



## Maximum support for full-frame (43.6mm) Target camera

- Maximum support for full-frame industrial cameras
- Bilateral telecentric design, ultra-high telecentricity, can improve the measurement accuracy by several times
- Optional iris diaphragm can effectively balance depth of field and resolution
- Can provide specially matched parallel light sources to improve the uniformity of illumination
- Some lenses support internal L90 steering, saving installation space
- This series of lenses have been precisely calibrated and can provide a comprehensive test report

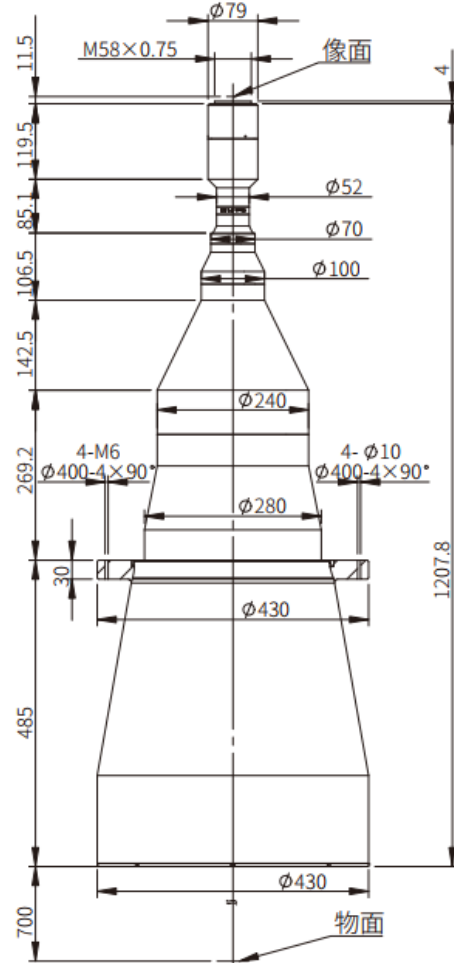


## Maximum support for full-frame (43.6mm) Target camera

Model	Chip type	Optical structure	WD (mm)	Mag (X)	Chip length	Chip width	diagonal	Long object FOV	Wide FOV	Total length of lens (mm)	Maximum Diameter (mm)	O/I (mm)	Lens interface	Optical distortion (%)	Resolution (μm)	aperture	DOF (mm)	Image field (mm)	Telecentricity (°)	Object field φ (mm)
XF-PTL39044-M58-11.48	35mm Full	Double Telecentric	700	0.114	36	24	43.3	315.8	210.5	1207.8	430	1919.3	M58	0.045	52.05	F9	74.8	43.6	0.04	382.5
XF-PTL35044-M58-11.48	35mm Full	Double Telecentric	540	0.127	36	24	43.3	283.5	189	987.5	376	1539	M58	0.04	46.68	F9	60.4	43.6	0.05	343.3
XF-PTL31044-M58-11.48	35mm Full	Double Telecentric	500	0.144	36	24	43.3	250	166.7	915.3	340	1426.8	M58	0.043	41.37	F9	47.5	43.6	0.04	302.8
XF-PTL26844-M58-11.48	35mm Full	Double Telecentric	410	0.166	36	24	43.3	216.9	144.6	849	300	1270.5	M58	0.05	35.75	F9	35.5	43.6	0.04	262.7
XF-PTL23844-M58-11.48	35mm Full	Double Telecentric	410	0.187	36	24	43.3	192.5	128.3	790.4	270	1211.9	M58	0.04	31.78	F9	28	43.6	0.04	233.2
XF-PTL19544-M58-11.48	35mm Full	Double Telecentric	400	0.229	36	24	43.3	157.2	104.8	642.6	222	1054.1	M58	0.046	26	F9	18.7	43.6	0.04	190.4
XF-PTL18244-M58-11.48	35mm Full	Double Telecentric	398	0.244	36	24	43.3	147.5	98.4	615.9	210	1025.4	M58	0.047	24.44	F9	16.3	43.6	0.04	178.7
XF-PTL15244-M58-11.48	35mm Full	Double Telecentric	320	0.293	36	24	43.3	122.9	81.9	568	180	899.5	M58	0.045	20.25	F9	11.3	43.6	0.04	148.8
XF-PTL12244-M58-11.48-VI	35mm Full	Double Telecentric	260	0.365	36	24	43.3	98.6	65.8	520.9	166	792.4	M58	0.042	16.26-103.13	F9-F57	7.3-47.4	43.6	0.04	119.5
XF-PTL11044-M58-11.48-VI	35mm Full	Double Telecentric	250	0.404	36	24	43.3	89.1	59.4	482.2	130	743.7	M58	0.05	14.73-93.41	F9-F57	6-39	43.6	0.04	107.9
XF-PTL09244-M58-11.48-VI	35mm Full	Double Telecentric	250	0.486	36	24	43.3	74.1	49.4	433	120	694.5	M58	0.05	12.24-77.72	F9-F57	4.1-27.1	43.6	0.04	89.7
XF-PTL08044-M58-11.48-VI	35mm Full	Double Telecentric	180	0.556	36	24	43.3	64.7	43.2	408.2	104	599.7	M58	0.045	10.69-68.1	F9-F57	3.2-20.7	43.6	0.03	78.4
XF-PTL06544-M58-11.48-VI	35mm Full	Double Telecentric	160	0.684	36	24	43.3	52.6	35.1	373.6	90	545.1	M58	0.048	8.7-55.41	F9-F57.4	2.1-13.7	43.6	0.03	63.7
XF-PTL05544-M58-11.48-VI	35mm Full	Double Telecentric	138	0.809	36	24	43.3	44.5	29.7	358	79	507.5	M58	0.019	7.4-46.82	F9-F57.4	1.5-9.8	43.6	0.04	53.9
XF-PTL04544-M58-11.48-VI	35mm Full	Double Telecentric	120	0.988	36	24	43.3	36.4	24.3	315	70	446.5	M58	0.05	6-38.32	F9-F57.4	1-6.5	43.6	0.03	44.1
XF-PTL03744-M58-11.48-VI	35mm Full	Double Telecentric	110	1.213	36	24	43.3	29.7	19.8	282.9	70	404.4	M58	0.058	7.35-31.22	F13.5-F57.4	1.0-4.3	43.6	0.03	35.9

