

# Mercedes-Benz Powertrain

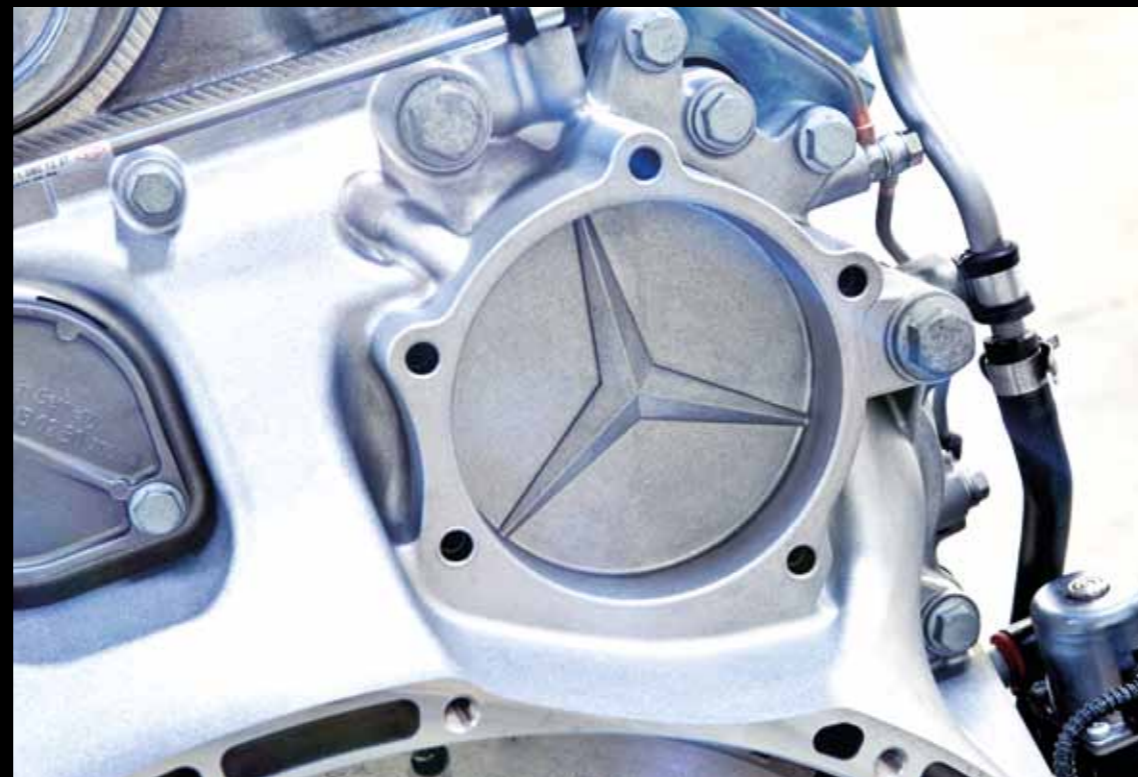


Portfolio **Truck Classic**: EURO III, EURO V and EEV.

Mercedes-Benz



Welcome to  
the Mercedes-Benz  
Powertrain.  
Leading in technology  
and efficiency.



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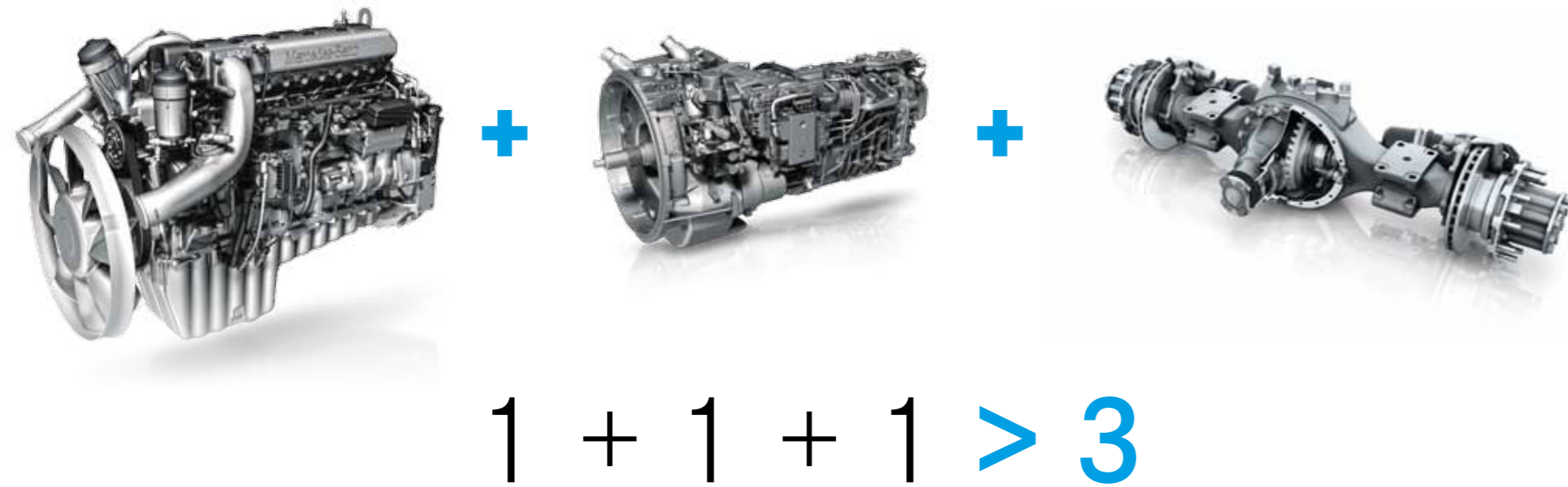
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# Going the **extra mile**. Mercedes-Benz Powertrain.

Mercedes-Benz Powertrain offers outperforming and individual engineered aggregates: engine systems, transmissions and axles – each will provide our customers with the **highest durability and quality at the same time**.

Together, they compose an even more sophisticated, technologically advanced and with regards to efficiency, unbeatable powertrain.

Let's develop together the best individual solution for your success.



## Benefits for you.

Integrated powertrain:

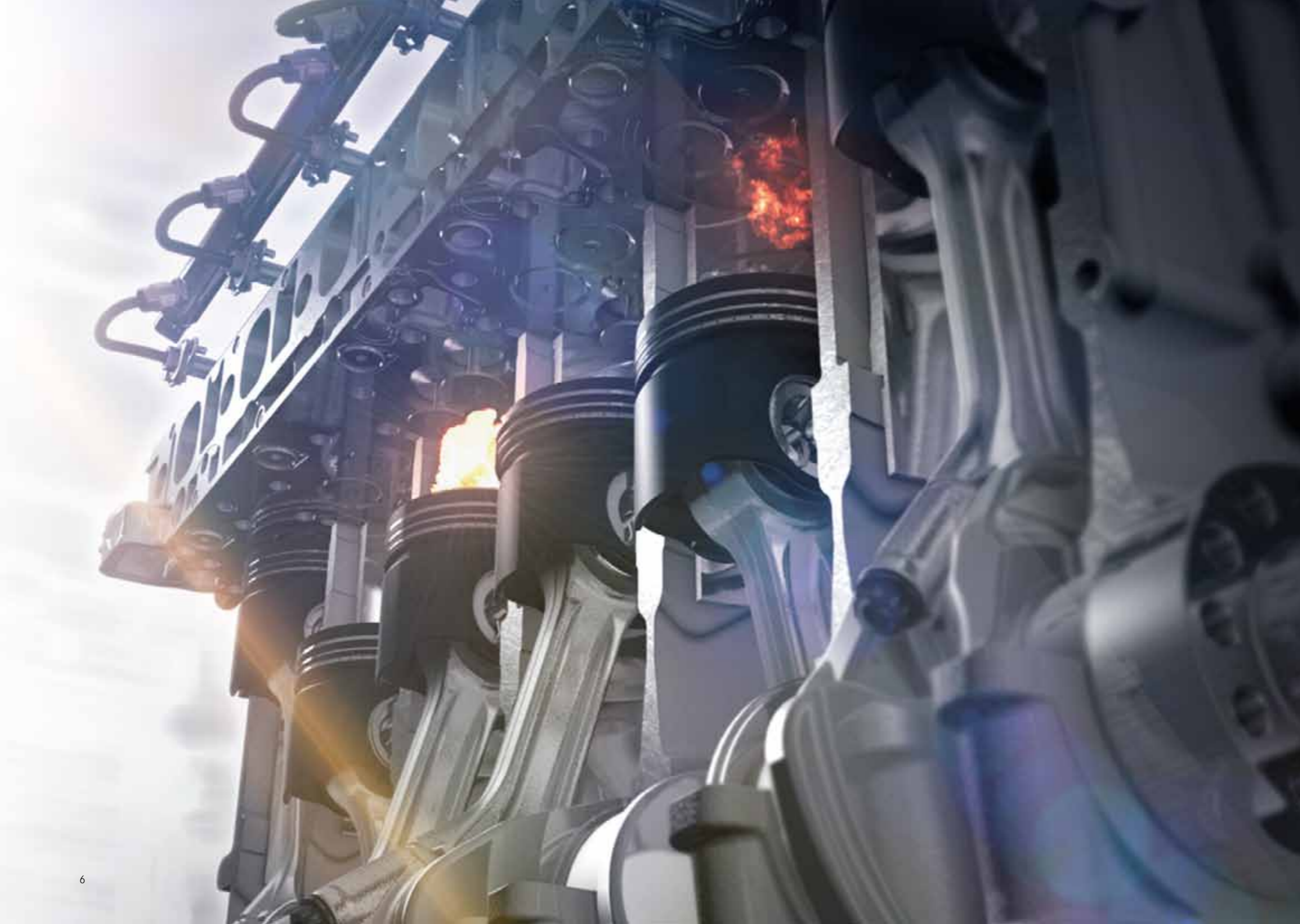
- ✓ Reduces integration efforts
- ✓ One Key Account Manager as main contact partner
- ✓ One system supplier for your individual powertrain solution
- ✓ One contractual partner

All powertrain components:

- ✓ Premium Mercedes-Benz quality standards due to the production on our high volume production lines
- ✓ Overall robust and reliable powertrain solutions provide a long lifetime for your powertrain components
- ✓ Leads to an optimized system setup due to common electric and electronic architecture (EE architecture) for efficient interaction of all powertrain components
- ✓ One electronic tool for end of line commissioning and diagnosis requires less training for your engineering group and after-sales team
- ✓ High invest in Mercedes-Benz R&D assures state-of-the-art quality

