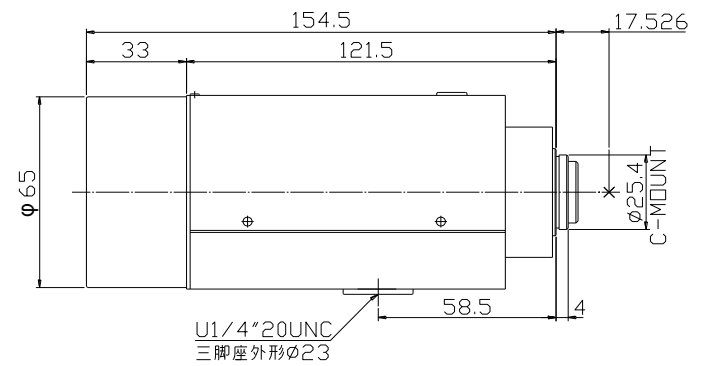
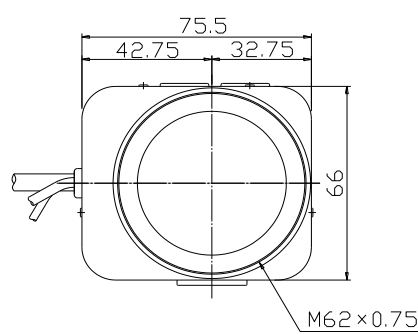


**x20 Zoom Lens**

**Y20Z10 (10-200mm) Series NEW ! DC Iris Model**



Photo : Y20Z15ADP



| Lens Type               |                     | Auto Iris                       |                      | Auto Focus (Standard)           |            | Auto Focus (Interface) |              |
|-------------------------|---------------------|---------------------------------|----------------------|---------------------------------|------------|------------------------|--------------|
| Model No.               |                     | Y20Z10AD                        | Y20Z10ADP            | Y20Z10AFD                       | Y20Z10AFDP | Y20Z10AFD-I            | Y20Z10AFDP-I |
| Format Size             |                     | 1/2"                            |                      |                                 |            |                        |              |
| Mount                   |                     | C / CS (with CS adapter)        |                      |                                 |            |                        |              |
| Focal Length            |                     | 10.0 - 200.0 mm                 |                      |                                 |            |                        |              |
| Max. Aperture Ratio     |                     | 1 : 2.4                         |                      |                                 |            |                        |              |
| Iris Range              |                     | F2.4 - F40                      |                      |                                 |            |                        |              |
| Min. Object Distance    |                     | 1.8 m                           |                      |                                 |            |                        |              |
| Operation               | Iris                | Auto (DC Drive)                 |                      |                                 |            |                        |              |
|                         | Focus               | Motorized                       | Auto(*1) / Motorized |                                 |            |                        |              |
|                         | Zoom                | Motorized                       |                      |                                 |            |                        |              |
| Angle of View           |                     | Wide / Tele                     |                      |                                 |            |                        |              |
|                         | Diagonal            | 42.4° / 2.2°                    |                      |                                 |            |                        |              |
|                         | Horizontal          | 37.8° / 1.8°                    |                      |                                 |            |                        |              |
|                         | Vertical            | 26.4° / 1.4°                    |                      |                                 |            |                        |              |
| Iris(DC)                | Drive Coil          | 190Ω ±10% (20°C)                |                      |                                 |            |                        |              |
|                         |                     | Close to Open : 4.0V (20°C)     |                      |                                 |            |                        |              |
|                         |                     | Open to Close : 0.5V (20°C)     |                      |                                 |            |                        |              |
|                         | Damp Coil           | 1150Ω ±10% (20°C)               |                      |                                 |            |                        |              |
|                         | Response Speed      | Approx. 3 sec.                  |                      |                                 |            |                        |              |
| Zoom                    | Input Voltage       | DC 8V-12V                       |                      | DC 4V-16V                       |            | DC ±4V - ±8V           |              |
|                         | Current Consumption | Max. 80 mA (Motor)              |                      | Max. 10 mA (Circuit)            |            |                        |              |
|                         | Motorization Speed  | Approx. 4-7 sec. (Variable)(*2) |                      | Approx. 2-7 sec. (Variable)(*2) |            |                        |              |
| Manual Focus            | Input Voltage       | DC 8V-12V                       |                      | DC 4V-16V                       |            | DC ±4V - ±8V           |              |
|                         | Current Consumption | Max. 80 mA (Motor)              |                      | Max. 10 mA (Circuit)            |            |                        |              |
|                         | Motorization Speed  | Approx. 4-7 sec. (Variable)(*2) |                      | Approx. 2-7 sec. (Variable)(*2) |            |                        |              |
| Auto Focus              | Input Voltage       | -                               |                      |                                 |            |                        |              |
|                         | Current Consumption | -                               |                      |                                 |            |                        |              |
| Preset Function (*3)    |                     | -                               | 2 Potentio           | -                               | 2 Potentio | -                      | 2 Potentio   |
| Applicable Wavelength   |                     | 430 nm - 680 nm                 |                      |                                 |            |                        |              |
| Back Focal Length       |                     | 11.1 mm (in air)                |                      |                                 |            |                        |              |
| Flange Back Length      |                     | 17.526 mm                       |                      |                                 |            |                        |              |
| Temperature Range       |                     | -10°C - +50°C                   |                      |                                 |            |                        |              |
| Filter Screw Size       |                     | M62.0 mm P=0.75                 |                      |                                 |            |                        |              |
| Dimension ( H x W x D ) |                     | 66 x 75.5 x 154.5 mm            |                      |                                 |            |                        |              |
| Weight (Approx.)        |                     | 770g                            | 785g                 | 780g                            | 795g       | 780g                   | 795g         |

