

Vision is
our mission®

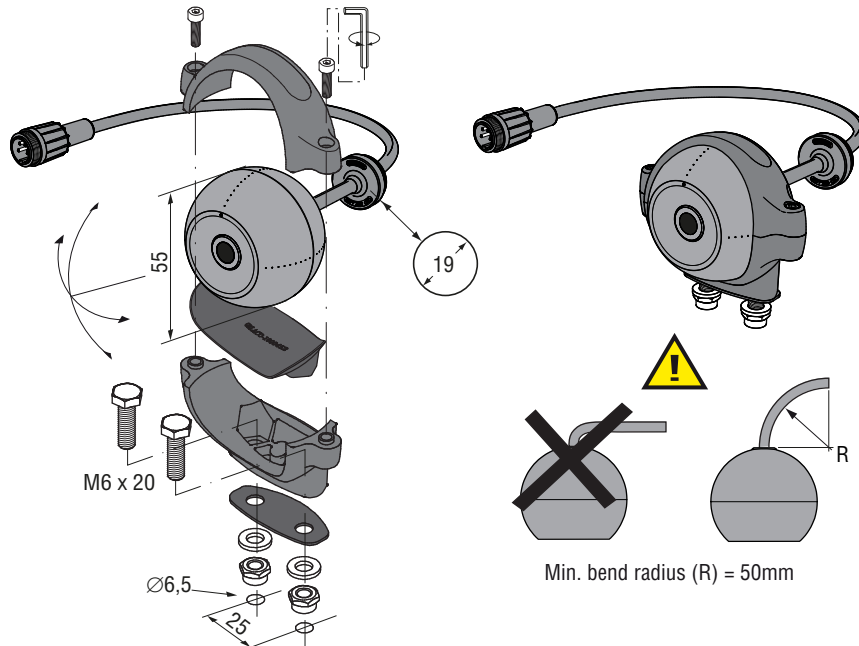
Product Data

Camera FAMOS PAL
20°: Article no. 312218
40°: Article no. 312219
60°: Article no. 312221
80°: Article no. 312222
102°: Article no. 312223
118°: Article no. 312224
129°: Article no. 312225

2016 • DS0171000 R2-0



Dimensions



TECHNICAL DATA

Camera FAMOS 20°/129° PAL

Description

| VTG/Orlaco Norge number | 312218 | 312219 | 312221 | 312222 | 312223 | 312224 | 312225 |
|------------------------------|-----------|-----------|-----------|-----------|------------|------------|------------|
| | FAMOS 20° | FAMOS 40° | FAMOS 60° | FAMOS 80° | FAMOS 102° | FAMOS 118° | FAMOS 129° |
| Lens specified | 20° | 40° | 60° | 80° | 102° | 118° | 129° |
| Horizontal lens angle | 20° | 40° | 60° | 80° | 102° | 118° | 129° |
| Vertical lens angle | 15° | 31° | 44° | 57° | 73° | 89° | 97° |

Sensor

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|--------------------------|--|
| Video signal | PAL = 720(H)x576(V) 50fld/s. 1 Vtt composite video into 75 Ohm. 1/4" |
| Sensor element | CMOS digital image sensor. 640 H x 480 V. |
| Light sensitivity | <0,05 Lux. |
| Dynamic Range | 80dB. |

Electrical

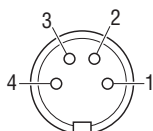
| | |
|-------------------------------|---|
| Power input* | 12...24V/DC. Below 6V: camera is non functional. Between 7V heating element automatically activated (20% capacity). At 8V the camera is fully functional and the heating is at 40% of its capacity. At 12V the heating is at 100% capacity. Between 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. |
| 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 loadumps. |
| Connectors | 0,5m cable with 4p molded male connector (camera power input and video output). |
| Min. cable bend radius | 50mm. |

Mechanical

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| 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 | -40°C to +85°C. |
| Storage temperature | -40°C to +125°C. |

Certification

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|-----------------------|--|
| 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 molded 4p male connector

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|------------------|----------------------|
| 1 = Coax core | = Video signal |
| 2 = Coax screen | = Video GND |
| 3 = Red | = 12...24V/DC |
| 4 = Black/orange | = 0V |
| Shielding | To connector housing |

All data subject to change without notice. All dimensions are for commercial purpose only.
The camera/display systems from Orlaco comply with the latest CE, ADR, EMC and mirror-directive regulations, where applicable.
All products are manufactured in accordance with the ISO 9001 quality management system, ISO/TS 16949 quality automotive, ISO 14001 environmental management systems and all Ex products with the IECEx scheme and ATEX directives, where applicable.

