

Telecentric Lens

DTTL Series Telecentric Lens

Model No:

2/3 Chip Support



DTTL Series

2/3 Chip Support

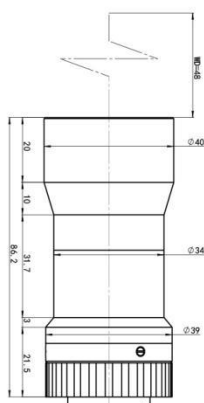
Target camera



- Professional customization of multiples and depth of field
- Dual telecentric design High definition Standard F interface
- Can be equipped with a dedicated parallel light
- For high-precision detection and measurement

Lens Model	Mag	WD	DOF	Telecen-	Optical	Aperture	Mtf>0.3	Mount	1/2"	1/1.7"IMX	1/1.8"EV76C	2/3"IMX250/
			mm	tricity	distortion	F/#	(lp/mm)		(6.4*4.8)mm	226(7.5*5.6)mm	570(7.1*5.3)mm	264*(8.4*7.1)mm
DTTL48-046X23	0.46X	48	1	<0.1	<0.1	5	178	C	13.9*10.4	16.3*12.2	15.4*11.5	18.3*15.4
DTTL50-039X23	0.39X	50	1.8	<0.1	<0.1	4	110	C	16.4*12.3	19.2*14.4	18.2*13.6	21.5*18.2
DTTL60-035X23	0.35X	60	1.9	<0.1	<0.1	5	165	C	18.3*13.7	21.4*16	20.3*15.1	24*20.3
DTTL110-031X23	0.31X	110	1.9	<0.1	<0.1	5	150	C	20.6*15.5	24.2*18.1	22.9*17.1	27.1*22.9
DTTL120-0271X23	0.271X	120	2.5	<0.1	<0.1	5	180	C	23.6*17.7	27.7*20.7	26.2*19.6	31*26.2
DTTL127-023X23	0.23X	127	3	<0.1	<0.1	5	150	C	27.8*20.9	32.6*24.3	30.9*23	36.5*30.9
DTTL140-021X23	0.21X	140	4.5	<0.1	<0.1	6	170	C	30.5*22.9	35.7*26.7	33.8*25.2	40*33.8
DTTL170-018X23	0.18X	170	5.5	<0.1	<0.1	6	130	C	35.6*26.7	41.7*31.1	39.4*29.4	46.7*39.4
DTTL250-0165X23	0.165X	250	5.8	<0.1	<0.1	7	120	C	38.8*29.1	45.5*33.9	43*32.1	50.9*43
DTTL180-016X23	0.16X	180	6.3	<0.1	<0.1	8	120	C	40*30	46.9*35	44.4*33.1	52.5*44.4
DTTL208-014X23	0.14X	208	6.8	<0.1	<0.1	5	200	C	45.7*34.3	53.6*40	50.7*37.9	60*50.7
DTTL195-013X23	0.13X	195	6.8	<0.1	<0.1	7	135	C	49.2*36.9	57.7*43.1	54.6*40.8	64.6*54.6
DTTL230-012X23	0.12X	230	6.9	<0.1	<0.1	5	200	C	53.3*40	62.5*46.7	59.2*44.2	70*59.2
DTTL250-01X23	0.1X	250	7.3	<0.1	<0.1	7	135	C	64*48	75*56	71*53	84*71
DTTL300-009X23	0.09X	300	8.5	<0.1	<0.1	6	100	C	71.1*53.3	83.3*62.2	78.9*58.9	93.3*78.9
DTTL250-008X23	0.08X	250	9	<0.1	<0.1	5	100	C	80*60	93.8*70	88.8*66.3	105*88.8
DTTL310-00725X23	0.0725X	310	12.5	<0.1	<0.1	6	180	C	88.3*66.2	103.4*77.2	97.9*73.1	115.9*97.9
DTTL350-0067X23	0.067X	350	15.5	<0.1	<0.1	5	200	C	95.5*71.6	111.9*83.6	106*79.1	125.4*106
DTTL360-006X23	0.06X	360	16	<0.1	<0.1	6	162	C	106.7*80	125*93.3	118.3*88.3	140*118.3
DTTL480-006X23	0.06X	480	21.7	<0.1	<0.1	6	150	C	106.7*80	125*93.3	118.3*88.3	140*118.3
DTTL330-0057X23	0.057X	330	25.7	<0.1	<0.1	6	200	C	112.3*84.2	131.6*98.2	124.6*93	147.4*124.6
DTTL405-00462X23	0.0462X	405	28	<0.1	<0.1	5	200	C	138.5*103.9	162.3*121.2	153.7*114.7	181.8*153.7
DTTL480-0043X23	0.043X	480	29	<0.1	<0.1	5	200	C	148.8*111.6	174.4*130.2	165.1*123.3	195.3*165.1
DTTL500-0035X23	0.035X	500	32.5	<0.1	<0.1	7	150	C	182.9*137.1	214.3*160	202.9*151.4	240*202.9

