







# **Heavy-duty camera** MC6000D

The MC6000D camera was developed specifically for heavy-duty applications. The robust design and special surface treatment makes it the perfect choice for use in extreme weather conditions. This camera is impervious to shock impacts up to 50 g and vibrations up to 5 g. The energy-efficient automotive CMOS sensor delivers an excellent image quality in operating temperatures between -40°C and +85°C. An integrated, automatically controlled 2.5 Watt screen heater ensures perfect visibility at temperatures below +5°C.



# Key facts

- Suitable for heavy-duty applications
- Immersion and jet cleaning-proof (IP68 and IP69K)
- Operating and storage temperature -40 °C...+85 °C
- Thermally tempered, distortion-free glass
- ■2.5 W screen heater
- Automotive CMOS sensor
- ■90° or 70° horizontal view angle
- On-board network integration capability, 9 V...32 V DC
- Made in Germany

# Standards/Certificates/Quality seals

- ■EN 13309 Construction machinery
- EN 14982 Agricultural/forestry machinery
- ■EN 12895 Industrial trucks
- EN 50121 Railway applications
- ■ISO 13766 Earth-moving equipment
- ADR





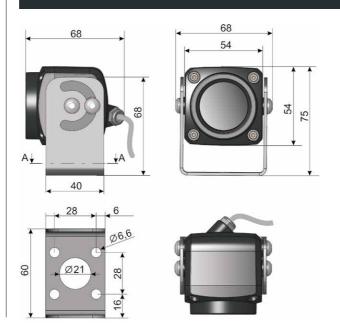
## Plug connection

	M12/5-pin, Code A (male)	Mini Din M14x1 / 4p (male)
Pin	Signal	
1	Video-signal	Video-signal
2	Mirror	Mirror
3	+V DC	Shutter
4	GND	+V DC
5	Video GND	Video GND/GND
6	Shield	





## Dimensions in mm



## Technical data

## ■ Image sensor

Energy efficient automotive CMOS sensor (1/4", 350,000 pixels, active PAL resolution H 640 x V 480) with many intelligent functions, including automatic white balance and automatic exposure and brightness control. Error recognition and pixel error correction, flicker suppression, high dynamic scope (75 dB), high S/N ratio (46 dB), and high light sensitivity (< 0,05 lux), programmable overlay and distortion correction available

#### ■ Visualisation

70° or 90° horizontal view angle (dep. on model), corresponds to 87,5° or 112,5° diagonal view angle, mirror capability via voltage signal (permanently mirrored version available)

## Housing protection class

Immersion and jet cleaning-proof (IP68 and IP69K) in accordance with ISO 20653 and IEC 60529

## ■ Power supply

On-board network integration capability, 9 V...32 V DC

#### ■ Electrical interference resistance

Interference-resistant electrical layout in accordance with the following industry standards: EN 13309, EN 14982, EN 50121, EN 55022, EN 61000, ISO 11452, and ISO 13766

# Operating and storage temperature

-40 °C...+85 °C

# ■Weight

0,4 kg

# Package contents

MC6000D compact camera	404 609x xxx
Bracket set	813 1500 005
Operating instructions	103 0000 150

### Housing

Robust aluminium housing, anodised and coated for added weather resistance, corrosion and salt spray resistant in accordance with DIN 60068, resistant against direct sunlight (UV-resistant in accordance with DIN 75220), acid and baseresistant in accordance with test plan

#### ■ Mechanical resistance

Particularly robust mechanical design, specifically suited for heavy-duty applications, shock resistant up to 50 g, continuous shock 30 g, 5 g vibration resistant in accordance with DIN EN 60068

## ■ Screen

Thermally tempered, distortion-free glass, extra breakage and impact resistant due to 4 mm thickness

## ■ Power consumption

Eco-friendly, energy efficient switchgear with < 0.5 W (with inactive heating) and < 3.0 W (with active heating)

### Screen heating

Winter-proof with automatically controlled 2.5 W screen heater to prevent ice formation, frost, and fogging up, active at temperatures below +5 °C

## ■ Connection cable

0,7 m molded, water-tight plug (IP67 when plugged in)

# Horizontal view angle

Schematic diagram

