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Our catalogue is developed with maximum care to live up to the expectations of our customers. However, no liability is accepted for possible mistakes or changes in the course of the year.

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European Approval - Directives towbar R55



Bosal and Oris towbars are tested and approved according to the European legislation regarding towbars R55. This approval assures optimal safety, durability and quality of our towbars at all times.

Quality



The quality management system of all Bosal manufacturing plants worldwide is ISO/TS 16949 certified with the ultimate goal to achieve zero defects and to deliver customer needs.

Towbars / Wiring kits

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Marketing Services

Website

On www.Bosal.com, you can find our advanced corporate website. The website provides detailed information about the Bosal Group and the extensive product portfolio.



Bosal web catalogues

The Bosal towbar catalogue and the Bosal exhaust catalogue are now accessible via the internet. These web catalogues are continuously updated and give all the latest product information. Bosal products can be searched for by car type or Bosal reference number, mounting instructions and EC approvals can easily be downloaded.

www.catalogue.bosal.com



Printed catalogue

At the beginning of each year, before the start of the new season, Bosal publishes a new edition of the towbar catalogue. Here you will find not only a comprehensive AfterMarket program, but also a lot of useful information about towbars and electrical wiring kits.



Product training

Bosal customers are regularly invited to attend product seminars to stay up-to-date with the latest product developments for towbars and wiring kits.



Bosal helpline



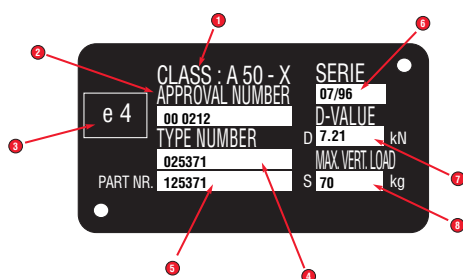
Your contact for technical queries and catalogue information. The telephone number can be found on the cover.

The standards

A towbar, approved to R55, meets the following criteria:

1. in line with fixation points of car manufacturer
2. in line with dimensions - towball height/distance towball - bumper
3. dynamic test (2 million cycles)
4. its approval number has to be engraved in the identification plate

**Approved towbars =
reliability - safety - legality!**



Towbar identification plate specifications according to R55 directives

1. towbar type with towball diameter of 50 mm
2. approval number = number given by the official approval authorities after dynamic test of 2 million cycles on test bench
3. approval number given by the EU member country
4. type number = reference acknowledged for approval
5. reference = commercial reference of the towbar
6. serie = production week of the towbar
7. D-value = $(TLW \times MTW) / (TLW + MTW) \times 9,81$ in N
TLW = Total loaded weight (vehicle)
TRW = Total rolling weight (vehicle + trailer)
MTW = Maximum towing weight (MTW = TRW - TLW)
8. maximum vertical load S = maximum static weight on the towball authorised by the car manufacturer

Towball height

The towball height needs to be between 35 and 42 cm when the car is charged to the maximum load. To determine the height of the towball when designing a towbar, car manufacturer fixation points will be used as a reference.

Trailer weights

All trailer weights mentioned in this catalogue apply to the towbar itself and are in general, equal to the maximum trailer weights specified by the car manufacturer.

Instructions for use

According to the R55 approval, the towbar is not allowed to cover the licence plate when not in use.

Rough terrain

When towing a trailer through rough terrain, the loading weight of the trailer has to be reduced by 50% and we advise that an appropriate speed for the road conditions (not exceeding 16 km/hour) is used.

Safety hooks

In terms of the Road Code (decree of 14/11/72) and the Official Journal EEC (n° L202/45), the trailer has to be secured automatically in case of detachment of the towbar when driving. Consequently, the user has to install a security cable or chain between the trailer and the towing hook of the towing vehicle.

Authorised towing weight

Your towbar has been designed to tow the maximum authorised towing weight to cover all the model platform variants. The maximum towing weight of a vehicle is specified in the manufacturer's vehicle manual. Take into account that hybrid or environmental friendly vehicles often are prohibited to tow or have a strongly limited towing weight. The manual, supplied with the vehicle, indicates the TRW (Total Rolling Weight) and the TLW (Total Loaded Weight) and calculate the difference $TRW - TLW =$ weight of the loaded trailer.

Tightening of the bolts

Check that all bolts are tight after towing for 1,000 km. Mounting and demounting of a standard bolt-on Bosal towbar is not allowed unless applying new fixation bolts and nuts, tightened according the specified torque.

Parking sensors

Bosal strongly recommends the fitting of a detachable towbar when the car is equipped with parking sensors.

