

INSPIRED BY COMFORT

مركز البراغي والعدد
BTCO
BOLTS & TOOLS CENTER

HAVE EVERYTHING IN SIGHT

2015



NEW: With 2-step zoom for close and long range vision:
CAM 604

-  AUDIO
-  IP 69K
-  HEATING
-  CLOSE+FAR

CAMERA-MONITOR SYSTEMS
FOR PROFESSIONALS

WAECO
by Dometic GROUP

Definitely a good investment **Camera-monitor system**



WAECO
by Dometic GROUP

With WAECO PerfectView, you can fit vehicles of all kinds with a tailor-made safety package. Cameras in a variety of designs, slim LCD monitors with smart amenities, complete packages and single components, standard and heavy-duty ... there is a professional solution for every demand and for every application.

ment: stems



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Contents, specifications and availability are subject to change due to the technical improvement.

Certified safety for truck construction machines

Compliance with standards and regulations is a matter of course for our designers. By working closely with vehicle manufacturers and trade associations, they have direct access to all important information.

New industry standards, growing safety requirements, changing legal conditions – WAECO PerfectView keeps you on the safe side.

WAECO
by Dometic GROUP

Proven
100,000 times
over!

ks, and the likes



Improved indirect vision

Every day fatal accidents happen on construction sites because machine operators fail to see colleagues or passersby behind or beside the vehicle.

By retrofitting a camera-monitor system you can increase the field of vision around the vehicle.



Reversing cameras on original displays

You can connect up to two cameras to a factory-fitted multimedia display. Simply put the WAECO control box and the matching adapter between them – and image transmission will work a treat.



Heavy-duty design

The PerfectView CAM 60ADR heavy-duty camera qualifies for use under extreme conditions with a certification according to ISO 16750-2, ISO 16750-3 and protection class IP 69K. More cameras, monitors and system solutions for heavy-duty use can be found on pages 38 – 47.



Subsidies for construction machines

To prevent accidents with heavy construction machinery, Germany's construction trade association BG Bau promotes the investment into suitable equipment for an improved field of vision (e.g. camera-monitor systems) with about 25% of the initial costs.





PerfectView CAM50C

Colour camera

- Compact colour camera with extra low profile and concealed cable
- Wide-angle lens with large picture angle (120° diagonal)



PerfectView CAM80CM

Colour shutter camera

- Super-compact colour camera
- Automatic, motor-operated camera cover to protect the lens from dirt
- Wide-angle lens with large picture angle (145° diagonal)
- Test marks:
ISO 16750-2 2010-03,
ISO 16750-3 4.1.2.4 2007-08
- Protection class: IP 68
- Microphone
- LDR-controlled IR LEDs



PerfectView CAM 44

Twin colour camera with shutter

- Colour CMOS camera (PAL) with LED
- Large picture angle in close range (140° diagonal)
- Telephoto function in long range (50° diagonal)
- Automatic, motor-operated camera cover
- Microphone
- Factory pre-mirrored
- LDR-controlled IR LEDs
- Distance marks (3-line) in reversing mode



PerfectView CAM 40

Colour ball camera

- Super-compact design with high vibration resistance
- Very high light sensitivity and resolution
- Wide-angle lens with large picture angle (130° diagonal)

PerfectView SWITCH 200VTO

Connects up to two cameras to original multimedia displays

With the PerfectView SWITCH 200VTO control box and the matching vehicle-specific adapter you can connect two cameras to a pre-installed multimedia display. The cameras are activated automatically or manually. You can switch back and forth between the two views manually using the external switch.



PerfectView cameras

Singly or in a package

Do you want a particularly compact design? Or sturdy equipment with integrated heating? Do you need a camera which produces sharp images both at close range and far away? Or are you looking for a special model because there is really no place for a reversing camera on the rear of your vehicle? The PerfectView range offers the right professional solution for every requirement.

**PERFECT
CLOSE AND
LONG RANGE
VISION**



PerfectView CAM 604

2-step zoom colour camera

- Picture angle: 153° diagonal in close range, 83° diagonal in long range
- Infra-red LEDs for improved night vision
- Temperature-controlled heater
- Integrated microphone
- Replaceable stone chip protection screen

PerfectView CAM 18

Colour ball camera

- Normal or mirrored picture function
- Aluminium housing
- Adjustable ball camera
- Microphone
- LDR-controlled IR LEDs
- Distance scale

PerfectView CAM 60ADR

Colour camera, ADR-compliant

- 6 LEDs for improved night vision
- Separate LEDs to prevent reflections
- Duplex protective glass for camera (hardened)
- Replaceable cover glass
- Cable input at the side (prevents cable breakage)
- Powder-coated aluminium housing
- Stainless steel mount and screws
- Complies with ISO 16750-3, ISO 16750-4, IEC68-2-38, ISO 9227, ECE R10, IP 69K (truck use) and ADR



PerfectView CAM 29BK

Brake light console camera

- Colour cylinder camera (PAL), 1/4" CMOS
- Wide-angle lens with large picture angle (150° diagonal)
- For FIAT Ducato X250, X290 and their sister models
- Fitted in the original brake light
- Water-proof IP 68
- Housing can be painted



PerfectView CAM 29BKS

Camera in roof base-mounted housing

- Colour cylinder camera (PAL), 1/4" CMOS
- Fits VW Crafter and Mercedes-Benz Sprinter (Ford Transit with adapter)
- Technical data as for CAM 29BK

Slim design, sharp images

The new PerfectView monitors

Flat, compact and easy to adjust thanks to the ball mount:

The new PerfectView monitors come in four different versions – with 5" or 7" diagonal screen size, each as a standard model or heavy-duty version with an attachable sun shield.

All monitors are tested and approved according to ISO 16750. Digital LCD technology with super-bright, energy-saving LED backlighting and advanced anti-reflex technology makes for excellent image quality in all light conditions.

Standard: **PerfectView M 55L** and **M 75L**

With three camera inputs



PerfectView M 55L

5" digital LCD monitor

- For 11 to 30 volts operating voltage
- Automatic or manual activation
- Automatic day/night adjustment
- Normal or mirrored picture function
- 384,000 pixels
- 3 camera inputs, 1 with video signal recognition
- Image settings can be saved for either camera
- Loudspeaker
- LED background illumination

PerfectView M 75L

7" digital LCD monitor

- For 11 to 30 volts operating voltage
- Switches on automatically or by manual operation
- Automatic day/night adjustment
- Normal or mirrored picture function
- 384,000 pixels
- 3 camera inputs, 1 with video signal recognition
- Image settings can be saved for either camera
- Loudspeaker
- LED background illumination



Heavy-Duty: **PerfectView M 55LX** and **M 75LX**

With four camera inputs

The new heavy-duty monitors from WAECO provide three additional benefits. First, they have four camera inputs. Second, they feature distance marks to define the borders of the danger zone. Third, each unit is supplied with an attachable sun shield.



Splash-proof: **PerfectView M 70IP**

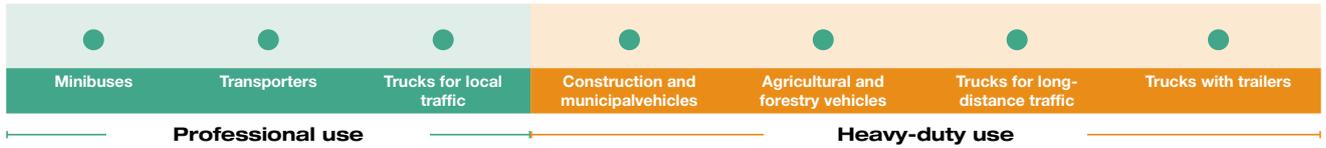
High-quality 7" digital colour LCD monitor

- For 12-volt and 24-volt operating voltage
- Splash-proof according to IP 69K
- 3 camera inputs
- Normal or mirrored picture function
- Multilingual OSD
- Aluminium housing
- LED background illumination
- Operation with sensor keys or by remote control
- Adjustable distance marks

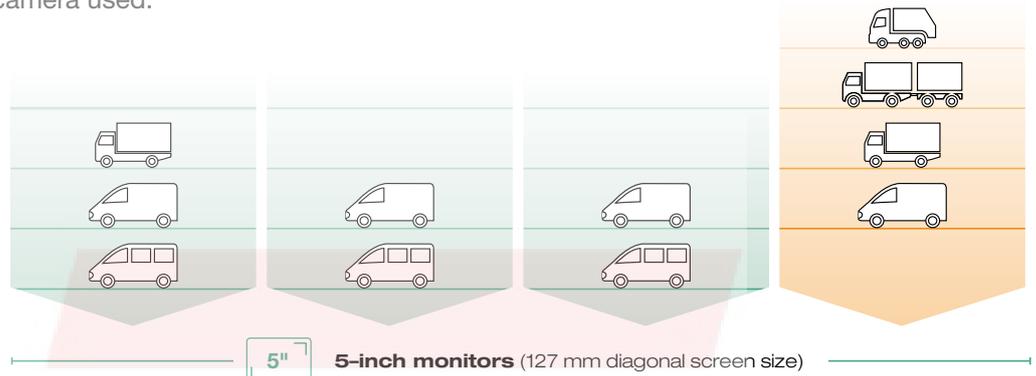


**WATER-PROOF
ACCORDING
TO IP 69K**

Decision aid



The following table gives you an overview of all the PerfectView complete systems currently available. Whether it's a truck or transporter, standard application or heavy-duty – you will find “your system” here! The recommended applications mainly depend on the system camera used.



System	RVS550N / NX	RVS565	RVS535	RVS580 / X
Ref. No.	9101900090 / 9101900091	9101900036	9101900001	9101900040 / 9101900085
Monitor	M 55L / M 55LX	M 55L	M 55L	M 55L / M 55LX
Operating voltage	11 to 30 volts DC	11 to 30 volts DC	11 to 30 volts DC	11 to 30 volts DC
Power consumption	8 watts	8 watts	8 watts	8 watts
Resolution	384,000 pixels	384,000 pixels	384,000 pixels	384,000 pixels
LED background illumination	•	•	•	•
Video standard	NTSC/PAL auto	NTSC/PAL auto	NTSC/PAL auto	NTSC/PAL auto
Number of camera inputs	L: 3 / LX: 4	3	3	L: 3 / LX: 4
Day/night dimmer	Automatic LDR	Automatic LDR	Automatic LDR	Automatic LDR
Distance scale	– / adjustable	– / adjustable	– / adjustable	– / adjustable
Mirrored picture function	can be set	can be set	can be set	can be set
Loudspeaker	•	•	•	•
Vibration resistance	6 g	6 g	6 g	6 g
Temperature range	-20 °C to +70 °C	-20 °C to +70 °C	-20 °C to +70 °C	-20 °C to +70 °C
Camera	CAM 50C	CAM 29BK	CAM 29BKS	CAM 80CM
Image sensor	1/4" CCD	1/4" CMOS	1/4" CMOS	1/3" CCD
Resolution	270,000 pixels	307,000 pixels	307,000 pixels	270,000 pixels
Horizontal/vertical/diagonal picture angle	90°/70°/120°	102°/73°/150°	102°/73°/150°	100°/72°/145°
Light sensitivity (lux)	< 0.5 (with LED 0)	< 0.5 (with LED 0)	< 0.5 (with LED 0)	< 0.5 (mit LED 0)
Video standard	PAL	PAL	PAL	PAL
Electronic brightness adjustment	•	•	•	•
IR LED for optimum night-time vision	•	•	•	•
Integrated microphone	•	–	–	•
Heating	•	–	–	•
Motor-operated camera shutter	–	–	–	•
Vibration resistance	6 g	6 g	6 g	6 g
Protection class	IP 69K	IP 68	IP 68	IP 68
Mirrored picture function	can be set	factory-preset	factory-preset	can be set
Temperature range	-20 to +65°C	-20 to +70°C	-20 to +70°C	-20 to +65°C
	see page 13/15	see page 25	see page 24	see page 16/19



Super-flat monitor plus LED colour camera:

Quality at a good price

High-quality components and modern technology: These WAECO PerfectView LCD reversing video systems offer impressive equipment for a competitive price. The PerfectView M 55L and M 75L LCD colour monitors feature elegant design and brilliant picture quality. Digital control technology provides fast turn-on times and trouble-free operation even in extreme heat.

The compact PerfectView CAM 50C colour camera provides a comfortable picture angle of 120° and is equipped with infra-red LEDs, temperature-controlled heating and a microphone.

Two additional cameras can be connected.



Matching accessories for reversing video systems – e.g. for connection of an additional camera – can be found on pages 56 – 61.

Improved cable sealing for installation without adhesive!



WAECO PerfectView RVS 550N

Reversing video system with digital 5" LCD monitor and compact colour camera

Suitable for



Scope of delivery

5" monitor, camera, 20 m connection cable from the monitor to the camera, monitor cable set, installation fittings for all components



M 55L



CAM 50C, silver

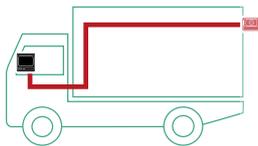
Monitor



Camera



Installation



Monitor M 55L

- Digital LCD panel with LED background illumination
- For 11 to 30 volts operating voltage
- Optimum picture quality even at low temperatures
- Normal or mirrored picture function
- Three camera inputs, including 1 with signal recognition
- Picture settings can be saved for three camera inputs
- Connection of e.g. side cameras via the indicator
- Automatic recognition of a trailer camera
- Elegant monitor base with concealed cable routing

• Technical data p. 10

Camera CAM 50C

- Compact colour camera with extra low design
- Colour CCD camera (PAL) with LED
- Normal or mirrored picture function
- Anodised and powder-coated housing
- Adjustable anti-glare sunshield
- Microphone
- Temperature-controlled heater
- Electronic brightness adjustment
- LDR-controlled IR LEDs
- Picture angle: 120° diagonal

• Technical data p. 10, 11, 27

Ref. No. 9101900090

3.19

WAECO PerfectView RVS 750N

Reversing video system with digital 7" LCD monitor and compact colour camera

Suitable for



Scope of delivery

7" Monitor, camera, 20 m connection cable from the monitor to the camera, monitor cable set, installation fittings for all components



M 75L



CAM 50C, silver

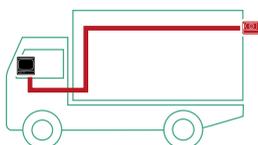
Monitor



Camera



Installation



Monitor M 75L

- Digital LCD panel with LED background illumination
- For 11 to 30 volts operating voltage
- Optimum picture quality even at low temperatures
- Normal or mirrored picture function
- Three camera inputs, including 1 with signal recognition
- Picture settings can be saved for three camera inputs
- Connection of e.g. side cameras via the indicator
- Automatic recognition of a trailer camera
- Elegant monitor base with concealed cable routing

• Technical data p. 11

Camera CAM 50C

- Compact colour camera with extra low design
- Colour CCD camera (PAL) with LED
- Normal or mirrored picture function
- Anodised and powder-coated housing
- Adjustable anti-glare sunshield
- Microphone
- Temperature-controlled heater
- Electronic brightness adjustment
- LDR-controlled IR LEDs
- Picture angle: 120° diagonal

• Technical data CAM50C p. 10, 11, 27

Ref. No. 9101900092

3.19



Matching accessories for reversing video systems – e.g. for connection of an additional camera – can be found on pages 56 – 61.