DTTL48-046X23



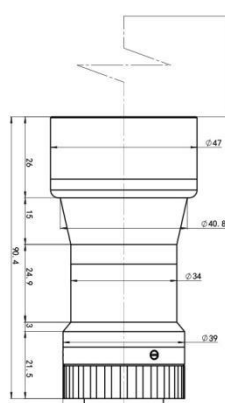
Main parameters

Mag	0.46X
WD	48
DOF(mm)	1
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	5
MTF>0.3(lp/mm)	178
Mount	C

Field of view

1/2" (6.4*4.8)mm	13.9*10.4
1/1.7" IMX226 (7.5*5.6)mm	16.3*12.2
1/1.8" EV76C570 (7.1*5.3)mm	15.4*11.5
2/3" IMX250/264" (8.4*7.1)mm	18.3*15.4

DTTL50-039X23



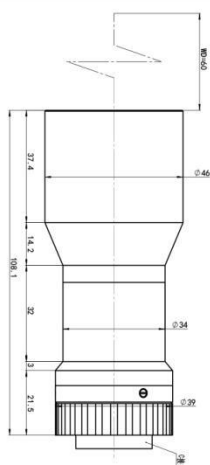
Main parameters

Mag	0.39X
WD	50
DOF(mm)	1.8
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	4
MTF>0.3(lp/mm)	110
Mount	C

Field of view

1/2" (6.4*4.8)mm	16.4*12.3
1/1.7" IMX226 (7.5*5.6)mm	19.2*14.4
1/1.8" EV76C570 (7.1*5.3)mm	18.2*13.6
2/3" IMX250/264" (8.4*7.1)mm	21.5*18.2

DTTL60-035X23



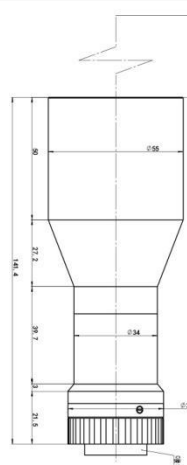
Main parameters

Mag	0.35X
WD	60
DOF(mm)	1.9
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	5
MTF>0.3(lp/mm)	165
Mount	C

Field of view

1/2" (6.4*4.8)mm	18.3*13.7
1/1.7" IMX226 (7.5*5.6)mm	21.4*16
1/1.8" EV76C570 (7.1*5.3)mm	20.3*15.1
2/3" IMX250/264" (8.4*7.1)mm	24*20.3

DTTL110-031X23



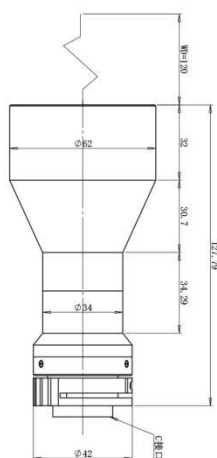
Main parameters

Mag	0.31X
WD	110
DOF(mm)	1.9
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	5
MTF>0.3(lp/mm)	150
Mount	C

Field of view

1/2" (6.4*4.8)mm	20.6*15.5
1/1.7" IMX226 (7.5*5.6)mm	24.2*18.1
1/1.8" EV76C570 (7.1*5.3)mm	22.9*17.1
2/3" IMX250/264" (8.4*7.1)mm	27.1*22.9

DTTL120-0271X23



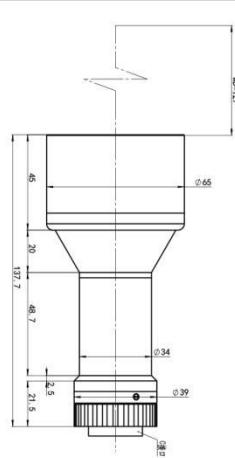
Main parameters

Mag	0.271X
WD	120
DOF(mm)	2.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	5
MTF>0.3(lp/mm)	180
Mount	C

Field of view

1/2" (6.4*4.8)mm	23.6*17.7
1/1.7" IMX226 (7.5*5.6)mm	27.7*20.7
1/1.8" EV76C570 (7.1*5.3)mm	26.2*19.6
2/3" IMX250/264" (8.4*7.1)mm	31*26.2

