

Telecentric Lens

DTTL-X Series Telecentric Lens

Model No:

Maximum support

1.1' (18.5mm)



DTTL Series WD=65mm

Maximum support
1.1' (18.5mm)

Target camera



Professional customization
of multiples and depth of field

Dual telecentric design
High definition Standard C
interface

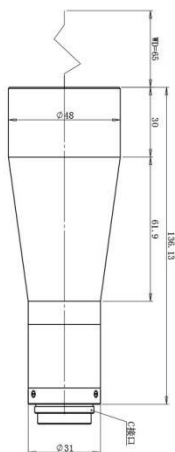
Can be equipped with a
dedicated parallel light
source

For high-precision
detection and measurement

Type	Lens Model	Mag	WD	DOF mm	Telecen -tricity	Optical distortion	Aperture F/#	Mtf>0.3 (lp/mm)	Mount	2/3"CCD (8.8*6.6)mm	7"CCD (12.8*9.6)mm	2"DALSA 12M (24.5*18.4)mm
Non-coaxial	DTTL65-03X23	0.3X	65	10.1	<0.1	<0.1	6	136	C	29.3*22	NA	NA
	DTTL65-03X20	0.3X	65	10.1	<0.1	<0.1	6	120	C	29.3*22	42.7*32	46.7*34.3
	DTTL60-04X23	0.4X	60	2.5	<0.1	<0.1	5	180	C	22*16.5	NA	NA
	DTTL65-04X10	0.4X	65	3.4	<0.1	<0.1	7	125	C	22*16.5	32*24	NA
	DTTL60-05X20	0.5X	60	3.6	<0.1	<0.1	8	100	C	17.6*13.2	25.6*19.2	28*20.6
	DTTL65-08X20	0.8X	65	1.4	<0.1	<0.1	10	65	C	11*8.3	16*12	17.5*12.9
	DTTL65-1F20	1.0X	65	0.9	<0.1	<0.1	13	100	C	8.8*6.6	12.8*9.6	14*10.3
	DTTL65-15F20	1.5X	65	0.4	<0.1	<0.1	13	85	C	5.9*4.4	8.5*6.4	9.3*6.9
	DTTL65-2F20	2.0X	65	0.2	<0.1	<0.1	14	80	C	4.4*3.3	6.4*4.8	7*5.2
	DTTL65-25F20	2.5X	65	0.2	<0.1	<0.1	14	70	C	3.5*2.6	5.1*3.8	5.6*4.1
	DTTL65-3F20	3.0X	65	0.1	<0.1	<0.1	15	60	C	2.9*2.2	4.3*3.2	4.7*3.4
	DTTL65-4F20	4.0X	65	0.06	<0.1	<0.1	15	60	C	2.2*1.7	3.2*2.4	3.5*2.6
	DTTL65-5F20	5.0X	65	0.04	<0.1	<0.1	18	54	C	1.8*1.3	2.6*1.9	2.8*2.1
	DTTL65-6F20	6.0X	65	0.05	<0.1	<0.1	21	42	C	1.5*1.1	2.1*1.6	2.3*1.7
	DTTL65-100F20	10X	65	0.03	<0.1	<0.1	28	36	C	0.88*0.66	1.28*0.96	1.4*1.03

