

Telecentric Lens

DTTL Series Telecentric Lens

Model No:

1.1 Chip Support



DTTL Series

1.1 Chip Support

Target camera



Professional customization
of multiples and depth of field

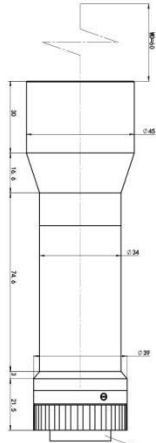
Dual telecentric design
High definition Standard C interface

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	2/3"CCD	1"CCD	1.1"IMX255
			mm	-tricity	distortion	F/#	(lp/mm)		(8.4*7.1)mm	(12.8*9.6)mm	(14.19*10.3)mm
DTTL60-08X20	0.8X	60	1.5	<0.1	<0.1	14	65	C	10.5*8.88	16*12	17.74*12.88
DTTL47-075X20	0.75X	47	1.0	<0.1	<0.1	6	120	C	11.2*9.47	17.07*12.8	18.92*13.73
DTTL70-07X20	0.7X	70	1.8	<0.1	<0.1	7	125	C	12*10.14	18.29*13.71	20.27*14.71
DTTL130-05X20	0.5X	130	3.2	<0.1	<0.1	10	90	C	16.8*14.2	25.6*19.2	28.38*20.6
DTTL60-045X20	0.45X	60	3.5	<0.1	<0.1	9	105	C	18.67*15.78	28.44*21.33	31.53*22.89
DTTL135-0385X20	0.385X	135	3.8	<0.1	<0.1	7	100	C	21.82*18.44	33.25*24.94	36.86*26.75
DTTL130-035X20	0.35X	130	4.6	<0.1	<0.1	6	122	C	24*20.29	36.57*27.43	40.54*29.43
DTTL135-0326X20	0.326X	135	5.3	<0.1	<0.1	9	98	C	25.77*21.78	39.26*29.45	43.53*31.6
DTTL158-03X20	0.3X	158	5.7	<0.1	<0.1	6	150	C	28*23.67	42.6*32	47.3*34.3
DTTL150-028X20	0.28X	150	7.2	<0.1	<0.1	10	98	C	30*25.36	45.71*34.29	50.68*36.79
DTTL180-025X20N	0.25X	180	9.0	<0.1	<0.1	7	120	C	33.6*28.4	51.2*38.4	56.76*41.2
DTTL100-024X20	0.24X	100	9.7	<0.1	<0.1	7	126	C	35*29.58	53.33*40	59.13*42.92
DTTL200-023X20	0.23X	200	10.6	<0.1	<0.1	8	95	C	36.52*30.87	55.65*41.74	61.7*44.78
DTTL220-022X20HR	0.22X	220	11.6	<0.1	<0.1	8	100	C	38.18*32.27	58.18*43.64	64.54*46.82
DTTL230-02X20	0.2X	230	14.0	<0.1	<0.1	7	145	C	42*35.5	64*48	70.5*51.5
DTTL200-019X20	0.19X	200	15.5	<0.1	<0.1	10	93	C	44.21*37.37	67.37*50.53	74.68*54.21
DTTL250-0183X20	0.183X	250	16.8	<0.1	<0.1	8	100	C	45.9*38.8	69.95*52.46	77.54*56.28
DTTL260-0168X20	0.168X	260	14.4	<0.1	<0.1	5	180	C	50*42.26	76.19*57.14	84.46*61.31
DTTL260-0163X20	0.163X	260	21.1	<0.1	<0.1	8	105	C	51.53*43.56	78.53*58.9	87.06*63.19
DTTL260-0154X20	0.154X	260	26.8	<0.1	<0.1	8	115	C	54.55*46.1	83.12*62.34	92.14*66.88
DTTL260-015X20OHR	0.15X	260	34.4	<0.1	<0.1	9	100	C	56*47.33	85.33*64	94.6*68.67
DTTL300-013X20	0.13X	300	33.2	<0.1	<0.1	9	95	C	64.62*54.62	98.46*73.85	109.15*79.23
DTTL420-01X20	0.1X	420	68.8	<0.1	<0.1	8	95	C	84*71	128*96	141.9*103
DTTL380-0091X20	0.091X	380	69.7	<0.1	<0.1	7	110	C	92.31*78.02	140.66*105.49	155.93*113.19
DTTL400-0077X20	0.077X	400	94.6	<0.1	<0.1	6	140	C	109.09*92.21	166.23*124.68	184.29*133.77
DTTL410-0071X20	0.071X	410	11.3	<0.1	<0.1	7	125	C	118.31*100	180.28*135.21	199.86*145.07
DTTL470-0069X20	0.069X	470	17.8	<0.1	<0.1	6	155	C	121.74*102.9	185.51*139.13	205.65*149.28
DTTL530-0061X20	0.061X	530	69.1	<0.1	<0.1	8	120	C	137.7*116.39	209.84*157.38	232.62*168.85

