

# EBS PRODUCT CATALOGUE

...FOR TRUCK & BUS APPLICATIONS:  
IVECO, MAN, MERCEDES BENZ, RENAULT TRUCKS, SCANIA & VOLVO

TRUCKSERVICES 

Disclaimer...

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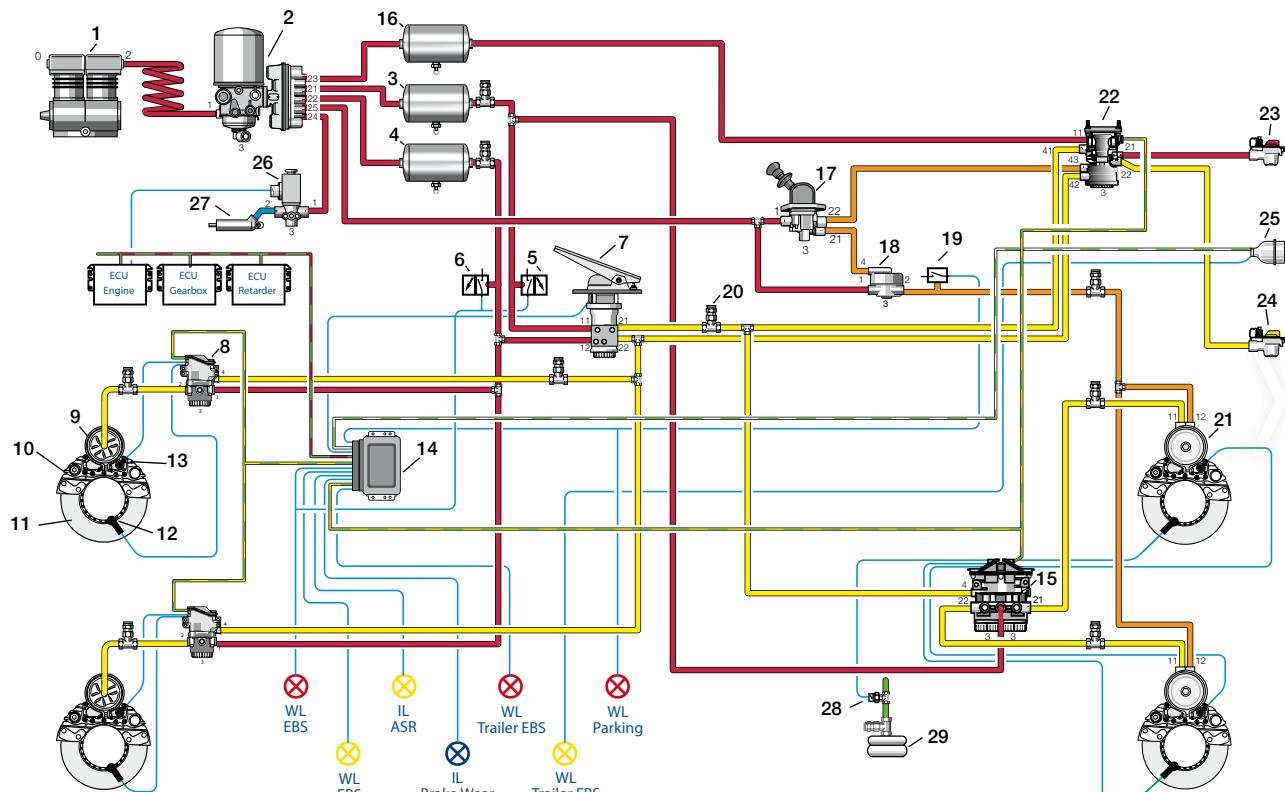
This disclaimer is an English translation of a German text, which should be referred to for all legal purposes. Any legal disputes arising from the use of this information shall be subject to German law.

## GLOSSARY OF ABBREVIATIONS

Abbreviation	Description
<b>ABS</b>	ABS (Anti-lock Braking System)
<b>CAN</b>	Controller Area Network
<b>CMU</b>	Communication and Measuring Unit
<b>EAC</b>	Electronic Air Control Unit
<b>EBS</b>	Electronic Braking System
<b>ECA</b>	Electronic Clutch Actuator
<b>ECU</b>	Electronic Control Unit
<b>EPM</b>	Electro-Pneumatic Module
<b>ESP</b>	Electronic Stability Program
<b>FBM</b>	Foot Brake Module
<b>OBD</b>	Diagnostic Connection
<b>SAS</b>	Steering Angle Sensor
<b>TCM</b>	Trailer Control Module
<b>TEBS</b>	Trailer Electronic Braking System
<b>UDIF</b>	Universal Diagnostics Interface
<b>YRS</b>	Yaw Rate Sensor

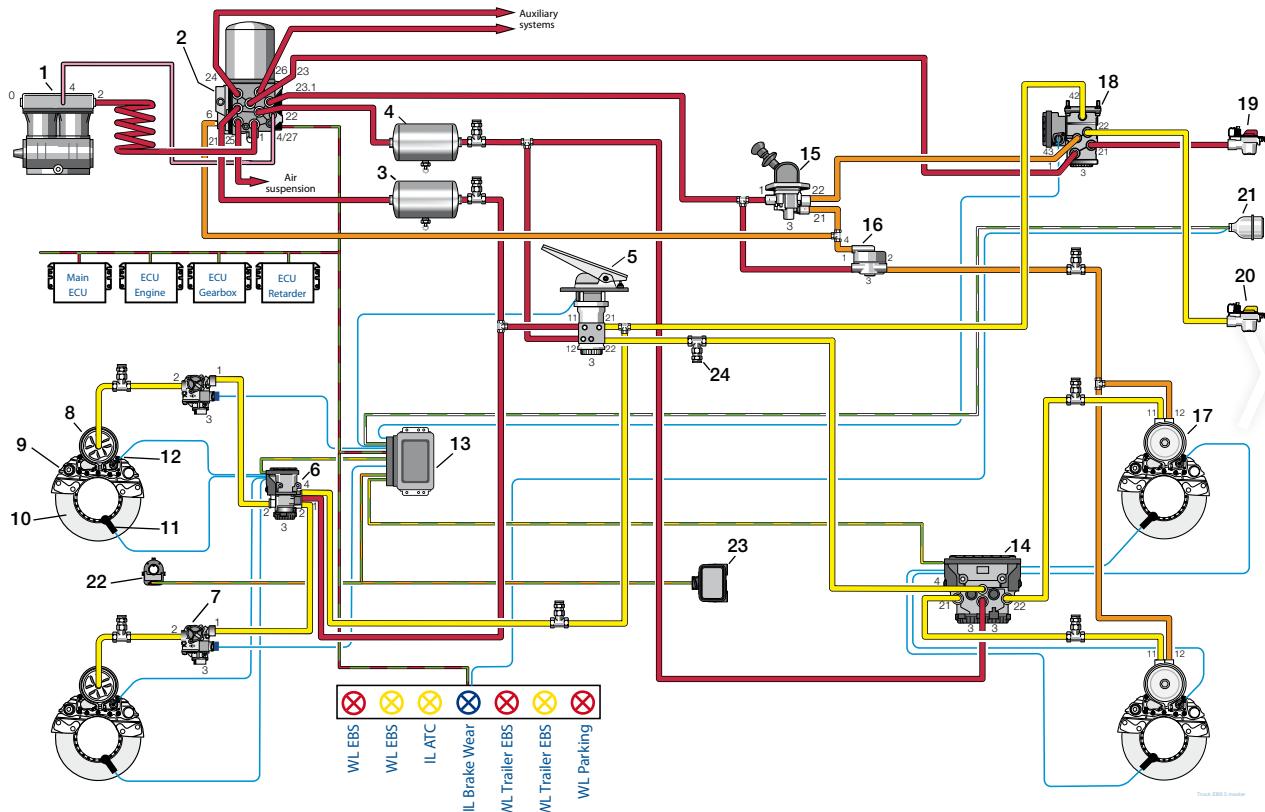
## KNORR-BREMSE ELECTRONIC BRAKING SYSTEM FOR TRUCKS (EBS 2.X)

1. Compressor
2. Air Processing Unit
3. Air Reservoir Circuit 1
4. Air Reservoir Circuit 2
5. Pressure Switch Circuit 1
6. Pressure Switch Circuit 2
7. EBS Foot Brake Module
8. EBS 1-Channel Module
9. Brake Chamber
10. Air Disc Brake
11. Brake Disc
12. Sensing Ring and Speed Sensor
13. Wear Sensor
14. EBS ECU
15. EBS 2-Channel Module
16. Air Reservoir Circuit 3
17. Hand Control Valve
18. Relay Valve
19. Pressure Switch
20. Test Connector
21. Spring Brake
22. EBS Trailer Control Module
23. Coupling Head "Supply"
24. Coupling Head "Control"
25. EBS Connection ISO 7638
26. Solenoid Valve
27. Operating Cylinder
28. Pressure Sensor
29. Air Spring Bellows



## KNORR-BREMSE ELECTRONIC BRAKING SYSTEM FOR TRUCKS (EBS 5)

1. Compressor
2. Electronic Air Control (EAC) Unit
3. Air Reservoir Circuit 1
4. Air Reservoir Circuit 2
5. Foot Brake Module
6. EBS One Channel Module
7. Pressure Control Modulator
8. Brake Chamber
9. Air Disc Brake
10. Brake Disc and Sensing Ring
11. Wheel Speed Sensor
12. Wear Sensor
13. EBS Electronic Control Unit (ECU)
14. EBS Two Channel Module
15. Hand Control Valve
16. Relay Valve
17. Spring Brake
18. EBS Trailer Control Module
19. Coupling Head "Supply"
20. Coupling Head "Control"
21. EBS Connection ISO 7638
22. ESP Steering Angle Sensor
23. ESP Yaw Rate Sensor
24. Test Connector