Type	Lens Model	Mag	WD	DOF mm	Telecen -tricity	Optical distortion	Aperture F/#	Mtf>0.3 (lp/mm)	Mount	2/3"CCD (8.8*6.6)mm	7"CCD (12.8*9.6)mm	2"DALSA 12M (24.5*18.4)mm
Coaxial	DTTL65-03T23	0.3X	65	10.1	<0.1	<0.1	6	120	C	29.3*22	NA	NA
	DTTL65-03T20	0.3X	65	10.1	<0.1	<0.1	6	136	C	29.3*22	42.7*32	46.7*34.3
	DTTL60-04T23HR	0.4X	60	2.5	<0.1	<0.1	5	180	C	22*16.5	NA	NA
	DTTL65-04T10HR	0.4X	65	3.4	<0.1	<0.1	7	125	C	22*16.5	32*24	NA
	DTTL60-05T20	0.5X	60	3.6	<0.1	<0.1	8	100	C	17.6*13.2	25.6*19.2	28*20.6
	DTTL65-08T20	0.8X	65	1.4	<0.1	<0.1	10	65	C	11*8.3	16*12	17.5*12.9
	DTTL65-1T20	1.0X	65	0.9	<0.1	<0.1	13	100	C	8.8*6.6	12.8*9.6	14*10.3
	DTTL65-15T20	1.5X	65	0.4	<0.1	<0.1	13	85	C	5.9*4.4	8.5*6.4	9.3*6.9
	DTTL65-2T20	2.0X	65	0.2	<0.1	<0.1	14	80	C	4.4*3.3	6.4*4.8	7*5.2
	DTTL65-25T20	2.5X	65	0.2	<0.1	<0.1	14	70	C	3.5*2.6	5.1*3.8	5.6*4.1
	DTTL65-3T20	3.0X	65	0.1	<0.1	<0.1	15	60	C	2.9*2.2	4.3*3.2	4.7*3.4
	DTTL65-4T20	4.0X	65	0.06	<0.1	<0.1	15	60	C	2.2*1.7	3.2*2.4	3.5*2.6
	DTTL65-5T20	5.0X	65	0.04	<0.1	<0.1	18	54	C	1.8*1.3	2.6*1.9	2.8*2.1
	DTTL65-6T20	6.0X	65	0.05	<0.1	<0.1	21	42	C	1.5*1.1	2.1*1.6	2.3*1.7

DTTL65-03X23



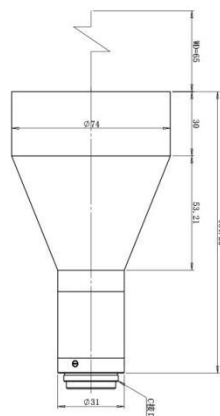
Main parameters

Mag	0.3X
WD	65
DOF(mm)	10.1
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	6
MTF>0.3(lp/mm)	136
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	29.3*22
1" CCD(12.8*9.6)mm	NA
1.1" CCD(14*10.3)mm	NA

DTTL65-03X20

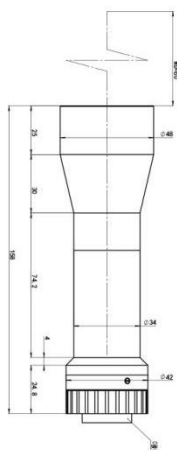


Main parameters

Mag	0.3X
WD	65
DOF(mm)	10.1
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	6
MTF>0.3(lp/mm)	120
Mount	C

Field of view

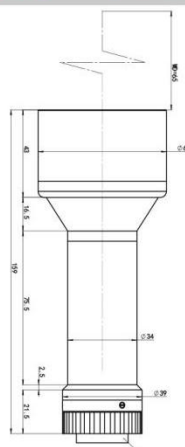
2/3" CCD(8.8*6.6)mm	29.3*22
1" CCD(12.8*9.6)mm	42.7*32
1.1" CCD(14*10.3)mm	46.7*34.3

DTTL60-04X23**Main parameters**

Mag	0.4X
WD	60
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

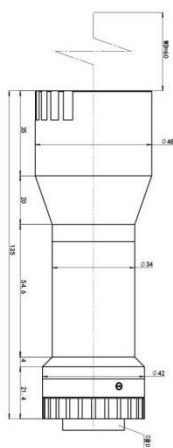
2/3" CCD(8.8*6.6)mm	22°16.5
1" CCD(12.8*9.6)mm	NA
1.1" CCD(14*10.3)mm	NA

DTTL65-04X10**Main parameters**

Mag	0.4X
WD	65
DOF(mm)	3.4
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	7
MTF>0.3(lp/mm)	125
Mount	C

Field of view

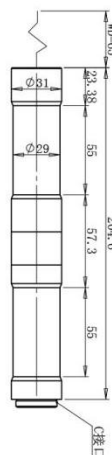
2/3" CCD(8.8*6.6)mm	22°16.5
1" CCD(12.8*9.6)mm	32°24
1.1" CCD(14*10.3)mm	NA

DTTL60-05X20**Main parameters**

Mag	0.5X
WD	60
DOF(mm)	3.6
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	8
MTF>0.3(lp/mm)	100
Mount	C

