

# SPECIFICATIONS

## TVR1426HDPZIR

1" 14-50mm F2.6 IR-CORRECTED MOTORIZED FOCUS/ZOOM/IRIS

- 1. Application IR-corrected Varifocal lens with Motorized Focus/Zoom/Iris for 1inch sensor
- 2. Optical specification
  - Testing condition: Dummy glass (Equivalent of BK7, thickness1.5mm)
  - Focal length 14-50 mm +/-5%
  - F-Number F2.6 (Wide) to F2.6 (telephoto) +/-5%
  - Effective image circle Diameter 16.8 mm
  - Back focus length 13.995 mm
  - Flange back focus 17.526 mm +0.05 mm
  - Object distance 1.2 m to Inf.
  - Angle of view Wide 50.5°x 38.0° Telephoto 14.5°x11.1°
  - Lens components 12 Groups and 15 elements

Projective resolution

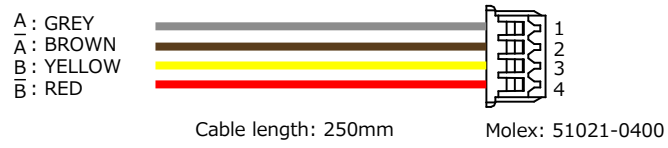
Wide		Telephoto	
Center	120 lp/mm	Center	120 lp/mm
Corner	100 lp/mm	Corner	100 lp/mm

Thickness of inside glass filter: 1.5 mm

- 3. Focusing system
  - Operation method Stepping motor drive
  - Rated voltage DC 3.3V
  - Excitation method 2 phase excitation
  - Drive mode Bi-polar Drive
  - Coil resistance 20Ω +/-7%
  - Step angle 0.088°
  - Noise 60 dB (Max.)
  - Output gear torque 200 gf-cm (Min.)
  - Max. starting frequency 800 pps (Min.)
  - Max. slewing frequency 1,100 pps (Min.)

Sequence of excitation

phase \ step	1	2	3	4
A	H	H	L	L
$\bar{A}$	L	L	H	H
B	L	H	H	L
$\bar{B}$	H	L	L	H

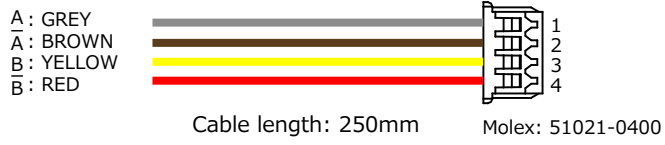


- Rotation angle 100°
- Number of steps 7,102 steps

- 4. Zooming system
  - Operation method Stepping motor drive
  - Rated voltage DC 3.3V
  - Excitation method 2 phase excitation
  - Drive mode Bi-polar Drive
  - Coil resistance 20Ω +/-7%
  - Step angle 0.088°
  - Noise 60 dB (Max.)

Output gear torque 200 gf-cm (Min.)  
 Max. starting frequency 800 pps (Min.)  
 Max. slewing frequency 1,100 pps (Min.)  
 Sequence of excitation

phase \ step	1	2	3	4
A	H	H	L	L
$\bar{A}$	L	L	H	H
B	L	H	H	L
$\bar{B}$	H	L	L	H



Rotation angle 100°  
 Number of steps 14,914 steps

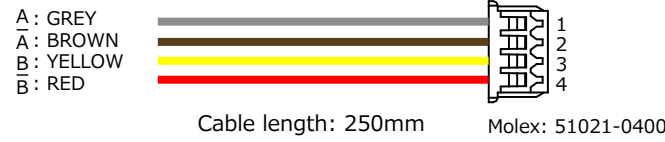
14 mm	20 mm	25 mm	30 mm	40 mm	45 mm	50 mm
0	4,455	7,226	9,374	11,148	12,679	14,914

steps

5. Iris system

Operation method Stepping motor drive  
 Rated voltage DC 3.3V  
 Excitation method 2 phase excitation  
 Drive mode Bi-polar Drive  
 Coil resistance 20Ω +/-7%  
 Step angle 0.088°  
 Noise 60 dB (Max.)  
 Output gear torque 200 gf-cm (Min.)  
 Max. starting frequency 800 pps (Min.)  
 Max. slewing frequency 1,100 pps (Min.)  
 Sequence of excitation

phase \ step	1	2	3	4
A	H	H	L	L
$\bar{A}$	L	L	H	H
B	L	H	H	L
$\bar{B}$	H	L	L	H



Rotation angle 41.5°  
 Number of steps 6,137 steps

F2.6	F2.8	F4.0	F5.6	F8.0	F11.0	F16.0
0	1,044	1,961	3,005	4,049	5,093	6,137

steps