DTTL60-08X20



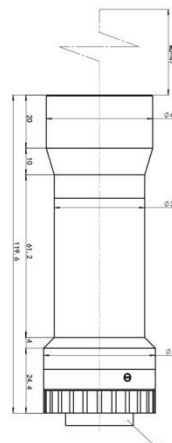
Main parameters

Mag	0.8X
WD	60
DOF(mm)	1.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	14
MTF>0.3(lp/mm)	65
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	10.5*8.88
1"CCD(12.8*9.6)mm	16*12
1.1"IMX255(14.19*10.3)mm	17.74*12.88

DTTL47-075X20



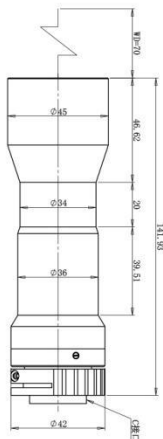
Main parameters

Mag	0.75X
WD	47
DOF(mm)	1.0
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	6
MTF>0.3(lp/mm)	120
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	11.2*9.47
1"CCD(12.8*9.6)mm	17.07*12.8
1.1"IMX255(14.19*10.3)mm	18.92*13.73

DTTL70-07X20



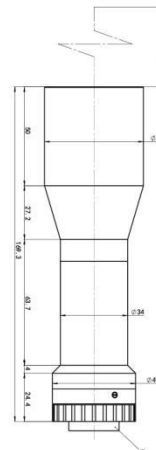
Main parameters

Mag	0.7X
WD	70
DOF(mm)	1.8
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	7
MTF>0.3(lp/mm)	125
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	12*10.14
1"CCD(12.8*9.6)mm	18.29*13.71
1.1"IMX255(14.19*10.3)mm	20.27*14.71

DTTL130-05X20



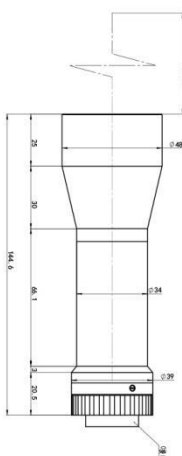
Main parameters

Mag	0.5X
WD	130
DOF(mm)	3.2
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	10
MTF>0.3(lp/mm)	90
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	16.8*14.2
1"CCD(12.8*9.6)mm	25.6*19.2
1.1"IMX255(14.19*10.3)mm	28.38*20.6

DTTL60-045X20



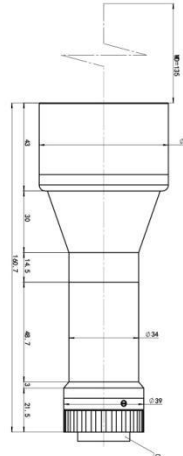
Main parameters

Mag	0.45X
WD	60
DOF(mm)	3.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	9
MTF>0.3(lp/mm)	105
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	18.67*15.78
1"CCD(12.8*9.6)mm	28.44*21.33
1.1"IMX255(14.19*10.3)mm	31.53*22.89

