

Telecentric Lens

DTTL-X Series WD=150mm

Model No:

Maximum support

1.1' (18.5mm)



DTTL Series WD=150mm

Maximum support
1.1' (18.5mm)

Target camera



Professional customization
of multiples and depth of field

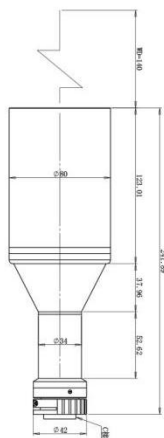
Dual telecentric design
High definition Standard C
interface

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	1"CCD (12.8*9.6)mm	1.7"CCD (14*10.3)mm
Non-Coaxial	DTTL140-03X20	0.3X	140	8.1	<0.1	<0.1	9	105	C	29.3*22	42.7*32	46.7*34.3
	DTTL150-04X20	0.4X	150	5.2	<0.1	<0.1	10	87	C	22*16.5	32*24	35*25.6
	DTTL150-05X20	0.5X	150	3.6	<0.1	<0.1	4	110	C	17.6*13.2	25.6*19.2	28*20.6
	DTTL150-08X20	0.8X	150	1.4	<0.1	<0.1	10	80	C	11*8.3	16*12	17.5*12.9
	DTTL150-10X20	1.0X	150	1	<0.1	<0.1	13	75	C	8.8*6.6	12.8*9.6	14*10.3
	DTTL140-12X20	1.2X	140	0.6	<0.1	<0.1	15	60	C	7.3*5.5	10.7*8	11.7*8.6
	DTTL150-15X20	1.5X	150	0.5	<0.1	<0.1	15	52	C	5.9*4.4	8.5*6.4	9.3*6.9
	DTTL150-20X20	2.0X	150	0.3	<0.1	<0.1	16	52	C	4.4*3.3	6.4*4.8	7*5.2
	DTTL140-30X20	3.0X	140	0.2	<0.1	<0.1	23	38	C	2.9*2.2	4.3*3.2	4.7*3.4
	DTTL140-40X20	4.0X	140	0.2	<0.1	<0.1	31	29	C	2.2*1.7	3.2*2.4	3.5*2.6
Coaxial	DTTL140-03T20	0.3X	140	8.1	<0.1	<0.1	9	105	C	29.3*22	42.7*32	46.7*34.3
	DTTL150-04T10	0.4X	150	5.2	<0.1	<0.1	10	87	C	22*16.5	32*24	NA
	DTTL150-05T20	0.5X	150	3.6	<0.1	<0.1	4	110	C	17.6*13.2	25.6*19.2	28*20.6
	DTTL150-08T20	0.8X	150	1.4	<0.1	<0.1	10	80	C	11*8.3	16*12	17.5*12.9
	DTTL150-10T20	1.0X	150	1	<0.1	<0.1	13	75	C	8.8*6.6	12.8*9.6	14*10.3
	DTTL140-12T20	1.2X	140	0.6	<0.1	<0.1	15	60	C	7.3*5.5	10.7*8	11.7*8.6
	DTTL150-15T20	1.5X	150	0.5	<0.1	<0.1	15	52	C	5.9*4.4	8.5*6.4	9.3*6.9
	DTTL150-20T20	2.0X	150	0.3	<0.1	<0.1	16	52	C	4.4*3.3	6.4*4.8	7*5.2
	DTTL140-30T20	3.0X	140	0.2	<0.1	<0.1	23	38	C	2.9*2.2	4.3*3.2	4.7*3.4
	DTTL140-40T20	4.0X	140	0.2	<0.1	<0.1	31	29	C	2.2*1.7	3.2*2.4	3.5*2.6

DTTL140-03X20



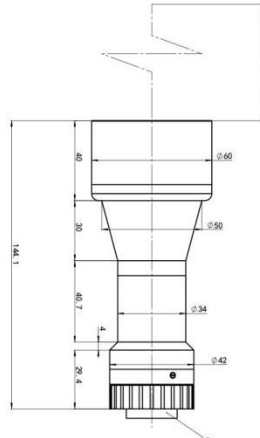
Main parameters

Mag	0.3X
WD	140
DOF(mm)	8.1
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	9
MTF>0.3(lp/mm)	105
Mount	C

Field of view

2/3" CCD(8.8*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'

DTTL150-04X20



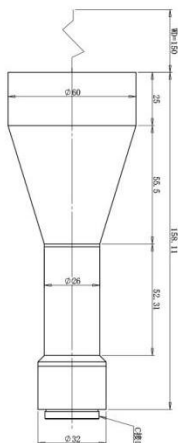
Main parameters

Mag	0.4X
WD	150
DOF(mm)	5.2
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	10
MTF>0.3(lp/mm)	87
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	35°25.6'

DTTL150-05X20



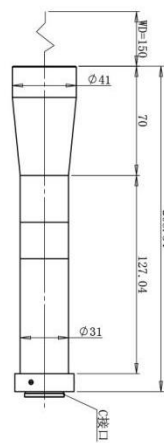
Main parameters

Mag	0.5X
WD	150
DOF(mm)	3.6
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	4
MTF>0.3(lp/mm)	110
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'

