

General Specifications

FC34E (Explosion-proof),
FC34U (Outdoor)
Fixed angle Zoom type CCD Color Camera



GS 85A7C01-17EN

■ GENERAL

FC34 fixed angle zoom type CCD color camera is compatible with a wide variety of applications, such as monitoring under sever environmental conditions and diagnosis of facilities.

Stainless chassis with electrolytic polishing is well suited for good corrosion-resistance, and also is compact and lightweight.

Heater and defroster is standard equipment that can be used for a wide range of temperature (-40°F to 140°F). Wiper and hood can be selected as option.

In control method, RS-485 connection is available. It can easy connect to a web camera server as a controller enabling to use various digital functions of video management system(s).



■ STANDARD SPECIFICATIONS

Camera

| | |
|---|--|
| Camera type: | Color |
| Image Sensor: | 1/4" interline transfer CCD |
| Signal: | NTSC, PAL |
| Effective Pixels: | NTSC: 976 (H) x 494 (V) PAL: 976 (H) x 582 (V) |
| Horizontal resolution: | 650TV line |
| Synchronous system: | Internal synchronization |
| Video S/N: | 50 dB |
| White Balance: | ATW |
| Electronic shutter (Auto/Manual): | 1/10,000 - 1/60 sec |
| Minimum illuminance of subject (shutter speed NTSC: 1/60sec, PAL: 1/50sec): | Normal sensitivity (Sense Up: OFF): 0.5 lx Color typical 0.04 lx Color typical High sensitivity (Sense Up: ON): 0.03lx Color typical 0.0025lx B/W typical |
| Zoom Magnification: | (36x optical) x (20x digital) |
| Lens: | 3.3 mm-119 mm / F1.4 - 4.2 (With auto focus) |
| Horizontal field of vision: | Approx. 60.2° (wide-angle) - Approx. 1.7° (telephoto) |
| Iris Control: | Automatic Iris control with manual override |

Input/output

Video signal output:
VBS (video burst sync) 1.0 V p-p 75
Video transmission distance:
Up to 300 m (when 5C-2V cable is used,
without a cable compensator)

Control signal input/output: RS-485
Asynchronous communication full duplex
mode of 8-bit data 1-bit stop, at 9,600 bps
Control signal transmission distance:
Up to 1200 m

Main Body

Explosion protection: Flame-proof construction
Explosion-proof class: Ex d IIC T5

 II 2 G
Ex d IIC T5 Gb
Ta= -40°C to +60°C

ATEX Certificated: CML 14 ATEX 1052X issue 0
(EN60079-0:2012, EN60079-1:2007)

Class of ship: DNV (Under examination)
Ingress protection: IEC IP66 equivalent

Compatible standards: 
Housing material: Stainless steel SS316L
Finish: Electrolytic polishing
Weight: 8.9kg

Recommended connection cable (Customer provided)

- Power cable: 3-conductor 1.25 mm² (2 outer diameter Ø10.0mm; JIS C3312 or outer diameter Ø 7.8mm: JIS C3306)
- Video cable: 75 Coaxial **Note* (5C-2V or 7C-2V)
- Control cable: 0.5 mm² 2-pair twisted pair shielded cable (Outer diameter Ø8.0mm) for RS-485

** Note: If the cable line will be exposed to intense noises, using a video transcoder is recommended.*

Power Supply

Allowable power supply: 100 to 240 V AC at 50/60 Hz, Power consumption: 30 VA (with heater)