DTTL135-0385X20



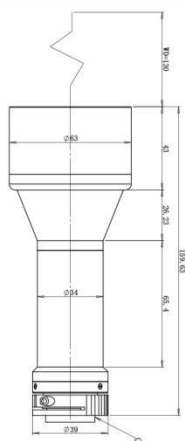
Main parameters

Mag	0.385X
WD	135
DOF(mm)	3.8
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	7
MTF>0.3(lp/mm)	100
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	21.82*18.44
1"CCD(12.8*9.6)mm	33.25*24.94
1.1"IMX255(14.19*10.3)mm	36.86*26.75

DTTL130-035X20



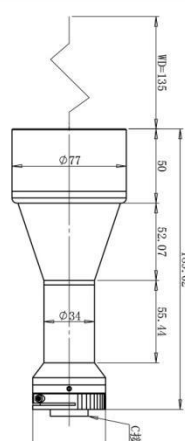
Main parameters

Mag	0.35X
WD	130
DOF(mm)	4.6
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	6
MTF>0.3(lp/mm)	122
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	24°20.29
1"CCD(12.8*9.6)mm	36.57°27.43
1.1"IMX255(14.19*10.3)mm	40.54°29.43

DTTL135-0326X20



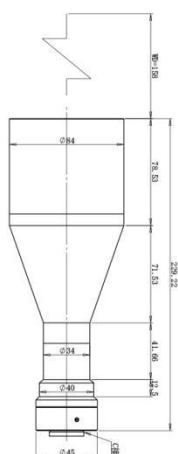
Main parameters

Mag	0.326X
WD	135
DOF(mm)	5.3
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	9
MTF>0.3(lp/mm)	98
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	25.77°21.78
1"CCD(12.8*9.6)mm	39.26°29.45
1.1"IMX255(14.19*10.3)mm	43.53°31.6

DTTL158-03X20



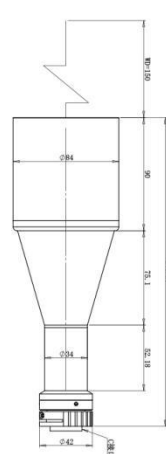
Main parameters

Mag	0.3X
WD	158
DOF(mm)	5.7
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	6
MTF>0.3(lp/mm)	150
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	28°23.67
1"CCD(12.8*9.6)mm	42.6°32
1.1"IMX255(14.19*10.3)mm	47.3°34.3

DTTL150-028X20



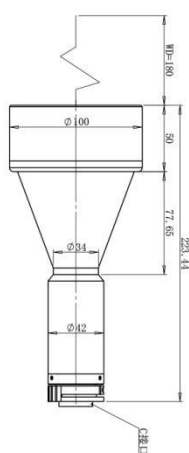
Main parameters

Mag	0.28X
WD	150
DOF(mm)	7.2
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	10
MTF>0.3(lp/mm)	98
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	30°25.36
1"CCD(12.8*9.6)mm	45.71°34.29
1.1"IMX255(14.19*10.3)mm	50.68°36.79

DTTL180-025X20N



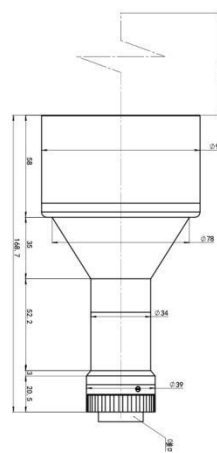
Main parameters

Mag	0.25X
WD	180
DOF(mm)	9.0
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	7
MTF>0.3(lp/mm)	120
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	33.6°28.4
1"CCD(12.8*9.6)mm	51.2°38.4
1.1"IMX255(14.19*10.3)mm	56.76°41.2

