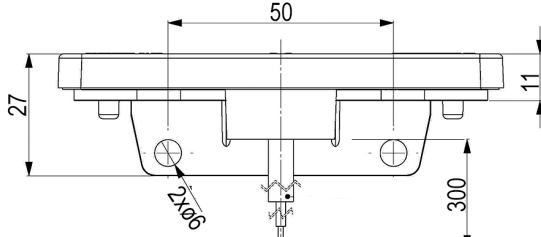

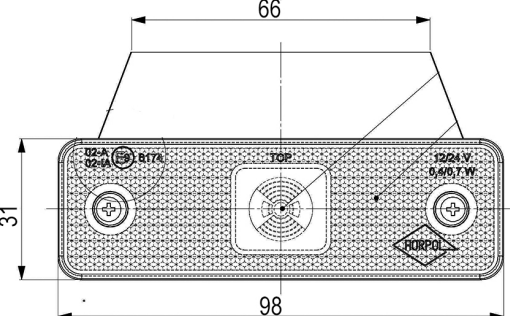

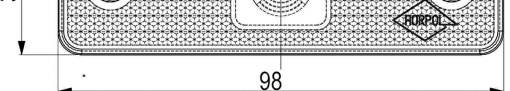

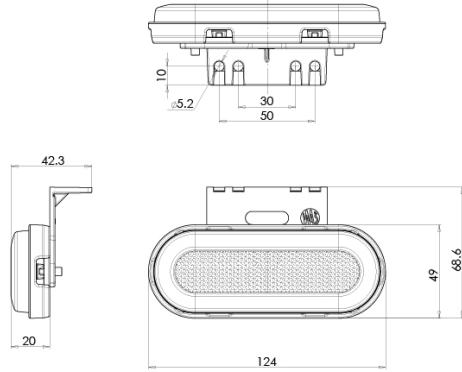

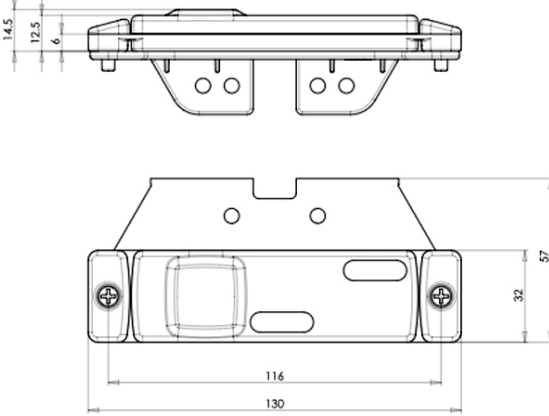









13 Lighting, Interconnections and Markings

MARKER LIGHTING

| TT-number / Name | Drawing | Photo |
|--|---|---|
| <p>1315502.100 LED marker light front, white with holder, 12/24 V</p> |  |  |
| <p>1315502.200 LED side marker light, orange with holder, 12/24 V</p> |  |  |
| <p>1315502.300 LED rear marker light, red with holder, 12/24 V</p> |  |  |
| <p>1321503.200 LED side marker light - NEON effect, position light with holder, 12/24 V</p> |  |  |
| <p>1321511.100 LED side marker light, orange with 12/24 V terminal</p> |  |  |

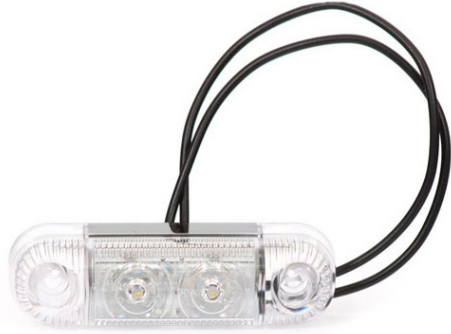


MARKER LIGHTING


| TT-number / Name | Photo |
|--|---|
| <p>1321510.100 LED marker light white-red left, 12/24 V</p> |  A black rectangular LED marker light with a white lens on the left side and a red lens on the right side. It has a mounting bracket on top and two wires extending from the bottom. |
| <p>1321510.200 LED marker light white-red right, 12/24 V</p> |  A black rectangular LED marker light with a clear lens on the left side and an orange lens on the right side. It has a mounting bracket on the bottom and two wires extending from the top. |
| <p>1321510.101 LED marker light white/orange/red left, 12/24 V</p> |  A black rectangular LED marker light with a clear lens on the left side and an orange lens on the right side. It has a mounting bracket on the bottom and two wires extending from the top. |
| <p>1321510.201 LED marker light white/orange/red right, 12/24 V</p> |  A black rectangular LED marker light with a clear lens on the left side and an orange lens on the right side. It has a mounting bracket on the bottom and two wires extending from the top. |




MARKER LIGHTING

| TT-number / Name | Photo |
|--|--|
| <p>1321505.100 LED marker light front, white, 12/24 V</p> |  |
| <p>1321505.300 LED marker light rear, red, 12/24 V</p> | |

LED Antenna

| TT-number / Name | Photo |
|---|---|
| <p>1315512.101 Rear left LED antenna - marker red/white</p> |  |
| <p>1315512.201 Rear right LED antenna - marker red/white</p> | |

