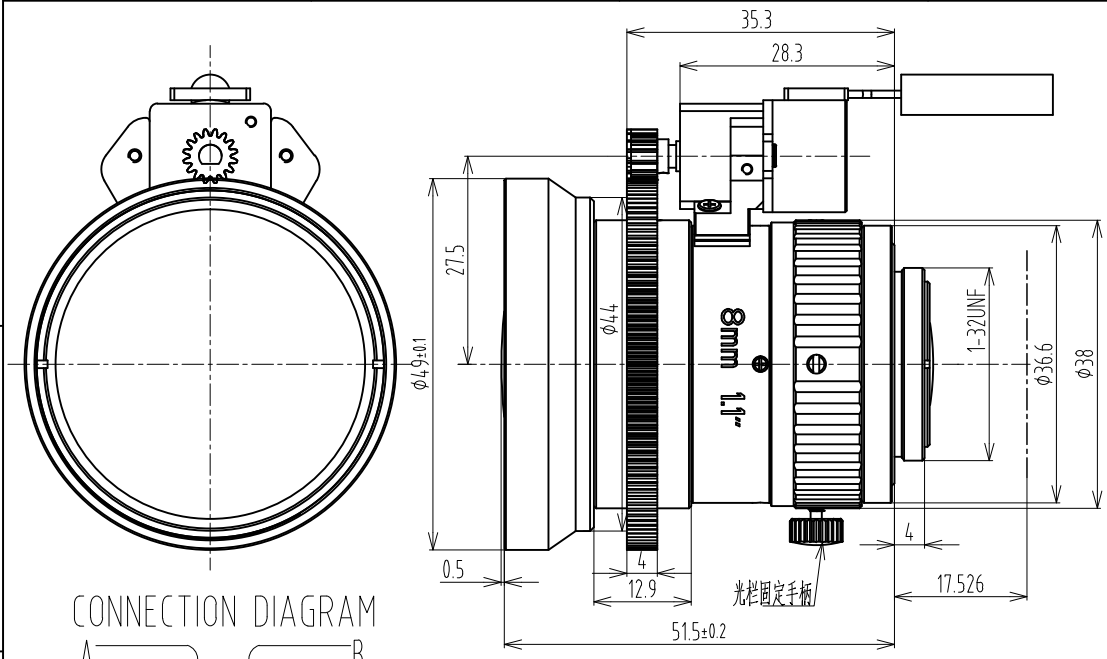
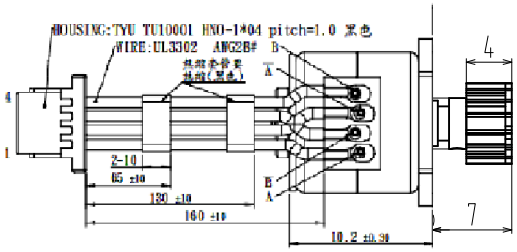


CONNECTION DIAGRAM

SEQUENCE OF EXCITATION

PHASE \ STEP	1	2	3	4
A	H	H	L	L
$\overline{A}$	L	L	H	H
B	L	H	H	L
$\overline{B}$	H	L	L	H

PIN	NOTOR TERMINAL	CABLE WIRE COLOUR
1	A	WHITE
2	$\overline{A}$	BLACK
3	$\overline{B}$	BLUE
4	B	RED



1.1" F2.8/8mm/C Mount

					Working distance	Optical Magnification	1.1" Field of View(mm)	
Focal Length		f=8mm			mm		H	V
Max Diameter(Ratio)		F=1:2.8~16						
Picture Size		1.1"(14.1×10.6mm)	1"(12.8×9.6mm)	2/3"(8.8×6.6mm)				
Angle	H	82°	76.3°	55.9°				
	V	65.7°	60.3°	43°				
	D	94°	89°	67.7°				
Object Dimension at 100mm	H	213.3mm	192.1mm	128mm				
	V	156.4mm	140.5mm	94.4mm				
	D	268.6mm	244mm	162.8mm				
Distortion (TV)		<1.5%	<1%	<0.8%	450	0.0177X	801.807	601.355
Focus distance(min)		0.1m			400	0.0197X	718.227	538.670
Flange back		17.526mm in air			350	0.0223X	634.614	475.960
Back focus		12.4mm(min)			300	0.0256X	550.953	413.215
lens coating size		420nm~1150nm			250	0.0302X	467.222	350.417
Front/Rear Effective Dia		Front Φ39.8mm Rear Φ15.6mm			200	0.0369X	383.383	192.14
Mount		C-Mount			150	0.0473X	299.363	224.522
Temperature Range		-10~+70°C			100	0.066X	215.017	161.263
Storage Temperature Range		-20~+80°C			80	0.0866X	176.1	128.6

ELECTRICAL CHARACTERISTIC

Rated Voltage(额定电压):	5.0V DC Constant
Operating Voltage Range(使用电压范围):	3.3V~5.0V
Excitation Method(激磁方式):	2 Phase Excitation
Coil Resistance(线圈电阻):	19Ω ± 10%
Step Angle(步进角度):	0.12° Step(ref)
Withstand Voltage(耐压):	AC 100 V/3mA
Insulation Resistance(绝缘阻抗):	10M Ω(AT500pps 5v DC)
Mechanical Speciication(机械特性):	
Final Transmission Ratio(减速比):	20:1
Gear Box3 Output Torque(输出力矩):	450gf-cm(min)(AT 500pps,5v DC)
Max.Slew rate(最大连续响应频率):	2500pps(min)(AT,5 v DC)
Max.Start rate(最大应答周波数):	1000pps(min)(AT,5 v DC
Mechanical Noise(机械噪音):	60dB(max)(DC 5v 500pps)
齿轮出力参数:	
齿轮齿形: JIS B 1701:	分度圆直径: Φ6.4/Φ48.4
模数: 0.4	齿顶圆直径: Φ7.2/Φ49.2
压力角: 20°	齿根圆直径: Φ5.4/Φ47.4
齿数: 16 / 121	精度: JGMA-116-02 5级

TOLERANCE:
. LINEARITY TOLERANCES ±0.05
. ANGULAR TOLERANCES ARE±30'
. DRAFT ANGLES AREA±0.5°/SIDE

三角法

材 料(环 保)

单位	比 例
mm	1:1

					设 计	chkp	2026-02-08	名称 DFA0820AD 规格
					校 对			部番 DFA0820D SPEC
					审 核			商品代号
版本	处数	更改文件号	担当	变更日期	批 准			

页 码	版 本
1/1	V0

A4