\*Specifications are subject to change without notice

- \*1- One Push Auto Focus
- \*2- Adjustable with volume
- \*3- 2 potentio - Preset on Zoom / Focus

**Wiring Diagram**

| Wiring Diagram for Auto Iris (DC) |                  | Resistance Value                |
|-----------------------------------|------------------|---------------------------------|
| BLACK                             | Damping Coil (-) | Damping Coil<br>( 1150Ω ± 10% ) |
| RED                               | Damping Coil (+) |                                 |
| WHITE                             | Driving Coil (+) | Drive Coil<br>( 190Ω ± 10% )    |
| GREEN                             | Driving Coil (-) |                                 |

**x20 Zoom Lens**

**Y20Z15 (15-300mm) Series NEW ! DC Iris Model**

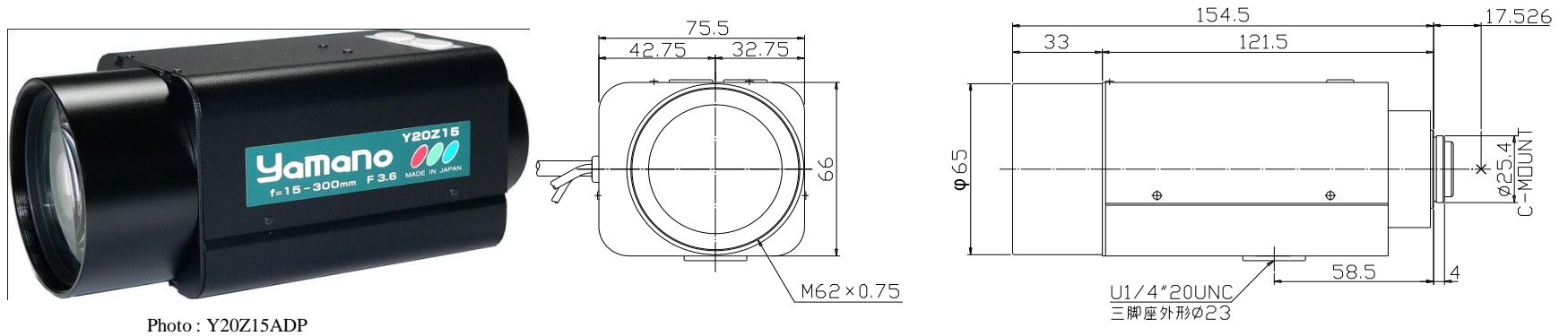


Photo : Y20Z15ADP

| Lens Type               |                     | Auto Iris   |            | Auto Focus (Standard)           |            | Auto Focus (Interface) |              |
|-------------------------|---------------------|---|------------|---------------------------------|------------|------------------------|--------------|
| Model No.               |                     | Y20Z15AD  | Y20Z15ADP  | Y20Z15AFD                       | Y20Z15AFDP | Y20Z15AFD-I            | Y20Z15AFDP-I |
| Format Size             |                     | 1/2"  |            |                                 |            |                        |              |
| Mount                   |                     | C / CS (with CS adapter)                          |            |                                 |            |                        |              |
| Focal Length            |                     | 15.0 - 300.0 mm                                   |            |                                 |            |                        |              |
| Max. Aperture Ratio     |                     | 1 : 3.6   |            |                                 |            |                        |              |
| Iris Range              |                     | F3.6 - F40  |            |                                 |            |                        |              |
| Min. Object Distance    |                     | 2.5 m   |            |                                 |            |                        |              |
| Operation               | Iris                | Auto (DC Drive )                                  |            |                                 |            |                        |              |
|                         | Focus               | Motorized   |            | Auto(*1) / Motorized            |            |                        |              |
|                         | Zoom                | Motorized   |            |                                 |            |                        |              |
| Angle of View           |                     | Wide / Tele                                       |            |                                 |            |                        |              |
|                         | Diagonal            | 29.2° / 1.5°                                      |            |                                 |            |                        |              |
|                         | Horizontal          | 23.4° / 1.2°                                      |            |                                 |            |                        |              |
|                         | Vertical            | 17.7° / 0.9°                                      |            |                                 |            |                        |              |
| Iris(DC)                | Drive Coil          | 190Ω ±10% (20°C)                                  |            |                                 |            |                        |              |