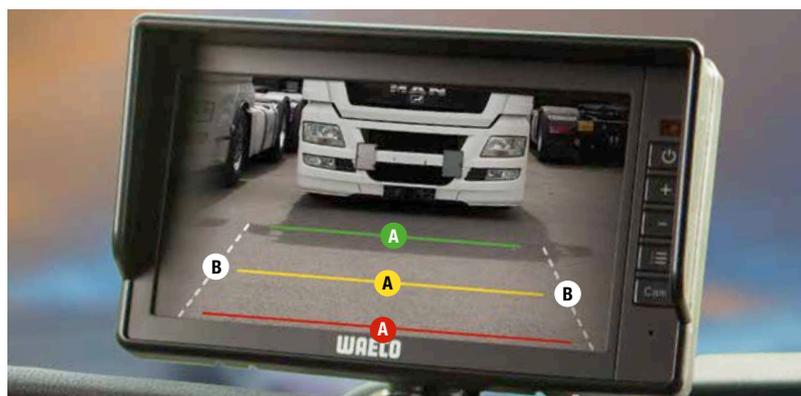
Heavy-duty monitor plus LED camera:

For tough types

One class up: For these WAECO PerfectView LCD reversing video systems, we have combined the light-intensive colour camera PerfectView CAM 50C with the heavy-duty LCD monitors of the LX series. A distinguishing feature of this series is the attachable sun shield.

On top of that, LX-series monitors give you the advantage to be able to connect up to four cameras – three with the option to save the settings separately. Side cameras can be controlled via the indicator, trailer cameras come on automatically when reverse gear is engaged. Adjustable distance marks make for convenient manoeuvring.

Distance marks on the monitor for convenient manoeuvring



- Ⓐ Distance lines
- Ⓑ Side lines

Thanks to the adjustable distance marks, it is immediately apparent what obstacles are in the danger zone. This allows you to safely park a 40-ton truck backwards.

WAECO PerfectView RVS 550NX

Reversing video system with digital 5" LCD monitor with distance marks and compact colour camera

Suitable for



Scope of delivery

5" monitor, colour camera, 20 m connection cable from the monitor to the camera, monitor cable set, installation fittings for all components, sun shield



M 55LX



CAM 50C, silver

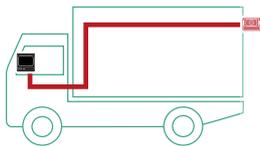
Monitor



Camera



Installation



Monitor M 55LX

- Digital LCD panel with LED background illumination
- Optimum picture quality even at low temperatures
- OSD distance marks for convenient manoeuvring
- Normal or mirrored picture function
- Four camera inputs, including 1 with signal recognition
- Image settings can be saved
- Connection of e.g. side cameras via the indicator
- Automatic recognition of a trailer camera
- Attachable sun shield
- Elegant monitor base with concealed cable routing

• Technical data p. 10

Camera CAM 50C

- Compact colour camera with extra low design
- Colour CCD camera (PAL) with LED
- Normal or mirrored picture function
- Anodised and powder-coated housing
- Adjustable anti-glare sunshield
- Microphone
- Temperature-controlled heater
- Electronic brightness adjustment
- LDR-controlled IR LEDs
- Picture angle: 120° diagonal

• Technical data p. 10, 11, 27

Ref. No. 9101900091

3.19

WAECO PerfectView RVS 750NX

Reversing video systems with digital 7" LCD monitor with distance marks and compact colour camera

Suitable for



Scope of delivery

7" monitor, colour camera, 20 m connection cable from the monitor to the camera, monitor cable set, installation fittings for all components, sun shield



M 75LX



CAM 50C, silver

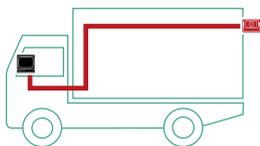
Monitor



Camera



Installation



Monitor M 75LX

- Digital LCD panel with LED background illumination
- Optimum picture quality even at low temperatures
- OSD distance marks for convenient manoeuvring
- Normal or mirrored picture function
- Four camera inputs, including 1 with signal recognition
- Image settings can be saved
- Connection of e.g. side cameras via the indicator
- Automatic recognition of a trailer camera
- Attachable sun shield
- Elegant monitor base with concealed cable routing

• Technical data p. 11

Camera CAM 50C

- Compact colour camera with extra low design
- Colour CCD camera (PAL) with LED
- Normal or mirrored picture function
- Anodised and powder-coated housing
- Adjustable anti-glare sunshield
- Mikrophone
- Temperature-controlled heater
- Electronic brightness adjustment
- LDR-controlled IR LEDs
- Picture angle: 120° diagonal

• Technical data p. 10, 11, 27

Ref. No. 9101900093

3.19



Well protected against dust and dirt Camera with **motor-operate**

Compact monitor plus colour shutter camera

With these two PerfectView system versions, the new LCD monitors of the L series team up with a robust colour camera, which is protected against dust and stone chips by a motor-operated cover and is fitted with a temperature-controlled heater.

WAECO PerfectView **RVS 580**

Reversing video system with digital 5" LCD monitor and colour shutter camera

Suitable for



Scope of delivery

5" monitor, camera, 20 m connection cable from the monitor to the camera, monitor cable set, installation fittings for all components



M 55L



CAM 80CM

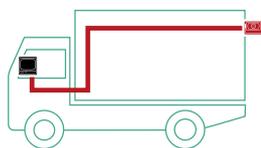
Monitor



Camera



Installation



Monitor M 55L

- Digital LCD panel with LED background illumination
- Optimum picture quality even at low temperatures
- Normal or mirrored picture function
- Three camera inputs, including 1 with signal recognition
- Picture settings can be saved for three camera inputs
- Connection of e.g. side cameras via the indicator
- Automatic recognition of a trailer camera
- Elegant monitor base with concealed cable routing

• Technical data p. 10

Camera CAM 80CM

- Compact colour shutter camera with large 145° picture angle
- 1/3" colour CCD camera (PAL) with LED
- Normal or mirrored picture function
- Automatic, motor-operated camera cover to protect the lens from dirt
- Ideal for installation in high-up or difficult-to-access areas
- Microphone
- Temperature-controlled heater
- Electronic brightness adjustment
- LDR-controlled IR LEDs

• Technical data p. 10, 11, 27



d cover



Matching accessories for reversing video systems – e.g. for connection of an additional camera – can be found on pages 56 – 61.

BOLTSANDTOOLS

WAECO PerfectView RVS 780

Reversing video system with digital 7" LCD monitor and colour shutter camera

Suitable for



Scope of delivery

7" monitor, camera, 20 m connection cable from the monitor to the camera, monitor cable set, installation fittings for all components



M 75L



CAM 80CM

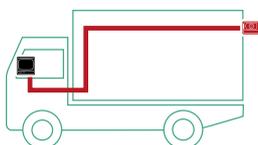
Monitor



Camera



Installation



Monitor M 75L

- Digital LCD panel with LED background illumination
- Optimum picture quality even at low temperatures
- Normal or mirrored picture function
- Three camera inputs, including 1 with signal recognition
- Image settings can be saved
- Connection of e.g. side cameras via the indicator
- Automatic recognition of a trailer camera
- Elegant monitor base with concealed cable routing

• Technical data p. 11

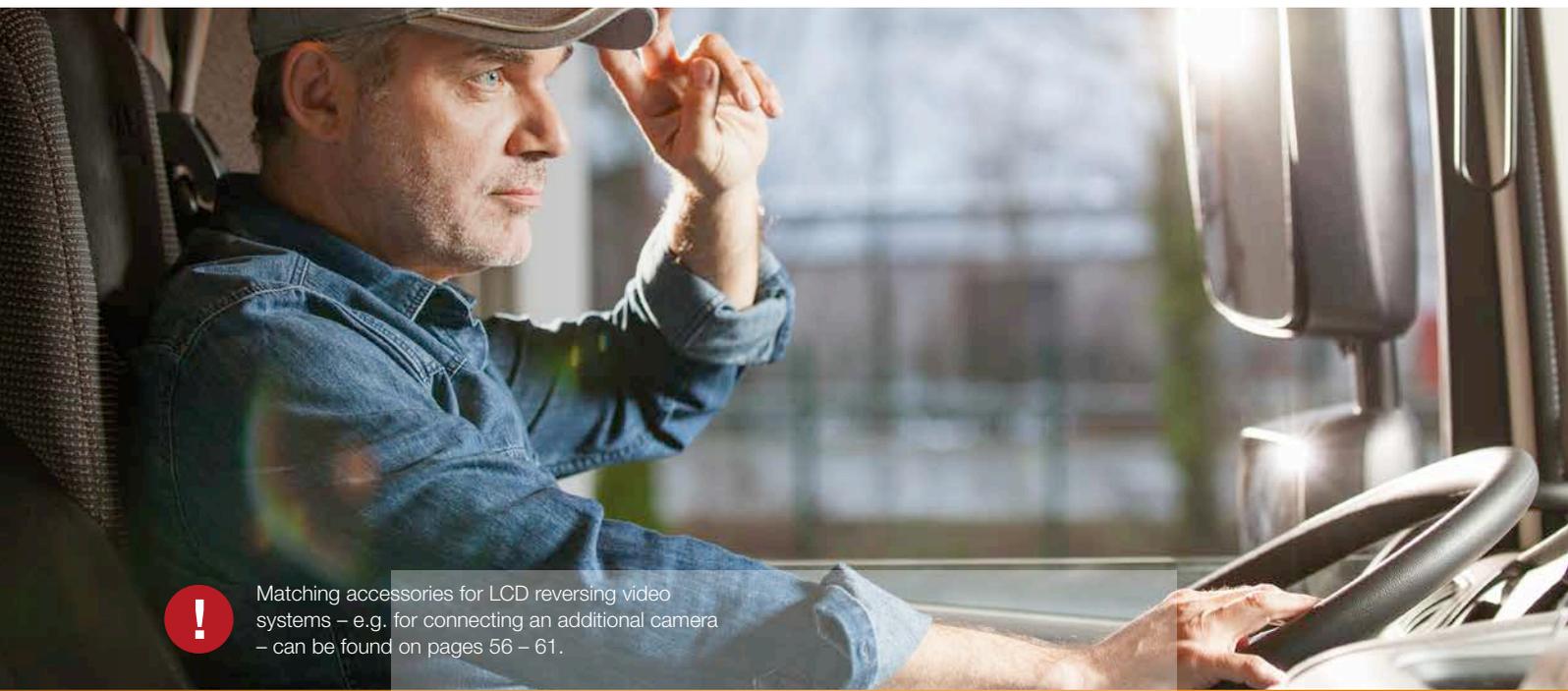
Camera CAM 80CM

- Compact colour shutter camera with large 145° picture angle
- $\geq 1/3"$ colour CCD camera (PAL) with LED
- Normal or mirrored picture function
- Automatic, motor-operated camera cover to protect the lens from dirt
- Ideal for installation in high-up or difficult-to-access areas
- Microphone
- Temperature-controlled heater
- Electronic brightness adjustment
- LDR-controlled IR LEDs

• Technical data p. 10, 11, 27

Ref. No. 9101900084

3.19



Matching accessories for LCD reversing video systems – e.g. for connecting an additional camera – can be found on pages 56 – 61.

Heavy-duty monitor with shutter camera: A powerful team!

Manoeuvring a heavy vehicle on rough ground with perfect ease – it's possible with our two professional systems. As soon as reverse gear is engaged, the CAM 80CM delivers pictures from the critical area behind the vehicle. The monitor automatically displays the manoeuvring aid. The system is 100% reliable, because the distance marks have been adapted exactly to the vehicle dimensions.

For perfect visibility around the vehicle, the package solution can be upgraded by adding further cameras, e.g. a side camera that comes on automatically as you touch the indicator. Up to four cameras can be connected to one monitor.

The new heavy-duty monitors from WAECO provide three additional benefits:



- **First**, they have four camera inputs.
- **Second**, they feature distance marks to define the borders of the danger zone.
- **Third**, each unit is supplied with an attachable sun shield.

WAECO PerfectView RVS 580X

Reversing video system with digital 5" LCD monitor and colour shutter camera

Suitable for



Scope of delivery

5" monitor, colour camera, 20 m connection cable from the monitor to the camera, monitor cable set, installation fittings for all components, sun shield



M 55LX



CAM 80CM

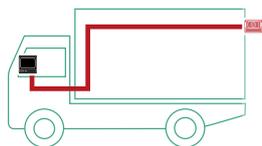
Monitor



Camera



Installation



Monitor M 55LX

- Digital LCD panel with LED background illumination
- Optimum picture quality even at low temperatures
- OSD distance marks for convenient manoeuvring
- Normal or mirrored picture function
- Four camera inputs, including 1 with signal recognition
- Image settings can be saved
- Connection of e.g. side cameras via the indicator
- Automatic recognition of a trailer camera
- Attachable sun shield
- Elegant monitor base with concealed cable routing

• Technical data p. 10

Camera CAM 80CM

- Compact colour shutter camera with large 145° picture angle
- 1/3" colour CCD camera (PAL) with LED
- Normal or mirrored picture function
- Automatic, motor-operated camera cover to protect the lens from dirt
- Ideal for installation in high-up or difficult-to-access areas
- Microphone
- Temperature-controlled heater
- Electronic brightness adjustment
- LDR-controlled IR LEDs

• Technical data p. 10, 11, 27

Ref. No. 9101900085

3.19

WAECO PerfectView RVS 780X

Reversing video system with digital 7" LCD monitor and colour shutter camera

Suitable for



Scope of delivery

7" monitor, colour camera, 20 m connection cable from the monitor to the camera, monitor cable set, installation fittings for all components, sun shield



M 75LX



CAM 80CM

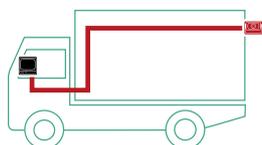
Monitor



Camera



Installation



Monitor M 75LX

- Digital LCD panel with LED background illumination
- Optimum picture quality even at low temperatures
- OSD distance marks for convenient manoeuvring
- Normal or mirrored picture function
- Four camera inputs, including 1 with signal recognition
- Image setting can be saved
- Connection of e.g. side cameras via the indicator
- Automatic recognition of a trailer camera
- Attachable sun shield
- Elegant monitor base with concealed cable routing

• Technical data p. 11

Camera CAM 80CM

- Compact colour shutter camera with large 145° picture angle
- 1/3" colour CCD camera (PAL) with LED
- Normal or mirrored picture function
- Automatic, motor-operated camera cover to protect the lens from dirt
- Ideal for installation in high-up or difficult-to-access areas
- Microphone
- Temperature-controlled heater
- Electronic brightness adjustment
- LDR-controlled IR LEDs

• Technical data p. 10, 11, 27

Ref. No. 9101900083

3.19

For optimal close range and long range vision Reversing video system **with**

Double safety with two camera eyes

In reverse gear, the monitor transmits an accurate picture of the area directly behind the vehicle. During the drive the system switches over to long range vision so you have the traffic situation a long way behind your vehicle fully in view. The technology behind this dual function is provided by the world's smallest shutter camera.