Installation Environment ***Note*

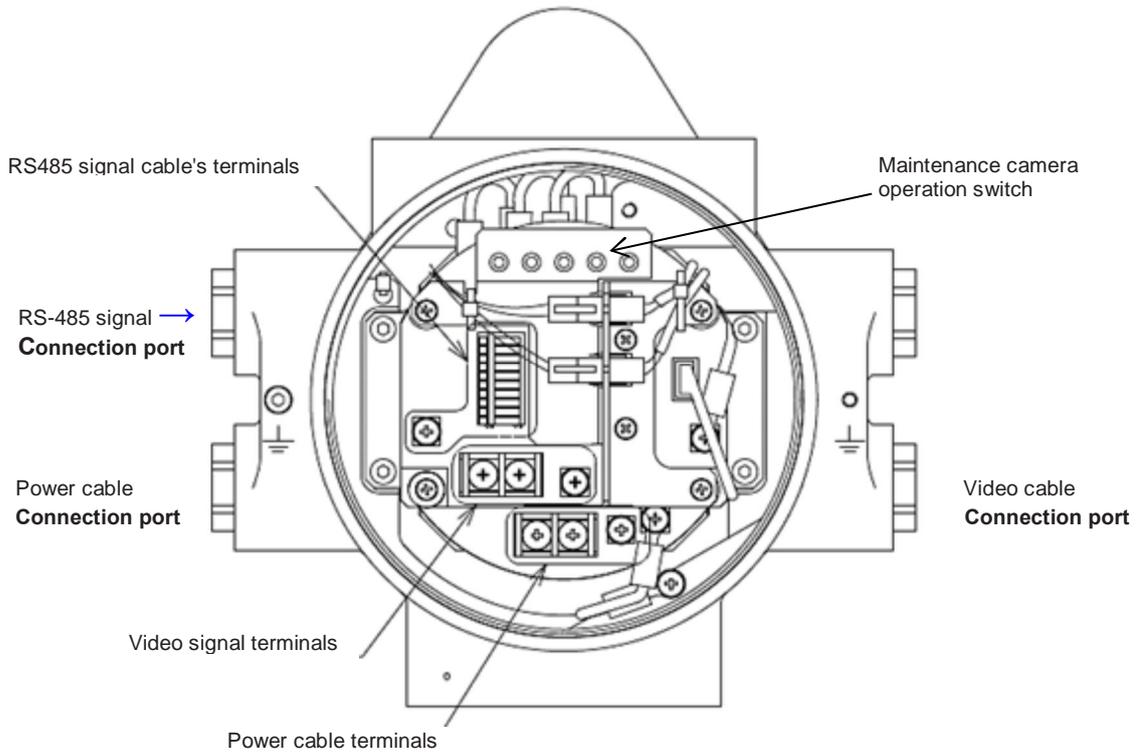
- Operating temperature: -40°C to +60°C (-40°F to 140°F)
- Installation: Upright / Inverted

*** Note: Heater (for camera protection), defroster (anti-fog function), and simple surge arrester (AC power line) are being equipped internally.*

■ CABLING (MAIN BODY)