LED Antenna - short



| TT-number / Name | Photo |
|--|--|
| <p>1315512.102 LED rear left antenna - short, marker - red/white/orange</p> |  |
| <p>1315512.202 LED rear left antenna - short, marker - red/white/orange</p> | |



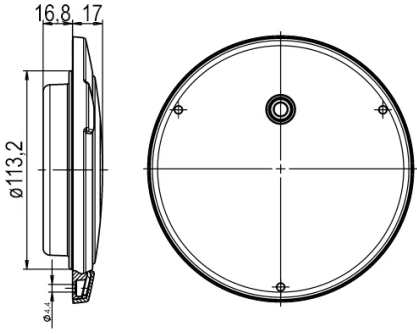



| TT-number / Name | Drawing | Photo |
|--|---------|-------|
| <p>1321560.000 LED brake light, 12/24 V</p> | | |
| <p>1321530.000 LED rear combination light with dynamic indicator, 12 - 24 V L/P, TYCO connector</p> | | |
| <p>1350025.000 Universal parking camera in brake light</p> | | |
| <p>1315520.100 Number plate LED lighting</p> | | |
| <p>1315539.000 Work lamp / reversing light 9 LED, 12 - 24 V</p> | | |

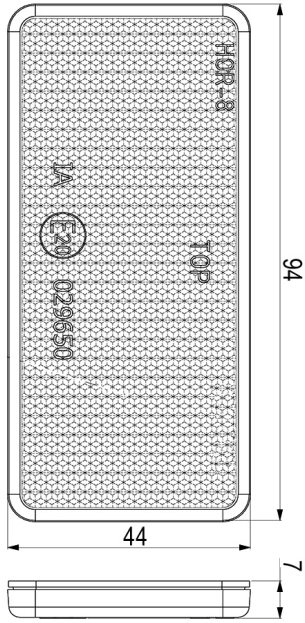
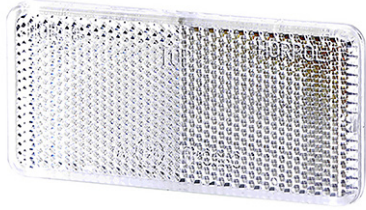

Working lamps

| TT-number / Name | Photo |
|--|---|
| <p>1315539.000 Work lamp / reversing light 9 LED, 12 - 24 V</p> |  |
| <p>1315539.100 Work lamp 9 LED with switch (magnet, spiral cable 7 m with car socket)</p> |  |

LED indoor



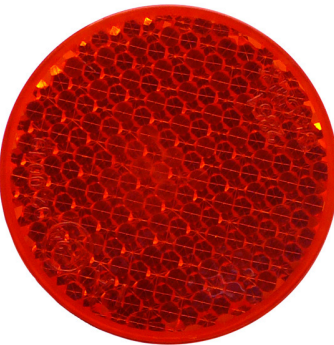

| TT-number / Name | Drawing | Photo |
|--|---|---|
| <p>1321520.000 LED indoor lighting, 12/24 V</p> |  |  |

REFLECTORS


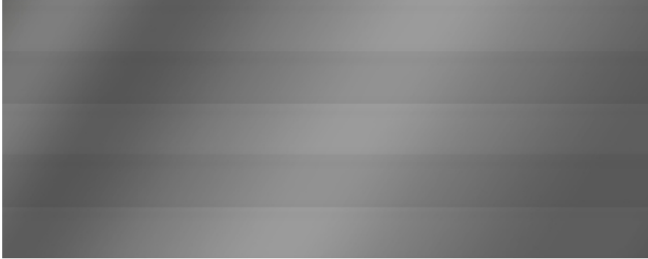

| TT-number / Name | Drawing | Photo |
|---|---|---|
| <p>1315541.100 Reflector square white, 44 x 94 mm</p> |  |  |
| <p>1315541.200 Reflector square orange, 44 x 94 mm</p> | |  |







REFLECTORS

| TT-number / Name | Photo |
|--|--|
| <p>1314001.100 Reflector orange self-adhesive round, diameter 54 mm</p> |  |
| <p>1314002.100 Reflector white self-adhesive round, diameter 54 mm</p> |  |
| <p>1314003.100 Reflector red self-adhesive round, diameter 54 mm</p> |  |
| <p>1314004.300 Reflector orange screw-in round, diameter 54 mm</p> |  |











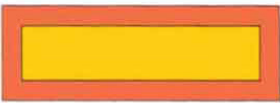
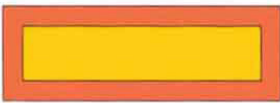






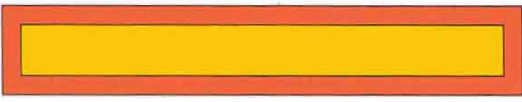
| TT-number / Name | Photo |
|---|--|
| <p data-bbox="272 342 539 394">1320201.000 Red reflective marker tape, 50 mm</p> <p data-bbox="264 421 547 472">1320201.050 Red reflective marker tape, 50 m roll</p> |  |
| <p data-bbox="264 741 547 792">1320202.000 White reflective marker tape, 50 mm</p> <p data-bbox="256 819 555 871">1320202.050 White reflective marker tape, 50 m roll</p> |  |
| <p data-bbox="260 1140 550 1191">1320203.000 Yellow reflective marker tape, 50 mm</p> <p data-bbox="252 1218 558 1270">1320203.050 Reflective marker tape yellow, 50 m roll</p> |  |