Accidents

Whenever a towbar is damaged as a result of an accident, it must not be repaired but replaced.

Stabilizers

We do not accept liability in cases where additional equipment such as stabilizers and/or load distributors are fitted between the towing and towed vehicle.



“Bosal Bike Carrier Compact”


Foldable bike carrier for two bicycles



- ✓ Easy installation/fixation of bikes
- ✓ Easy to tilt
- ✓ Easy to store - foldable (50x70x22cm)
- ✓ Storage bag included
- ✓ Anti-theft security
- ✓ Mounting by a quick connector
- ✓ 7/13 pole connector
- ✓ Maximum load 60 kg
- ✓ Suitable for electrical bicycles



070-234
“Bosal Bike Carrier Compact”
 foldable bike carrier for two bicycles



070-213
 ride on ramp for bike carrier
“Bosal Bike Carrier Compact”

Easy go, pack and store!



1. Remove the bicycles.



2. Fold the bike carrier.



3. Pack the bike carrier in its storage bag (included).



4. Store the bike carrier (dimensions 50x70x22 cm).

“Bosal Bike Carrier Original”

Standard bike carrier for two bicycles

- ✓ Easy installation/fixation of bikes
- ✓ Easy to tilt
- ✓ 7/13 pole connector
- ✓ Maximum load 60 kg



070-233
“Bosal Bike Carrier Original”
 standard bike carrier for two bicycles



Bicycle carriers for hybrid and ECO vehicles

Car manufacturers invest in a green future by producing more and more hybrid or fuel-saving and compact cars. Very often, car manufacturers do not allow a towbar on these vehicles because they are not equipped to tow a caravan or trailer. As a result, it is also not possible to mount a bicycle carrier. Bosal has developed a bicycle carrier solution for these vehicles.



Benefits:

- ✓ Unique Bosal support system (easy "Click" system)
- ✓ Complies with all the necessary legislations and regulations
- ✓ Complete solution incl. wiring set
- ✓ Anti-theft security
- ✓ Easy to tilt

The Bosal bicycle solution guarantees the same kind of security and reliability as with a traditional towbar. The applications are integrated in the towbar catalogue. The customer has to order the crossbar in combination with one of the three adapted bike carriers.

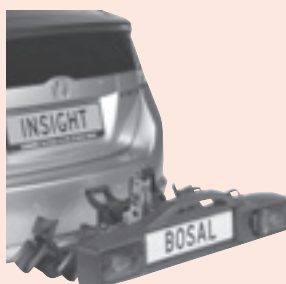


If a towbar is not allowed, Bosal has the solution!



The bicycle carrier is fixed onto the vehicle, simply by clicking it in. This total mounting process requires only a few seconds.

Types of bike carriers, adapted to be used in combination with Bosal BCS crossbar:



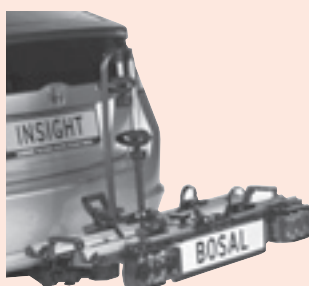
029-154

Twinny Load Swing CK
standard bike carrier
for two bicycles
fixation on bicycle crank



029-664

"Bosal Bike Carrier Original"
standard bike carrier
for two bicycles



029-974

"Bosal Bike Carrier Compact"
foldable bike carrier
for two bicycles



VERTICAL
DETACHABLE

Perfect design for the highest demands

Latest trends

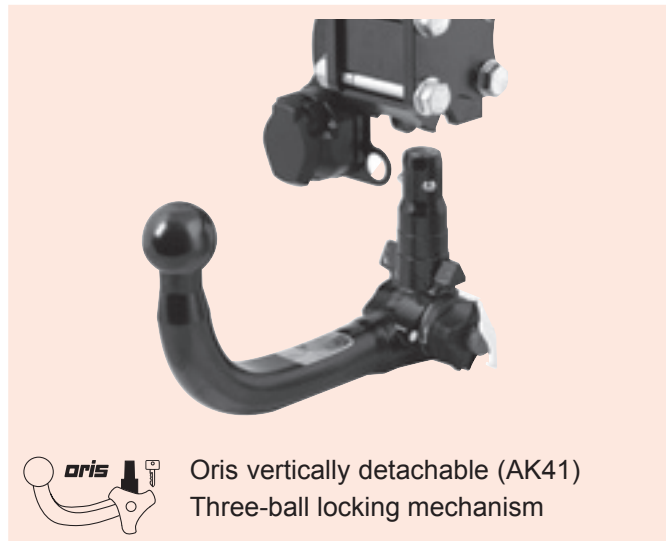
In these times of increasing individualisation, detachable towbars are the trend. After detaching the towball, the system is - depending on the type - completely or almost completely invisible. The handling is comfortable and easy, and the aesthetic design of the vehicle remains intact.