|                         |                     | Close to Open : 4.0V (20°C)                       |            |                                 |            |                        |              |
|                         |                     | Open to Close : 0.5V (20°C)                       |            |                                 |            |                        |              |
|                         | Damp Coil           | 1150Ω ±10% (20°C)                                 |            |                                 |            |                        |              |
|                         | Response Speed      | Approx. 3 sec.                                    |            |                                 |            |                        |              |
|                         | -                   | -   |            |                                 |            |                        |              |
| Zoom                    | Input Voltage       | DC 8V-12V   |            | DC 4V-16V                       |            | DC ±4V - ±8V           |              |
|                         | Current Consumption | Max. 80 mA (Motor)                                |            | Max. 10 mA (Circuit)            |            |                        |              |
|                         | Motorization Speed  | Approx. 4-7 sec. (Variable)(*2)                   |            | Approx. 2-7 sec. (Variable)(*2) |            |                        |              |
| Manual Focus            | Input Voltage       | DC 8V-12V   |            | DC 4V-16V                       |            | DC ±4V - ±8V           |              |
|                         | Current Consumption | Max. 80 mA (Motor)                                |            | Max. 10 mA (Circuit)            |            |                        |              |
|                         | Motorization Speed  | Approx. 4-7 sec. (Variable)(*2)                   |            | Approx. 2-7 sec. (Variable)(*2) |            |                        |              |
| Auto Focus              | Input Voltage       | DC8V-16V  |            |                                 |            |                        |              |
|                         | Current Consumption | Max.50mA (Standby) / Max.150mA (Zoom or Focus on) |            |                                 |            |                        |              |
| Preset Function (*3)    |                     | -   | 2 Potentio | -                               | 2 Potentio | -                      | 2 Potentio   |
| Applicable Wavelength   |                     | 430 nm - 680 nm                                   |            |                                 |            |                        |              |
| Back Focal Length       |                     | 14.9 mm (in air)                                  |            |                                 |            |                        |              |
| Flange Back Length      |                     | 17.526 mm   |            |                                 |            |                        |              |
| Temperature Range       |                     | -10°C - +50°C                                     |            |                                 |            |                        |              |
| Filter Screw Size       |                     | M62.0 mm P=0.75                                   |            |                                 |            |                        |              |
| Dimension ( H x W x D ) |                     | 66 x 75.5 x 154.5 mm                              |            |                                 |            |                        |              |
| Weight (Approx.)        |                     | 770g  | 785g       | 780g                            | 795g       | 780g                   | 795g         |