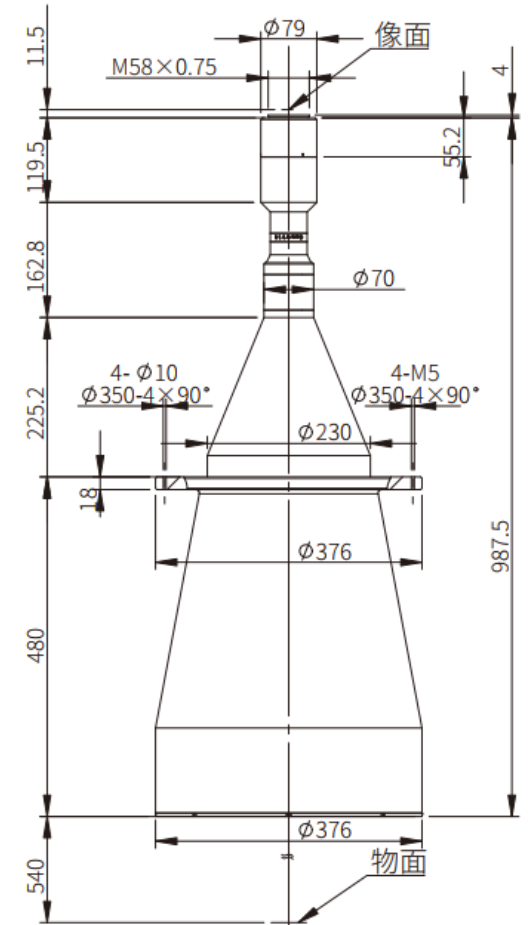
## XF-PTL39044-M58-11.48

Chip type	35mm Full
Chip length	36
Chip width	24
diagonal	43.3
Long object field of view	315.8
Wide field of view	210.5
Total length of lens (mm)	1207.8
Maximum diameter (mm)	430
O/I (mm)	1919.3
Lens interface	M58 Mount
Optical distortion (%)	0.045
Resolution (μm)	52.05
aperture	F9
Depth of field (mm)	74.8
Image field (mm)	43.6
Telecentric design value (°)	0.04
Object field φ (mm)	382.5
Working distance (mm)	700
Optical structure	Double telecentric
Magnification (X)	0.114



