

# SPECIFICATION SHEET

**CUSTOMER:** \_\_\_\_\_

**PRODUCT :** Application to 1/3" COMS Sensor \_\_\_\_\_

Optical Designer	Mechanical Designer	Checked by	Prepared by

Customer Approval	DongYa Primely Release

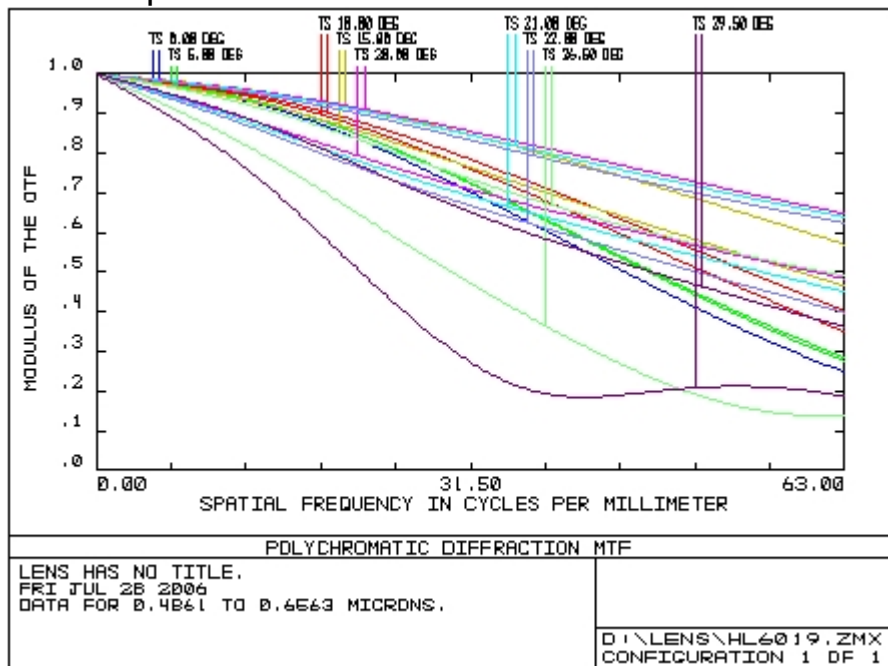
# 1.OPTICAL SPECIFICATION

- (1) PARTS NAME: HL6020
- (2) F/NO: 2.0
- (3) TV DISTORTION(Maximum): <11.2 % @ 1.0 Field
- (4) EFL: 6.0mm
- (5) DEPTH OF FOCUS: ±0.03 mm MTF> 50% @ 45 lp/mm in 0.7 Field
- (6) RELATIVE ILLUMINATION: >85%
- (7) H VALUE: 8.64 mm  
Distance From First Surface To First Principal Pt.  
  
H' VALUE: -5.88 mm  
Distance From Last Surface To Second Principal Pt.  
  
HH' VALUE: 0.98 mm  
Orientation To The Right Is Positive
- (8) SEMI-FIELD ANGLE: 29.5  
CHIEF RAY ANGLE: <10.8°
- (9) FIRST SURFACE TO ENTRANCE PUPIL PT.: 5.02mm  
ENTRANEC PUPIL DIAMETER: 3.15mm  
LAST SURFACE TO EXIT PUPIL PT.: -15.07mm  
EXIT PUPIL DIAMETER: 7.98mm  
Orientation To The Right Is Positive
- (10) APERTURE STOP DIAMETER: 4.4mm
- (11) CALCULATE MTF AT WAVELENGTH: (Theoretical Value)  
587 nm : 486 nm : 656 nm = 1 : 1 : 1

CYCLE /	45 lp/mm		63 lp/mm		90 lp/mm	
	T	S	T	S	T	S
IMAGEHEIGHT						

<b>AXIS</b>	58.8		37.3		14.9	
0.93 mm	71.1	67.7	53.4	50.0	29.8	27.4
1.55 mm	77.4	76.3	66.5	64.4	49.4	48.5
2.17 mm	58.0	71.1	39.7	58.5	16.0	45.9
3.1 mm	24.4	35.1	9.1	16.5	6.61	8.6