Field of view

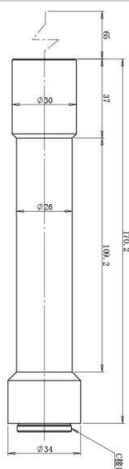
2/3" CCD(8.8*6.6)mm	17.6°13.2
1" CCD(12.8*9.6)mm	25.6°19.2
1.1" CCD(14*10.3)mm	28°20.6

DTTL65-08X20**Main parameters**

Mag	0.8X
WD	65
DOF(mm)	1.4
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	10
MTF>0.3(lp/mm)	65
Mount	C

Field of view

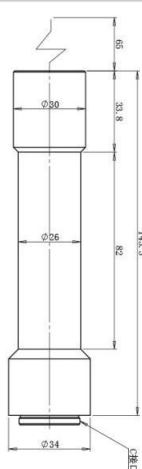
2/3" CCD(8.8*6.6)mm	11°8.3
1" CCD(12.8*9.6)mm	16°12
1.1" CCD(14*10.3)mm	17.5°12.9

DTTL65-1F20**Main parameters**

Mag	1.0X
WD	65
DOF(mm)	0.9
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	13
MTF>0.3(lp/mm)	100
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	8.8°6.6
1" CCD(12.8*9.6)mm	12.8°9.6
1.1" CCD(14*10.3)mm	14°10.3

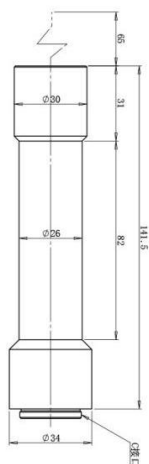
DTTL65-15F20**Main parameters**

Mag	1.5X
WD	65
DOF(mm)	0.4
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	13
MTF>0.3(lp/mm)	85
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	5.9°4.4
1" CCD(12.8*9.6)mm	8.5°6.4
1.1" CCD(14*10.3)mm	9.3°6.9

DTTL65-2F20



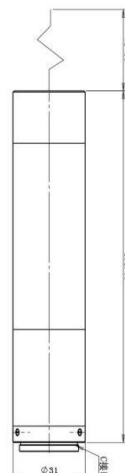
Main parameters

Mag	2.0X
WD	65
DOF(mm)	0.2
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	14
MTF>0.3(lp/mm)	80
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	4.4*3.3
1" CCD(12.8*9.6)mm	6.4*4.8
1.1" CCD(14*10.3)mm	7*5.2

DTTL65-25F20



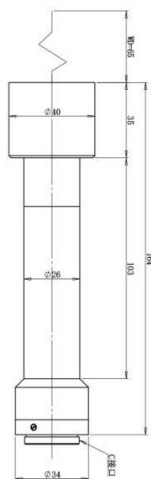
Main parameters

Mag	2.5X
WD	65
DOF(mm)	0.2
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	14
MTF>0.3(lp/mm)	70
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	3.5*2.6
1" CCD(12.8*9.6)mm	5.1*3.8
1.1" CCD(14*10.3)mm	5.6*4.1

DTTL65-3F20



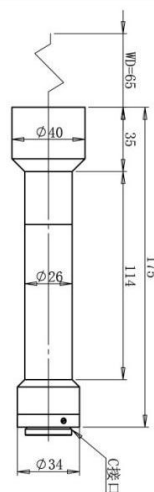
Main parameters

Mag	3.0X
WD	65
DOF(mm)	0.1
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	15
MTF>0.3(lp/mm)	60
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	2.9*2.2
1" CCD(12.8*9.6)mm	4.3*3.2
1.1" CCD(14*10.3)mm	4.7*3.4

DTTL65-4F20



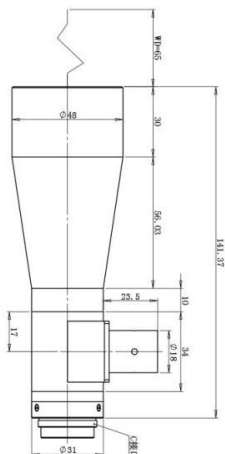
Main parameters

Mag	4.0X
WD	65
DOF(mm)	0.06
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	15
MTF>0.3(lp/mm)	60
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	2.2*1.7
1" CCD(12.8*9.6)mm	3.2*2.4
1.1" CCD(14*10.3)mm	3.5*2.6