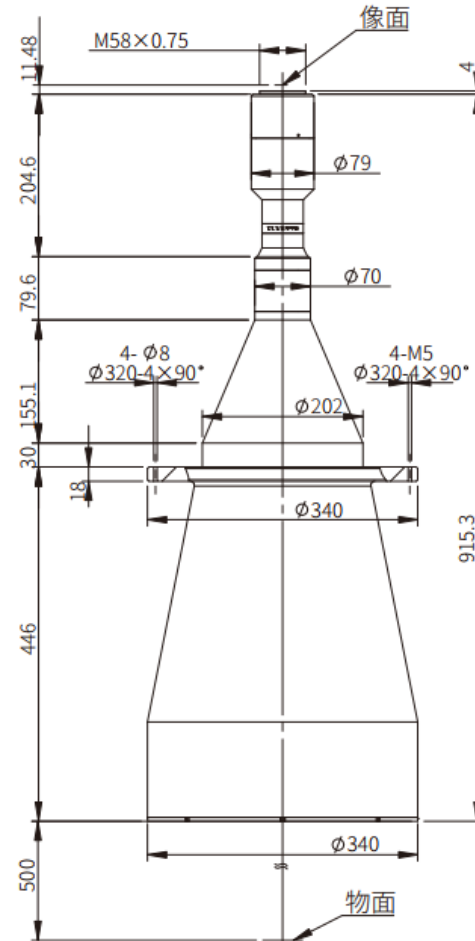
## XF-PTL35044-M58-11.48

Chip type	35mm Full
Chip length	36
Chip width	24
diagonal	43.3
Long object field of view	283.5
Wide field of view	189
Total length of lens (mm)	987.5
Maximum diameter (mm)	376
O/I (mm)	1539
Lens interface	M58 Mount
Optical distortion (%)	0.04
Resolution (μm)	46.68
aperture	F9
Depth of field (mm)	60.4
Image field (mm)	43.6
Telecentric design value (°)	0.05
Object field φ (mm)	343.3
Working distance (mm)	540
Optical structure	Double telecentric
Magnification (X)	0.127



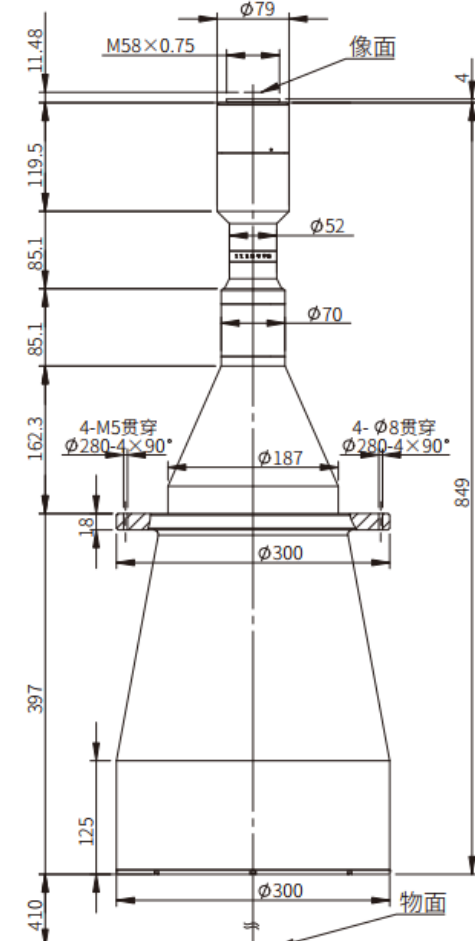
## XF-PTL31044-M58-11.48

Chip type	35mm Full
Chip length	36
Chip width	24
diagonal	43.3
Long object field of view	250
Wide field of view	166.7
Total length of lens (mm)	915.3
Maximum diameter (mm)	340
O/I (mm)	1426.8
Lens interface	M58 Mount
Optical distortion (%)	0.043
Resolution (μm)	41.37
aperture	F9
Depth of field (mm)	47.5
Image field (mm)	43.6
Telecentric design value (°)	0.04
Object field φ (mm)	302.8
Working distance (mm)	500
Optical structure	Double telecentric
Magnification (X)	0.144



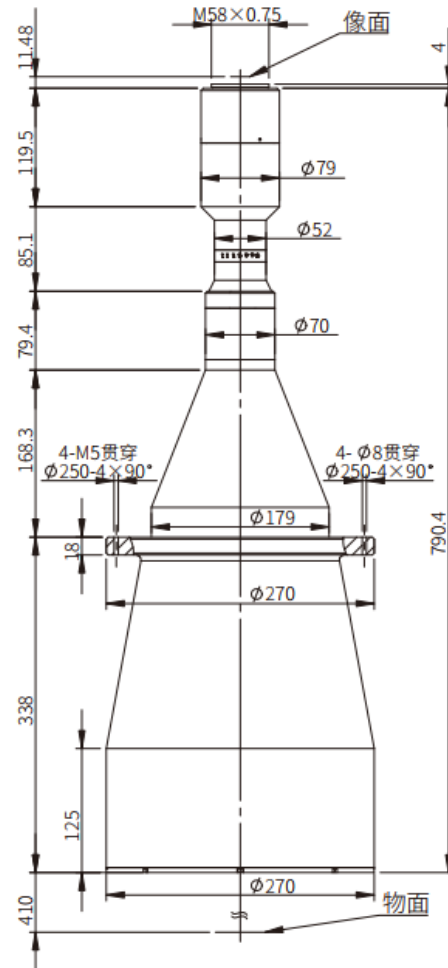
## XF-PTL26844-M58-11.48

Chip type	35mm Full
Chip length	36
Chip width	24
diagonal	43.3
Long object field of view	216.9
Wide field of view	144.6
Total length of lens (mm)	849
Maximum diameter (mm)	300
O/I (mm)	1270.5
Lens interface	M58 Mount
Optical distortion (%)	0.05
Resolution (μm)	35.75
aperture	F9
Depth of field (mm)	35.5
Image field (mm)	43.6
Telecentric design value (°)	0.04
Object field φ (mm)	262.7
Working distance (mm)	410
Optical structure	Double telecentric
Magnification (X)	0.166



