Vision is our mission®

Camera FAMOS 118° PAL IR LED
Article no. 0171600
Camera FAMOS 80° PAL IR LED
Article no. 0171610
Camera FAMOS 118° NTSC IR LED
Article no. 0171620
Camera FAMOS 80° NTSC IR LED
Article no. 0171630

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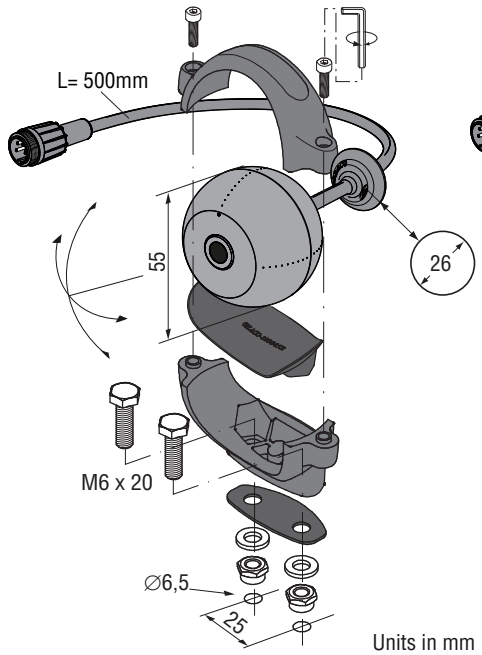
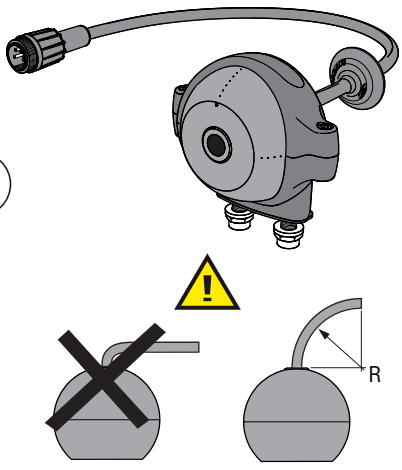
Product Data

Dimensions



Units in mm



Min. bend radius (R) = 50mm

TECHNICAL DATA

Camera FAMOS 80°/118° PAL/NTSC IR LED

	Description			
Article number	**0171600**	**0171610**	**0171620**	**0171630**
	FAMOS 118° PAL IR LED	FAMOS 80° PAL IR LED	FAMOS 118° NTSC IR LED	FAMOS 80° NTSC IR LED
Lens specified	118°	80°	118°	80°
Horizontal lens angle	118°	80°	118°	80°
Vertical lens angle	89°	59°	89°	59°

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. The IR camera also provides a good image with 0 lux ambient light by means of the IR LEDs.
LED	4 High Power Infrared LEDs (850nm).
Activation IR LED's	Modern software algorithm measures automatically the output parameters of the CMOS sensor and automatically decides and activates the value of IR illumination needed for the best image. IR LED's are activated between 0% and 100% in steps of 1%.

Electrical

Power input	12...24V/DC. Below 12V: camera is non functional. At 12V the heating and IR LED are available at 100% capacity. Between 12V and 33V camera, heating element and IR LED are fully functional. Above 33V the overvoltage protection is activated and camera plus heating element and IR LED are switched off. This overvoltage-protection is deactivated below 32V. Powercircuit is protected up to 80V/Dc. Outputs are Short Circuit Protected. *In all these above mentioned values; a tolerance of +/-10% is applied.*
Power consumption	Camera only: 1.2W at 12V , Heater & full LED on: 7,5W at 12V. Camera only: 1.2W at 24V , Heater & full LED on: 7,5W at 24V.
Inrush current	0.5A at 12V and 1.0A at 24V (t < 2ms, peak (>90%) t = 0.3ms).
Heater element	2,4W max. Puls 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.

Mechanical

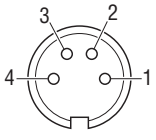
Housing	Cycoloy (PC + ABS). Filling: Camera is potted with Polyurethane elastomer.
Ingress protection	IP67 according to IEC 60529, Dust tight and protected against the effects of immersion in water up to 1m for 30 minutes and IP69k according to DIN 40050-9: camera can withstand a high pressure cleaning 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	Camera; -40°C to +85°C. IR LEDs; -40°C to +50°C.
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 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

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