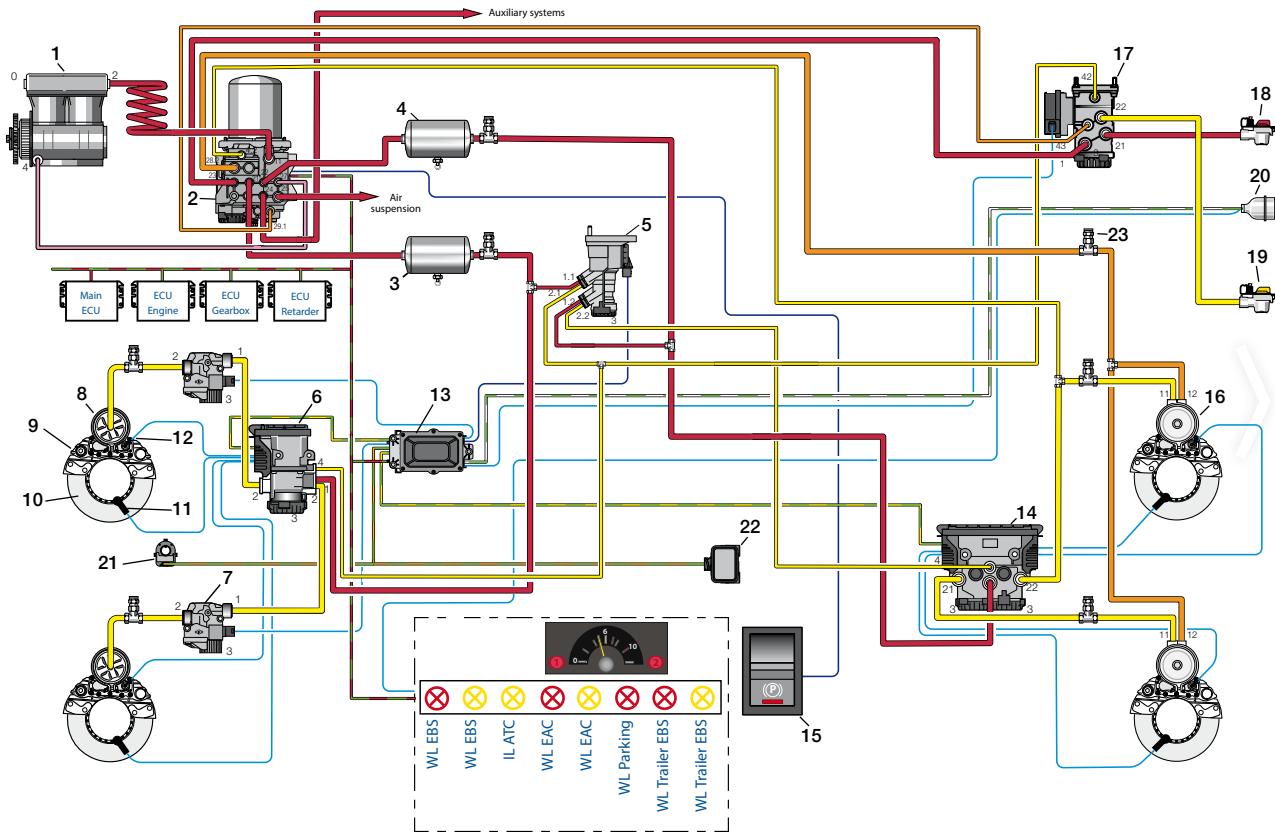


## KNORR-BREMSE ELECTRONIC BRAKING SYSTEM FOR TRUCKS (EBS 7)

1. Compressor with Clutch
2. Electronic Air Control (EAC) Unit
3. Air Reservoir Circuit 1
4. Air Reservoir Circuit 2
5. EBS Foot Brake Module
6. EBS One Channel Module
7. Pressure Control Modulator
8. Brake Chamber
9. Air Disc Brake
10. Brake Disc and Sensing Ring
11. Wheel Speed Sensor
12. Wear Sensor
13. EBS Electronic Control Unit (ECU)
14. EBS Two Channel Module
15. Hand Control Unit
16. Spring Brake
17. EBS Trailer Control Module
18. Coupling Head "Supply"
19. Coupling Head "Control"
20. EBS Connection ISO 7638
21. ESP Steering Angle Sensor
22. ESS Yaw Rate Sensor \*
23. Test Connector

\* May be integrated in the ECU (13)

- Supply
- ESS Signal
- Service Brake
- Parking Brake
- CAN-Signal "Control"
- CAN-Signal "Trailer"
- CAN-Signal "ESP"
- CAN-Signal "J1939"
- Analogue Electrical Signal
- Digital Electrical Signal
- WL Warning Lamp
- IL Information Lamp



## Operation

When the driver depresses the brake pedal, the FBM triggers the 'brake' function via EBS. The central ECU recognises the fact that the driver is applying the brakes and controls the electronics in the EPMs via CAN-brake. Electronics within each EPM trigger their respective solenoid valves and evaluate the signals from the wheel speed sensors (implementing the ABS function when necessary) and brake wear sensors. The EPMs feed air to the brake actuators and control the pressure in accordance with the control input. The TCM controls the pressure in the trailer braking system and ensures minimal coupling forces. The pneumatic dual circuit design ensures that secondary braking performance requirements are achieved in the unlikely event of an EBS failure.

## Faster brake reaction time, reduced stopping distance

Knorr-Bremse EBS results in braking pressure not only building up faster but also simultaneously in all brake actuators. This reduces the stopping distance since the brake pressure is applied directly by the EPMs to the actuators. The brakes respond without delay. At the same time, the excellent control sensitivity serves to increase braking comfort. The EBS coupling force control precisely matches the braking effects between towing vehicle and trailer. This ensures that both vehicles brake smoothly and at precisely the same time.

## Less wear, longer service intervals

EBS results in an equal demand being placed on each brake. When the brakes are released, all the brake actuators are exhausted immediately. The EBS optimises brake management by utilising the effects of the retarder or engine brake to reduce load on the wheel brakes. Furthermore, brake wear control ensures that the brake pad/disc wear is uniform throughout their service life. This means an increase in the useful life of the brakes of up to 20%.

## ESP Function

ESP only intervenes to restore directional stability when there is a difference between the driver's input (the direction wished for by the driver) and the vehicle's actual movement. During "understeer", i.e. when the vehicle travels on a greater radius than that defined by the steering wheel angle, the vehicle is turned back onto the 'correct' course by ESP applying the brakes at the inside rear wheel. In the case of "oversteer", the rear of the tractor drifts to the outside of the curve. In order to put the tractor/semi-trailer combination back on course, ESP now applies the brakes on the tractor's outside front wheel and all of the semi-trailer's wheels.

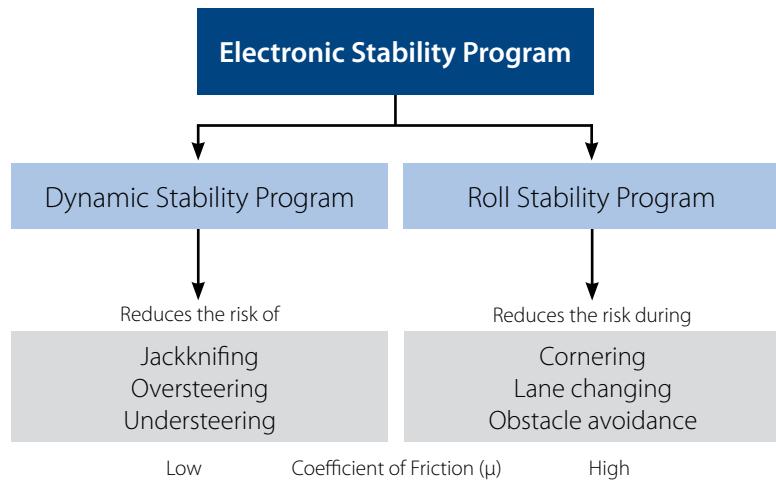
## Protection against Roll-Over

Especially in the case of articulated vehicles, ESP reduces the possibility of roll-over occurring. The system evaluates a variety of different sensor signals and, with the help of lateral acceleration data, detects the possibility of roll-over at a very early stage. As a result, ESP reduces engine torque and the brakes are selectively applied via EBS. The vehicle slows down and the danger of roll over is reduced.

### Without ESP



### With ESP



## Lifetime Efficiency – Knorr-Bremse Genuine Remanufactured EconX® EBS

In the highly competitive transport and logistics market, economical solutions are a must, especially when it comes to repairs. Knorr-Bremse Genuine Remanufactured EconX EBS products are service solutions for older vehicles that are genuine, economical and sustainable.

A genuine remanufacturing process is a highly industrialized and standardized process. In spite of great efforts in the return of old and used products (cores), the disassembling, the cleaning, the reconditioning, the testing and the reassembling of products – Knorr-Bremse can realize a cost advantage for the customer. This is especially attractive for owners of older vehicles, that have a reduced market value, and is supporting an economical value based repair. In addition to that, Knorr-Bremse remanufacturing as the highest form of recycling can realize e.g. 56% savings of CO<sub>2</sub> emissions with EconX EBS5 2-Channel Module compared to the service new product.

Knorr-Bremse has more than 60 years' experience in the remanufacturing of original parts. With the opening of a centralized 12,000 m<sup>2</sup> specialized remanufacturing plant in Liberec, Czech Republic, Knorr-Bremse has expanded its capacity. Each step in the remanufacturing process is designed to meet Knorr-Bremse's very high quality and safety standards. That is also why final (re-)assembly and testing of remanufactured EBS products takes place on the same assembly lines that are used to manufacture the OE new products.

	Knorr-Bremse Service New EBS	Knorr-Bremse EconX® EBS (Genuine Remanufactured)
<b>Warranty</b>	12-month warranty (standard IAM Warranty)	
<b>Replenishment lead time</b>	As known	Additional 2 weeks as known from service new products
<b>Technology</b>	That of a new OE product: the latest series production technology	As close as possible to the latest series production technology, based on the remanufactured components
<b>Life expectancy</b>	In line with established OE product quality	Shorter than for service new products due to remanufactured components
<b>Manufacturing process</b>	Assembled on the same production lines as new OE products	
<b>Testing</b>	Tested and inspected according to the same parameters and standards as a new OE product	
<b>Appearance</b>	That of a new OE product	May have signs of use and include reconditioned parts
<b>Housing colour</b>	As known from OE new products: Anodized grey	Anodized grey or lacquered black and housings might be colored differently
<b>Quality management system</b>	Knorr-Bremse quality management system	
<b>Recommended for</b>	All vehicle ages	The current value related repair of older vehicles
<b>Available product types</b>	The full Knorr-Bremse product range	EconX EBS2 1Ch, 2Ch, TCM, FBM EconX EBS5 1Ch, 2Ch, TCM, FBM



## NEO Diagnostics: most braking systems, most manufacturers, most options.

Wherever trucks, trailers and buses are serviced, repaired or overhauled there is increasing demand for intelligent diagnostic tools for their electronic systems. Knorr-Bremse's response to this challenge is NEO System Diagnostics, a state-of-the-art generation of diagnostics that is unrivalled in terms of economy, performance, design and future proofing. Practical training is provided to ensure efficient use of the system from the very outset.

NEO is an innovative solution that offers automated testing and measurement routines enabling modern workshops to provide high integrity, professional diagnostic services for many types of commercial vehicle electronic braking systems. NEO is available in three main versions that provide a range of functionality designed to meet the specific requirements of different sizes and type of workshop. Depending upon the version selected, NEO can be directly linked to the braking system's ECU and the vehicle peripherals, and offers automatic or semi-automatic recognition of the braking system, irrespective of manufacturer or configuration.

NEO can communicate with the vehicle's electronic systems, carry out measurements, conduct diagnosis, provide clear service instructions and ultimately check that the servicing has been carried out correctly.

Inexpensive to purchase, the NEO diagnostics solution represents a future-proof investment as it can be updated/upgraded at any time. Users of earlier Knorr-Bremse diagnostics systems will also be able to use all of their existing peripherals with the NEO solution. NEO is user friendly and provides accessible, detailed advice on systems and service; in some cases using computer animation. Knorr-Bremse's NEO Training Courses provide practical training on the system's broad range of functions, either in-house or at a Knorr-Bremse training facility.