\*Specifications are subject to change without notice

- \*1- One Push Auto Focus
- \*2- Adjustable with volume
- \*3- 2 potentio - Preset on Zoom / Focus

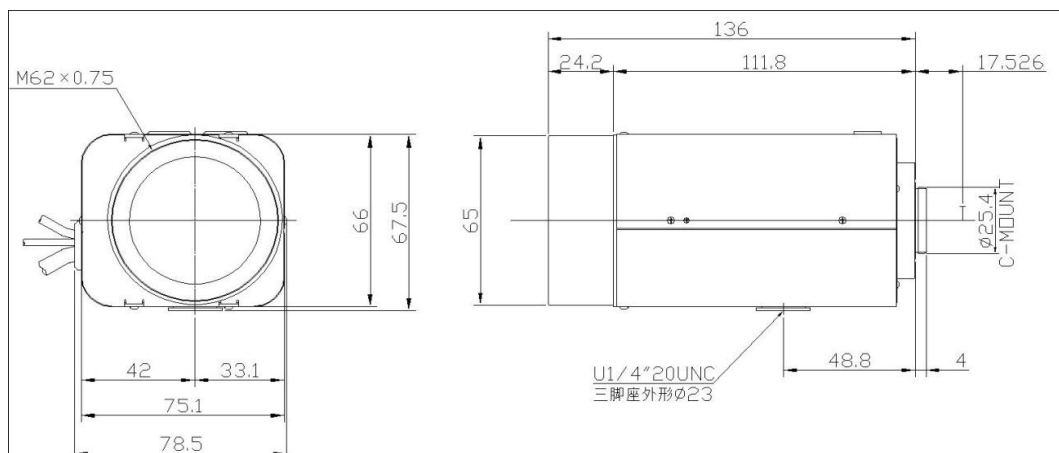
**Wiring Diagram**

| Wiring Diagram for Auto Iris (DC) |                  | Resistance Value                |
|-----------------------------------|------------------|---------------------------------|
| BLACK                             | Damping Coil (-) | Damping Coil<br>( 1150Ω ± 10% ) |
| RED                               | Damping Coil (+) |                                 |
| WHITE                             | Driving Coil (+) | Drive Coil<br>( 190Ω ± 10% )    |
| GREEN                             | Driving Coil (-) |                                 |