DTTL150-08X20



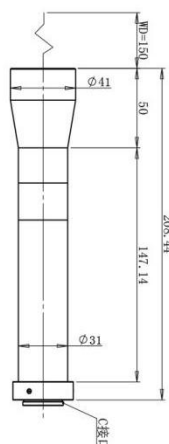
Main parameters

Mag	0.8X
WD	150
DOF(mm)	1.4
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	10
MTF>0.3(lp/mm)	80
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'

DTTL150-10X20



Main parameters

Mag	1.0X
WD	150
DOF(mm)	1
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	13
MTF>0.3(lp/mm)	75
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'

DTTL140-12X20



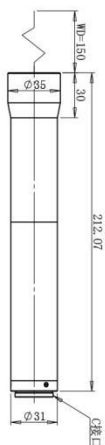
Main parameters

Mag	1.2X
WD	140
DOF(mm)	0.6
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	7.3°5.5'
1" CCD(12.8*9.6)mm	10.7°8'
1.1" CCD(14*10.3)mm	11.7°8.6'

DTTL150-15X20



Main parameters

Mag	1.5X
WD	150
DOF(mm)	0.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	15
MTF>0.3(lp/mm)	52
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

DTTL150-20X20



Main parameters

Mag	2.0X
WD	150
DOF(mm)	0.3
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	16
MTF>0.3(lp/mm)	52
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

DTTL140-30X20



Main parameters

Mag	3.0X
WD	140
DOF(mm)	0.2
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	23
MTF>0.3(lp/mm)	38
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

DTTL140-40X20



Main parameters

Mag	4.0X
WD	140
DOF(mm)	0.2
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	31
MTF>0.3(lp/mm)	29
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

Technical drawing of the 'B' type probe, showing a side view with dimensions. The probe has a total length of 267.8 mm. The main body has a diameter of 28.0 mm. The base section has a diameter of 23.1 mm and a height of 23.5 mm. The base is labeled 'B' and has a width of 24.2 mm. The probe is shown with a jagged line indicating a break in the shaft.

Mag	0.3X
WD	140
DOF(mm)	8.1
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	9
MTF>0.3(lp/mm)	105
Mount	C

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

Technical drawing of a vertical pipe assembly. The drawing shows a cross-section of the pipe with various diameters and lengths. The top section has a diameter of $\Phi 60$ and a length of 40. Below this is a section with a diameter of $\Phi 34$ and a length of 25.8. The bottom section has a diameter of $\Phi 38$ and a length of 47.5. A small section with a diameter of $\Phi 18$ and a length of 29.5 is shown on the right side. The total length of the assembly is 130. The drawing also indicates a connection point labeled "C接口".

Mag	0.4X
WD	150
DOF(mm)	5.2
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	10
MTF>0.3(lp/mm)	87
Mount	C

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

Technical drawing of a mechanical part, likely a nozzle or connector, showing a side view and a cross-section. The side view shows a tapered body with a base diameter of 32 mm and a top diameter of 50 mm. The cross-section shows internal features including a central hole with a diameter of 10 mm, a smaller hole with a diameter of 2.6 mm, and a threaded section with a diameter of 15 mm. Dimensions are given in millimeters.

Mag	0.5X
WD	150
DOF(mm)	3.6
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	4
MTF>0.3(lp/mm)	110
Mount	C

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

Mag	0.8X
WD	150
DOF(mm)	1.4
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	10
MTF>0.3(lp/mm)	80
Mount	C

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

Technical drawing of a mechanical part, likely a shaft or rod, showing various dimensions and features. The drawing includes a cross-section at the top with a diameter of $\Phi 41$, a central section with a diameter of $\Phi 18$, and a bottom section with a diameter of $\Phi 31$. Dimensions include a total length of 98.62, a top section length of 50, a central section length of 30, and a bottom section length of 19.52. A break line is shown in the top section. A label "C接" (C-connection) is at the bottom.

Mag	1.0X
WD	150
DOF(mm)	1
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	13
MTF>0.3(lp/mm)	75
Mount	C

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

[illegible]

Mag	1.2X
WD	140
DOF(mm)	0.6
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	15
MTF>0.3(lp/mm)	60
Mount	C

2/3" CCD(8.8*6.6)mm	7.3*5.5
1" CCD(12.8*9.6)mm	10.7*8
1.1" CCD(14*10.3)mm	11.7*8.6

Mag	1.5X
WD	150
DOF(mm)	0.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	15
MTF>0.3(lp/mm)	52
Mount	C

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

[illegible]

Mag	2.0X
WD	150
DOF(mm)	0.3
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	16
MTF>0.3(lp/mm)	52
Mount	C

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

Mag	3.0X
WD	140
DOF(mm)	0.2
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	23
MTF>0.3(lp/mm)	38
Mount	C

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

[illegible]

Mag	4.0X
WD	140
DOF(mm)	0.2
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	31
MTF>0.3(lp/mm)	29
Mount	C

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