# NEO | green



Part No: K019470N00

## Basic diagnostics

The easy-to-use NEO|green system provides an inexpensive introduction to the world of professional diagnostics for electronic braking systems. The robust hard case contains everything required for communication with the Electronic Control Unit (ECU) via the diagnostics interface, including a Universal Diagnostics Interface (UDIF) and a number of vehicle-specific adaptors. The NEO|green software runs on any Windows®-based computer that meets certain technical specifications. A DVD with the latest version of the software is also included in this introductory package. Should you require additional functionality from your diagnostics tool for more sophisticated requirements you can upgrade from NEO|green to NEO|orange or NEO|blue at any time.

Once the NEO | green software has been installed on a suitable PC, the diagnostics tool can communicate with many braking system ECUs.

# NEO Connecting Cables



## NEO CONNECTING CABLES

1



2



3



4



5



6



7



8



9



10



11



12



13



14



15



16



17



18



19



20



21



22



23



## NEO CONNECTING CABLES



Part Number	Description	Vehicle Manufacturer	System(s)	Use with NEO system	Fig
<b>K019470N00</b>	NEO   green Starter Kit		Various		1
<b>K019471N00</b>	NEO   orange Starter Kit		Various		2
<b>K025338N00</b>	NEO   blue Full Version Kit		Various		3
<b>K025340N00</b>	NEO   green Upgrade Kit <sup>1)</sup> (upgrade from ECUTalk®)		Various		4
<b>K001113N00</b>	EBS Connecting Cable (ECU)	Various	EBS 2.2/2.3	Blue	7
<b>K001114N00</b>	EBS Connecting Cable (Peripheral equipment)	Various	EBS 2.2/2.3	Blue	10
<b>K012567N00</b>	EBS Connecting Cable (ECU)	Scania	EBS 2.1 only	Blue	5

1) The NEO | green Upgrade Kit is specially designed for customers who already have the Knorr-Bremse ECUTalk® trailer software and would like to upgrade to NEO | green.

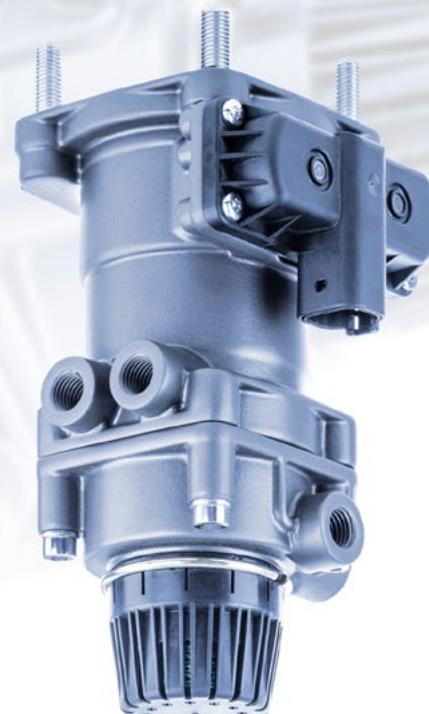
## NEO CONNECTING CABLES

Part Number	Description	Vehicle Manufacturer	System(s)	Use with NEO system	Fig
<b>K012568N00</b>	EBS Connecting Cable (Peripheral equipment)	Scania	EBS 2.1 only	Blue	6
<b>K017175N00</b>	Connecting Cable 1 (red)		Various	Green, Orange & Blue	8
<b>K017176N00</b>	Connecting Cable 2 (yellow)		Various	Green, Orange & Blue	9
<b>K017180N00</b>	Truck/Bus	Renault Trucks	I8, EU12, ABS 2x, Wabco C, EBS 2 & Clutch (ECA)	Green, Orange & Blue	13
<b>K017181N00</b>	Truck/Bus - OBD	Truck/Bus	Various	Green, Orange & Blue	14
<b>K017182N00</b>	Truck/Bus	Scania	Gamma 2E/2P, Wabco C/D & EBS 2	Green, Orange & Blue	15
<b>K017185N00</b>	Truck/Bus	Volvo	KB92, EBS 2, Wabco C/D & Clutch (ECA)	Green, Orange & Blue	18
<b>K017187N00</b>	Truck/Bus - 12 pin	MAN	KB92, KB3AL, Gamma 2E/2M/3M & CI12	Green, Orange & Blue	20
<b>K017500N00</b>	Connecting Cable (Peripheral equipment)	Iveco, MAN, Renault Trucks, Scania & Volvo	EBS 5	Blue	11
<b>K017501N00</b>	Connecting Cable	Iveco, MAN, Renault Trucks, Scania & Volvo	EBS 5	Blue	12
<b>K017503N00</b>	EBS 5 ECU X1 CAN Adapter	Iveco, MAN, Renault Trucks, Scania & Volvo	EBS 5	Green, Orange & Blue	22
<b>K018306N00</b>	Connecting Cable 3 (black)		Various	Green, Orange & Blue	23
<b>K018307N00</b>	Connecting Cable 4 (blue)		Various	Green, Orange & Blue	24
<b>K018308N00</b>	Connecting Cable 5 (green)		Various	Green, Orange & Blue	25
<b>K018310N00</b>	Connecting Cable 6 (white)		Various	Green, Orange & Blue	26

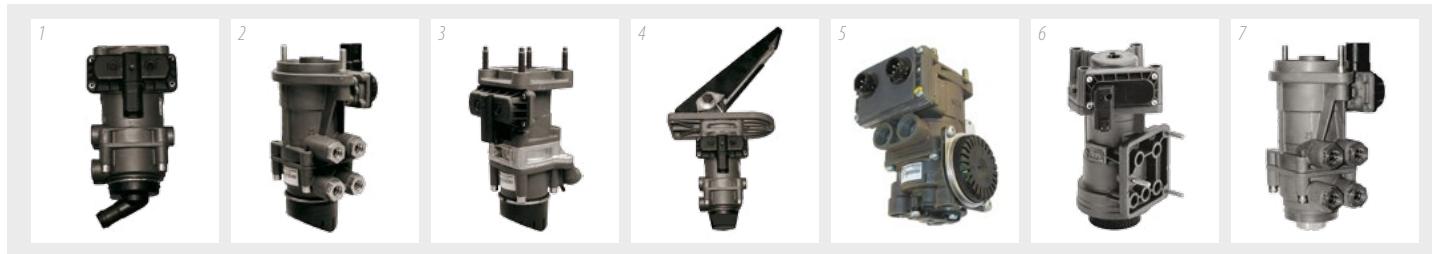
## NEO CONNECTING CABLES

Part Number	Description	Vehicle Manufacturer	System(s)	Use with NEO system	Fig
<b>K018312N00</b>	UDIF to CAN Cable		Various	Green, Orange & Blue	27
<b>K034101N00</b>	EBS Breakout Box Cable (1-Channel EPM)	Scania, Renault Trucks & Volvo	EBS 5	Orange & Blue	28
<b>K034102N00</b>	EBS Breakout Box Cable (2-Channel EPM)	Scania, Renault Trucks & Volvo	EBS 5	Orange & Blue	29
<b>K034103N00</b>	EBS Breakout Box Cable (1-Channel EPM)	MAN	EBS 5	Orange & Blue	30
<b>K034104N00</b>	EBS Breakout Box Cable (2-Channel EPM)	MAN	EBS 5	Orange & Blue	29
<b>Z007887</b>	Connecting Cable (UDIF to PC - USB)		Various	Green	32
<b>II39557F</b>	Pressure Testing Set		Various	Orange & Blue	33
<b>K001166N00</b>	EBS Breakout Box		EBS	Orange & Blue	34
<b>K015615N00</b>	Wireless Card for CMU	Various	Various	Orange & Blue	35
<b>K001344N00</b>	Measuring Adapter Cable (Test Probes)		Various	Orange & Blue	16
<b>K001345N00</b>	Measuring Adapter Cable (Deutsch Plug, 1-Channel EPM)		EBS 2.2/2.3	Orange & Blue	17
<b>K001346N00</b>	Measuring Adapter Cable (G+H Plug, 1-Channel EPM)		EBS 2.2/2.3	Orange & Blue	19
<b>K001347N00</b>	Measuring Adapter Cable (Deutsch Plug, 2-Channel EPM)		EBS 2.2/2.3	Orange & Blue	21
<b>K001348N00</b>	Measuring Adapter Cable (G+H Plug, 2-Channel EPM)		EBS 2.2/2.3	Orange & Blue	31

# Foot Brake Modules (FBM)



## FOOT BRAKE MODULES (FBM)



OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	
<b>Iveco - Irisbus</b>	K005485	EBS 5	K024928N50		4
<b>Iveco - Irisbus</b>	K024928	EBS 5	K024928N50		4
<b>MAN</b>	K039530	EBS 2	K039530N50		2
<b>MAN</b>	Z002932	EBS 2	K039546N50		7
<b>MAN</b>	0486200006	EBS 2	K039544N50		2
<b>MAN</b>	0486200007	EBS 2	K039530N50		2
<b>MAN</b>	0486200007	EBS 2	K039530X50	** EconX	2
<b>MAN</b>	0486200011	EBS 2	K039544N50		2
<b>MAN</b>	K039544	EBS 2	K039544N50		2
<b>MAN</b>	K039546	EBS 2	K039546N50		7
<b>MAN</b>	K000926	EBS 5	K039569N50		2
<b>MAN</b>	K000926	EBS 5	K039569X50	** EconX	2
<b>MAN</b>	K007145	EBS 5	K039571N50		2

\*\* Knorr-Bremse Genuine Remanufactured Product

## FOOT BRAKE MODULES (FBM)

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>MAN</b>	K039569	EBS 5.X	K039569N50		2
<b>MAN</b>	K039571	EBS 5.X	K039571N50		2
<b>Mercedes</b>	II37181	EBS 4	II37181N50		5
<b>Mercedes</b>	K014773	EBS 5.1	K014773N50	7)	
<b>Renault</b>	0486200101	EBS 2	0486200101N50		3
<b>Renault</b>	0486200103	EBS 2	0486200101N50		3
<b>Renault</b>	0486200104	EBS 2	0486200104N50		3
<b>Renault</b>	0486200104	EBS 2	0486200104X50	** EconX	3
<b>Renault</b>	0486200105	EBS 2	0486200104N50		3
<b>Renault</b>	K001428	EBS 5	K040158N50		3
<b>Renault</b>	K001428	EBS 5	K040158X50	** EconX	3
<b>Renault</b>	K001894	EBS 5	K040156N50		3
<b>Renault</b>	K001894	EBS 5	K040156X50	** EconX	3
<b>Renault</b>	K040158	EBS 5.X	K040158N50		3
<b>Renault</b>	K040158	EBS 5.X	K040158X50	** EconX	3
<b>Renault</b>	K040156	EBS 5.X	K040156N50		3
<b>Renault</b>	K040156	EBS 5.X	K040156X50	** EconX	3
<b>Renault</b>	K046640	EBS 7	K103367K50	3)	
<b>Scania</b>	0486200002	EBS 2	0486200008N50		6