DTTL100-024X20



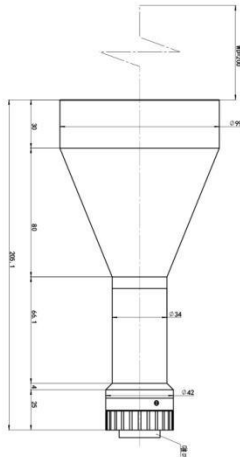
Main parameters

Mag	0.24X
WD	100
DOF(mm)	9.7
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	7
MTF>0.3(lp/mm)	126
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	35°29.58
1"CCD(12.8*9.6)mm	53.33°40
1.1"IMX255(14.19*10.3)mm	59.13°42.92

DTTL200-023X20



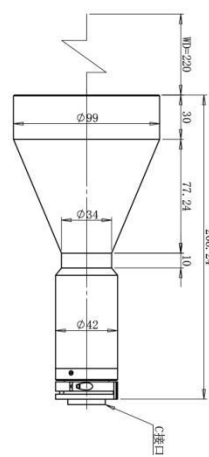
Main parameters

Mag	0.23X
WD	200
DOF(mm)	10.6
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	8
MTF>0.3(lp/mm)	95
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	36.52*30.87
1"CCD(12.8*9.6)mm	55.65*41.74
1.1"IMX255(14.19*10.3)mm	61.7*44.78

DTTL220-022X20HR



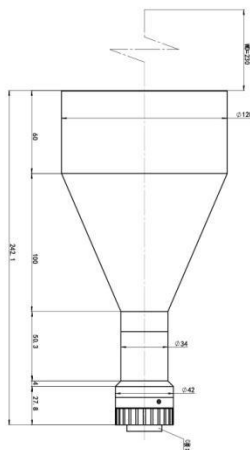
Main parameters

Mag	0.22X
WD	220
DOF(mm)	11.6
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	8
MTF>0.3(lp/mm)	100
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	38.18*32.27
1"CCD(12.8*9.6)mm	58.18*43.64
1.1"IMX255(14.19*10.3)mm	64.54*46.82

DTTL230-02X20



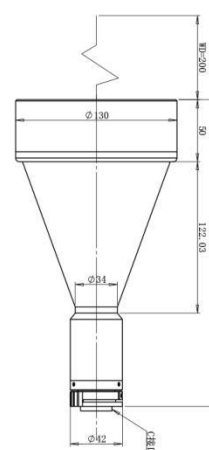
Main parameters

Mag	0.2X
WD	230
DOF(mm)	14.0
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	7
MTF>0.3(lp/mm)	145
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	42*35.5
1"CCD(12.8*9.6)mm	64*48
1.1"IMX255(14.19*10.3)mm	70.5*51.5

DTTL200-019X20



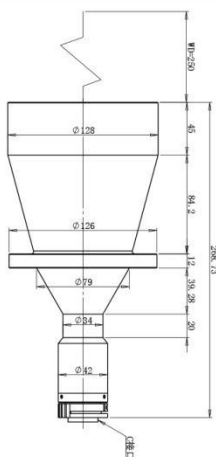
Main parameters

Mag	0.19X
WD	200
DOF(mm)	15.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	10
MTF>0.3(lp/mm)	93
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	44.21*37.37
1"CCD(12.8*9.6)mm	67.37*50.53
1.1"IMX255(14.19*10.3)mm	74.68*54.21

DTTL250-0183X20



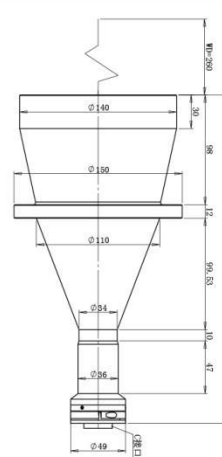
Main parameters

Mag	0.183X
WD	250
DOF(mm)	16.8
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	8
MTF>0.3(lp/mm)	100
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	45.9*38.8
1"CCD(12.8*9.6)mm	69.95*52.46
1.1"IMX255(14.19*10.3)mm	77.54*56.28