WAECO PerfectView **RVS 594**

Reversing video system with digital 5" LCD monitor and colour twin camera with shutter

Scope of delivery

5" digital colour LCD monitor, colour twin camera with shutter, 20 m connection cable from the monitor to the camera, monitor cable set, installation fittings for all components



M 55L



Suitable for



CAM 44

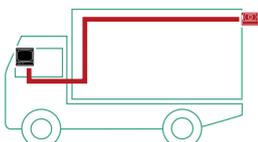
Monitor



Camera



Installation



Digital colour LCD monitor M55L

- Digital LCD panel with LED background illumination
- Optimum picture quality even at low temperatures
- Normal or mirrored picture function
- Three camera inputs, including 1 with signal recognition
- Image settings can be saved for three camera inputs
- Connection of e.g. side cameras via the indicator
- Automatic recognition of a trailer camera
- Elegant monitor base with concealed cable routing

• Technical data p. 10

Colour shutter camera CAM 44

- Smallest colour twin camera with shutter and extra-wide picture angle
- Colour CMOS camera (PAL) with LED
- Large picture angle in close range (140° diagonal)
- Telefunction in long range (50° diagonal)
- Operated via the two camera inputs in the monitor
- Automatic, motor-operated camera cover
- Ideal for high-up or difficult-to-access areas thanks to motor-operated camera cover
- Microphone
- Distance marks in reversing mode

• Technical data p. 10, 11, 29

Ref. No. 9101900002

twin camera:

The CAM 44 has two separate camera modules – a 140° wide-angle lens for close range vision and a 50° lens for long range vision that looks through the opening when the shutter is closed.



Two lenses: one for close range, one for long range



Even when the shutter is closed, long-range pictures are still possible to the rear.

WAECO PerfectView RVS 794

Reversing video system with digital 7" LCD monitor and colour twin camera with shutter

Scope of delivery

7" digital colour LCD monitor, colour twin camera with shutter, 20 m connection cable from the monitor to the camera, monitor cable set, installation fittings for all components



M 75L

Suitable for



CAM 44

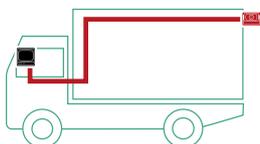
Monitor



Camera



Installation



Digital colour LCD monitor M75L

- Digital LCD panel with LED background illumination
- Optimum picture quality even at low temperatures
- Normal or mirrored picture function
- Three camera inputs, including 1 with signal recognition
- Image settings can be saved
- Connection of e.g. side cameras via the indicator
- Automatic recognition of a trailer camera
- Elegant monitor base with concealed cable routing

• [Technical data p. 10](#)

Colour shutter camera CAM44

- Smallest colour twin camera with shutter and extra-wide picture angle
- Colour CMOS camera (PAL) with LED
- Large picture angle in close range (140° diagonal)
- Telefunction in long range (50° diagonal)
- Operated via the two camera inputs in the monitor
- Automatic, motor-operated camera cover
- Ideal for high-up or difficult-to-access areas thanks to motor-operated camera cover
- Microphone
- Distance marks in reversing mode

• [Technical data p. 10, 11, 29](#)

Ref.-No. 9101900061



WAECO PerfectView RVS 764X

This professional solution meets highest demands. You always have everything in sight – when manoeuvring, during the drive and even at night. Our dream team takes care of that – the 2-step zoom camera CAM 604 in interplay with the 7" LCD monitor M 75LX.

Perfect 2-step **close and longrange vision**

When manoeuvring in reverse gear, the CAM 604 shows you the **area** directly behind the vehicle – the images are crystal-clear, without distorted curved lens effects. During the drive the 2-step zoom camera switches over to **long range vision**. Thanks to LED support, it also provides **high-contrast pictures at night**.

Camera CAM 604



- Extra-large diagonal picture angle: 153° in close range, 83° in long range
- Replaces the inside rear-view mirror if required
- Infra-red LEDs for improved night vision
- Temperature-controlled heater
- Integrated microphone
- Replaceable stone chip protection screen
- Camera requires 2 monitor signal inputs
- Factory pre-mirrored
- Anodised and powder-coated aluminium housing with stainless steel mount
- Electronic brightness adjustment
- Test marks: ISO 16750-2 2010-03, ISO 16750-3 4.1.2.4 2007-08

• [Technical information page 11, 29](#)

Camera



PerfectView RVS 764X Ref. No. 9101900087

Suitable for:



Close range vision

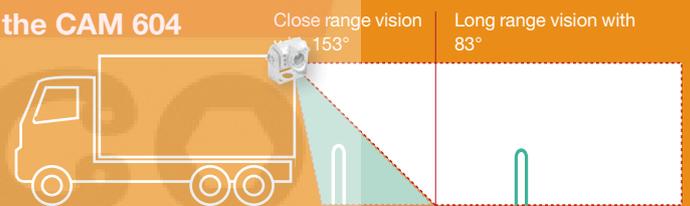


Long range vision



Night vision

Picture angle of the CAM 604



Digital monitor with manoeuvring aid

The high quality 7" LCD monitor provides **excellent image quality**. **Adjustable distance marks** allows you to park even a 40-tonne truck backwards with ease.

The M 75LX has **four camera inputs** – two for the CAM 604, and another two for additional cameras.

Monitor M 75LX



Monitor



- Digital LCD panel with LED background illumination
- Optimum picture quality even at low temperatures
- OSD distance marks for convenient manoeuvring
- Normal or mirrored picture function
- Four camera inputs, including 1 with signal recognition
- Image settings can be saved
- Connection of e.g. side cameras via the indicator
- Automatic recognition of a trailer camera
- Attachable sun shield
- Elegant monitor base with concealed cable routing

• [Technical information page 11](#)

Custom solutions for panel vans

Many panel vans just don't have a suitable mounting surface for a camera on the rear. The obvious alternative is to fasten the camera on the roof or on the original brake light. For either configuration the WAECO PerfectView range offers a convincing solution.

For our **custom solution for VW Crafter and Mercedes-Benz Sprinter** we have integrated the cylinder camera CAM 29BKS into a super-low-profile roof base-mounted housing. An angular adapter for universal installation on other vehicles, such as Ford Transit, is included in the set.

WAECO PerfectView RVS 535

Reversing video system with digital 5" LCD monitor and colour cylinder camera in a roof base-mounted housing

Suitable for



Scope of delivery

5" monitor, colour cylinder camera incl. roof base-mounted housing, 20 m connection cable from the monitor to the camera, monitor cable set, installation fittings for all components



M 55L

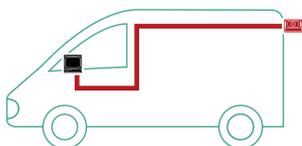


CAM 29BKS

Monitor



Installation



Monitor M 55L

- Digital LCD panel with LED background illumination
- Optimum picture quality even at low temperatures
- Normal or mirrored picture function
- Three camera inputs, including 1 with signal recognition
- Image settings can be saved for three camera inputs
- Connection of e.g. side cameras via the indicator
- Automatic recognition of a trailer camera
- Elegant monitor base with concealed cable routing

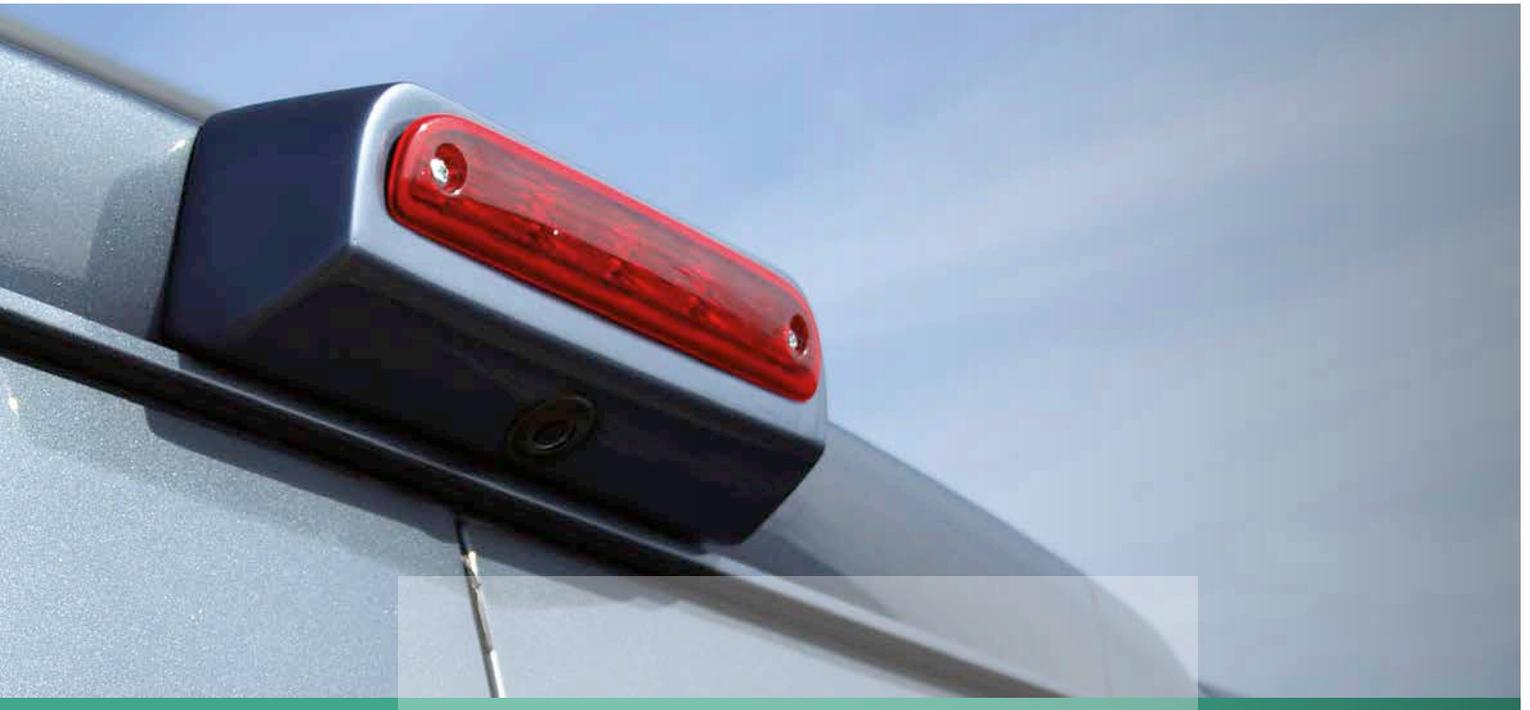
• Technical data M 55L p. 10

Camera CAM 29BKS

- Colour cylinder camera (PAL)
- For roof installation on panel vans that have no suitable mounting surface for a camera on the rear
- Suitable for VW Crafter, Mercedes-Benz Sprinter
- Factory pre-mirrored
- High light sensitivity
- Electronic brightness adjustment
- Protection class: IP 68
- Wide-angle lens with large picture angle (150° diagonal)

• Technical data CAM 29BKS p. 10, 28

Ref. No. 9101900001



For Fiat Ducato and its sister models Citroën Jumper and Peugeot Boxer (from year 2006) we have designed the special camera CAM 29BK. The small cylinder camera is enclosed in a console which is easily installed on the original brake light of the vehicle.

WAECO PerfectView RVS 565

Reversing video system with digital 5" LCD monitor and colour cylinder camera in a brake light console

Suitable for



Scope of delivery

5" monitor, colour cylinder camera incl. brake light console, 20 m connection cable from the monitor to the camera, monitor cable set, installation fittings for all components



M 55L

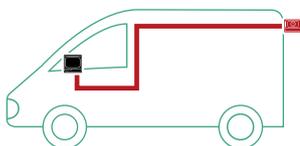


CAM 29BK

Monitor



Installation



Monitor M 55L

- Digital LCD panel with LED background illumination
- Optimum picture quality even at low temperatures
- Normal or mirrored picture function
- Three camera inputs, including 1 with signal recognition
- Image settings can be saved for three camera inputs
- Connection of e.g. side cameras via the indicator
- Automatic recognition of a trailer camera
- Elegant monitor base with concealed cable routing

• Technical data M 55L p. 10

Camera CAM 29BK

- Colour cylinder camera (PAL)
- For installation on the original brake light of Fiat Ducato, Citroën Jumper, Peugeot Boxer (from year 2006)
- Factory pre-mirrored
- High light sensitivity
- Electronic brightness adjustment
- Protection class: IP 68
- Wide-angle lens with large picture angle (150° diagonal)

• Technical data p. 10, 28

Ref. No. 9101900036

Monitors and cameras

Do you want to upgrade a reversing video system with a camera for the front, side or trailer? Go ahead, the PerfectView range gives you plenty of options.

The vehicle is equipped with a navigation system? Then you can easily connect a reversing camera to the navigation monitor!

Monitor



Monitor



Monitors of the PerfectView L series

Inputs for up to 3 cameras (1 with signal recognition). Image settings can be saved.

Connection of side cameras via the indicator. Automatic recognition of a trailer camera.



Monitors of the PerfectView LX series

Inputs for up to 4 cameras (1 with signal recognition). Image settings can be saved.

Connection of side cameras via the indicator. Automatic recognition of a trailer camera.

Up to 4
cameras
on a single
monitor



	Model M 55L	Model M 55LX	Model M 75L	Model M 75LX
Camera inputs	2 + 1 with signal recognition	3 + 1 with signal recognition	2 + 1 with signal recognition	3 + 1 with signal recognition
Weight		350 g		400 g
Dimensions (WxHxD incl. mount)		146 x 87 x 26 mm		190 x 110 x 26 mm
Brightness		350 cd/m ²		400 cd/m ²
Distance scale	-	•	-	•
Operating voltage			11 to 30 volts DC	
Resolution			384,000 pixels	
Power consumption			8 watts	
PAL/NTSC auto			•	
Operating temperature			-20°C to +70°C	
Vibration resistance			6 g	
Dimmer			automatic via LDR	
Mirrored picture function			can be set	
Test marks			E-certified, ISO 16750	
Ref. No.	9102100056	9102100059	9102100057	9102100058

WAECO PerfectView **CAM 50C/NAV**

Compact colour camera with extra low design



WAECO PerfectView **CAM 80CM/NAV**

Smallest colour shutter camera with a large picture angle



Camera CAM 50C

Camera CAM 50NAV

- Colour CCD camera (PAL) with LED
- Super-compact, with extra-low-profile housing and concealed cable routing
- LDR-controlled infrared LEDs for improved night vision
- CAM 50NAV is suitable for connection to navigation systems with RCA input using the RCA plug connector



Camera CAM 80CM

Camera CAM 80NAV

- Robust camera with motor-operated cover
- Active infrared light for optimal night vision
- Wide-angle lens with large picture angle (145° diagonal)
- CAM 80NAV is suitable for connection to navigation systems using PerfectView AMP 100



Ref. No. **CAM 50C** 9102000019

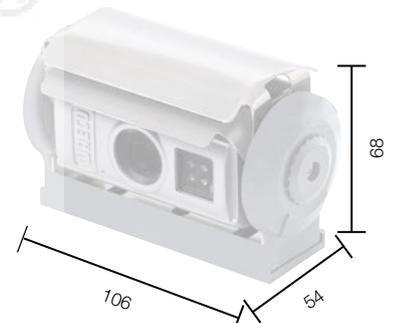
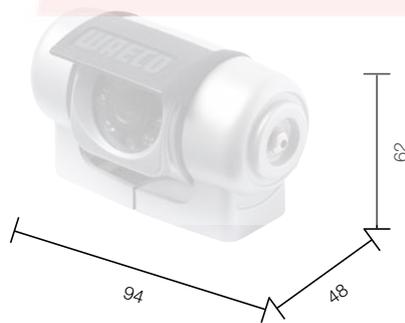
CAM 50NAV 9102000022

3.19

Ref. No. **CAM 80CM** 9102000066

CAM 80NAV 9102000023

3.19



Dimensions	94 x 62 x 48 mm (incl. mount)
Operating voltage	11 to 16 volts DC
Power consumption	1.8 watts with heater
Image sensor	1/4" CCD
Resolution	270,000 pixels
Picture angle	120° diagonal, h: ca. 90° v: approx. 70°
Light sensitivity	< 0.5 lux, 0 with LED
Video standard	PAL
Operating temperature	-20°C to +65°C
Colour	silver
Vibration resistance	6 g
Weight	200 g
Brightness adjustment	electronic
Mirrored picture function	can be set
Protection class	IP 69K
Test marks	E-certified