| TT-number / Name | Photo |
|--|--|
| <p>1320204.000 Red reflective marker tape, 50 mm - intermittent</p> <p>1320204.050 Red reflective marker tape, 50 mm - intermittent, 50 m roll</p> |  |
| <p>1320205.000 White reflective tape, 50 mm - intermittent</p> <p>1320205.050 White reflective tape, 50 mm - intermittent, 50 m roll</p> |  |
| <p>1320206.000 Yellow reflective marker tape, 50 mm - intermittent</p> <p>1320206.050 Yellow reflective marker tape, 50 mm - intermittent, 50 m roll</p> |  |
| <p>1320207.050 Red reflective marker tape for tankers, 50 m roll</p> |  |

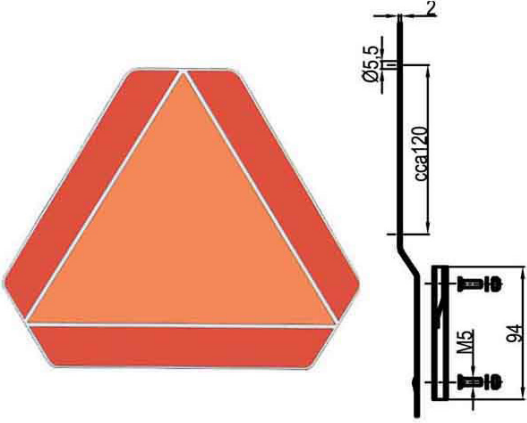






REFLECTIVE MARKINGS

| TT-number / Name | Photo | |
|--|--|---|
| <p>1320001.300 Rear markings for motor vehicles, set of 2 Dimensions: 565 x 130 mm Material: Reflective Al sheet</p> |  |  |
| <p>1320001.301 Rear markings for motor vehicles, set of 2, PREMIUM Dimensions: 565 x 130 mm Material: Reflective Al sheet</p> |  |  |
| <p>1320001.350 Rear markings for motor vehicles, set of 2 Dimensions: 565 x 130 mm Material: Reflective sticker</p> |  |  |
| <p>1320001.351 Rear markings for motor vehicles, set of 2 PREMIUM Dimensions: 565 x 130 mm Material: Reflective sticker</p> |  |  |
| <p>1320002.300 Rear markings for connected trailers, set of 2 Dimensions: 565 x 195 mm Material: Reflective Al sheet</p> |  |  |
| <p>1320002.301 Rear markings for trailers, set of 2, PREMIUM Dimensions: 565 x 195 mm Material: Reflective Al sheet</p> |  |  |
| <p>1320002.350 Rear markings for connected trailers, set of 2 Dimensions: 565 x 195 mm Material: Reflective sticker</p> |  |  |
| <p>1320002.351 Rear markings for trailers, set of 2, PREMIUM Dimensions: 565 x 195 mm Material: Reflective sticker</p> |  |  |
| <p>1320003.300 Rear markings for trailers Dimensions: 1130 x 195 mm Material: Reflective Al sheet</p> |  | |

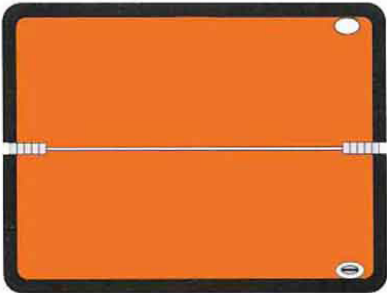
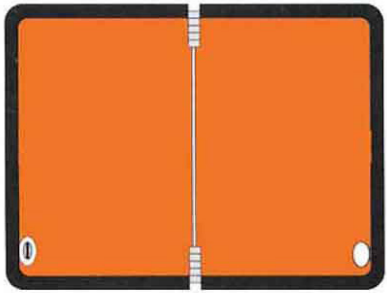
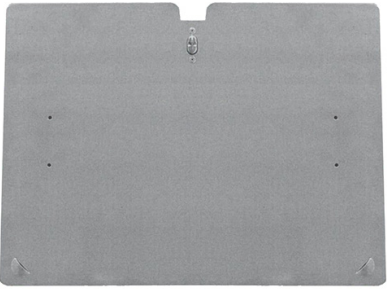
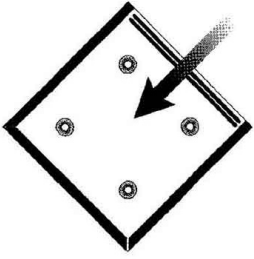


REFLECTIVE MARKINGS

| TT-number / Name | Photo |
|--|--|
| <p>1320011.300 Rear markings for slow vehicles with a designed speed of up to 30 km/h Dimensions: 350 x 350 mm Material: Reflective Al sheet</p> <p>1320012.000 Holder for warning triangle</p> <p>1320013.000 Holder for vehicle</p> |  |
| <p>1320021.300 TIR sign fixed Dimensions: 400 x 250 mm Material: Reflective Al sheet</p> |  |
| <p>1320022.000 TIR sign folding (vertical) top fixed Material: Reflective Al sheet</p> |  |
| <p>1320031.300 Oversize sign Dimensions: 500 x 500 mm Material: Reflective Al sheet</p> |  |
| <p>1320032.310 Night parking signs UNIVERSAL Dimensions: 423 x 423 mm Material: Reflective Al sheet</p> |  |

