

Vision is
our mission®

2015 • DS0135010 EN R2-0

Camera AMOS 118° PAL
Article no. 0135010

Camera AMOS 102° PAL Maxview
Article no. 0135020

Camera AMOS 69° PAL
Article no. 0135030

Camera AMOS 58° PAL
Article no. 0135040

Camera AMOS 24° PAL
Article no. 0135050

Camera AMOS 16° PAL
Article no. 0135060

Camera AMOS 118° NTSC
Article no. 0135110

Camera AMOS 102° NTSC Maxview
Article no. 0135120

Camera AMOS 69° NTSC
Article no. 0135130

Camera AMOS 58° NTSC
Article no. 0135140

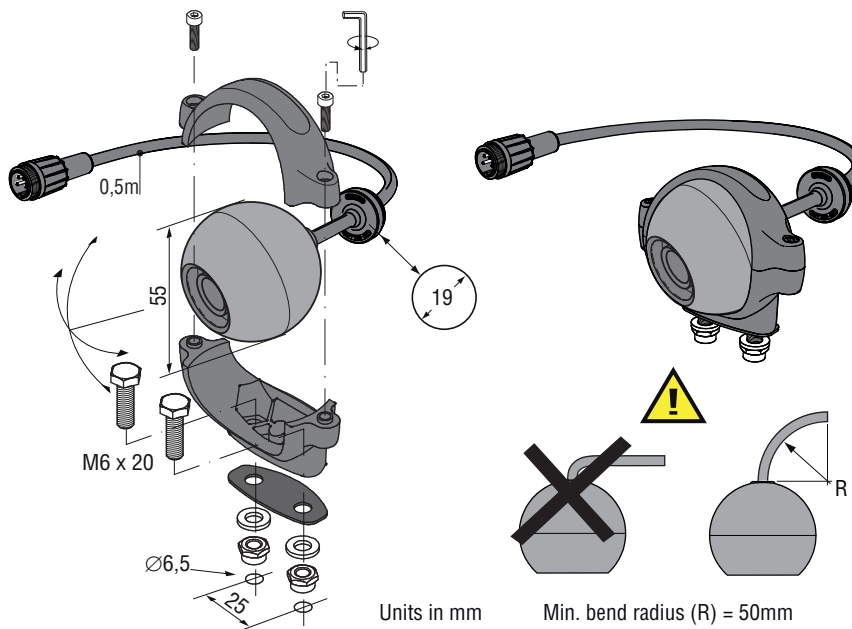
Camera AMOS 24° NTSC
Article no. 0135150

Camera AMOS 16° NTSC
Article no. 0135160



Product Data

Dimensions



Units in mm

Min. bend radius (R) = 50mm

NEW FEATURE
Safety ticker



luginbühl
fahrzeug- und werkstatttechnik

ORLACO
Specialised Camera Solutions

ISO/TS 16949
ISO 9001
ISO 14001



TECHNICAL DATA

Camera AMOS PAL/NTSC

	Description					
Article numbers PAL	0135060	0135050	0135040	0135030	0135020	0135010
Article numbers NTSC	0135160	0135150	0135140	0135130	0135120	0135110
Description	AMOS 16°	AMOS 24°	AMOS 58°	AMOS 69°	AMOS 102°	AMOS 118°
Lens specified	16°	24°	58°	69°	102°	118°
Horizontal lens angle	16°	24°	58°	69°	102°	118°
Vertical lens angle	12°	18°	44°	52°	86°	89°
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	1/4" CMOS digital image sensor. 680 H x 480 V.					
Light sensitivity	<0,05 Lux.					
Dynamic Range	80dB.					

Electrical

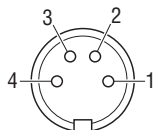
Power input	12..24V/DC. Below 6V: camera is non functional. Between 7V heating element automatically activated (20% capacity). At 8V the camera is fully functional and the heating is at 40% of its capacity. At 12V the heating is at 100% capacity. Between 12V and 33V camera and heating element are fully 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: 1,2W at 24V; Heating on (max. Power at -40°C): 3,6W at 24V.
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.
Heater	2,4W max. Puls Width Modulated, activated from +30°C (min) to -40°C.
Operating temperature	-40°C to +85°C.
Storage temperature	-40°C to +125°C.
Connectors	0,5m cable with 4p male connector (camera power input and video output).
Min. cable bend radius	50mm.

Mechanical

Housing	Anodised aluminium, black, UV resistant, light fastness >8, corrosion proof according IEC 60068-2-52 salt mist, cyclic.
Ingress protection	IP68 according to IEC 60529 (up to 10 m under water), IP69k according to DIN 40050-9: camera can withstand a high pressure cleaning with water: 14-16L/min. 80°C and 100 bars flow.
Nitrogen filled	Filled with overpressure 1 bar.
Lens glass	Chemically hardened, toughed, tempered float glass: 5 to 7 times stronger than ordinary glass, protected against acid: class 2-3; DIN 12116, passed flying stone test.
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).

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. (Mirror directive only applies for Art. No. 0135010)
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

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 Oriaco 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.