## x10 Infrared Corrected Zoom Lens ( Day & Night )

### Y10Z85RD (8.5-85mm)Series - Infrared Corrected Zoom Lens (DC Iris)

No Photo



| Lens Type               |                          | Auto Iris  |                      | Auto Focus (Standard)                             |             | Auto Focus (Interface) |               |
|-------------------------|--------------------------|--|----------------------|---|-------------|------------------------|---------------|
| Model No.               |                          | Y10Z85RAD  | Y10Z85RADP           | Y10Z85RAFD  | Y10Z85RAFDP | Y10Z85RAFD-I           | Y10Z85RAFDP-I |
| Format Size             | 1/2"                     |  |                      |   |             |                        |               |
| Mount                   | C / CS (with CS adapter) |  |                      |   |             |                        |               |
| Focal Length            | 8.5 - 85.0 mm            |  |                      |   |             |                        |               |
| Max. Aperture Ratio     | 1 : 1.5                  |  |                      |   |             |                        |               |
| Iris Range              | F1.5 - 360               |  |                      |   |             |                        |               |
| Min. Object Distance    | 1.5 m                    |  |                      |   |             |                        |               |
| Operation               | Iris                     | Auto (DC Drive )   |                      |   |             |                        |               |
|                         | Focus                    | Motorized  | Auto(*1) / Motorized |   |             |                        |               |
|                         | Zoom                     | Motorized  |                      |   |             |                        |               |
| Angle of View           |                          | Wide / Tele  |                      |   |             |                        |               |
|                         | Diagonal                 | 53.7° / 5.4°   |                      |   |             |                        |               |
|                         | Horizontal               | 41.5° / 4.3°   |                      |   |             |                        |               |
|                         | Vertical                 | 31.3° / 3.3°   |                      |   |             |                        |               |
| Iris                    | Drive Coil               | 190Ω ±10% (20°C)<br>Close to Open : 4.0V (20°C)<br>Open to Close : 0.5V (20°C) |                      |   |             |                        |               |
|                         | Damp Coil                | 1150Ω ±10% (20°C)  |                      |   |             |                        |               |
|                         | Response Speed           | Approx. 3 sec.   |                      |   |             |                        |               |
|                         | -                        | -  |                      |   |             |                        |               |
| Zoom                    | Input Voltage            | DC 8V-12V  |                      | DC 4V-16V   |             | DC ±4V - ±8V           |               |
|                         | Current Consumption      | Max. 80 mA (Motor)   |                      | Max. 10 mA (Circuit)                              |             |                        |               |
|                         | Motorization Speed       | Approx. 4-7 sec. (Variable)(*2)  |                      | Approx. 2-7 sec. (Variable)(*2)                   |             |                        |               |
| Manual Focus            | Input Voltage            | DC 8V-12V  |                      | DC 4V-16V   |             | DC ±4V - ±8V           |               |
|                         | Current Consumption      | Max. 80 mA (Motor)   |                      | Max. 10 mA (Circuit)                              |             |                        |               |
|                         | Motorization Speed       | Approx. 4-7 sec. (Variable)(*2)  |                      | Approx. 2-7 sec. (Variable)(*2)                   |             |                        |               |
| Auto Focus              | Input Voltage            | -  |                      | DC8V-16V  |             |                        |               |
|                         | Current Consumption      | -  |                      | Max.50mA (Standby) / Max.150mA (Zoom or Focus on) |             |                        |               |
| Preset Function *3      | -                        | 2 Potentio   |                      | -   | 2 Potentio  |                        | -             |
| Applicable Wavelength   | 430 nm - 950 nm          |  |                      |   |             |                        |               |
| Back Focal Length       | 14.65 mm (in air)        |  |                      |   |             |                        |               |
| Flange Back Length      | 17.526 mm                |  |                      |   |             |                        |               |
| Temperature Range       | -10°C - +40°C            |  |                      |   |             |                        |               |
| Filter Screw Size       | M62.0 mm P=0.75          |  |                      |   |             |                        |               |
| Dimension ( H x W x D ) | 66 x 75.1 x 136 mm       |  |                      |   |             |                        |               |
| Weight (Approx.)        | 710g                     | 725g   | 715g                 | 725g  | 715g        | 725g                   |               |

\*Specifications are subject to change without notice

- \*1- One Push Auto Focus
- \*2- Adjustable with volume
- \*3- 2 potentio - Preset on Zoom / Focus

#### Wiring Diagram

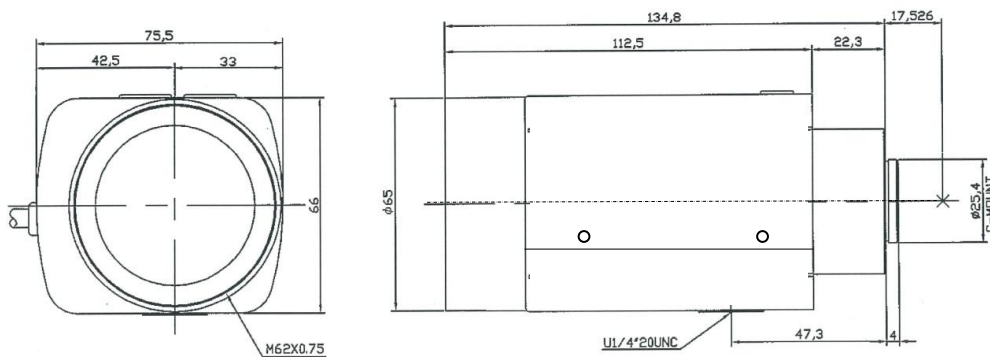
| Wiring Diagram for Auto Iris (DC) |                  | Resistance Value               |
|-----------------------------------|------------------|--------------------------------|
| BLACK                             | Damping Coil (-) | Damping Coil<br>( 1150Ω ±10% ) |
| RED                               | Damping Coil (+) |                                |
| WHITE                             | Driving Coil (+) | Drive Coil<br>( 190Ω ±10% )    |
| GREEN                             | Driving Coil (-) |                                |