Dimensions	106 x 68 x 54 mm (incl. mount)
Operating voltage	11 to 16 volts DC
Power consumption	1.8 watts with heater
Image sensor	1/3" CCD
Resolution	290,000 pixels
Picture angle	145° diagonal, h: approx. 100°, v: approx. 72°
Light sensitivity	< 0.5 lux, 0 with LED
Video standard	PAL
Operating temperature	-20°C to +65°C
Colour	silver
Vibration resistance	6 g
Weight	350 g
Brightness adjustment	electronic
Mirrored picture function	can be set
Protection class	IP 68
Test marks	E-certified, ISO 16750

WAECO PerfectView CAM 29/BK/NAV

Brake light console camera



WAECO PerfectView CAM 29BKS

Camera in roof base-mounted housing



Camera CAM 29, CAM 29BK, CAM 29BK NAV

CAM 29: Single camera

CAM 29BK: Camera incl. brake light console

CAM 29BK NAV: Camera incl. brake light console & navigation adapter

- Colour cylinder camera (PAL), 1/4" CMOS
- Wide-angle lens with large picture angle (150° diagonal)
- For Fiat Ducato, Citroën Jumper, Peugeot Boxer (from year 2006)
- Fitted in the original brake light
- Waterproof according to IP 68
- Housing can be painted



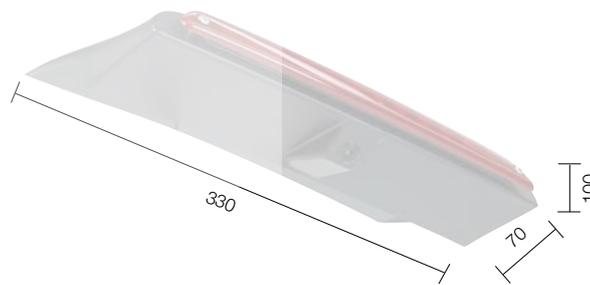
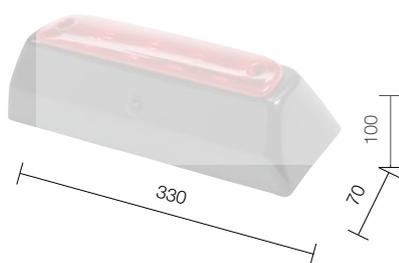
Ref. No. CAM 29 910200086 CAM 29BK 9102000101 CAM 29BK NAV 9102000094 **3.19**

Camera CAM 29BKS

- Colour cylinder camera (PAL), 1/4" CMOS
- Fits VW Crafter and Mercedes-Benz Sprinter W906
- Wide-angle lens with large picture angle (150° diagonal)
- Waterproof according to IP 68



Ref. No. CAM 29BKS 9102000100 **3.19**



Dimensions	330 x 100 x 70
Operating voltage	11 to 16 volts DC
Power consumption	approx. 1 watt
Image sensor	1/4" CMOS
Resolution	307,000 pixels
Picture angle	150° diagonal, h: approx. 102°, v: approx. 73°
Light sensitivity	< 0.5 lux; 0 lux with LED
Video standard	PAL
Operating temperature	-20°C to +70°C
Colour	black
Vibration resistance	8 g
Weight	400 g
Brightness adjustment	electronic
Mirrored picture function	factory-preset
Protection class	IP 68
Test marks	E-certified

Dimensions	370 x 290 x 50 mm (incl. console)
Operating voltage	11 to 16 volts DC
Power consumption	approx. 1 watt
Image sensor	1/4" CMOS
Resolution	307,000 pixels
Picture angle	150° diagonal, h: approx. 102° v: approx. 73°
Light sensitivity	< 0.5 lux; 0 lux with LED
Video standard	PAL
Operating temperature	-20°C to +70°C
Colour	black
Vibration resistance	8 g
Weight	400 g
Brightness adjustment	electronic
Mirrored picture function	factory-preset
Protection class	IP 68
Test marks	E-certified

WAECO PerfectView **CAM 604/NAV**

Compact 2-step zoom colour camera



WAECO PerfectView **CAM 44/NAV**

Smallest colour twin camera with shutter



Camera CAM 604

- Extra-large diagonal picture angles: 153° in close range, 83° in long range
- Replaces the inside rear-view mirror if required
- Separate IR LED for improved night vision
- Replaceable stone chip protection screen
- IP 69K

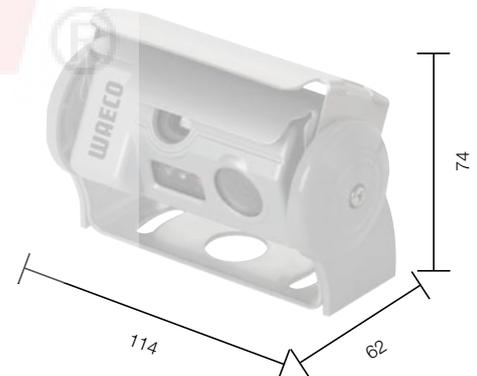
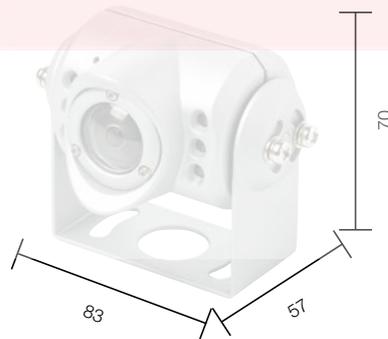
Camera CAM 44

- Large picture angle in close range (140° diagonal)
- Telefunction in long range (50° diagonal)
- Replaces the inside rear-view mirror if required
- Automatic, motor-operated camera cover
- Distance marks in reversing mode



Ref. No. **CAM 604** 9102000071 **CAM 604NAV** 9102000057 **3.19**

Ref. No. **CAM 44** 9102000061 **CAM 44NAV** 9102000062 **3.19**



Dimensions	83 x 70 x 57 mm
Operating voltage	10 to 16 volts DC
Power consumption	max. 6 watts
Image sensor	1/4" CMOS
Resolution	Approx. 400,000 pixels
Picture angle	Close range: 153° diagonal, h: approx. 140°, v: approx. 94° Long range: 83° diagonal, h: approx. 63°, v: approx. 52°
Light sensitivity	< 1 lux; 0 with LED
Video standard	PAL
Operating temperature	-30°C to 70°C
Colour	silver
Vibration resistance	10 g
Weight	approx. 300 g
Brightness adjustment	electronic
Mirrored picture function	factory-preset
Protection class	IP 69K
Test marks	E-certified, ISO 16750

Dimensions	114 x 74 x 62 mm
Operating voltage	11 to 16 volts DC
Power consumption	approx. 1.2 watts
Image sensor	1/3" / 1/4" CMOS
Resolution	290,000 pixels
Picture angle	Close range: 140° diagonal, h: approx. 100°, v: approx. 72° Long range: 50° diagonal, h: approx. 35°, v: approx. 28°
Light sensitivity	< 1 lux; 0 with LED
Video standard	PAL
Operating temperature	-30°C to +70°C
Colour	silver
Vibration resistance	6 g
Weight	360 g
Brightness adjustment	electronic
Mirrored picture function	factory-preset
Protection class	IP 68
Test marks	E-certified

WAECO PerfectView **CAM 30C/40**

Ball cameras with LED and very flexible mounts for accurate alignment



WAECO PerfectView **CAM 16**

Universal colour cylinder camera



Camera CAM 30C

Camera CAM 40

- Normal or mirrored picture function
- Sturdy, waterproof aluminium housing
- Electronic brightness adjustment
- LDR-controlled IR LEDs
- Wide-angle lens with large picture angle
- **CAM 30C** with microphone

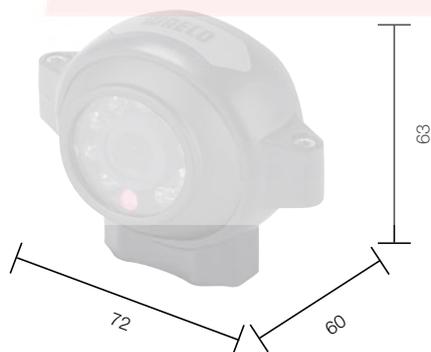
Camera CAM 16

- Ideal for use as side camera (e.g. for discreet mounting in bumpers, bus mirrors, etc.)
- Can be fitted with or without mounting bracket
- High light sensitivity
- Wide-angle lens with large picture angle



CAM 30C: Ref. No. 9102000045 **CAM 40:** Ref. No. 9102000047 **3.19**

CAM 16 Ref. No. 9102000077 **3.19**



Dimensions	72 x 60 x 63 mm (incl. mount)
Operating voltage	11 to 16 volts DC
Power consumption	approx. 1.8 Watts
Image sensor	1/4" CCD sensor
Resolution	270,000 pixels
Picture angle	120°/130° diagonal, h: ca. 90° v: ca. 70°
Light sensitivity	< 1 lux, 0 with LED
Video standard	PAL
Operating temperature	-20°C to +65°C
Colour	black
Vibration resistance	8 g
Weight	200 g
Brightness adjustment	electronic
Mirrored picture function	can be set
Protection class	IP 68
Test marks	E-approval

Dimensions	30 x 30 x 46 mm (incl. mount)
Operating voltage	11 to 16 volts DC
Power consumption	approx. 1.0 watts
Image sensor	1/4" CCD sensor
Resolution	270,000 pixels
Picture angle	150° diagonal, h: approx. 102°, v: approx. 73°
Light sensitivity	< 1 lux
Video standard	PAL
Operating temperature	-20°C to +65°C
Colour	silver
Vibration resistance	6 g
Weight	200 g
Brightness adjustment	electronic
Mirrored picture function	can be set
Protection class	equivalent to IP 68
Test marks	E-certificate

WAECO PerfectView **CAM 18**

Colour ball camera



Camera CAM 18

- Normal or mirrored picture function
- Sturdy ABS plastic housing
- Adjustable ball camera
- Microphone
- LDR-controlled IR LEDs
- Distance scale



WAECO PerfectView **CAM 18NAV**

Colour ball camera



Camera CAM 18NAV

- Normal or mirrored picture function
- Sturdy ABS plastic housing
- Adjustable ball camera
- Microphone
- LDR-controlled IR LEDs
- Distance scale
- With navigation adapter



CAM 18

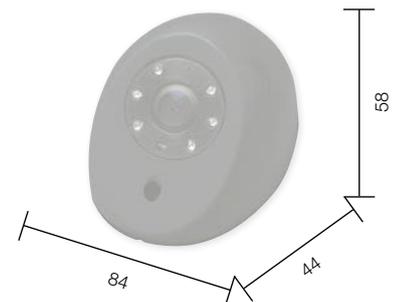
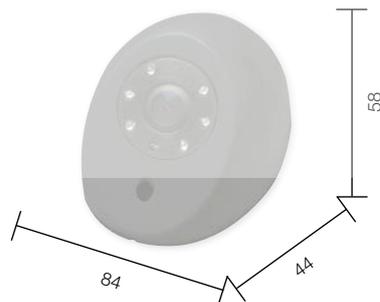
Ref. No. 9102000096

3.19

CAM 18NAV

Ref. No. 9102000103

3.19



Dimensions (Ø x D)	84 x 58 x 44 (incl. mount)
Operating voltage	12 volts
Power consumption	max. 1 watt
Image sensor	1/3" CMOS
Resolution	355,000
Picture angle	140° diagonal; h: ca. 90° v: ca. 70°
Light sensitivity	< 1 lux, 0 with LED
Video standard	PAL
Operating temperature	-20°C to +70°C
Colour	black
Vibration resistance	6 g
Weight	100 g
Brightness adjustment	electronic
Mirrored picture function	can be set
Protection class	IP 69K
Compliance	E-certificate

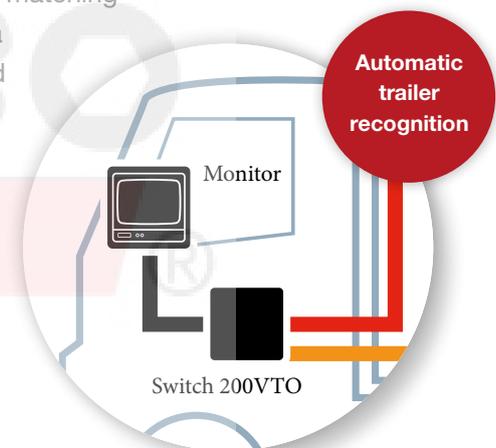
Dimensions (Ø x D)	84 x 58 x 44 (incl. mount)
Operating voltage	12 volts
Power consumption	max. 1 watt
Image sensor	1/3" CMOS
Resolution	355,000
Picture angle	140° diagonal; h: ca. 90° v: ca. 70°
Light sensitivity	< 1 lux, 0 mit LED
Video standard	PAL
Operating temperature	-20°C to +70°C
Colour	black
Vibration resistance	6 g
Weight	100 g
Brightness adjustment	electronic
Mirrored picture function	can be set
Protection class	IP 69K
Test marks	E-certificate

WAECO cameras on original multimedia display

PerfectView **Switch 200VTO**

With the PerfectView SWITCH 200VTO control box and the matching vehicle-specific adapter you can connect two cameras to a pre-installed multimedia display. The cameras are activated automatically or manually. You can manually switch between the two views via the external switch.

Which PerfectView cameras are compatible with which common multimedia systems and which adapter fits with which truck model can be found in the following table on the right side.



Automatic **trailer recognition**

Handy for towing vehicles: PerfectView SWITCH 200VTO automatically detects when a trailer is coupled and ensures that the image from the trailer camera appears on the monitor. The WAECO control box is also first choice for heavy-duty applications. Unlike other control boxes available in the market, PerfectView SWITCH 200VTO can also control shutter cameras.



WAECO PerfectView **Switch 200VTO**

- Two camera inputs/video and audio output (Cinch/RCA)
- Reverse gear trigger input/video trigger output
- External switch for manual switchover between the cameras
- Adjustable switch time between video signal and trigger output
- Trailer recognition

Switch 200VTO

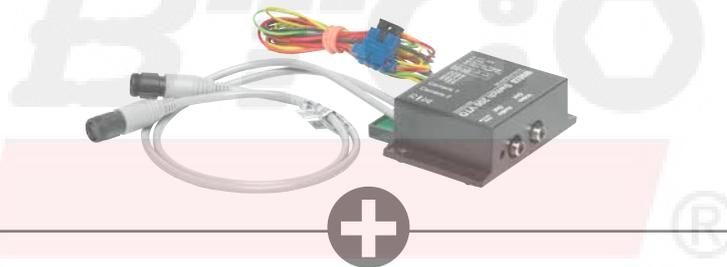
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3.19



WAECO PerfectView Switch 200VTO

Control box with 2 camera inputs for OEM monitors



	MB Actros / Antos		Scania			Volvo		MAN		Iveco
adapters	RVMB2	RVMB1	RVSC1	RVMAN1	RVSC2	RWO1	RWO2	RVMAN1	RV351LZ	RVMAN1
Purpose	J2D multimedia system with J9J video preparation	J2D multimedia system without J9J video preparation	Original SCANIA multimedia system	SCANIA premium radio	Original SCANIA monitor (Orlaco)	Older Volvo multimedia systems	Trailer camera, SID High with BUPMON	MAN Topline2 /MMT multimedia system	Topline2/ MMT with 351LZ video preparation	IVEconnect multimedia system
Ref. No.	9102200149	9102200153	9102200149	9102200144	9102200150	9102200151	9102200180	9102200144	9102200178	9102200144



• Technical data of the cameras on p. 10, 11 and 27 – 31

Camera	CAM 60ADR	CAM 80CM	CAM 50C	CAM 30C	CAM 40
Vehicle types	For trucks				
Camera type	Colour camera	Colour shutter camera	Colour camera	Colour ball camera	Colour ball camera
Ref. No.	9102000065	9102000066	9102000019	9102000045	9102000047

Safe and secure inside and out

Numerous studies have shown: fitting public transport vehicles with video cameras is an effective way to prevent assaults and vandalism.