3) Only available as kit incl. 4 nuts &amp; grease

7) Not available before 2017

\*\* Knorr-Bremse Genuine Remanufactured Product

## FOOT BRAKE MODULES (FBM)

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>Scania</b>	0486200008	EBS 2	0486200008N50		6
<b>Scania</b>	0486200008	EBS 2	0486200008X50	** EconX	6
<b>Scania</b>	0486200009	EBS 2	0486200008N50		6
<b>Scania</b>	K000087	EBS 5	K044696N50		3
<b>Scania</b>	K000087	EBS 5	K044696X50	** EconX	3
<b>Scania</b>	K001973	EBS 5	K044694N50		1
<b>Scania</b>	K044696	EBS 5.X	K044696N50		3
<b>Scania</b>	K044696	EBS 5.X	K044696X50	** EconX	3
<b>Scania</b>	K044694	EBS 5.X	K044694N50		1
<b>Scania</b>	K055628	EBS 7	K055628N50	4)	
<b>Volvo</b>	0486200004	EBS 2	0486200004N50		1
<b>Volvo</b>	0486200004	EBS 2	0486200004X50	** EconX	1
<b>Volvo</b>	0486200005	EBS 2	0486200004N50		1
<b>Volvo</b>	0486200005	EBS 2	0486200004X50	** EconX	1
<b>Volvo</b>	0486200202	EBS 2	0486200202N50		4
<b>Volvo</b>	0486200203	EBS 2	0486200202N50		4
<b>Volvo</b>	K000928	EBS 5	K040159N50		1
<b>Volvo</b>	K000928	EBS 5	K040159X50	** EconX	1
<b>Volvo</b>	K040159	EBS 5.X	K040159N50		1
<b>Volvo</b>	K040159	EBS 5.X	K040159X50	** EconX	1

4) Not available before 2018

\*\* Knorr-Bremse Genuine Remanufactured Product

## FOOT BRAKE MODULES (FBM)

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>Volvo</b>	K001974	EBS 5	K024928N50		4
<b>Volvo</b>	K001974	EBS 5	K024928X50	** EconX	4
<b>Volvo</b>	K024928	EBS 5	K024928N50		4
<b>Volvo</b>	K024928	EBS 5	K024928X50	** EconX	4
<b>Volvo</b>	K040156	EBS 5	K040156N50		3
<b>Volvo</b>	K040156	EBS 5	K040156X50	** EconX	3
<b>Volvo</b>	K021231	EBS 5	K024928N50		4
<b>Volvo</b>	K021231	EBS 5	K024928X50	** EconX	4
<b>Volvo</b>	K027386	EBS 7	K103367K50	3)	

3) Only available as kit incl. 4 nuts &amp; grease

\*\* Knorr-Bremse Genuine Remanufactured Product

# Electronic Control Unit (ECU)



## ELECTRONIC CONTROL UNITS (ECU)



Note: all replacement EBS electronic control units require programming either using data mirroring (which can be carried out using the NEO System diagnostics) or by the Vehicle Manufacturer with suitable dataset.

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes
<b>Iveco - Irisbus</b>	0486106072	EBS 5	0486106307N50	
<b>Iveco - Irisbus</b>	0486106073	EBS 5	0486106307N50	
<b>Iveco - Irisbus</b>	0486106088	EBS 5	0486106307N50	
<b>Iveco - Irisbus</b>	0486106109	EBS 5.X	0486106314N50	
<b>MAN</b>	0486106018	EBS 2.2	0486106042N50	
<b>MAN</b>	0486106015	EBS 2.2		1)
<b>MAN</b>	0486106019	EBS 2.2	0486106019N50	
<b>MAN</b>	0486106012	EBS 2.2		1)
<b>MAN</b>	0486106027	EBS 2.3	0486106042N50	
<b>MAN</b>	0486106029	EBS 2.3	0486106042N50	
<b>MAN</b>	0486106041	EBS 2.3	0486106042N50	

1) Not available in IAM

## ELECTRONIC CONTROL UNITS (ECU)

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes
MAN	0486106042	EBS 2.3	0486106042N50	
MAN	0486106051	EBS 5	0486106303N50	
MAN	0486106052	EBS 5	0486106303N50	
MAN	0486106070	EBS 5	0486106303N50	
MAN	0486106071	EBS 5	0486106303N50	
MAN	0486106082	EBS 5	0486106303N50	
MAN	0486106083	EBS 5	0486106303N50	
MAN	0486106086	EBS 5	0486106303N50	
MAN	0486106087	EBS 5	0486106303N50	
MAN	0486106089	EBS 5	0486106303N50	
MAN	0486106090	EBS 5	0486106303N50	
MAN	0486106301	EBS 5	0486106303N50	
MAN	0486106100	EBS 5.X	0486106309N50	
MAN	0486106118	EBS 5.X	0486106309N50	
MAN	0486106129	EBS 5.X	0486106309N50	
MAN	0486106101	EBS 5.X	0486106308N50	
MAN	0486106130	EBS 5.X	0486106308N50	
MAN	0486106136	EBS 5.X	0486106308N50	
MAN	0486106119	EBS 5.X	0486106308N50	
MAN	0486106114	EBS 5.X	0486106309N50	
MAN	0486106120	EBS 5.X	0486106309N50	

## ELECTRONIC CONTROL UNITS (ECU)

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes
<b>MAN</b>	0486106131	EBS 5.X	0486106309N50	
<b>MAN</b>	0486106135	EBS 5.X	0486106309N50	
<b>Mercedes</b>	II36407	EBS 4		1)
<b>Mercedes</b>	II40400	EBS 4		1)
<b>Renault</b>	0486106014	EBS 2.2	0486106024N50	
<b>Renault</b>	0486106024	EBS 2.2	0486106024N50	
<b>Renault</b>	0486106057	EBS 5	0486106305N50	
<b>Renault</b>	0486106067	EBS 5	0486106305N50	
<b>Renault</b>	0486106069	EBS 5	0486106305N50	
<b>Renault</b>	0486106074	EBS 5	0486106305N50	
<b>Renault</b>	0486106077	EBS 5	0486106305N50	
<b>Renault</b>	0486106078	EBS 5	0486106305N50	
<b>Renault</b>	0486106079	EBS 5	0486106305N50	
<b>Renault</b>	0486106080	EBS 5	0486106305N50	
<b>Renault</b>	0486106081	EBS 5	0486106305N50	
<b>Renault</b>	0486106084	EBS 5	0486106305N50	
<b>Renault</b>	0486106085	EBS 5	0486106305N50	
<b>Renault</b>	0486106110	EBS 5.X	0486106312N50	
<b>Renault</b>	0486106111	EBS 5.X	0486106312N50	
<b>Renault</b>	0486106112	EBS 5.X	0486106312N50	

1) Not available in IAM

## ELECTRONIC CONTROL UNITS (ECU)

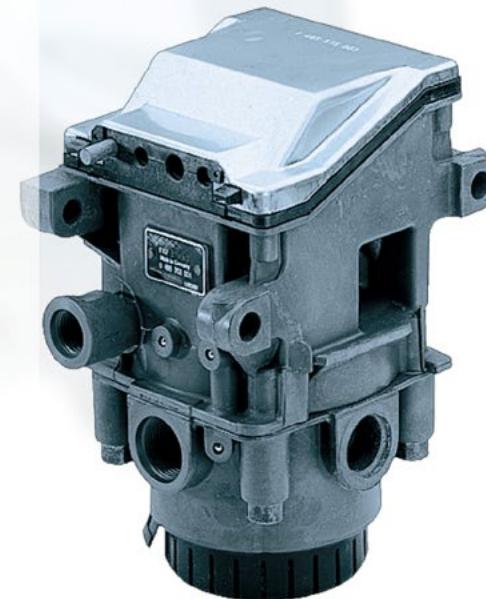
OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes
<b>Renault</b>	0486106115	EBS 5.X	0486106312N50	
<b>Renault</b>	0486106123	EBS 5.X	0486106312N50	
<b>Renault</b>	0486106139	EBS 5.X	0486106312N50	
<b>Renault</b>	0486106116	EBS 5.X	0486106312N50	
<b>Renault</b>	0486106124	EBS 5.X	0486106312N50	
<b>Renault</b>	0486106138	EBS 5.X	0486106312N50	
<b>Renault</b>	0486106117	EBS 5.X	0486106312N50	
<b>Scania</b>	0486106001	EBS 2.0		1)
<b>Scania</b>	0486106008	EBS 2.1	0486106008N50	
<b>Scania</b>	0486106010	EBS 2.2	0486106021N50	
<b>Scania</b>	0486106021	EBS 2.2	0486106021N50	
<b>Scania</b>	0486106050	EBS 5	0486106306N50	
<b>Scania</b>	0486106065	EBS 5	0486106306N50	
<b>Scania</b>	0486106104	EBS 5.X	0486106310N50	
<b>Scania</b>	0486106105	EBS 5.X	0486106310N50	
<b>Scania</b>	0486106121	EBS 5.X	0486106329N50	
<b>Scania</b>	0486106122	EBS 5.X	0486106329N50	
<b>Scania</b>	0486106128	EBS 5.X	0486106329N50	
<b>Volvo</b>	0486106006	EBS 2.2	0486106020N50	
<b>Volvo</b>	0486106016	EBS 2.2	0486106020N50	

1) Not available in IAM

## ELECTRONIC CONTROL UNITS (ECU)

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes
<b>Volvo</b>	0486106020	EBS 2.2	0486106020N50	
<b>Volvo</b>	0486106026	EBS 2.3	0486106028N50	
<b>Volvo</b>	0486106028	EBS 2.3	0486106028N50	
<b>Volvo</b>	0486106063	EBS 5	0486106304N50	
<b>Volvo</b>	0486106064	EBS 5	0486106304N50	
<b>Volvo</b>	0486106068	EBS 5	0486106304N50	
<b>Volvo</b>	0486106102	EBS 5.X	0486106311N50	
<b>Volvo</b>	0486106103	EBS 5.X	0486106311N50	
<b>Volvo</b>	0486106126	EBS 5.X	0486106311N50	
<b>SOE</b>	0486106106	EBS 5.X	0486106106N50	
<b>SOE</b>	0486106107	EBS 5.X	0486106106N50	