Recommended connection port assignment

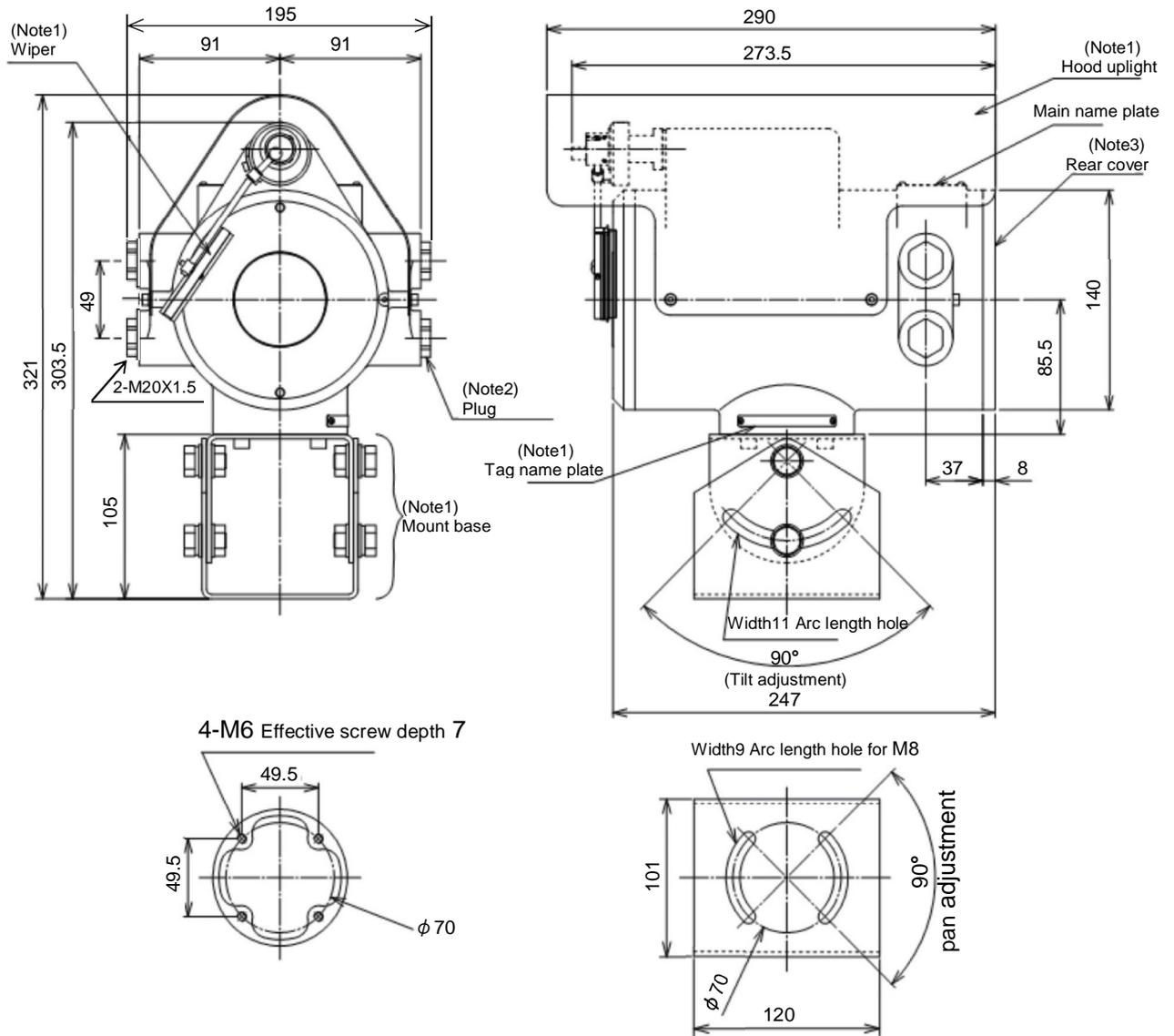
(Internal connections: when a rear cover has been removed)



■ EXTERNAL DIMENSIONS

Main body of model FC34

Upright Type
FC34□-□□□□S

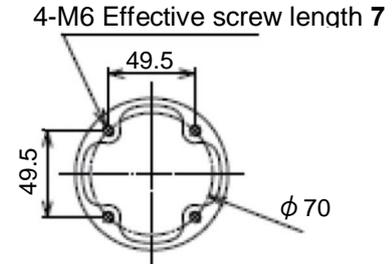
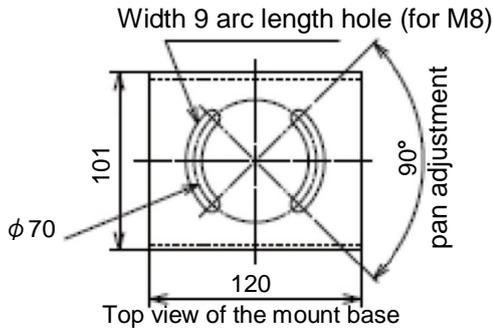


- (Note 1): By using each option specification code at the time of order, it will be attached to the product at the time of shipment.
- (Note 2): A plug is attached to each cable output port for prevention of water leakage into the main body. Please remove the plug before making a connection.
- (Note 3): Please remove the rear cover when cables are connected.

