

Telecentric Lens

DTTL Series Telecentric Lens

Model No:

57.4mm Chip Support



DTTL Series

57.4mm Chip Support

Target camera



Professional customization
of multiples and depth of field

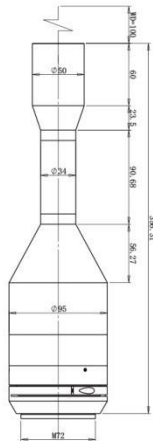
Dual telecentric design
High definition Standard M72
interface

Can be equipped with a
dedicated parallel light

For high-precision
detection and measurement

Lens Model	Mag	WD	DOF mm	Telecen -tricity	Optical distortion	Aperture F/#	Mtf>0.3 (lp/mm)	Mount	8k*5um (40.94mm)	36*24mm (43mm)	16k 16384*5μm	16K (57.4mm)
DTTL100-1.7X61	1.7X	100	0.5	<0.1	<0.1	25	36	M72	24.1	21.2*14.1	32.8	33.8
DTTL100-1.45X61	1.45X	100	0.5	<0.1	<0.1	22	42	M72	28.2	24.8*16.6	35.9	39.6
DTTL102-1.35X61	1.35X	102	0.5	<0.1	<0.1	20	48	M72	30.3	26.7*17.8	46	42.5
DTTL115-1.1X61	1.1X	115	1.6	<0.1	<0.1	24	40	M72	37.2	32.7*21.8	50	52.2
DTTL145-1X61	1X	145	1.9	<0.1	<0.1	23	36	M72	40.9	36*24	54.6	57.4
DTTL176-093X61	0.93X	176	1.5	<0.1	<0.1	29	30	M72	44	38.7*25.8	58.5	61.7
DTTL175-082X61	0.82X	175	2.5	<0.1	<0.1	21	48	M72	49.9	43.9*29.3	64	70
DTTL180-073X61	0.73X	180	2.5	<0.1	<0.1	17	60	M72	56.1	49.3*32.9	70	78.6
DTTL138-07X61	0.7X	138	1.8	<0.1	<0.1	10	70	M72	58.5	51.4*34.3	81.9	82
DTTL230-065X61	0.65X	230	3.1	<0.1	<0.1	16	48	M72	63	55.4*36.9	84.5	88.3
DTTL178-055X61	0.55X	178	2.8	<0.1	<0.1	11	64	M72	74.4	65.5*43.6	94.2	104.4
DTTL230-052X61	0.52X	230	5.0	<0.1	<0.1	22	36	M72	78.7	69.2*46.2	109.2	110.4
DTTL215-046X61	0.46X	215	4.8	<0.1	<0.1	10	90	M72	89	78.3*52.2	136.5	124.8
DTTL285-034X61	0.34X	285	10.7	<0.1	<0.1	15	45	M72	120.4	105.9*70.6	154.6	168.8
DTTL312-0308X61	0.308X	312	7.8	<0.1	<0.1	9	85.5	M72	132.9	116.9*77.9	190.5	186.4
DTTL360-0273X61	0.273X	360	11.6	<0.1	<0.1	11	80	M72	150	31.9*87.9	234.1	210.3
DTTL440-0237X61	0.237X	440	15.7	<0.1	<0.1	11	80	M72	172.7	51.9*101.3	252.1	242.2
DTTL250-0198X61	0.198X	250	30.0	<0.1	<0.1	11	72	M72	206.8	81.8*121.2	308	289.9

DTTL100-1.7X61



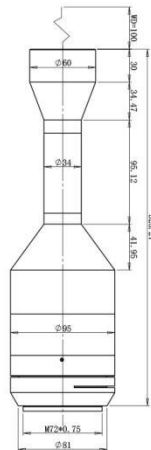
Main parameters

Mag	1.7X
WD	100
DOF(mm)	0.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	25
MTF>0.3(lp/mm)	36
Mount	M72

Field of view

8k*5um (40.94mm)	24.1
36*24mm(43mm)	21.2*14.1
KAI-47051 (48.7*29)	28.6*17.1
16K (57.4mm)	33.8

DTTL100-1.45X61



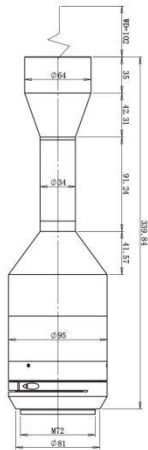
Main parameters

Mag	1.45X
WD	100
DOF(mm)	0.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	22
MTF>0.3(lp/mm)	42
Mount	M72