## Benefits for your customers.

- ✓ Provides optimized fuel efficiency by specially composed powertrain solutions
- ✓ Ensures robust and reliable performance in every scenario of operation
- ✓ Minimizes downtimes as our worldwide After-Sales network covers warranty and policy from one source
- ✓ Synchronized maintenance intervals and repair worldwide via our one-stop shop logic for the complete powertrain
- ✓ Increases the resale value of the vehicles due to the highest quality standards offered by Mercedes-Benz
- ✓ Higher Driver comfort due to the high integration of all assistent systems and features

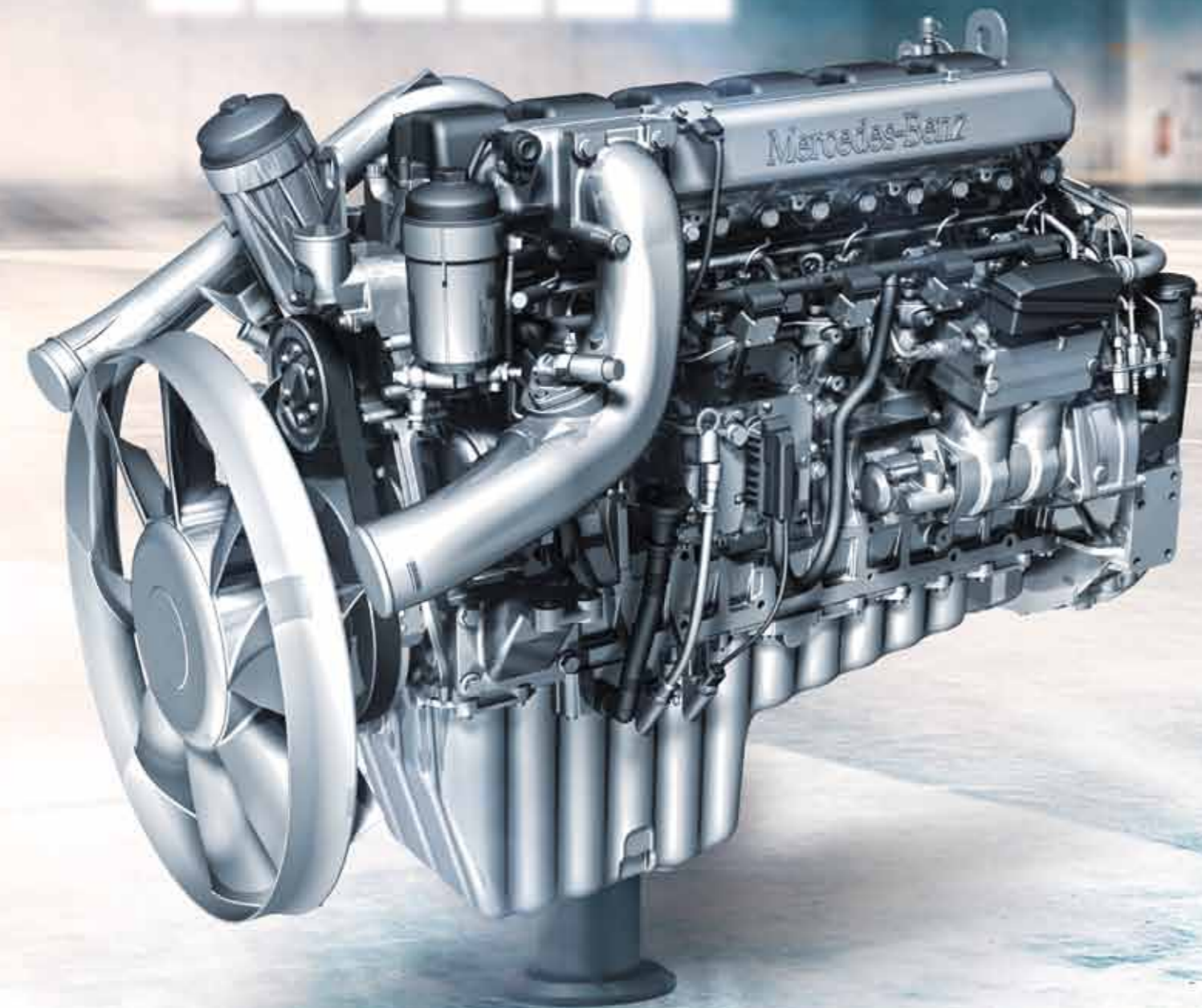


## Our engine systems product portfolio: TCO reduction at its best.

Our EURO III, V and EEV engines are **synonymous for strength, economy and durability**. Based on these characteristics, our engines are ideal for short radius distribution, construction site transport and long distance haulage. They can also be modified to create customer-specific variants for use in different truck applications. The 4/6 cylinder in-line models with EURO III, V and EEV engines represent **superior function and efficiency**. **The EURO V engines operate at the highest levels of efficiency and ensure superior power output.**

Thanks to BlueTec®, Mercedes-Benz's SCR diesel technology, they operate in a particularly eco-friendly way. BlueTec® ensures low CO<sup>2</sup> emissions and extremely low concentrations of nitrogen oxide (NO<sub>x</sub>) and particulates, to meet emission standards at the tailpipe. **Besides low consumption, the BlueTec® engines also have impressive maintenance intervals and a long engine life.** At Mercedes-Benz, we have spent decades bringing our diesel engines to perfection. Our dedication to excellence has earned Mercedes-Benz loyal customers around the world, in the most demanding industries and application.



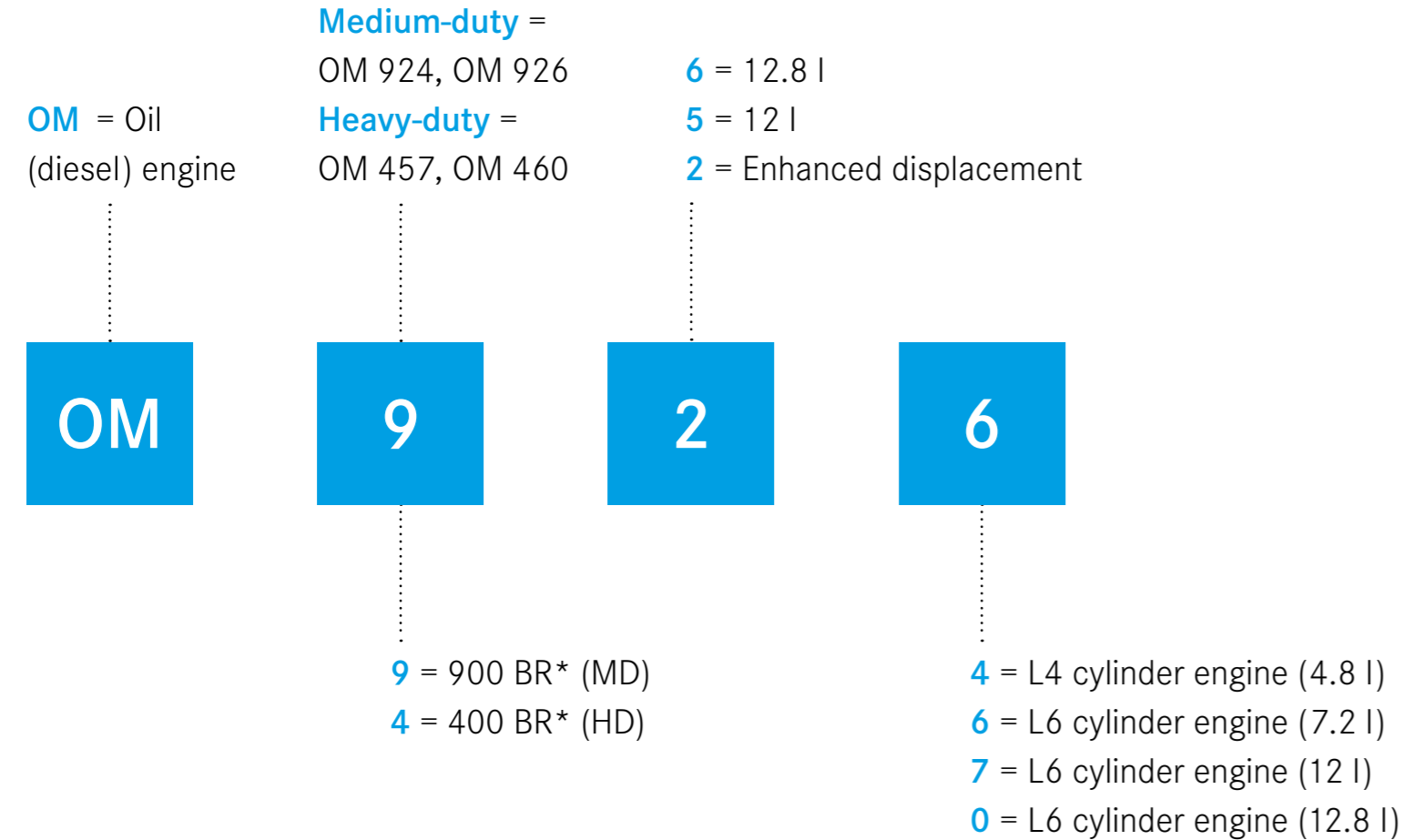


## Mercedes-Benz engine systems.

92X, 457 and 460  
model series.

Proven engine systems for a wide range of applications.

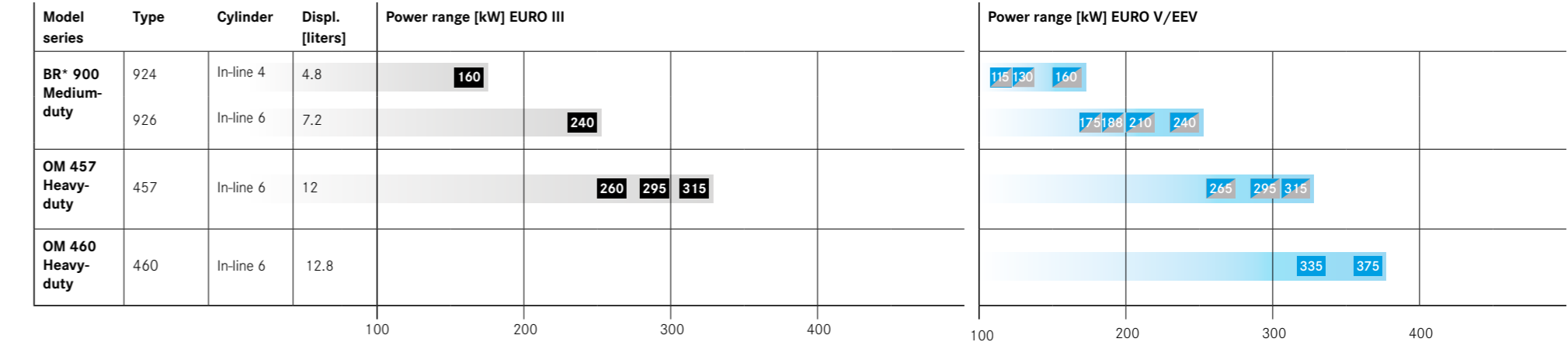
# Derivation "Nomenclature" - engine systems.



