

129AC Series

Air Cooled Stainless Steel Camera Housing



Installation manual

DESCRIPTION

The **129AC** series is well suited to protect CCTV equipment in hot and corrosive environments. The **129AC** series perfectly fills the gap between locations which need a liquid cooling system and locations which don't need any cooling systems at all. The main cooling system used is a Vortex Tube, which converts the air inlet into two streams (one hot and one cold). The **129AC** series is entirely built in AISI316L stainless steel. 1/4" air nozzle is available as an option for all models.

MODELS

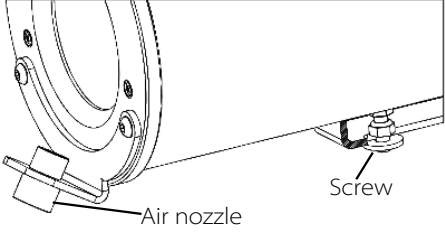
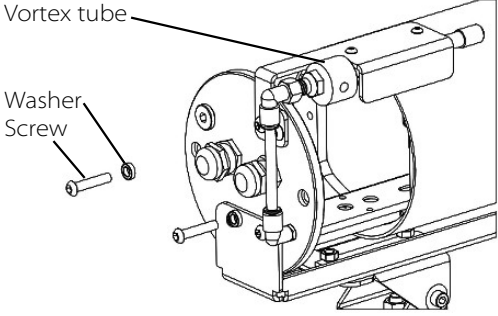
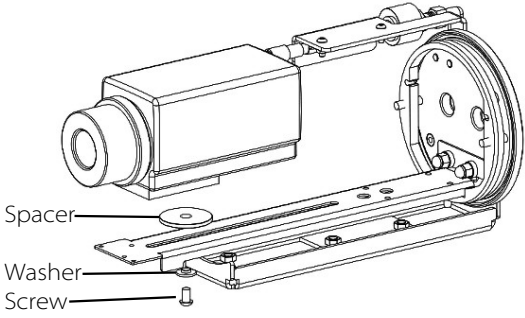
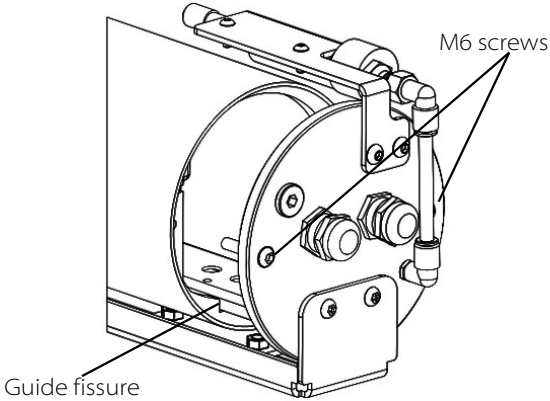
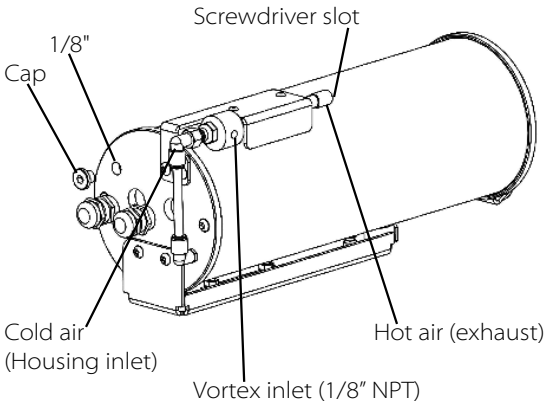
129AC	Camera housing (L=360 mm). Usable front window diameter: 70 mm; thickness 5mm.
129ACIR70	Camera housing (L=360 mm). Usable front window diameter: 70 mm; Germanium window, thickness 3 mm, AR/DLC coating.

CERTIFICATIONS

EN 61000-6-3:2007 and 50130-4:1995 + A1:1998 + A2:2003 (EMC – Electromagnetic Compatibility)
60950-1:2006 + A11:2009 (LVD – Safety)