AK41

The ultimate system for the demanding motorist

- ✓ OE competence for the AfterMarket
- ✓ Vertical system, completely invisible when detached
- ✓ High D-values, for towing of heavy loads
- ✓ Fully automatic locking mechanism
- ✓ User friendly

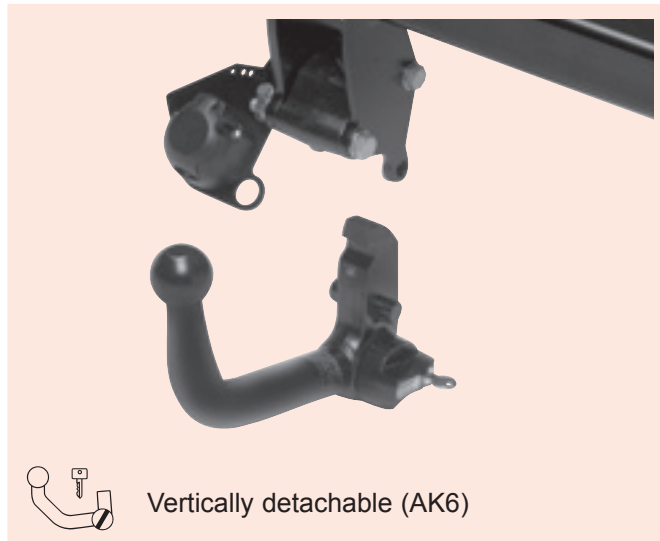


Oris vertically detachable (AK41)
Three-ball locking mechanism

AK6

The standard in proven Bosal quality

- ✓ TOP quality
- ✓ Vertical system, completely invisible when detached
- ✓ Fully automatic locking mechanism
- ✓ User friendly



Vertically detachable (AK6)



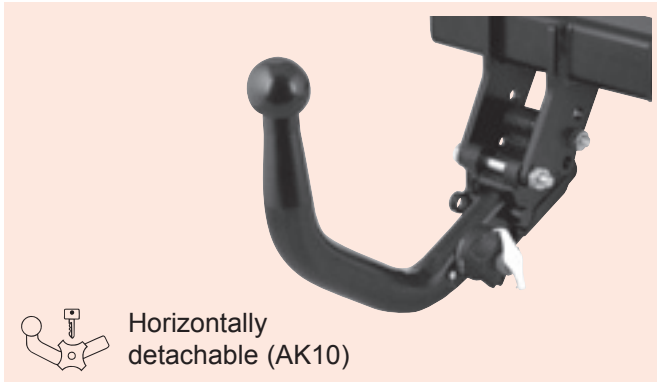
HORIZONTAL DETACHABLE

Quick and practical

AK10

Competitive detachable system

- ✓ Practical and modern design
- ✓ Semi automatic locking mechanism
- ✓ Angeled position for less visibility

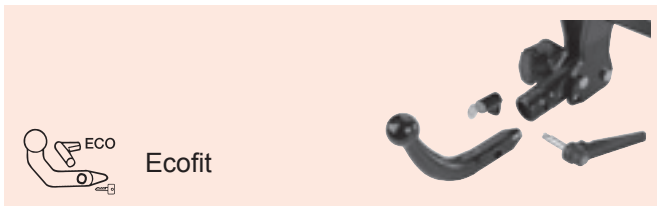


The AK10 is a detachable towbar specially designed for small and economy cars without compromising the performance of the product. All AK10 systems are equipped with the OE based detachable system.

ECOFIT

The detachable system for everybody's purse

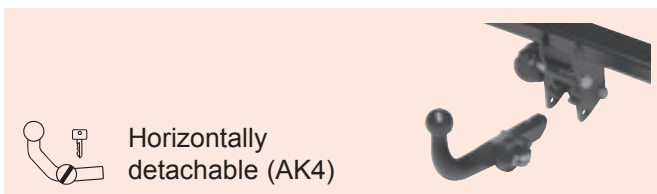
- ✓ Excellent price-value ratio
- ✓ Easy mounting



AK4

For the ambitious motorist

- ✓ Fully automatic locking mechanism
- ✓ User friendly



RIGID TOWBARS

The Classics

Standard bolt-on

For frequent and heavy towing

- ✓ Fixed towball that cannot be removed without tools
- ✓ Recommended for maximum towing weights