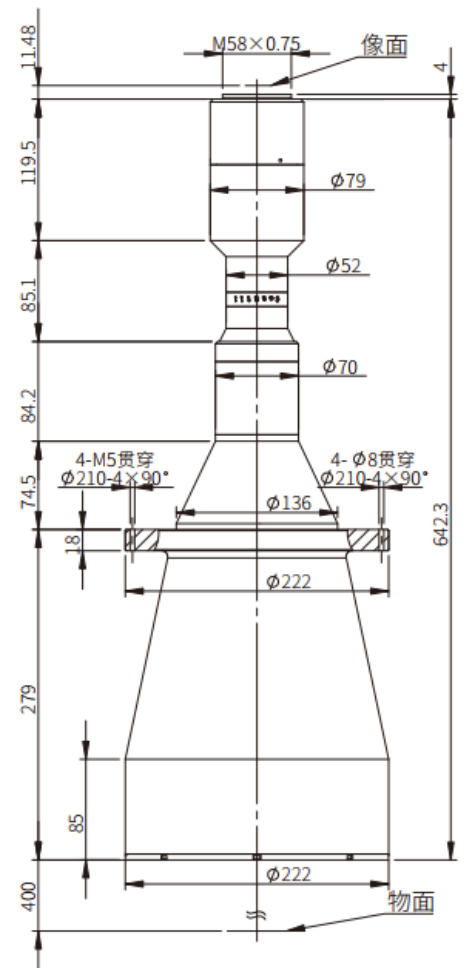
## XF-PTL23844-M58-11.48

Chip type	35mm Full
Chip length	36
Chip width	24
diagonal	43.3
Long object field of view	192.5
Wide field of view	128.3
Total length of lens (mm)	790.4
Maximum diameter (mm)	270
O/I (mm)	1211.9
Lens interface	M58 Mount
Optical distortion (%)	0.04
Resolution (μm)	31.78
aperture	F9
Depth of field (mm)	28
Image field (mm)	43.6
Telecentric design value (°)	0.04
Object field φ (mm)	233.2
Working distance (mm)	410
Optical structure	Double telecentric
Magnification (X)	0.187



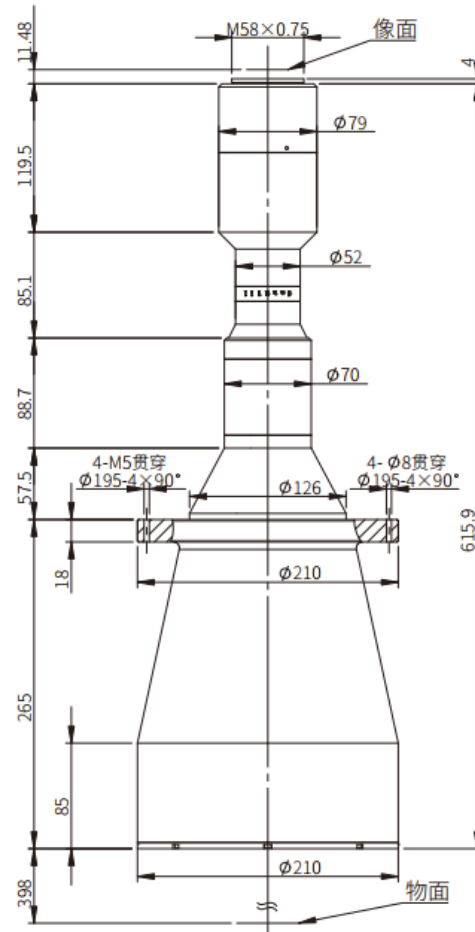
## XF-PTL19544-M58-11.48

Chip type	35mm Full
Chip length	36
Chip width	24
diagonal	43.3
Long object field of view	157.2
Wide field of view	104.8
Total length of lens (mm)	642.6
Maximum diameter (mm)	222
O/I (mm)	1054.1
Lens interface	M58 Mount
Optical distortion (%)	0.046
Resolution (μm)	26
aperture	F9
Depth of field (mm)	18.7
Image field (mm)	43.6
Telecentric design value (°)	0.04
Object field φ (mm)	190.4
Working distance (mm)	400
Optical structure	Double telecentric
Magnification (X)	0.229