Field of view

8k*5um (40.94mm)	28.2
36*24mm(43mm)	24.8*16.6
KAI-47051 (48.7*29)	33.6*20
16K (57.4mm)	39.6

DTTL102-1.35X61



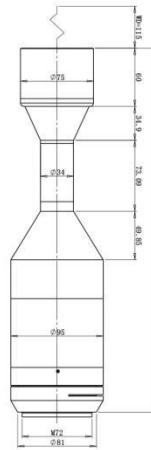
Main parameters

Mag	1.35X
WD	102
DOF(mm)	0.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	20
MTF>0.3(lp/mm)	48
Mount	M72

Field of view

8k*5um (40.94mm)	30.3
36*24mm(43mm)	26.7*17.8
KAI-47051 (48.7*29)	36.1*21.5
16K (57.4mm)	42.5

DTTL115-1.1X61



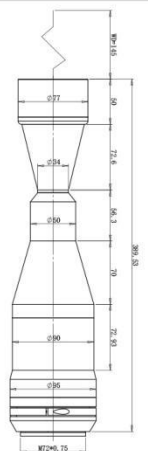
Main parameters

Mag	1.1X
WD	115
DOF(mm)	1.6
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	24
MTF>0.3(lp/mm)	40
Mount	M72

Field of view

8k*5um (40.94mm)	37.2
36*24mm(43mm)	32.7*21.8
KAI-47051 (48.7*29)	44.3*26.4
16K (57.4mm)	52.2

DTTL145-1X61



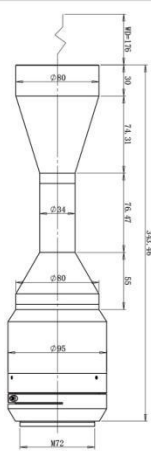
Main parameters

Mag	1X
WD	145
DOF(mm)	1.9
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	23
MTF>0.3(lp/mm)	36
Mount	M72

Field of view

8k*5um (40.94mm)	40.9
36*24mm(43mm)	36*24
KAI-47051 (48.7*29)	48.7*29
16K (57.4mm)	57.4

DTTL176-0.93X61



Main parameters

Mag	0.93X
WD	176
DOF(mm)	1.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	29
MTF>0.3(lp/mm)	30
Mount	M72

Field of view

8k*5um (40.94mm)	44
36*24mm(43mm)	38.7*25.8
KAI-47051 (48.7*29)	52.4*31.2
16K (57.4mm)	61.7

Technical drawing of a vertical shaft assembly. The shaft has a top flange with diameter 100, a central section with diameter 54, and a bottom section with diameter 81. The total height is 173 mm. The shaft is shown in a cross-section view with a break line in the middle.

Mag	0.82X
WD	175
DOF(mm)	2.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	21
MTF>0.3(lp/mm)	48
Mount	M72

8k*5um (40.94mm)	49.9
36*24mm(43mm)	43.9*29.3
KAl-47051 (48.7*29)	59.4*35.4
16K (57.4mm)	70

Mag	0.73X
WD	180
DOF(mm)	2.5
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	17
MTF>0.3(lp/mm)	60
Mount	M72

8k*5um (40.94mm)	56.1
36*24mm(43mm)	49.3*32.9
KAI-47051(48.7*29)	66.7*39.7
16K (57.4mm)	78.6

Technical drawing of a mechanical part, likely a valve or fitting. The drawing includes a cross-section view at the top and a side view below. Dimensions are given in millimeters (mm) and inches (in). Key diameters include 125 mm, 100 mm, 75 mm, 50 mm, 30 mm, and 25 mm. A note at the bottom indicates "MATERIAL: 304".

Mag	0.7X
WD	138
DOF(mm)	1.8
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	10
MTF>0.3(lp/mm)	70
Mount	M72

8k*5um (40.94mm)	58.5
36*24mm(43mm)	51.4*34.3
KAI-47051 (48.7*29)	69.6*41.4
16K (57.4mm)	82

Mag	0.65X
WD	230
DOF(mm)	3.1
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	16
MTF>0.3(lp/mm)	48
Mount	M72

8k*5um (40.94mm)	63
36*24mm(43mm)	55.4*36.9
KAI-47051(48.7*29)	74.9*44.6
16K (57.4mm)	88.3

Technical drawing of a mechanical part, likely a nozzle or probe, showing dimensions in millimeters. The drawing includes a top view with a diameter of 46 mm and a side view with a diameter of 45 mm. The total height is 178 mm. Other dimensions include 50 mm, 98 mm, 15 mm, 46.07 mm, 71.4 mm, 55 mm, 95 mm, and a 1 mm gap. The bottom is labeled M72.

