

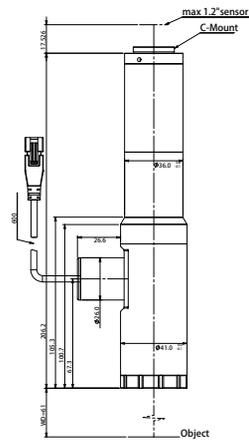
DTCA121-6.6



FOV(Φmm)	6.6
Mag.(x)	3.025
WD(mm)	61±1
Max Sensor Size(Φmm)	20(1.2")
F/#	9.4
MTF30(lp/mm)	>96
DOF(mm)	±0.05@F6.6
Distortion(% max)	0.06
Telecentricity(° max)	0.005
NA	0.16
Length(mm)	206.2
Mount	C
Iris	NO
Coaxial Light	NO

Field of View (mmxmm)	
1.2" IMX530/540 (14.6x12.6)	4.8x4.2

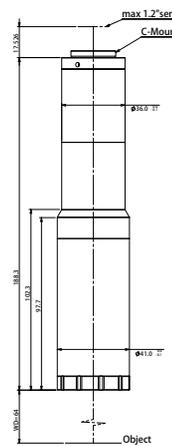
DTCA121-6.6CL



FOV(Φmm)	6.6
Mag.(x)	3.025
WD(mm)	61±1
Max Sensor Size(Φmm)	20(1.2")
F/#	9.4
MTF30(lp/mm)	>96
DOF(mm)	±0.05@F6.6
Distortion(% max)	0.06
Telecentricity(° max)	0.005
NA	0.16
Length(mm)	206.2
Mount	C
Iris	NO
Coaxial Light	YES

Field of View (mmxmm)	
1.2" IMX530/540 (14.6x12.6)	4.8x4.2

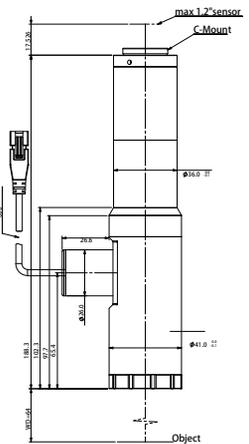
DTCA121-7.3



FOV(Φmm)	7.3
Mag.(x)	2.74
WD(mm)	64±1
Max Sensor Size(Φmm)	20(1.2")
F/#	8.5
MTF30(lp/mm)	>105
DOF(mm)	±0.05@F7.3
Distortion(% max)	0.02
Telecentricity(° max)	0.03
NA	0.16
Length(mm)	188.3
Mount	C
Iris	NO
Coaxial Light	NO

Field of View (mmxmm)	
1.2" IMX530/540 (14.6x12.6)	5.3x4.6

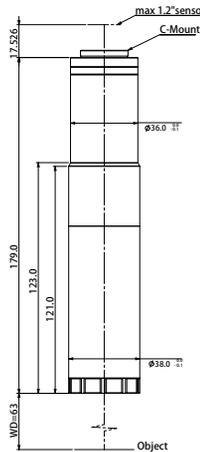
DTCA121-7.3CL



FOV(Φmm)	7.3
Mag.(x)	2.74
WD(mm)	64±1
Max Sensor Size(Φmm)	20(1.2")
F/#	8.5
MTF30(lp/mm)	>105
DOF(mm)	±0.05@F7.3
Distortion(% max)	0.02
Telecentricity(° max)	0.03
NA	0.16
Length(mm)	188.3
Mount	C
Iris	NO
Coaxial Light	YES

Field of View (mmxmm)	
1.2" IMX530/540 (14.6X12.6)	5.3x4.6

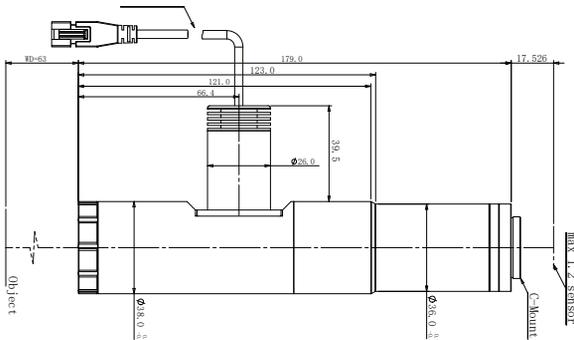
DTCA121-10



FOV(Φmm)	10
Mag.(x)	2.000
WD(mm)	63±1
Max Sensor Size(Φmm)	20(1.2")
F/#	6.6
MTF30(lp/mm)	>142
DOF(mm)	±0.07@F6.6
Distortion(% max)	<0.2
Telecentricity(° max)	<0.1
NA	0.15
Length(mm)	179.0
Mount	C
Iris	NO
Coaxial Light	NO

Field of View (mmxmm)	
1.2" IMX530/540 (14.6X12.6)	7.3x6.3

DTCA121-10CL



FOV(Φmm)	10
Mag.(x)	2.000
WD(mm)	63±1
Max Sensor Size(Φmm)	20(1.2")
F/#	6.6
MTF30(lp/mm)	>142
DOF(mm)	±0.07@F6.6
Distortion(% max)	<0.2
Telecentricity(° max)	<0.1
NA	0.15
Length(mm)	179.0
Mount	C
Iris	NO
Coaxial Light	YES

Field of View (mmxmm)	
1.2" IMX530/540 (14.6X12.6)	7.3x6.3

DTCA Series

High Resolution, With Coaxial Light,

For 3D AOI Applications



Lens Model	FOV (Φmm)	Mag. β(x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% Max)	Telecentricity (° Max)	NA	Length (mm)	Mount	Iris	Coaxial Light
DTCA121-80-G-AL	80	0.25	240±3	20(1.2")	6.0	>150	±3.84@F6	0.05	0.1	0.020	190.7	C	YES	NO
DTCA121-80C-G-AL	80	0.25	240±3	20(1.2")	6.0	>150	±3.84@F6	0.05	0.1	0.020	190.7	C	YES	YES
DTCA175-28.2-128-M58-AL	28.2	1.0	128±2	28.2(1.75")	11	>76	±0.45@F8	0.01	0.09	0.045	315.5	M58	NO	NO
DTCA175-28.2C-128-M58-AL	28.2	1.0	128±2	28.2(1.75")	11	>76	±0.45@F8	0.01	0.09	0.045	317.9	M58	NO	YES
DTCA175-51-G-M58-AL	51	0.55	220±3	28.2(1.75")	8.0	>106	±1.05@F8	0.05	0.09	0.034	192.7	M58	YES	NO
DTCA175-51C-G-M58-AL	51	0.55	220±3	28.2(1.75")	8.0	>106	±1.05@F8	0.05	0.09	0.034	197.9	M58	YES	YES
DTCA175-61.4-G-M42-AL	61.4	0.46	250±3	28.2(1.75")	8.0	>120	±1.5@F8	0.03	0.21	0.028	184.9	M42	YES	NO
DTCA175-61.4C-G-M42-AL	61.4	0.46	250±3	28.2(1.75")	8.0	>120	±1.5@F8	0.03	0.21	0.028	190.1	M42	YES	YES
DTCA175-15.7-M42-AL	15.7	1.846	71±1	29(1.75")	20.0	>45	±2.5@F20	<0.1	<0.1	0.0461	311.9	M42	NO	NO
DTCA185-81-G-M58-AL	81.1	0.37	250±3	30(1.85")	8.0	>114	±2.35@F8	0.08	0.05	0.023	200	M58	YES	NO
DTCA185-81C-G-M58-AL	81.1	0.37	250±3	30(1.85")	8.0	>114	±2.35@F8	0.08	0.05	0.023	200	M58	YES	YES
DTCA210-11.8-M58	11.8	2.8	90±1	33(2")	11	>90	±0.05@F11	<0.02	<0.05	0.142	300.9	M58	NO	NO

DTCA230 Series

DTCA110 Series

DTCA121 Series

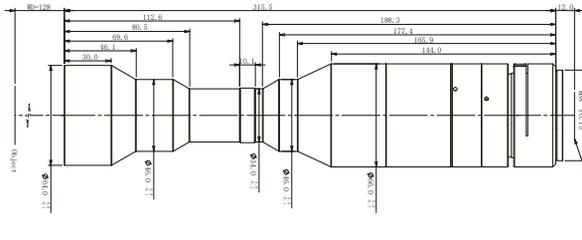
DTCA175 Series

DTCA185 Series

Lens Model	FOV (Φ mm)	Mag. $\beta(x)$	WD (mm)	Sensor Size (Φ mm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% Max)	Telecentricity ($^{\circ}$ Max)	NA	Length (mm)	Mount	Iris	Coaxial Light
DTCA210-11.8C-M58	11.8	2.8	90 \pm 1	33(2")	11	>90	\pm 0.05@F11	<0.02	<0.05	0.142	300.9	M58	NO	YES
DTCA210-44.8-M58-AL	44.8	0.7	90 \pm 1	33(2")	7.8	>90	\pm 0.05@F7.8	0.1	NA	0.046	194.2	M58	NO	NO
DTCA210-215-M42-AL	215	0.1536	220 \pm 3	33(2")	10.0	>90	\pm 13.6@F8	<0.1	<0.1	0.009	369	M42	NO	NO
DTCA35F-44-G-M58-AL	44	1.0	102	35F(44mm)	6.1-32	150-33	0.49-2.56	0.04	0.04	0.083-0.015	297.3	M58	YES	NO
DTCA35F-44C-G-M58-AL	44	1.0	102	35F(44mm)	6.1-32	150-33	0.49-2.56	0.04	0.04	0.083-0.015	297.3	M58	YES	YES
DTCA35F-22-G-M58-AL	22	2.0	102	35F(44mm)	8-32	118-32	0.16-0.64	0.045	0.008	0.125-0.031	282.5	M58	YES	NO
DTCA35F-22C-G-M58-AL	22	2.0	102	35F(44mm)	8-32	118-32	0.16-0.64	0.045	0.008	0.125-0.031	282.5	M58	YES	YES
DTCA35F-14.6-G-M58-AL	14.6	3.0	60	35F(44mm)	8.8-32	106-33	0.08-0.28	0.045	0.006	0.17-0.04693	359.4	M58	YES	NO
DTCA35F-14.6C-G-M58-AL	14.6	3.0	60	35F(44mm)	8.8-32	106-33	0.08-0.28	0.045	0.006	0.17-0.04693	359.4	M58	YES	YES
DTCA35F-11-G-M58-AL	11	4.0	60	35F(44mm)	11-32	90-32	0.06-0.16	0.02	0.02	0.18-0.062	353.2	M58	YES	NO
DTCA35F-11C-G-M58-ALV3	11	4.0	60	35F(44mm)	11-32	90-32	0.06-0.16	0.02	0.02	0.18-0.062	365.4	M58	YES	YES
DTCA35F-8.8-G-M58-AL	8.80	5.0	60	35F(44mm)	13-32	74-31	0.04-0.1	0.02	0.01	0.19-0.077	387	M58	YES	NO
DTCA35F-8.8C-G-M58-AL	8.80	5.0	60	35F(44mm)	13-32	74-31	0.04-0.1	0.02	0.01	0.19-0.077	387	M58	YES	YES
DTCA35F-94-M58-AL	94	0.462	378 \pm 4	43.4	8.0	>115	\pm 1.5@F8.0	<0.1	<0.1	0.028	456.9	M58	NO	NO
DTCA35F-94C-M58-AL	94	0.462	378 \pm 4	43.4	8.0	>115	\pm 1.5@F8.0	<0.1	<0.1	0.028	456.9	M58	NO	YES
DTCA35F-82-M58-AL	82	0.530	338 \pm 5	43.4	10.0	>92	\pm 1.4@F10	<0.1	<0.1	0.026	464.4	M58	NO	NO
DTCA35F-82C-M58-AL	82	0.530	338 \pm 5	43.4	10.0	>92	\pm 1.4@F10	<0.1	<0.1	0.026	464.4	M58	NO	YES

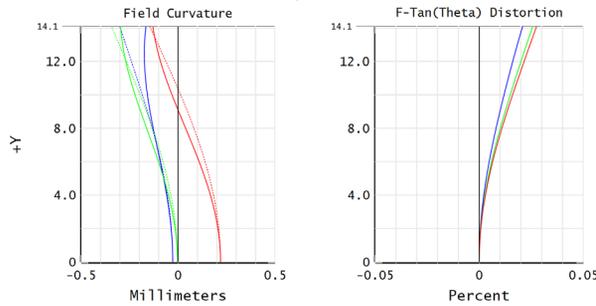
Product Selection
Quick Reference Table

DTCA175-28.2-128-M58-AL



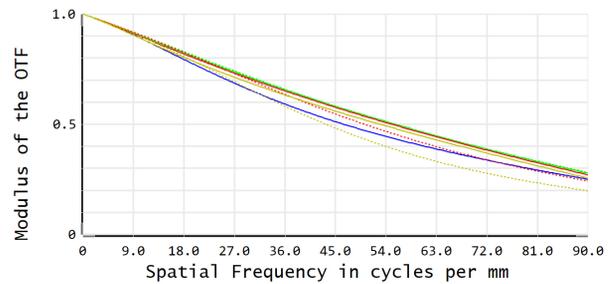
FOV(Φ mm)	28.2
Mag.(x)	1.0
WD(mm)	128 \pm 2
Max Sensor Size(Φ mm)	28.2(1.75")
F/#	11
MTF30(lp/mm)	>76
DOF(mm)	\pm 0.45@F8
Distortion(% max)	0.01
Telecentricity($^\circ$ max)	0.09
NA	0.04538
Length(mm)	315.5
Mount	M58
Iris	NO
Coaxial Light	NO

Field of View (mmxmm)	
1.75" IMX342 (22.3x16.7)	22.3x16.7



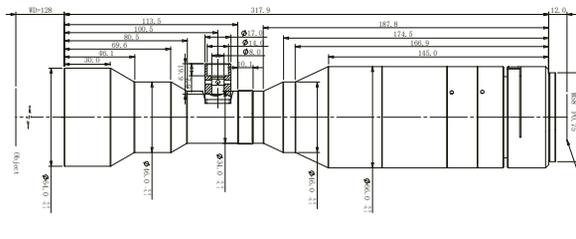
$\theta=0.4861$ -Tangential $\theta=0.4861$ -Sagittal $\theta=0.5876$ -Tangential
 $\theta=0.5876$ -Sagittal $\theta=0.6563$ -Tangential $\theta=0.6563$ -Sagittal

$\theta=0.4861$ $\theta=0.5876$ $\theta=0.6563$



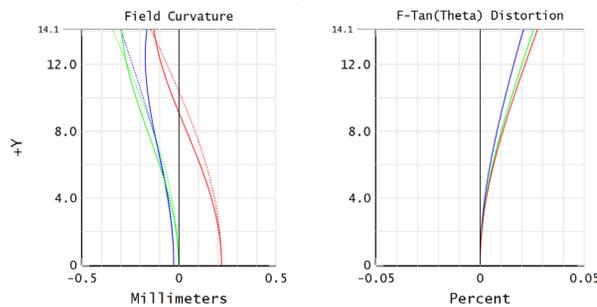
$\theta=0.00$ mm - Tangential $\theta=0.00$ mm - Sagittal $\theta=8.00$ mm - Tangential $\theta=8.00$ mm - Sagittal
 $\theta=12.00$ mm - Tangential $\theta=12.00$ mm - Sagittal $\theta=14.10$ mm - Tangential $\theta=14.10$ mm - Sagittal

DTCA175-28.2C-128-M58-AL



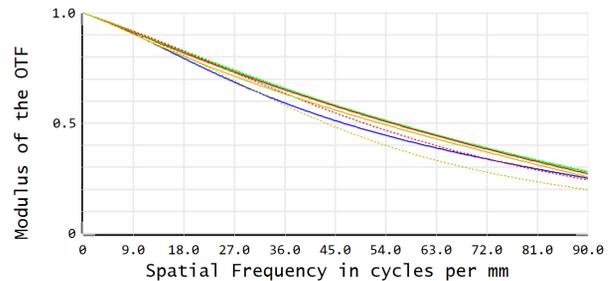
FOV(Φ mm)	28.2
Mag.(x)	1.0
WD(mm)	128 \pm 2
Max Sensor Size(Φ mm)	28.2(1.75")
F/#	11
MTF30(lp/mm)	>76
DOF(mm)	\pm 0.45@F8
Distortion(% max)	0.01
Telecentricity($^\circ$ max)	0.09
NA	0.04538
Length(mm)	315.5
Mount	M58
Iris	NO
Coaxial Light	YES