\* BR = Baureihe = model series

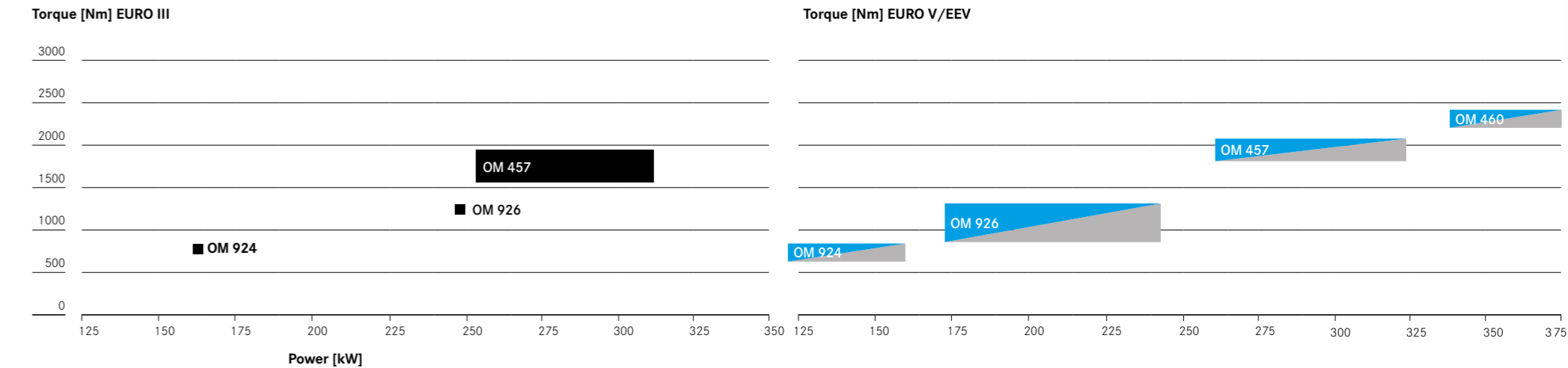
# Engine systems for EURO III, EURO V and EEV.

Portfolio of EURO III, EURO V and EEV engine systems for trucks



■ EURO III ■ EURO V ■ EEV  
 \* BR = Baureihe = model series

## Power range



# Medium-duty engine systems.



## Always a good choice.

### Your product benefits for medium-duty engine systems:

- 4- and 6-cylinder diesel engines in an **in-line arrangement**
- **Displacement** of 4.8 and 7.2 liters
- **Output** of 115 up to 240 kW
- **Low fuel consumption** due to proven **SCR technology**
- Compact **installation space**
- Cylinder head with **3-valve technology**
- Powerful and **dynamic engine brakes** due to **decompression technology**
- Additional **power take-off** options
- “**One box**” SCR exhaust after-treatment
- **Wide range** of potential **adaptations** due to extensive modular system

# OM 924

Arrangement: In-line 4  
Displacement: 4.8 l



## Weight and dimensions\*

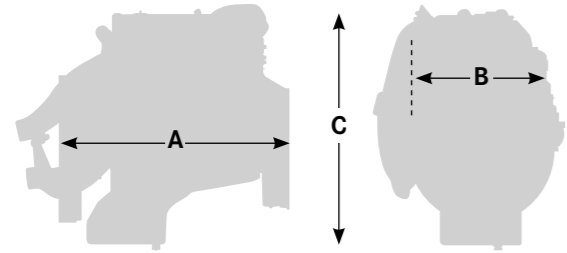
### Dry weight

EURO III: 395 kg  
EURO V/EEV: 405 kg

### Dimensions

**A** = length 944 mm  
**B** = width (excl. charge air pipe) 600 mm  
**C** = height 930 mm

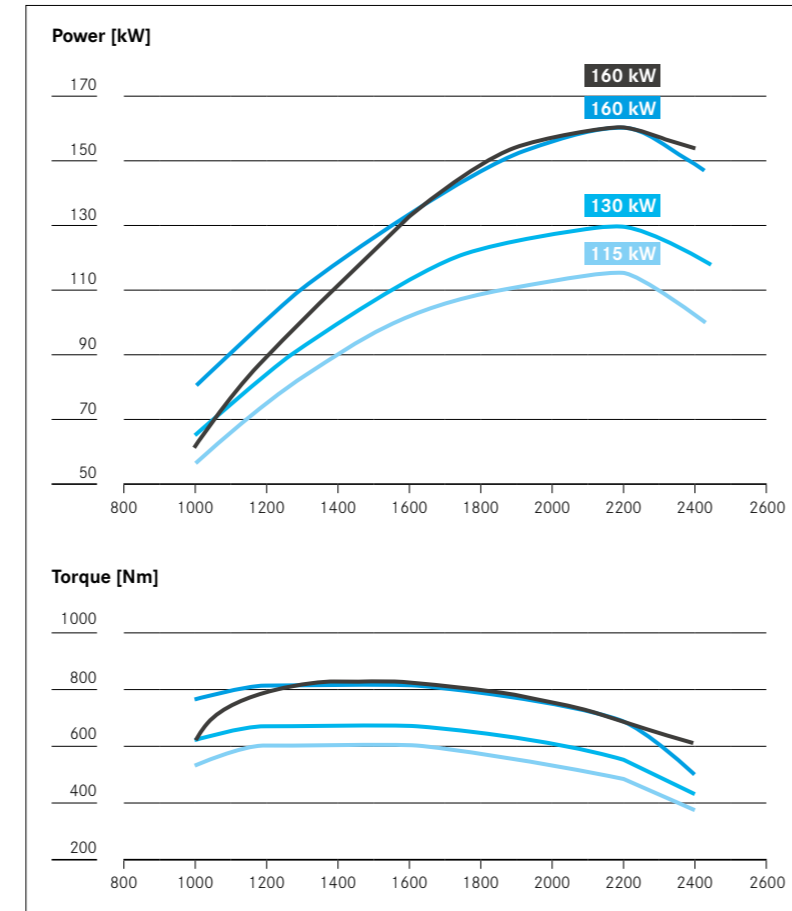
\* depending on equipment installed



## Rated power and maximal torque

		EURO III	EURO V/EEV	EURO V/EEV	EURO V/EEV
<b>Rated power</b>	[kW/hp]	<b>160/218</b>	<b>115/156</b>	<b>130/177</b>	<b>160/218</b>
<b>at engine speed</b>	[rpm]	2200	2200	2200	2200
<b>Maximal torque</b>	[Nm]	810	610	675	810
<b>at engine speed</b>	[rpm]	1400-1600	1200-1600	1200-1600	1200-1600

## Performance



# OM 926

Arrangement: In-line 6  
Displacement: 7.2 l



## Weight and dimensions\*

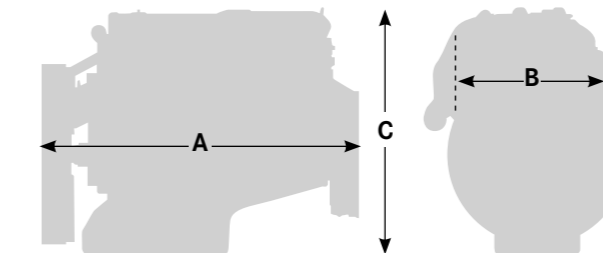
### Dry weight

EURO III: 530 kg  
EURO V/EEV: 540 kg

### Dimensions

**A** = length 1228 mm  
**B** = width (excl. charge air pipe) 640 mm  
**C** = height 930 mm

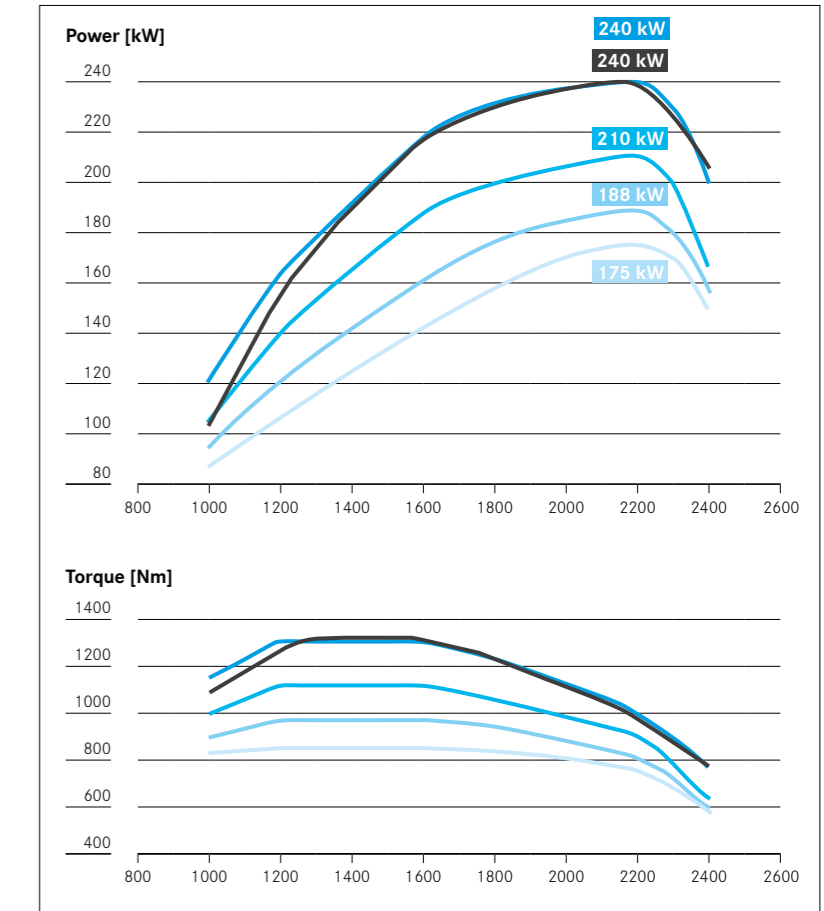
\* depending on equipment installed



## Rated power and maximal torque

		EURO III	EURO V/EEV	EURO V/EEV	EURO V/EEV	EURO V/EEV
<b>Rated power</b>	[kW/hp]	<b>240/326</b>	<b>175/238</b>	<b>188/255</b>	<b>210/286</b>	<b>240/326</b>
<b>at engine speed</b>	[rpm]	2200	2200	2200	2200	2200
<b>Maximal torque</b>	[Nm]	1300	850	970	1120	1300
<b>at engine speed</b>	[rpm]	1200-1600	1200-1600	1200-1600	1200-1600	1200-1600

## Performance







Heavy-duty engine systems.

