



A1 Monitors Summary

Caccialanza & C. **A1 Monitors** are light compact units for high performances, designed to operate in extreme conditions and in adverse environments (warehouse, etc.) and to be used on mobile units.

These monitors are a new product to be employed in remote controlled systems requiring a high aim precision.

Movements are performed by means of electric actuators integrated with bus power and command/control system with a single cable (flame resistant).

There is also a version with manual local commands also on the unit, through a joy-stick for each movement acting on the monitor servomechanisms.



A1 monitors are available in the following executions:

- electric remote operation (A1-EI)
- manual assist operation through local pushbuttons (AS1-EI-P)

A1 monitors can be equipped with water/foam nozzles:

- water/foam nozzle with fixed flowrate, adjustable fo full jet/fog jet
- water/foam nozzle with variable flowrate, adjustable fo full jet/fog jet

Main Technical Data of A1 Monitors:

- flowrate: 50 - 800 lt/min
- pressure drop: 0,3 bar with a flowrate of 100 lt/min
0,7 bar with a flowrate of 200 lt/min
1,2 bar with a flowrate of 400 lt/min
2,0 bar with a flowrate of 600 lt/min
2,8 bar with a flowrate of 800 lt/min
- max nominal pressure: 16 bar
- inlet flange: 1½" ANSI 150 lbs RF
DN 40 UNI PN 16
- body material: seawater resistant light alloy EN AB 42000-Al Si 7 MgTA

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A1 Monitors operation

A1 Monitors, through the single power/command cable, have to interface exclusively with Caccialanza integrated standard command/control panels.

Integrated standard panels in very compact execution are available in the version for control of 1 single monitor with 1 valve or for control of 2 monitors with 1 valve each.

On the panels there are the monitor command devices (joysticks and buttons) that can be doubled on one or more remote control panels, connected to the main panel by means of a single cable or optical fiber.

Features of these panels are listed in the document Integrated standard panels.

Special executions of panels are available on request.

A version of the monitor foresees, besides the panel commands, also local buttons mounted on the monitor for a direct assist operation.

Technical Data of the A1 Monitors in the different executions:

A1-EI electric remote controlled Monitor

- | | | |
|-----------------------------|------------|--|
| - operation: | electric: | through electric multiturn actuators IP 67,
with integrated electric motors 24V/CC IP67, 0,21 kW |
| - locking devices: | | for arresting the horizontal and the vertical
movements in all positions |
| - rotation movement: | | horizontal and vertical movements on ball bearings |
| - lubrication: | | continuous |
| - rotation: | | 360° (adjustable from the panel) |
| - elevation: | | +75° / -55° (adjustable from the panel) |
| - torque switches: | | max rotation 360° (adjustable from the panel)
max elevation +75° / -55° (adjustable from the panel) |
| - mechanical protection: | | adjustable virtual limit switches for horizontal and vertical
movements |
| - motor protection: | | virtual thermostats integrated in the operation |
| - position control | | digital integrated for rotation, elevation and nozzle |
| - electric operation speed: | rotation: | about 180° in 26 sec. (about 7°/sec.) |
| | elevation: | about 90° in 12 sec. (about 7,5°/sec.) |

(general assembly drawing [52030015](#))



Electric remote controlled and manual local assist operated AS1-EI-P Monitor

- operation: electric: through electric multiturn actuators IP 67,
with integrated electric motors 24V/CC IP67, 0,21 kW
 - manual: through local pushbuttons
 - locking devices: for arresting the horizontal and the vertical
movements in all positions
 - rotation movement: horizontal and vertical movements on ball bearings
 - lubrication: continuous
 - rotation: electric: 360° (adjustable)
 - manual: 360°
 - elevation: electric: +75° / -55° (adjustable)
 - manual: +75° / -55°
 - torque switches: max rotation 360° (adjustable)
 - max elevation +75° / -55° (adjustable)
 - mechanical protection: adjustable virtual limit switches for horizontal and vertical
movements
 - motor protection: virtual thermostats integrated in the operation
 - position control: digital integrated for rotation, elevation and nozzle
 - electric operation speed: rotation: about 180° in 26 sec. (about 7°/sec.)
 - elevation: about 90° in 12 sec. (about 7,5°/sec.)
- (general assembly : drawing. 52030019)

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