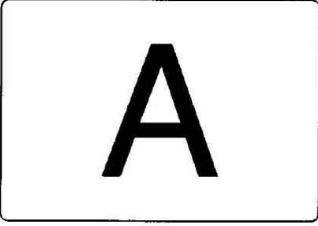
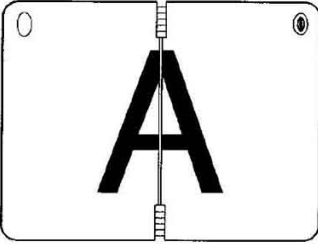
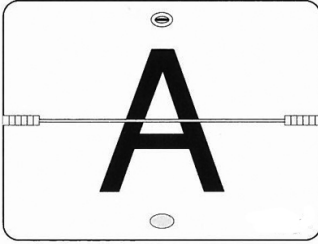



REFLECTIVE MARKINGS

| TT-number / Name | Photo |
|--|--|
| <p>1320042.300 ADR sign - foldable horizontally Dimensions: 300 x 400 mm Material: galvanized steel</p> |  |
| <p>1320043.300 ADR sign - foldable vertically Dimensions: 300 x 400 mm Material: galvanized steel</p> |  |
| <p>1320044.000 Panel for ADR hanging sign Dimensions: 300 x 400 mm Material: galvanized steel</p> |  |
| <p>1320045.000 Panel for ADR sign Dimensions: 300 x 300 mm Material: galvanized steel</p> |  |










REFLECTIVE MARKINGS

| TT-number / Name | Photo |
|---|--|
| <p>1320051.300 Sign - A - waste transport, solid Dimensions: 300 x 400 mm Material: Al sheet</p> |  |
| <p>1320052.300 Sign - A - waste transport, vertically foldable Dimensions: 300 x 400 mm Material: Al sheet</p> |  |
| <p>1320053.300 Sign - A - waste transport, horizontally foldable Dimensions: 300 x 400 mm Material: Al sheet</p> |  |
| <p>1320061.000 Sticker - L Dimension: diameter 225 mm</p> |  |











REFLECTIVE MARKINGS

| TT-number / Name | Photo |
|---|---|
| 1320068.025 Sticker marking designed speed 25 km Dimension: diameter 200 mm |  |
| 1320068.030 Sticker marking designed speed 30 km Dimension: diameter 200 mm |  |
| 1320068.040 Sticker marking designed speed 40 km Dimension: diameter 200 mm |  |
| 1320068.080 Sticker marking designed speed 80 km Dimension: diameter 200 mm |  |
| 1320068.085 Sticker marking designed speed 85 km Dimension: diameter 200 mm |  |
| 1320068.090 Sticker marking designed speed 90 km Dimension: diameter 200 mm |  |
| 1320068.100 Sticker marking designed speed 100 km Dimension: diameter 200 mm |  |



REFLECTIVE MARKINGS

| TT-number / Name | Photo |
|---|---|
| <p>1320168.020 Reflective sticker - marking designed speed 25 km Dimension: diameter 200 mm</p> |  |
| <p>1320168.025 Reflective sticker - marking designed speed 25 km Dimension: diameter 200 mm</p> |  |
| <p>1320168.030 Reflective sticker - marking designed speed 30 km Dimension: diameter 200 mm</p> |  |
| <p>1320168.040 Reflective sticker - marking designed speed 40 km Dimension: diameter 200 mm</p> |  |
| <p>1320168.080 Reflective sticker - marking designed speed 80 km Dimension: diameter 200 mm</p> |  |
| <p>1320168.085 Reflective sticker - marking designed speed 85 km Dimension: diameter 200 mm</p> |  |
| <p>1320168.090 Reflective sticker - marking designed speed 90 km Dimension: diameter 200 mm</p> |  |
| <p>1320168.100 Reflective sticker - marking designed speed 100 km Dimension: diameter 200 mm</p> |  |



REFLECTIVE MARKINGS

| TT-number / Name | Photo |
|--|--|
| <p>1320072.000 Gas transportation sticker Dimensions: 320 x 320 mm</p> |  |
| <p>1320074.000 Danger of explosion - Al sheet metal Dimensions: 320 x 320 mm</p> |  |
| <p>1320075.000 Explosion hazard - PVC board Dimensions: 320 x 320 mm</p> |  |
| <p>1320102.000 Reflective signs for containers Al sign - left Dimensions: 700 x 140 mm Material: Al sheet</p> |  |
| <p>1320104.000 Reflective signs for containers Al sign - right Dimensions: 700 x 140 mm Material: Al sheet</p> |  |
| <p>1320105.000 Sign reflex container 705x141 set L+P self-adhesive. Dimensions: 700 x 140 mm Material: Al sheet</p> |  |
| <p>1320130.000 Reflective flags for folding face Dimensions: 250 x 400 mm</p> |  |