## Climb every mountain.

### Your product benefits for heavy-duty engine systems:

- 6-cylinder diesel engines in **in-line arrangement**
- **Displacement** of 12 and 12.8 liters
- **Output** of 260 up to 375 kW
- **Low fuel consumption** due to proven **SCR technology**
- Compact **installation space**
- Cylinder head with **4-valve technology**
- Powerful and **dynamic engine brakes** due to **decompression technology**
- Additional **power take-off options**
- **“One box”** SCR exhaust after-treatment

# OM 457

Arrangement: In-line 6  
Displacement: 12 l



## Weight and dimensions\*

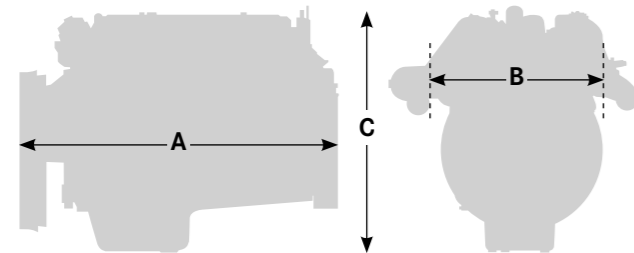
### Dry weight

EURO III: 1005 kg  
EURO V/EEV: 1015 kg

### Dimensions

**A** = length 1478 mm  
**B** = width (excl. charge air pipe) 750 mm  
**C** = height 1095 mm

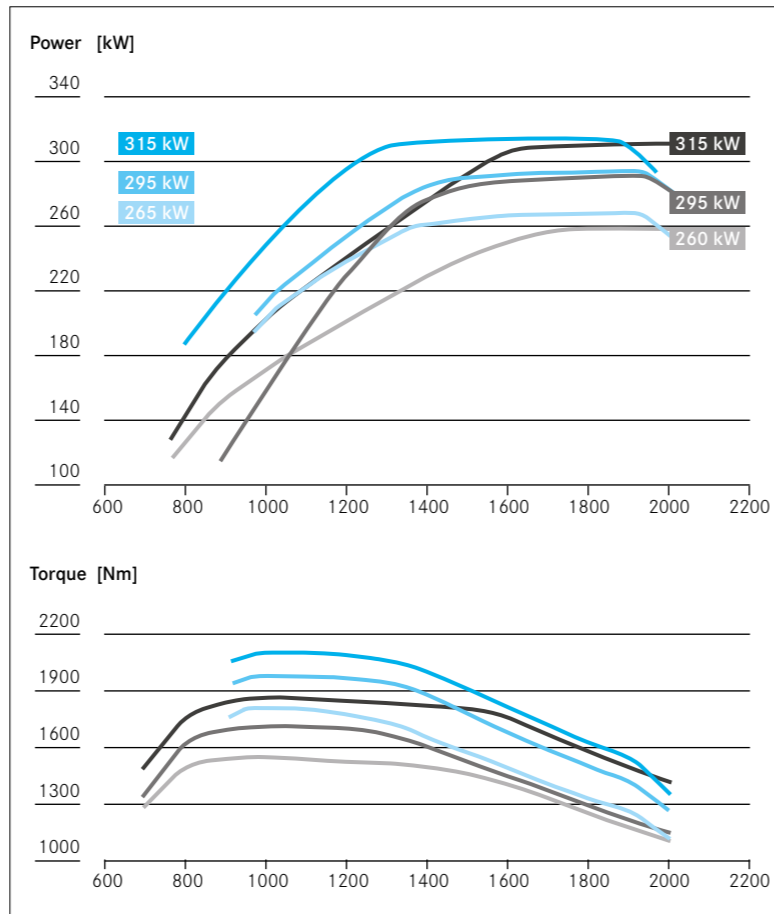
\* depending on equipment installed



## Rated power and nominal torque

	EURO III	EURO III	EURO III	EURO V/EEV	EURO V/EEV	EURO V/EEV
<b>Rated power</b> [kW/hp]	260/354	295/401	315/428	265/360	295/401	315/428
<b>at engine speed</b> [rpm]	2000	2000	2000	1900	1900	1900
<b>Nominal torque</b> [Nm]	1850	2000	2100	1850	2000	2100
<b>at engine speed</b> [rpm]	1100	1100	1100	1100	1100	1100

## Performance





# OM 460

Arrangement: In-line 6  
Displacement: 12.8 l

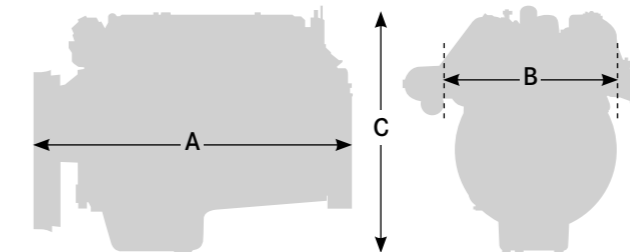


## Weight and dimensions\*

**Dry weight**  
EURO V: 1015 kg

**Dimensions**  
**A** = length 1478 mm  
**B** = width (excl. charge air pipe) 750 mm  
**C** = height 1095 mm

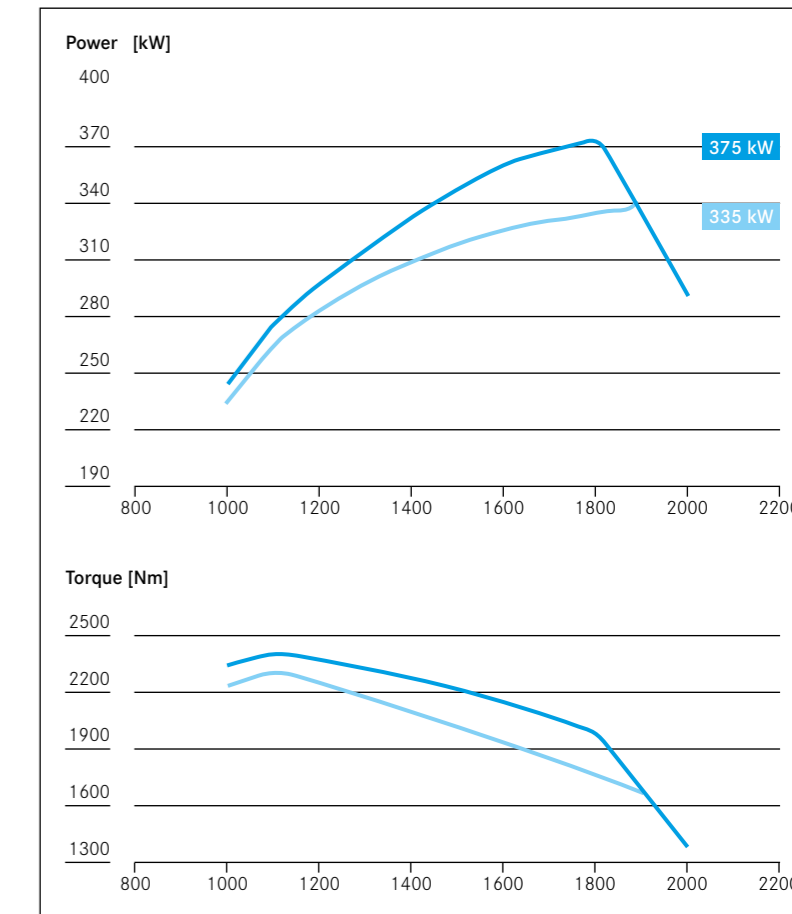
\* depending on equipment installed



## Rated power and maximal torque

		EURO V	EURO V
<b>Rated power</b>	[kW/hp]	<b>335/456</b>	<b>375/510</b>
<b>at engine speed</b>	[rpm]	1900	1800
<b>Nominal torque</b>	[Nm]	2300	2400
<b>at engine speed</b>	[rpm]	1100	1100

## Performance



# Clean from start to finish.

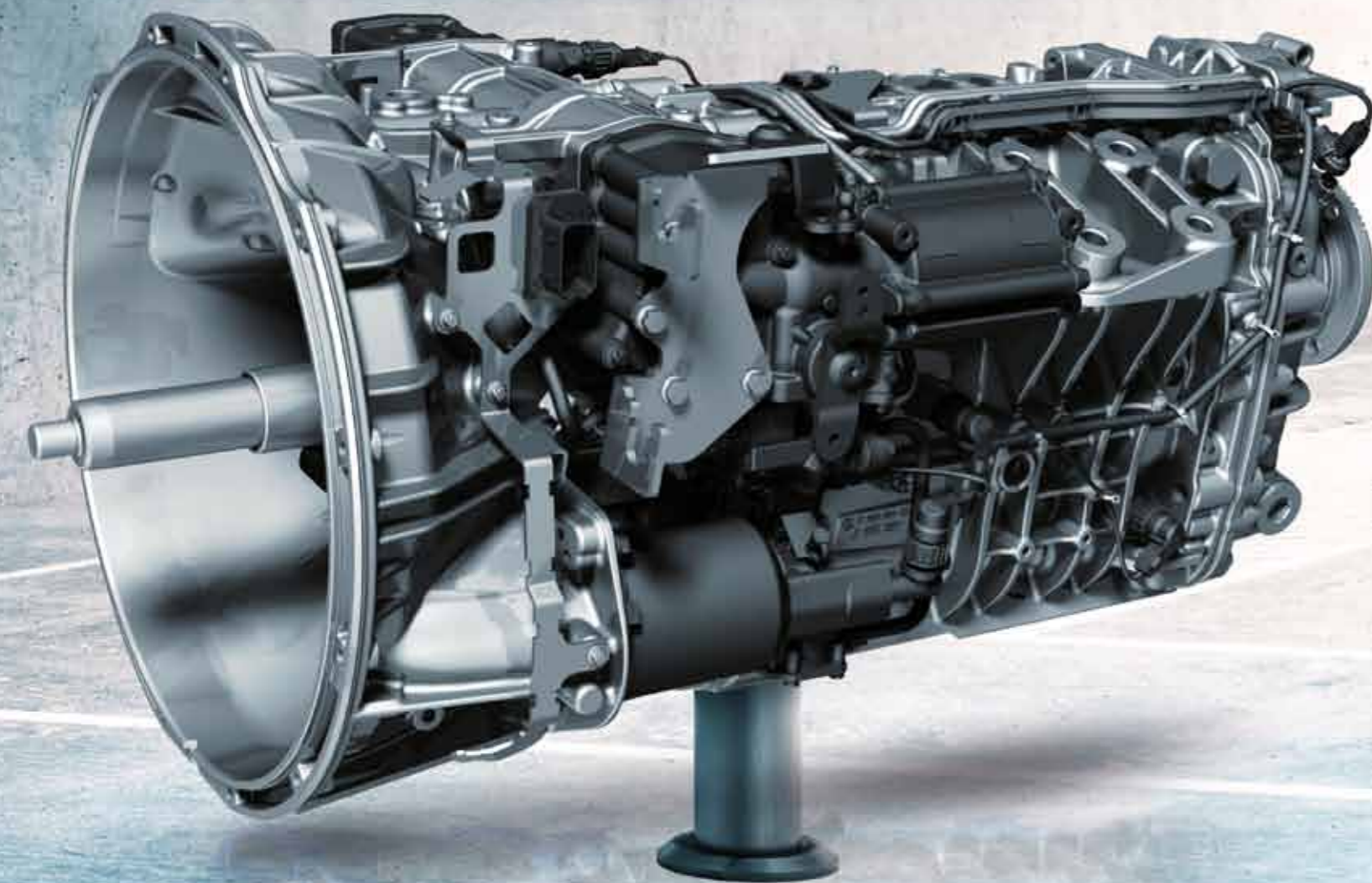
## Your product benefits for the after-treatment system:

- **Low impact** on exhaust **back pressure**
- Significant **NOx reduction** at a broad range of exhaust gas volume flows and exhaust gas temperatures
- **Small installation space** and **low weight**
- **Long lifetime**, adapted to the engine's lifetime
- Consistent **common parts strategy**
- **Many different variants** for exhaust gas inlet and outlet
- **Different shapes**: cubic or oval geometry
- **Vertical and horizontal** variants



With BlueTec<sup>®</sup>, Mercedes-Benz's SCR diesel technology, the level of nitrogen oxide is reduced by a **catalytic converter and AdBlue<sup>®</sup> / Diesel Exhaust Fluid (DEF)**. The main advantages of BlueTec<sup>®</sup> are cost-efficient compliance with **EURO V and EEV**, **low fuel consumption**, **low particulate matter emissions** and **low CO<sub>2</sub> emissions**.

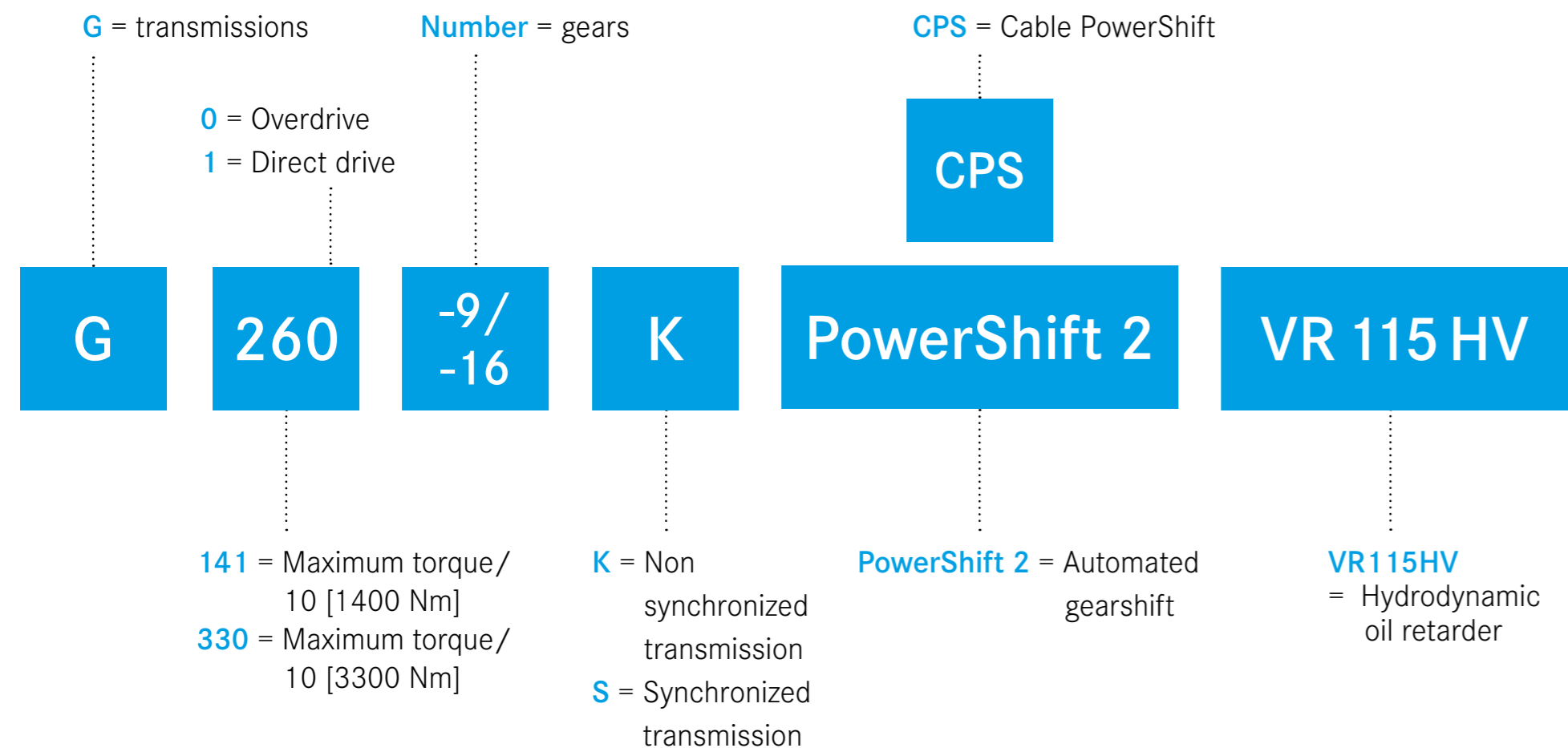
## EURO V and EEV exhaust after-treatment system.



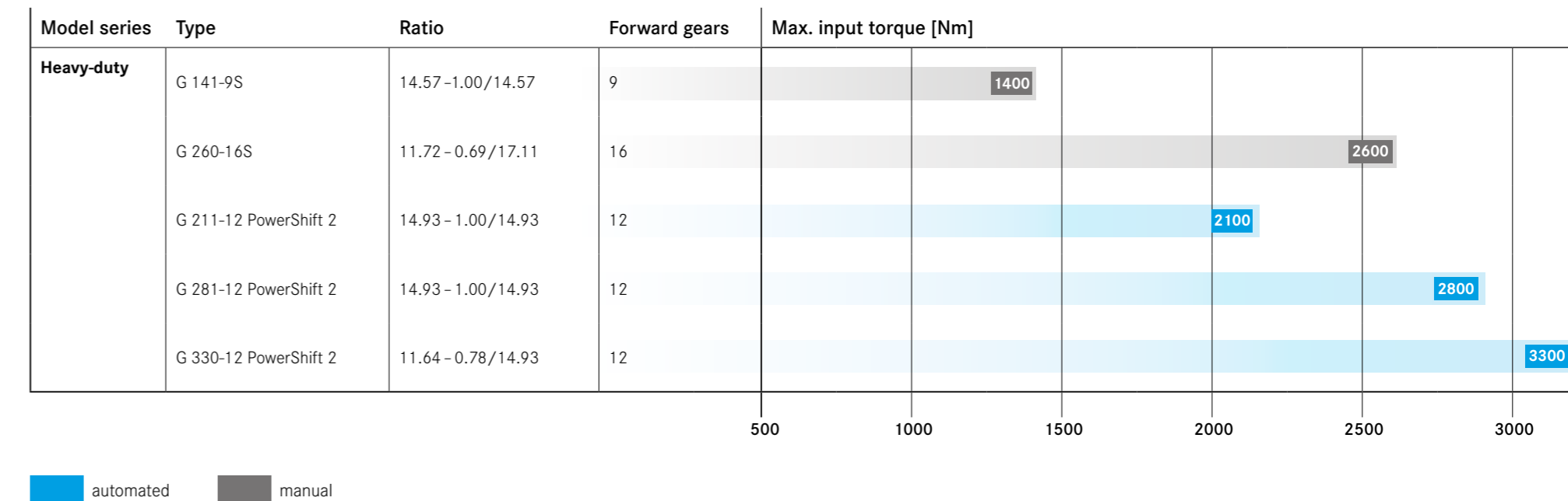
Mercedes-Benz  
transmissions.

Reliable transmissions  
for a wide range  
of applications.