Field of View (mmxmm)	
1.75" IMX342 (22.3x16.7)	22.3x16.7



$\theta=0.4861$ -Tangential $\theta=0.4861$ -Sagittal $\theta=0.5876$ -Tangential
 $\theta=0.5876$ -Sagittal $\theta=0.6563$ -Tangential $\theta=0.6563$ -Sagittal

$\theta=0.4861$ $\theta=0.5876$ $\theta=0.6563$



$\theta=0.00$ mm - Tangential $\theta=0.00$ mm - Sagittal $\theta=8.00$ mm - Tangential $\theta=8.00$ mm - Sagittal
 $\theta=12.00$ mm - Tangential $\theta=12.00$ mm - Sagittal $\theta=14.10$ mm - Tangential $\theta=14.10$ mm - Sagittal

DTCA Series
Ultra Resolution
Bi-Telecentric Lenses

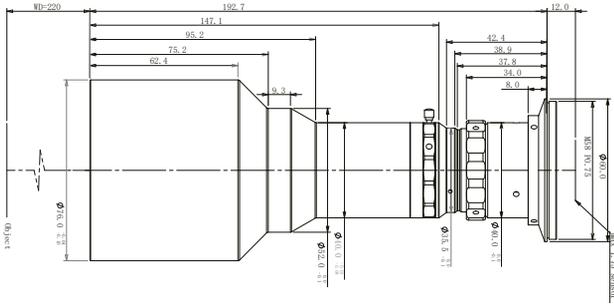
WWK Series
C-Mount High Resolution
Telecentric Lenses

DTCL Series
Telecentric Illuminators

Featured Products and
Modules

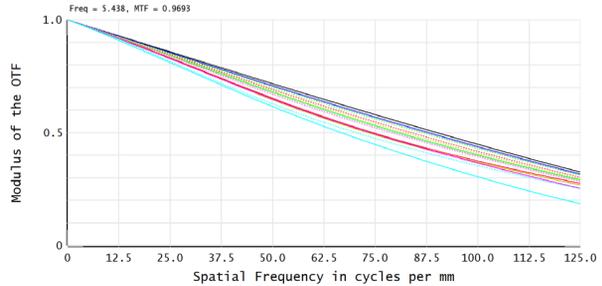
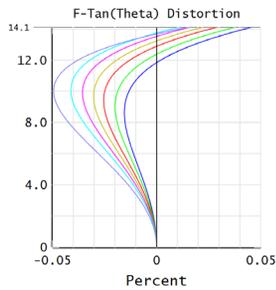
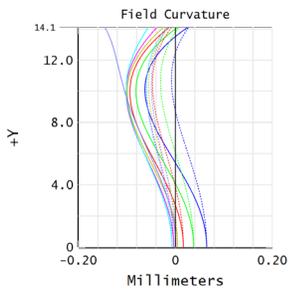
360° View Lenses

DTCA175-51-G-M58-AL



FOV(φmm)	51
Mag.(x)	0.55
WD(mm)	220±3
Max Sensor Size(φmm)	28.2(1.75")
F/#	8.0
MTF30(lp/mm)	>106
DOF(mm)	±1.05@F8
Distortion(% max)	0.05
Telecentricity(° max)	0.09
NA	0.0344
Length(mm)	192.7
Mount	M58
Iris	YES
Coaxial Light	NO

Field of View (mmxmm)	
1.75" IMX342 (22.3x16.7)	40.5x30.4



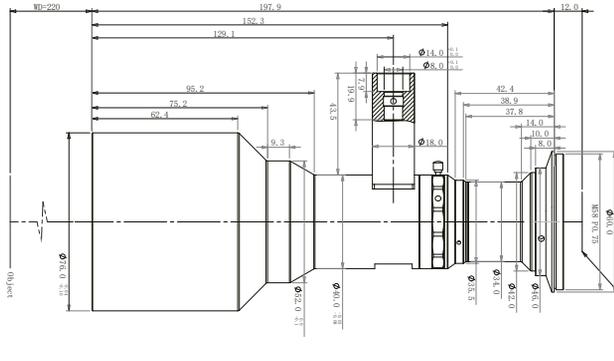
Legend for Field Curvature and Distortion graphs:

- 0.000 mm-Tangential, 0.000 mm-Sagittal, 0.000 mm-Tangential
- 0.400 mm-Tangential, 0.400 mm-Sagittal, 0.400 mm-Tangential
- 0.800 mm-Tangential, 0.800 mm-Sagittal, 0.800 mm-Tangential
- 1.200 mm-Tangential, 1.200 mm-Sagittal, 1.200 mm-Tangential
- 1.600 mm-Tangential, 1.600 mm-Sagittal, 1.600 mm-Tangential
- 2.000 mm-Tangential, 2.000 mm-Sagittal, 2.000 mm-Tangential
- 2.400 mm-Tangential, 2.400 mm-Sagittal, 2.400 mm-Tangential
- 2.800 mm-Tangential, 2.800 mm-Sagittal, 2.800 mm-Tangential
- 3.200 mm-Tangential, 3.200 mm-Sagittal, 3.200 mm-Tangential
- 3.600 mm-Tangential, 3.600 mm-Sagittal, 3.600 mm-Tangential
- 4.000 mm-Tangential, 4.000 mm-Sagittal, 4.000 mm-Tangential

Legend for OTF graph:

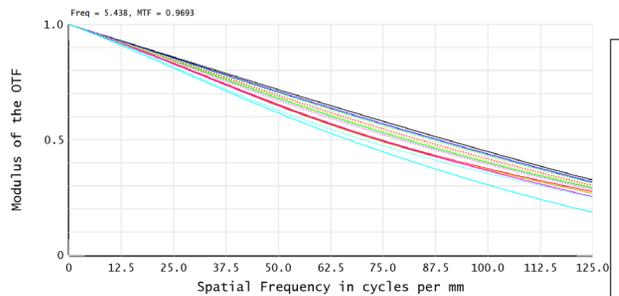
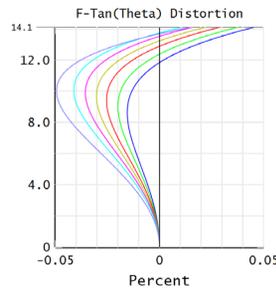
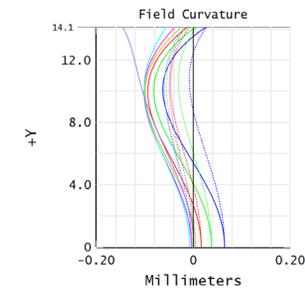
- 0.00 mm-Tangential, 0.00 mm-Sagittal
- 6.11 mm-Tangential, 6.11 mm-Sagittal
- 12.22 mm-Tangential, 12.22 mm-Sagittal
- 18.33 mm-Tangential, 18.33 mm-Sagittal
- 24.44 mm-Tangential, 24.44 mm-Sagittal
- 30.56 mm-Tangential, 30.56 mm-Sagittal
- 36.67 mm-Tangential, 36.67 mm-Sagittal
- 42.78 mm-Tangential, 42.78 mm-Sagittal
- 48.89 mm-Tangential, 48.89 mm-Sagittal
- 55.00 mm-Tangential, 55.00 mm-Sagittal
- 61.11 mm-Tangential, 61.11 mm-Sagittal
- 67.22 mm-Tangential, 67.22 mm-Sagittal
- 73.33 mm-Tangential, 73.33 mm-Sagittal
- 79.44 mm-Tangential, 79.44 mm-Sagittal
- 85.56 mm-Tangential, 85.56 mm-Sagittal
- 91.67 mm-Tangential, 91.67 mm-Sagittal
- 97.78 mm-Tangential, 97.78 mm-Sagittal
- 103.89 mm-Tangential, 103.89 mm-Sagittal
- 110.00 mm-Tangential, 110.00 mm-Sagittal
- 116.11 mm-Tangential, 116.11 mm-Sagittal
- 122.22 mm-Tangential, 122.22 mm-Sagittal
- 128.33 mm-Tangential, 128.33 mm-Sagittal
- 134.44 mm-Tangential, 134.44 mm-Sagittal
- 140.56 mm-Tangential, 140.56 mm-Sagittal
- 146.67 mm-Tangential, 146.67 mm-Sagittal
- 152.78 mm-Tangential, 152.78 mm-Sagittal
- 158.89 mm-Tangential, 158.89 mm-Sagittal
- 165.00 mm-Tangential, 165.00 mm-Sagittal
- 171.11 mm-Tangential, 171.11 mm-Sagittal
- 177.22 mm-Tangential, 177.22 mm-Sagittal
- 183.33 mm-Tangential, 183.33 mm-Sagittal
- 189.44 mm-Tangential, 189.44 mm-Sagittal
- 195.56 mm-Tangential, 195.56 mm-Sagittal
- 201.67 mm-Tangential, 201.67 mm-Sagittal
- 207.78 mm-Tangential, 207.78 mm-Sagittal
- 213.89 mm-Tangential, 213.89 mm-Sagittal
- 220.00 mm-Tangential, 220.00 mm-Sagittal

DTCA175-51C-G-M58-AL



FOV(φmm)	51
Mag.(x)	0.55
WD(mm)	220±3
Max Sensor Size(φmm)	28.2(1.75")
F/#	8.0
MTF30(lp/mm)	>106
DOF(mm)	±1.05@F8
Distortion(% max)	0.05
Telecentricity(° max)	0.09
NA	0.0344
Length(mm)	197.9
Mount	M58
Iris	YES
Coaxial Light	YES

Field of View (mmxmm)	
1.75" IMX342 (22.3x16.7)	40.5x30.4



Legend for Field Curvature and Distortion graphs:

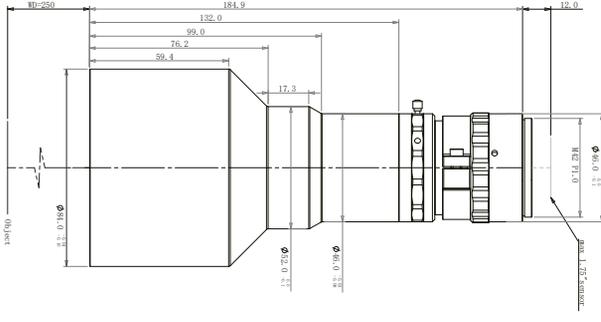
- 0.000 mm-Tangential, 0.000 mm-Sagittal, 0.000 mm-Tangential
- 0.400 mm-Tangential, 0.400 mm-Sagittal, 0.400 mm-Tangential
- 0.800 mm-Tangential, 0.800 mm-Sagittal, 0.800 mm-Tangential
- 1.200 mm-Tangential, 1.200 mm-Sagittal, 1.200 mm-Tangential
- 1.600 mm-Tangential, 1.600 mm-Sagittal, 1.600 mm-Tangential
- 2.000 mm-Tangential, 2.000 mm-Sagittal, 2.000 mm-Tangential
- 2.400 mm-Tangential, 2.400 mm-Sagittal, 2.400 mm-Tangential
- 2.800 mm-Tangential, 2.800 mm-Sagittal, 2.800 mm-Tangential
- 3.200 mm-Tangential, 3.200 mm-Sagittal, 3.200 mm-Tangential
- 3.600 mm-Tangential, 3.600 mm-Sagittal, 3.600 mm-Tangential
- 4.000 mm-Tangential, 4.000 mm-Sagittal, 4.000 mm-Tangential

Legend for OTF graph:

- 0.00 mm-Tangential, 0.00 mm-Sagittal
- 6.11 mm-Tangential, 6.11 mm-Sagittal
- 12.22 mm-Tangential, 12.22 mm-Sagittal
- 18.33 mm-Tangential, 18.33 mm-Sagittal
- 24.44 mm-Tangential, 24.44 mm-Sagittal
- 30.56 mm-Tangential, 30.56 mm-Sagittal
- 36.67 mm-Tangential, 36.67 mm-Sagittal
- 42.78 mm-Tangential, 42.78 mm-Sagittal
- 48.89 mm-Tangential, 48.89 mm-Sagittal
- 55.00 mm-Tangential, 55.00 mm-Sagittal
- 61.11 mm-Tangential, 61.11 mm-Sagittal
- 67.22 mm-Tangential, 67.22 mm-Sagittal
- 73.33 mm-Tangential, 73.33 mm-Sagittal
- 79.44 mm-Tangential, 79.44 mm-Sagittal
- 85.56 mm-Tangential, 85.56 mm-Sagittal
- 91.67 mm-Tangential, 91.67 mm-Sagittal
- 97.78 mm-Tangential, 97.78 mm-Sagittal
- 103.89 mm-Tangential, 103.89 mm-Sagittal
- 110.00 mm-Tangential, 110.00 mm-Sagittal
- 116.11 mm-Tangential, 116.11 mm-Sagittal
- 122.22 mm-Tangential, 122.22 mm-Sagittal
- 128.33 mm-Tangential, 128.33 mm-Sagittal
- 134.44 mm-Tangential, 134.44 mm-Sagittal
- 140.56 mm-Tangential, 140.56 mm-Sagittal
- 146.67 mm-Tangential, 146.67 mm-Sagittal
- 152.78 mm-Tangential, 152.78 mm-Sagittal
- 158.89 mm-Tangential, 158.89 mm-Sagittal
- 165.00 mm-Tangential, 165.00 mm-Sagittal
- 171.11 mm-Tangential, 171.11 mm-Sagittal
- 177.22 mm-Tangential, 177.22 mm-Sagittal
- 183.33 mm-Tangential, 183.33 mm-Sagittal
- 189.44 mm-Tangential, 189.44 mm-Sagittal
- 195.56 mm-Tangential, 195.56 mm-Sagittal
- 201.67 mm-Tangential, 201.67 mm-Sagittal
- 207.78 mm-Tangential, 207.78 mm-Sagittal
- 213.89 mm-Tangential, 213.89 mm-Sagittal
- 220.00 mm-Tangential, 220.00 mm-Sagittal

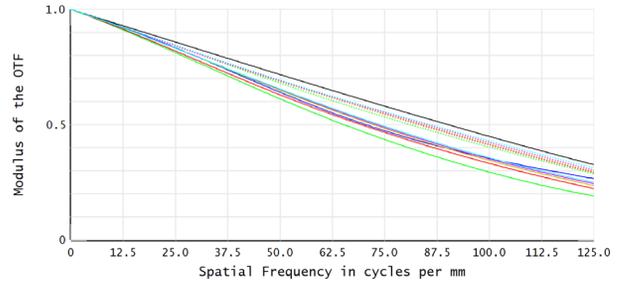
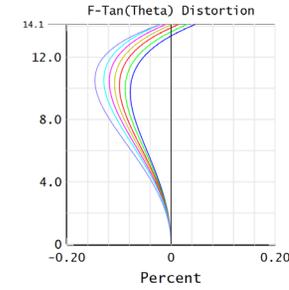
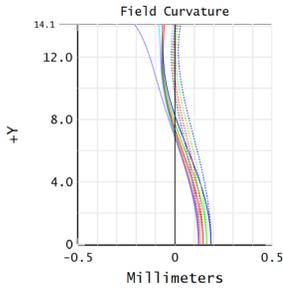
Product Selection
Quick Reference Table

DTCA175-61.4-G-M42-AL



FOV(Φmm)	61.4
Mag.(x)	0.46
WD(mm)	250±3
Max Sensor Size(Φmm)	28.2(1.75")
F/#	8.0
MTF30(lp/mm)	>120
DOF(mm)	±1.5@F8
Distortion(% max)	0.03
Telecentricity(° max)	0.21
NA	0.0288
Length(mm)	184.9
Mount	M42
Iris	YES
Coaxial Light	NO

Field of View (mmxmm)	1.75° IMX342 (22.3x16.7)
	48.5x36.3



Legend for Field Curvature and Distortion graphs:

- 0.000 Tangential, 0.000 Sagittal, 0.000 Tangential, 0.000 Sagittal
- 0.000 Tangential, 0.000 Sagittal, 0.000 Tangential, 0.000 Sagittal
- 0.000 Tangential, 0.000 Sagittal, 0.000 Tangential, 0.000 Sagittal
- 0.000 Tangential, 0.000 Sagittal, 0.000 Tangential, 0.000 Sagittal

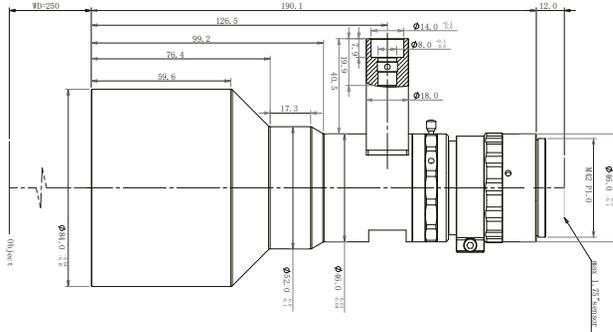
Legend for Distortion graph:

- 0.000, 0.000, 0.000, 0.000, 0.000, 0.000, 0.000, 0.000

Legend for OTF graph:

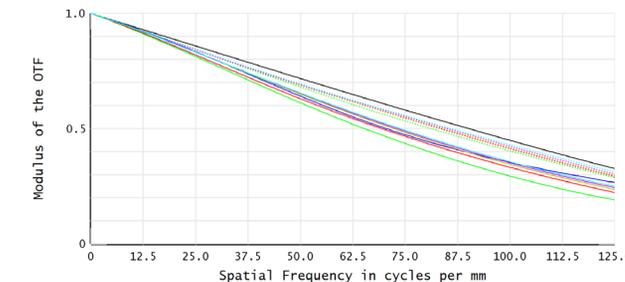
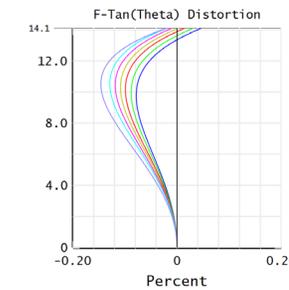
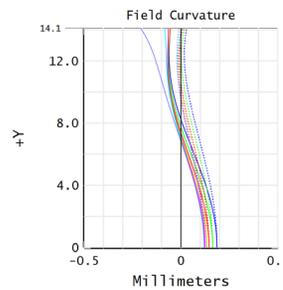
- DIFF, Limit-Tangential, DIFF, Limit-Sagittal, 0.00 mm-Tangential, 0.00 mm-Sagittal
- 14.76 mm-Tangential, 14.76 mm-Sagittal, 12.00 mm-Tangential, 12.00 mm-Sagittal
- 9.87 mm-Tangential, 9.87 mm-Sagittal, 8.92 mm-Tangential, 8.92 mm-Sagittal
- 7.05 mm-Tangential, 7.05 mm-Sagittal

DTCA175-61.4C-G-M42-AL



FOV(Φmm)	61.4
Mag.(x)	0.46
WD(mm)	250±3
Max Sensor Size(Φmm)	28.2(1.75")
F/#	8.0
MTF30(lp/mm)	>120
DOF(mm)	±1.5@F8
Distortion(% max)	0.03
Telecentricity(° max)	0.21
NA	0.0288
Length(mm)	190.1
Mount	M42
Iris	YES
Coaxial Light	YES

Field of View (mmxmm)	1.75° IMX342 (22.3x16.7)
	48.5x36.3



Legend for Field Curvature and Distortion graphs:

- 0.000 Tangential, 0.000 Sagittal, 0.000 Tangential, 0.000 Sagittal
- 0.000 Tangential, 0.000 Sagittal, 0.000 Tangential, 0.000 Sagittal
- 0.000 Tangential, 0.000 Sagittal, 0.000 Tangential, 0.000 Sagittal
- 0.000 Tangential, 0.000 Sagittal, 0.000 Tangential, 0.000 Sagittal

Legend for Distortion graph:

- 0.000, 0.000, 0.000, 0.000, 0.000, 0.000, 0.000, 0.000

Legend for OTF graph:

- DIFF, Limit-Tangential, DIFF, Limit-Sagittal, 0.00 mm-Tangential, 0.00 mm-Sagittal
- 14.76 mm-Tangential, 14.76 mm-Sagittal, 12.00 mm-Tangential, 12.00 mm-Sagittal
- 9.87 mm-Tangential, 9.87 mm-Sagittal, 8.92 mm-Tangential, 8.92 mm-Sagittal
- 7.05 mm-Tangential, 7.05 mm-Sagittal

DTCA Series
Matrix Bi-Telecentric
Lenses

DTCA Series
Ultra Resolution
Bi-Telecentric Lenses

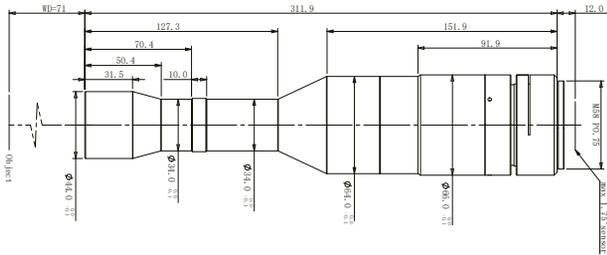
WWK Series
C-Mount High Resolution
Telecentric Lenses

DTCL Series
Telecentric Illuminators

Featured Products and
Modules

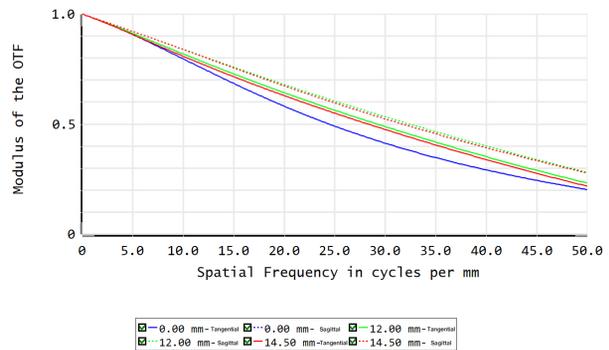
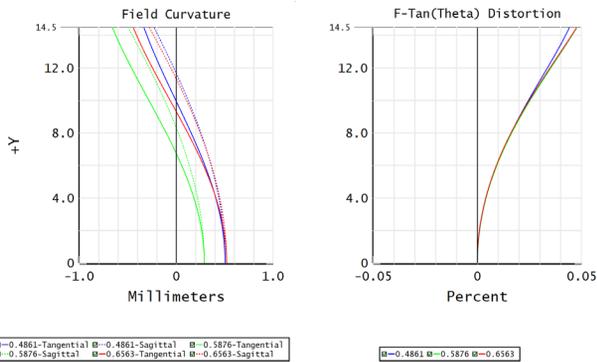
360° View Lenses

DTCA175-15.7-M58-AL

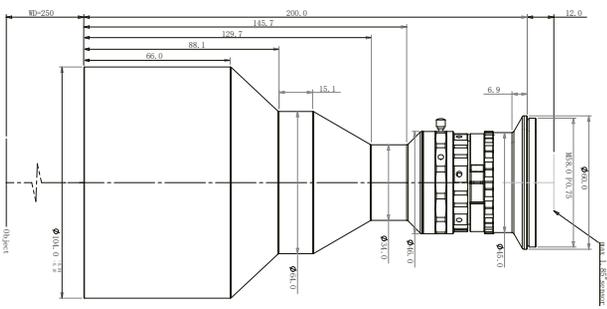


FOV(Φmm)	15.7
Mag.(x)	1.846
WD(mm)	71±1
Max Sensor Size(Φmm)	29(1.75")
F/#	20.0
MTF30(lp/mm)	>45
DOF(mm)	±2.5@F20
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
NA	0.0461
Length(mm)	311.9
Mount	M42
Iris	YES
Coaxial Light	NO

Field of View (mmxmm)	
1.75" IMX342 (22.3x16.7)	12.1x9

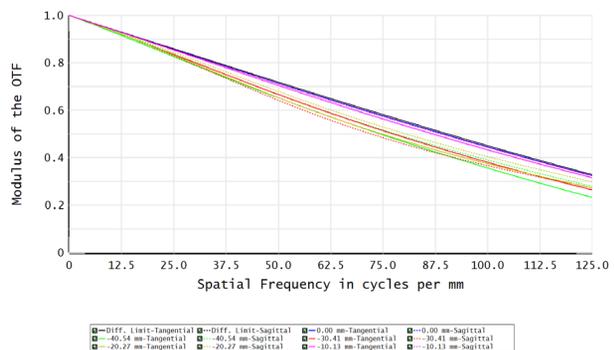
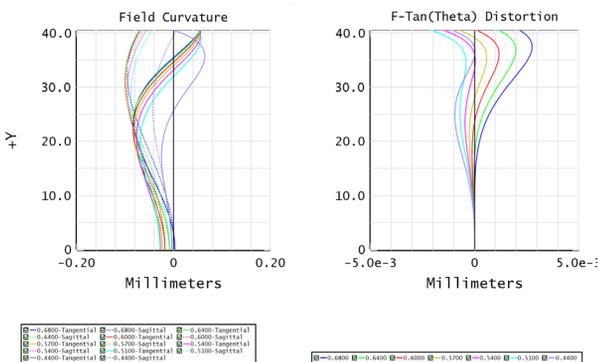


DTCA185-81-G-M58-AL

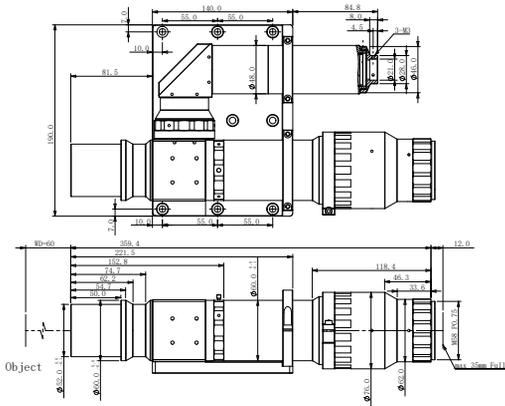


FOV(Φmm)	81.1
Mag.(x)	0.37
WD(mm)	250±3
Max Sensor Size(Φmm)	30(1.85")
F/#	8.0
MTF30(lp/mm)	>114
DOF(mm)	±2.35@F8
Distortion(% max)	0.08
Telecentricity(° max)	0.05
NA	0.02312
Length(mm)	200
Mount	M58
Iris	YES
Coaxial Light	NO

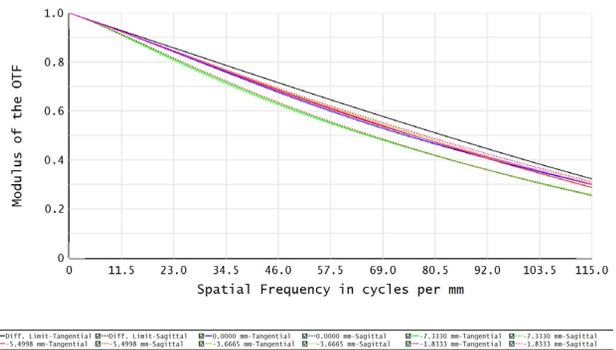
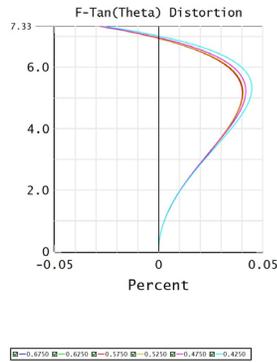
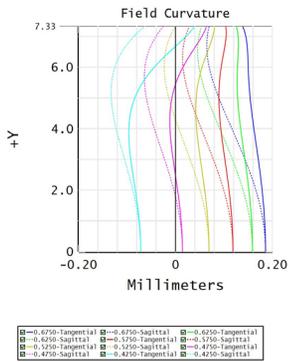
Field of View (mmxmm)	
1.75" IMX342 (22.3x16.7)	60.3x45.1



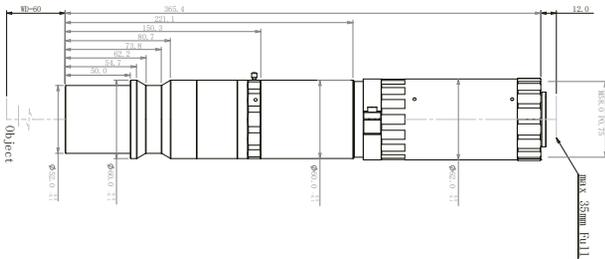
DTCA35F-14.6C-G-M58-AL



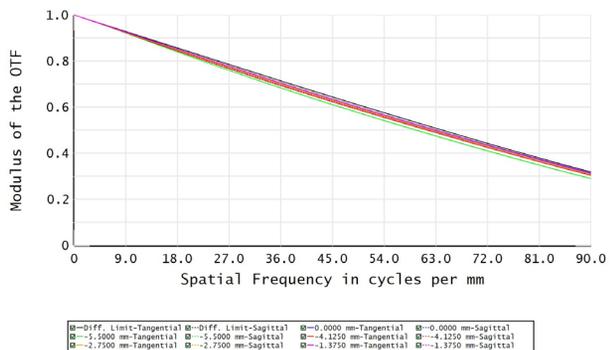
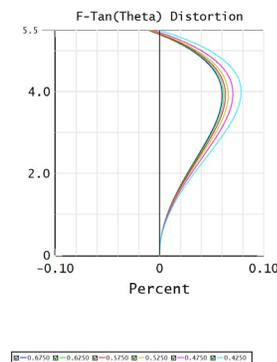
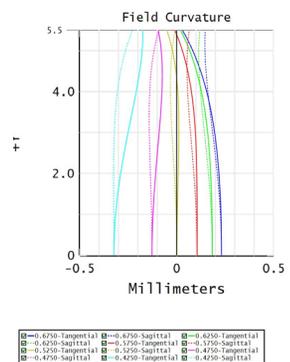
FOV(Φmm)	14.6
Mag.(x)	3.0
WD(mm)	60
Max Sensor Size(Φmm)	35F(44mm)
F/#	8.8-32
MTF30(lp/mm)	106-33
DOF(mm)	0.08-0.28
Distortion(% max)	0.045
Telecentricity(° max)	0.0065
NA	0.17-0.04693
Length(mm)	359.4
Mount	M58
Iris	YES
Coaxial Light	YES
Field of View (mmxmm)	
37.4mm GMAX3265(29.9x22.4)	10x7.5



DTCA35F-11-G-M58-AL

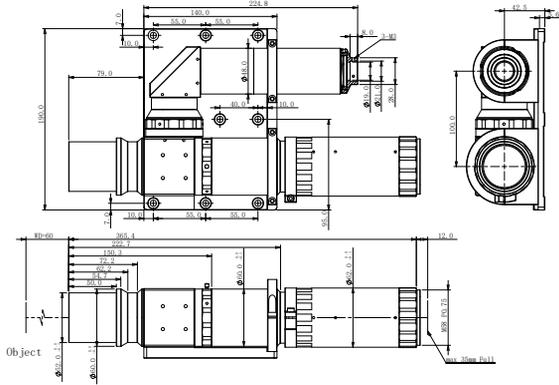


FOV(Φmm)	11
Mag.(x)	4.0
WD(mm)	60±1
Max Sensor Size(Φmm)	44
F/#	11-32
MTF30(lp/mm)	90-32
DOF(mm)	0.06-0.16
Distortion(% max)	0.02
Telecentricity(° max)	0.02
NA	0.18-0.0624
Length(mm)	365.4
Mount	M58
Iris	YES
Coaxial Light	NO
Field of View (mmxmm)	
37.4mm GMAX3265(29.9x22.4)	7.5x5.6