## x10 Infrared Corrected Zoom Lens ( Day & Night )

**x18 Infrared Corrected Zoom Lens ( Day & Night )**

**Y18Z86RD (8.6-154mm)Series - Infrared Corrected Zoom Lens (DC Iris)**

No Photo



| Lens Type               |                     | Auto Iris   |            | Auto Focus (Standard)           |             | Auto Focus (Interface) |               |
|-------------------------|---------------------|---|------------|---------------------------------|-------------|------------------------|---------------|
| Model No.               |                     | Y18Z86RAD   | Y18Z86RADP | Y18Z86RAFD                      | Y18Z86RAFDP | Y18Z86RAFD-I           | Y18Z86RAFDP-I |
| Format Size             |                     | 1/2"  |            |                                 |             |                        |               |
| Mount                   |                     | C / CS (with CS adapter)                          |            |                                 |             |                        |               |
| Focal Length            |                     | 8.6 - 154.0 mm                                    |            |                                 |             |                        |               |
| Max. Aperture Ratio     |                     | 1 : 2.5   |            |                                 |             |                        |               |
| Iris Range              |                     | F2.5 - 360  |            |                                 |             |                        |               |
| Min. Object Distance    |                     | 2.0 m   |            |                                 |             |                        |               |
| Operation               | Iris                | Auto (DC Drive )                                  |            |                                 |             |                        |               |
|                         | Focus               | Motorized   |            | Auto(*1) / Motorized            |             |                        |               |
|                         | Zoom                | Motorized   |            |                                 |             |                        |               |
| Angle of View           |                     | Wide / Tele                                       |            |                                 |             |                        |               |
|                         | Diagonal            | 48.9° / 3.0°                                      |            |                                 |             |                        |               |
|                         | Horizontal          | 40.6° / 2.4°                                      |            |                                 |             |                        |               |
|                         | Vertical            | 30.8° / 1.8°                                      |            |                                 |             |                        |               |
| Iris                    | Drive Coil          | 190Ω ±10% (20°C)                                  |            |                                 |             |                        |               |
|                         |                     | Close to Open : 4.0V (20°C)                       |            |                                 |             |                        |               |
|                         |                     | Open to Close : 0.5V (20°C)                       |            |                                 |             |                        |               |
|                         | Damp Coil           | 1150Ω ±10% (20°C)                                 |            |                                 |             |                        |               |
|                         | Response Speed      | Approx. 3 sec.                                    |            |                                 |             |                        |               |
|                         | -                   | -   |            |                                 |             |                        |               |
| Zoom                    | Input Voltage       | DC 8V-12V   |            | DC 4V-16V                       |             | DC ±4V - ±8V           |               |
|                         | Current Consumption | Max. 80 mA (Motor)                                |            | Max. 10 mA (Circuit)            |             |                        |               |
|                         | Motorization Speed  | Approx. 4-7 sec. (Variable)(*2)                   |            | Approx. 2-7 sec. (Variable)(*2) |             |                        |               |
| Manual Focus            | Input Voltage       | DC 8V-12V   |            | DC 4V-16V                       |             | DC ±4V - ±8V           |               |
|                         | Current Consumption | Max. 80 mA (Motor)                                |            | Max. 10 mA (Circuit)            |             |                        |               |
|                         | Motorization Speed  | Approx. 4-7 sec. (Variable)(*2)                   |            | Approx. 2-7 sec. (Variable)(*2) |             |                        |               |
| Auto Focus              | Input Voltage       | DC8V-16V  |            |                                 |             |                        |               |
|                         | Current Consumption | Max.50mA (Standby) / Max.150mA (Zoom or Focus on) |            |                                 |             |                        |               |
| Preset Function *3      |                     | -   | 2 Potentio | -                               | 2 Potentio  | -                      | 2 Potentio    |
| Applicable Wavelength   |                     | 430 nm - 950 nm                                   |            |                                 |             |                        |               |
| Back Focal Length       |                     | 14.2 mm (in air)                                  |            |                                 |             |                        |               |
| Flange Back Length      |                     | 17.526 mm   |            |                                 |             |                        |               |
| Temperature Range       |                     | -10°C - +40°C                                     |            |                                 |             |                        |               |
| Filter Screw Size       |                     | M6.2.0 mm P=0.75                                  |            |                                 |             |                        |               |
| Dimension ( H x W x D ) |                     | 66 x 75.5 x 154.5 mm                              |            |                                 |             |                        |               |
| Weight (Approx.)        |                     | 785g  | 800g       | 790g                            | 800g        | 790g                   | 800g          |