DTTL65-03T23



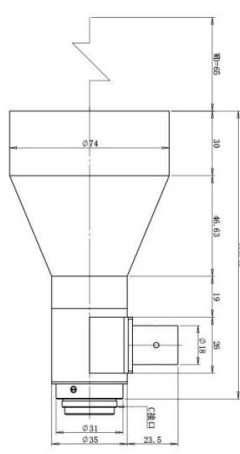
Main parameters

Mag	0.3X
WD	65
DOF(mm)	10.1
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	6
MTF>0.3(lp/mm)	120
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	29.3*22
1" CCD(12.8*9.6)mm	NA
1.1" CCD(14*10.3)mm	NA

DTTL65-03T20



Main parameters

Mag	0.3X
WD	65
DOF(mm)	10.1
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	6
MTF>0.3(lp/mm)	136
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	29.3*22
1" CCD(12.8*9.6)mm	42.7*32
1.1" CCD(14*10.3)mm	46.7*34.3

DTTL60-04T23HR



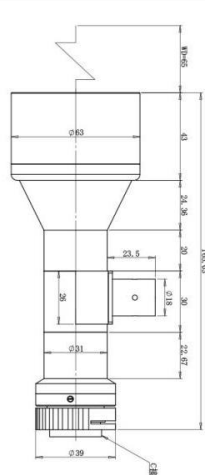
Main parameters

Mag	0.4X
WD	60
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

2/3" CCD(8.8*6.6)mm	22*16.5
1" CCD(12.8*9.6)mm	NA
1.1" CCD(14*10.3)mm	NA

DTTL65-04T10HR



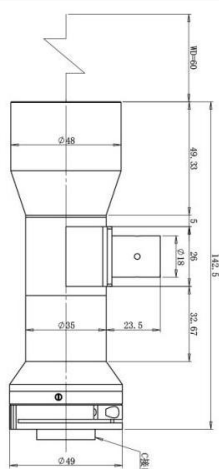
Main parameters

Mag	0.4X
WD	65
DOF(mm)	3.4
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	7
MTF>0.3(lp/mm)	125
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	22*16.5
1" CCD(12.8*9.6)mm	32*24
1.1" CCD(14*10.3)mm	NA

DTTL60-05T20



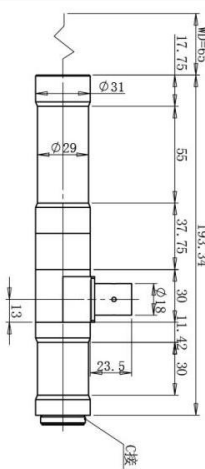
Main parameters

Mag	0.5X
WD	60
DOF(mm)	3.6
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	8
MTF>0.3(lp/mm)	100
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	17.6*13.2
1" CCD(12.8*9.6)mm	25.6*19.2
1.1" CCD(14*10.3)mm	28*20.6

DTTL65-08T20



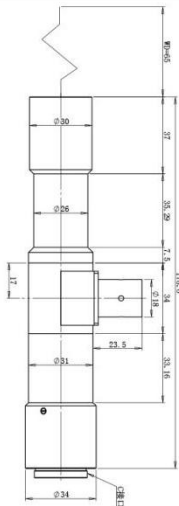
Main parameters

Mag	0.8X
WD	65
DOF(mm)	1.4
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	10
MTF>0.3(lp/mm)	65
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	11*8.3
1" CCD(12.8*9.6)mm	16*12
1.1" CCD(14*10.3)mm	17.5*12.9

DTTL65-1T20



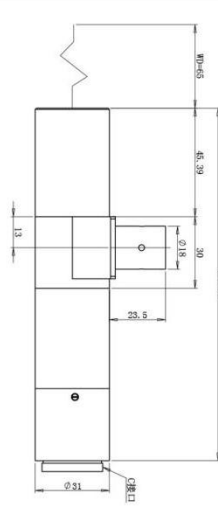
Main parameters

Mag	1.0X
WD	65
DOF(mm)	0.9
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	13
MTF>0.3(lp/mm)	100
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	8.8*6.6
1" CCD(12.8*9.6)mm	12.8*9.6
1.1" CCD(14*10.3)mm	14*10.3