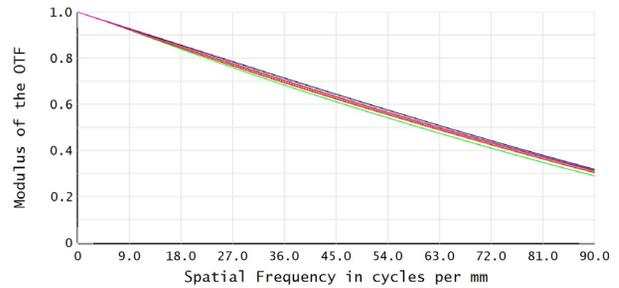
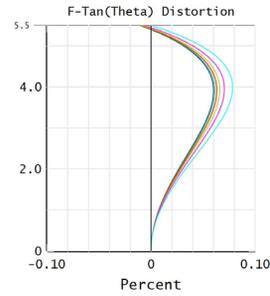
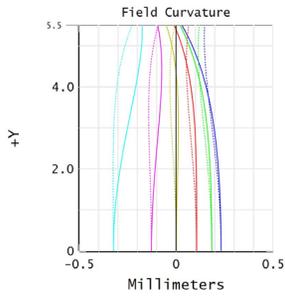


Product Selection
Quick Reference Table

DTCA35F-11C-G-M58-ALV3



FOV(Φmm)	11
Mag.(x)	4.0
WD(mm)	60±1
Max Sensor Size(Φmm)	44
F/#	11-32
MTF30(lp/mm)	90-32
DOF(mm)	0.06-0.16
Distortion(% max)	0.02
Telecentricity(° max)	0.02
NA	0.18- 0.0624
Length(mm)	365.4
Mount	M58
Iris	YES
Coaxial Light	YES
Field of View (mmxmm)	
37.4mm GMAX3265(29.9x22.4)	7.5x5.6

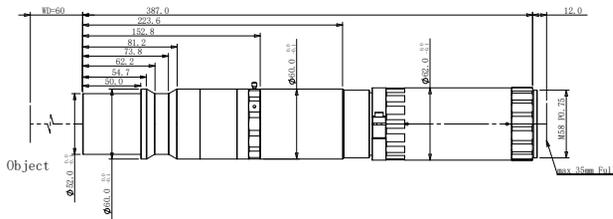


Legend for Field Curvature and Distortion graphs:
 -0.4750 mm-Tangential, -0.4750 mm-Sagittal, -0.4750 mm-Tangential, -0.4750 mm-Sagittal, -0.4750 mm-Tangential, -0.4750 mm-Sagittal, -0.4750 mm-Tangential, -0.4750 mm-Sagittal, -0.4750 mm-Tangential, -0.4750 mm-Sagittal

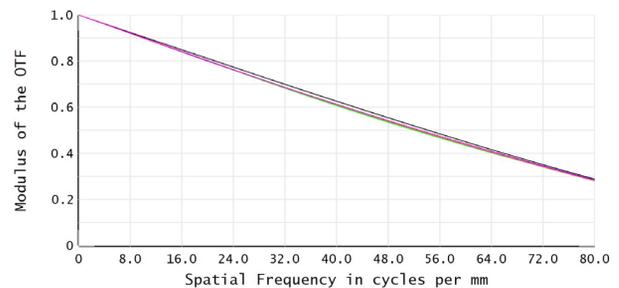
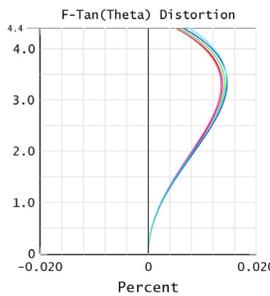
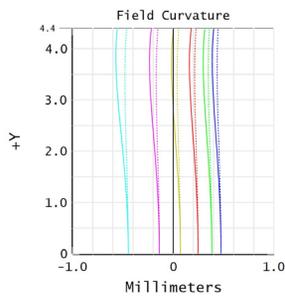
Legend for F-Tan(Theta) Distortion graph:
 -0.4750, -0.4750, -0.4750, -0.4750, -0.4750, -0.4750

Legend for Modulus of the OTF graph:
 -Diff. Limit-Tangential, -Diff. Limit-Sagittal, -0.0000 mm-Tangential, -0.0000 mm-Sagittal, -5.0000 mm-Tangential, -5.0000 mm-Sagittal, -4.1150 mm-Tangential, -4.1150 mm-Sagittal, -2.7500 mm-Tangential, -2.7500 mm-Sagittal, -1.3750 mm-Tangential, -1.3750 mm-Sagittal

DTCA35F-8.8-G-M58-AL



FOV(Φmm)	8.8
Mag.(x)	5.0
WD(mm)	60
Max Sensor Size(Φmm)	35F(44mm)
F/#	13-32
MTF30(lp/mm)	74-31
DOF(mm)	0.04-0.1
Distortion(% max)	0.02
Telecentricity(° max)	0.01
NA	0.19-0.07792
Length(mm)	387
Mount	M58
Iris	YES
Coaxial Light	NO
Field of View (mmxmm)	
37.4mm GMAX3265(29.9x22.4)	6.0x4.5



Legend for Field Curvature and Distortion graphs:
 -0.4750 mm-Tangential, -0.4750 mm-Sagittal, -0.4750 mm-Tangential, -0.4750 mm-Sagittal, -0.4750 mm-Tangential, -0.4750 mm-Sagittal, -0.4750 mm-Tangential, -0.4750 mm-Sagittal, -0.4750 mm-Tangential, -0.4750 mm-Sagittal

Legend for F-Tan(Theta) Distortion graph:
 -0.4750, -0.4750, -0.4750, -0.4750, -0.4750, -0.4750

Legend for Modulus of the OTF graph:
 -Diff. Limit-Tangential, -Diff. Limit-Sagittal, -0.0000 mm-Tangential, -0.0000 mm-Sagittal, -4.4000 mm-Tangential, -4.4000 mm-Sagittal, -3.8105 mm-Tangential, -3.8105 mm-Sagittal, -3.1113 mm-Tangential, -3.1113 mm-Sagittal, -2.2000 mm-Tangential, -2.2000 mm-Sagittal

DTCM Series
Matrix Bi-Telecentric
Lenses

DTCA Series
Ultra Resolution
Bi-Telecentric Lenses

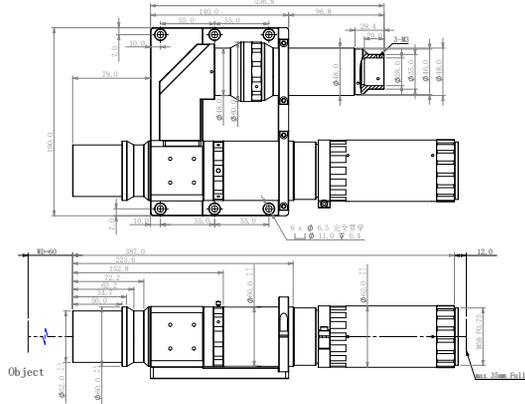
WWK Series
C-Mount High Resolution
Telecentric Lenses

DTCL Series
Telecentric Illuminators

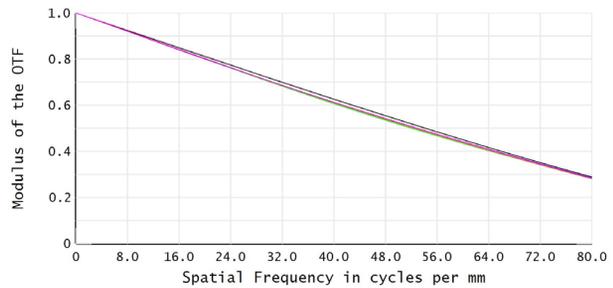
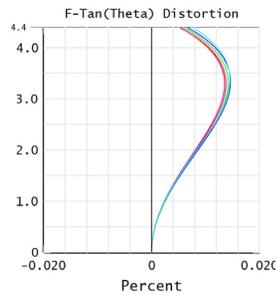
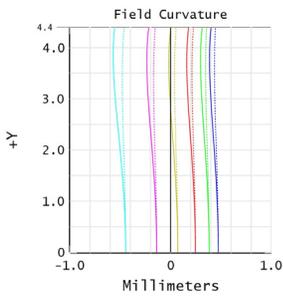
Featured Products and
Modules

360° View Lenses

DTCA35F-8.8C-G-M58-AL



FOV(Φmm)	8.8
Mag.(x)	5.0
WD(mm)	60
Max Sensor Size(Φmm)	35F(44mm)
F/#	13-32
MTF30(lp/mm)	74-31
DOF(mm)	0.04-0.1
Distortion(% max)	0.02
Telecentricity(° max)	0.01
NA	0.19-0.07792
Length(mm)	387
Mount	M58
Iris	YES
Coaxial Light	YES
Field of View (mmxmm)	
37.4mm GMAX3265(29.9x22.4)	6.0x4.5

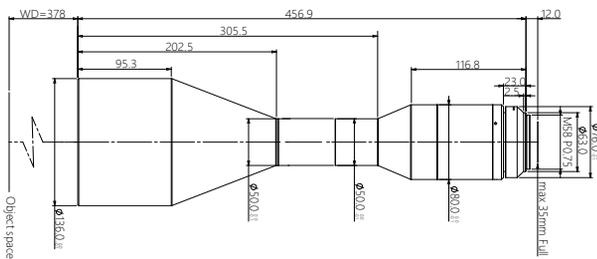


Legend for Field Curvature and Distortion graphs:
 -0.4750-Tangential, -0.4750-Sagittal, -0.4250-Tangential, -0.4250-Sagittal, -0.3750-Tangential, -0.3750-Sagittal, -0.3250-Tangential, -0.3250-Sagittal, -0.2750-Tangential, -0.2750-Sagittal, -0.2250-Tangential, -0.2250-Sagittal, -0.1750-Tangential, -0.1750-Sagittal, -0.1250-Tangential, -0.1250-Sagittal, -0.0750-Tangential, -0.0750-Sagittal

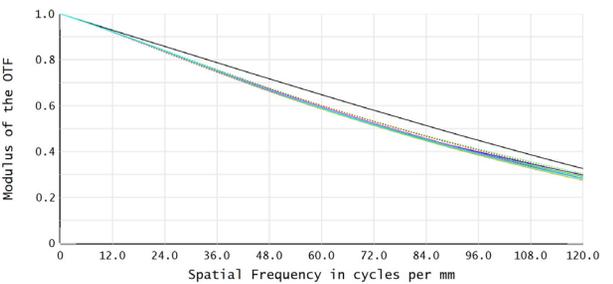
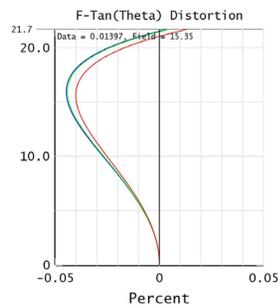
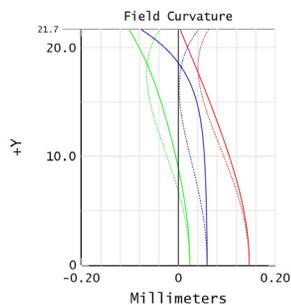
Legend for F-Tan(Theta) Distortion graph:
 -0.6750, -0.6250, -0.5750, -0.5250, -0.4750, -0.4250

Legend for Modulus of the OTF graph:
 -Diff. Limit-Tangential, -Diff. Limit-Sagittal, -0.0000 mm-Tangential, -0.0000 mm-Sagittal, -4.0000 mm-Tangential, -4.0000 mm-Sagittal, -3.8102 mm-Tangential, -3.8102 mm-Sagittal, -3.1113 mm-Tangential, -3.1113 mm-Sagittal, -2.2000 mm-Tangential, -2.2000 mm-Sagittal

DTCA35F-94-M58-AL



FOV(Φmm)	94
Mag.(x)	0.462
WD(mm)	378±4
Max Sensor Size(Φmm)	43.4
F/#	8.0
MTF30(lp/mm)	>115
DOF(mm)	±1.5@F8.0
Distortion(% max)	<-0.1
Telecentricity(° max)	<-0.1
NA	0.02889
Length(mm)	456.9
Mount	M58
Iris	NO
Coaxial Light	NO
Field of View (mmxmm)	
CMV50000 (36.43x27.62)	78.9x59.8
KAI29050/2 (36.17x24.11)	78.3x52.2
KAI43142 (36.18x24.12)	78.3x52.2



Legend for Field Curvature and Distortion graphs:
 -0.4861-Tangential, -0.4861-Sagittal, -0.5876-Tangential, -0.5876-Sagittal, -0.6563-Tangential, -0.6563-Sagittal

Legend for F-Tan(Theta) Distortion graph:
 -0.4861, -0.5876, -0.6563

Legend for Modulus of the OTF graph:
 -Diff. Limit-Tangential, -Diff. Limit-Sagittal, -0.00 mm-Tangential, -0.00 mm-Sagittal, -7.50 mm-Tangential, -7.50 mm-Sagittal, -10.75 mm-Tangential, -10.75 mm-Sagittal, -11.20 mm-Tangential, -11.20 mm-Sagittal, -15.30 mm-Tangential, -15.30 mm-Sagittal, -21.70 mm-Tangential, -21.70 mm-Sagittal, -24.30 mm-Tangential, -24.30 mm-Sagittal

DTCA 系列

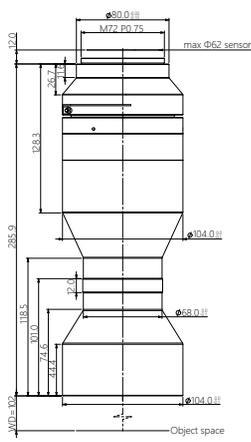
Support Up To 24K Linescan Camera,

150 Megapixel Camera



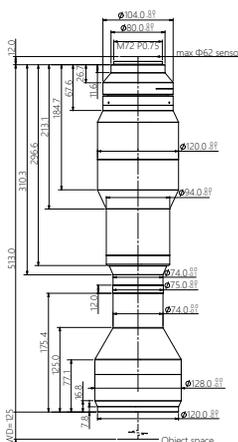
Lens Model	FOV (Φmm)	Mag. β(x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% Max)	Telecentricity (° Max)	NA	Length (mm)	Mount	Iris	Coaxial Light
DTCA16K-62-M72-AL	62	1.0	102±2	62	7.0	>110	±0.3@F7.0	<0.1	<0.62	0.071	285.9	M72	NO	NO
DTCA16K-72.7-M72-AL	72.7	0.853	125±3	62	6.0	>135	±0.3@F6.0	<0.1	<0.3	0.071	513.0	M72	NO	NO
DTCA16K-88G-M72-AL	88	0.705	125±3	62	5.0	>162	±0.4@F5.0	<0.1	<0.3	0.071	464.4	M72	NO	NO
DTCA23K-63-M95-AL	63	1.3	145±3	82	7.5	>124	±0.18@F7.5	0.03	0.04	0.086	513.5	M95	NO	NO
DTCA23K-93.7-M95-AL	93.7	0.875	140±3	82	9.5	>97	±0.5@F9.5	0.03	0.08	0.046	468.1	M95	NO	NO
DTCA24K-44-M95-AL	44	2.0	120±3	88	4.8	>62	±0.05@F4.8	0.045	0.1	0.208	463.0	M95	NO	NO
DTCA24K-62-M95-AL	62	1.419	123±3	88	7.0	>115	±0.1@F7.0	<0.1	<0.1	0.100	466.3	M95	NO	NO
DTCA24K-75-M95-AL	75	1.173	152±3	88	7.0	>118	±0.2@F7.0	<0.01	<0.05	0.083	486.0	M95	NO	NO
DTCA24K-79-M95-AL	79.2	1.110	150±3	88	7.0	>100	±0.2@F7.0	<0.01	<0.2	0.079	478.5	M95	NO	NO
DTCA24K-88-M95-ALV2	88	1.0	162±3	88	8.0	>90	±0.3@F8.0	<0.1	<0.1	0.062	453.2	M95	NO	NO
DTCA24K-92-M95-AL	91.6	0.960	150±3	88	8.0	>90	±0.3@F8.0	<0.1	<0.1	0.062	458.5	M95	NO	NO