DTTL127-023X23



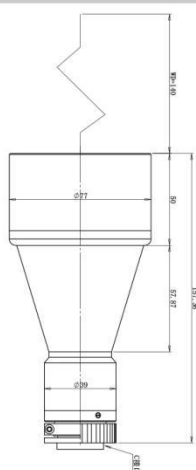
Main parameters

Mag	0.23X
WD	127
DOF(mm)	3
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	5
MTF>0.3(lp/mm)	150
Mount	C

Field of view

1/2" (6.4*4.8)mm	27.8*20.9
1/1.7" IMX226 (7.5*5.6)mm	32.6*24.3
1/1.8" EV76C570 (7.1*5.3)mm	30.9*23
2/3" IMX250/264" (8.4*7.1)mm	36.5*30.9

DTTL140-021X23



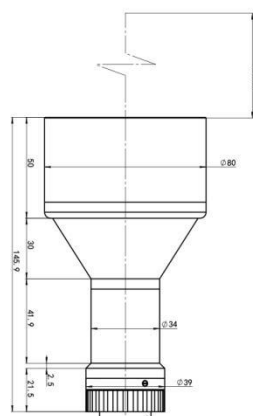
Main parameters

Mag	0.21X
WD	140
DOF(mm)	4.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	6
MTF>0.3(lp/mm)	170
Mount	C

Field of view

1/2" (6.4*4.8)mm	30.5°22.9
1/1.7"IMX226(7.5*5.6)mm	35.7°26.7
1/1.8"EV76C570(7.1*5.3)mm	33.8°25.2
2/3"IMX250/264"(8.4*7.1)mm	40°33.8

DTTL170-018X23



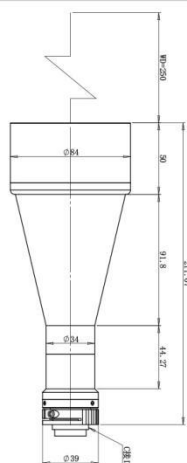
Main parameters

Mag	0.18X
WD	170
DOF(mm)	5.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	6
MTF>0.3(lp/mm)	130
Mount	C

Field of view

1/2" (6.4*4.8)mm	35.6°26.7
1/1.7"IMX226(7.5*5.6)mm	41.7°31.1
1/1.8"EV76C570(7.1*5.3)mm	39.4°29.4
2/3"IMX250/264"(8.4*7.1)mm	46.7°39.4

DTTL250-0165X23



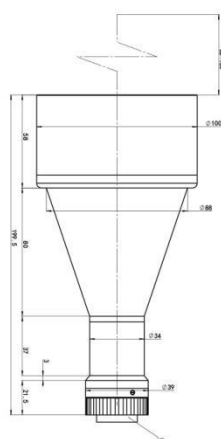
Main parameters

Mag	0.165X
WD	250
DOF(mm)	5.8
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	7
MTF>0.3(lp/mm)	120
Mount	C

Field of view

1/2" (6.4*4.8)mm	38.8°29.1
1/1.7"IMX226(7.5*5.6)mm	45.5°33.9
1/1.8"EV76C570(7.1*5.3)mm	43°32.1
2/3"IMX250/264"(8.4*7.1)mm	50.9°43

DTTL180-016X23



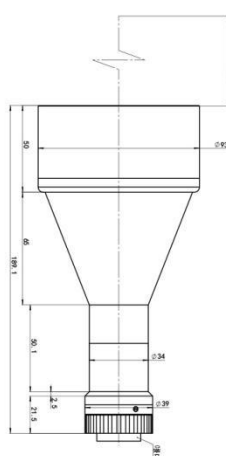
Main parameters

Mag	0.16X
WD	180
DOF(mm)	6.3
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	8
MTF>0.3(lp/mm)	120
Mount	C

Field of view

1/2" (6.4*4.8)mm	40°30
1/1.7"IMX226(7.5*5.6)mm	46.9°35
1/1.8"EV76C570(7.1*5.3)mm	44.4°33.1
2/3"IMX250/264"(8.4*7.1)mm	52.5°44.4

DTTL208-014X23



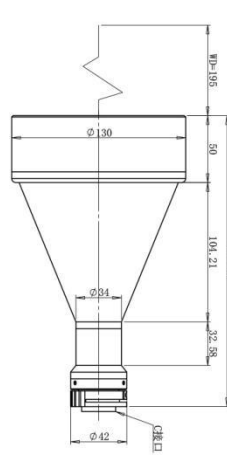
Main parameters

Mag	0.14X
WD	208
DOF(mm)	6.8
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	5
MTF>0.3(lp/mm)	200
Mount	C