# Derivation "Nomenclature" - transmissions.

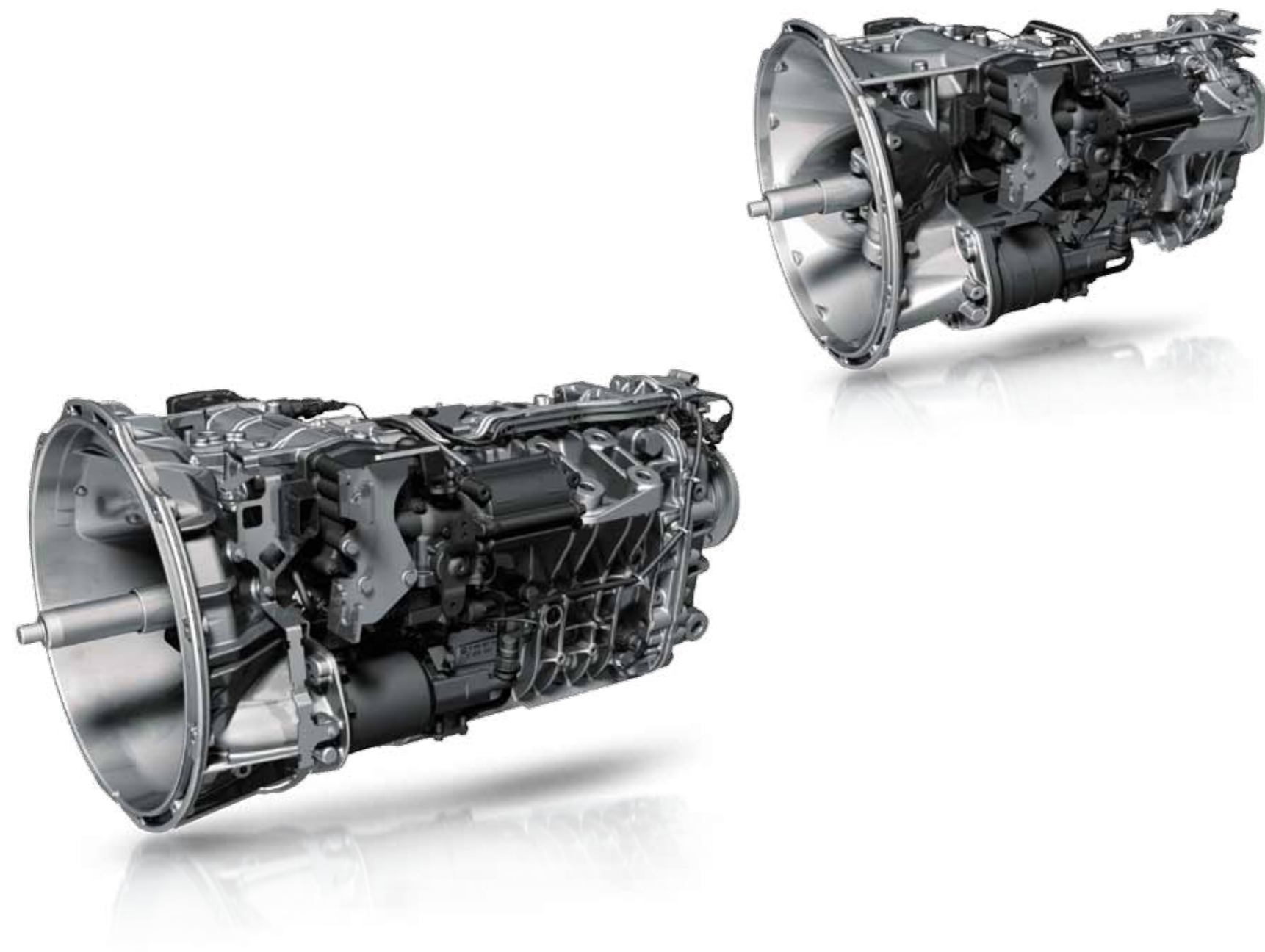


# Transmissions for EURO III, EURO V and EEV engine systems.



## Meaning of symbols:

- MT** Manual shifted transmission
- Transmission for medium-duty trucks
- Transmission for heavy-duty trucks & special vehicles
- Transmission for cranes



## Our transmission product portfolio: Smooth operation in every situation.

Our range of service extends from 9-speed to 16-speed transmissions for heavy-duty commercial vehicles and cranes as well as for special vehicles. An extensive selection of power take-off units, transfer cases and several circuit variants ensure that a custom-made transmission can be developed from standardized components. All transmissions are manufactured on a large scale by Mercedes-Benz Commercial Vehicles and are engineered to meet the highest standards of technology and quality.

Meeting the demands of our customers is the focus of our work. We feel committed to advancing the design of our systems in a consistent and innovative way in-line with market and customer requirements.

Our know-how is based on decades of experience in the manufacturing and development of commercial vehicle transmissions. This manufacturing expertise distinguishes our transmissions today particularly by three features:

- **Very smooth running characteristics**
- **Low weight**
- **Extreme durability**

In future, we will continue to stand for innovative products focused on customer-oriented applications.



Heavy-duty transmissions.

## Performance driven to the extreme.

### Your product benefits for heavy-duty transmissions:

- **9- to 16-speed** transmissions
- **Max. input torque** from **1400 to 2600 Nm**
- **Wide gear ratio** from **14.57 to 17.11**
- Max. permissible **gross combination weight (GCW)** from **40 to 55 t**
- **Mechanical shifting systems** enable very smooth gear changing and high driving
- Highly variable **modular systems** for customer-specific system solutions
- **Integrated** hydrodynamic retarder
- Quiet **running characteristics** and **long service life** through optimized gear set geometry and high-precision processing technologies
- **Compact design** and **weight-optimized** metal housing for ideal installation dimensions and an ideal power/weight ratio
- Long **service intervals** and low **operating costs** due to a **fuel-efficient design** optimized for customer-specific operating conditions
- More comfortable **vibration characteristic**



# G 141-9S



- Direct-drive synchronized transmission with 9 speeds and a wide gear ratio spread
- Economical gear ratio spread (including small gear ratio between 7<sup>th</sup> and 8<sup>th</sup> gear)



## Specifications and dimensions

**Max. input torque** 1400 Nm  
**Permissible gross combination weight (GCW)** 44 t  
**Transmission weight excl. oil** 210 kg  
**Oil filling capacity** 11 l

**A** = length 914 mm  
**B** = width 555 mm  
**C** = center to center 142 mm  
**D** = diameter SAE 1 and SAE 2



Gear	1	2	3	4	5	6	7	8	R	Gear ratio spread
Ratio	9.748	6.635	4.821	3.667	2.585	1.810	1.315	1.000	13.862	14.573

# G 260-16S



- 16-speed synchronized transmission with a wide gear ratio spread
- Overdrive versions
- Hydrodynamic retarder can be adapted

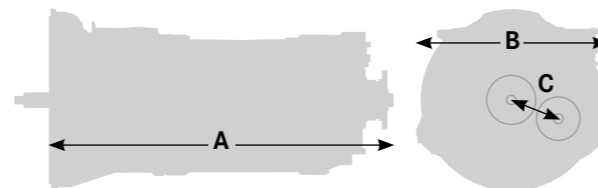


## Specifications and dimensions

**Max. input torque** 2600 Nm  
**Permissible gross combination weight (GCW)** 55 t  
**Transmission weight excl. oil** 290 kg/  
 352 kg\*  
**Oil filling capacity** 14 l

**A** = length 1020 mm  
**B** = width 555 mm  
**C** = center to center 152 mm  
**D** = diameter SAE 1

\* with retarder



Gear	1	2	3	4	5	6	7	8	R	Gear ratio spread
$i_s$	11.722	7.916	5.291	3.636	2.664	1.799	1.203	0.826	10.656	17.11
$i_L$	9.747	6.583	4.400	3.023	2.215	1.476	1.000	0.687	8.861	17.11



# G 211-12 PowerShift 2



- 12-speed non synchronized transmission with large overall ratio
- Direct drive version
- Integrated powerpack mount on transmission housing
- Electronic-automated shift system EPS III K



## Specifications and dimensions

**Max. input torque** 2100 Nm  
**Permissible gross combination weight (GCW)** 44 t  
**Transmission weight excl. oil** 235 kg  
**Oil filling capacity** 10 l

**A** = length 962,5 mm  
**B** = width 624 mm  
**C** = center to center 142 mm



Gear	1	2	3	4	5	6	R	Gear ratio spread
$i_s$	14.93	9.03	5.63	3.39	2.05	1.28	14.93	14.93
$i_L$	11.67	7.06	4.40	2.65	1.60	1.00	11.67	14.93

# G 281-12 PowerShift 2



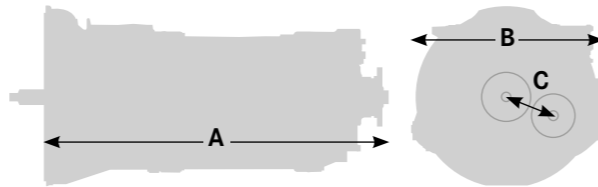
- 12-speed non synchronized transmission with large overall ratio
- Overdrive versions
- Hydrodynamic Retarder additional available
- Electronic-automated shift system EPS III K



## Specifications and dimensions

**Max. input torque** 2800 Nm  
**Permissible gross combination weight (GCW)** 60 t  
**Transmission weight excl. oil** 287 kg  
**Oil filling capacity** 14 l

**A** = length 1033 mm  
**B** = width 624 mm  
**C** = center to center 152 mm



Gear	1	2	3	4	5	6	R 1	R 2	Gear ratio spread
$i_s$	14.93	9.024	5.644	3.393	2.051	1.283	16.386	3.724	14.93
$i_L$	11.639	7.035	4.400	2.645	1.599	1.000	12.774	2.903	14.93

# G 330-12 PowerShift 2



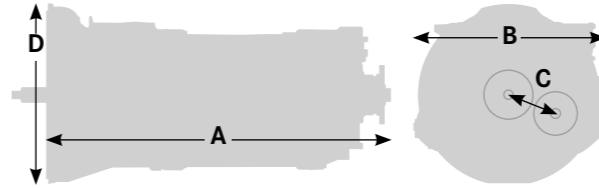
- 12-speed none synchronized transmission with large overall ratio
- Overdrive versions
- Hydrodynamic Retarder additional available
- Electronic-automated shift system EPS III K



## Specifications and dimensions

**Max. input torque** 3300 Nm  
**Permissible gross combination weight (GCW)** 60 t  
**Transmission weight excl. oil** 292 kg  
**Oil filling capacity** 14 l

**A** = length 1033 mm  
**B** = width 624 mm  
**C** = center to center 152 mm



Gear	1	2	3	4	5	6	R 1	R 2	Gear ratio spread
$i_s$	11.639	7.035	4.400	2.645	1.599	1.000	12.774	2.093	14.93
$i_L$	9.020	5.452	3.410	2.050	1.239	0.775	9.900	2.250	14.93



## Integrated hydrodynamic oil retarder

The integrated hydrodynamic oil retarder offers a **high braking torque in combination with a compact, weight-saving design**. The braking power of the retarder is also **independent of selected gear or current engine speed**.

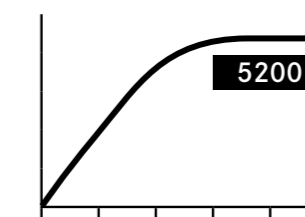
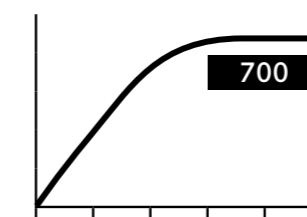
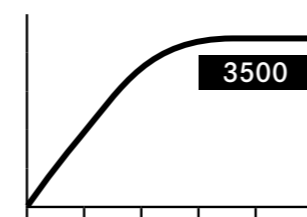
A gear change does not result in any interruption in the retarder braking action and the retarder braking power depends only on the current driving speed. The braking power can be controlled precisely in **five stages** using the right hand control stalk on the steering column. In addition to the engine brake, the retarder provides a **maximum braking torque up to 3500 Nm (VR 115 HV)**.