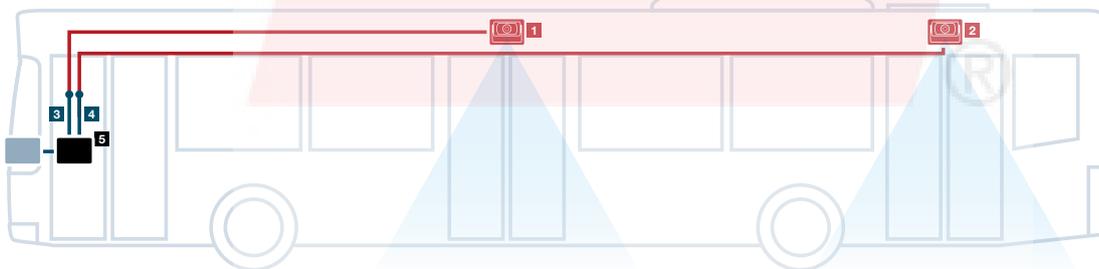
The technology deters potential offenders and helps the police in investigations.

With a resolution of 310,000 or 330,000 pixels and a light sensitivity of 0.01 lux, the PerfectView CAM 11 and CAM 12 cameras recommend themselves for use in vehicle interiors.



Navigation system with additional interior surveillance function:

In our example, a navigation system was retrofitted with two CAM 12 interior surveillance cameras using the SWITCH 300 control box. The retrofit works a treat with the matching adapter cables from WAECO.



Scope of delivery – navigation system		Ref. No.
Product		
Cameras	1 PerfectView CAM 12 (incl. 20 m cable)	9102000053
	2 PerfectView CAM 12 (incl. 20 m cable)	9102000053
Adapters	3 ADAPT3 monitor adapter, new plug / old socket (6-pin mini-DIN, grey cable)	9102200046
	4 ADAPT3 monitor adapter, new plug / old socket (6-pin mini-DIN, grey cable)	9102200046
Switchbox	5 PerfectView SWITCH 300	9102200105

specific adapters on request

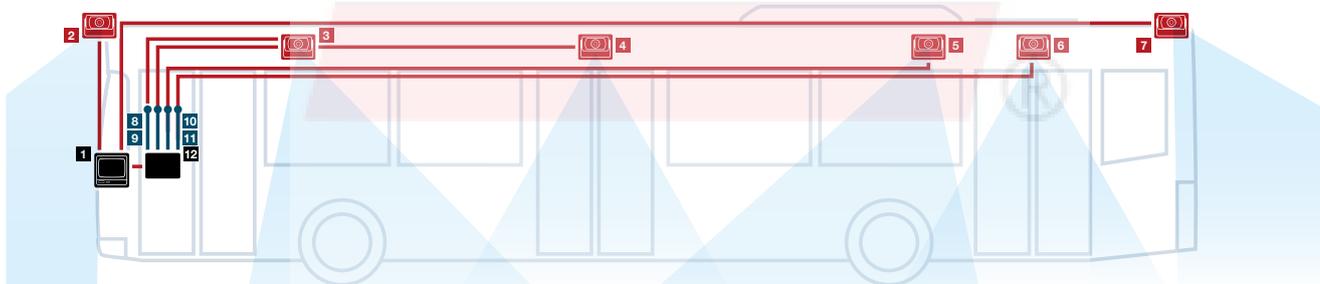




Complete solution for buses

Door surveillance and reversing safety

The large 7" LCD monitor shows the full security programme. Four interior cameras of the CAM 11 type monitor the entrance areas. Thanks to video splitter up to four camera pictures can be displayed simultaneously on the monitor. As soon as the reverse gear is engaged, the CAM 80CM provides images from the critical area behind the vehicle.



Scope of delivery – complete solution

Product		Ref. No.
Monitor	1 PerfectView M75LX	9102100058
Cameras	2 PerfectView CAM40 (incl. 5 m cable)	9102000047
	3 4 5 6 PerfectView CAM11 (incl. 20 m cable)	9102000052
	7 PerfectView CAM80CM (incl. 20 m cable)	9102000066
Adapters	8 ADAPT3 monitor adapter, new plug / old socket (6-pin mini-DIN, grey cable)	9102200046
	9 ADAPT3 monitor adapter, new plug / old socket (6-pin mini-DIN, grey cable)	9102200046
	10 ADAPT3 monitor adapter, new plug / old socket (6-pin mini-DIN, grey cable)	9102200046
	11 ADAPT3 monitor adapter, new plug / old socket (6-pin mini-DIN, grey cable)	9102200046
Video splitter	12 PerfectView VS400	9102200044
Video recorder	13 PerfectView REC 400 (see page 37)	9102200138



WAECO PerfectView CAM 11

Mini dome camera



Camera CAM 11

- Colour CCD camera (PAL)
- Normal or mirrored picture function
- Very high resolution and light sensitivity
- Installation height of only 31 mm
- Wide-angle lens with large picture angle (125° diagonal)
- Ideally suited for indoor surveillance

Scope of delivery

Mini dome camera, 20 m monitor-to-camera connection cable, installation fittings for all components

CAM 11

Ref. No. 9102000052

3.19

WAECO PerfectView CAM 12

LED dome camera



Camera CAM 12

- Colour CCD camera (PAL) with LED
- Normal or mirrored picture function
- Very high resolution and light sensitivity
- LDR-controlled IR LEDs
- Wide-angle lens with large picture angle (125° diagonal)
- Can be used for indoor surveillance or as a reversing camera

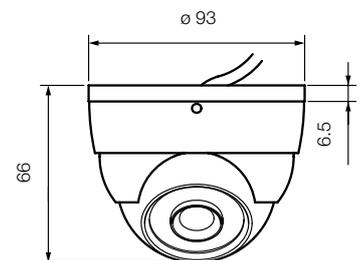
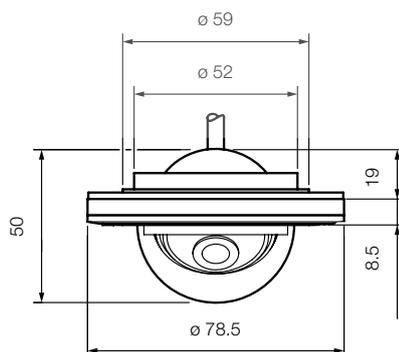
Scope of delivery

LED dome camera, 20 m monitor-to-camera connection cable, installation fittings for all components

CAM 12

Ref. No. 9102000053

3.19



Dimensions (Ø x D)	78.5 x 50 mm (incl. installation depth)
Operating voltage	12 volts DC
Power consumption	approx. 1.2 watts
Image sensor	1/3" CCD sensor
Resolution	310,000 pixels
Picture angle	125° diagonal; h: ca. 95° v: ca. 70°
Light sensitivity	0.01 lux
Operating temperature	-20°C to +50°C
Vibration resistance	6 g
Weight	300 g
Brightness adjustment	electronic
Mirrored picture function	can be set

Dimensions (Ø x D)	93 x 66 mm
Operating voltage	12 volts DC
Power consumption	approx. 3.6 watts
Image sensor	1/3" CCD sensor
Resolution	330,000 pixels
Picture angle	125° diagonal; h: ca. 95° v: ca. 70°
Light sensitivity	0.01 lux or 0 lux with LED
Operating temperature	-20°C to +60°C
Vibration resistance	6 g
Weight	300 g
Brightness adjustment	electronic
Mirrored picture function	can be set



Accessories for interior surveillance cameras

Item designation	Ref. No.
Monitors	
M55L 5" LCD monitor	9102100056
M75L 7" LCD monitor	9102100057
M70IP 7" heavy-duty LCD monitor	9102100046
M55LX 5" LCD monitor	9102100059
M75LX 7" LCD monitor	9102100058
System and extension cables	
System and extension cable, 5 m	9102200028
System and extension cable, 10 m	9102200029
System and extension cable, 20 m	9102200030
Other accessories	
VS 400 Video splitter for WAECO cameras with PAL video standard	9102200044
SWITCH 300 Up to three independently controllable cameras on one monitor input	9102200105
REC 400 Video recorder	9102200138
Cable adapters	
ADAPT3 Adapter monitor, new plug / old socket (6-pin mini-DIN, grey cable)	9102200046
RV-ADAPT-NAV Adapter cable for navigation systems	9103555990

System and extension cables are required only if the cable provided with the camera (20 m) is not sufficient. The ADAPT3 adapter is required for each camera connected to the accessories listed here (monitor, video splitter, switch box, system and extension cable). For connection to a navigation system with RCA cinch input, an RV-ADAPT-NAV adapter is required for each camera.

Video recorder PerfectView REC 400

TIP!



This compact device offers multiple options for recording what is happening in critical situations "live" on site:

- **Recording of video signals from up to four cameras**
- **Documentation of the vehicle position by GPS**
- **Data storage on SD card**

More info on page 57

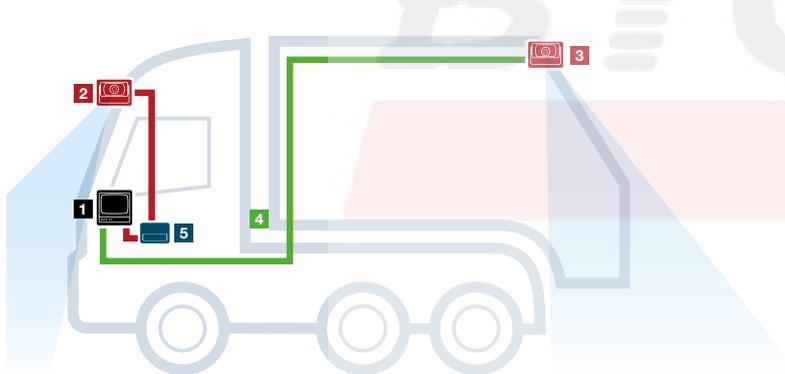
Certified technology meets future requirements

Far-sighted investment

Private and public investors have an eye on upcoming legislation when taking their purchasing decisions. They set great store by quality, maximum safety and compliance with all relevant standards. A top priority is to extend the field of vision around the vehicle. Certified WAECO products formed the bases for customised solutions. Here are a few examples.

Certified “safe-all-around” package for municipal vehicles

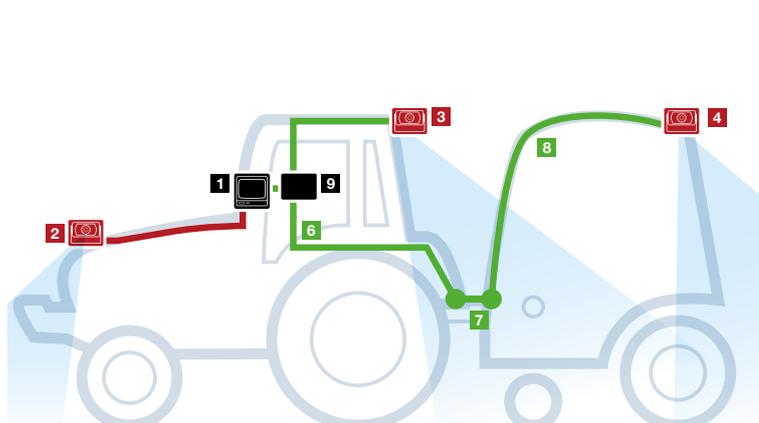
With this equipment, the driver of the municipal vehicle has all the safety-relevant areas in view and under control. The CAM 60ADR camera is ADR-approved and complies with protection class IP 69K.



Order scope – municipal vehicle	
Product	Ref. No.
Monitor	
1 PerfectView M 75LX	9101900058
Cameras	
2 PerfectView CAM 40 (incl. 5 m cable)	9102000047
3 PerfectView CAM 60ADR (without system cable)	9102000065
Cables	
4 System and extension cable, 10 m	9102200029
Video recorder	
5 PerfectView REC 400	9102200138

Robust video technology for agricultural machinery

Harnessed performance: high-quality 5" LCD monitor + ball camera for monitoring the front working area + one robust rear-view camera each (protection class IP 69K) at the rear of the towing vehicle and the trailer. Thanks to the video splitter, images from both reversing cameras can be displayed simultaneously while reversing.



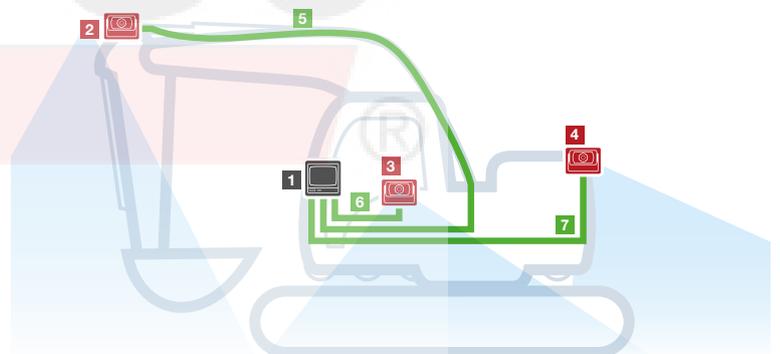
Order scope – tractor/trailer	
Product	Ref. No.
Monitor	
1 PerfectView M 55LX	9102100059
Cameras	
2 PerfectView CAM 40 (incl. 5 m cable)	9102000047
3 4 PerfectView incl. CAM 60ADR	9102000065
Cables	
5 System and extension cable, 5 m	9102200028
6 System and extension cable, 10 m	9102200029
7 CAB38 quick coupler for trailers	9102200101
8 System and extension cable, 20 m	9102200030
Video splitter	
9 PerfectView VS 400	910220044



All-round safety and legal compliance: Custom solution for **excavators**

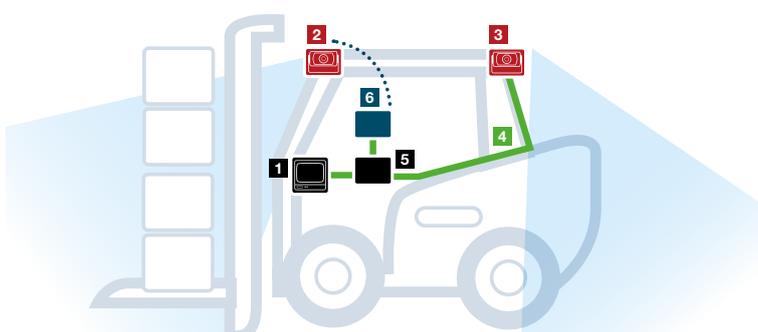
The minimum requirements for visibility in all directions from construction equipment are regulated by Machinery Directory 2006/42/EC. High-quality optical equipment was also important for the customer. **Our solution:** M 75LX and CAM 40 (a combination certified according to the 2003/97/EC mirror directive), plus another two cameras of type CAM 40 + CAM604.