INSTALLING THE CAMERA

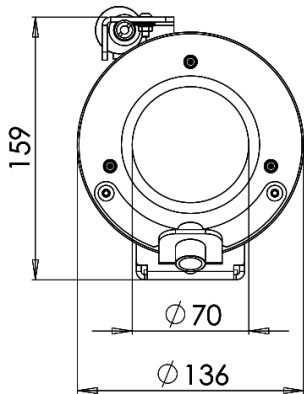
	Prior to installation and operation, read carefully all instructions the in this manual and heed all warnings.
	Unpack this equipment and handle it carefully. If the package appears to be damaged, notify the shipper immediately.
	Use the original packaging to transport the unit. Disconnect power supply 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.
	To maintain the IP rating of the unit, adequate cable glands must be used. The unit must be tightly closed when operating.
	The internal pressure inside the housing must never exceed 0,5 bar.
	Vortex tube surface and hot air outlet could reach very hot temperature.
	A screwdriver slot is available to adjust the temperature/flow ratio. Do not operate on the screwdriver slot when the Vortex tube is working.
	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.
	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.
	An all-pole mains switch with an opening distance between the contacts at least 3 mm in each pole must be incorporated in the electrical installation. The switch must be equipped with protection against the fault current towards the ground (differential) and the overcurrent (magnetothermal, maximum 15A). It must be very quickly recognizable and readily accessible. A suitable blow fuse must also be installed for protection.
	For connection to the mains, use a multipolar cable having minimum 3x1,5 mm ² (15 AWG). The main cable must be at least protected by an ordinary PVC sheath.
	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.	

<p>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.</p>	 <p>Air nozzle Screw</p>
<p>2. Unscrew the two M6 screws on the rear flange. Slide the housing outer body away from the back flange. <u>Be careful not to lose screws, washers and O-rings.</u></p>	 <p>Vortex tube Washer Screw</p>
<p>3. Install the camera Mount the camera on the internal rail using one of the 1/4" screws supplied and the plastic washer. Use the included spacers to adjust its height position. Feed the cables through cable glands on the rear flange and perform electrical and video connections according to the instructions in the camera installation manual.</p>	 <p>Spacer Washer Screw</p>
<p>4. 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 flange. 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.</p>	 <p>M6 screws Guide fissure</p>
<p>5. Connect compressed air supply to the Vortex tube inlet (1/8" NPT). ABFL-01 Air Filter available (not included). Maximum inlet air pressure: 6 Bar. The Vortex tube converts the inlet air into two streams: one colder (which goes inside the housing) and one hotter (which goes outside). A screwdriver slot is available to adjust the temperature/flow ratio. On the rear flange is available a 1/8" hole for pressure gauge (not included) to check the internal housing pressure. The internal pressure inside the housing must never exceed 0,5 bar.</p>	 <p>Screwdriver slot 1/8" Cap Cold air (Housing inlet) Vortex inlet (1/8" NPT) Hot air (exhaust)</p>

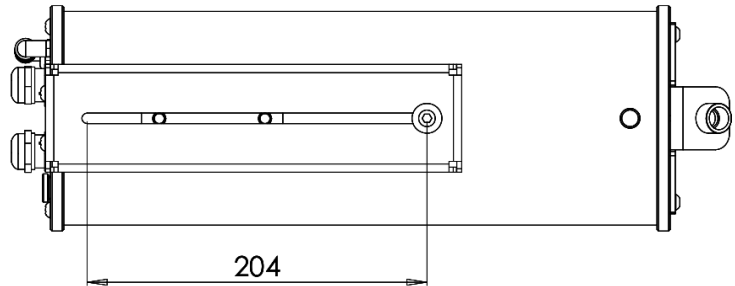
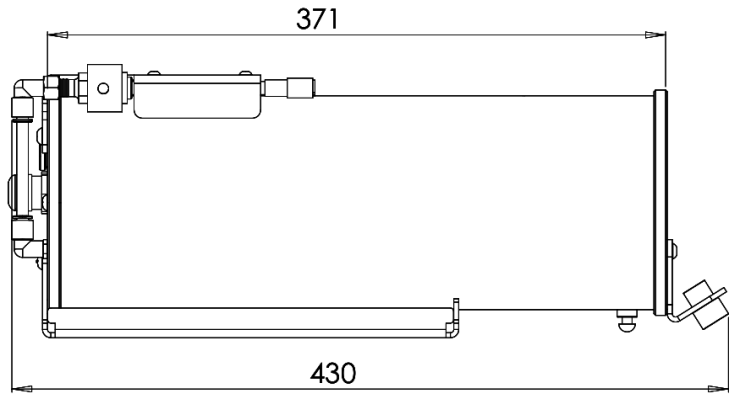
All pictures display the 1/4" air nozzle which is available as an option

DIMENSIONS

FRONTAL VIEW



SIDE VIEW



MAX INTERNAL DIMENSIONS [mm]

Model	Internal	Ø
129AC/129ACIR70	81x81x318	96

Dimensions in millimetres – Tolerances according QMS – Design and product specifications subject to change without notice



Preserve this manual as a reference for future needs.

Here you can find the always up-to-date pdf version of this document:

	<p>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.</p>
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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.