

Product information



Part number: A.005203 / A.005204 / A.005205 / A.005206
A.005207 / A.005208 / A.005209

Camera Compact Color FAMOS PAL

Description

The FAMOS Camera is an extreme sturdy, compact industrial camera that can be used in virtually all vision solutions on machines, vehicles and vessels. The Advanced CMOS sensor camera is shock and vibration-proof, 100% waterproof, has heated lens glass and provides the best possible image in all weather conditions. In addition, the integrated Safety ticker detects 'frozen' images, so that you definitely know that the camera is active.

The new FAMOS cameras are characterized by hardware enhancements. The redesign has reduced the number of parts, which has increased the reliability of the camera further. This has allowed the camera to achieve the highest EMC standards. With its advanced CMOS sensor, the camera has a light sensitivity of 0.05 lux. The new lens in this camera has heated glass as standard, with a special hard coating to prevent scratches.

Angles

| Part.nr | A.005203 | A.005204 | A.005205 | A.005206 | A.005207 | A.005208 | A.005209 |
|----------|----------|----------|----------|----------|----------|----------|----------|
| Lens | 20° | 40° | 60° | 80° | 102° | 118° | 129° |
| Hor.ang | 20° | 40° | 60° | 80° | 102° | 118° | 129° |
| Vert.ang | 15° | 31° | 44° | 57° | 73° | 89° | 97° |

Sensor

| | |
|-------------------|--|
| Video signal | PAL = 720(H)x576(V) 50fld/s. NTSC = 720(H)x480(V) 60fld/s. 1 Vtt composite video into 75 Ohm |
| Sensor element | ¼" CMOS digital image sensor. 640 H x 480 V |
| Light sensitivity | < 0,05 Lux |
| Dynamic Range | 80dB |

Electrical

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|------------------------|---|
| Power input | 12...24V/DC. Below 6V: camera is non functional. Between 7V heating element automatically activated (20% capacity). At 8V the camera is fully functional and the heating is at 40% of its capacity. At 12V the heating is at 100% capacity. Between 12V and 33V camera and heating element are fully functional. Above 33V the overvoltage protection is activated and camera plus heating element are switched off. This overvoltage-protection is deactivated below 32V. Powercircuit is protected up to 80V/Dc. Outputs are short circuit protected. <i>In all these above mentioned values; a tolerance of +/-10% is applied.</i> |
| Power consumption | Heating off: 1.1W at 12V, 1.2W at 24V; Heating on: Max. power at 24V 0,15A = 3,6W Max. power at 12V 0.28A = 3.4W |
| Inrush Current | At 12V: 4.5A, 300us. At 24V: 12.0A, 300us |
| Heater Element | 2.4W max. Pulse width modulated, activated from +30°C (min) to -40°C |
| Transient Protection | Camera may be powered directly from 12V or 24V battery without additional electrical protection since camera has an integrated circuit that protects the camera against over- and undervoltage, spikes, ripples and loaddumps |
| Connectors | 0,5m cable with 4p molded male connector (camera power input and video output) |
| Min. Cable Bend Radius | 50mm |

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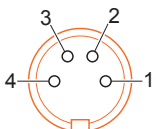
Mechanical

| | |
|-----------------------|--|
| Housing | Cycoloy (PC + ABS). Filling: Camera is potted with Polyurethane elastomer. |
| Ingress protection | IP68 according to IEC 60529; dust tight and protected against the effects of continuous immersion in water up to 10m under water for 30 minutes. IP69k according to DIN 40050-9: camera can withstand a high pressure cleaning with water: 14-16L/min. 80°C and 100 bars flow. |
| Mounting Hardware | Standard stainless steel. |
| Shock Constancy | Shock and vibration resistant for usage on trucks, cranes, fork-lifts, maritime applications, machinery Random vibration test 15,3Grms at frequency: 24 to 2000, PSD (g ² /Hz) 0,04 to 0,10 |
| Camera Bracket | Material: glass reinforced polyamide, test: 50 Nm at -40°C to +85°C |
| Weight | 0,21kg, 0,29 in standard packing. |
| Truck use | Withstand all fluids and materials used in and around trucks like: ammonia solution 5%, ethanol 80-100%, isopropanol 5-10%, soapy water (min. 50% soap per volume), alkaline degreasing compounds(used in high pressure washing equipment). |
| Operating Temperature | Operating temperature -40°C to +85°C. |
| Storage Temperature | Storage temperature -40°C to +100°C. |