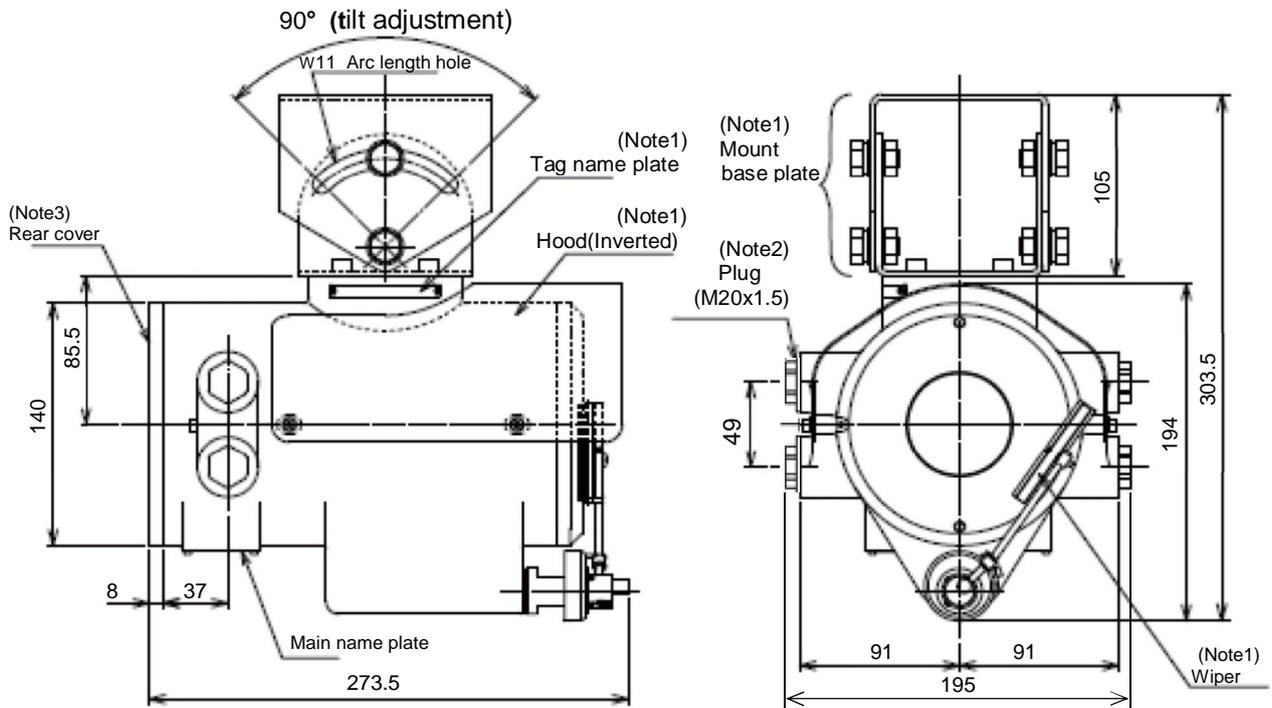
■ EXTERNAL DIMENSIONS

Main body of model FC34

Inverted Type
FC34□-□□□□U



FC34 Main body Top View
(WITHOUT the mount base)



- (Note 1): By using each option specification code at the time of order, it will be attached to the product at the time of shipment.
- (Note 2): A plug is attached to each cable output port for prevention of water leakage into the main body. Please remove the plug before making a connection.
- (Note 3): Please remove the rear cover when cables are connected.

■ MODEL AND SUFFIX CODES

| Model | Suffix Code | Description |
|------------------|-------------|--|
| FC34E | | Explosion-proof Fixed angle Zoom type CCD Color Camera |
| FC34U | | Outdoor Fixed angle Zoom type CCD Color Camera |
| Camera type | -N | High-sensitivity, 1/4 inch, 976 (H) x 494 (V) pixels 36 times optical zoom NTSC. |
| | -P | High-sensitivity, 1/4 inch, 976 (H) x 582(V) pixels 36 times optical zoom. PAL |
| Wiper | W | With wiper |
| | N | Without wiper |
| Control (Note1) | N | Multiplexed signal (for Japan only) |
| | S | RS-485 |
| Cable connection | 0 | G (PF) female thread (for TIIS explosion protection in Japan) |
| | 1 | M female thread (for ATEX explosion protection overseas) |
| Installation | S | Upright |
| | U | Inverted |
| Cable gland | EG2 | Explosion-proof packing adapter 2 pieces, female thread G1/2 (for TIIS explosion protection in Japan) |
| | EG3 | Explosion-proof packing adapter 3 pieces, female thread G1/2 (for TIIS explosion protection in Japan) |
| | EM2 | Explosion-proof packing adapter 2 pieces, female thread M20X1.5 (for ATEX explosion protection overseas) |
| | EM3 | Explosion-proof packing adapter 3 pieces, female thread M20X1.5 (for ATEX explosion protection overseas) |
| | UG2 | Water-proof gland with union 2 pieces, female thread G1/2 (for Japan) |
| | UG3 | Water-proof gland with union 3 pieces, female thread G1/2 (for Japan) |
| | UM2 | Water-proof gland with union 2 pieces, female thread M20X1.5 (for overseas) |
| | UM3 | Water-proof gland with union 3 pieces, female thread M20X1.5 (for overseas) |
| | NNN | None (only FC34U is available) |