400kPa **850kPa**

| TT-number | Name | Dimension |
|-------------|-------------------------------|------------|
| 1320091.250 | Tyre pressure sticker 250 kpa | 80 x 40 mm |
| 1320091.270 | Tyre pressure sticker 270 kpa | 80 x 40 mm |
| 1320091.300 | Tyre pressure sticker 300 kpa | 80 x 40 mm |
| 1320091.325 | Tyre pressure sticker 325 kpa | 80 x 40 mm |
| 1320091.350 | Tyre pressure sticker 350 kpa | 80 x 40 mm |
| 1320091.375 | Tyre pressure sticker 375 kpa | 80 x 40 mm |
| 1320091.400 | Tyre pressure sticker 400 kpa | 80 x 40 mm |
| 1320091.425 | Tyre pressure sticker 425 kpa | 80 x 40 mm |
| 1320091.450 | Tyre pressure sticker 450 kpa | 80 x 40 mm |
| 1320091.475 | Tyre pressure sticker 475 kpa | 80 x 40 mm |
| 1320091.500 | Tyre pressure sticker 500 kpa | 80 x 40 mm |
| 1320091.525 | Tyre pressure sticker 525 kpa | 80 x 40 mm |
| 1320091.550 | Tyre pressure sticker 550 kpa | 80 x 40 mm |
| 1320091.600 | Tyre pressure sticker 600 kpa | 80 x 40 mm |
| 1320091.625 | Tyre pressure sticker 625 kpa | 80 x 40 mm |
| 1320091.650 | Tyre pressure sticker 650 kpa | 80 x 40 mm |
| 1320091.675 | Tyre pressure sticker 675 kpa | 80 x 40 mm |
| 1320091.700 | Tyre pressure sticker 700 kpa | 80 x 40 mm |
| 1320091.725 | Tyre pressure sticker 725 kpa | 80 x 40 mm |
| 1320091.750 | Tyre pressure sticker 750 kpa | 80 x 40 mm |
| 1320091.775 | Tyre pressure sticker 775 kpa | 80 x 40 mm |
| 1320091.800 | Tyre pressure sticker 800 kpa | 80 x 40 mm |
| 1320091.825 | Tyre pressure sticker 825 kpa | 80 x 40 mm |
| 1320091.850 | Tyre pressure sticker 850 kpa | 80 x 40 mm |
| 1320091.900 | Tyre pressure sticker 900 kpa | 80 x 40 mm |
| 1320091.950 | Tyre pressure sticker 950 kpa | 80 x 40 mm |

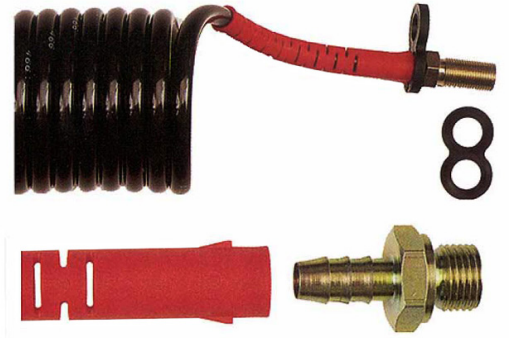
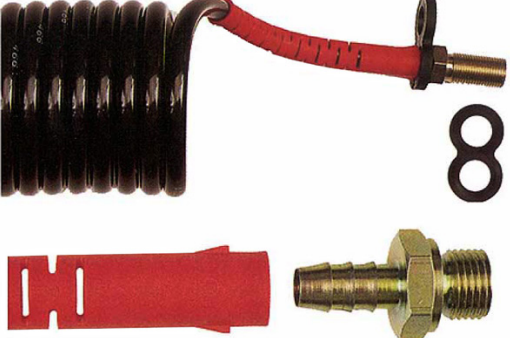


CABLES

| TT-number / Name | Photo |
|---|--|
| <p data-bbox="347 378 461 405">1321580.000</p> <p data-bbox="189 405 622 432">Flat cable 2 x 1.5 mm²; YLY-SP (6.5 x 3.9 mm), roll 100 m</p> |  |



AIR HOSES

| TT-number / Name | Photo |
|---|---|
| <p>1311007.000 Spiral air hose M22 - red Spiral air hose with working length 4.0 m, number of threads 20 and colour red. It is made of thermally and colour stable material. International standard of connection dimensions, colour coded according to ISO 7375, ISO 7628, DIN 73378, DIN 74323, DIN 74324.</p> <p>Dimensions: M22 x 1.5 mm</p> |  <p>The photo shows a red spiral air hose with a brass fitting on one end and a red plastic connector on the other. A brass O-ring is also shown next to the fitting.</p> |
| <p>1311008.000 Spiral air hose M22 - yellow Spiral air hose with working length 4.0 mm, number of threads 20 and colour yellow. It is made of thermally and colour stable material. International standard of connection dimensions, colour coded according to ISO 7375, ISO 7628, DIN 73378, DIN 74323, DIN 74324.</p> <p>Dimensions: M22 x 1.5 mm</p> |  <p>The photo shows a yellow spiral air hose with a brass fitting on one end and a yellow plastic connector on the other. A brass O-ring is also shown next to the fitting.</p> |

SOCKETS AND PLUGS

| TT-number / Name | Photo |
|---|--|
| <p>1312041.000 Socket with voltage 12 V, current load 20 A and number of poles 7. Material: Metal</p> |  |
| <p>1312043.000 Socket with voltage 12 V, current load 20 A and number of poles 7. Material: Plastic</p> |  |
| <p>1312044.000 Plug with voltage 12 V, current load 20 A and number of poles 7. Material: Plastic</p> |  |
| <p>1312045.000 Socket with voltage 12 V, current load 20 A and number of poles 13. Material: Plastic</p> |  |