DTTL65-15T20



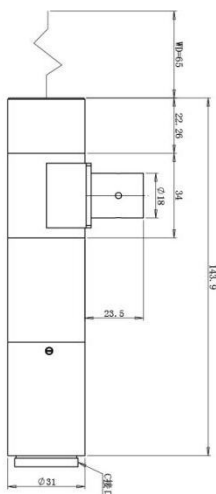
Main parameters

Mag	1.5X
WD	65
DOF(mm)	0.4
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	13
MTF>0.3(lp/mm)	85
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	5.9*4.4
1" CCD(12.8*9.6)mm	8.5*6.4
1.1" CCD(14*10.3)mm	9.3*6.9

DTTL65-2T20



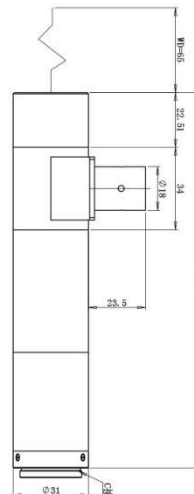
Main parameters

Mag	2.0X
WD	65
DOF(mm)	0.2
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	14
MTF>0.3(lp/mm)	80
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	4.4*3.3
1" CCD(12.8*9.6)mm	6.4*4.8
1.1" CCD(14*10.3)mm	7*5.2

DTTL65-25T20



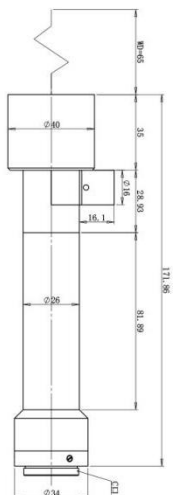
Main parameters

Mag	2.5X
WD	65
DOF(mm)	0.2
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	14
MTF>0.3(lp/mm)	70
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	3.5*2.6
1" CCD(12.8*9.6)mm	5.1*3.8
1.1" CCD(14*10.3)mm	5.6*4.1

DTTL65-3T20



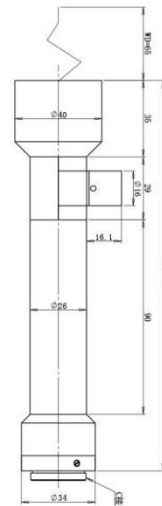
Main parameters

Mag	3.0X
WD	65
DOF(mm)	0.1
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	15
MTF>0.3(lp/mm)	60
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	2.9*2.2
1" CCD(12.8*9.6)mm	4.3*3.2
1.1" CCD(14*10.3)mm	4.7*3.4

DTTL65-4T20



Main parameters

Mag	4.0X
WD	65
DOF(mm)	0.06
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	15
MTF>0.3(lp/mm)	60
Mount	C

Field of view

2/3" CCD(8.8*6.6)mm	2.2*1.7
1" CCD(12.8*9.6)mm	3.2*2.4
1.1" CCD(14*10.3)mm	3.5*2.6

Main parameters	
Mag	5.0X
WD	65
DOF(mm)	0.04
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	18
MTF>0.3(lp/mm)	54
Mount	C

Field of view	
2/3" CCD(8.8*6.6)mm	1.8*1.3
1" CCD(12.8*9.6)mm	2.6*1.9
1.1" CCD(14*10.3)mm	2.8*2.1

Main parameters	
Mag	6.0X
WD	65
DOF(mm)	0.05
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	21
MTF>0.3(lp/mm)	42
Mount	C

Field of view	
2/3" CCD(8.8*6.6)mm	1.5*1.1
1" CCD(12.8*9.6)mm	2.1*1.6
1.1" CCD(14*10.3)mm	2.3*1.7

Main parameters	
Mag	10X
WD	65
DOF(mm)	0.03
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	28
MTF>0.3(lp/mm)	36
Mount	C

Field of view	
2/3" CCD(8.8*6.6)mm	0.88*0.66
1" CCD(12.8*9.6)mm	1.28*0.96
1.1" CCD(14*10.3)mm	1.4*1.03

[illegible]

Main parameters	
Mag	12X
WD	65
DOF(mm)	0.02
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	33
MTF>0.3(lp/mm)	28
Mount	C

Field of view	
2/3" CCD(8.8*6.6)mm	0.73*0.55
1" CCD(12.8*9.6)mm	1*0.8
1.1" CCD(14*10.3)mm	1.16*0.85