\*Specifications are subject to change without notice

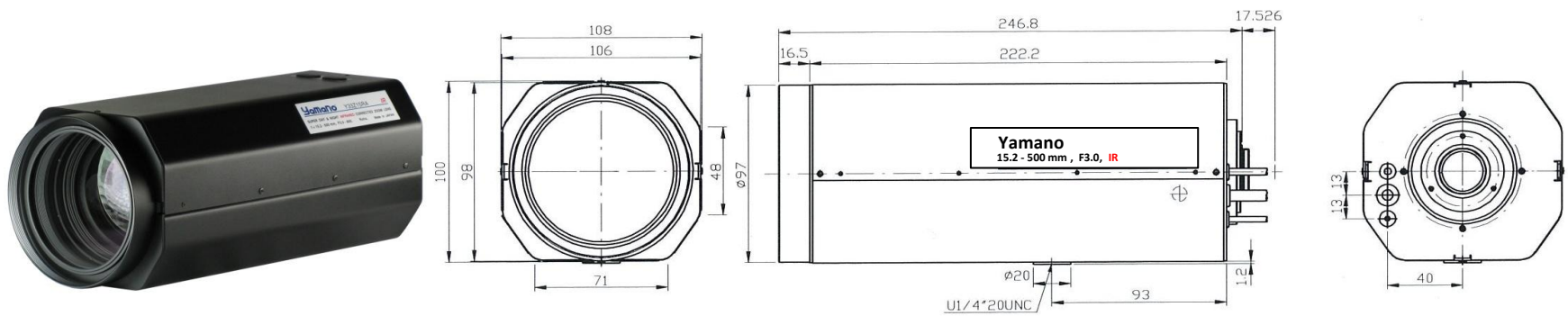
- \*1- One Push Auto Focus
- \*2- Adjustable with volume
- \*3- 2 potentio - Preset on Zoom / Focus

**Wiring Diagram**

| Wiring Diagram for Auto Iris (DC) |                  | Resistance Value               |
|-----------------------------------|------------------|--------------------------------|
| BLACK                             | Damping Coil (-) | Damping Coil<br>( 1150Ω ±10% ) |
| RED                               | Damping Coil (+) |                                |
| WHITE                             | Driving Coil (+) | Drive Coil<br>( 190Ω ±10% )    |
| GREEN                             | Driving Coil (-) |                                |