Mag	0.55X
WD	178
DOF(mm)	2.8
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	11
MTF>0.3(lp/mm)	64
Mount	M72

8k*5um (40.94mm)	74.4
36*24mm(43mm)	65.5*43.6
KAl-47051 (48.7*29)	88.5*52.7
16K (57.4mm)	104.4

[illegible]

Mag	0.52X
WD	230
DOF(mm)	5.0
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	22
MTF>0.3(lp/mm)	36
Mount	M72

8k*5um (40.94mm)	78.7
36*24mm(43mm)	69.2*46.2
KAI-47051 (48.7*29)	93.7*55.8
16K (57.4mm)	110.4

Technical drawing of a vertical container with dimensions in mm. The container has a top flange with a diameter of 175 mm and a height of 45 mm. Below this is a conical section with a height of 116.7 mm and a base diameter of 70 mm. This is followed by a short cylindrical section with a height of 15 mm and a diameter of 70 mm. The main body is a tapered section with a height of 80.47 mm and a top diameter of 74 mm. Below this is a section with a height of 78.37 mm and a diameter of 80 mm. The bottom section has a height of 50.47 mm and a diameter of 95 mm. The total height is 382.15 mm. The bottom flange has a diameter of 75 mm.

Mag	0.46X
WD	215
DOF(mm)	4.8
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	10
MTF>0.3(lp/mm)	90
Mount	M72

8k*5um (40.94mm)	89
36*24mm(43mm)	78.3*52.2
KAI-47051(48.7*29)	105.9*63
16K (57.4mm)	124.8

Mag	0.34X
WD	285
DOF(mm)	10.7
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	15
MTF>0.3(lp/mm)	45
Mount	M72

8k*5um (40.94mm)	120.4
36*24mm(43mm)	105.9*70.6
KAl-47051 (48.7*29)	143.2*85.3
16K (57.4mm)	168.8

Mag	0.308X
WD	312
DOF(mm)	7.8
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	9
MTF>0.3(lp/mm)	85.5
Mount	M72

8K*5um (40.94mm)	132.9
36*24mm(43mm)	116.9*77.9
KAI-47051 (48.7*29)	158.1*94.2
16K (57.4mm)	186.4

Technical drawing of a lamp with dimensions:

- Top diameter: $\varnothing 290$
- Top section height: 58
- Overall height: 500
- Intermediate diameter: $\varnothing 271$
- Intermediate section height: 172.9
- Base diameter: $\varnothing 95$
- Base height: 65
- Base label: M 20x 75

Mag	0.273X
WD	360
DOF(mm)	11.6
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	11
MTF>0.3(lp/mm)	80
Mount	M72

8k*5um (40.94mm)	150
36*24mm(43mm)	131.9*87.9
KAI-47051(48.7*29)	178.4*106.2
16K (57.4mm)	210.3

Mag	0.237X
WD	440
DOF(mm)	15.7
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	11
MTF>0.3(lp/mm)	80
Mount	M72

8k*5um (40.94mm)	172.7
36*24mm(43mm)	151.9*101.3
KAI-47051 (48.7*29)	205.5*122.4
16K (57.4mm)	242.2

Technical drawing of a vertical container with dimensions in mm. The drawing shows a cylindrical body with a conical bottom and a flared top. Dimensions include diameters ($\phi 356$, $\phi 336$, $\phi 216$, $\phi 230$, $\phi 167.52$, $\phi 39$, $\phi 95$) and heights (130, 162.5, 18, 19.2, 19.0, 6, 95.7). A break symbol is shown at the top.

Mag	0.198X
WD	250
DOF(mm)	30.0
Telecentricity	<0.1
Optical distortion	<0.1
Aperture(F/#)	11
MTF>0.3(lp/mm)	72
Mount	M72

8k*5um (40.94mm)	206.8
36*24mm(43mm)	181.8*121.2
KAI-47051(48.7*29)	246*146.5
16K (57.4mm)	289.9