DTCA16K-62-M72-AL



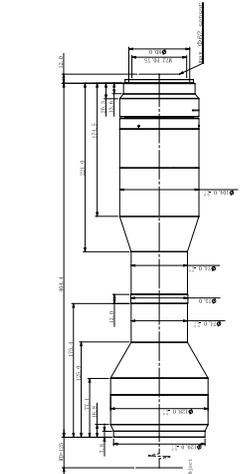
FOV(Φmm)	62
Mag.(x)	1.000
WD(mm)	102±2
Max Sensor Size(Φmm)	62
F/#	7.0
MTF30(lp/mm)	>110
DOF(mm)	±0.3@F7.0
Distortion(% max)	<0.1
Telecentricity(° max)	<0.62
NA	0.07125
Length(mm)	285.9
Mount	M72
Iris	NO
Coaxial Light	NO
Field of View (mmxmm)	
KAI-47051 (48.7x29.0)	48.7x29.0
Linescan-12K 5um (61.44mm)	61.4mm
Linescan-16K 3.5/3.53um (57.4mm)	57.4mm

DTCA16K-72.7-M72-AL



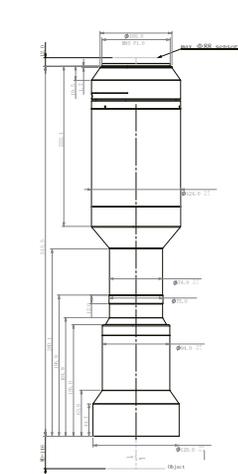
FOV(Φmm)	72.7
Mag.(x)	0.853
WD(mm)	125±3
Max Sensor Size(Φmm)	62
F/#	6.0
MTF30(lp/mm)	>135
DOF(mm)	±0.3@F6.0
Distortion(% max)	<0.1
Telecentricity(° max)	<0.3
NA	0.07112
Length(mm)	513.0
Mount	M72
Iris	NO
Coaxial Light	NO
Field of View (mmxmm)	
KAI-47051 (48.7x29.0)	57.1x34.0
Linescan-12K 5um (61.44mm)	72.0
Linescan-16K 3.5/3.53um (57.4mm)	67.3

DTCA16K-88G-M72-AL



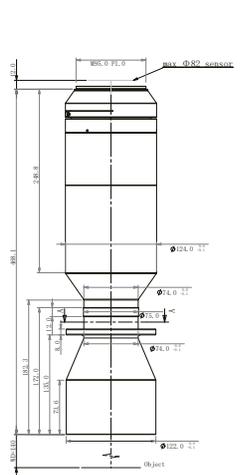
FOV(Φmm)	88
Mag.(x)	0.705
WD(mm)	125±3
Max Sensor Size(Φmm)	62
F/#	7.0
MTF30(lp/mm)	>165
DOF(mm)	±0.6@F7.0
Distortion(% max)	<0.1
Telecentricity(° max)	<0.3
NA	0.07112
Length(mm)	464.4
Mount	M72
Iris	NO
Coaxial Light	NO
Field of View (mmxmm)	
KAI-47051 (48.7x29.0)	69.1x41.1
Linescan-12K 5um (61.44mm)	87.1
Linescan-16K 3.5/3.53um (57.4mm)	81.4

DTCA23K-63-M95-AL



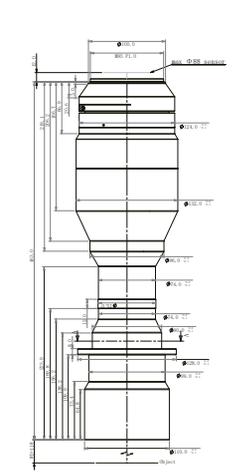
FOV(Φmm)	63
Mag.(x)	1.3
WD(mm)	146±3
Max Sensor Size(Φmm)	82
F/#	7.5
MTF30(lp/mm)	>124
DOF(mm)	±0.18@F7.5
Distortion(% max)	0.03
Telecentricity(° max)	0.04
NA	0.08685
Length(mm)	513.5
Mount	M95
Iris	NO
Coaxial Light	NO
Field of View (mmxmm)	
DALSA 86M (64.32x48.38)	49.5x37.2
Linescan-16K 5um (81.9mm)	63

DTCA23K-93.7-M95-AL



FOV(Φmm)	93.7
Mag.(x)	0.875
WD(mm)	140±3
Max Sensor Size(Φmm)	82
F/#	9.5
MTF30(lp/mm)	>97
DOF(mm)	±0.5@F9.5
Distortion(% max)	0.03
Telecentricity(° max)	0.08
NA	0.04601
Length(mm)	468.1
Mount	M95
Iris	NO
Coaxial Light	NO
Field of View (mmxmm)	
DALSA 86M (64.32x48.38)	73.5x55.3
Linescan-16K 5um (81.9mm)	93.6

DTCA24K-44-M95-AL



FOV(Φmm)	44
Mag.(x)	2.0
WD(mm)	118±3
Max Sensor Size(Φmm)	88
F/#	4.8
MTF30(lp/mm)	>62
DOF(mm)	±0.05@F4.8
Distortion(% max)	0.045
Telecentricity(° max)	0.1
NA	0.208143
Length(mm)	463.0
Mount	M95
Iris	NO
Coaxial Light	NO
Field of View (mmxmm)	
DALSA 86M (64.32x48.38)	32.2x24.2
Linescan-16K 5um (81.9mm)	40.1
Linescan-24K 3.5um (86.0mm)	43

DTCA210 Series

DTCA35F Series

DTCA16K Series

DTCA23K Series

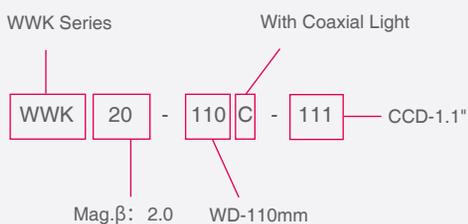
DTCA24K Series

WWK Series

C-Mount High Resolution Telecentric Lenses



Naming Rule



Features

- High-resolution telecentric lens that supports 5M-25M pixel area scan cameras.
- A variety of low magnification designs are available for applications with a larger field of view.
- High definition, low distortion, high telecentricity, especially suitable for high-precision AOI applications.
- The long working distance specification facilitates the arrangement of lighting and machine components.
- The built-in coaxial optical specification is especially suitable for wafers, glass devices, and display devices.

WWK - WD 110mm

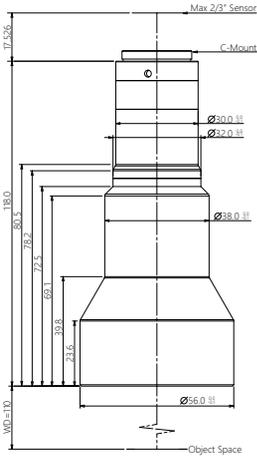
For Sensors up to 1.1"

25 MegaPixels Industrial Camera



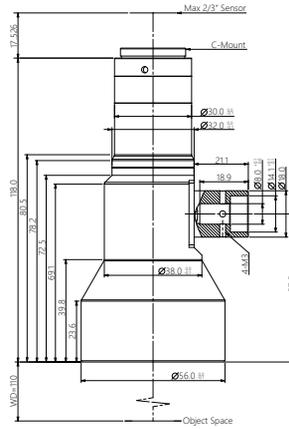
Lens Model	Mag. (x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% max)	Telecentricity (° max)	Length (mm)	Mount	Coaxial Light
WWK03-110-230	0.3	110±2	11.0(2/3")	5.6	>170	±2.5@F5.6	<0.02	<0.04	118.0	C	NO
WWK03-110C-230	0.3	110±2	11.0(2/3")	5.6	>170	±2.5@F5.6	<0.02	<0.04	118.0	C	YES
WWK04-110-230	0.4	110±2	11.0(2/3")	7	>140	±1.8@F7	<0.02	<0.03	140.2	C	NO
WWK04-110C-230	0.4	110±2	11.0(2/3")	7	>140	±1.8@F7	<0.02	<0.03	140.2	C	YES
WWK05-110-230	0.5	110±2	11.0(2/3")	7	>140	±1.1@F7	<0.03	<0.03	127.3	C	NO
WWK05-110C-230	0.5	110±2	11.0(2/3")	7	>140	±1.1@F7	<0.03	<0.03	127.3	C	YES
WWK05-110-111V3	0.5	110±2	18.0(1.1")	7	124	±1.1@F7	0.1	0.08	133.2	C	NO
WWK05-110C-111V3	0.5	110±2	18.0(1.1")	7	124	±1.1@F7	0.1	0.08	133.2	C	YES
WWK063-110-111V3	0.63	110±2	18.0(1.1")	7	124	±0.7@F7	0.1	0.05	133.2	C	NO
WWK063-110C-111V3	0.63	110±2	18.0(1.1")	7	124	±0.7@F7	0.1	0.05	133.2	C	YES
WWK07-108-110	0.7	108±2	16.0(1")	7	>135	±0.6@F7	<0.02	<0.02	133.4	C	NO
WWK07-108C-110	0.7	108±2	16.0(1")	7	>135	±0.6@F7	<0.02	<0.02	133.4	C	YES
WWK08-110-111V3	0.8	110±2	18.0(1.1")	6.6	128	±0.4@F6.6	0.08	0.06	142.5	C	NO
WWK08-110CP-111V3	0.8	110±2	18.0(1.1")	6.6	128	±0.4@F6.6	0.08	0.06	152.6	C	YES
WWK10-110-111V3	1.0	110±2	18.0(1.1")	7	128	±0.3@F7	0.1	0.06	142.5	C	NO
WWK10-110CP-111V3	1.0	110±2	18.0(1.1")	7	128	±0.3@F7	0.1	0.06	152.6	C	YES
WWK15-110-111	1.5	110±2	18.0(1.1")	10	>78	±0.18@F10	<0.1	<0.1	128.8	C	NO
WWK15-110C-111	1.5	110±2	18.0(1.1")	10	>78	±0.18@F10	<0.1	<0.1	128.8	C	YES
WWK20-110-111	2	110±2	18.0(1.1")	13.5	>60	±0.14@F13.5	<0.1	<0.1	133.2	C	NO
WWK20-110C-111	2	110±2	18.0(1.1")	13.5	>60	±0.14@F13.5	<0.1	<0.1	133.2	C	YES
WWK30-110-111	3	110±2	18.0(1.1")	20.1	>40	±0.09@F20.1	<0.1	<0.1	166.1	C	NO
WWK30-110C-111	3	110±2	18.0(1.1")	20.1	>40	±0.09@F20.1	<0.1	<0.1	166.1	C	YES
WWK40-108-111V3	4.0	108±2	18.0(1.1")	20	43	±0.05@F20	0.07	0.05	162.4	C	NO
WWK40-108C-111V3	4.0	108±2	18.0(1.1")	20	43	±0.05@F20	0.07	0.05	165.5	C	YES
WWK60-108-111V3	6.0	108±2	18.0(1.1")	29.7	29	±0.035@F29.7	0.04	0.03	171.4	C	NO
WWK60-108C-111V3	6.0	108±2	18.0(1.1")	29.7	29	±0.035@F29.7	0.04	0.03	175.5	C	YES
WWK80-108-111V3	8.0	108±2	18.0(1.1")	40.4	21	±0.025@F40.4	0.08	0.02	203.9	C	NO
WWK80-108C-111V3	8.0	108±2	18.0(1.1")	40.4	21	±0.025@F40.4	0.08	0.02	207.8	C	YES

WWK03-110-230



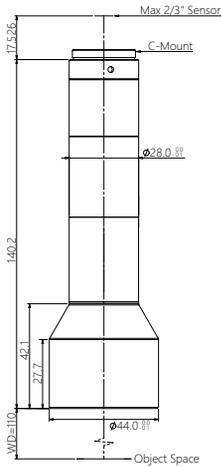
Mag.β(x)	0.3
WD(mm)	110±2
Max Sensor Size(Φmm)	11.0(2/3")
F/#	5.6
MTF30 (lp/mm)	>170
DOF(mm)	±2.5@F5.6
Distortion(% max)	<0.02
Telecentricity(° max)	<0.04
Length(mm)	118.0
Mount	C
Coaxial Light	NO
Field of View(mm×mm)	
1/1.8" EV76C570 (7.2x5.4)	24.0x18.0
1/1.7" IMX226 (7.5x5.6)	25.0x18.7
2/3" IMX250/264 (8.45x7.1)	28.2x23.7

WWK03-110C-230



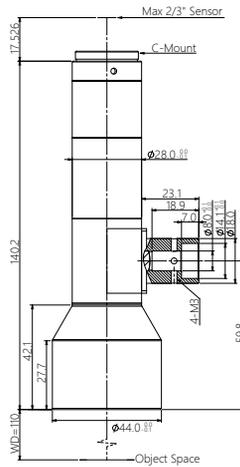
Mag.β(x)	0.3
WD(mm)	110±2
Max Sensor Size(Φmm)	11.0(2/3")
F/#	5.6
MTF30 (lp/mm)	>170
DOF(mm)	±2.5@F5.6
Distortion(% max)	<0.02
Telecentricity(° max)	<0.04
Length(mm)	118.0
Mount	C
Coaxial Light	YES
Field of View(mm×mm)	
1/1.8" EV76C570 (7.2x5.4)	24.0x18.0
1/1.7" IMX226 (7.5x5.6)	25.0x18.7
2/3" IMX250/264 (8.45x7.1)	28.2x23.7

WWK04-110-230



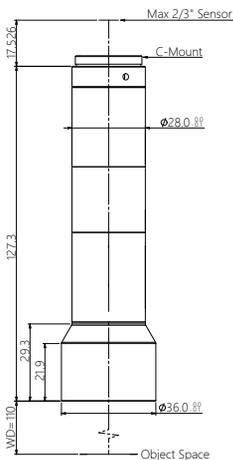
Mag.β(x)	0.4
WD(mm)	110±2
Max Sensor Size(Φmm)	11.0(2/3")
F/#	7
MTF30 (lp/mm)	>140
DOF(mm)	±1.8@F7
Distortion(% max)	<0.02
Telecentricity(° max)	<0.03
Length(mm)	140.2
Mount	C
Coaxial Light	NO
Field of View(mm×mm)	
1/1.8" EV76C570 (7.2x5.4)	18.0x13.5
1/1.7" IMX226 (7.5x5.6)	18.8x14.0
2/3" IMX250/264 (8.45x7.1)	21.1x17.8

WWK04-110C-230



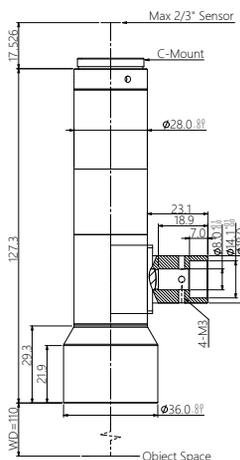
Mag.β(x)	0.4
WD(mm)	110±2
Max Sensor Size(Φmm)	11.0(2/3")
F/#	7
MTF30 (lp/mm)	>140
DOF(mm)	±1.8@F7
Distortion(% max)	<0.02
Telecentricity(° max)	<0.03
Length(mm)	140.2
Mount	C
Coaxial Light	YES
Field of View(mm×mm)	
1/1.8" EV76C570 (7.2x5.4)	18.0x13.5
1/1.7" IMX226 (7.5x5.6)	18.8x14.0
2/3" IMX250/264 (8.45x7.1)	21.1x17.8

WWK05-110-230



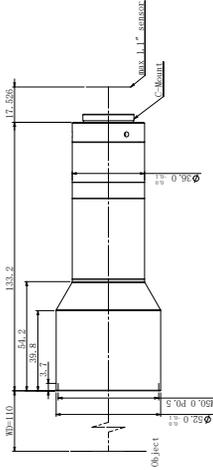
Mag.β(x)	0.5
WD(mm)	110±2
Max Sensor Size(Φmm)	11.0(2/3")
F/#	7
MTF30 (lp/mm)	>140
DOF(mm)	±1.1@F7
Distortion(% max)	<0.03
Telecentricity(° max)	<0.03
Length(mm)	127.3
Mount	C
Coaxial Light	NO
Field of View(mm×mm)	
1/1.8" EV76C570 (7.2x5.4)	14.4x10.8
1/1.7" IMX226 (7.5x5.6)	15.0x11.2
2/3" IMX250/264 (8.45x7.1)	16.9x14.2