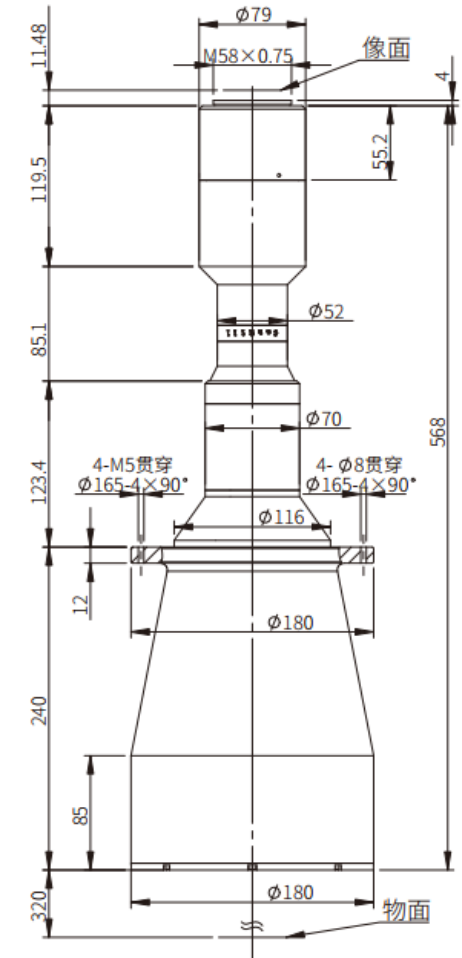
## XF-PTL18244-M58-11.48

Chip type	35mm Full
Chip length	36
Chip width	24
diagonal	43.3
Long object field of view	147.5
Wide field of view	98.4
Total length of lens (mm)	615.9
Maximum diameter (mm)	210
O/I (mm)	1025.4
Lens interface	M58 Mount
Optical distortion (%)	0.047
Resolution (μm)	24.44
aperture	F9
Depth of field (mm)	16.3
Image field (mm)	43.6
Telecentric design value (°)	0.04
Object field φ (mm)	178.7
Working distance (mm)	398
Optical structure	Double telecentric
Magnification (X)	0.244



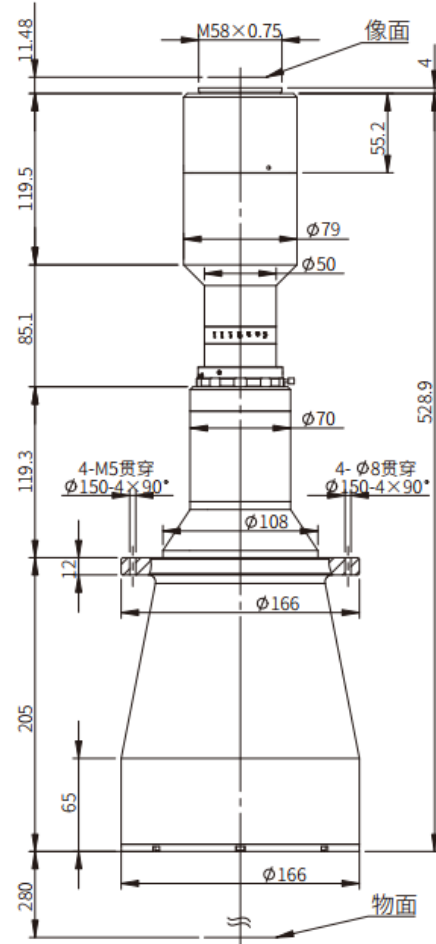
## XF-PTL15244-M58-11.48

Chip type	35mm Full
Chip length	36
Chip width	24
diagonal	43.3
Long object field of view	122.9
Wide field of view	81.9
Total length of lens (mm)	568
Maximum diameter (mm)	180
O/I (mm)	899.5
Lens interface	M58 Mount
Optical distortion (%)	0.045
Resolution (μm)	20.25
aperture	F9
Depth of field (mm)	11.3
Image field (mm)	43.6
Telecentric design value (°)	0.04
Object field φ (mm)	148.8
Working distance (mm)	320
Optical structure	Double telecentric
Magnification (X)	0.293