Order scope – excavator	
Product	Ref. No.
Monitor	
1 PerfectView M 75LX	9102100058
Cameras	
2 3 PerfectView CAM40	9102000047
4 PerfectView CAM604	9102000071
Cables	
5 Heavy-duty system and extension cable, 20 m	9102200071
6 Heavy-duty system and extension cable, 5 m	9102200069
7 Heavy-duty system and extension cable, 10 m	9102200070



Effective accident prevention in **forklift traffic zones**

The centrepiece of this safety solution is the M 70IP monitor, which meets the vibration and impact resistance requirements defined in ISO 16750-3. Three cameras monitor the front, rear and loading area. The camera on the lift fork uses a digital radio link to transmit images wirelessly to the monitor. Thanks to the video splitter connected in-between, the monitor is able to show the images from all cameras simultaneously.



Order scope – forklift	
Product	Ref. No.
Monitor	
1 PerfectView M70IP	9102100046
Cameras	
2 3 PerfectView CAM40	9102000047
Cables	
4 System and extension cable, 10 m	9102200029
Video splitter	
5 PerfectView VS400	9102200044
Radio link	
6 PerfectView VT 100DIG	9102200116

Heavy-duty monitors

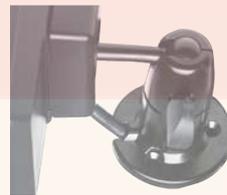
The new LX series with

Four camera inputs, OSD manoeuvring aid, attachable sun shield: the new heavy-duty monitors in the PerfectView LX series are designed inside out for professional use. Digital LCD technology with super-bright, energy-saving LED backlighting, combined with advanced anti-reflex technology, make for excellent image quality.



Technology

- Digital LCD monitor with LED backlighting for a flicker-free image display
- Bright, high-contrast display
- Excellent readability in all light conditions (anti-reflex technology)



Optimised connections

- Prepared for concealed routing of the monitor cable under the monitor base
- Precisely adjustable ball mount for optimal positioning
- Lockable plug-in connectors – IP 67 compliant

NEW! WAECO PerfectView M 55LX



Monitor M 55LX

- Digital LCD panel with LED background illumination
- Optimum picture quality even at low temperatures
- OSD distance marks for convenient manoeuvring
- Normal or mirrored picture function
- Four camera inputs, including 1 with signal recognition
- Image settings can be saved
- Connection of e.g. side cameras via the indicator
- Automatic recognition of a trailer camera
- Attachable sun shield
- Elegant monitor base with concealed cable routing

• Technical data of the cameras p. 27 ff.



four camera inputs

Design and look

- Super-slim construction
- Design perfectly matches the vehicle interior
- Available with 5" or 7" LCD display



Operation

- Intuitive menu guidance
- Illuminated keys
- Day/night switching
- Adjustable distance marks



NEW! WAECO PerfectView **M 75LX**



Monitor M 75LX

- Digital LCD panel with LED background illumination
- Optimum picture quality even at low temperatures
- OSD distance marks for convenient manoeuvring
- Normal or mirrored picture function
- Four camera inputs, including 1 with signal recognition
- Image settings can be saved
- Connection of e.g. side cameras via the indicator
- Automatic recognition of a trailer camera
- Attachable sun shield
- Elegant monitor base with concealed cable routing

• Technical data of the cameras p. 27 ff.

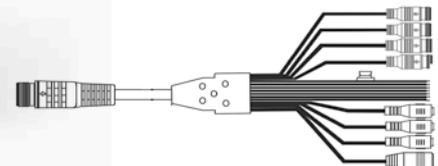
M 75LX: Ref. No. 9102100058

3.19

Heavy-duty monitor with **quad splitter**

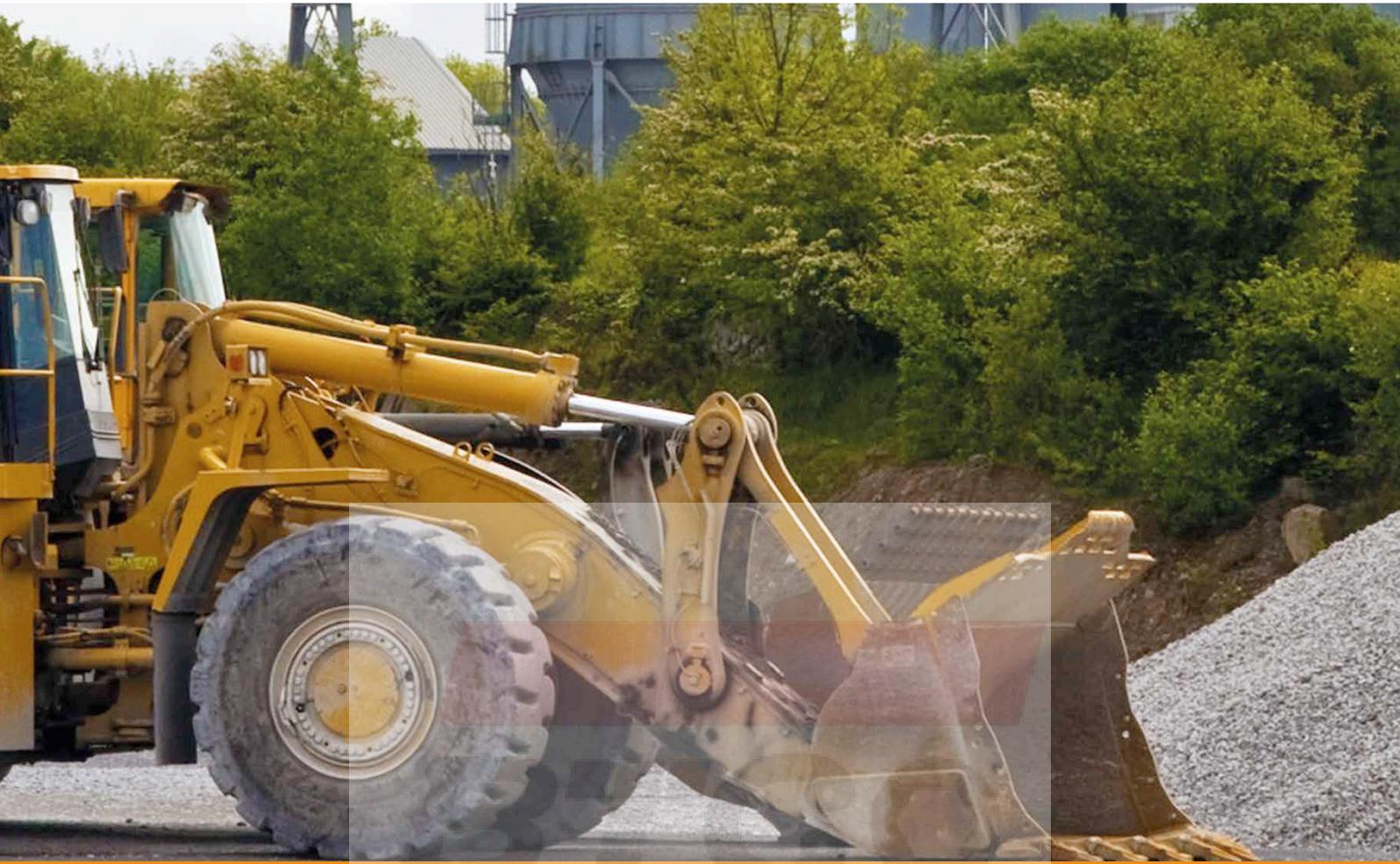
This **9" heavy-duty monitor** allows you to connect **up to four cameras**. The integrated **quad splitter** brings all four camera images simultaneously on the screen. Using the touchscreen control you can easily change back and forth between the different views. Via the **A/V output** you can send video sequences to a recorder.

NEW



The **benefits**

- Large 9" LCD monitor, especially suitable for split screen application
- Touchscreen for fast operation in split mode
- Various split-screen modes can be pre-installed
- Many functions (including split functions) can be activated by external control signals



WAECO PerfectView **RVS monitor M 9LQ**®

Monitor M 9LQ

- Large 9" monitor with touchscreen
- For 12-volt and 24-volt operating voltage
- Mirrored picture function can be set for each camera
- LED background illumination
- 4 camera inputs
- Quad splitter for simultaneous display of 4 camera images
- Operation via sensor keys (monitor) or touchscreen (quad splitter)
- Ideal for special vehicles, agricultural machinery, etc.



Dimensions (WxHxD)	234 x 158 x 40 mm
Operating voltage	11 to 32 volts DC
Resolution (pixels)	385,000
Operating temperature	-20°C to 70°C
Video format	PAL/NTSC auto
Vibration resistance	6 g
Weight	800 g
Brightness	350 cd/m ²
Picture angle	Top: 50°, bottom / right / left: 70°
Camera inputs	4
Test marks	E-certificate

M 9LQ: Ref. No. 9102100055

3.19

Splash-proof heavy-duty monitor

This robust monitor will easily resist a firehose jet unscathed.

It is **splash-protected according to IP 69K** and was specially designed for use in dusty and damp environments. **Up to three cameras** can be connected. When the reversing camera comes on, the **manoeuvring aid** appears on the screen.

WAECO PerfectView **RVS Monitor M 70IP**



Monitor M 70IP

- With digital LCD panel
- For 12-volt and 24-volt operating voltage
- Splash-proof according to IP 69K
- 3 camera inputs
- Normal or mirrored picture function
- OSD distance marks for convenient manoeuvring, multilingual
- LED background illumination
- Operation with sensor keys or by remote control
- Specially designed for agriculture, earth work, fire services, etc.
- EMC according to ECE R 10

WAECO PerfectView **CAM 60ADR**

ADR-compliant heavy-duty colour camera for use under extreme conditions



Colour camera for use under extreme conditions

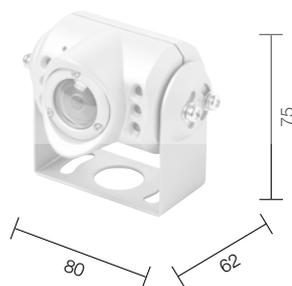
- With replaceable stone chip protection screen
- anodised and powder-coated aluminium housing with stainless steel protection cap
- Microphone
- Double lens cover
- Temperature-controlled permanent heater with 3 or 4 watts output
- Waterproof screw connectors
- Electronic brightness adjustment
- Wide-angle lens with large picture angle (120° diagonal)
- LDR-controlled IR LEDs
- **Approved to ISO 6722-1 5.11, ISO 14572 5.21, ISO 16750-3 4.1.2.4, ISO 16750-3 4.2.2, DIN 40050-9**



CAM 60ADR

Ref. No. 9102000065

3.19



Dimensions	80 x 75 x 62 mm (incl. mount)
Operating voltage	11 to 16 volts DC
Power consumption	Approx. 4.8 watts (with heater)
Image sensor	1/3" CCD
Resolution	290,000 pixels
Picture angle	120° diagonal, h: approx. 108°, v: approx. 92°
Light sensitivity	< 1 lux
Video standard	PAL
Operating temperature	-30°C to +65°C
Vibration resistance	10 g
Weight	300 g
Brightness adjustment	electronic
Mirrored picture function	can be set
Protection class	IP 69K
Test marks	E-certificate

WAECO PerfectView **Accessory**

Heavy-duty system and extension cable, ADR-compliant



Heavy-duty system and extension cables

- 6-pin screw connector, water-proof
- Extra-robust/reinforced design
- ADR-compliant

Extension cable, 5 m

Ref. No. 910220069

Extension cable, 10 m

Ref. No. 910220070

Extension cable, 20 m

Ref. No. 910220071

3.19

System and extension cables, light-duty design



System and extension cables

- 6-pin screw connector, water-proof
- Light-duty design

Extension cable, 5 m

Ref. No. 9102200028

Extension cable, 10 m

Ref. No. 9102200029

Extension cable, 20 m

Ref. No. 9102200030

3.19



Perfect close and long range vision:
WAECO PerfectView CAM 604

The new CAM 604 is **well equipped for extreme conditions**: non-corroding, resistant to vibration, dust- and water-proof according to IP 69K



The lens is shielded by a replaceable stone chip protection screen. The use of a shutter was deliberately omitted to prevent the risk of scratching by trapped dust particles.

When manoeuvring in reverse gear, the convenient 153° wide-angle lens of the 2-step zoom camera shows the area directly behind the vehicle – the images are crystal-clear, without distorted curved lens effects. During the drive the lens switches over to 83° picture angle mode, so you have the traffic situation a long way behind your vehicle fully in view.





WAECO PerfectView CAM 604



CAM 604	Ref. No. 9102000071	3.19
<ul style="list-style-type: none"> • Compact 2-step zoom colour camera for optimal close and long range vision • Extra-large diagonal picture angles: 153° in close range, 83° in long range • Replaces the inside rear-view mirror if required • Infra-red LEDs for improved night vision • Temperature-controlled heater • Integrated microphone • Replaceable stone chip protection screen (IP 69K) • Camera requires 2 monitor signal inputs 	<p>Dimensions (W x H x D) 83 x 70 x 57 mm</p> <p>Operating voltage 10 – 16 V DC</p> <p>Power consumption max. 6 W</p> <p>Image sensor 1/4" CMOS</p> <p>Resolution Approx. 400,000 pixels</p> <p>Picture angle Long range: 63° H, 52° V, 83° D Close range: 140° H, 94° V, 153° D</p> <p>Light sensitivity < 1 lux, 0 mit LED</p> <p>Video standard PAL</p> <p>Operating temperature -30°C to 70°C</p> <p>Vibration resistance 10 g</p> <p>Weight approx. 300 g</p> <p>Brightness adjustment electronic</p> <p>Mirrored picture function factory-preset</p> <p>Protection class IP 69K</p> <p>Test marks ISO 16750, EMC according to ECE R 10</p>	





Blaupunkt High-end navigation + WAECO reversing camera

Professional solution for highest demands

Premium quality and plenty of comfort features – this state-of-the-art configuration leaves nothing to be desired. The new Blaupunkt naviceiver Columbia 945 provides a vast array of media options. It includes maps for 44 European countries and can be combined with five different WAECO reversing cameras, which convert the naviceiver into a safety assistant.

