

# 129 Series

### **Medium size Stainless Steel Camera Housing**



## **Installation manual**





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#### **DESCRIPTION**

The 129 series is entirely made in AISI316L stainless steel to protect CCTV cameras in outdoor locations, especially where corrosive environment can cause the premature deterioration of a standard aluminium/plastic camera housing. Housings may have optional sunshield, heater/demister and integrated wiper.

An air barrier is available as an optional. It is designed to protect front flange of 129 series camera housings from the formation of dust and other deposits. It is recommended to filter the compressed air feed through the air barrier using the optional filter ABFL-01 (sold separately).

#### **MODELS**

129 <sup>1</sup>	Housing
129SH/24 <sup>1</sup>	Housing + sunshield + heater. Supply voltage: 24VUC
129SH/230 <sup>1</sup>	Housing + sunshield + heater. 230V~
129WW/24 <sup>2</sup>	Housing + sunshield + heater + integrated wiper. 24V~
129WW/24D <sup>2</sup>	Housing + sunshield + heater + integrated wiper. 24VDC
129WW/230 <sup>2</sup>	Housing + sunshield + heater + integrated wiper. 230V~
129AB³*	Housing + air barrier front flange
129IR50⁴	Housing. UW: 50
129SHIR50/24 <sup>4</sup>	Housing + sunshield + heater. Supply voltage: 24VUC. UW: 50
129SHIR50/230⁴	Housing + sunshield + heater. 230V~. UW: 50
129WWIR50/24 <sup>4</sup>	Housing + sunshield + heater + integrated wiper. 24V~. UW: 50
129WWIR50/24D⁴	Housing + sunshield + heater + integrated wiper. 24VDC. UW: 50
129WWIR50/230 <sup>4</sup>	Housing + sunshield + heater + integrated wiper. 230V~. UW: 50
129IR70⁵	Housing. UW: 70
129SHIR70/24 <sup>5</sup>	Housing + sunshield + heater. Supply voltage: 24VUC. UW: 70
129SHIR70/230⁵	Housing + sunshield + heater. 230V~. UW: 70
129WWIR70/24 <sup>5</sup>	Housing + sunshield + heater + integrated wiper. 24V~. UW: 70
129WWIR70/24D⁵	Housing + sunshield + heater + integrated wiper. 24VDC. UW: 70
129WWIR70/230⁵	Housing + sunshield + heater + integrated wiper. 230V~. UW: 70
129ABIR70 <sup>5</sup> *	Housing + air barrier front flange. UW: 70

Usable front window diameter: 90 mm, thickness: 5 mm

Usable front window diameter: 72 mm, thickness: 12 mm. Vandal resistant glass

Usable front window diameter: 70 mm, thickness: 5 mm. Tempered glass
UW= Usable front window diameter. Thickness: 2 mm. Germanium, AR/DLC coating

UW= Usable front window diameter. Thickness: 3 mm. Germanium, AR/DLC coating

All the above models are 360mm long. Suffix –L is used for 460mm long models.

460mm long version is not available.

#### **GENERAL & MECHANICAL**

-20° +60°C (-4° +140° F) **Operating Temperature** AISI316L Stainless Steel Construction **Finish** Electro-polished

2 M20x1,5 nickel plated brass cable glands (included) **Cable entries** 

Standard cable diameter 5-10mm

1/8" GAS (included Ø6 super-rapid fitting) Air inlet (optional air barrier)

Max air pressure (optional air barrier)

#### **ELECTRICAL**

Thermostatically controlled heater  $TON = 12 \pm 4$ °C,  $TOFF = 20 \pm 3$ °C Available voltages 24VUC (24V~/VDC), 230V~ (+/-10%)

**Power consumption** 10W

Wiper

**Available voltages** 24V~, 230V~, 24VDC (+/-10%)

**Power consumption** 6W (24V~, 230V~) 4W (24VDC)

#### **CERTIFICATIONS**

Ingress Protection(EN 60529) IP66/IP67 for all models

IP68 for models without wiper

**EMC** EN 61000-6-3:2007;

EN 50130-4:1995 + A1:1998 + A2:2003

EN 60950-1:2006 + A11:2009 LVD

**RoHS** 2011/65/EU WEEE 2012/19/EU



#### PRELIMINARY REMARKS

Prior to installation and operation, read carefully all instructions the in this manual and heed all warnings.