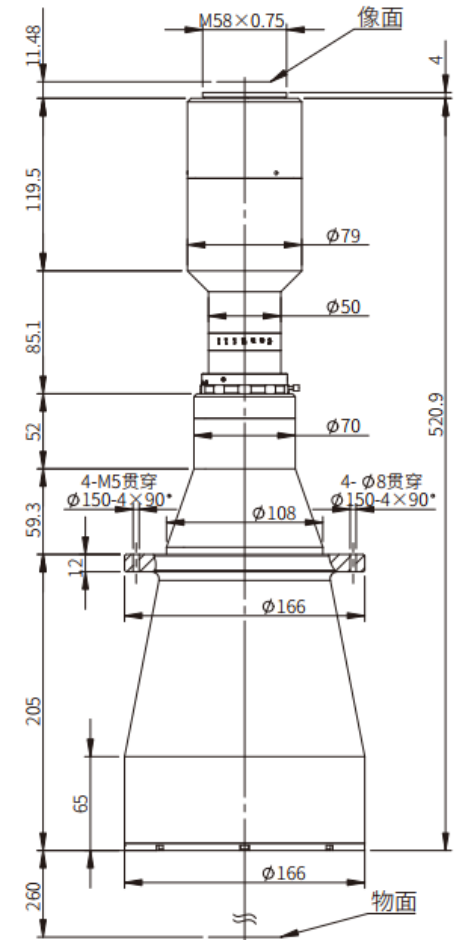
## XF-PTL13744-M58-11.48-VI

Chip type	35mm Full
Chip length	36
Chip width	24
diagonal	43.3
Long object field of view	110.8
Wide field of view	73.8
Total length of lens (mm)	528.9
Maximum diameter (mm)	166
O/I (mm)	820.4
Lens interface	M58 Mount
Optical distortion (%)	0.048
Resolution (μm)	18.33-117.86
aperture	F9-F57
Depth of field (mm)	9.2-59.4
Image field (mm)	43.6
Telecentric design value (°)	0.04
Object field φ (mm)	134.2
Working distance (mm)	280
Optical structure	Double telecentric
Magnification (X)	0.325



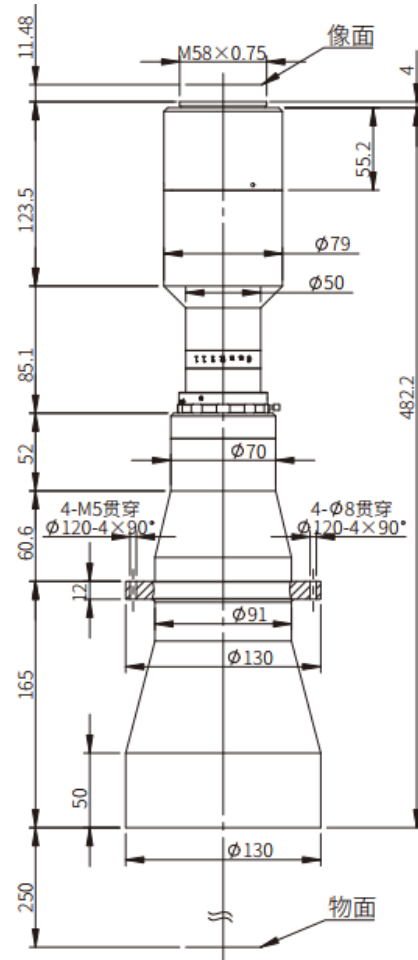
## XF-PTL12244-M58-11.48-VI

Chip type	35mm Full
Chip length	36
Chip width	24
diagonal	43.3
Long object field of view	98.6
Wide field of view	65.8
Total length of lens (mm)	520.9
Maximum diameter (mm)	166
O/I (mm)	792.4
Lens interface	M58 Mount
Optical distortion (%)	0.042
Resolution (μm)	16.26-103.13
aperture	F9-F57
Depth of field (mm)	7.3-47.4
Image field (mm)	43.6
Telecentric design value (°)	0.04
Object field φ (mm)	119.5
Working distance (mm)	260
Optical structure	Double telecentric
Magnification (X)	0.365



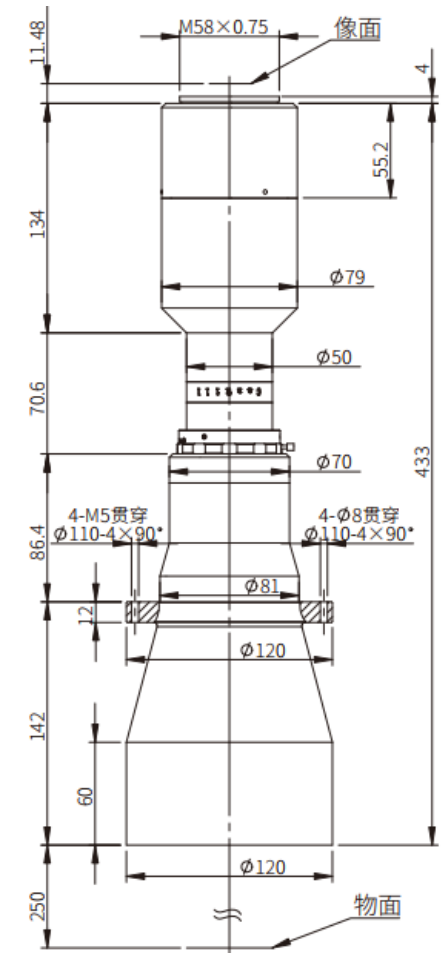
## XF-PTL11044-M58-11.48-VI

Chip type	35mm Full
Chip length	36
Chip width	24
diagonal	43.3
Long object field of view	89.1
Wide field of view	59.4
Total length of lens (mm)	482.2
Maximum diameter (mm)	130
O/I (mm)	743.7
Lens interface	M58 Mount
Optical distortion (%)	0.05
Resolution (μm)	14.73-93.41
aperture	F9-F57
Depth of field (mm)	6-39
Image field (mm)	43.6
Telecentric design value (°)	0.04
Object field φ (mm)	107.9
Working distance (mm)	250
Optical structure	Double telecentric
Magnification (X)	0.404