# 1-Channel Electro- Pneumatic Module (EPM)



## 1-CHANNEL ELECTRO-PNEUMATIC MODULES (EPM)



OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>Iveco - Irisbus</b>	K005496	EBS 5	K023219N50		3
<b>Iveco - Irisbus</b>	K023219	EBS 5.X	K023219N50		3
<b>MAN</b>	0486203012	EBS 2.2	0486203023N50		1
<b>MAN</b>	0486203012	EBS 2.2	0486203023X50	** EconX	1
<b>MAN</b>	0486203013	EBS 2.2	0486203023N50		1
<b>MAN</b>	0486203013	EBS 2.2	0486203023X50	** EconX	1
<b>MAN</b>	0486203016	EBS 2.2	0486203023N50		1
<b>MAN</b>	0486203016	EBS 2.2	0486203023X50	** EconX	1
<b>MAN</b>	0486203023	EBS 2.2	0486203023N50		1
<b>MAN</b>	0486203023	EBS 2.2	0486203023X50	** EconX	1
<b>MAN</b>	0486203032	EBS 2.3	0486203023N50		1
<b>MAN</b>	0486203032	EBS 2.3	0486203023X50	** EconX	1
<b>MAN</b>	K000913	EBS 5	K021204N50		3

\*\* Knorr-Bremse Genuine Remanufactured Product

## 1-CHANNEL ELECTRO-PNEUMATIC MODULES (EPM)

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>MAN</b>	K000913	EBS 5	K021204X50	** EconX	3
<b>MAN</b>	K021204	EBS 5.X	K021204N50		3
<b>MAN</b>	K021204	EBS 5.X	K021204X50	** EconX	3
<b>MAN</b>	K050211	EBS7	K050211N50	2)	4
<b>Mercedes</b>	II37083	EBS 4	II37083N50		2
<b>Mercedes</b>	K102408	EBS 5.1	K102408N50	7)	3
<b>Renault</b>	0486203030	EBS 2.2	0486203030N50		1
<b>Renault</b>	0486203030	EBS 2.2	0486203030X50	** EconX	1
<b>Renault</b>	0486203004	EBS 2.2	0486203030N50		1
<b>Renault</b>	0486203004	EBS 2.2	0486203030X50	** EconX	1
<b>Renault</b>	0486203017	EBS 2.2	0486203030N50		1
<b>Renault</b>	0486203017	EBS 2.2	0486203030X50	** EconX	1
<b>Renault</b>	0486203002	EBS 2.1	0486203030N50		1
<b>Renault</b>	0486203002	EBS 2.1	0486203030X50	** EconX	1
<b>Renault</b>	0486203028	EBS 2.2	0486203030N50		1
<b>Renault</b>	0486203028	EBS 2.2	0486203030X50	** EconX	1
<b>Renault</b>	0486203031	EBS 2.2	0486203030N50		1
<b>Renault</b>	0486203031	EBS 2.2	0486203030X50	** EconX	1
<b>Renault</b>	0486203034	EBS 2.3	0486203030N50		1

2) Not available before Q4.2016

7) Not available before 2017

\*\* Knorr-Bremse Genuine Remanufactured Product

## 1-CHANNEL ELECTRO-PNEUMATIC MODULES (EPM)

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>Renault</b>	0486203034	EBS 2.3	0486203030X50	** EconX	1
<b>Renault</b>	K000914	EBS 5	K021203N50		3
<b>Renault</b>	K000914	EBS 5	K021203X50	** EconX	3
<b>Renault</b>	K021203	EBS 5.X	K021203N50		3
<b>Renault</b>	K021203	EBS 5.X	K021203X50	** EconX	3
<b>Renault</b>	K093190	EBS 7	K093190N50		4
<b>Scania</b>	0486203001	EBS 2.0		1)	
<b>Scania</b>	0486203005	EBS 2.1	0486203025N50		1
<b>Scania</b>	0486203005	EBS 2.1	0486203025X50	** EconX	1
<b>Scania</b>	0486203009	EBS 2.2	0486203025N50		1
<b>Scania</b>	0486203009	EBS 2.2	0486203025X50	** EconX	1
<b>Scania</b>	0486203025	EBS 2.2	0486203025N50		1
<b>Scania</b>	0486203025	EBS 2.2	0486203025X50	** EconX	1
<b>Scania</b>	0486203026	EBS 2.2	0486203025N50		1
<b>Scania</b>	0486203026	EBS 2.2	0486203025X50	** EconX	1
<b>Scania</b>	K000085	EBS 5	K021202N50		3
<b>Scania</b>	K000085	EBS 5	K021202X50	** EconX	3
<b>Scania</b>	K021202	EBS 5.X	K021202N50		3
<b>Scania</b>	K021202	EBS 5.X	K021202X50	** EconX	3
<b>Scania</b>	K050214	EBS 7	K050214N50	4)	4

1) Not available in IAM

4) Not available before 2018

\*\* Knorr-Bremse Genuine Remanufactured Product

## 1-CHANNEL ELECTRO-PNEUMATIC MODULES (EPM)

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>Volvo</b>	0486203006	EBS 2.2	0486203033N50		1
<b>Volvo</b>	0486203006	EBS 2.2	0486203033X50	** EconX	1
<b>Volvo</b>	0486203014	EBS 2.2	0486203033N50		1
<b>Volvo</b>	0486203014	EBS 2.2	0486203033X50	** EconX	1
<b>Volvo</b>	0486203022	EBS 2.3	0486203033N50		1
<b>Volvo</b>	0486203022	EBS 2.3	0486203033X50	** EconX	1
<b>Volvo</b>	0486203024	EBS 2.3	0486203033N50		1
<b>Volvo</b>	0486203024	EBS 2.3	0486203033X50	** EconX	1
<b>Volvo</b>	0486203033	EBS 2.3	0486203033N50		1
<b>Volvo</b>	0486203033	EBS 2.3	0486203033X50	** EconX	1
<b>Volvo</b>	K000914	EBS 5	K021203N50		3
<b>Volvo</b>	K000914	EBS 5	K021203X50	** EconX	3
<b>Volvo</b>	K021203	EBS 5.X	K021203N50		3
<b>Volvo</b>	K021203	EBS 5.X	K021203X50	** EconX	3
<b>Volvo</b>	K093190	EBS 7	K093190N50		4
<b>SOE</b>	K010416	EBS 5	K021202N50		3
<b>SOE</b>	K010416	EBS 5	K021202X50	** EconX	3
<b>SOE</b>	K023220	EBS 5.X	K021202N50		3
<b>SOE</b>	K023220	EBS 5.X	K021202X50	** EconX	3

\*\* Knorr-Bremse Genuine Remanufactured Product

# 2-Channel Electro- Pneumatic Module (EPM)



## 2-CHANNEL ELECTRO-PNEUMATIC MODULES (EPM)



OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>Iveco - Irisbus</b>	K005498	EBS 5	K023213N50		2
<b>Iveco - Irisbus</b>	K023213	EBS 5.X	K023213N50		2
<b>MAN</b>	0486204008	EBS 2.2	0486204017N50		1
<b>MAN</b>	0486204008	EBS 2.2	0486204017X50	** EconX	1
<b>MAN</b>	0486204009	EBS 2.2	0486204017N50		1
<b>MAN</b>	0486204009	EBS 2.2	0486204017X50	** EconX	1
<b>MAN</b>	0486204012	EBS 2.2	0486204017N50		1
<b>MAN</b>	0486204012	EBS 2.2	0486204017X50	** EconX	1
<b>MAN</b>	0486204017	EBS 2.3	0486204017N50		1
<b>MAN</b>	0486204017	EBS 2.3	0486204017X50	** EconX	1
<b>MAN</b>	0486204024	EBS 2.3	0486204017N50		1
<b>MAN</b>	0486204024	EBS 2.3	0486204017X50	** EconX	1
<b>MAN</b>	K000921	EBS 5	K020024N50		2

\*\* Knorr-Bremse Genuine Remanufactured Product

## 2-CHANNEL ELECTRO-PNEUMATIC MODULES (EPM)

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>MAN</b>	K000921	EBS 5	K020024X50	** EconX	2
<b>MAN</b>	K015441	EBS 5	K023216N50		3
<b>MAN</b>	K020024	EBS 5.X	K020024N50		2
<b>MAN</b>	K020024	EBS 5.X	K020024X50	** EconX	2
<b>MAN</b>	K023216	EBS 5.X	K023216N50		3
<b>MAN</b>	K050209	EBS 7	K050209N50		4
<b>MAN</b>	K050210	EBS 7	K050209N50		4
<b>Mercedes</b>	K102407	EBS 5.1	K102407N50	7)	
<b>Renault</b>	0486204001	EBS 2.1	0486204021N50		1
<b>Renault</b>	0486204001	EBS 2.1	0486204021X50	** EconX	1
<b>Renault</b>	0486204021	EBS 2.1	0486204021N50		1
<b>Renault</b>	0486204021	EBS 2.1	0486204021X50	** EconX	1
<b>Renault</b>	0486204002	EBS 2.2	0486204021N50		1
<b>Renault</b>	0486204002	EBS 2.2	0486204021X50	** EconX	1
<b>Renault</b>	0486204023	EBS 2.2	0486204021N50		1
<b>Renault</b>	0486204023	EBS 2.2	0486204021X50	** EconX	1
<b>Renault</b>	0486204026	EBS 2.2	0486204021N50		1
<b>Renault</b>	0486204026	EBS 2.2	0486204021X50	** EconX	1
<b>Renault</b>	K000922	EBS 5	K020023N50		2
<b>Renault</b>	K000922	EBS 5	K020023X50	** EconX	2

7) Not available before 2017

\*\* Knorr-Bremse Genuine Remanufactured Product

## 2-CHANNEL ELECTRO-PNEUMATIC MODULES (EPM)

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>Renault</b>	K000923	EBS 5	K023215N50		3
<b>Renault</b>	K001411	EBS 5	K020023N50		2
<b>Renault</b>	K001411	EBS 5	K020023X50	** EconX	2
<b>Renault</b>	K020022	EBS 5.X	K020023N50		2
<b>Renault</b>	K020022	EBS 5.X	K020023X50	** EconX	2
<b>Renault</b>	K020023	EBS 5.X	K020023N50		2
<b>Renault</b>	K020023	EBS 5.X	K020023X50	** EconX	2
<b>Renault</b>	K023215	EBS 5.X	K023215N50		3
<b>Renault</b>	K093192	EBS 7	K093192N50		4
<b>Scania</b>	0486204004	EBS 2.2	0486204019N50		1
<b>Scania</b>	0486204004	EBS 2.2	0486204019X50	** EconX	1
<b>Scania</b>	0486204006	EBS 2.2	0486204019N50		1
<b>Scania</b>	0486204006	EBS 2.2	0486204019X50	** EconX	1
<b>Scania</b>	0486204019	EBS 2.2	0486204019N50		1
<b>Scania</b>	0486204019	EBS 2.2	0486204019X50	** EconX	1
<b>Scania</b>	0486204020	EBS 2.2	0486204019N50		1
<b>Scania</b>	0486204020	EBS 2.2	0486204019X50	** EconX	1
<b>Scania</b>	K000086	EBS 5	K032014N50		2
<b>Scania</b>	K000086	EBS 5	K032014X50	** EconX	2
<b>Scania</b>	K000088	EBS 5	K032014N50		2