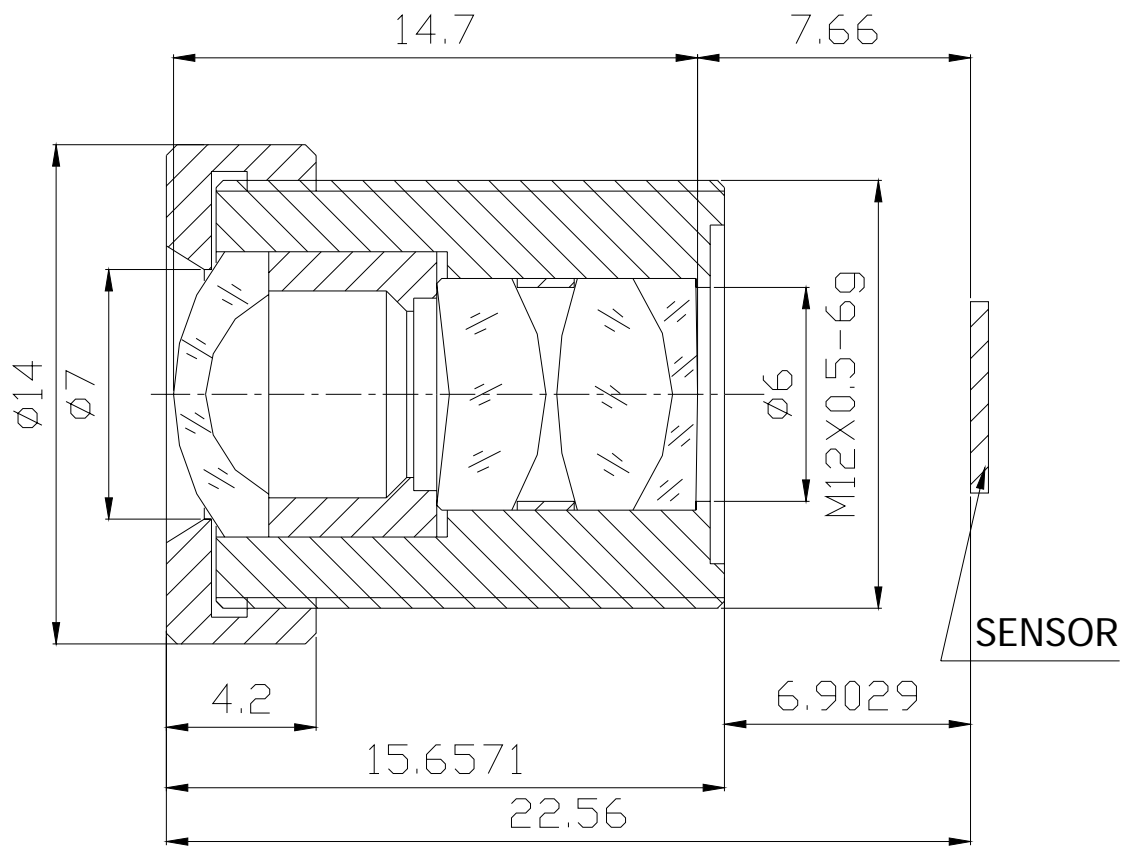
MTF=63 lp/mm



(12) B.F.L (In Air & On Axis)( Refer to the last surface of the mechanism)

Object Distance	B.F.L
Infinite	7.11
3000.0 mm	7.125
2000.0 mm	7.130
1000.0 mm	7.147
800.0 mm	7.155
600.0 mm	7.168
400.0 mm	7.195
300.0 mm	7.221
200.0 mm	7.274

## 2. OPTICAL LAYOUT:



## SPECIFICATION

3. EFL= 6.0mm
4. F/NO=2.0
5. BFL=8.64mm
6. FOV=59°
7. DISTORTION less 1.5%
8. RELATIVE ILLUMINATION >85%
9. CONSTRUCTION: 4G3E
10. THREAD: M12X0.5P

### 3.INSPECTION EQUIPMENT:

ITEM	EQUIPMENT
1. Barrel Dimension	Calipers
2. Cosmetic	Visual
3. Resolution	Project tester
4. B.F.L.	Project tester

### 4.QUALITY CONTROL:

- (1)All product be shipped has through 100% inspection resolution specification and sampling inspection of DY Q.A. plan.
- (2)AQL standard of DY Q.A. plan is based on contract between customer and DY.
- (3)DY will offer the inspection report per lot for ref.
- (4) Working temperature of product: -10°C~+65°C.