## XF-PTL09244-M58-11.48-VI

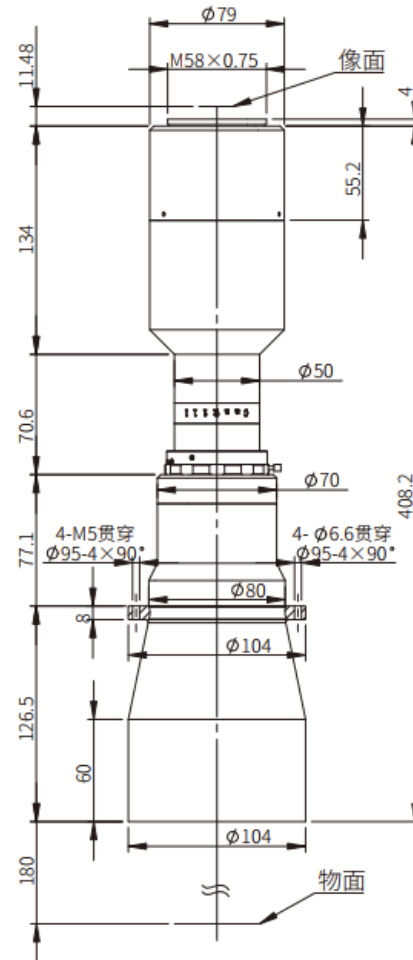
Chip type	35mm Full
Chip length	36
Chip width	24
diagonal	43.3
Long object field of view	74.1
Wide field of view	49.4
Total length of lens (mm)	433
Maximum diameter (mm)	120
O/I (mm)	694.5
Lens interface	M58 Mount
Optical distortion (%)	0.05
Resolution (μm)	12.24-77.72
aperture	F9-F57
Depth of field (mm)	4.1-27.1
Image field (mm)	43.6
Telecentric design value (°)	0.04
Object field φ (mm)	89.7
Working distance (mm)	250
Optical structure	Double telecentric
Magnification (X)	0.486





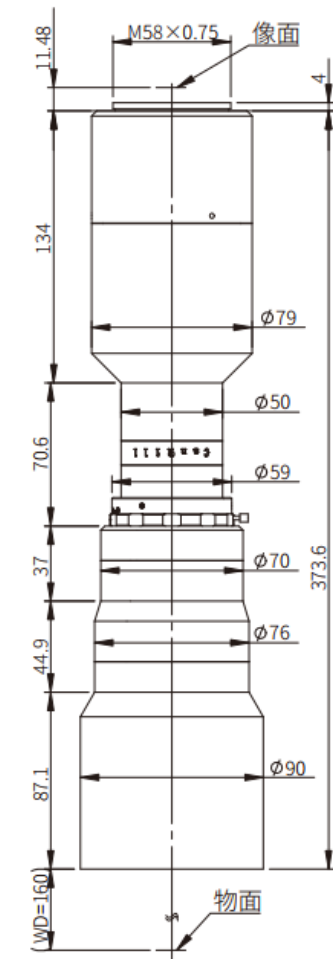
## XF-PTL08044-M58-11.48-VI

Chip type	35mm Full
Chip length	36
Chip width	24
diagonal	43.3
Long object field of view	64.7
Wide field of view	43.2
Total length of lens (mm)	408.2
Maximum diameter (mm)	104
O/I (mm)	599.7
Lens interface	M58 Mount
Optical distortion (%)	0.045
Resolution ( $\mu\text{m}$ )	10.69-68.1
aperture	F9-F57
Depth of field (mm)	3.2-20.7
Image field (mm)	43.6
Telecentric design value ( $^{\circ}$ )	0.03
Object field $\varphi$ (mm)	78.4
Working distance (mm)	180
Optical structure	Double telecentric
Magnification (X)	0.556



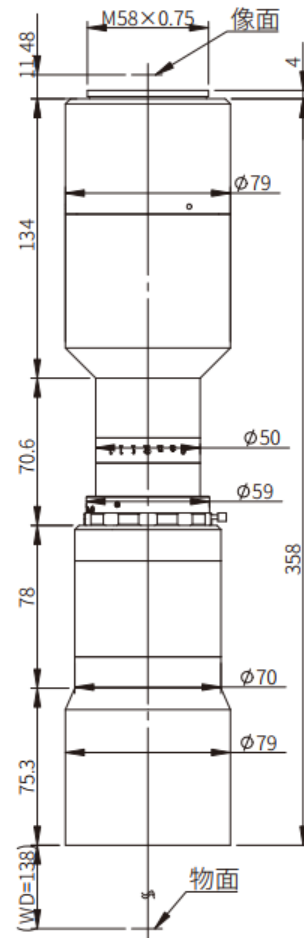
## XF-PTL06544-M58-11.48-VI

Chip type	35mm Full
Chip length	36
Chip width	24
diagonal	43.3
Long object field of view	52.6
Wide field of view	35.1
Total length of lens (mm)	373.6
Maximum diameter (mm)	90
O/I (mm)	545.1
Lens interface	M58 Mount
Optical distortion (%)	0.048
Resolution ( $\mu\text{m}$ )	8.7-55.41
aperture	F9-F57.4
Depth of field (mm)	2.1-13.7
Image field (mm)	43.6
Telecentric design value ( $^{\circ}$ )	0.03
Object field $\varphi$ (mm)	63.7
Working distance (mm)	160
Optical structure	Double telecentric
Magnification (X)	0.684