The benefits

- Android operating system
- In one package with a WAECO reversing camera
- Wi-Fi (USB dongle included)
- Rear seat entertainment
- Excellent audio and reception quality
- DAB-prepared
- Parrot Bluetooth hands-free kit
- Capacitive Silk Vision display (anti-reflex)
- Four USB ports
- Special truck software



- 1 Design and look**
- High-quality finish and attractive design
 - Large capacitive 6.8" Silk Vision touch display



- 2 Internet**
- Internet access via Wi-Fi (USB dongle included) or smart phone (tethering must be supported)



- 5 Operation**
- New, future-proof Android operating system
 - Intuitive control, as you are accustomed to from your smart phone
 - Apps and downloads via App Store possible



- 6 Radio und sound**
- Optimal radio reception with the latest high-end Blaupunkt tuner generation
 - Parametric 5-band equaliser
 - Powerful amplifier with 4 x 50 watts max. output



Blaupunkt Columbia 945

- 2-DIN multimedia navigation with 6.8" Silk Vision TFT display
- FM, MW, LW tuner, 50 station presets
- Maps for 44 European countries
- 12 months of free map updates
- Internet via WiFi/WLAN
- Prepared for compatible DAB receivers
- Infrared remote control included
- **Exclusively available from Dometic WAECO**



• Technical data of the cameras on p. 10, 11 and 27 – 31

Camera	CAM 50NAV	CAM 80NAV	CAM 604NAV	CAM 44NAV	CAM 29BK NAV
Vehicle types	For trucks		For trucks		For panel vans
System incl. naviceiver	PerfectView NAV 950	PerfectView NAV 980	PerfectView NAV 964	PerfectView NAV 944	PerfectView NAV 960
Ref. No.	9103531035	9103531037	9103531028	9103531032	9103531033



3 Driving comfort

- Excellent readability in all light conditions (anti-reflex technology)
- High quality PARROT™ Bluetooth hands-free kit
- Additional display can be connected, optionally with identical display as that on the main screen



4 Additional features and functions

- Mirror MODE*: full mirroring and operation of the connected smart phone on/via the Columbia display

*requires additional HDMI cable



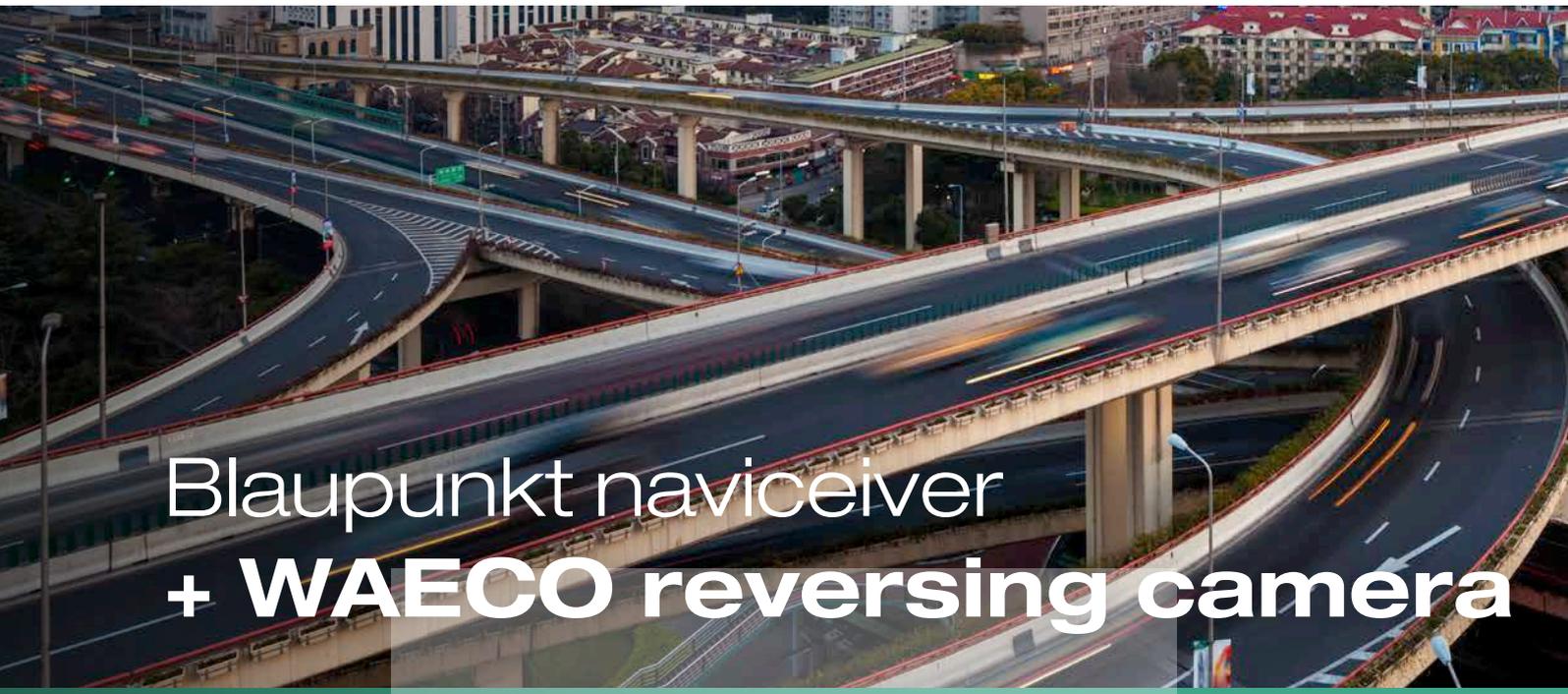
7 Navigation

- Latest navigation software
- Optionally available for cars or for larger vehicles, depending on the camera configuration
- 12 months of free map updates included



8 Media player

- Playback of your audio and video files in the common formats
- Possible sources: smart phone, USB flash drive or hard drives, micro SDHC card



Blaupunkt naviceiver + WAECO reversing camera

Powerful combo **at an entry-level price**

This new configuration, too, is an exclusive offer from WAECO and provides great performance at a fair price. The Blaupunkt naviceiver Los Angeles 530 is complemented by a WAECO reversing camera to fit the driver and the vehicle. The version with the Blaupunkt moniceiver of the same name provides even better sound quality. Navigation can be added with the matching navigation retrofit kit.

The **benefits**

- Excellent audio and reception quality
- In one package with a WAECO reversing camera
- Bluetooth 2.0 / smart phone compatible
- Excellent audio and reception quality
- Capacitive Silk Vision display (anti-reflex)
- Hands-free kit with access to telephone directory



1 Design and look

- High-quality finish and attractive design
- Large, capacitive 6.2" digital touch screen display

2 Operation

- Well proven, clearly structured operator guidance
- Infrared remote control included

3 Driving comfort

- Excellent Bluetooth hands-free kit



Excellent audio and reception quality

Blaupunkt Los Angeles 530

- 2-DIN multimedia naviceiver with 6.2" touch screen TFT display
- FM and MW tuner with 30 station presets
- Maps for 44 European countries
- 12 months of free map updates
- **Exclusively available from Dometic WAECO**



• Technical data of the cameras on p. 10, 11 and 27 – 31



Camera	CAM 18NAV	CAM 50NAV	CAM 80NAV	CAM 604NAV	CAM 44NAV	CAM 29BK NAV
Vehicle types		For trucks		For trucks		For panel vans
System (incl. naviceiver)	PerfectView NAV 818	PerfectView NAV 850	PerfectView NAV 880	PerfectView NAV 864	PerfectView NAV 844	PerfectView NAV 860
Ref. No.	9103531026	9103531008	9103531010	9103531015	9103531011	9103531029



- 4 Radio and sound**
- Radio reception at its best with the latest high-end Blaupunkt tuner generation
 - Parametric equaliser
 - Powerful amplifier with 4 x 45 watts max. output

- 5 Navigation**
- Optionally available for cars or for larger vehicles (truck software), depending on the camera configuration
 - **12 months of free map updates included**



Multimedia with different “play modes”: **WAECO moniceiver + WAECO reversing camera**

WAECO goodies at a good price

This inexpensive moniceiver offers well proven WAECO quality. It combines the functions of a car radio with those of a DVD / VCD / DivX® / CD / MP3 / WMA player.

When a reversing camera is added, it also makes manoeuvring safer.

During reversing, the vehicle surroundings are shown on the display.

The WAECO MC 402 moniceiver is the ideal entry-level model for onboard entertainment.

The multi-functional device can be combined with six different WAECO cameras, while it can also be used separately.

It fits into every double DIN slot. Tailor-made installation frames are available for Fiat Ducato and MB Sprinter.

The **benefits**

- Suitable for double DIN slot
- Hands-free kit with access to telephone directory
- Can be used separately or with reversing camera
- Bluetooth 2.0 / smart phone compatible



**WAECO
MONICEIVER**
also available
separately

WAECO PerfectView MC 402

- 2 DIN moniceiver with 6.2" monitor, touchscreen display and input for reversing camera
- VHF/MW RDS tuner with 30 station presets and access to traffic services
- Integrated DVD / VCD / DivX® / CD / MP3 / WMA player
- Bluetooth audio streaming
- Prepared for compatible daB receivers

Scope of delivery:

Moniceiver	Ref. No.
WAECO PerfectView MC 402	9102100024
Moniceiver, 20 m connection cable, installation fittings, adapter cable	

Accessories:

Installation frame for	Ref. No.	Installation frame for	Ref. No.
FIAT Ducato, 2007 model or later	9102200106	Ford Transit, 2006 model or later	9102200120
MB Sprinter, 2006 model or later	9102200109	Iveco Daily	9102200127

• Technical data of the cameras on p. 10, 11 and 27 – 31

System including camera:

Camera	CAM 18NAV	CAM 50NAV	CAM 80NAV	CAM 604NAV	CAM 44NAV	CAM 29BK NAV
Vehicle types	For trucks			For trucks		For panel vans
System incl. moniceiver	PerfectView MC 418	PerfectView MC 450	PerfectView MC 480	PerfectView MC 464	PerfectView MC 444	PerfectView MC 460
Ref. No.	9103531018	9101900069	9101900070	9103531017	9101900072	9103531021



Multimedia with navigation option **Blaupunkt moniceiver + WAECO camera**

One **moniceiver** – many options

With its excellent sound quality and reception features, the Blaupunkt® moniceiver ensures perfect entertainment on board. Listen to your favourite hits and the traffic news, make phone calls conveniently and safely via the Bluetooth hands-free kit – all this and more is possible. The connected WAECO rear video camera assists you while manoeuvring.

Truck or panel van – the system offers various configuration options to create your dream package. **Six different camera models** from the WAECO range are compatible with the Blaupunkt Los Angeles 530. Also available from WAECO: a matching **GPS kit for retrofitting the navigation function**.

The **benefits**

- Excellent audio and reception quality
- In one package with a WAECO reversing camera
- Bluetooth 2.0 / smart phone compatible
- 10-band equaliser
- Capacitive Silk Vision display (anti-reflex)
- Hands-free kit with access to telephone directory



**Excellent
audio and
reception
quality**

Blaupunkt Los Angeles 530

- 2 DIN multimedia moniceiver with 6.2" touch screen TFT display
- FM and MW tuner with 30 station presets
- Navigation can be retrofitted (GPS 20 navigation kit, Re. No. 9103534001)



• Technical data of the cameras on p. 10, 11 and 27 – 31

Camera	CAM 18NAV	CAM 50NAV	CAM 80NAV	CAM 604NAV	CAM 44NAV	CAM 29BK NAV
Vehicle types	For trucks			For trucks		For panel vans
System incl. moniceiver	PerfectView MC 818	PerfectView MC 850	PerfectView MC 880	PerfectView MC 864	PerfectView MC 844	PerfectView MC 860
Ref. No.	9103531022	9103531000	9103531002	9103531016	9103531003	9103531025

Four times in the picture

Video splitter

With this video splitter, you can put the images from up to four cameras on the screen as needed. Four display modes are possible. When the reversing camera is activated the monitor screen additionally shows distance marks. The housing and camera connectors are water-proof.



1) Main image with an additional image

2) Main image with two additional images

3) Screen split into two

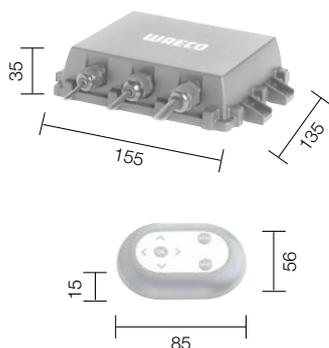
4) Screen split into four

WAECO PerfectView VS 400

Video splitter for up to 4 cameras



Scope of delivery: Video splitter with supply cable (1.0 m), operating manual



Dimensions (mm)

Video splitter VS400

- Displays the video images from up to 4 connected cameras on one monitor
- Image display manually adjustable: full screen, split mode, picture-in-picture, or quad mode
- Automatic operation and camera switch-on times can be set as required
- Cameras separately adjustable; automatic saving of the last setting
- Distance scale for camera 1
- Water-proof camera connectors and housing
- Not suitable for CRT systems

Dimensions (W x H x D)

155 x 35 x 135 mm

Operating voltage

12 to 32 volts DC

Camera inputs

4-channel AV input

Video standard

PAL or NTSC

Operating temperature

-30°C to 60°C

Display

Full Screen / Split / Picture-in-Picture / Quad

Weight

750 g

Document incidents

Video recorder

In some situations it may be useful to capture events “live” on site. With the PerfectView REC 400 video recorder you can record video signals from up to four cameras simultaneously, while the integrated GPS receiver records the position of the vehicle and the accelerometer documents the force profile.



The documentation is especially useful as evidence of the condition of the goods in the truck loading space, for example. Aber auch in Bussen oder Taxis, zur Sicherheit der Fahrgäste und Fahrer. Here the legal provisions in regard to video surveillance (data privacy) must be observed.

The evaluation and management of images is possible via the recorder or via a connected PC.

WAECO PerfectView REC 400

Digital video recorder for recording video and audio signals



Scope of delivery: Recorder, cable, microphone, infra-red receiver, GPS antenna, remote control, software



Dimensions (mm)

WAECO PerfectView REC 400

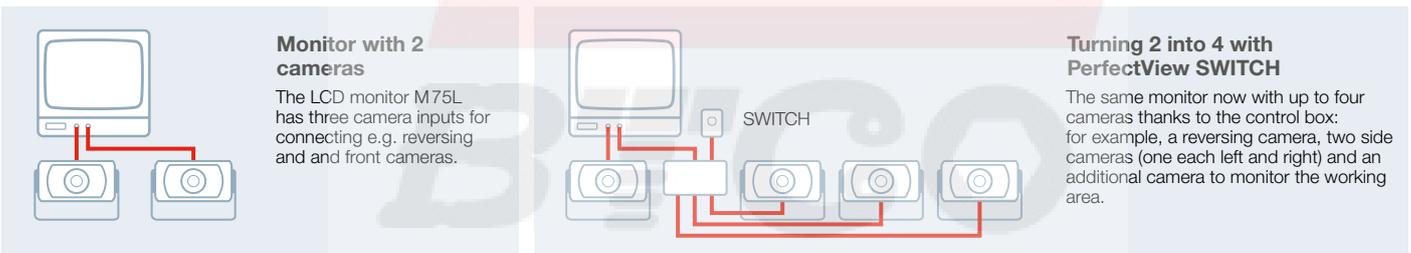
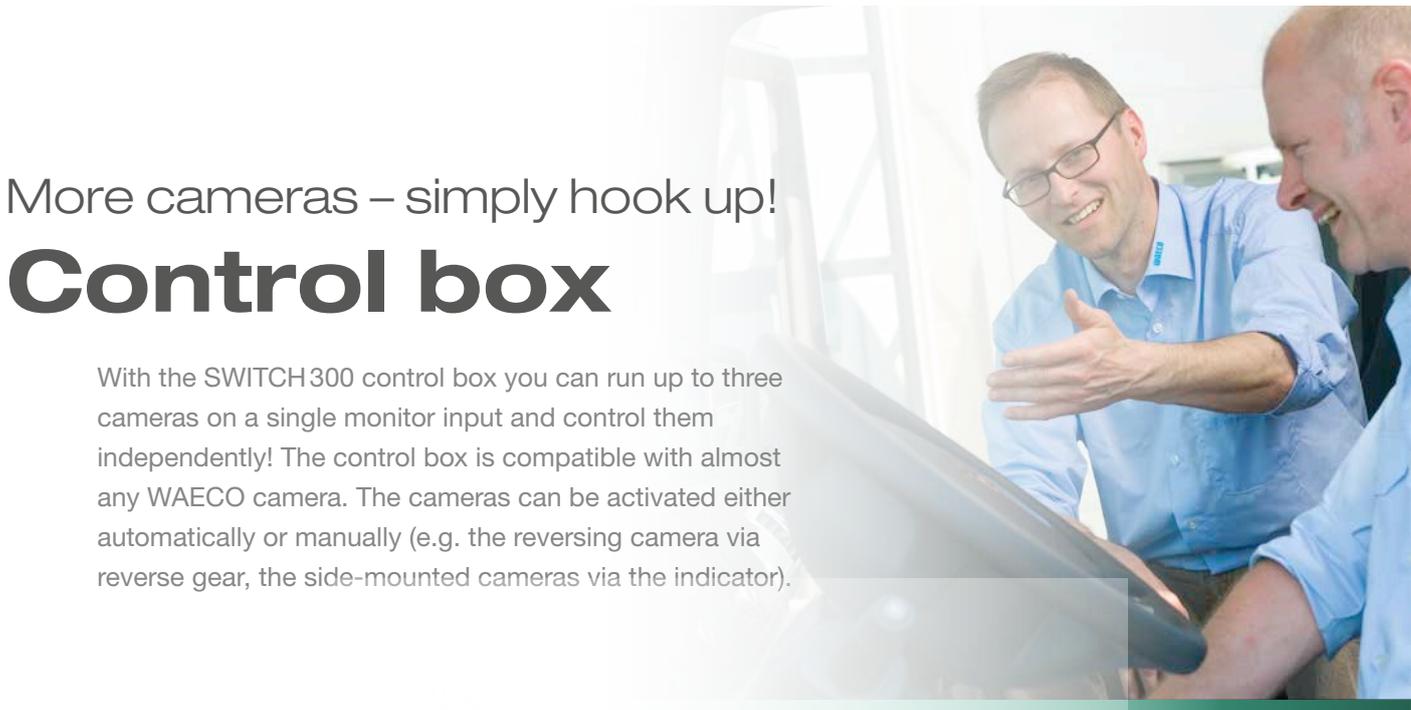
- Compact design (fanless)
- Compatible with PAL and NTSC
- 4 video inputs for simultaneous recording of signals from up to 4 cameras
- Storage on SD card (not included)
- Recording time: up to 70 hours (CIF, 15 frames/second, 64 GB SD card)
- Integrated GPS receiver for position tracking
- Built-in accelerometer for documenting the force profile
- Recording management via PC or recorder
- Split image function as with VS 400

Operating voltage	12 to 24 volts DC
Power draw	500 mA
Operating temperature	-20°C to + 65°C
Video codec	H.264
Resolution	D1 (up to 720 x 576 pixels)
Frame rate	Up to 30 frames/second
Weight	440 g

More cameras – simply hook up!