\*\* Knorr-Bremse Genuine Remanufactured Product

## 2-CHANNEL ELECTRO-PNEUMATIC MODULES (EPM)

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>Scania</b>	K000088	EBS 5	K032014X50	** EconX	2
<b>Scania</b>	K016255	EBS 5	K032014N50		2
<b>Scania</b>	K016255	EBS 5	K032014X50	** EconX	2
<b>Scania</b>	K020020	EBS 5.X	K032014N50		2
<b>Scania</b>	K020020	EBS 5.X	K032014X50	** EconX	2
<b>Scania</b>	K020021	EBS 5.X	K032014N50		2
<b>Scania</b>	K020021	EBS 5.X	K032014X50	** EconX	2
<b>Scania</b>	K032014	EBS 5.X	K032014N50		2
<b>Scania</b>	K032014	EBS 5.X	K032014X50	** EconX	2
<b>Scania</b>	K125218	EBS 7	K125218N50	4)	
<b>Volvo</b>	0486204005	EBS 2.2	0486204025N50		1
<b>Volvo</b>	0486204005	EBS 2.2	0486204025X50	** EconX	1
<b>Volvo</b>	0486204010	EBS 2.2	0486204025N50		1
<b>Volvo</b>	0486204010	EBS 2.2	0486204025X50	** EconX	1
<b>Volvo</b>	0486204016	EBS 2.3	0486204025N50		1
<b>Volvo</b>	0486204016	EBS 2.3	0486204025X50	** EconX	1
<b>Volvo</b>	0486204018	EBS 2.3	0486204025N50		1
<b>Volvo</b>	0486204018	EBS 2.3	0486204025X50	** EconX	1
<b>Volvo</b>	0486204025	EBS 2.3	0486204025N50		1
<b>Volvo</b>	0486204025	EBS 2.3	0486204025X50	** EconX	1

4) Not available before 2018

\*\* Knorr-Bremse Genuine Remanufactured Product

## 2-CHANNEL ELECTRO-PNEUMATIC MODULES (EPM)

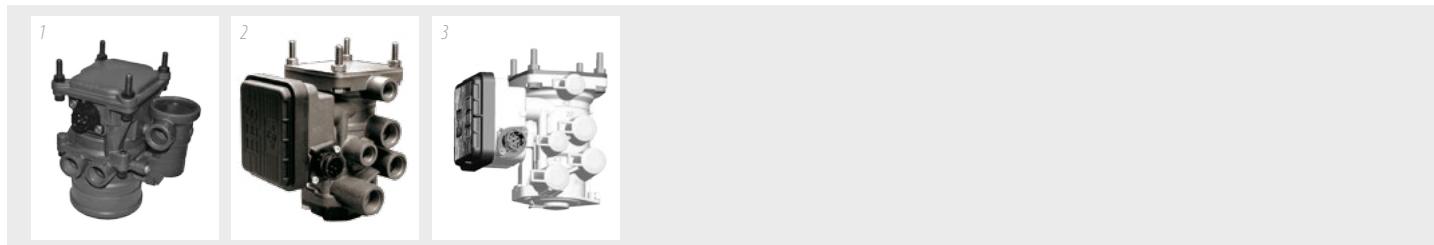
OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>Volvo</b>	K000922	EBS 5	K020023N50		2
<b>Volvo</b>	K000922	EBS 5	K020023X50	** EconX	2
<b>Volvo</b>	K001411	EBS 5	K020023N50		2
<b>Volvo</b>	K001411	EBS 5	K020023X50	** EconX	2
<b>Volvo</b>	K020022	EBS 5.X	K020023N50		2
<b>Volvo</b>	K020022	EBS 5.X	K020023X50	** EconX	2
<b>Volvo</b>	K020023	EBS 5.X	K020023N50		2
<b>Volvo</b>	K020023	EBS 5.X	K020023X50	** EconX	2
<b>Volvo</b>	K093192	EBS 7	K093192N50		4
<b>SOE</b>	K010415	EBS 5	K032014N50		2
<b>SOE</b>	K010415	EBS 5	K032014X50	** EconX	2
<b>SOE</b>	K023217	EBS 5.X	K032014N50		2
<b>SOE</b>	K023217	EBS 5.X	K032014X50	** EconX	2

\*\* Knorr-Bremse Genuine Remanufactured Product

# Trailer Control Module (TCM)



## TRAILER CONTROL MODULES (TCM)



OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>MAN</b>	0486205004	EBS 2.2	0486205022N50		1
<b>MAN</b>	0486205004	EBS 2.2	0486205022X50	** EconX	1
<b>MAN</b>	0486205010	EBS 2.2	0486205022N50		1
<b>MAN</b>	0486205010	EBS 2.2	0486205022X50	** EconX	1
<b>MAN</b>	0486205011	EBS 2.2	0486205022N50		1
<b>MAN</b>	0486205011	EBS 2.2	0486205022X50	** EconX	1
<b>MAN</b>	0486205016	EBS 2.2	0486205022N50		1
<b>MAN</b>	0486205016	EBS 2.2	0486205022X50	** EconX	1
<b>MAN</b>	0486205022	EBS 2.3	0486205022N50		1
<b>MAN</b>	0486205022	EBS 2.3	0486205022X50	** EconX	1
<b>MAN</b>	K000917	EBS 5	K020623N50		2
<b>MAN</b>	K000917	EBS 5	K020623X50	** EconX	2
<b>MAN</b>	K020623	EBS 5.X	K020623N50		2

\*\* Knorr-Bremse Genuine Remanufactured Product

## TRAILER CONTROL MODULES (TCM)

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>MAN</b>	K020623	EBS 5.X	K020623X50	** EconX	2
<b>Mercedes</b>	K000920	EBS 5.1	K000920N50	7)	
<b>Renault</b>	0486205006	EBS 2.2	0486205022N50		1
<b>Renault</b>	0486205006	EBS 2.2	0486205022X50	** EconX	1
<b>Renault</b>	0486205017	EBS 2.2	0486205022N50		1
<b>Renault</b>	0486205017	EBS 2.2	0486205022X50	** EconX	1
<b>Renault</b>	K000919	EBS 5	K020623N50		2
<b>Renault</b>	K000919	EBS 5	K020623X50	** EconX	2
<b>Renault</b>	K016060	EBS 5	K020626N50		3
<b>Renault</b>	K016060	EBS 5	K020626X50	** EconX	3
<b>Renault</b>	K020626	EBS 5.X	K020626N50		3
<b>Renault</b>	K020626	EBS 5.X	K020626X50	** EconX	3
<b>Renault</b>	K028781	EBS 7	K028781N50		
<b>Scania</b>	0486205001	EBS 2.2	0486205014N50		1
<b>Scania</b>	0486205001	EBS 2.2	0486205014X50	** EconX	1
<b>Scania</b>	0486205003	EBS 2.2	0486205014N50		1
<b>Scania</b>	0486205003	EBS 2.2	0486205014X50	** EconX	1
<b>Scania</b>	0486205014	EBS 2.2	0486205014N50		1
<b>Scania</b>	0486205014	EBS 2.2	0486205014X50	** EconX	1
<b>Scania</b>	0486205020	EBS 2.2	0486205014N50		1

7) Not available before 2017

\*\* Knorr-Bremse Genuine Remanufactured Product

## TRAILER CONTROL MODULES (TCM)

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>Scania</b>	0486205020	EBS 2.2	0486205014X50	** EconX	1
<b>Scania</b>	K000089	EBS 5	K020623N50		2
<b>Scania</b>	K000089	EBS 5	K020623X50	** EconX	2
<b>Scania</b>	K020622	EBS 5.X	K020623N50		2
<b>Scania</b>	K020622	EBS 5.X	K020623X50	** EconX	2
<b>Scania</b>	K103131	EBS 7	K103131N50	4)	
<b>Volvo</b>	0486205002	EBS 2.2	0486205022N50		1
<b>Volvo</b>	0486205002	EBS 2.2	0486205022X50	** EconX	1
<b>Volvo</b>	0486205008	EBS 2.2	0486205022N50		1
<b>Volvo</b>	0486205008	EBS 2.2	0486205022X50	** EconX	1
<b>Volvo</b>	0486205015	EBS 2.2	0486205022N50		1
<b>Volvo</b>	0486205015	EBS 2.2	0486205022X50	** EconX	1
<b>Volvo</b>	0486205019	EBS 2.3	0486205022N50		1
<b>Volvo</b>	0486205019	EBS 2.3	0486205022X50	** EconX	1
<b>Volvo</b>	K000918	EBS 5	K020624N50		2
<b>Volvo</b>	K000918	EBS 5	K020624X50	** EconX	2
<b>Volvo</b>	K000919	EBS 5	K020623N50		2
<b>Volvo</b>	K000919	EBS 5	K020623X50	** EconX	2
<b>Volvo</b>	K020624	EBS 5.X	K020624N50		2
<b>Volvo</b>	K020624	EBS 5.X	K020624X50	** EconX	2

4) Not available before 2018

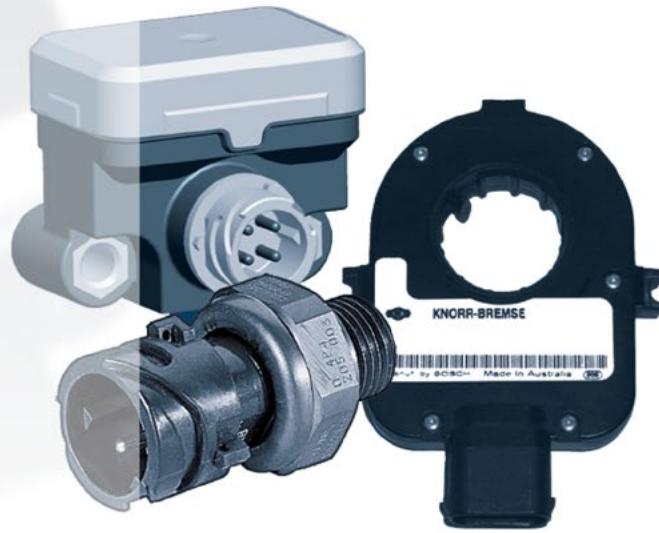
\*\* Knorr-Bremse Genuine Remanufactured Product

## TRAILER CONTROL MODULES (TCM)

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>Volvo</b>	K020625	EBS 5.X	K020623N50		2
<b>Volvo</b>	K020625	EBS 5.X	K020623X50	** EconX	2
<b>Volvo</b>	K028781	EBS 7	K028781N50		
<b>SOE</b>	K023711	EBS 5.X	K020623N50		2
<b>SOE</b>	K023711	EBS 5.X	K020623X50	** EconX	2

\*\* Knorr-Bremse Genuine Remanufactured Product

# EBS Sensors





Pressure Sensor

Yaw Rate Sensor (YRS)

Yaw Rate Sensor (YRS)

Steering Angle Sensor (SAS)

Steering Angle Sensor (SAS)

