

# TCDP23C4XC120

## SPECIFICATIONS

Magnification	(x)	0.072 0.286
Object field of view	(mm x mm)	
with 1/3" detector (4.8 x 3.6 mm)		67.0 x 50.3 16.8 x 12.6
with 1/2.5" detector (5.70 x 4.28 mm)		79.6 x 59.8 19.9 x 14.9
with 1/2" detector (6.4 x 4.8 mm)		89.4 x 67.0 22.3 x 16.8
with 1/1.8" detector (7.13 x 5.37 mm)		99.6 x 75.0 24.9 x 18.7
with 2/3" - 5 MP detector (8.45 x 7.07 mm)		118.0 x 98.7 29.5 x 24.7
with KAI-2020 14.8 mm diagonal w x h 11.84 x 8.88		Ø=124.0 Ø=31.0
with KAI-04050 16 mm diagonal w x h 12.8 x 9.6		Ø=134.0 Ø=33.5
with KAI-4022/4021 21.5 mm diagonal w x h 15.2 x 15.2		- -
with KAI-08050 22.6 mm diagonal w x h 18.1 x 13.6		- -
Optical specifications		
Working distance	(mm)	334.5 334.5
wF/# (2)		8 12
Telecentricity (3)	(deg)	< 0.07 (0.08) < 0.08 (0.10)
Distortion , typical (max)	(%)	< 0.04 (0.10) < 0.05 (0.08)
Field depth (4)	(mm)	131 12
CTF @ 70 lp/mm	(%)	> 35 > 35
Mechanical specifications		
Length	(mm)	423.4
H1	(mm)	192.1
Diameter	(mm)	180.0
Mount		C



## NOTES

1. TCDP Series has been replaced by TCDP PLUS series. Please check our website for the list of [replaced products](#)
2. Working F-number (wF/#): the real F/# of a lens when used as a macro.
3. Maximum slope of principal rays inside the lens: when converted to milliradians, it gives the maximum measurement error for any millimeter of object displacement.
4. At the borders of the field depth the image can be still used for measurement but, to get a very sharp image, only half of the nominal field depth should be considered. Pixel size used for calculation is 5.5 µm.