## VR 115 HV Hydrodynamic retarder

### Your product benefits:

- **Stainless steel** heat exchanger
- **Reduction of friction** by axial rotor displacement
- Optimized **hydrodynamics**
- **Integration** into the vehicle management
- Standard prop **shaft length** is determined by the **retarder unaffected**



Retarder.

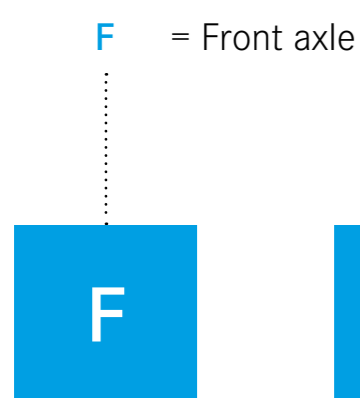


# Mercedes-Benz axles.

Reliable axles  
for every application.

# Derivation "Nomenclature" - axles.

## Non-driven axles



Number = Axle load [t]

## Driven axles

- R = Rear axle
- RT = Rear axle tandem
- FD = Front axle driven
- FT = Front axle tandem driven



Number = Ring gear diameter [mm]

# The right axle for every application.

Axle portfolio: front axles\* and rear axles.

Vehicle category	Front axles*	Wheel-end size [inches]	Axle load [t]	Rear axles	Wheel-end size [inches]	Axle load [t]
Light-duty	F 4.1 - F 4.4	17.5	to 4.4	R 325	17.5	6 - 8.3
Medium-duty	F 5.3 - F 6.1	19.5/20/22.5	5.3 - 6.1	R 390	19.5/20/22.5	9.2 - 11
	FD 346 - FD 360	20/22.5	4.7 - 6			
Heavy-duty	F 7.5 - F 8	20/22.5	7.5 - 8	R 440	22.5	13
	F 9 - F 9.5	20/22.5	9	R 485	22.5	13
	FD 233 P	20/22.5/24	7.5 - 9	R 233 P - R 300 P	20/22.5/24	13.4 - 16
	FD 233 P** FT 233 P+	20/22.5/24	18	RT 390 + RT 390 T **	22.5	20
				RT 440 + R 440 **	22.5	26
				RT 300 P + R 300 P **	20/22.5/24	26.8 - 32

\* front axles are applicable as steered tag and pusher axles \*\* tandem

### Meaning of symbols:

- Front axles
- Rear axles

- Axles for light-duty trucks
- Axles for medium-duty trucks
- Axles for heavy-duty trucks



# Our axle product portfolio: Efficiency on demand.

Our product range consists of axles for a broad range of commercial vehicles. This portfolio is highly suitable for nearly all commercial categories, in urban areas or overland, from delivery to heavy trucks.

We use our customers' experience, their requirements and demands as an essential precondition in the development of new axle technologies.

Our innovative state-of-the-art engineering and our quality-driven plants in Germany give our axles outstanding performance in:

- **Durability**
- **Fuel efficiency**
- **Noise behaviour**

Top vehicle manufacturers around the world trust on the outstanding quality and performance of our axles and the reliability of our services. We are one of the world's biggest producers of commercial axles and we want to share our experience and technology with you.

Convince yourself and discover the advantages of Mercedes-Benz axles.



Front axles.

## Flexibility at high level.

### Your product benefits for front axles:

- Wheel-end sizes from **17.5 to 22.5 inches**
- Driven front axles for **light-, medium- and heavy-duty applications**
- Axle loads from **4.1 to 9.5 t** (per axle)
- Gross vehicle weight rating (**GVWR**) from **6.5 to 250 t**
- **Additional payload** due to compact design and weight-optimized technical design
- **Left or right hand drive** applications possible
- **High fuel efficiency design** to suit the operating conditions
- **Maintenance-free** wheel-hubs
- Easy maintenance and **long oil change intervals**
- **Longer lifetime** and **quieter operation** due to our optimized gear set design

# F 4.1-F 4.4



- Steered rigid axle with forged front axle beam
- Recommended for light-duty application

## Data and dimensions

<b>Axle load</b>	4.1 - 4.4 t
<b>Wheel-end size</b>	17.5 inches
<b>Brake</b>	disk brake
<b>Axle weight*</b>	245 kg
<b>A = overall width</b>	2293-2303 mm
<b>B = track width</b>	1949-1975 mm
<b>C = spring track</b>	830 mm
<b>D = max. steering angle</b>	52°

\* varies depending on configuration

# F 5.3-F 6.1



- Steered rigid axle with forged front axle beam
- Recommended for medium-duty application

## Data and dimensions

<b>Axle load</b>	5.3-6.1 t
<b>Wheel-end size</b>	19.5 inches
<b>Brake</b>	disk brake
<b>Axle weight*</b>	357 kg
<b>A = overall width</b>	2346-2389 mm
<b>B = track width</b>	1955-1991 mm
<b>C = spring track</b>	830 mm
<b>D = max. steering angle</b>	52°

\* varies depending on configuration

# FD 346-FD 360



- Steered, driven salisbury-design axle
- Recommended for medium-duty application

## Data and dimensions

<b>Axle load</b>	4.7-6 t
<b>Wheel-end size</b>	19.5 inches
<b>Brake</b>	drum brake
<b>Drive type</b>	single-stage
<b>Axle weight*</b>	492 kg
<b>A = overall width</b>	2190-2496 mm
<b>B = track width</b>	1886-2098 mm
<b>C = spring track</b>	830/1000 mm
<b>D = max. steering angle</b>	39°

\* varies depending on configuration

# F 7.5-F 8



- Steered rigid axle with forged front axle beam
- Recommended for heavy-duty application

## Data and dimensions

<b>Axle load</b>	7.5-8 t
<b>Wheel-end size</b>	22.5 inches
<b>Brake</b>	disk brake/ drum brake
<b>Axle weight*</b>	461 kg
<b>A = overall width</b>	2486-2583 mm
<b>B = track width</b>	2046-2140 mm
<b>C = spring track</b>	840 mm
<b>D = max. steering angle</b>	52°

\* varies depending on configuration



# F 9-F 9.5



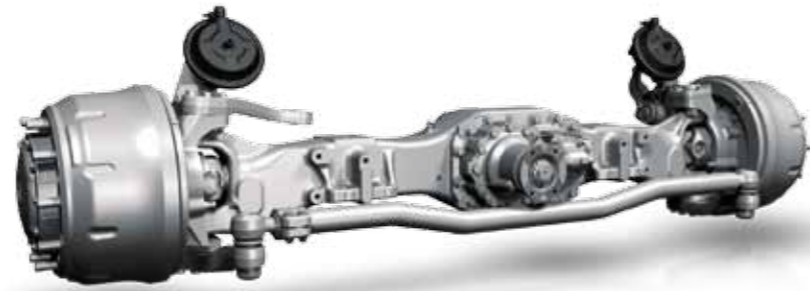
- Steered rigid axle with forged front axle beam
- Recommended for heavy-duty application

## Data and dimensions

<b>Axle load</b>	9-9.5 t
<b>Wheel-end size</b>	22.5 inches
<b>Brake</b>	disk brake/ drum brake
<b>Axle weight*</b>	463 kg
<b>A = overall width</b>	2486-2583 mm
<b>B = track width</b>	2046-2153 mm
<b>C = spring track</b>	840 mm
<b>D = max. steering angle</b>	48°

\* varies depending on configuration

# FD 233 P



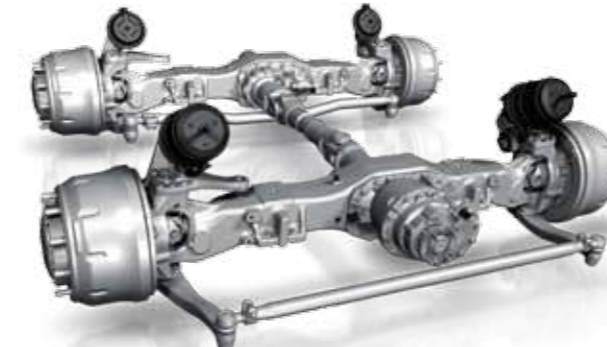
- Steered, driven planetary axle with cast axle housing
- Recommended for heavy-duty application

## Data and dimensions

<b>Axle load</b>	7.5-9 t
<b>Wheel-end size</b>	22.5 inches
<b>Brake</b>	drum brake
<b>Drive type</b>	double reduction/planetary
<b>Axle weight*</b>	738 kg
<b>A = overall width</b>	2480-2506 mm
<b>B = track width</b>	1997-2092 mm
<b>C = spring track</b>	840/875 mm
<b>D = max. steering angle</b>	42°