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>SAS - STEERING ANGLE SENSORS</b>					
<b>Iveco - Irisbus</b>	0486021010	EBS 2 & 5	0486021025N50	2), 5)	4
<b>MAN</b>	0486021002	EBS 2 & 5	0486021025N50	2), 5)	4
<b>MAN</b>	0486021034	EBS 2 & 5	0486021035N50	5)	5
<b>Scania</b>	0486021003	EBS 2 & 5	0486021028N50	2), 5)	5
<b>Scania</b>	K097326	EBS 7	K097326N50	4), 5)	5
<b>Volvo</b>	0486021001	EBS 2 & 5	0486021028N50	2), 5)	5
<b>SOE</b>	0486021007	EBS 2 & 5	0486021025N50	2), 5)	4

2) Not available before Q4. 2016

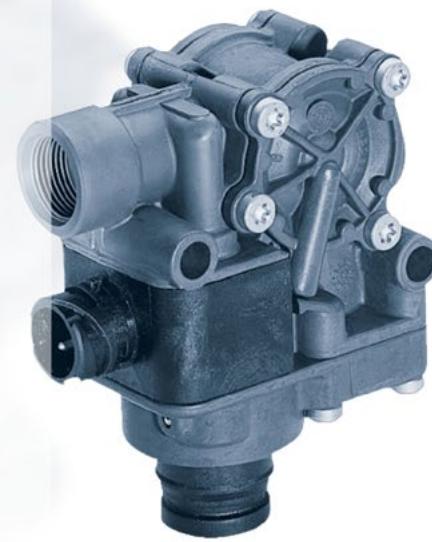
4) Not available before 2018

5) All Yaw Rate &amp; Steering Angle Sensors require calibrating after installation, this can be carried out with NEO System diagnostics

OE Manufacturer	Basic Part Number	System	IAM Part Number	Notes	Fig.
<b>YRS - YAW RATE SENSORS</b>					
<b>Iveco - Irisbus</b>	0486020009	EBS 2 & 5	0486020007N50	5)	2
<b>Iveco - Irisbus</b>	K020568	EBS 5.X	K020568N50	5)	3
<b>MAN</b>	0486020002	EBS 2 & 5	0486020007N50	5)	2
<b>MAN</b>	K020568	EBS 5.X	K020568N50	5)	3
<b>Mercedes</b>	K092229	EBS 5.1	K092229N50	5)	3
<b>Renault</b>	0486020001	EBS 2 & 5	0486020007N50	5)	2
<b>Renault</b>	K020568	EBS 5.X	K020568N50	5)	3
<b>Scania</b>	0486020003	EBS 2 & 5	0486020007N50	5)	2
<b>Scania</b>	K020568	EBS 5.X	K020568N50	5)	3
<b>Volvo</b>	0486020001	EBS 2 & 5	0486020007N50	5)	2
<b>Volvo</b>	K020568	EBS 5.X	K020568N50	5)	3
<b>SOE</b>	0486020007	EBS 2 & 5	0486020007N50	5)	2
<b>SOE</b>	K020568	EBS 5.X	K020568N50	5)	3
<b>PRESSURE SENSORS</b>					
<b>Renault</b>	0484205004	EBS 2 & 5	0484205006N50		1
<b>Renault</b>	0484205006	EBS 2 & 5	0484205006N50		1
<b>Scania</b>	0484205003	EBS 2 & 5	0484205006N50		1
<b>Volvo</b>	0484205007	EBS 2 & 5	0484205006N50		1

5) All Yaw Rate & Steering Angle Sensors require calibrating after installation, this can be carried out with NEO System diagnostics

# Pressure Control Valves



## PRESSURE CONTROL VALVES



OE Manufacturer	Basic Part Number	Type No.	Electrical Connection	Compressed Air Port	IAM Part Number	Notes	Fig.
<b>Iveco - Irisbus</b>	II15492	BR9150	Schlemmer Bayonet (24V)	VOSS 230, VOSS 232 or M22x1,5	K0384382N50	6)	2
<b>Iveco - Irisbus</b>	II17776	BR9154	DIN Bayonet (24V)	VOSS 230, VOSS 232 or M22x1,5	K038438N50		2
<b>MAN</b>	0265351118		DIN Bayonet (24V)	VOSS 230, VOSS 232 or M22x1,5	K038438N50		2
<b>MAN</b>	II40864F	BR9159	DIN Bayonet (24V)	VOSS 230, VOSS 232 or M22x1,5	K038438N50		2
<b>MAN</b>	II38665F	BR9182	DIN Bayonet (24V)	VOSS 230, VOSS 232 or M22x1,5	K038438N50		2
<b>Mercedes</b>	0265351122		DIN Bayonet (24V)	VOSS 230, VOSS 232 or M22x1,5	K038438N50		2
<b>Mercedes</b>	0486201017		DIN Bayonet (24V)	VOSS 230, VOSS 232 or M22x1,5	K093488N50		3

6) Supplied with adapter cable

## PRESSURE CONTROL VALVES

OE Manufacturer	Basic Part Number	Type No.	Electrical Connection	Compressed Air Port	IAM Part Number	Notes	Fig.
<b>Mercedes</b>	0265351101		Kostal M24x1 (24V)	DIN	K0384381N50	6)	1
<b>Mercedes</b>	II16278	BR9152	Kostal M24x1 (24V)	DIN	K0384381N50	6)	1
<b>Mercedes</b>	II17776	BR9154	DIN Bayonet (24V)	VOSS 230, VOSS 232 or M22x1,5	K038438N50		2
<b>Mercedes</b>	II37086	BR9180	DIN Bayonet (24V)	VOSS 230, VOSS 232 or M22x1,5	K038438N50		2
<b>Renault</b>	II41119F	BR9191	DIN Bayonet (24V)	VOSS 230, VOSS 232 or M22x1,5	K038438N50		2
<b>Renault</b>	0265351118		DIN Bayonet (24V)	VOSS 230, VOSS 232 or M22x1,5	K038438N50		2
<b>Scania</b>	II16278	BR9152	Kostal M24x1 (24V)	DIN	K0384381N50	6)	1
<b>Scania</b>	II32612	BR9156	DIN Bayonet (24V)	VOSS 230, VOSS 232 or M22x1,5	K038438N50		2
<b>Scania</b>	0265351101		Kostal M24x1 (24V)	DIN	K0384381N50	6)	1
<b>Volvo</b>	II38665F	BR9182	DIN Bayonet (24V)	VOSS 230, VOSS 232 or M22x1,5	K038438N50		2
<b>SOE</b>	II38659F	BR9163	Kostal M24x1 (12V)	1/2"-14 NPTF	K0935181N00		1
<b>SOE</b>	II40872F	BR9166	Kostal M24x1 (12V)	M22x1,5	K0384681N50		1
<b>SOE</b>	K017813		DIN Bayonet (12V)	VOSS 230, VOSS 232 or M22x1,5	K038488N50		2

6) Supplied with adapter cable

# Wheel Speed Sensors (WSS)



## WHEEL SPEED SENSORS (WSS)



OE Manufacturer	Basic Part Number	Sensor	Electrical Connector	Length (mm)	IAM Part No.	Notes	Fig.
<b>Iveco - Irisbus</b>	0486000273	90°	plug type round	1390	0486000273K50		1
<b>Iveco - Irisbus</b>	0265004025	90°	plug type round	1300	0265004025K50		
<b>MAN</b>	0486000284	180°	MKR Plus	1000	0486000284K50		6
<b>MAN</b>	0486001041	180°	Schlemmer	2000	0486001041K50		5
<b>MAN</b>	0486001042	180°	Schlemmer	2000	0486001042K50		5
<b>MAN</b>	0486000250	90°	G & H	1500	0486000250K50		4
<b>MAN</b>	0486000251	90°	G & H	1500	0486000251K50		4
<b>MAN</b>	0486000252	90°	G & H	1850	0486000252K50		4
<b>MAN</b>	0486000253	90°	G & H	1850	0486000253K50		4

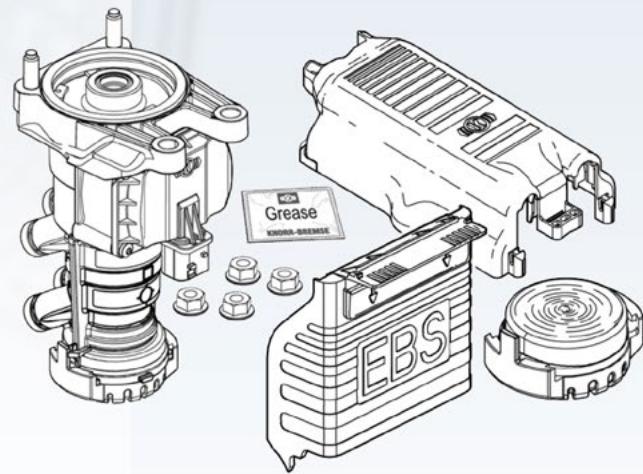
## WHEEL SPEED SENSORS (WSS)

OE Manufacturer	Basic Part Number	Sensor	Electrical Connector	Length (mm)	IAM Part No.	Notes	Fig.
<b>MAN</b>	0486000256	90°	G & H	2150	0486000256K50		4
<b>MAN</b>	0486000257	90°	G & H	2150	0486000257K50		4
<b>MAN</b>	0486000260	90°	G & H	1800	0486000260K50		4
<b>MAN</b>	0486000261	90°	G & H	1800	0486000261K50		4
<b>MAN</b>	0486000262	90°	G & H	3900	0486000262K50		4
<b>MAN</b>	0486000263	90°	G & H	3900	0486000263K50		4
<b>MAN</b>	0486000238	90°	Schlemmer	2000	0486000238K50		2
<b>MAN</b>	0486000239	90°	Schlemmer	1300	0486000239K50		2
<b>MAN</b>	0486000240	90°	Schlemmer	2000	0486000240K50		2
<b>MAN</b>	0486000241	90°	Schlemmer	2000	0486000241K50		2
<b>MAN</b>	0486000242	90°	Schlemmer	2000	0486000242K50		2
<b>Mercedes</b>	0486001080	180°	socket type round	3000	0486001080K50		7
<b>Mercedes</b>	0265004011	90°	socket type round	1300	0265004011K50		
<b>Mercedes</b>	0486000275	90°	socket type round	2000	0486000275K50		
<b>Renault</b>	0486000291	90°	Deutsch	2400	0486000291K50		
<b>Renault</b>	0486000290	90°	Deutsch	2400	0486000290K50		
<b>Renault</b>	0486000292	90°	Deutsch	3200	0486000292K50		
<b>Renault</b>	0486000293	90°	Deutsch	2800	0486000293K50		
<b>Renault</b>	0486000286	90°	Plaselec	1400	0486000286K50		
<b>Renault</b>	0486000287	90°	Plaselec	1400	0486000287K50		
<b>Renault</b>	0486000301	90°	Plaselec	2100	0486000301K50		