WWK05-110C-230



Mag.β(x)	0.5
WD(mm)	110±2
Max Sensor Size(Φmm)	11.0(2/3")
F/#	7
MTF30 (lp/mm)	>140
DOF(mm)	±1.1@F7
Distortion(% max)	<0.03
Telecentricity(° max)	<0.03
Length(mm)	127.3
Mount	C
Coaxial Light	YES
Field of View(mm×mm)	
1/1.8" EV76C570 (7.2x5.4)	14.4x10.8
1/1.7" IMX226 (7.5x5.6)	15.0x11.2
2/3" IMX250/264 (8.45x7.1)	16.9x14.2

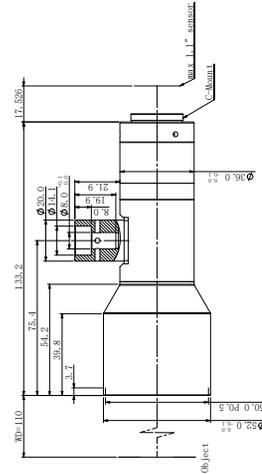
WWK05-110-111V3



Mag.β(x)	0.5
WD(mm)	110±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	7
MTF30 (lp/mm)	124
DOF(mm)	±1.1@F7
Distortion(% max)	0.1
Telecentricity(° max)	0.08
Length(mm)	133.2
Mount	C
Coaxial Light	NO

Field of View(mm x mm)	
1"IMX183(13.13x8.76)	26.3x17.5
1.1"IMX253(14.19x10.38)	28.4x20.8

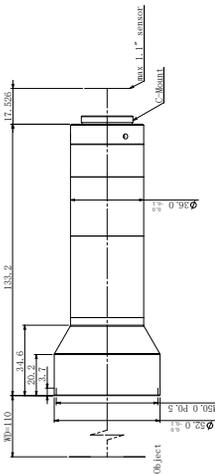
WWK05-110C-111V3



Mag.β(x)	0.5
WD(mm)	110±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	7
MTF30 (lp/mm)	124
DOF(mm)	±1.1@F7
Distortion(% max)	0.1
Telecentricity(° max)	0.08
Length(mm)	133.2
Mount	C
Coaxial Light	YES

Field of View(mm x mm)	
1"IMX183(13.13x8.76)	26.3x17.5
1.1"IMX253(14.19x10.38)	28.4x20.8

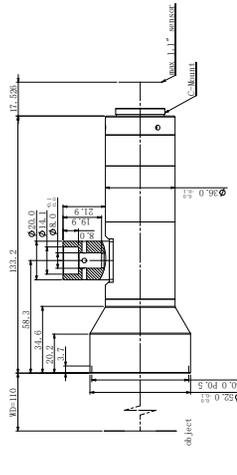
WWK063-110-111V3



Mag.β(x)	0.63
WD(mm)	110±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	7
MTF30 (lp/mm)	124
DOF(mm)	±0.7@F7
Distortion(% max)	0.1
Telecentricity(° max)	0.05
Length(mm)	133.2
Mount	C
Coaxial Light	NO

Field of View(mm x mm)	
1"IMX183(13.13x8.76)	20.8x13.9
1.1"IMX253(14.19x10.38)	22.5x16.5

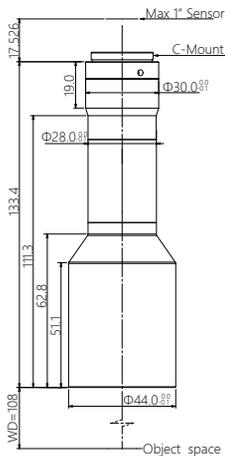
WWK063-110C-111V3



Mag.β(x)	0.63
WD(mm)	110±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	7
MTF30 (lp/mm)	124
DOF(mm)	±0.7@F7
Distortion(% max)	0.1
Telecentricity(° max)	0.05
Length(mm)	133.2
Mount	C
Coaxial Light	YES

Field of View(mm x mm)	
1"IMX183(13.13x8.76)	20.8x13.9
1.1"IMX253(14.19x10.38)	22.5x16.5

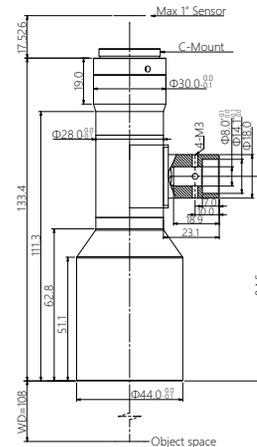
WWK07-108-110



Mag.β(x)	0.7
WD(mm)	108±2
Max Sensor Size(Φmm)	16.0(1")
F/#	7
MTF30 (lp/mm)	>135
DOF(mm)	±0.6@F7
Distortion(% max)	<0.02
Telecentricity(° max)	<0.02
Length(mm)	133.4
Mount	C
Coaxial Light	NO

Field of View(mm x mm)	
1" PYTHON 5000(12.43x9.83)	17.8x14.0
1" IMX255 (14.19x7.51)	20.3x10.7
1" IMX183 (13.13x8.76)	18.8x12.5

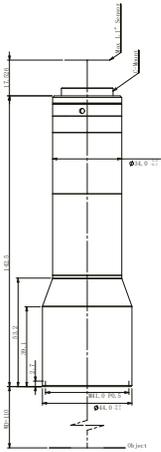
WWK07-108C-110



Mag.β(x)	0.7
WD(mm)	108±2
Max Sensor Size(Φmm)	16.0(1")
F/#	7
MTF30 (lp/mm)	>135
DOF(mm)	±0.6@F7
Distortion(% max)	<0.02
Telecentricity(° max)	<0.02
Length(mm)	133.4
Mount	C
Coaxial Light	YES

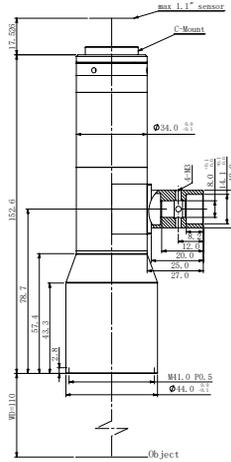
Field of View(mm x mm)	
1" PYTHON 5000(12.43x9.83)	17.8x14.0
1" IMX255 (14.19x7.51)	20.3x10.7
1" IMX183 (13.13x8.76)	18.8x12.5

WWK08-110-111V3



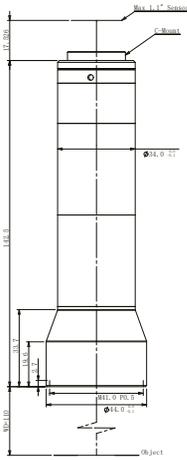
Mag.β(x)	0.8
WD(mm)	110±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	6.6
MTF30 (lp/mm)	128
DOF(mm)	±0.4@F6.6
Distortion(% max)	0.08
Telecentricity(° max)	0.06
Length(mm)	152.6
Mount	C
Coaxial Light	NO
Field of View(mm x mm)	
1" IMX183 (13.13x8.76)	16.4x11.0
1.1" IMX253 (14.19x10.38)	17.7x13.0

WWK08-110CP-111V3



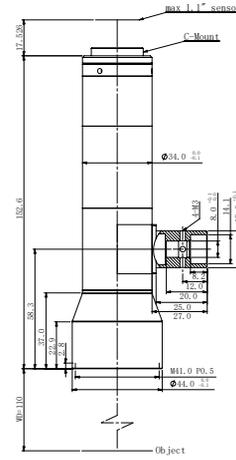
Mag.β(x)	0.8
WD(mm)	110±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	6.6
MTF30 (lp/mm)	128
DOF(mm)	±0.4@F6.6
Distortion(% max)	0.08
Telecentricity(° max)	0.06
Length(mm)	152.6
Mount	C
Coaxial Light	YES
Field of View(mm x mm)	
1" IMX183 (13.13x8.76)	16.4x11.0
1.1" IMX253 (14.19x10.38)	17.7x13.0

WWK10-110-111V3



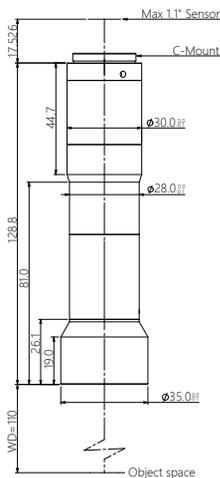
Mag.β(x)	1.0
WD(mm)	110±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	7
MTF30 (lp/mm)	128
DOF(mm)	±0.3@F7
Distortion(% max)	0.1
Telecentricity(° max)	0.06
Length(mm)	142.5
Mount	C
Coaxial Light	NO
Field of View(mm x mm)	
1" IMX183 (13.13x8.76)	13.1x8.8
1.1" IMX253 (14.19x10.38)	14.2x10.4

WWK10-110CP-111V3



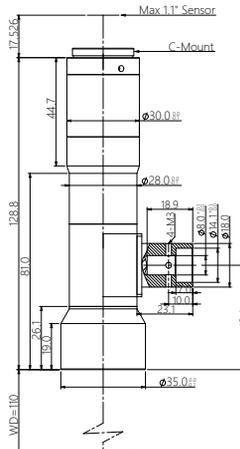
Mag.β(x)	1.0
WD(mm)	110±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	7
MTF30 (lp/mm)	152.6
DOF(mm)	±0.3@F7
Distortion(% max)	0.1
Telecentricity(° max)	0.06
Length(mm)	142.5
Mount	C
Coaxial Light	YES
Field of View(mm x mm)	
1" IMX183 (13.13x8.76)	13.1x8.8
1.1" IMX253 (14.19x10.38)	14.2x10.4

WWK15-110-111



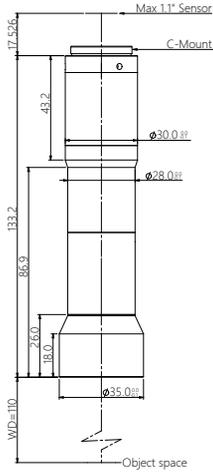
Mag.β(x)	1.5
WD(mm)	110±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	10
MTF30 (lp/mm)	>78
DOF(mm)	±0.18@F10
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
Length(mm)	128.8
Mount	C
Coaxial Light	NO
Field of View(mm x mm)	
1" IMX183 (13.13x8.76)	8.8x5.8
1.1" IMX253 (14.19x10.38)	9.5x6.9

WWK15-110C-111



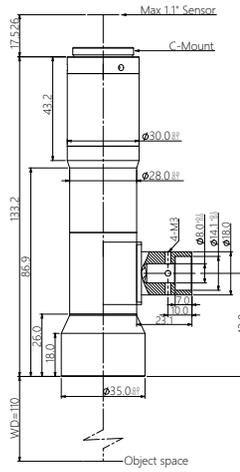
Mag.β(x)	1.5
WD(mm)	110±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	10
MTF30 (lp/mm)	>78
DOF(mm)	±0.18@F10
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
Length(mm)	128.8
Mount	C
Coaxial Light	YES
Field of View(mm x mm)	
1" IMX183 (13.13x8.76)	8.8x5.8
1.1" IMX253 (14.19x10.38)	9.5x6.9

WWK20-110-111



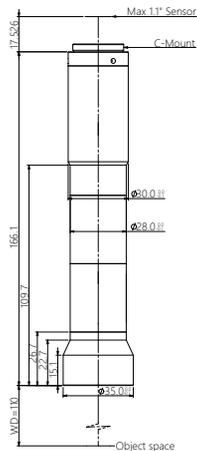
Mag.β(x)	2.0
WD(mm)	110±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	13.5
MTF30 (lp/mm)	>60
DOF(mm)	±0.14@F13.5
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
Length(mm)	133.2
Mount	C
Coaxial Light	NO
Field of View(mm×mm)	
1" IMX183 (13.13x8.76)	6.6x4.4
1.1" IMX253 (14.19x10.38)	7.1x5.2

WWK20-110C-111



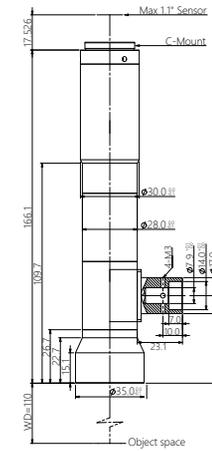
Mag.β(x)	2.0
WD(mm)	110±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	13.5
MTF30 (lp/mm)	>60
DOF(mm)	±0.14@F13.5
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
Length(mm)	133.2
Mount	C
Coaxial Light	YES
Field of View(mm×mm)	
1" IMX183 (13.13x8.76)	6.6x4.4
1.1" IMX253 (14.19x10.38)	7.1x5.2

WWK30-110-111



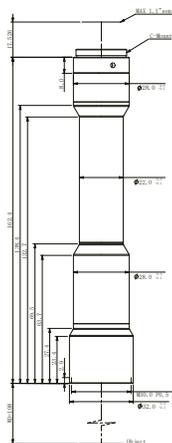
Mag.β(x)	3.0
WD(mm)	110±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	20.1
MTF30 (lp/mm)	>40
DOF(mm)	±0.09@F20.1
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
Length(mm)	166.1
Mount	C
Coaxial Light	NO
Field of View(mm×mm)	
1" IMX183 (13.13x8.76)	4.4x2.9
1.1" IMX253 (14.19x10.38)	4.7x3.5

WWK30-110C-111



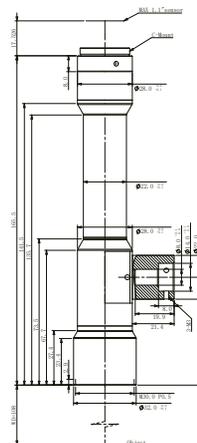
Mag.β(x)	3.0
WD(mm)	110±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	20.1
MTF30 (lp/mm)	>40
DOF(mm)	±0.09@F20.1
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
Length(mm)	166.1
Mount	C
Coaxial Light	YES
Field of View(mm×mm)	
1" IMX183 (13.13x8.76)	4.4x2.9
1.1" IMX253 (14.19x10.38)	4.7x3.5

WWK40-108-111V3



Mag.β(x)	4.0
WD(mm)	108±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	20
MTF30 (lp/mm)	43
DOF(mm)	±0.05@F20
Distortion(% max)	0.07
Telecentricity(° max)	0.05
Length(mm)	162.4
Mount	C
Coaxial Light	NO
Field of View(mm×mm)	
1" IMX183 (13.13x8.76)	3.3x2.2
1.1" IMX253 (14.19x10.38)	3.5x2.6

WWK40-108C-111V3



Mag.β(x)	4.0
WD(mm)	108±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	20
MTF30 (lp/mm)	43
DOF(mm)	±0.05@F20
Distortion(% max)	0.07
Telecentricity(° max)	0.05
Length(mm)	165.5
Mount	C
Coaxial Light	YES
Field of View(mm×mm)	
1" IMX183 (13.13x8.76)	3.3x2.2
1.1" IMX253 (14.19x10.38)	3.5x2.6

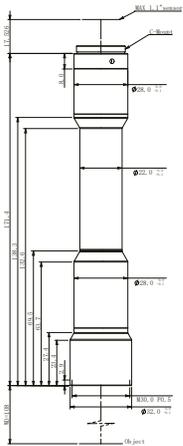
WD 110

WD180

WD220

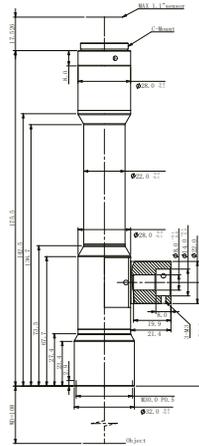
Long WD

WWK60-108-111V3



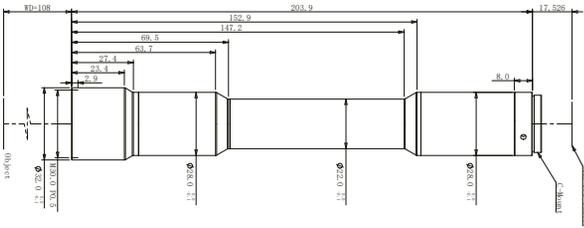
Mag.β(x)	6.0
WD(mm)	108±2
Max Sensor Size(φmm)	18.0(1.1")
F/#	29.7
MTF30 (lp/mm)	29
DOF(mm)	±0.035@F29.7
Distortion(% max)	0.04
Telecentricity(° max)	0.03
Length(mm)	171.4
Mount	C
Coaxial Light	NO
Field of View(mm xmm)	
1" IMX183 (13.13x8.76)	2.2x1.5
1.1" IMX253 (14.19x10.38)	2.4x1.7

