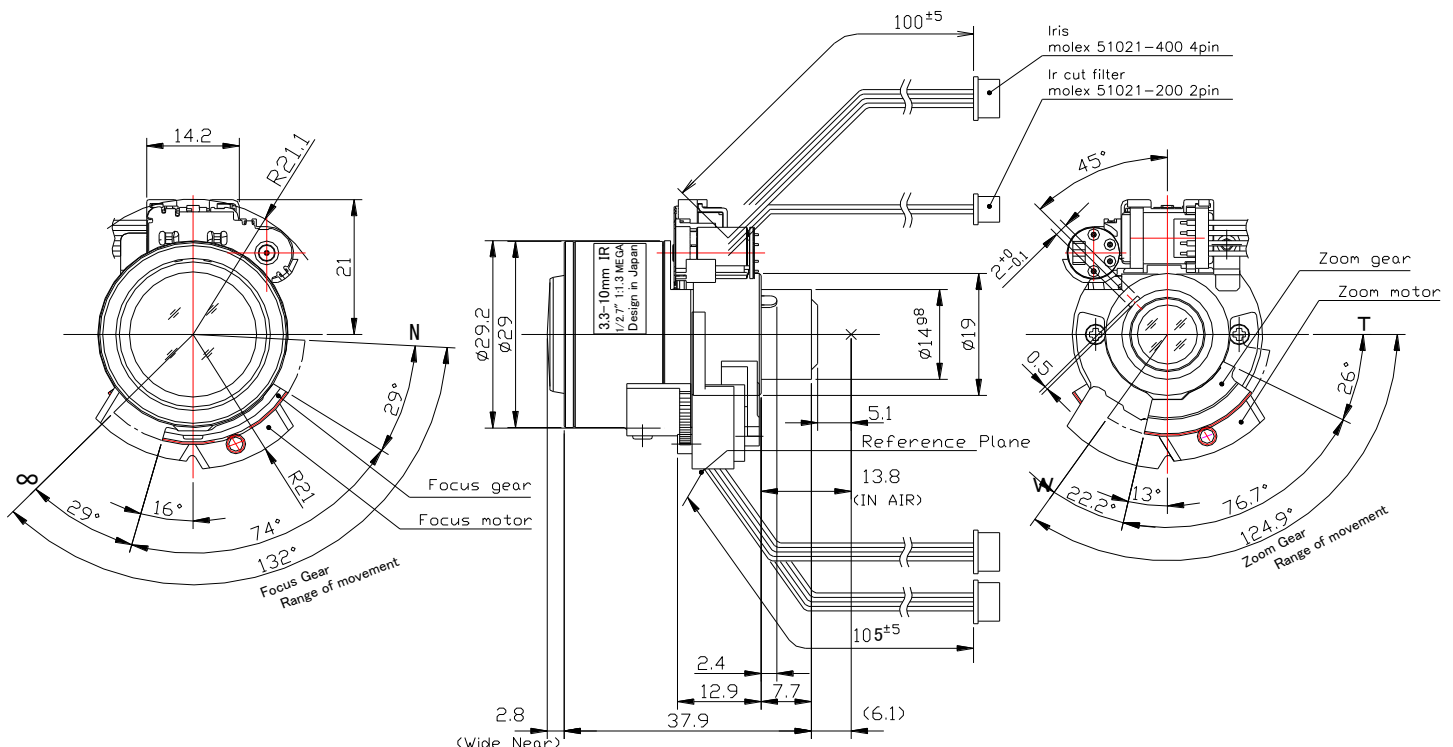


MSVF3X3313IR-BCPN-MD



Type	AI VARI		Mount	φ 14 Straight Mount	
Focal Length	3.3~10.0mm		Back Focus	5.7~12.3mm	
Fno.	F1.3		Flange Back	13.8mm	
Designed Image Format	1/2.7"(φ 6.75)		Exit Pupil	-66.7 ~ -21.1mm	
Operation Range	Iris	F1.3-F16-Closed	Filter Size	-	
	Focus	0.5m~∞	Aperture	Front	φ 15.9mm
	Zoom	3.3~10.0mm		Rear	φ 6.5mm
Control	Iris	Mortorized	Dimension	φ 29 x 37.9mm	
	Focus	Mortorized		Weight	24.7g
	Zoom	Mortorized			
	ICR	DC Galvanometer			
Object Size at MOD	Wide	1105.9x692.0mm			
	Tele	288.9x214.2mm			
Field of View	D	129.3° ~ 40.5°	16:9	129.3° ~ 40.5°	
	H	4:3 97.1° ~ 32.4°		108.2° ~ 35.4°	
	V	70.1° ~ 24.3°		56.2° ~ 19.8°	
Control	Iris	Focus	Zoom	IR cut filter	
Motor type	PM type stepping motor	PM type stepping motor	PM type stepping motor	Galvanometer	
Operation voltage	2.6V ~ 3.8V	2.8V ~ 3.6V	2.8V ~ 3.6V	3.0V ~ 5.0V	
Coil resistance	28.5Ω /phase ±10%	28.5Ω /phase ±7%		190Ω /phase ±10%	
Excite driving method	2phase Bipolar Constant voltage	1-2phase Bipolar Constant voltage	1-2phase Bipolar Constant voltage	-	
Reduction ratio	-	1/131.574	1/131.574	-	
Step angle	0.709°	0.171°	0.171°	-	
Insulation resistance	1MΩ or more	1MΩ or more	1MΩ or more	1MΩ or more	
Light Measuring Method	-				
Input Signal	-				
Iris Accuracy	-				
Sensitivity Adjustment	-				
Operating Temperature	-10 ~ +50 °C				