Welded

Designed for the highest fitability

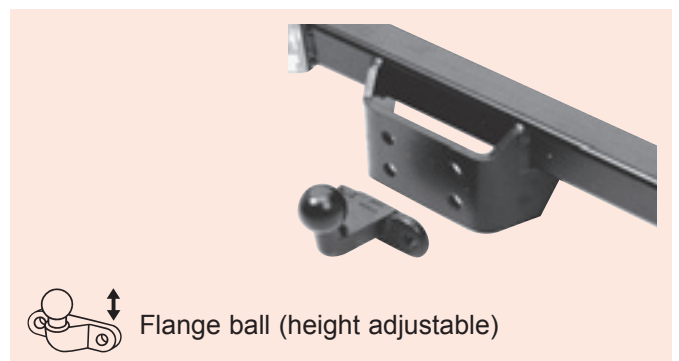
- ✓ Towball is welded to the subframe
- ✓ Towball is not removable



Flange ball

Recommended for commercial use and off-road vehicles

- ✓ Recommended for maximum towing weights
- ✓ Is compatible with two and four hole fixings (height adjustable), depending on the vehicle type



bosal *ORIS*

Leading OE-supplier in Europe

Bosal Oris is today the largest manufacturer of towbars and worldwide the leading OE-supplier for the German, as well as the international, Automotive Industry.



The research and development centre of Bosal Oris in Markgröningen (Germany)

The Bosal Oris Portfolio includes development, manufacturing and sales of

- ✓ Towbars with rigid, detachable and retractable towballs
- ✓ Wind deflectors for cabrios
- ✓ Roofbars and roof racks
- ✓ Accessories for Off-the-Road vehicles

Bosal Oris is the forerunner in retractable towbars and was the first manufacturer to supply these technological systems directly to the assembly line of the global automotive manufacturers. The Bosal Oris high development competence is also proven by the fact that the world's first detachable towball in 1985 also came from the Oris company.

Bosal Oris develops towbar systems in close cooperation with the car manufacturers. These towbar systems fulfill the most severe norms at the highest manufacturing level. More than 150 patents demonstrate the strong culture of innovation.

For the AfterMarket, a large and up-to-date range with a wide variety of towball systems is available. In OE quality!

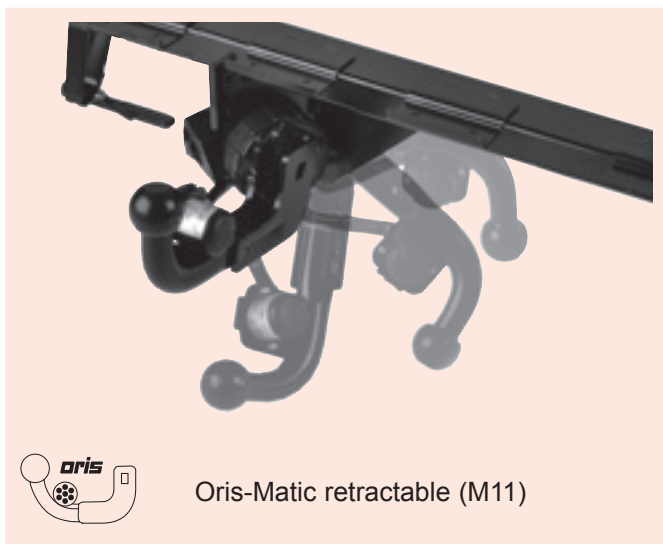
Our Original Equipment customers for towbars are:

AUDI	LANDROVER	PORSCHE
BMW	MAZDA	RENAULT
CITROEN	MERCEDES-BENZ	TOYOTA
DACIA	MINI	VAUXHALL
FORD	OPEL	VW
GM	PEUGEOT	



ORIS-MATIC

Retractable Oris-Matic – Invisible in a flash



Oris-Matic retractable (M11)

The Oris-Matic retractable towbar is the ideal solution for the motorist who prefers to hide his towbar when not in use, but wishes to keep his hands clean while moving it out of sight. Thanks to an ingenious swivel mechanism, the Oris-Matic towball can very easily be hidden when not in use. With the external operating lever concealed under the bumper, the towball can be swiveled out of sight in less than 2 seconds. The result: a completely invisible towbar which requires significantly less handling than the current detachable systems.

The Oris -Matic is not only easy to operate, the installation time is also similar to conventional towbars. In some cases, a small adaptation to the vehicle's bumper may be necessary.