## WHEEL SPEED SENSORS (WSS)

OE Manufacturer	Basic Part Number	Sensor	Electrical Connector	Length (mm)	IAM Part No.	Notes	Fig.
<b>Renault</b>	0486000302	90°	Plaselec	2100	0486000302K50		
<b>Renault</b>	0486000288	90°	Socket type round	1400	0486000288K50		
<b>Renault</b>	0486000289	90°	Socket type round	1390	0486000289K50		
<b>SOE</b>	0265004042	180°	180°, plug type round	875	0265004042K50		
<b>SOE</b>	0486001064	180°	180°, socket type round	1650	0486001064K50		8
<b>SOE</b>	0486000133	90°	90°, open	2020	0486000133000		9
<b>SOE</b>	0486000134	90°	90°, socket type round	400	0486000134000		10
<b>SOE</b>	0486000135	90°	90°, socket type round	2000	0486000135000		11
<b>SOE</b>	0486000136	90°	90°, socket type round	1000	0486000136000		12
<b>SOE</b>	0486000137	90°	90°, open	2570	0486000137000		3
<b>SOE</b>	0486001090	180°	180°, socket type round	500	0486001090K50		8

# Spare Parts



## SPARE PARTS

Part Number	Product	Spare Part Number	Note	Description
<b>0486203001</b>	1-Channel EPM	1485515020000		Top cover
<b>0486203002</b>	1-Channel EPM	1485515020000		Top cover
<b>0486203002</b>	1-Channel EPM	1487010369000		Silencer
<b>0486203004</b>	1-Channel EPM	1485515020000		Top cover
<b>0486203004</b>	1-Channel EPM	1487010369000		Silencer
<b>0486203005</b>	1-Channel EPM	1485515020000		Top cover
<b>0486203006</b>	1-Channel EPM	1485515022000		Top cover
<b>0486203006</b>	1-Channel EPM	1487010360000		Silencer
<b>0486203009</b>	1-Channel EPM	1485515020000		Top cover
<b>0486203012</b>	1-Channel EPM	1485515021000		Top cover
<b>0486203012</b>	1-Channel EPM	1487010360000		Silencer
<b>0486203014</b>	1-Channel EPM	1485515022000		Top cover
<b>0486203014</b>	1-Channel EPM	1487010360000		Silencer
<b>0486203016</b>	1-Channel EPM	1485515021000		Top cover
<b>0486203016</b>	1-Channel EPM	1487010360000		Silencer
<b>0486203017</b>	1-Channel EPM	1485515020000		Top cover
<b>0486203017</b>	1-Channel EPM	1487010369000		Silencer
<b>0486203022</b>	1-Channel EPM	1485515022000		Top cover
<b>0486203022</b>	1-Channel EPM	1487010360000		Silencer
<b>0486203023</b>	1-Channel EPM	1485515021000		Top cover
<b>0486203023</b>	1-Channel EPM	1487010360000		Silencer

## SPARE PARTS

Part Number	Product	Spare Part Number	Note	Description
<b>0486203024</b>	1-Channel EPM	1485515022000		Top cover
<b>0486203024</b>	1-Channel EPM	1487010360000		Silencer
<b>0486203025</b>	1-Channel EPM	1485515020000		Top cover
<b>0486203026</b>	1-Channel EPM	1485515020000		Top cover
<b>0486203028</b>	1-Channel EPM	1487010369000		Silencer
<b>0486203030</b>	1-Channel EPM	1487010369000		Silencer
<b>0486203032</b>	1-Channel EPM	1485515021000		Top cover
<b>0486203032</b>	1-Channel EPM	1487010360000		Silencer
<b>0486203033</b>	1-Channel EPM	1485515022000		Top cover
<b>0486203033</b>	1-Channel EPM	1487010360000		Silencer
<b>0486203034</b>	1-Channel EPM	1487010369000		Silencer
<b>0486204008</b>	2-Channel EPM	1487010361000		Top cover
<b>0486204009</b>	2-Channel EPM	1487010361000		Top cover
<b>0486204012</b>	2-Channel EPM	1487010361000		Top cover
<b>0486204017</b>	2-Channel EPM	1487010361000		Top cover
<b>0486204024</b>	2-Channel EPM	1487010361000		Top cover
<b>0486205001</b>	TCM	1487010354000		Silencer
<b>0486205002</b>	TCM	1487010354000		Silencer
<b>0486205004</b>	TCM	1487010354000		Silencer
<b>0486205006</b>	TCM	1487010354000		Silencer
<b>0486205008</b>	TCM	1487010354000		Silencer

## SPARE PARTS

Part Number	Product	Spare Part Number	Note	Description
<b>0486205010</b>	TCM	1487010354000		Silencer
<b>0486205011</b>	TCM	1487010354000		Silencer
<b>0486205014</b>	TCM	1487010354000		Silencer
<b>0486205015</b>	TCM	1487010354000		Silencer
<b>0486205016</b>	TCM	1487010354000		Silencer
<b>0486205017</b>	TCM	1487010354000		Silencer
<b>0486205019</b>	TCM	1487010354000		Silencer
<b>0486205020</b>	TCM	1487010354000		Silencer
<b>0486205022</b>	TCM	1487010354000		Silencer
<b>K000085</b>	1-Channel EPM	K000846K50	1)	Side cover
<b>K000085</b>	1-Channel EPM	K000847K50	2)	Silencer
<b>K000086</b>	2-Channel EPM	K000846K50	1)	Side cover
<b>K000086</b>	2-Channel EPM	K000847K50	2)	Silencer
<b>K000088</b>	2-Channel EPM	K000846K50	1)	Side cover
<b>K000088</b>	2-Channel EPM	K000847K50	2)	Silencer
<b>K000913</b>	1-Channel EPM	K000846K50	1)	Side cover
<b>K000913</b>	1-Channel EPM	K000847K50	2)	Silencer
<b>K000914</b>	1-Channel EPM	K000846K50	1)	Side cover
<b>K000914</b>	1-Channel EPM	K000847K50	2)	Silencer
<b>K000921</b>	2-Channel EPM	K000846K50	1)	Side cover

1) Contains only ONE side cover, two are required for 2-Channel EPMS

2) Contains only ONE silencer, two are required for 2-Channel EPMS

## SPARE PARTS

Part Number	Product	Spare Part Number	Note	Description
<b>K000921</b>	2-Channel EPM	K000847K50	2)	Silencer
<b>K000922</b>	2-Channel EPM	K000846K50	1)	Side cover
<b>K000922</b>	2-Channel EPM	K000847K50	2)	Silencer
<b>K000923</b>	2-Channel EPM	K000846K50	1)	Side cover
<b>K001411</b>	2-Channel EPM	K000846K50	1)	Side cover
<b>K001411</b>	2-Channel EPM	K000847K50	2)	Silencer
<b>K005496</b>	1-Channel EPM	K000846K50	1)	Side cover
<b>K005496</b>	1-Channel EPM	K000847K50	2)	Silencer
<b>K005498</b>	2-Channel EPM	K000846K50	1)	Side cover
<b>K005498</b>	2-Channel EPM	K000847K50	2)	Silencer
<b>K014973</b>	1-Channel EPM	K000846K50	1)	Side cover
<b>K014973</b>	1-Channel EPM	K000847K50	2)	Silencer
<b>K015441</b>	2-Channel EPM	K000846K50	1)	Side cover
<b>K020020</b>	2-Channel EPM	K000846K50	1)	Side cover
<b>K020020</b>	2-Channel EPM	K000847K50	2)	Silencer
<b>K020021</b>	2-Channel EPM	K000846K50	1)	Side cover
<b>K020021</b>	2-Channel EPM	K000847K50	2)	Silencer
<b>K020022</b>	2-Channel EPM	K000846K50	1)	Side cover
<b>K020022</b>	2-Channel EPM	K000847K50	2)	Silencer
<b>K020023</b>	2-Channel EPM	K000846K50	1)	Side cover

1) Contains only ONE side cover, two are required for 2-Channel EPMS

2) Contains only ONE silencer, two are required for 2-Channel EPMS

## SPARE PARTS

Part Number	Product	Spare Part Number	Note	Description
<b>K020023</b>	2-Channel EPM	K000847K50	2)	Silencer
<b>K020024</b>	2-Channel EPM	K000846K50	1)	Side cover
<b>K020024</b>	2-Channel EPM	K000847K50	2)	Silencer
<b>K021202</b>	1-Channel EPM	K000846K50	1)	Side cover
<b>K021202</b>	1-Channel EPM	K000847K50	2)	Silencer
<b>K021203</b>	1-Channel EPM	K000846K50	1)	Side cover
<b>K021203</b>	1-Channel EPM	K000847K50	2)	Silencer
<b>K021204</b>	2-Channel EPM	K000846K50	1)	Side cover
<b>K021204</b>	2-Channel EPM	K000847K50	2)	Silencer
<b>K023215</b>	2-Channel EPM	K000846K50	1)	Side cover
<b>K023216</b>	2-Channel EPM	K000846K50	1)	Side cover
<b>K023217</b>	2-Channel EPM	K000846K50	1)	Side cover
<b>K023217</b>	2-Channel EPM	K000847K50	2)	Silencer
<b>K023218</b>	1-Channel EPM	K000846K50	1)	Side cover
<b>K023219</b>	1-Channel EPM	K000846K50	1)	Side cover
<b>K023219</b>	1-Channel EPM	K000847K50	2)	Silencer
<b>K023220</b>	1-Channel EPM	K000846K50	1)	Side cover
<b>K023220</b>	1-Channel EPM	K000847K50	2)	Silencer
<b>K027386</b>	FBM	K103367K50		FBM complete
<b>K046640</b>	FBM	K103367K50		FBM complete

1) Contains only ONE side cover, two are required for 2-Channel EPMS

2) Contains only ONE silencer, two are required for 2-Channel EPMS

## SPARE PARTS

Part Number	Product	Spare Part Number	Note	Description
<b>K093190</b>	1-Channel EPM	K045926K50	1)	Side Cover
<b>K093190</b>	1-Channel EPM	K041964K50	2)	Silencer
<b>K093192</b>	2-Channel EPM	K045926K50	1)	Side Cover
<b>K093192</b>	2-Channel EPM	K041964K50	2)	Silencer
<b>K028781</b>	TCM	K041964K50		Silencer
<b>K055628</b>	FBM	K041964K50		Silencer
<b>K050214</b>	1-Channel EPM	K045926K50	1)	Side Cover
<b>K050214</b>	1-Channel EPM	K000847K50	2)	Silencer
<b>K125218</b>	2-Channel EPM	K045926K50	1)	Side Cover
<b>K125218</b>	2-Channel EPM	K000847K50	2)	Silencer
<b>K103131</b>	TCM	K000847K50		Silencer

1) Contains only ONE side cover, two are required for 2-Channel EPMs

2) Contains only ONE silencer, two are required for 2-Channel EPMs

**Knorr-Bremse Systeme für  
Nutzfahrzeuge GmbH**

Moosacher Strasse 80

80809 Munich

Germany

Tel: +49 89 3547-0

Fax: +49 89 3547-2767

[SOE-EUROPE@KNORR-BREMSE.COM](mailto:SOE-EUROPE@KNORR-BREMSE.COM)

[WWW.KNORR-BREMSECVS.COM](http://WWW.KNORR-BREMSECVS.COM)



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