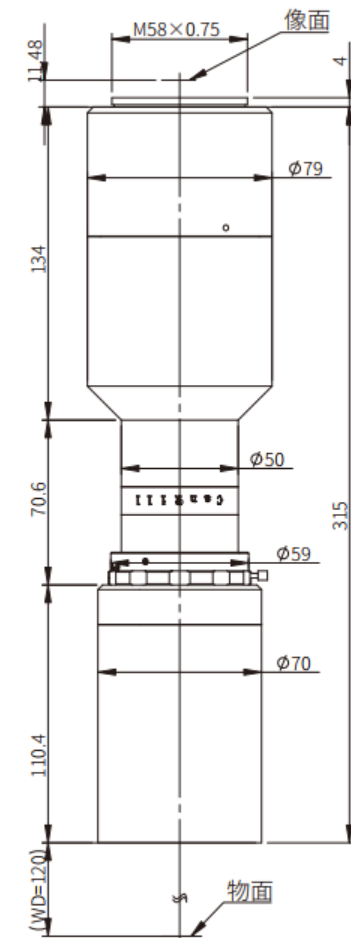
## XF-PTL05544-M58-11.48-VI

Chip type	35mm Full
Chip length	36
Chip width	24
diagonal	43.3
Long object field of view	64.7
Wide field of view	43.2
Total length of lens (mm)	408.2
Maximum diameter (mm)	104
O/I (mm)	599.7
Lens interface	M58 Mount
Optical distortion (%)	0.045
Resolution (μm)	10.69-68.1
aperture	F9-F57
Depth of field (mm)	3.2-20.7
Image field (mm)	43.6
Telecentric design value (°)	0.03
Object field φ (mm)	78.4
Working distance (mm)	180
Optical structure	Double telecentric
Magnification (X)	0.556



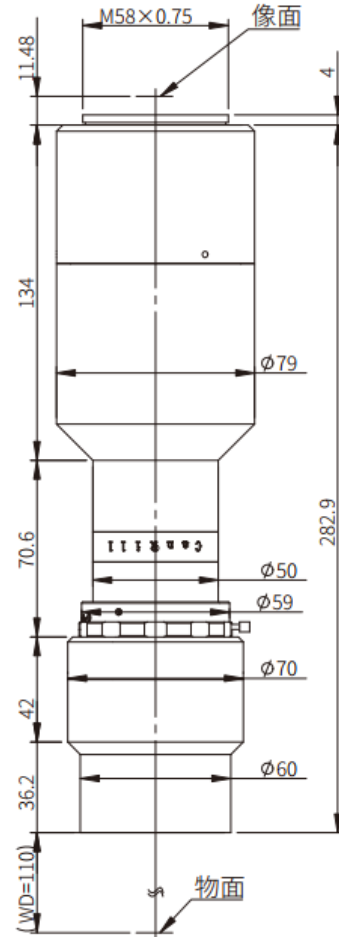
## XF-PTL04544-M58-11.48-VI

Chip type	35mm Full
Chip length	36
Chip width	24
diagonal	43.3
Long object field of view	36.4
Wide field of view	24.3
Total length of lens (mm)	315
Maximum diameter (mm)	70
O/I (mm)	446.5
Lens interface	M58 Mount
Optical distortion (%)	0.05
Resolution (μm)	6-38.32
aperture	F9-F57.4
Depth of field (mm)	1-6.5
Image field (mm)	43.6
Telecentric design value (°)	0.03
Object field φ (mm)	44.1
Working distance (mm)	120
Optical structure	Double telecentric
Magnification (X)	0.988



## XF-PTL03744-M58-11.48-VI

Chip type	35mm Full
Chip length	36
Chip width	24
diagonal	43.3
Long object field of view	29.7
Wide field of view	19.8
Total length of lens (mm)	282.9
Maximum diameter (mm)	70
O/I (mm)	404.4
Lens interface	M58 Mount
Optical distortion (%)	0.058
Resolution (μm)	7.35-31.22
aperture	F13.5-F57.4
Depth of field (mm)	1.0-4.3
Image field (mm)	43.6
Telecentric design value (°)	0.03
Object field φ (mm)	35.9
Working distance (mm)	110
Optical structure	Double telecentric
Magnification (X)	1.213





큐브아이엔티

Machine Vision System & Component

# THANK YOU

제품관련 문의 및 상담은 하단의 연락처로 문의주시면  
언제나 친절하고 성실히 응대해 드립니다.

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