WWK60-108C-111V3



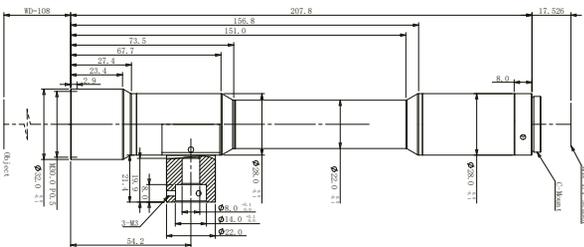
Mag.β(x)	6.0
WD(mm)	108±2
Max Sensor Size(φmm)	18.0(1.1")
F/#	29.7
MTF30 (lp/mm)	29
DOF(mm)	±0.035@F29.7
Distortion(% max)	0.04
Telecentricity(° max)	0.03
Length(mm)	175.5
Mount	C
Coaxial Light	YES
Field of View(mm xmm)	
1" IMX183 (13.13x8.76)	2.2x1.5
1.1" IMX253 (14.19x10.38)	2.4x1.7

WWK80-108-111V3



Mag.β(x)	8.0
WD(mm)	108±2
Max Sensor Size(φmm)	18.0(1.1")
F/#	40.4
MTF30 (lp/mm)	21
DOF(mm)	±0.025@F40.4
Distortion(% max)	0.08
Telecentricity(° max)	0.02
Length(mm)	203.9
Mount	C
Coaxial Light	NO
Field of View(mm xmm)	
1" IMX183 (13.13x8.76)	1.6x1.1
1.1" IMX253 (14.19x10.38)	1.8x1.3

WWK80-108C-111V3



Mag.β(x)	8.0
WD(mm)	108±2
Max Sensor Size(φmm)	18.0(1.1")
F/#	40.4
MTF30 (lp/mm)	21
DOF(mm)	±0.025@F40.4
Distortion(% max)	0.08
Telecentricity(° max)	0.02
Length(mm)	207.8
Mount	C
Coaxial Light	YES
Field of View(mm xmm)	
1" IMX183 (13.13x8.76)	1.6x1.1
1.1" IMX253 (14.19x10.38)	1.8x1.3

WWK-WD 180mm

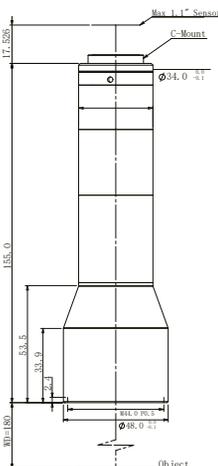
For Sensors up to 1.1"

25 MegaPixels Industrial Camera



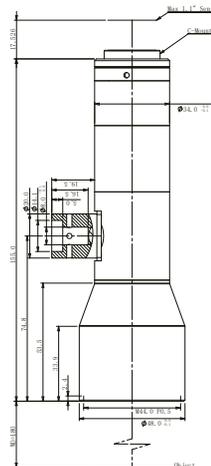
Lens Model	Mag. (x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% max)	Telecentricity (° max)	Length (mm)	Mount	Coaxial Light
WWK08-180-111V3	0.8	180±2	18.0(1.1")	8	>108	±0.5@F8	0.04	0.08	155.0	C	NO
WWK08-180C-111V3	0.8	180±2	18.0(1.1")	8	>108	±0.5@F8	0.04	0.08	155.0	C	YES
WWK10-180-111V3	1.0	180±2	18.0(1.1")	8	>107	±0.3@F8	0.01	0.08	179.1	C	NO
WWK10-180C-111V3	1.0	180±2	18.0(1.1")	8	>107	±0.3@F8	0.01	0.08	179.1	C	YES
WWK40-178-111V3	4.0	178±2	18.0(1.1")	22.2	>38	±0.06@F22.2	0.08	0.08	342.2	C	NO
WWK40-178C-111V3	4.0	178±2	18.0(1.1")	22.2	>38	±0.06@F22.2	0.08	0.08	347.2	C	YES
WWK60-178-111V3	6.0	178±2	18.0(1.1")	33.2	>27	±0.04@F33.2	0.07	0.08	345.2	C	NO
WWK60-178C-111V3	6.0	178±2	18.0(1.1")	33.2	>27	±0.04@F33.2	0.07	0.08	347.3	C	YES
WWK80-178-111V3	8.0	178±2	18.0(1.1")	43.8	>21	±0.03@F43.8	0.08	0.04	337.0	C	NO
WWK80-178C-111V3	8.0	178±2	18.0(1.1")	43.8	>21	±0.03@F43.8	0.08	0.04	347.2	C	YES

WWK08-180-111V3



Mag.β(x)	0.8
WD(mm)	180±2
Max Sensor Size(Φmm)	18.0(1/1")
F/#	8
MTF30 (lp/mm)	>108
DOF(mm)	±0.5@F8
Distortion(% max)	0.04
Telecentricity(° max)	0.08
Length(mm)	155.0
Mount	C
Coaxial Light	NO
Field of View(mmxmm)	
1" IMX183 (13.13x8.76)	16.4x11.0
1.1" IMX253 (14.19x10.38)	17.7x13.0

WWK08-180C-111V3



Mag.β(x)	0.8
WD(mm)	180±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	8
MTF30 (lp/mm)	>108
DOF(mm)	±0.5@F8
Distortion(% max)	0.04
Telecentricity(° max)	0.08
Length(mm)	155.0
Mount	C
Coaxial Light	YES
Field of View(mmxmm)	
1" IMX183 (13.13x8.76)	16.4x11.0
1.1" IMX253 (14.19x10.38)	17.7x13.0

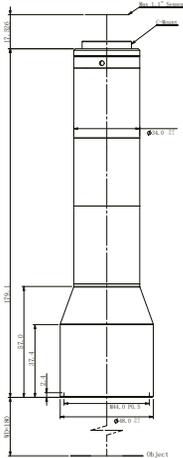
WD 110

WD 180

WD 220

Long WD

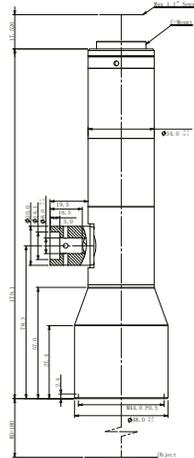
WWK10-180-111V3



Mag.β(x)	1.0
WD(mm)	180±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	8
MTF30 (lp/mm)	>107
DOF(mm)	±0.3@F8
Distortion(% max)	0.01
Telecentricity(° max)	0.08
Length(mm)	179.1
Mount	C
Coaxial Light	NO

Field of View(mmxmm)	
1" IMX183 (13.13x8.76)	13.1x8.8
1.1" IMX253 (14.19x10.38)	14.2x10.4

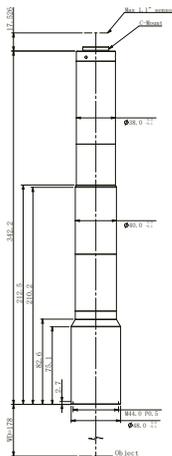
WWK10-180C-111V3



Mag.β(x)	1.0
WD(mm)	180±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	8
MTF30 (lp/mm)	>107
DOF(mm)	±0.3@F8
Distortion(% max)	0.01
Telecentricity(° max)	0.08
Length(mm)	179.1
Mount	C
Coaxial Light	YES

Field of View(mmxmm)	
1" IMX183 (13.13x8.76)	13.1x8.8
1.1" IMX253 (14.19x10.38)	14.2x10.4

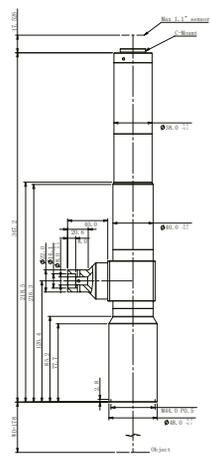
WWK40-178-111V3



Mag.β(x)	4.0
WD(mm)	178±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	22.2
MTF30 (lp/mm)	>38
DOF(mm)	±0.06@F22.2
Distortion(% max)	0.08
Telecentricity(° max)	0.08
Length(mm)	342.2
Mount	C
Coaxial Light	NO

Field of View(mmxmm)	
1" IMX183 (13.13x8.76)	3.3x2.2
1.1" IMX253 (14.19x10.38)	3.5x2.6

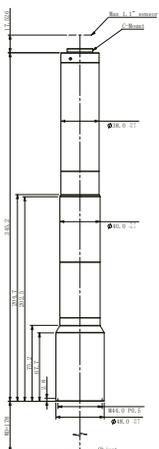
WWK40-178C-111V3



Mag.β(x)	4.0
WD(mm)	178±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	22.2
MTF30 (lp/mm)	>38
DOF(mm)	±0.06@F22.2
Distortion(% max)	0.08
Telecentricity(° max)	0.08
Length(mm)	347.2
Mount	C
Coaxial Light	YES

Field of View(mmxmm)	
1" IMX183 (13.13x8.76)	3.3x2.2
1.1" IMX253 (14.19x10.38)	3.5x2.6

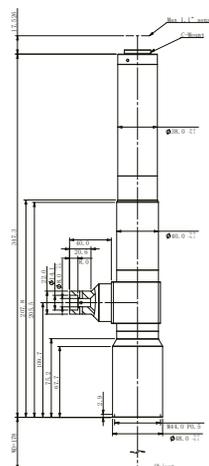
WWK60-178-111V3



Mag.β(x)	6.0
WD(mm)	178±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	33.2
MTF30 (lp/mm)	>27
DOF(mm)	±0.04@F33.2
Distortion(% max)	0.07
Telecentricity(° max)	0.08
Length(mm)	345.2
Mount	C
Coaxial Light	NO

Field of View(mmxmm)	
1" IMX183 (13.13x8.76)	2.2x1.5
1.1" IMX253 (14.19x10.38)	2.4x1.7

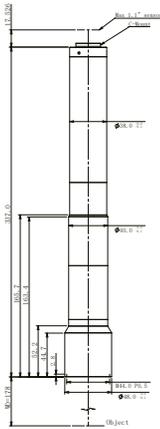
WWK60-178C-111V3



Mag.β(x)	6.0
WD(mm)	178±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	33.2
MTF30 (lp/mm)	>27
DOF(mm)	±0.04@F33.2
Distortion(% max)	0.07
Telecentricity(° max)	0.08
Length(mm)	347.3
Mount	C
Coaxial Light	YES

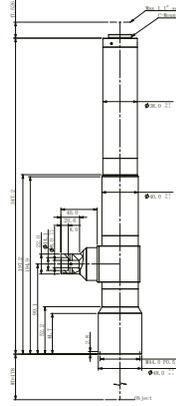
Field of View(mmxmm)	
1" IMX183 (13.13x8.76)	2.2x1.5
1.1" IMX253 (14.19x10.38)	2.4x1.7

WWK80-178-111V3



Mag.β(x)	8.0
WD(mm)	178±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	43.8
MTF30 (lp/mm)	>21
DOF(mm)	±0.03@F43.8
Distortion(% max)	0.08
Telecentricity(° max)	0.04
Length(mm)	337.0
Mount	C
Coaxial Light	NO
Field of View(mm xmm)	
1" IMX183 (13.13x8.76)	1.6x1.1
1.1" IMX253 (14.19x10.38)	1.8x1.3

WWK80-178C-111V3



Mag.β(x)	8.0
WD(mm)	178±2
Max Sensor Size(Φmm)	18.0(1.1")
F/#	43.8
MTF30 (lp/mm)	>21
DOF(mm)	±0.03@F43.8
Distortion(% max)	0.08
Telecentricity(° max)	0.04
Length(mm)	347.2
Mount	C
Coaxial Light	YES
Field of View(mm xmm)	
1" IMX183 (13.13x8.76)	1.6x1.1
1.1" IMX253 (14.19x10.38)	1.8x1.3

Hole Inspection Lenses for 360° Inside View



- 1.Specialized lens developed specifically for hole inspection.
- 2.Capable of achieving a wide FOV for hole inspection.
- 3.Capable of inspecting holes with diameters ranging from 5mm to 120mm and depths ranging from 4mm to 120mm.
- 4.Up to 2/3" Φ6mm camera.
- 5.Customizable aperture size to adjust brightness and depth of field.
- 6.Compared with traditional lenses that rely on depth of field for hole inspection, this lens has higher clarity.
- 7.Non-contact inspection, lens can be positioned outside of the hole.
- 8.Small size of the lens saves installation space.

PRHI230-82

Max Sensor Size	2/3"	
Image Circle	6.6mm	
Wavelength	Visible light	
WD	5mm-65mm	
Mount	C-mount	
Inspection Diameter (mm)	Inspection Height(mm)	WD(mm)
5	4	5
10	6	7
20	20	13
30	30	17
40	40	24
50	50	27.7
60	60	33.2
80	80	44
100	100	55
120	120	65

WWK-WD 220mm

For Sensors up to 1.1"

25 MegaPixels Industrial Camera



WD 110

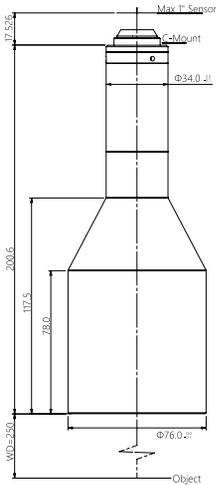
WD 180

WD 220

Long WD

Lens Model	Mag. (x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% max)	Telecentricity (° max)	Length (mm)	Mount	Coaxial Light
WWK022-220-230-ALV2	0.22	220±3	11.0(2/3")	6.9	>130	±5.7@F6.9	<0.05	<0.05	190	C	NO
WWK022-220-111	0.22	220±3	18.0(1.1")	8	>110	±6.6@F8	<0.1	<0.15	232.9	C	NO
WWK023-220-111	0.23	220±3	18.0(1.1")	8	>110	±6.0@F8	<0.1	<0.18	233.0	C	NO
WWK0246-220-111	0.246	220±3	18.0(1.1")	8	>100	±5.3@F8	<0.1	<0.13	232.9	C	NO
WWK0275-220-110	0.275	220±3	16.0(1")	8	>113	±8.5@F8	<0.03	<0.1	242.6	C	NO
WWK0275-220-111	0.275	220±3	18.0(1.1")	8	>105	±4.2@F8	<0.1	<0.15	242.9	C	NO
WWK03-250-110	0.3	250±3	16.0(1")	8	>102	±3.6@F8	<0.2	<0.2	200.6	C	NO
WWK032-220-110	0.32	220±3	16.0(1")	12.1	>75	±4.7@F12.1	<0.15	<0.07	210.0	C	NO
WWK0345-220-111	0.345	220±3	18.0(1.1")	8	>115	±2.7@F8	<0.1	<0.1	212.2	C	NO
WWK0367-220-110	0.367	220±3	16.0(1")	8	>115	±4.7@F16	<0.1	<0.1	214.9	C	NO
WWK0367-220-111	0.367	220±3	18.0(1.1")	8	>115	±2.4@F8	<0.1	<0.1	213.1	C	NO
WWK046-220-110	0.46	220±3	16.0(1")	11.6	>80	±2.2@F11.6	<0.25	<0.1	205.2	C	NO
WWK046-220C-110	0.46	220±3	16.0(1")	11.6	>80	±2.2@F11.6	<0.25	<0.1	205.2	C	YES
WWK05-220-110	0.5	220±3	16.0(1")	8	>110	±1.3@F8	<0.1	<0.1	205.7	C	NO
WWK05-220C-110	0.5	220±3	16.0(1")	8	>110	±1.3@F8	<0.1	<0.1	205.7	C	YES
WWK05-220-111	0.5	220±3	18.0(1.1")	7	>140	±1.1@F7	<0.05	<0.02	205.4	C	NO
WWK05-220C-111	0.5	220±3	18.0(1.1")	7	>140	±1.1@F7	<0.05	<0.02	205.4	C	YES
WWK055-220-110	0.55	220±3	16.0(1")	8	>110	±1.1@F8	<0.1	<0.1	215.4	C	NO
WWK055-220-111	0.55	220±3	18.0(1.1")	10.1	>90	±1.3@F10.1	<0.1	<0.1	215.6	C	NO
WWK055-220C-111	0.55	220±3	18.0(1.1")	10.1	>90	±1.3@F10.1	<0.1	<0.1	215.6	C	YES