Plug in & go

The electrical socket, cleverly integrated into the neck of the towball, also eliminates the burden of having to search under the vehicle bumper for the socket. The trailer or caravan connector can simply be plugged in once the towball is locked into position.

Safety check

Thanks to the alarm tone which sounds if the ball neck is not properly locked in position, you can always be sure of a safe drive.

Oris-Matic Simply swivel away!

- ✓ OE Competence for the AfterMarket
- ✓ Towball and socket plate invisible when not in use
- ✓ No mounting/demounting of the towball necessary
- ✓ 13-pole electrical set included
- ✓ Very easy access to the socket
- ✓ Safety check via alarm tone
- ✓ Same installation time as for conventional towbars
- ✓ Comfortable, easy, clean and quick handling
- ✓ Patented system

Invisible in less than 2 seconds!



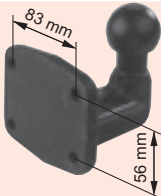


Balls with flange



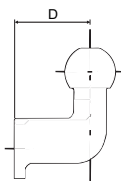
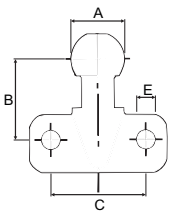
022-844

->I 3500 kg
D-value 20,2 kN
EC 3361

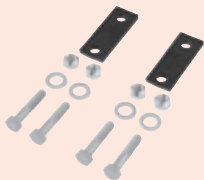


022-834

->I 3500 kg
D-value 31 kN
EC 1168



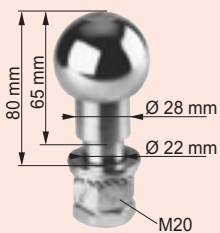
		A	B	C	D	E
022-844	black	50	80	90	75	M16
022-834	black	50	75	83	104	M10



019-554

Adapter kit for 4-hole
flange ball (022-834)
if indicated in catalogue.

Straight ball



022-794 *

->I 1200 kg

Universal towbar for American vehicles



028-392

Vehicles with
pre-mounted receiver

Couplings



000-214 *

A = max 1500 kg
B = max 3500 kg



000-204 *

max 3500 kg



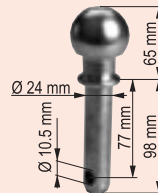
024-374

max 3500 kg
D-value 31 kN
EC 8112



028-714

max 3500 kg
D-value 25,1 kN
EC 4472



000-194

max 1500 kg

	A	B	C	E
000-204	20		90	17
000-214	24		90	17
024-374			90	17
028-714		56	83	11

* Not EC approved, only for agricultural use or offroad vehicles (max 40 km/h)

Bumper Protector



028-864

with fixation
on the ball coupling





Ball couplings



Bosal reference	Max load capacity (kg)	D-value (kN)	Max. vert. charge (kg)	Pole carriage diameter (mm)	Mounting hole dimensions (mm)			Material	Appr. number
					Mounting holes Ø	Distance holes	Hole alignment		
024-234	1400	13.2	100	Ø 50	Ø 12,5 x 2	90	Vertical	Steel	00-0505
024-244	1400	13.2	100	Ø 60	Ø 12,5 x 2	90	Vertical	Steel	00-0505
024-254	1400	13.2	100	Ø 70	Ø 12,5 x 2	90	Vertical	Steel	00-0505
024-274	1400	13.2	100	∅ 50	Ø 12,5 x 2	90	Horizontal	Steel	00-0510
024-284	1400	13.2	100	∅ 60	Ø 12,5 x 2	90	Vertical	Steel	00-0510
024-294	1400	13.2	100	∅ 70	Ø 12,5 x 2	90	Vertical	Steel	00-0510
024-314	1400	13.2	100	Ø 50	Ø 12,5 x 2	40	Horiz / Vertic	Steel	00-0508
024-324	1400	13.2	100	Ø 45	Ø 12,5 x 2	40	Horiz / Vertic	Steel	00-0508
024-334	2000	18.5	100	Ø 50	Ø 12,5 x 2	40	Horiz / Vertic	Steel	00-0506
024-344	2000	18.5	100	Ø 45	Ø 12,5 x 2	40	Horiz / Vertic	Steel	00-0506
024-354	2700	25	150	Ø 50	Ø 12,5 x 2	40	Horiz / Vertic	Cast	00-0507
024-364	2700	25	150	Ø 45	Ø 12,5 x 2	40	Horiz / Vertic	Cast	00-0507
024-394	3500	31.0	150	Ø 60	Ø 14,5 x 2	54	Horizontal	Cast	00-0509
024-414	750	7.2	75	Δ	Ø 10,5 x 4	90 x 2	Vertical	Steel	00-0746
024-464	750	7.2	75	Ø 50	Ø 12,5 x 2	90	Vertical	Steel	00-1040
024-474	750	7.2	75	Ø 60	Ø 12,5 x 2	90	Vertical	Steel	00-1040
024-514	750	7.2	75	Ø 70	Ø 12,5 x 2	90	Vertical	Steel	00-1040
024-524	750	7.2	75	∅ 40	Ø 12,5 x 2	90	Horizontal	Steel	00-1040
024-534	750	7.2	75	∅ 45	Ø 12,5 x 2	90	Horizontal	Steel	00-1040
024-544	750	7.2	75	∅ 50	Ø 12,5 x 2	90	Horizontal	Steel	00-1040
024-554	750	7.2	75	∅ 60	Ø 12,5 x 2	90	Horizontal	Steel	00-1040
024-564	750	7.2	75	∅ 70	Ø 12,5 x 2	90	Horizontal	Steel	00-1040
024-574	750	7.2	75	∅ 50	Ø 12,5 x 2	90	Vertical	Steel	00-1040
024-584	750	7.2	75	∅ 60	Ø 12,5 x 2	90	Vertical	Steel	00-1040
024-594	750	7.2	75	∅ 70	Ø 12,5 x 2	90	Vertical	Steel	00-1040