SOCKETS AND PLUGS

| TT-number / Name | Photo |
|---|--|
| <p>1312046.000 Plug with voltage 12 V, current load 20 A and number of poles 13. Material: Plastic</p> |  |
| <p>1312048.500 Mini adapter P50 13/7 12 V Mini adapter length 50 mm, for 12 V, according to ISO 11446, ISO 1724 Usage: 13-pole socket on the towing vehicle, 7-pole plug on the trailer. Material: Plastic</p> |  |
| <p>1312049.500 Mini adapter GB 7/13 12 V Mini adapter length 50 mm, for 12 V, according to ISO 11446, ISO 1724 Usage: 13-pole plug on trailer, 7-pole socket on towing vehicle. Material: Plastic</p> |  |
| <p>1312051.000 Rubber grommet for 13-pole socket</p> |  |

CAMERAS AND MONITORS

A camera system is the perfect aid for use on vans, trucks, buses, semi-trailer trucks, refuse trucks and agricultural equipment. Our range of products allows you to create a system to meet your particular needs on a specific vehicle. Choose the right monitor size and camera, or simply add additional cameras to your existing system. Installing the system will improve driving comfort, reduce driver fatigue and help prevent accidents and collisions.

Monitors allow you to set the appropriate image orientation when the camera is rotated in an unconventional manner. Connecting trigger wires allows the feeds from individual cameras to appear over the entire screen automatically when the driver needs to see in that direction (for example when turning or reversing).



In addition to universal cameras, a rear camera may be integrated into the brake light on some van models, which helps preserve the original appearance of the back of the vehicle. Given the ability to use cameras in vehicles of different sizes, individual connecting cables are not included with the cameras and must be ordered in the required quantities and lengths. All cameras are designed for outdoor use with IP68 or IP69K protection and the horizontal angle of view is 120°.

MONITORS

- Diagonal 7", 9" or 10"
- resolution 1024 x 600 pixels (AHD monitors)
- video inputs for 720p HD and CVBS cameras
- 2, 3 or 4 channel (4-split view function)
- 4 image orientation setting options
- TV system: PAL/NTSC support
- automatically displays the correct feed (e.g. when reversing or turning)
- M12 4 PIN connection cable or wireless (only TFT7HDW)

CAMERAS

- CMOS 1/3" sensor chip (AHD cameras)
- 720p HD and C VBS resolution
- automatic IR illumination
- durable M12 4-PIN screw-in connectors
- resistance to wear (IP69K) and shock (min. 4G)



AHD – PROPERTIES AND APPLICATIONS

"Analogue High Definition" is a technology that is a successor to analogue systems, but processes and transmits high resolution images (e.g. HD 720p - 1280 x 720) over cables without delay or loss.

AHD uses progressive scanning, and the signal format permits the elimination of blur and flicker, while improving colour reproduction. Uncompressed "raw" data is transmitted in analogue form, which eliminates delay, choppiness and image jamming.

AHD offers the advantages of compatibility and variability. For example 720p AHD cameras may be used with 720p or 1080p AHD monitors. 720p AHD monitors support 720p AHD cameras and analogue cameras at the same time. AHD recorders with AHD technology tend to be hybrid (MXVR1004), meaning they support IP cameras as well as analogue cameras in addition to AHD cameras.

Due to the fact that AHD cameras are also equipped with automatic IR illumination, the AHD image is even more detailed in the dark (compared to an analogue camera), and the only remaining advantage of an analogue system is a lower monitor price.



| Compatibility table | | CAMERA | | |
|---------------------|-----------|----------|-----------|----------|
| | | AHD 720p | AHD 1080p | Analogue |
| MONITOR | AHD 720p | OK | | OK |
| | AHD 1080p | OK | OK | OK |
| | Analogue | | | OK |


APPLICATIONS FOR TYPICAL COMMERCIAL VEHICLES AND LORRIES

For easy orientation, to determine the appropriate monitors and cameras, we list 8 typical vehicles with the location of specific system items.









MONITOR

| | TT-number | position | description | diagonal size | resolution | AHD/ analogue | channels / split image | connectors |
|--|-------------|----------|---|---------------|------------|---------------|------------------------|------------|
|  | 1350107.000 | 1 | 4 channel, analogue, automatic camera detection | 7" | 800 x 480 | analogue | 2 ch | M12 4PIN |



CAMERAS

| | TT-number | position | location | sensing chip | AHD/ analogue | IR illumination | connector | TV system |
|---|-------------|----------|--|----------------|-----------------|-----------------|-----------|-----------|
|  | 1350022.000 | 2 | rear, in brake light for Jumper, Boxer, Ducato (06-) | CCD Sharp 1/4" | analogue 420TVL | yes | RCA | NTSC |
|  | 1350004.000 | 3 | side, in rear-view mirror | CMOS 1/4" | analogue 420TVL | no | RCA | NTSC |
|  | 1350001.000 | 4 | in cargo area | CMOS 1/3" | analogue 600TVL | yes | RCA | PAL |