\* varies depending on configuration

# FD 233 P + FT 233 P

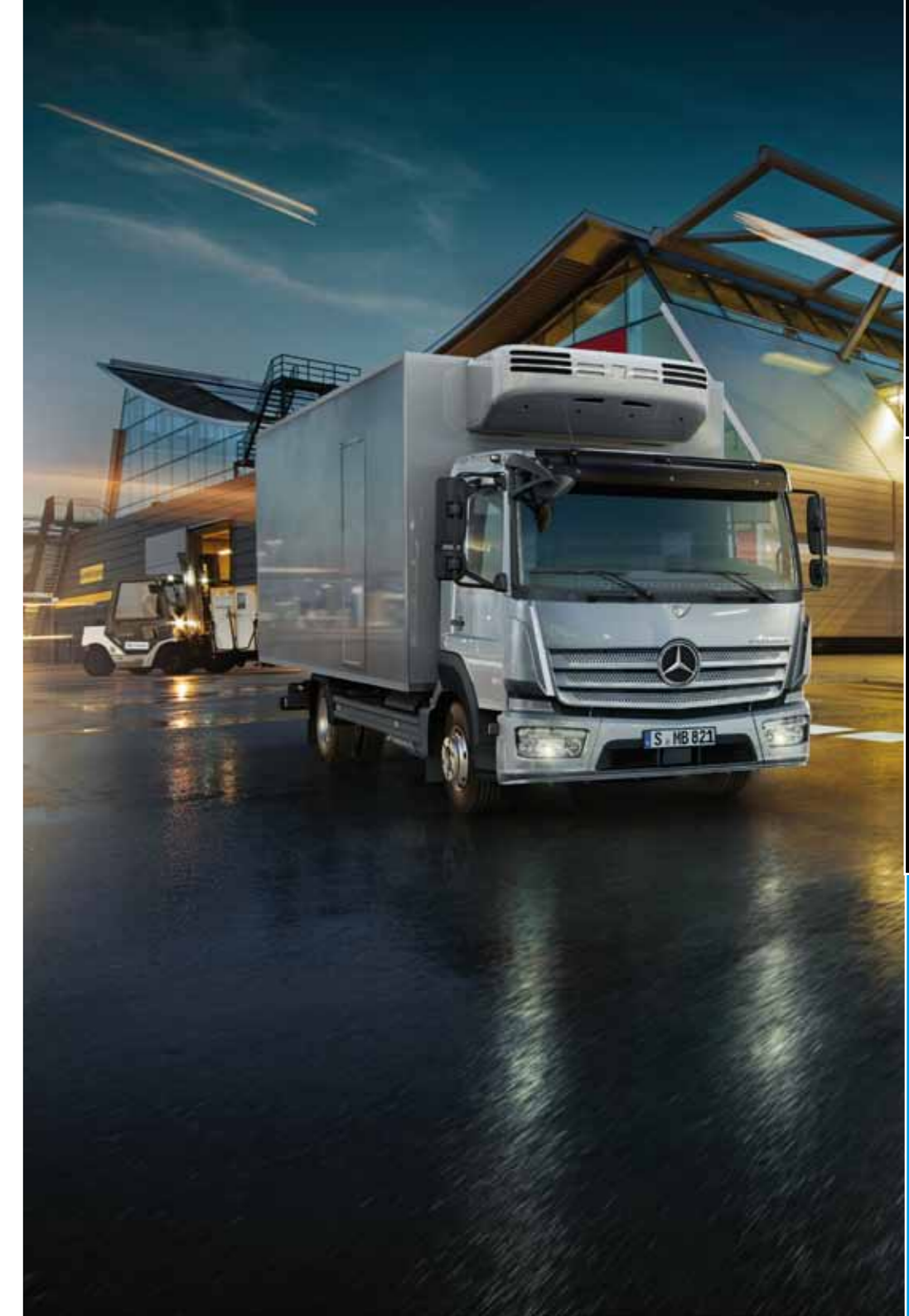


- Steered, driven planetary axle with cast axle housing, tandem
- Recommended for heavy-duty application

## Data and dimensions

<b>Axle load</b>	18 t (tandem)
<b>Wheel-end size</b>	22.5 inches
<b>Brake</b>	drum brake
<b>Through-drive axle</b>	yes
<b>Drive type</b>	double reduction/planetary
<b>Axle weight*</b>	1621 kg
<b>A = overall width</b>	2480-2506 mm
<b>B = track width</b>	1997-2092 mm
<b>C = spring track</b>	840 mm
<b>D = max. steering angle</b>	38°

\* varies depending on configuration





Rear axles.

# Master every challenge.

## Your product benefits for rear axles:

- **Wheel-end sizes** from 17.5 to 22.5 inches
- **Hypoid and planetary** driven
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- **Additional payload** due to weight optimized design
- **Maintanance-free** wheel-hubs
- New Final Drive axle with **optimized oil management** reduces fuel consumption

# R 325



- Fabricated axle housing
- Recommended for light-duty application

## Data and dimensions

<b>Axle load</b>	6.2–8.3 t	
<b>Wheel-end size</b>	17.5 inches	
<b>Brake</b>	disk brake	
<b>Suspension</b>	air springs/steel springs	
<b>Drive type</b>	single reduction/hypoid	
<b>Axle weight*</b>	350 kg	
<b>A = overall width</b>	2232–2330 mm	
<b>B = track width</b>	1760–1775 mm	
<b>C = spring track</b>	1022 mm	
<b>Ring gear diameter</b>	325 mm	

\* varies depending on configuration

# R 390



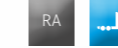
- Fabricated axle housing
- Recommended for medium-duty application

## Data and dimensions

<b>Axle load</b>	11 t	
<b>Wheel-end size</b>	19.5 inches	
<b>Brake</b>	disk brake/drum brake	
<b>Suspension</b>	air springs/steel springs	
<b>Drive type</b>	single reduction/hypoid	
<b>Axle weight*</b>	541 kg	
<b>A = overall width</b>	2284–2489 mm	
<b>B = track width</b>	1753–1840 mm	
<b>C = spring track</b>	1022 mm	
<b>Ring gear diameter</b>	390 mm	

\* varies depending on configuration

# R 440



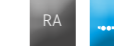
- Fabricated axle housing
- Recommended for heavy-duty application

## Data and dimensions

<b>Axle load</b>	13 t	
<b>Wheel-end size</b>	22.5 inches	
<b>Brake</b>	disk brake	
<b>Suspension</b>	air springs/steel springs	
<b>Drive type</b>	single reduction/hypoid	
<b>Axle weight*</b>	680 kg	
<b>A = overall width</b>	2410–2482 mm	
<b>B = track width</b>	1802–1910 mm	
<b>C = spring track</b>	930 mm	
<b>Ring gear diameter</b>	440 mm	

\* varies depending on configuration

# R 485



- Cast axle housing for high engine torque
- Recommended for heavy-duty application

## Data and dimensions

<b>Axle load</b>	13 t	
<b>Wheel-end size</b>	22.5 inches	
<b>Brake</b>	disk brake	
<b>Suspension</b>	air springs/steel springs	
<b>Drive type</b>	single reduction/hypoid	
<b>Axle weight*</b>	765 kg	
<b>A = overall width</b>	2422–2482 mm	
<b>B = track width</b>	1802–1804 mm	
<b>C = spring track</b>	930 mm	
<b>Ring gear diameter</b>	485 mm	

\* varies depending on configuration

# R 233 P - R 300 P



- Planetary axle with cast axle housing
- Recommended for heavy-duty application

## Data and dimensions

<b>Axle load</b>	13.4–16 t	
<b>Wheel-end size</b>	22.5 inches	
<b>Brake</b>	disk brake/drum brake	
<b>Suspension</b>	air springs/steel springs	
<b>Drive type</b>	double reduction/planetary	
<b>Axle weight*</b>	792 kg	
<b>A = overall width</b>	2407–2775 mm	
<b>B = track width</b>	1800–2039 mm	
<b>C = spring track</b>	930 mm	
<b>Ring gear diameter</b>	233/300 mm	

\* varies depending on configuration

# RT 233 P + R 233 P- RT 300 P + R 300 P



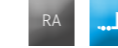
- Planetary axle with cast axle housing, tandem
- Recommended for heavy-duty application

## Data and dimensions

<b>Axle load</b>	26.8–32 t (tandem)	
<b>Wheel-end size</b>	22.5 inches	
<b>Brake</b>	disk brake/drum brake	
<b>Through-drive axle</b>	yes	
<b>Suspension</b>	air springs/steel springs	
<b>Drive type</b>	two-stage/planetary	
<b>Axle weight*</b>	1643 kg (tandem)	
<b>A = overall width</b>	2407–2775 mm	
<b>B = track width</b>	1800–2039 mm	
<b>C = spring track</b>	930 mm	
<b>Ring gear diameter</b>	233/300 mm	

\* varies depending on configuration

# RT 390 + RT 390 T



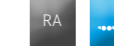
- Fabricated axle housing, tandem
- Recommended for heavy-duty application

## Data and dimensions

<b>Axle load</b>	20 t (tandem)	
<b>Wheel-end size</b>	22.5 inches	
<b>Brake</b>	disk brake	
<b>Through-drive axle</b>	yes	
<b>Suspension</b>	air springs/steel springs	
<b>Drive type</b>	single-stage/hypoid	
<b>Axle weight*</b>	1255 kg (tandem)	
<b>A = overall width</b>	2441–2501 mm	
<b>B = track width</b>	1821–1823 mm	
<b>C = spring track</b>	990 mm	
<b>Ring gear diameter</b>	390 mm	

\* varies depending on configuration

# RT 440 + R 440



- Fabricated axle housing, tandem
- Recommended for heavy-duty application

## Data and dimensions

<b>Axle load</b>	26 t (tandem)	
<b>Wheel-end size</b>	22.5 inches	
<b>Brake</b>	disk brake	
<b>Through-drive axle</b>	yes	
<b>Suspension</b>	air springs/steel springs	
<b>Drive type</b>	single-stage/hypoid	
<b>Axle weight*</b>	1482 kg (tandem)	
<b>A = overall width</b>	2410–2482 mm	
<b>B = track width</b>	1802–1910 mm	
<b>C = spring track</b>	930 mm	
<b>Ring gear diameter</b>	440 mm	

\* varies depending on configuration



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# Index.

ENGINES					TRUCK	BUSES
Type	Cylinder	Displacement [litres]	Power [kW]	Torque [Nm]		
OM 924	L4	4.8	115, 130, 160	610, 675, 810	x	x
OM 926	L6	7.2	175, 188, 210, 240	850, 970, 1120, 1300	x	x
OM 457	L6	12.0	260, 265, 295, 310 <sup>2</sup> , 315, 335 <sup>2</sup>	1600 <sup>2</sup> , 1750 <sup>2</sup> , 1850, 1900 <sup>2</sup> , 2000, 2100, 2200 <sup>2</sup>	x	x
OM 460	L6	12.8	335, 375	2300, 2400	x	

TRANSMISSIONS					TRUCK	BUSES
Type	Ratio	Forward gears	Max. input torque [Nm]			
G 90 - 6S	6.70 - 0.73/9.20	6	1000			
G 141 - 9S	9.75 - 1.00/14.57	8	1400	x		x
G 260 - 16S	11.72 - 0.69/17.11	16	2600	x		
G 211 - 12 PowerShift 2	14.93 - 1.00/14.93	12	2100	x		
G 281 - 12 PowerShift 2	14.93 - 1.00/14.93	12	2800	x		
G 330 - 12 PowerShift 2	11.64 - 0.78/14.93	12	3300	x		
GO 230 - 6 CPS	6.53 - 0.72/9.03	6	2300			x
GO 240 - 8 PowerShift 2	6.57 - 0.63/10.38	8	2400			x

<sup>1</sup> Output level only available for trucks. <sup>2</sup> Output level only available for buses.

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R 390	19.5	11	x	x
R 440	22.5	13	x	x
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RT 390 + RT 390 T	22.5	20.5	x	
RT 440 + R 440	22.5	26	x	

Oktober 2020

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