Field of view

1/2" (6.4*4.8)mm	45.7°34.3
1/1.7"IMX226(7.5*5.6)mm	53.6°40
1/1.8"EV76C570(7.1*5.3)mm	50.7°37.9
2/3"IMX250/264"(8.4*7.1)mm	60°50.7

DTTL195-013X23



Main parameters

Mag	0.13X
WD	195
DOF(mm)	6.8
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	7
MTF>0.3(lp/mm)	135
Mount	C

Field of view

1/2" (6.4*4.8)mm	49.2°36.9
1/1.7"IMX226(7.5*5.6)mm	57.7°43.1
1/1.8"EV76C570(7.1*5.3)mm	54.6°40.8
2/3"IMX250/264"(8.4*7.1)mm	64.6°54.6

Mag	0.12X
WD	230
DOF(mm)	6.9
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	5
MTF>0.3(lp/mm)	200
Mount	C

1/2"(6.4*4.8)mm	53.3*40
1/1.7"IMX226(7.5*5.6)mm	62.5*46.7
1/1.8"EV76C570(7.1*5.3)mm	59.2*44.2
2/3"IMX250/264"(8.4*7.1)mm	70*59.2

Technical drawing of a mechanical part, likely a nozzle or probe, showing dimensions in millimeters. The drawing includes a side view and a cross-sectional view. Key dimensions include: overall length 250 mm, top diameter 40 mm, middle diameter 50 mm, bottom diameter 110 mm, and various section diameters (24, 26, 29 mm). A scale bar indicates 0 to 10 mm.

Mag	0.1X
WD	250
DOF(mm)	7.3
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	7
MTF>0.3(lp/mm)	135
Mount	C

1/2"(6.4*4.8)mm	64°48
1/1.7"MX226(7.5*5.6)mm	75°56
1/1.8"EV76C570(7.1*5.3)mm	71°53
2/3"MX250/264"(8.4*7.1)mm	84°71

Technical drawing of a tapered container with dimensions in mm. The drawing shows a side view of a container with a tapered body and a base. Dimensions are given in mm: total height 900, top diameter 46, body diameter 45, base diameter 34, and base diameter 39. A label 'C/E 1' points to the base. A note 'C/E 1' is also present.

Mag	0.09X
WD	300
DOF(mm)	8.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	6
MTF>0.3(lp/mm)	100
Mount	C

1/2"(6.4*4.8)mm	71.1*53.3
1/1.7"IMX226(7.5*5.6)mm	83.3*62.2
1/1.8"EV76C570(7.1*5.3)mm	78.9*58.9
2/3"IMX250/264"(8.4*7.1)mm	93.3*78.9

[illegible]

Mag	0.08X
WD	250
DOF(mm)	9
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	5
MTF>0.3(lp/mm)	100
Mount	C

1/2"(6.4*4.8)mm	80°60
1/1.7"MX226(7.5*5.6)mm	93.8°70
1/1.8"EV76C570(7.1*5.3)mm	88.8°66.3
2/3"MX250/264"(8.4*7.1)mm	105°88.8

Mag	0.0725X
WD	310
DOF(mm)	12.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	6
MTF>0.3(lp/mm)	180
Mount	C

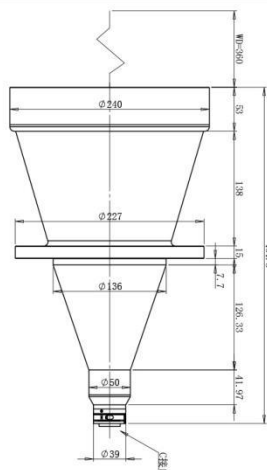
1/2"(6.4*4.8)mm	88.3*66.2
1/1.7"IMX226(7.5*5.6)mm	103.4*77.2
1/1.8"EV76C570(7.1*5.3)mm	97.9*73.1
2/3"IMX250/264"(8.4*7.1)mm	115.9*97.9

[illegible]

Mag	0.067X
WD	350
DOF(mm)	15.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	5
MTF>0.3(lp/mm)	200
Mount	C

1/2"(6.4*4.8)mm	95.5*71.6
1/1.7"IMX226(7.5*5.6)mm	111.9*83.6
1/1.8"EV76C570(7.1*5.3)mm	106*79.1
2/3"IMX250/264"(8.4*7.1)mm	125.4*106