BLIND SPOT DETECTION

| | | | | | | | | |
|---|-------------|---|------------------------------|------------|------------------------|---------------------|--------------------------|------------------------------|
|  | 1350037.000 | 5 | into the plastic rear bumper | 9 V – 30 V | acoustically, visually | 2x microwave 79 GHz | 5 m rear, left and right | Control unit - display 4.5 m |
|---|-------------|---|------------------------------|------------|------------------------|---------------------|--------------------------|------------------------------|


BLIND SPOT DETECTION

| | | | | | | | | |
|---|-------------|---|--|----------------|-----------------|-----|-----|------|
|  | 1350024.000 | 2 | OEM parking camera for Renault Master, Opel Movano | CCD Sharp 1/4" | analogue 420TVL | yes | RCA | NTSC |
|  | 1350021.000 | 2 | OEM Parking camera, VW, Mercedes | CCD Sharp 1/4" | analogue 420TVL | yes | RCA | NTSC |









MONITOR

| | TT-number | position | description | diagonal size | resolution | AHD/ analogue | channels / split image | connectors |
|---|-------------|----------|--|---------------|------------|---------------|------------------------|------------|
|  | 1350108.000 | 1 | 3 channel, AHD, automatic camera detection | 9" | 1024 x 600 | AHD 720p | 4ch 2, 3, 4 | M12 4PIN |

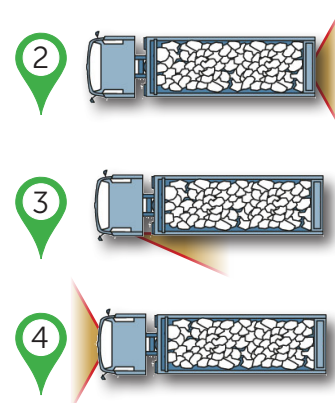
CAMERAS

| | TT-number | position | location | sensing chip | AHD/ analogue | IR illumination | connector | TV system |
|---|-------------|----------|--|--------------|-----------------|-----------------|-----------|-----------|
|  | 1350008.000 | 2 | rear, heated, automatic folding shield | CMOS 1/3" | AHD 720p | yes | M12 4PIN | PAL |
|  | 1350007.000 | 3 | side | CMOS 1/3" | AHD 720p | yes | M12 4PIN | PAL |
|  | 1350004.000 | 4 | side, in rear-view mirror | CMOS 1/4" | analogue 420TVL | no | RCA | NTSC |
|  | 1350007.000 | 4 | in interior | CMOS 1/3" | AHD 720p | yes | M12 4PIN | PAL |


BLIND SPOT DETECTION

| | | | | | | | | |
|---|-------------|---|------------------------------|------------|------------------------|---------------------|--------------------------|------------------------------|
|  | 1350037.000 | 6 | into the plastic rear bumper | 9 V – 30 V | acoustically, visually | 2x microwave 79 GHz | 5 m rear, left and right | Control unit - display 4.5 m |
|---|-------------|---|------------------------------|------------|------------------------|---------------------|--------------------------|------------------------------|









MONITOR

| | TT-number | position | description | diagonal size | resolution | AHD/ analogue | channels / split image | connectors |
|---|-------------|----------|--|---------------|------------|---------------|------------------------|------------|
|  | 1350108.000 | 1 | 3 channel, AHD, automatic camera detection | 9" | 1024 x 600 | AHD 720p | 4ch 2, 3, 4 | M12 4PIN |

CAMERAS


| | TT-number | position | location | sensing chip | AHD/ analogue | IR illumination | connector | TV system |
|---|-------------|----------|--|--------------|-----------------|-----------------|-----------|-----------|
|  | 1350008.000 | 2 | rear, heated, automatic folding shield | CMOS 1/3" | AHD 720p | yes | M12 4PIN | PAL |
|  | 1350007.000 | 3 | in interior | CMOS 1/3" | AHD 720p | yes | M12 4PIN | PAL |
|  | 1350004.000 | 4 | side, in rear-view mirror | CMOS 1/4" | analogue 420TVL | no | RCA | NTSC |

BLIND SPOT DETECTION




| | | | | | | | | |
|---|-------------|---|------------------------------|------------|------------------------|---------------------|--------------------------|------------------------------|
|  | 1350037.000 | 5 | into the plastic rear bumper | 9 V – 30 V | acoustically, visually | 2x microwave 79 GHz | 5 m rear, left and right | Control unit - display 4.5 m |
|---|-------------|---|------------------------------|------------|------------------------|---------------------|--------------------------|------------------------------|




MONITOR

| | TT-number | position | description | diagonal size | resolution | AHD/ analogue | channels / split image | connectors |
|---|-------------|----------|--|---------------|------------|---------------|------------------------|------------|
|  | 1350108.000 | 1 | 3 channel, AHD, automatic camera detection | 9" | 1024 x 600 | AHD 720p | 4ch 2, 3, 4 | M12 4PIN |

CAMERAS

| | TT-number | position | location | sensing chip | AHD/ analogue | IR illumination | connector | TV system |
|---|-------------|----------|--|--------------|-----------------|-----------------|-----------|-----------|
|  | 1350008.000 | 2 | rear, heated, automatic folding shield | CMOS 1/3" | AHD 720p | yes | M12 4PIN | PAL |
|  | 1350007.000 | 3 | in interior | CMOS 1/3" | AHD 720p | yes | M12 4PIN | PAL |
|  | 1350004.000 | 4 | side, in rear-view mirror | CMOS 1/4" | analogue 420TVL | no | RCA | NTSC |