(Note1) If designating a "Local control+type, requiring a special order code (/Z) instead of the suffix code (N or S).

OPTION SPECIFICATIONS

Additional arrangement items set forth below are requiring an optional specification at the time of ordering otherwise those are not attached to the product.

| Item | Option code | Description |
|----------------|-------------|--|
| Mount base | /A | Mount base to attach the main body (Note2) |
| Name tag plate | /T | Installation of a stainless steel (Note3) |
| With Hood | /SH | Hood (Upright) |
| | /UH | Hood (Inverted) |
| Tool | /CT | Tool (for rear cover maintenance) (Note4) |

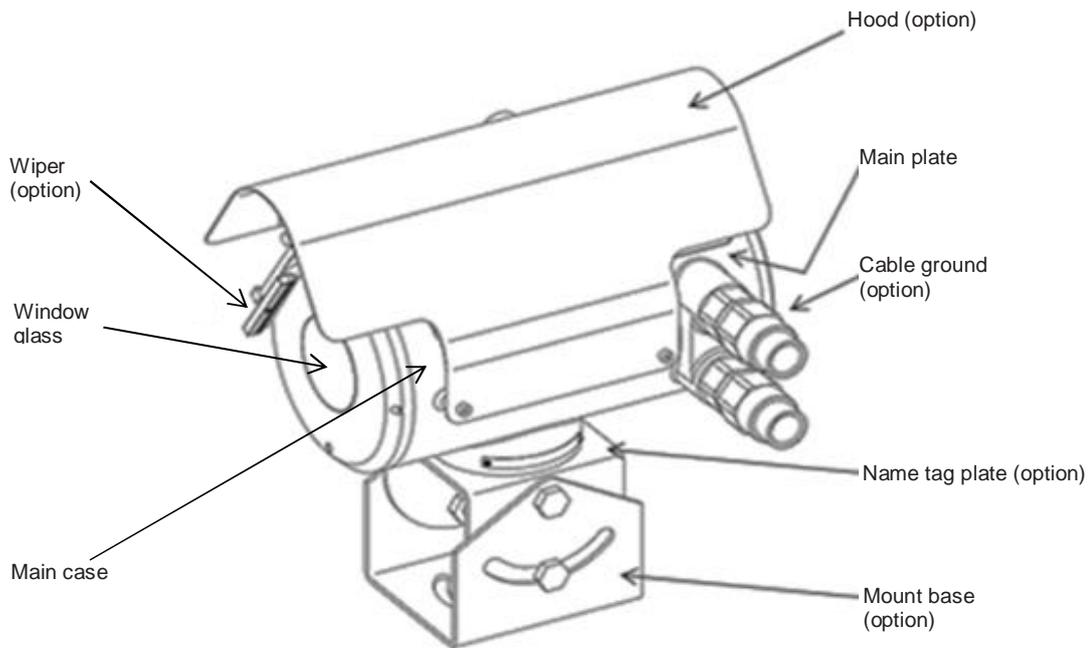
(Note2) If option code /A was omitted at the time of ordering, "Mount base" will not attach to the product.

(Note3) Up to 15 letters (alpha-numeral combination code, % and %) can be specified on the plate at the time of order.

(Note4) If option code /CT was omitted at the time of ordering, "Tool" will not attach to the product.

Item specified at the time of the order

1. Model and Suffix code
2. Tag name (Up to 15 letters), If %Name tag plate+(/T) option is specified.



Note): Every trade or company name used in this document is a trademark or registered trademark of the company