Unpack this equipment and handle it carefully. If the package appears to be damaged, notify the shipper immediately.

Use the original packaging to transport the unit. Disconnect power supply before moving it. In case of returning the equipment, the original packaging must be used.

Make sure that the installation surface can support at least four times the weight of the unit in normal operating conditions. In case of excessive external stress (e.g. vibration, strong winds or impact), the equipment may need additional means of protection.

Proper stainless steel hardware should be carefully chosen to fasten the unit to the surfaces.

Use caution when lifting and assembling the unit. It is recommended that non-slip protective gloves be worn during installation. The unit could bear sharp edges.



Trying to manually force the wiper will result in damaging the device and will void the warranty.

To maintain the IP rating of the unit, adequate cable glands must be used. The unit must be tightly closed when operating.

For security reasons, do not install the unit in the proximity of water containers and never push objects or pour liquids into the unit. The unit can be safely used in damp environments or outdoors, as long as the connectors are properly sealed.

Video and data cables should not share the same conduit with supply voltage cables. Whenever EMC is an issue, adequately shielded cables must be used.

Open only the covers pointed out in this installation manual. Other covers should be open only by the manufacturer. Tightening/loosening the screws using automatic tools such as drill drivers may result in damaged threads.

Remove PVC protective film from the sunshield after installation.

This equipment has been designed to fit in harsh environments requiring little or no maintenance. Suggested inspection interval is 6 months, but extremely harsh environments may require more frequent inspection and maintenance checks. On each inspection check the O-ring seals and the eventual window wiper blade integrity. Replace them if necessary.

Check cables, electrical connections and mounting hardware for integrity and tightness. Replace or tighten any damaged/loose part.

Before performing any operation, turn off the power. The installation of the unit can be performed only by qualified personnel in accordance with the regulations in force. Do not connect the unit to a supply circuit unless the installation is completed.

Check carefully the supply voltage marked on the label. Incorrect Power Supply Voltage may damage the unit. Do not overload the terminal connection, as it may cause a fire or electrical shock hazard.



An all-pole mains switch with an opening distance between the contacts at least 3mm in each pole must be incorporated in the electrical installation between the equipment and the main supply. Isolating switches, circuit breakers or any equivalent device can be used as a disconnection switch. Such switch must be very quickly recognizable and readily accessible.

Fasten all the cables inside the housing with cables ties or other fixing means to avoid the electrical contact with surrounding parts in case that terminal blocks screw off.

Electrical connections (such as plugs and cords) must be protected from potential hazardous environmental factors (e.g. foot traffic, hitting objects).

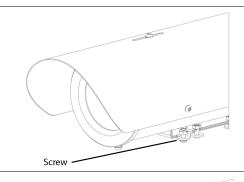
Ensure that the unit case is properly earthed, connecting all the earth ground studs. Earth cable should be about 10mm longer than the other cables on the connector, in such way that it won't be accidentally disconnected if the cable is stretched or pulled.

When leaving the unit unused for long periods, disconnect supply cables.

#### **INSTALLING THE HOUSING**

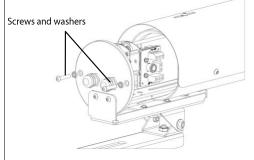
#### 1. Open the housing

Loosen the screw at the bottom of the external rail. The screw is fixed to a nut welded on the housing.



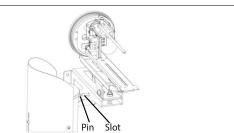
2. Unscrew the two M6 screws on the rear flange. Slide the housing outer body away from the back flange.

Be careful not to lose screws, washers and O-rings.



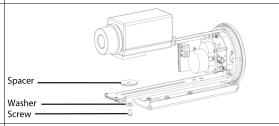


3. Hang the housing body inserting the pin into the slot on the bracket in order to perform electrical connections and maintenance tasks inside the housing.



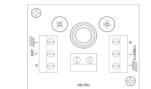
#### 4. Install the camera

Mount the camera on the internal rail using one of the ¼" screws supplied and the plastic washer. Use the included spacers to adjust its height position. Feed the cables through the cable glands on the rear flange and perform electrical and video connections according to the instructions in the camera installation manual.



