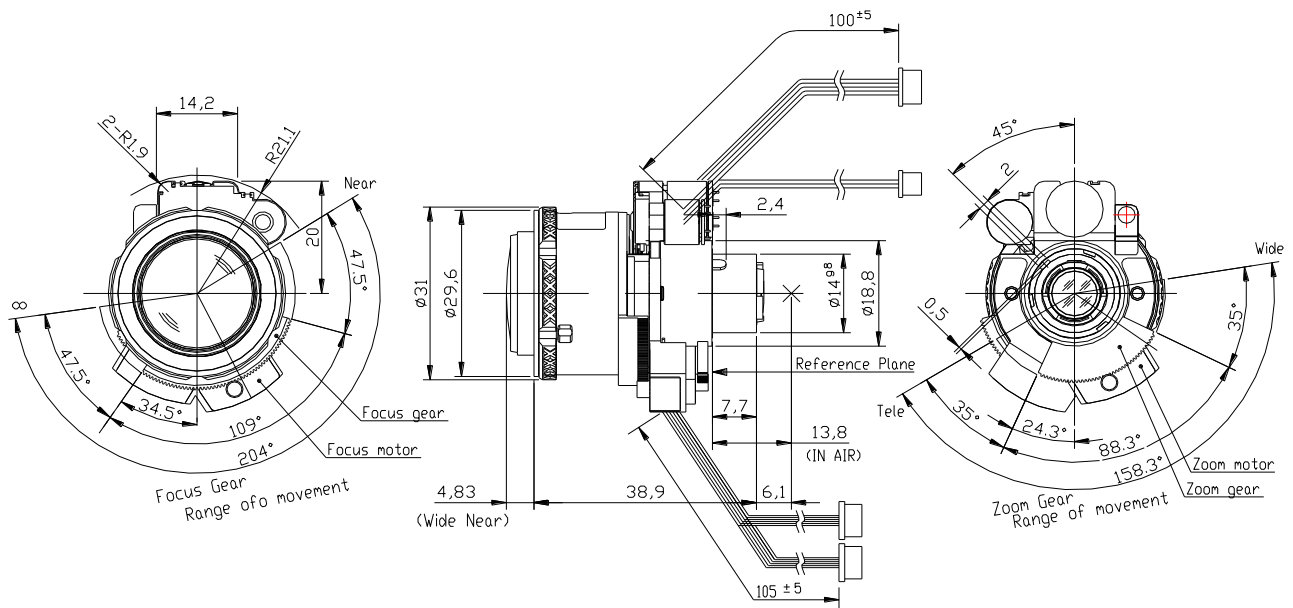


# MSVF3.3X0313IR-BCDN-MD



Type	AI VARI		Mount	φ 14 Straight Mount	
Focal Length	3.0~10.0mm		Back Focus	4.81~11.88mm	
Fno.	F1.3		Flange Back	13.8mm	
Designed Image Format	1/2.7"(φ 6.75)		Exit Pupil	-90.3 ~ -10.8mm	
Operation Range	Iris	F1.3-F360	Filter Size	-	
	Focus	0.5m~∞	Aperture	Front	φ 18.8mm
	Zoom	3.0~10.0mm		Rear	φ 7.8mm
Control	Iris	DC Galvanometer	Dimension	φ 31.6 x 38.9mm	
	Focus	Mortorized		Weight	32.6g
	Zoom	Mortorized			
	ICR	DC Galvanometer			
Object Size at MOD	Wide	779x1288mm	601x1662mm		
	Tele	219x296mm	181x330mm		
Field of View	D	136° ~ 40°	139° ~ 41°		
	H	4:3 104° ~ 32°	16:9 117° ~ 36°		
	V	Screen 75° ~ 24°	Screen 61° - 20°		
Control	Iris	Focus	Zoom	IR cut filter	
Motor type	Galvanometer	PM type stepping motor	PM type stepping motor	Galvanometer	
Operation voltage	3.0V ~ 5.0V	2.8V ~ 3.6V	2.8V ~ 3.6V	3.0V ~ 5.0V	
Driving Coil resistance	190Ω /phase ±10%	28.5Ω /phase ±7%		190Ω /phase ±10%	
Damping Coil resistance	855Ω /phase ±10%	-	-	-	
Excite driving method	-	1-2phase Bipolar Constant voltage	1-2phase Bipolar Constant voltage	-	
Reduction ratio	-	1/131.574	1/131.574	-	
Step angle	-	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



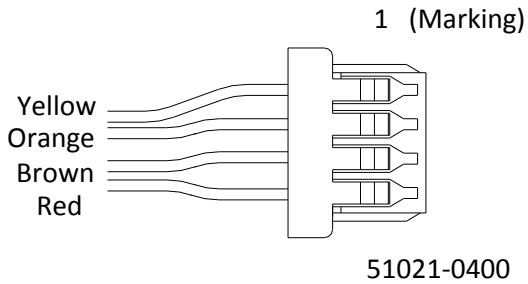
Subject to change without notice

# MSVF3.3X0313IR-BCDN-MD



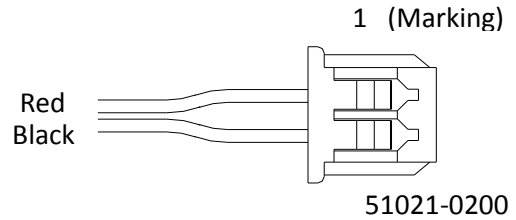
## CONNECTION & CONTROL

(1) Auto Iris terminal



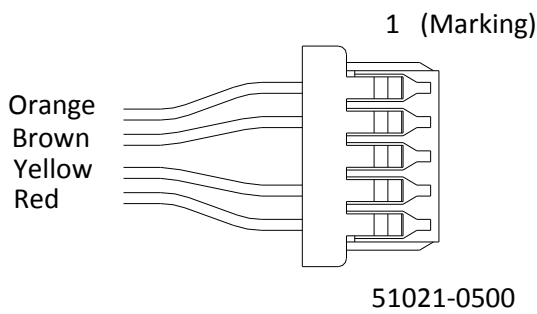
Pin number	Color	Assignment
1	Yellow	Damping(+)
2	Orange	Damping(-)
3	Brown	Driving (+)
4	Red	Driving (-)

(2) IR Cut Filter Control terminal



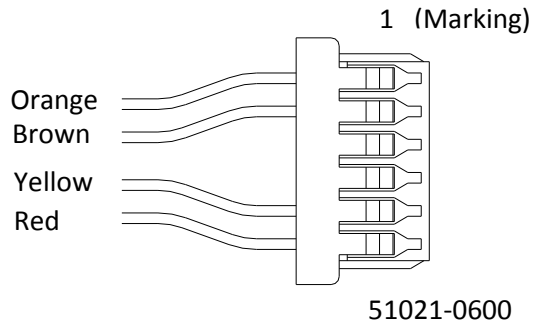
Pin number	Color	Assignment
1	Red	IR IN/OUT(-/+)
2	Black	IR GND

(3) Zoom Moter Control terminal



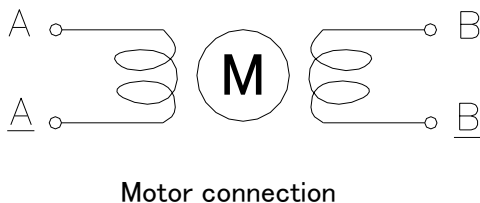
Pin number	Color	Assignment
1	Orange	B
2	Brown	A
3	N/A	N/A
4	Yellow	B
5	Red	A

(4) Focus Moter 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) Moter Control Excitation pattern



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