Displays



AK6
269-818
310x230x340 mm



Ecofit
269-808
310x210x280 mm



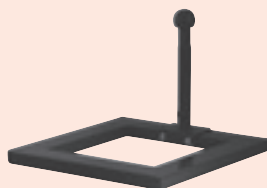
AK41
269-034
310x150x390 mm



AK10
269-347
260x150x310 mm



269-159
Display bike carrier



269-153
Display bike carrier

Vertical load meter



026-434
measures the vertical weight of the trailer coupling

Auxiliary coupling for the towbar



022-754
galvanised



022-654
galvanised



022-704
for towbar with flange ball

Safety cable



022-724
safety cable engages the parking brake in case of detachment of the caravan or trailer ± 100 cm

Auxiliary coupling for trailer



022-694
strip + steel cable

Storage bag



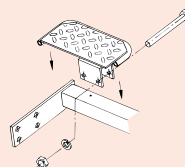
023-924
for AK4/AK6/
Ecofit towball

Spare keys



contact helpline

Universal footboard



022-374
for towbar with 60 mm square section tube 240 x 420 mm



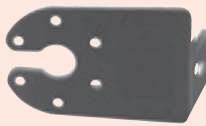
Socket plate



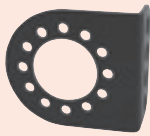
022-894
for Ø 32 mm clamp fitting

022-904
for Ø 38 mm clamp fitting

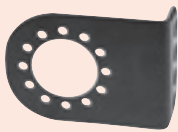
022-884
plastic plate only



023-574
metal long



024-184
metal short

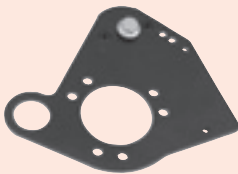


024-194
metal long



026-254 left
026-274 right

+



026-244
rotating plate left and right

Ecofit



023-774



024-624
new design

Cover plates



022-914
for type AK4-AK6 with
welded housing



023-644
for type AK4-AK6 with
screwed housing



024-614
for type AK4-AK6
with screwed housing
new design



023-874
for type AK11



026-234
for type AK41

Ball caps



022-104
black plastic

022-124
black plastic with Bosal logo



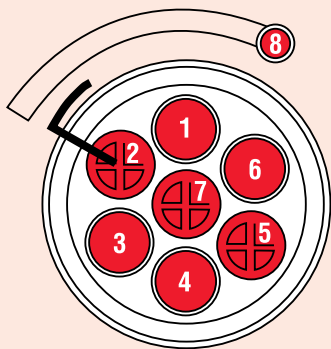
023-664
black plastic with
Bosal-Oris logo



7-pole

with rear fog light switch

010-178 / 022-004
without / with

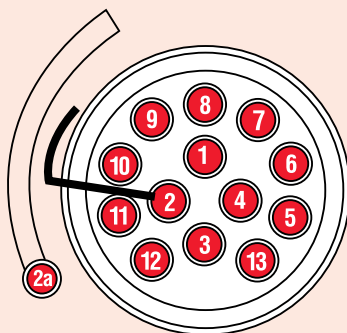


Pin	Function	color
1	Indicator left	yellow
2	Rear fog light	blue
3	Ground	white
4	Indicator right	green
5	Rear light right	brown
6	Stop lights	red
7	Rear light left	black
8	Rear fog light after switch	gray