DTTL260-0168X20



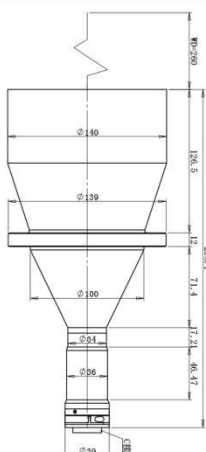
Main parameters

Mag	0.168X
WD	260
DOF(mm)	14.4
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	5
MTF>0.3(lp/mm)	180
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	50*42.26
1"CCD(12.8*9.6)mm	76.19*57.14
1.1"IMX255(14.19*10.3)mm	84.46*61.31

DTTL260-0163X20



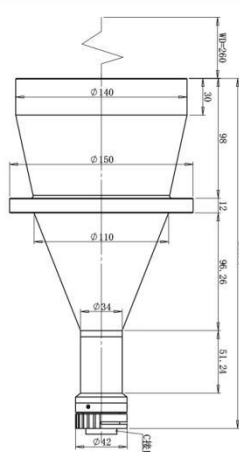
Main parameters

Mag	0.163X
WD	260
DOF(mm)	21.1
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	8
MTF>0.3(lp/mm)	105
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	51.53°43.56
1"CCD(12.8*9.6)mm	78.53°58.9
1.1"IMX255(14.19*10.3)mm	87.06°63.19

DTTL260-0154X20



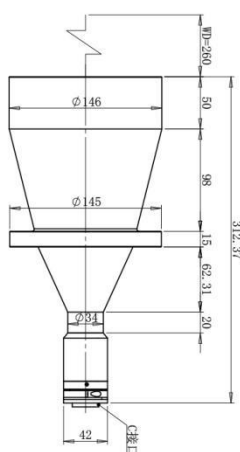
Main parameters

Mag	0.154X
WD	260
DOF(mm)	26.8
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	8
MTF>0.3(lp/mm)	115
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	54.55°46.1
1"CCD(12.8*9.6)mm	83.12°62.34
1.1"IMX255(14.19*10.3)mm	92.14°66.88

DTTL260-015X20HR



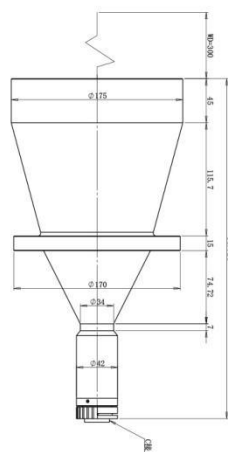
Main parameters

Mag	0.15X
WD	260
DOF(mm)	34.4
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	9
MTF>0.3(lp/mm)	100
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	56°47.33
1"CCD(12.8*9.6)mm	85.33°64
1.1"IMX255(14.19*10.3)mm	94.6°68.67

DTTL300-013X20



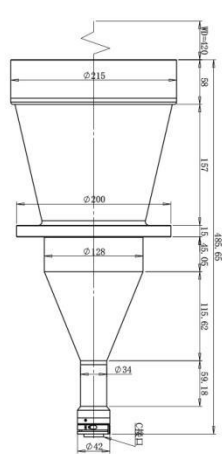
Main parameters

Mag	0.13X
WD	300
DOF(mm)	33.2
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	9
MTF>0.3(lp/mm)	95
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	64.62°54.62
1"CCD(12.8*9.6)mm	98.46°73.85
1.1"IMX255(14.19*10.3)mm	109.15°79.23

DTTL420-01X20



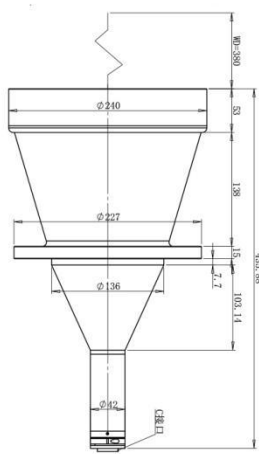
Main parameters

Mag	0.1X
WD	420
DOF(mm)	68.8
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	8
MTF>0.3(lp/mm)	95
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	84°71
1"CCD(12.8*9.6)mm	128°96
1.1"IMX255(14.19*10.3)mm	141.9°103