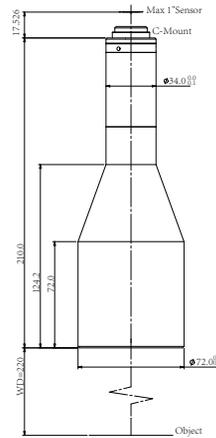
WWK03-250-110



Mag.β(x)	0.3
WD(mm)	250±3
Max Sensor Size(Φmm)	16(1")
F/#	8
MTF30 (lp/mm)	>102
DOF(mm)	±3.6@F8
Distortion(% max)	<0.2
Telecentricity(° max)	<0.2
Length(mm)	200.6
Mount	C
Coaxial Light	NO

Field of View(mm x mm)	
1" PYTHON 5000(12.43x9.83)	41.4x32.8
1" IMX255 (14.19x7.51)	47.3x25.0
1" IMX183 (13.13x8.76)	43.8x29.2

WWK032-220-110

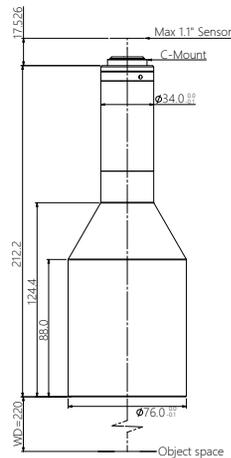


Mag.β(x)	0.32
WD(mm)	220±3
Max Sensor Size(Φmm)	16(1")
F/#	12.1
MTF30 (lp/mm)	>75
DOF(mm)	±4.7@F12.1
Distortion(% max)	<0.15
Telecentricity(° max)	<0.07
Length(mm)	210.0
Mount	C
Coaxial Light	NO

Field of View(mm x mm)	
1" PYTHON 5000(12.43x9.83)	38.8x30.7
1" IMX255 (14.19x7.51)	44.3x23.5
1" IMX183 (13.13x8.76)	41.0x27.4

WD 110

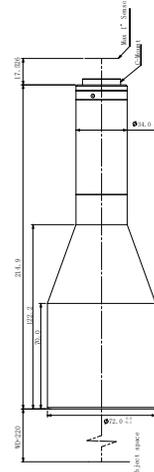
WWK0345-220-111



Mag.β(x)	0.345
WD(mm)	220±3
Max Sensor Size(Φmm)	18.0(1.1")
F/#	8
MTF30 (lp/mm)	>115
DOF(mm)	±2.7@F8
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
Length(mm)	212.2
Mount	C
Coaxial Light	NO

Field of View(mm x mm)	
1" IMX183 (13.13x8.76)	38.1x25.4
1.1" IMX253 (14.19x10.38)	41.1x30.1

WWK0367-220-110



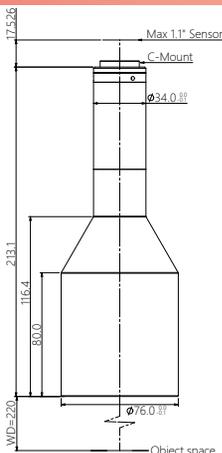
Mag.β(x)	0.367
WD(mm)	220±3
Max Sensor Size(Φmm)	16.0(1")
F/#	8
MTF30 (lp/mm)	>115
DOF(mm)	±4.7@F16
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
Length(mm)	214.9
Mount	C
Coaxial Light	NO

Field of View(mm x mm)	
1" PYTHON 5000(12.43x9.83)	33.9x26.8
1" IMX255 (14.19x7.51)	38.7x20.5
1" IMX183 (13.13x8.76)	35.8x23.9

WD 180

WD 220

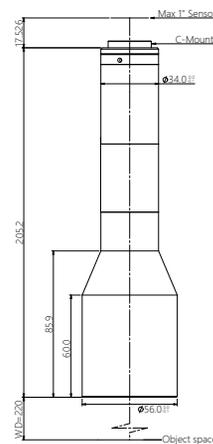
WWK0367-220-111



Mag.β(x)	0.367
WD(mm)	220±3
Max Sensor Size(Φmm)	18.0(1.1")
F/#	8
MTF30 (lp/mm)	>115
DOF(mm)	±2.4@F8
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
Length(mm)	213.1
Mount	C
Coaxial Light	NO

Field of View(mm x mm)	
1" IMX183 (13.13x8.76)	35.8x23.9
1.1" IMX253 (14.19x10.38)	38.7x28.3

WWK046-220-110

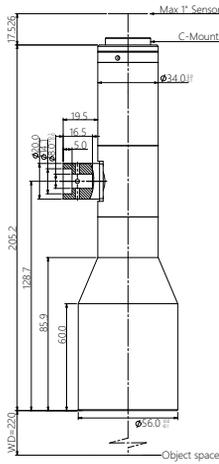


Mag.β(x)	0.46
WD(mm)	220±3
Max Sensor Size(Φmm)	16.0(1")
F/#	11.6
MTF30 (lp/mm)	>80
DOF(mm)	±2.2@F11.6
Distortion(% max)	<0.25
Telecentricity(° max)	<0.1
Length(mm)	205.2
Mount	C
Coaxial Light	NO

Field of View(mm x mm)	
1" PYTHON 5000(12.43x9.83)	27.0x21.4
1" IMX255 (14.19x7.51)	30.8x16.3
1" IMX183 (13.13x8.76)	28.5x19.0

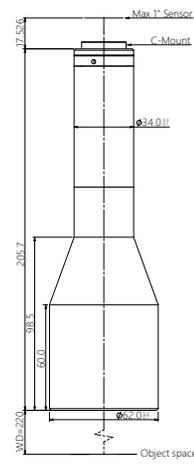
Long WD

WWK046-220C-110



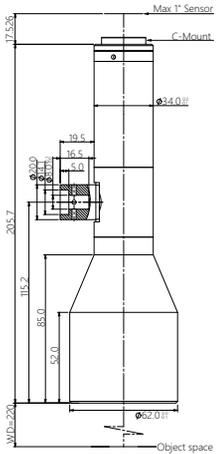
Mag.β(x)	0.46
WD(mm)	220±3
Max Sensor Size(Φmm)	16.0(1")
F/#	11.6
MTF30 (lp/mm)	>80
DOF(mm)	±2.2@F11.6
Distortion(% max)	<0.25
Telecentricity(° max)	<0.1
Length(mm)	205.2
Mount	C
Coaxial Light	YES
Field of View(mm xmm)	
1" PYTHON 5000(12.43x9.83)	27.0x21.4
1" IMX255 (14.19x7.51)	30.8x16.3
1" IMX183 (13.13x8.76)	28.5x19.0

WWK05-220-110



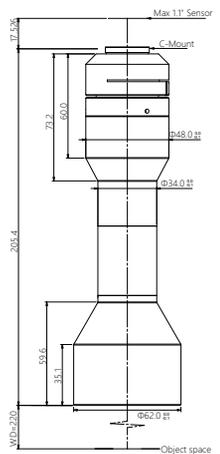
Mag.β(x)	0.5
WD(mm)	220±3
Max Sensor Size(Φmm)	16.0(1")
F/#	8
MTF30 (lp/mm)	>110
DOF(mm)	±1.3@F8
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
Length(mm)	205.7
Mount	C
Coaxial Light	NO
Field of View(mm xmm)	
1" PYTHON 5000(12.43x9.83)	24.9x19.7
1" IMX255 (14.19x7.51)	28.4x15.0
1" IMX183 (13.13x8.76)	26.3x17.5

WWK05-220C-110



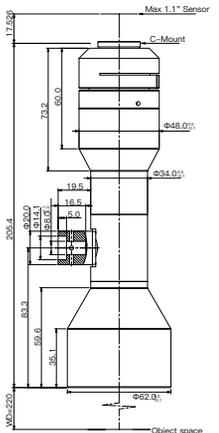
Mag.β(x)	0.5
WD(mm)	220±3
Max Sensor Size(Φmm)	16.0(1")
F/#	8
MTF30 (lp/mm)	>110
DOF(mm)	±1.3@F8
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
Length(mm)	205.7
Mount	C
Coaxial Light	YES
Field of View(mm xmm)	
1" PYTHON 5000(12.43x9.83)	24.9x19.7
1" IMX255 (14.19x7.51)	28.4x15.0
1" IMX183 (13.13x8.76)	26.3x17.5

WWK05-220-111



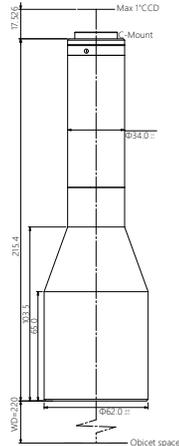
Mag.β(x)	0.5
WD(mm)	220±3
Max Sensor Size(Φmm)	18.0(1.1")
F/#	7
MTF30 (lp/mm)	>140
DOF(mm)	±1.1@F7
Distortion(% max)	<0.05
Telecentricity(° max)	<0.02
Length(mm)	205.4
Mount	C
Coaxial Light	NO
Field of View(mm xmm)	
1" IMX183 (13.13x8.76)	26.3x17.5
1.1" IMX253 (14.19x10.38)	28.4x20.8

WWK05-220C-111



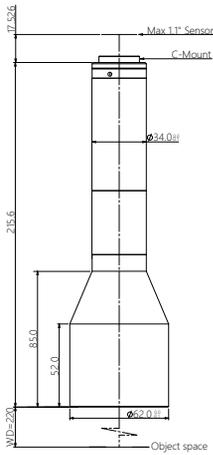
Mag.β(x)	0.5
WD(mm)	220±3
Max Sensor Size(Φmm)	18.0(1.1")
F/#	7
MTF30 (lp/mm)	>140
DOF(mm)	±1.1@F7
Distortion(% max)	<0.05
Telecentricity(° max)	<0.02
Length(mm)	205.4
Mount	C
Coaxial Light	YES
Field of View(mm xmm)	
1" IMX183 (13.13x8.76)	26.3x17.5
1.1" IMX253 (14.19x10.38)	28.4x20.8

WWK055-220-110



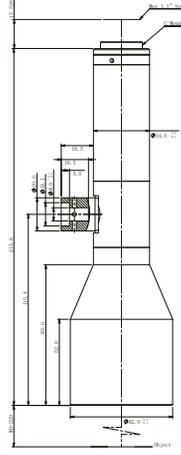
Mag.β(x)	0.55
WD(mm)	220±3
Max Sensor Size(Φmm)	16.0(1")
F/#	8
MTF30 (lp/mm)	>110
DOF(mm)	±1.1@F8
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
Length(mm)	215.4
Mount	C
Coaxial Light	NO
Field of View(mm xmm)	
1" PYTHON 5000(12.43x9.83)	22.6x17.9
1" IMX255 (14.19x7.51)	25.8x13.7
1" IMX183 (13.13x8.76)	23.9x15.9

WWK055-220-111



Mag.β(x)	0.55
WD(mm)	220±3
Max Sensor Size(φmm)	18.0(1.1")
F/#	10.1
MTF30 (lp/mm)	>90
DOF(mm)	±1.3@F10.1
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
Length(mm)	215.6
Mount	C
Coaxial Light	NO
Field of View(mmxmm)	
1" IMX183 (13.13x8.76)	23.9x15.9
1.1" IMX253 (14.19x10.38)	25.8x18.9

WWK055-220C-111



Mag.β(x)	0.55
WD(mm)	220±3
Max Sensor Size(φmm)	18.0(1.1")
F/#	10.1
MTF30 (lp/mm)	>90
DOF(mm)	±1.3@F10.1
Distortion(% max)	<0.1
Telecentricity(° max)	<0.1
Length(mm)	215.6
Mount	C
Coaxial Light	NO
Field of View(mmxmm)	
1" IMX183 (13.13x8.76)	23.9x15.9
1.1" IMX253 (14.19x10.38)	25.8x18.9

WD 110

WD 180

WD 220

Long WD

360° Catadioptric Lenses



Max Sensor Size	Image Circle	Imaging	Matching	Lens	Working Wavelength	Inspection Diameter
			FA lens focal length	Mount	(nm)	(mm)
2/3"	7.07	Simultaneous Imaging of Outer Wall	16mm	C-mount	450~650	5~30

Object Diameter(mm)	Object Height(mm)	WD (mm)	Top and Side Walls
			Can the top and outer wall be imaged simultaneously?
5	3	41	Outer Wall Imaging
7	5	39	Outer wall and Top Imaging Simultaneously
10	6	36	Outer wall and Top Imaging Simultaneously
15	11	30	Outer wall and Top Imaging Simultaneously
20	13	24	Outer wall and Top Imaging Simultaneously
25	18	15	Outer wall and Top Imaging Simultaneously
30	18	10	Outer Wall Imaging

WWK-Long WD

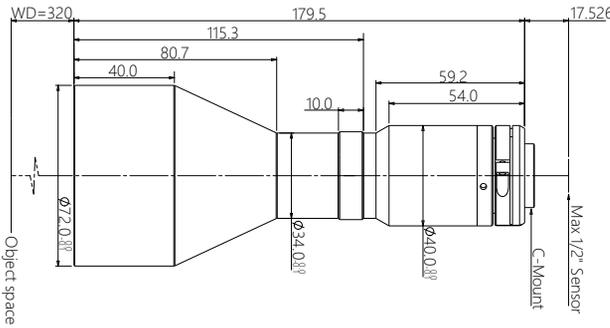
For Sensors up to 1/2"

10 MegaPixels Industrial Camera



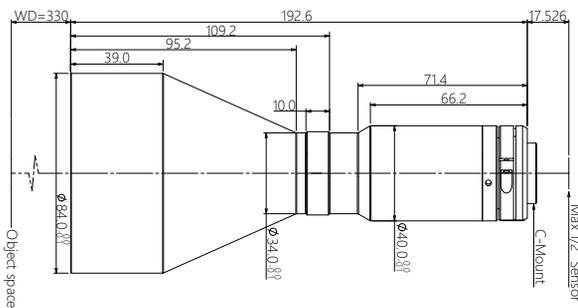
Lens Model	Mag. (x)	WD (mm)	Sensor Size (Φmm)	F/#	MTF30 (lp/mm)	DOF (mm)	Distortion (% max)	Telecentricity (° max)	Length (mm)	Mount	Coaxial Light
WWK015-320-120-AL	0.15	320±3	8(1/2")	7	>130	±12.4@F7	<0.05	<0.1	179.5	C	NO
WWK012-330-120-AL	0.12	330±3	8(1/2")	7	>135	±19.4@F7	<0.05	<0.1	192.6	C	NO

WWK015-320-120-AL



Mag.β(x)	0.15
WD(mm)	320±3
Max Sensor Size(Φmm)	8(1/2")
F/#	7
MTF30 (lp/mm)	>130
DOF(mm)	±12.4@F7
Distortion(% max)	<0.05
Telecentricity(° max)	<0.1
Length(mm)	179.5
Mount	C
Coaxial Light	NO
Field of View(mmxmm)	
1/2.5" 9P001/31 (5.7x4.28)	38.0x28.5
1/2.3" 9J003 (6.44x4.62)	42.9x30.8

WWK012-330-120-AL



Mag.β(x)	0.12
WD(mm)	330±3
Max Sensor Size(Φmm)	8(1/2")
F/#	7
MTF30 (lp/mm)	>135
DOF(mm)	±19.4@F7
Distortion(% max)	<0.05
Telecentricity(° max)	<0.1
Length(mm)	192.6
Mount	C
Coaxial Light	NO
Field of View(mmxmm)	
1/2.5" 9P001/31 (5.7x4.28)	47.5x35.7
1/2.3" 9J003 (6.44x4.62)	53.7x38.5



Same Price
Higher Performance

Same Quality
Faster Delivery

Same Project
Better Solution



VICO imaging
com

HONGKONG VICO TECHNOLOGY LIMITED

sales@vicoimaging.com
www.vicoimaging.com