13-pole DIN

(Jaeger)
with rear fog light switch

020-814

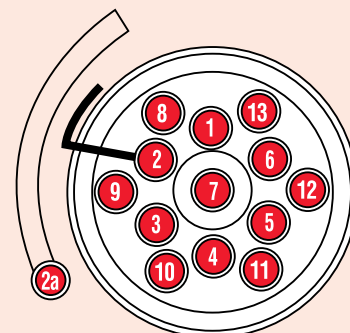


Pin	Function	color
1	Indicator left	yellow
2	Rear fog light	blue
2a	Rear fog light to lamp	gray
3	Ground	white
4	Indicator right	green
5	Rear light right	brown
6	Stop lights	red
7	Rear light left	black
8	Reversing lights	white big cable
9	Constant current	blue big cable
10	Battery charger	
11	Free	
12	Free	
13	Ground	white

13-pole Multicon

(West)
with rear fog light switch

021-018





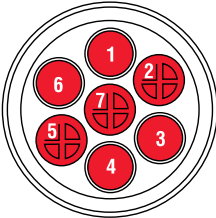
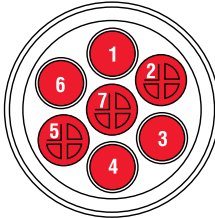
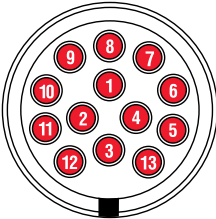
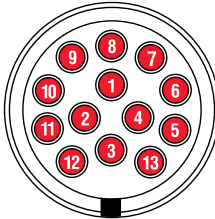
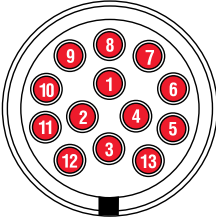
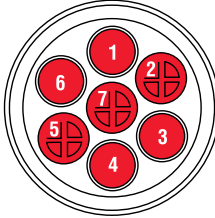
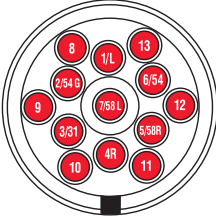
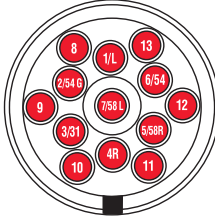
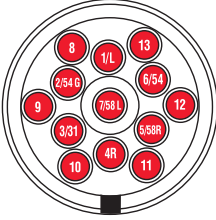
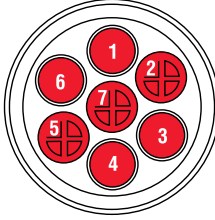
Pin	Function	color
1	Indicator left	yellow
2	Rear fog light	blue
2a	Rear fog light to lamp	gray
3	Ground	white
4	Indicator right	green
5	Rear light right	brown
6	Stop lights	red
7	Rear light left	black
8	Reversing lights	gray
9	Constant current	red big cable
10	Battery charger	green big cable
11	Free	
12	Free	
13	Ground	white

Specific cable sets

Please note that Bosal always recommends the use of vehicle specific cable sets, as newer vehicles often have features that make universal cable sets unsuitable. These include on-board diagnostics, computers and thin wiring. Possibly, activation of certain functions at the car dealer can be required. However, the obligatory trailer lighting is guaranteed. The activation can be done with the next regular service and will ensure correct functioning of e.g. parking sensors and/or trailer stability program (T-SP). Attention, trailers/caravans with LED lights are not always compatible with our specific cable sets. Contact your Bosal helpline for more information.





 Connection on trailer	Wiring adapter	 Connection on car
 <p>022-584 7-pole plastic plug</p>	<p>Direct connection</p>	<p>010-178 022-004 7-pole</p> 
 <p>022-454 13-pole plug Jaeger (DIN 72.570)</p>	<p>Direct connection</p>	<p>020-814 13-pole plug Jaeger</p> 
 <p>022-454 13-pole plug Jaeger (DIN 72.570)</p>	<p>Adapter cable 7 / 13 022-614 (023-394) 13 / 7 022-604 (022-504)</p>	<p>010-178 022-004 7-pole</p> 
 <p>022-484 13-pole plug Feder (Multicontacts)</p>	<p>Direct connection</p>	<p>021-018 13-pole plug West (Multicontacts)</p> 
 <p>022-484 13-pole plug Feder (Multicontacts)</p>	<p>Direct connection</p>	<p>010-178 022-004 7-pole</p> 