Certification

| | |
|----------------|--|
| Approvals | Approvals in compliance with all relevant EMC- and Automotive directives. This device complies with Part 15 of the FCC Rules. Operation is subject to the following conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Certificates available upon request. |
| Green Passport | All materials are compliant to Green Passport requirements according IMO resolution MEPC.197 (62) as adopted on 15 July 2011 (Maritime sector: International Maritime Organization concerning the functions of the Marine Environment Protection Committee). |

Electrical Connections



Front side of
4p male connector

1 = Coax Core
2 = Coax Screen
3 = Red
4 = Black/Orange
Shielding

Video signal
Video GND
12...24VDC
0V
To connector housing

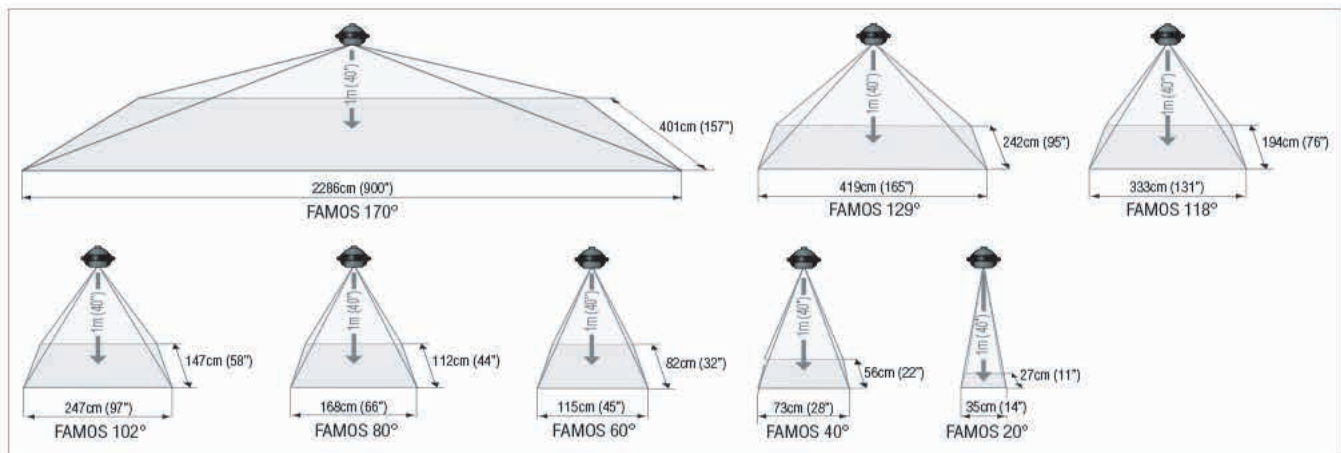
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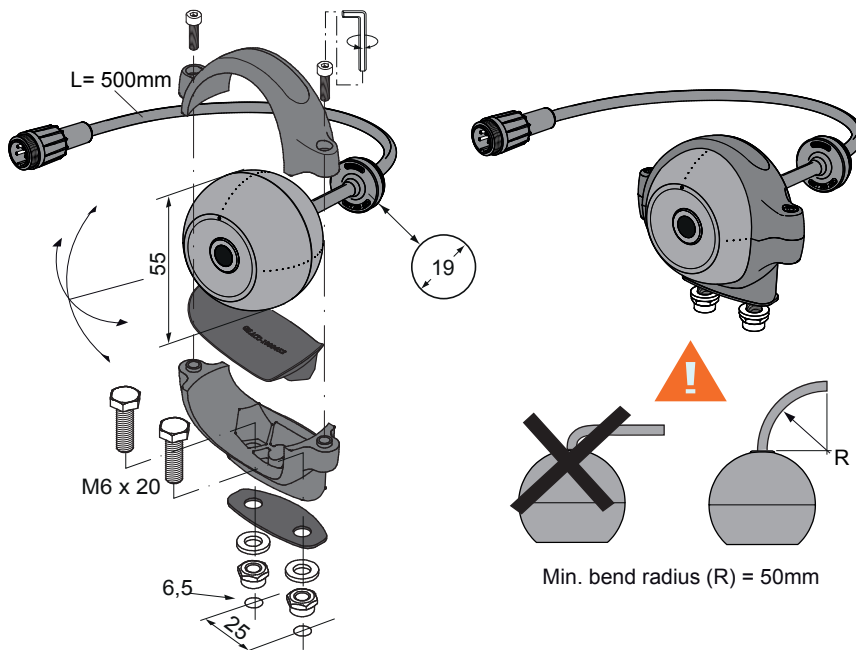
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Field of Vision



Dimensions

All units in mm



NOTE NTSC models also available. For more information, please contact us.