Control box

With the SWITCH300 control box you can run up to three cameras on a single monitor input and control them independently! The control box is compatible with almost any WAECO camera. The cameras can be activated either automatically or manually (e.g. the reversing camera via reverse gear, the side-mounted cameras via the indicator).



WAECO PerfectView Switch 300

Control box for additional reversing video applications
For operation of up to three independently controllable cameras on one camera input of the monitor

Scope of delivery: control box, on-board supply connection cable, switch for manual activation of the cameras, control box connection cable, fitting materials, installation and operating manual

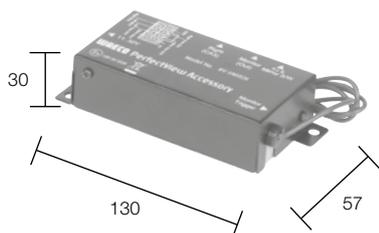


Features & functions

- Cameras can be activated either automatically or manually (e.g. reversing camera via reverse gear, side cameras via the indicators)
- Power input: 0.84 watts max. (without cameras)
- Suitable for 12-volt and 24-volt vehicle electrics

Cable adapters

- The two WAECO cable systems up to 2009 (black or grey) were replaced by a new, uniform cable system from 2010.
- Adapters for adapting installed cables when existing components are replaced by new ones – no need to re-lay cables



Dimensions (mm)

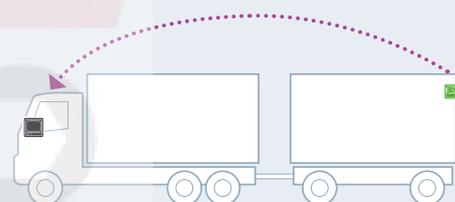
Product	Ref. No.
PerfectView SWITCH 300	9102200105
WAECO CRT cable up to 2009	
ADAPT1 camera adapter, new socket / old plug	9102200042
ADAPT6 monitor adapter, new plug / old socket	9102200057
WAECO LCD cable up to 2009	
ADAPT2 camera adapter, new socket / old plug	9102200043
ADAPT3 monitor adapter, new plug / old socket	9102200046

Wireless and trouble-free: Digital radio link

With the digital radio link WAECO PerfectView VT 100DIG, video and audio signals can be transmitted over distances up to 120 metres (line of sight) without fail.

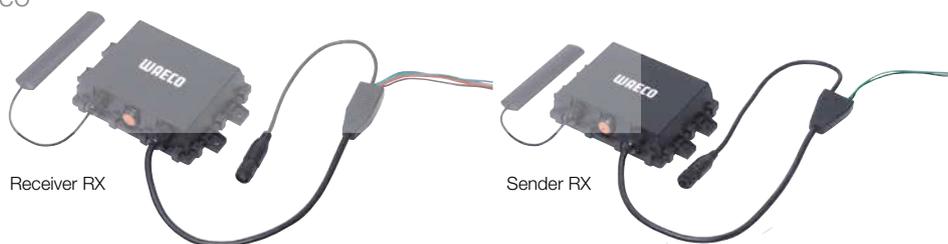


The use of coded signals and automatic channel selection enable extremely stable transmission. The benefits of radio-based signal transmission: there's no need to lay cables and no need for cost-intensive maintenance either. The housing of the digital radio link is waterproof according to protection class IP 65 and therefore suitable for installing outside the vehicle – ideal for retrofitting.



WAECO PerfectView VT 100DIG [®]

Digital radio link for transmitting video and audio signals



Transmitter



Receiver



Dimensions (mm)

WAECO PerfectView VT 100DIG

- Uninterrupted transmission
- Transmission distance of up to 120 m, line of sight
- Reception delay under 200 ms
- Frame rate up to 30/s
- Simultaneous operation of up to 6 radio links possible
- Water-proof IP 65

Dimensions (W x H x D)

- Operating voltage**
- Current consumption**
- Operating temperature**
- Transmission rate**
- Resolution**
- Frame rate**
- Switch-on time**
- Delay**
- Transmission distance**
- Video codec**
- Audio codec**
- Channel changing rate**
- Weight**

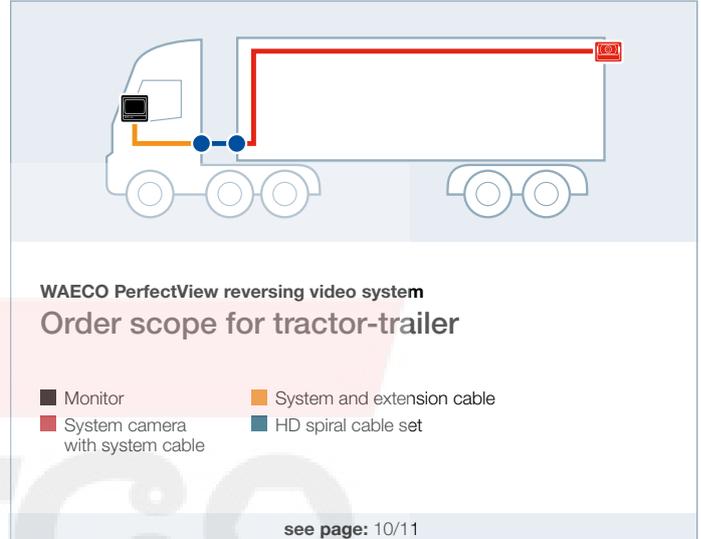
Transmitter 155 x 35 x 135 mm
Receiver 155 x 35 x 135 mm

12 to 36 volts DC
1 A
-20°C to 60°C
6 mbit/s
D1
Max. 30/s
3 s
< 200 ms
Up to 120 meters (line of sight)
MP4
MP3, 1 channel
1200/s
1.26 kg

Accessories for trailers and tractor-trailers

Heavy-duty spiral cable sets, system and extension cable

You want to extend a reversing video system to include a rear-view camera for the trailer? Or fit a tractor-trailer with a camera-monitor system? Here is all you need for installation: System and extension cables, plug connectors and heavy-duty spiral cable sets. Perfectly coordinated, plug-in components make installation easy and flexible.



WAECO PerfectView Accessories

Heavy-duty spiral cable set for trailers incl. sockets



SPK 150



SPK 160



SPK 170

Features & functions

- Trailer cable 4 m, heavy-duty design, ready-to-use with sockets (plug/jack)
- For towing vehicles with trailer/tractor-trailer
- Especially for commercial use
- SPK170 is a spiral cable with 7 wires and allows the two cameras CAM604 and CAM44 to be used e.g. on a trailer.

Heavy-duty spiral cable set SPK 150 for trailers incl. sockets, compatible with spiral cable RV-500SPK (up to 2009)

Ref. No. 9102200031

Socket with system plug

Ref. No. 9102200065

Socket with system jack

Ref. No. 9102200064

Heavy-duty spiral cable set SPK 160 for trailers incl. sockets, compatible with spiral cable RV-100SPK (up to 2009)

Ref. No. 9102200077

Socket with system plug

Ref. No. 9102200087

Socket with system jack

Ref. No. 9102200086

Heavy-duty spiral cable set SPK 170 for trailers incl. sockets

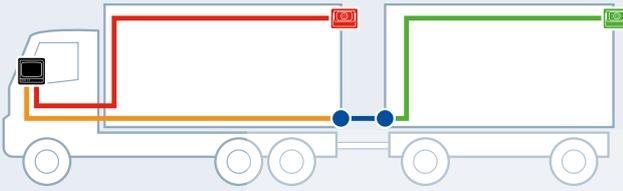
Ref. No. 9102200171

Socket with system plug

Ref. No. 9102200172

Socket with system jack

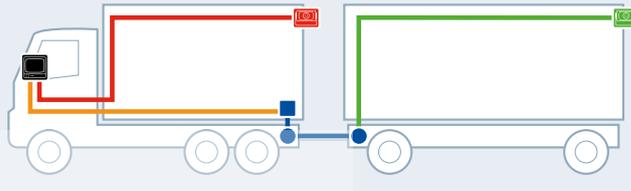
Ref. No. 9102200173



WAECO PerfectView reversing video system
Order scope for trucks with trailers

- Monitor
- System camera with system cable
- System and extension cable
- HD spiral cable set
- Additional camera with system cable (see p. 28 – 33)

see page: 10/11, except for CRT245, RVS594, RVS794



WAECO PerfectView reversing video system
Order scope for trailers with low coupling

- Monitor
- System camera with system cable
- System and extension cable
- Socket with system plug
- CAB 39 system and extension cable
- Additional camera with system cable (see p. 28 – 37)

see page: 10/11

Note: Adapters are only required when connecting the new monitors and cameras to older WAECO cables (built before 2010). For any questions, please contact our technical service team.

CAB 38 quick connector for trailer



Features & functions	
<ul style="list-style-type: none"> Trailer cable 2 x 30 cm, light-duty version, including ready-to-use surface-mounted sockets 	
CAB 38 quick connector for trailer	Ref. No. 9102200101

CAB 39 system and extension cable for trailers with low coupling



Features & functions	
<ul style="list-style-type: none"> Trailer cable 5 m for trailers with low coupling With ABS socket (12 V model) 	
CAB 39 system and extension cable for trailers with low coupling, 5 m	Ref. No. 9102200110
Socket with system plug, compatible with RV-100SPK spiral cable (up to 2009)	Ref. No. 9102200087

FAX ORDER FORM

Simple copy, complete and fax to us.

Sender / stamp

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2015



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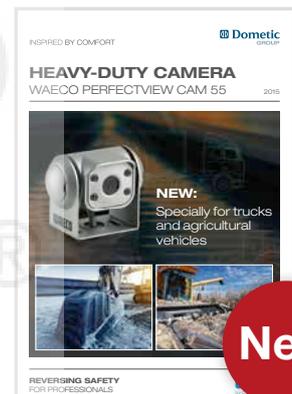
Safety and comfort accessories for cars, trucks and vans.



WAECO Frigo

Product range and prices

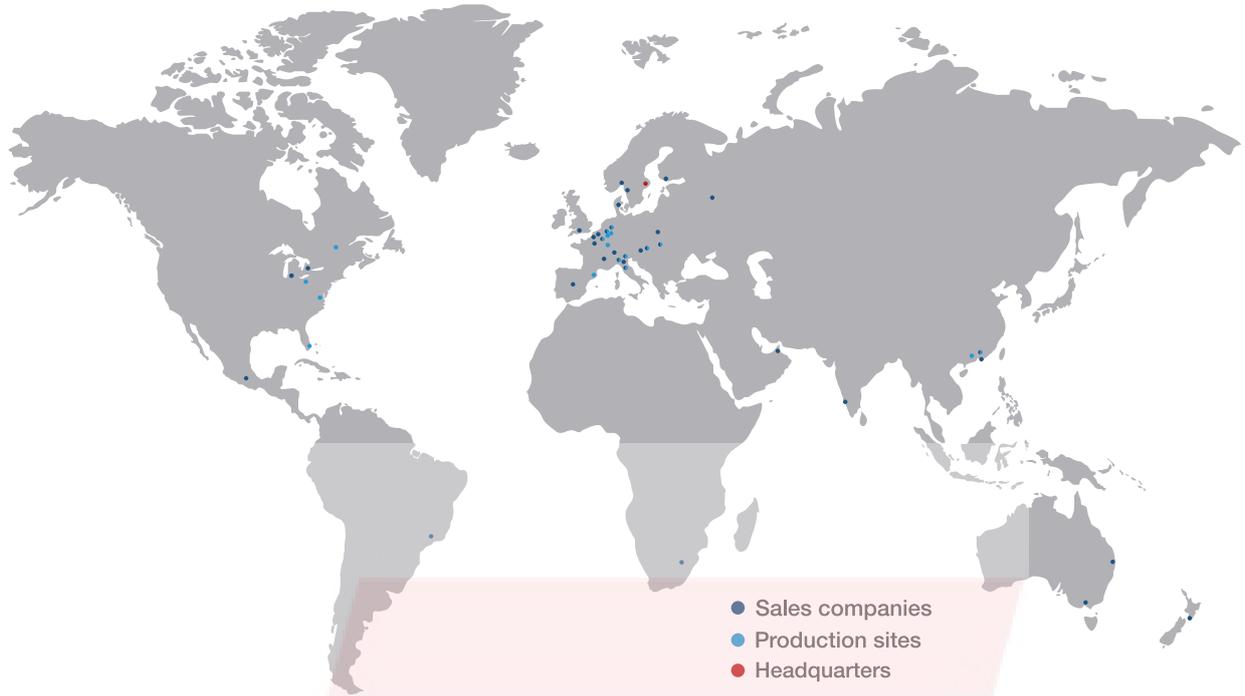
Cooling systems for refrigerated and deep-freeze vehicles



CAM 55 brochure

The new special camera for agricultural and heavy-duty applications

Always a good link: the Dometic WAECO website. That's where you will find the complete product range. You'll get a clear view of the products along with detailed information. Plus interesting news about our company and the latest special offers and of course you can order all our catalogues online.



Dometic GROUP is a customer-driven, world-leading provider of leisure products for the RV, automotive, truck and marine markets. We supply the industry and aftermarket with a complete range of air conditioners, refrigerators, awnings, cookers, sanitation systems, lighting, mobile power equipment, comfort and safety solutions, windows, doors and other equipment that make life more comfortable away from home.

Dometic GROUP supplies a wide range of workshop equipment for service and maintenance of built-in air conditioners.

Dometic GROUP also provides specially designed refrigerators for hotel rooms, offices, wine storage and transport and storage of medical products.

Our products are sold in almost 100 countries and are produced mainly in wholly-owned production facilities around the world.