Universal wiring kits

010-178

7-pole universal wiring kit without rear fog light switch-off. Cable length is 200 cm. Socket is pre-fitted. (connection see page XV)

022-004

7-pole universal wiring kit with rear fog light switch-off. Cable length is 200 cm. Socket is pre-fitted. (connection see page XV)

020-814

13-pole DIN universal wiring kit with rear fog light switch-off. Cable length is 180 cm. Socket is pre-fitted. (connection see page XV)

021-018

13-pole Multicon (Feder) universal wiring kit with rear fog light switch-off. Cable length is 180 cm. Socket is pre-fitted. (connection see page XV)

022-718

Smart-Connect, 7-pole with PDC- and fog light switch-off. Pre-fitted socket.

022-788

Smart-Connect, 7-pole with PDC switch-off. No fog light switch-off. Pre-fitted socket.

022-798

Smart-Connect, 7-pole with PDC- and fog light switch-off. No pre-fitted socket.

022-808

Smart-Connect, 13-pole with PDC- and fog light switch-off. Pre-fitted socket.

022-708

Extension kit Smart-Connect, for vehicles with double fog light.



Smart-Connect

Newer vehicles have an increasing electronics complexity. The latest evolution in that respect has been the introduction of a network solution, better known as the Can-Bus. To answer to this new demand, Bosal introduced the SMART-CONNECT. The electronic module assures a high performance and reliability, and decreases the mounting time thanks to a pre-fitted socket. With the SMART-CONNECT, the connection to the vehicle's wiring is made by universal connectors, resulting in a wider range coverage, a faster availability for newly launched cars and an easy connection.

More information on www.catalogue.bosal.com

Wiring kit testers



028-804

Wiring kit tester for 7- and 13-pole

After connecting the towbar and the wiring kit, a light function check is essential. The new Bosal testbox checks the safety functions on all modern vehicles and trailers by use of a wireless 7- or 13-pole connection. The device is equipped with a rechargeable battery.



028-754

Wiring kit tester for 7- and 13-pole vehicle socket



023-454

Wiring kit tester for 7-pole trailer

023-464

Wiring kit tester for 13-pole trailer DIN-system

Can-Bus finder



029-194

Can-Bus tester



Smart-Sensor

024-608

7-pole e-set with pre-fitted socket.

024-644



Extension wire packed per 5.



Sockets



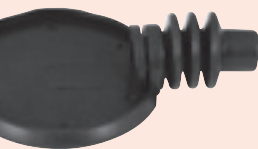
023-384
7-pole plastic socket
splash water proof



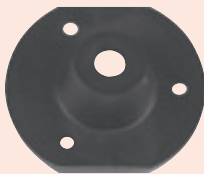
022-434
7-pole plastic socket with
rear fog lamp switch-off
splash water proof



023-744
7-pole ISO with micro
switch



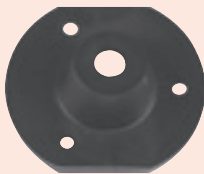
026-314
7-pole metal socket



022-634
protection seal



029-884
protection seal
side entrance



023-594
protection seal



028-844
socket cover

Plugs



022-584
7-pole plastic plug



022-594
7-pole metal plug

Adapter sockets



028-684
from 13-pole
socket DIN
to 7-pole plug



022-514
from 13-pole
socket DIN to
13-pole plug
Multicon



022-504
mini adapter
from 13-pole
socket DIN to
7-pole plug



023-654
quick adapter
from 7-pole
socket to 13-pole
DIN plug



West 13-pole plug, socket, dual purpose 7- and 13-pole for trailers and caravans

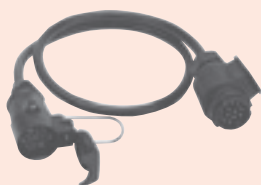


023-564
ISO/DIN 1724
13-pole socket with micro switch, West system, protection seal, bolts and nuts included



022-484
ISO/DIN 1724
13-pole plug West-system

Adapter cables



022-604
from 13-pole DIN socket to 7-pole plug



022-614
from 7-pole socket to 13-pole DIN plug



026-904
from 13-pole West plug to 13-pole DIN socket

13-pole plug - sockets conforming to DIN

023-604
13-pole high socket with rear fog lamp switch-off protection seal, bolts and nuts included



023-964
13-pole low socket with rear fog lamp switch-off

023-764
13-pole DIN with micro switch



022-454
13-pole plug DIN