BLIND SPOT DETECTION

| | | | | | | | | |
|---|-------------|---|------------------------------|------------|------------------------|---------------------|--------------------------|------------------------------|
|  | 1350037.000 | 5 | into the plastic rear bumper | 9 V – 30 V | acoustically, visually | 2x microwave 79 GHz | 5 m rear, left and right | Control unit - display 4.5 m |
|---|-------------|---|------------------------------|------------|------------------------|---------------------|--------------------------|------------------------------|



ON-BOARD CAMERAS

TT-number
1350035.000



Dash cam, Full HD, CPL filter, parking mode Neoline X72

NEOLINE Full HD Car Camera (1080p 30fps, 720p 60fps), SO NY Exmor image sensor, f 1.8 aperture, with 140° viewing angle, IPS 2.0" display, WDR, support up to 128 GB SD card. The sophisticated parking mode supports individual recording settings when parking, including resolution, sensitivity. Start recording by shaking or movement, or both sensors. The camera includes Night Mode in monochrome mode for better image capture in low light conditions.

Technical parameters:

- Image sensor: SONY Exmor CMOS, Novatek CPU
- Video resolution: Full HD 1920x1080 (30 sn/sec)
Video format: MP4
- WDR: image optimisation for bright and dark conditions
- Scanning angle: 140°
- Display: built-in, 2.0" diagonal
- CPL filter – rotary anti-glare polarising filter
- Speaker and Microphone: built-in magnetic holder - quick and firm attachment
- G-overload sensor
- Parking mode
- Night mode
- Cyclic recording
- Date and time – option to display on the recording
- Micro SD slot: support 8 GB to 128 GB capacity built-in capacitor
- Menu language: CZ, EN, FRA, RU, ESP, DE, PL
- Storage temperature: from -20°C to +70°C
- Operating temperature: from -10°C to +60°C

TT-number
1350036.000



On-board camera for cars, Wi-Fi, GPS

Full HD car camera with built-in GPS, overload sensor, Wi-Fi and mobile app. This camera has a gesture sensing function that allows you to lock the video or save a photo by waving your hand in front of the camera. The lens is a 6-layer lens with a 152° angle of view, F1.8 aperture.

Technical parameters:

- CPU: Hisilicon 3561C_V200
- Image sensor: Panasonic CMOS
- Lens: 6-layer, 152° scanning angle, F1.8
- Wi-Fi: 2.4 GHz, 802.11b / g / n.
- G-sensor: simple overload sensor
- Video resolution: 1920 * 1080 (16:9), 9), @ 30fps
- Audio: 8 kHz, 2 channels
- Photo resolution: 1920 * 1080, .JPG
- Storage: SD card, up to 64 GB, Class
- Operating temperature: from -20°C to +70°C
- Power: DC 5 V, 1 A, from 12/24 V adapter
- Video processing: 3D filter, image enhancement
- Mobile application: Smart iCarcam

13. page 30

CABLING AND ADAPTERS

| | TT-number | description | channels |
|--|-------------|---|----------|
| | 1350058.000 | M12 cable, male-male, length: 5 metres | 1 |
| | 1350052.000 | cable M12, male-female, length 10 metres | 1 |
| | 1350053.000 | cable M12, male-female, length 15 metres | 1 |
| | 1350054.000 | cable M12, male-female, length 20 metres | 1 |
| | 1350056.000 | flexible cabling to connect tractor/trailer, M12, male-male | 3 |
| | 1350057.000 | monitor (M12 male plug) and camera (RCA male plug) adapter | 1 |

TT-number
1350200.000



Network DVR video recorder designed for mobile applications and vehicle installation. The device can be connected to 4x analogue HDCVI / AHD / TVI / CVBS and one IP camera (up to 4Mpix). ONVIF allows connection of cameras from different manufacturers. The camera footage is recorded on two SD cards (max. 2x 256 GB, not included). The recordings can be viewed directly on the connected monitor, networked in a web browser. The recording equipment keeps the system running even under harsh conditions because it meets the requirements of EN50155, ISO 7637-2 and ISO16750 - standards for electronic equipment used in road and rail transport, including requirements for temperature, humidity, shock, vibration. On request, a version of the device with GPS / 4G / WIFI can be supplied.

Technical parameters:

Image processing:

- possibility of a time delay for switching off the recording
- motion detection in the image
- alarm in case of loss of video signal
- alarm in case of camera view obstruction
- alarm in case of vehicle overturning
- recording speed up to 100 Mb/s
- summary view of all connected cameras: combination 1/4/8
- recording modes manual, schedule (regular [continuous])

General characteristics, parameters:

- Fanless: yes
- Video compression: H.264, H.264+, H.265+, H.265
- Max. resolution of IP recording (Mpx): 4.0
- Max. recording resolution AHD 2 (1080p)
- Dahua IoT: no
- Video analytics NVR: yes
- RAID controller: no
- Alarm input/output: yes (7/2)
- Number of connectable IP cameras: 1
- Power supply for PoE/PoC cameras: yes
- 4x HDCVI/AHD/TVI/PAL input (4pin)
- 2x USB 2.0 ports