DIMENSIONS



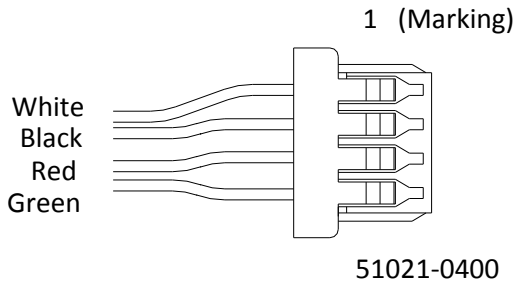
Subject to change without notice

MSVF3X3313IR-BCPN-MD



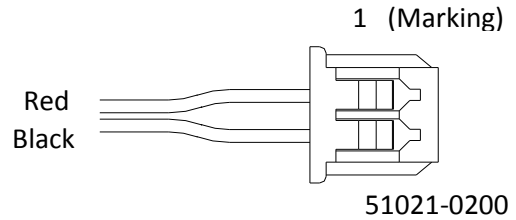
CONNECTION & CONTROL

(1) Auto Iris terminal



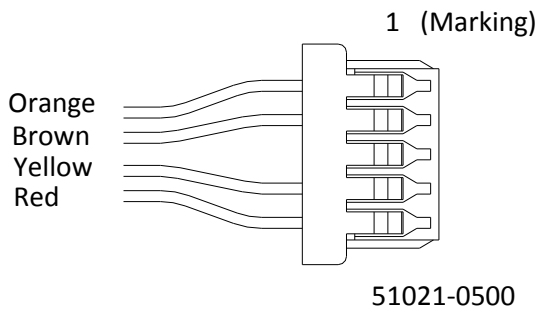
Pin number	Color	Assignment
1	White	A
2	Black	B
3	Red	A
4	Green	B

(2) IR Cut Filter Control terminal



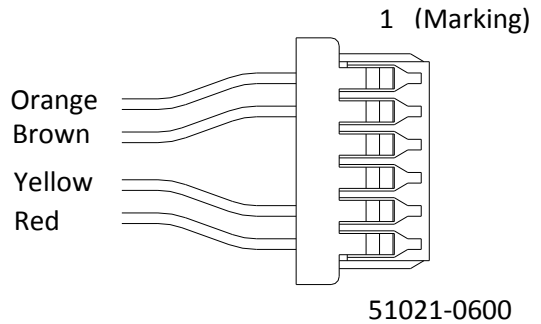
Pin number	Color	Assignment
1	Red	IR IN/OUT(-/+)
2	Black	IR GND

(3) Zoom Motor Control terminal



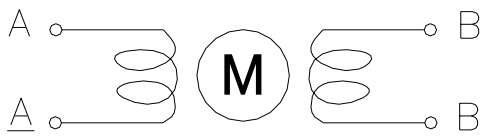
Pin number	Color	Assignment
1	Orange	B
2	Brown	A
3	N/A	N/A
4	Yellow	B
5	Red	A

(4) Focus Motor Control terminal



Pin number	Color	Assignment
1	Orange	B
2	Brown	A
3	N/A	N/A
4	N/A	N/A
5	Yellow	B
6	Red	A

(5) Motor Control Excitation pattern



Motor connection

Iris CW: Open → Close

Excite Pottem of CW revolution				
Step	A	\bar{A}	B	\bar{B}
0	H	L	H	L
1	L	H	H	L
2	L	H	L	H
3	H	L	L	H

Focus & Zoom

Excite Pottem of CW revolution				
Step	A	\bar{A}	B	\bar{B}
0	H	L	H	L
1	L	L	H	L
2	L	H	H	L
3	L	H	L	L
4	L	H	L	H
5	L	L	L	H
6	H	L	L	H
7	H	L	L	L