#### 5. Only on housings with heater system

Perform the input and output (to the camera) voltage connections using the PCB installed inside the housing near the rear flange.



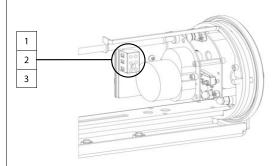
#### 6. Only on housings with wash wiper system [24/240VAC]

Connect correct supply voltage between pin 1 (line) and pin 2 (neutral).

Connecting pin 1 (line) to pin 3, the wiper works until pin 3 is disconnected, then the wiper parks itself to its initial position.

A pormally open switch, connected between pin1 and pin3, can be

A normally open switch, connected between pin1 and pin3, can be used for this operation.



#### Only on housings with wash wiper system [24VDC]

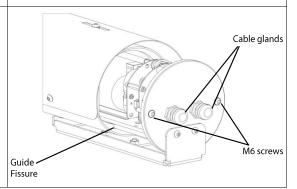
Connect correct supply voltage between pin 1 (+24VDC) and pin 2 (0V).

Connecting pin 1 (+24VDC) to pin 3, the wiper works until pin 3 is disconnected, then the wiper parks itself to its initial position.

A normally open switch, connected between pin1 and pin3, can be used for this operation.

#### 7. Close the housing.

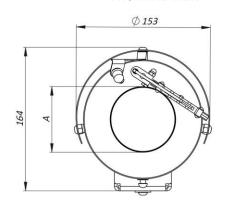
- a. Slide the housing outer body along the internal rail. The internal rail is to be inserted in the guide fissure as shown in the picture. Check the proper position of the seal in its groove on the rear
- b. Tighten the cable glands up till an 8 Nm torque ratio.
- c. Tighten the two M6 on the rear flange screws to the main body.
- d. Fix the screw at the bottom of the external rail to the nut welded on the housing.



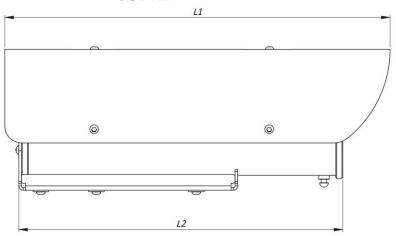


#### **DIMENSIONS**

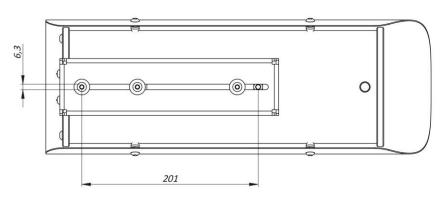
#### **FRONTAL VIEW**



#### **SIDE VIEW**



#### **MOUNTING PATTERN**



FOR "A" VALUES CHECK "MODELS" SECTION

#### MAX EXTERNAL LENGTH [mm]

Model	L1	L2
129SH/129SHIR	440	375
129SH-L/129SHIR-L	540	475
129WW/129WWIR	440	375
129WW-L/129WWIR-L	540	475
129AB/129ABIR70	440	395

#### MAX INTERNAL USABLE AREA [mm]

	Max internal	Max usable	
Model	dimensions	internal diameter	
129SH/129SHIR	80x80x254	96	
129SH-L/129SHIR-L	80x80x354	96	
129WW/129WWIR	80x80x184	86	
129WW-L/129WWIR-L	80x80x284	86	



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#### Preserve this manual as a reference for future needs.

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Used electrical, electronic and stainless steel products should not be mixed with general waste.

For proper treatment, recovery and recycling of old products, please take them to applicable collection points, in accordance with your national legislation and the Directives 2002/95/EC and 2002/96/EC.

By disposing of these products correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

For more information about collection and recycling of old products, please contact your local municipality or your waste disposal service.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.

The manufacturer declines all liability for any consequence resulting from improper installation practices, tampering or improper uses of the product.

The descriptions and illustrations contained in this manual are not binding. The manufacturer reserves the right to make any alterations deemed appropriate for the technical, manufacturing and commercial improvement of the product, while leaving the essential product features unchanged, at any time and without undertaking to update the present publication.

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