DTTL380-0091X20



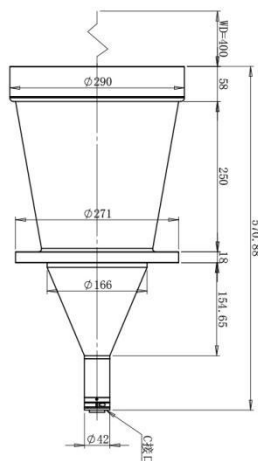
Main parameters

Mag	0.091X
WD	380
DOF(mm)	69.7
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	7
MTF>0.3(lp/mm)	110
Mount	C

Field of view

2/3"CCD(8.4*7.1)mm	92.31°78.02
1"CCD(12.8*9.6)mm	140.66°105.49
1.1"IMX255(14.19*10.3)mm	155.93°113.19

DTTL400-0077X20



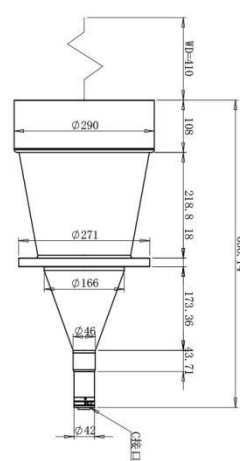
Main parameters

Mag	0.077X
WD	400
DOF(mm)	94.6
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	6
MTF>0.3(lp/mm)	140
Mount	C

Field of view

2/3" CCD(8.4*7.1)mm	109.09*92.21
1" CCD(12.8*9.6)mm	166.23*124.68
1.1" IMX255(14.19*10.3)mm	184.29*133.77

DTTL410-0071X20



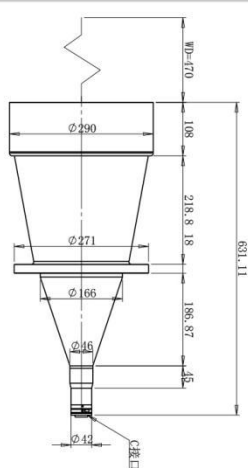
Main parameters

Mag	0.071X
WD	410
DOF(mm)	111.3
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	7
MTF>0.3(lp/mm)	125
Mount	C

Field of view

2/3" CCD(8.4*7.1)mm	118.31*100
1" CCD(12.8*9.6)mm	180.28*135.21
1.1" IMX255(14.19*10.3)mm	199.86*145.07

DTTL470-0069X20



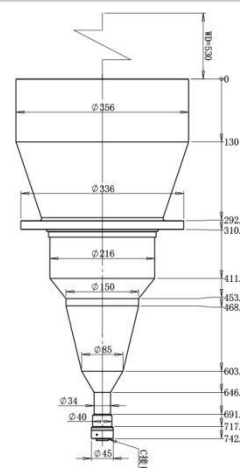
Main parameters

Mag	0.069X
WD	470
DOF(mm)	117.8
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	6
MTF>0.3(lp/mm)	155
Mount	C

Field of view

2/3" CCD(8.4*7.1)mm	121.74*102.9
1" CCD(12.8*9.6)mm	185.51*139.13
1.1" IMX255(14.19*10.3)mm	205.65*149.28

DTTL530-0061X20



Main parameters

Mag	0.061X
WD	530
DOF(mm)	169.1
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	8
MTF>0.3(lp/mm)	120
Mount	C

Field of view

2/3" CCD(8.4*7.1)mm	137.7*116.39
1" CCD(12.8*9.6)mm	209.84*157.38
1.1" IMX255(14.19*10.3)mm	232.62*168.85