DTTL360-006X23



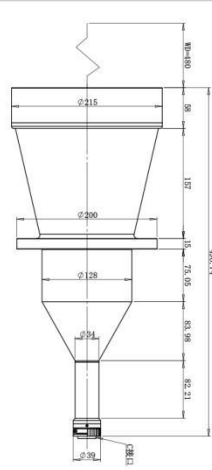
Main parameters

Mag	0.06X
WD	360
DOF(mm)	16
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	6
MTF>0.3(lp/mm)	162
Mount	C

Field of view

1/2" (6.4*4.8)mm	106.7*80
1/1.7"IMX226(7.5*5.6)mm	125*93.3
1/1.8"EV76C570(7.1*5.3)mm	118.3*88.3
2/3"IMX250/264"(8.4*7.1)mm	140*118.3

DTTL480-006X23



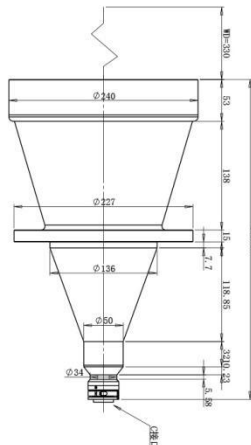
Main parameters

Mag	0.06X
WD	480
DOF(mm)	21.7
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	6
MTF>0.3(lp/mm)	150
Mount	C

Field of view

1/2" (6.4*4.8)mm	106.7*80
1/1.7"IMX226(7.5*5.6)mm	125*93.3
1/1.8"EV76C570(7.1*5.3)mm	118.3*88.3
2/3"IMX250/264"(8.4*7.1)mm	140*118.3

DTTL330-0057X23



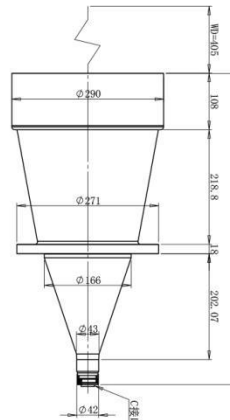
Main parameters

Mag	0.057X
WD	330
DOF(mm)	25.7
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	6
MTF>0.3(lp/mm)	200
Mount	C

Field of view

1/2" (6.4*4.8)mm	112.3*84.2
1/1.7"IMX226(7.5*5.6)mm	131.6*98.2
1/1.8"EV76C570(7.1*5.3)mm	124.6*93
2/3"IMX250/264"(8.4*7.1)mm	147.4*124.6

DTTL405-00462X23



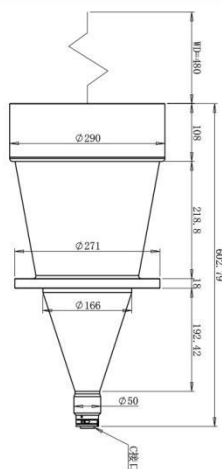
Main parameters

Mag	0.0462X
WD	405
DOF(mm)	28
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	5
MTF>0.3(lp/mm)	200
Mount	C

Field of view

1/2" (6.4*4.8)mm	138.5*103.9
1/1.7"IMX226(7.5*5.6)mm	162.3*121.2
1/1.8"EV76C570(7.1*5.3)mm	153.7*114.7
2/3"IMX250/264"(8.4*7.1)mm	181.8*153.7

DTTL480-0043X23



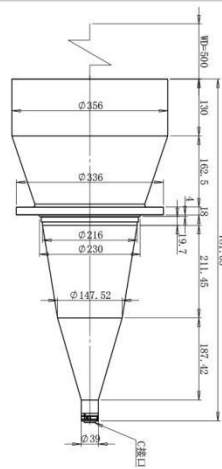
Main parameters

Mag	0.043X
WD	480
DOF(mm)	29
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	5
MTF>0.3(lp/mm)	200
Mount	C

Field of view

1/2" (6.4*4.8)mm	148.8*111.6
1/1.7"IMX226(7.5*5.6)mm	174.4*130.2
1/1.8"EV76C570(7.1*5.3)mm	165.1*123.3
2/3"IMX250/264"(8.4*7.1)mm	195.3*165.1

DTTL500-0035X23



Main parameters

Mag	0.035X
WD	500
DOF(mm)	32.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	7
MTF>0.3(lp/mm)	150
Mount	C

Field of view

1/2" (6.4*4.8)mm	182.9*137.1
1/1.7"IMX226(7.5*5.6)mm	214.3*160
1/1.8"EV76C570(7.1*5.3)mm	202.9*151.4
2/3"IMX250/264"(8.4*7.1)mm	240*202.9