**x33 Infrared Corrected Zoom Lens ( Day & Night )**

**Y33Z15R (15.2-500.0mm)Series - Infrared Corrected Zoom Lens (DC Iris)**



Drawing: Y33Z15RAF Model

| Lens Type               |                     | Auto Iris                         |   | Auto Focus (Standard) |              | Auto Focus (Interface) |                |
|-------------------------|---------------------|-----------------------------------|---|-----------------------|--------------|------------------------|----------------|
| Model No.               |                     | Y33Z15RAD                         | Y33Z15RADP  | Y33Z15RAFD            | Y33Z15RAFD-P | Y33Z15RAFD-I           | Y33Z15RAFD-P-I |
| Format Size             |                     | 1/2"                              |   |                       |              |                        |                |
| Mount                   |                     | C / CS (with CS adapter)          |   |                       |              |                        |                |
| Focal Length            |                     | 15.2 - 500.0 mm                   |   |                       |              |                        |                |
| Max. Aperture Ratio     |                     | 1 : 3.0                           |   |                       |              |                        |                |
| Iris Range              |                     | F3.0 - 22 (or 800 with ND filter) |   |                       |              |                        |                |
| Min. Object Distance    |                     | 4.0 m                             |   |                       |              |                        |                |
| Operation               | Iris                | Auto (DC)                         |   |                       |              |                        |                |
|                         | Focus               | Motorized                         | Auto / Motorized                                  |                       |              |                        |                |
|                         | Zoom                | Motorized                         |   |                       |              |                        |                |
| Angle of View           |                     | Wide / Tele                       |   |                       |              |                        |                |
|                         | Diagonal            | 28.86° / 0.92°                    |   |                       |              |                        |                |
|                         | Horizontal          | 23.42° / 0.74°                    |   |                       |              |                        |                |
|                         | Vertical            | 17.74° / 0.55°                    |   |                       |              |                        |                |
| Iris                    | Drive Coil          | 190Ω ±10% (20°C)                  |   |                       |              |                        |                |
|                         |                     | Close to Open : 4.0V (20°C)       |   |                       |              |                        |                |
|                         |                     | Open to Close : 0.5V (20°C)       |   |                       |              |                        |                |
|                         | Damp Coil           | 1150Ω ±10% (20°C)                 |   |                       |              |                        |                |
|                         | Response Speed      | Approx. 3 sec.                    |   |                       |              |                        |                |
|                         | -                   | -                                 |   |                       |              |                        |                |
| Zoom                    | Input Voltage       | DC 8V-12V                         | DC 8V-16V   |                       | DC ±8V - ±9V |                        |                |
|                         | Current Consumption | Max. 100 mA (Motor)               | Max. 10 mA (Circuit)                              |                       |              |                        |                |
|                         | Motorization Speed  | Approx. 6-45 sec.                 | Approx. 6-45 sec.(at 8V) (Variable)               |                       |              |                        |                |
| Manual Focus            | Input Voltage       | DC 8V-12V                         | DC 8V-16V   |                       | DC ±8V - ±9V |                        |                |
|                         | Current Consumption | Max. 100 mA (Motor)               | Max. 10 mA (Circuit)                              |                       |              |                        |                |
|                         | Motorization Speed  | Approx. 12-80 sec.                | Approx. 12-80 sec.(at 8V) (Variable)              |                       |              |                        |                |
| Auto Focus              | Input Voltage       | -                                 | DC8V-16V  |                       |              |                        |                |
|                         | Current Consumption | -                                 | Max.50mA (Standby) / Max.200mA (Zoom or Focus on) |                       |              |                        |                |
| TCS (option)            | Input Voltage       | DC 9V-12V                         |   |                       |              |                        |                |
|                         | Current Consumption | 50mA                              |   |                       |              |                        |                |
| SFS (Option)            | Input Voltage       | DC 9V-12V                         |   |                       |              |                        |                |
|                         | Current Consumption | 50mA                              |   |                       |              |                        |                |
| Preset Function         |                     | -                                 | Z & F   | -                     | Z & F        | -                      | Z & F          |
| Applicable Wavelength   |                     | 430 nm - 950 nm                   |   |                       |              |                        |                |
| Back Focal Length       |                     | 41.48 mm (in air)                 |   |                       |              |                        |                |
| Flange Back Length      |                     | 17.526 mm                         |   |                       |              |                        |                |
| Filter Screw Size       |                     | M95.0 mm P=1.0                    |   |                       |              |                        |                |
| Dimension ( V x H x D ) |                     | 108.0 x 100.0 x 246.8 mm          |   |                       |              |                        |                |
| Weight (Approx.)        |                     | 2200g                             | 2300g   | 2400g                 | 2500g        | 2400g                  | 2500g          |

\*Specifications are subject to change without notice

\* Option

**x33 Infrared Corrected Zoom Lens ( Day & Night )**