

|   |        |
|---|--------|
| <input type="checkbox"/> <b>D5K210</b> (154 kW) |        |
| Max power at 2,200 r/min                        | 210 hp |
| Max torque at 1,100–1,700 r/min                 | 800 Nm |
| <input type="checkbox"/> <b>D5K240</b> (177 kW) |        |
| Max power at 2,200 r/min                        | 240 hp |
| Max torque at 1,200–1,600 r/min                 | 900 Nm |

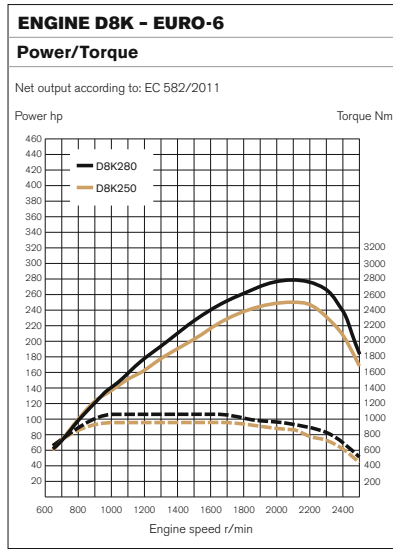
**D5K**

|   |                     |
|---|---------------------|
| No. of cylinders  | 4                   |
| Displacement  | 5.1 dm <sup>3</sup> |
| Stroke  | 135 mm              |
| Bore  | 110 mm              |
| Compression ratio   | 17.5:1              |
| Economy revs  | 1,100–1,800 r/min   |
| Exhaust braking effect (2,800 r/min)                            | 80 kW               |
| Oil filters   | 1                   |
| Oil change volume, incl. filter                                 | 15 l                |
| Cooling system, total volume                                    | 13 l                |
| Oil change interval: Up to 40,000 km, or once a year with VDS4. |                     |

**FUEL**  
EN 590 (EU norm) max 10 ppm sulphur.

**ENGINE-MOUNTED POWER TAKE-OFF**  
Ratio 1:1 600 Nm\*

\* Torque output both when driving and standing still.



|   |          |
|---|----------|
| <input type="checkbox"/> <b>D8K250</b> (184 kW) |          |
| Max power at 2,100 r/min                        | 250 hp   |
| Max torque at 900–1,700 r/min                   | 950 Nm   |
| <input type="checkbox"/> <b>D8K280</b> (206 kW) |          |
| Max power at 2,100 r/min                        | 280 hp   |
| Max torque at 950–1,700 r/min                   | 1,050 Nm |

**D8K**

|   |                     |
|---|---------------------|
| No. of cylinders  | 6                   |
| Displacement  | 7.7 dm <sup>3</sup> |
| Stroke  | 135 mm              |
| Bore  | 110 mm              |
| Compression ratio   | 17.5:1              |
| Economy revs  | 1,000–1,700 r/min   |
| Exhaust braking effect (2,800 r/min)  | 120 kW              |
| Engine brake effect (2,800 r/min)   | 170 kW              |
| Oil filters   | 1                   |
| Oil change volume, incl. filter   | 20 l                |
| Cooling system, total volume  | 17 l                |
| Oil change interval: Up to 80,000 km or once a year (Long haul)/60,000 km or once a year (Distribution) using VDS4. |                     |

**FUEL**  
EN 590 (EU norm) max 10 ppm sulphur.

**ENGINE-MOUNTED POWER TAKE-OFF**  
Ratio 1:1 600 Nm\*

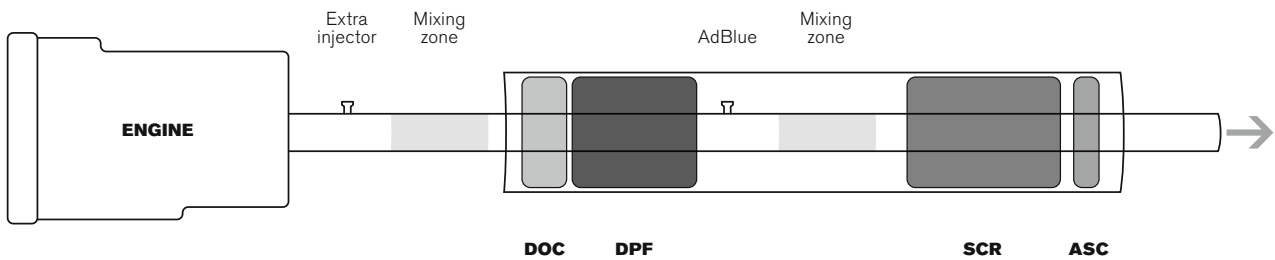
\* Torque output both when driving and standing still.

## 2 DRIVELINE

### EURO-6

We've come a long way in reducing environmental impact. Now it's time for Euro 6, the toughest step so far, putting extremely strict limits on emissions of particulate matter PM (0.01 g/kWh) and oxides of nitrogen NO<sub>x</sub> (0.40 g/kWh for steady-state cycle and 0.46 g/kWh for transient cycle).

### OUR SOLUTION FOR EURO 6



#### ENGINE

A closed loop butterfly exhaust brake, a turbo, a so-called water cooled EGR and more. The new engine components serve two main purposes: to improve gas-flow and make sure the exhausts reach the after-treatment system at optimum temperature.

#### EXTRA INJECTOR

A special diesel injector is used for heat management of the Diesel Oxidation Catalyst DOC and ensures the efficiency of the Diesel Particulate Filter DPF and good Selective Catalytic Reduction SCR functionality.

#### DIESEL OXIDATION CATALYST (DOC)

The DOC produces the NO<sub>2</sub> necessary for the DPF to efficiently combust the particulates. In cold conditions, it also provides the heat needed for regeneration.

#### DIESEL PARTICULATE FILTER (DPF)

The filter collects particulate matter (PM) and stores it until it's burned off during regeneration. If the temperature is not achieved during the duty cycle there is a switch in the cab to regenerate the DPF when stationary. There is also a regeneration gauge in the dash.

#### SELECTIVE CATALYTIC REDUCTION (SCR)

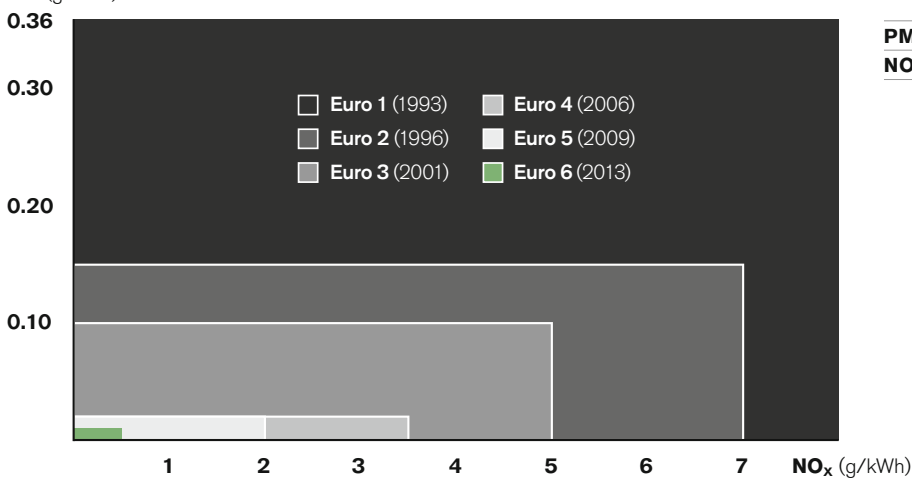
In the mixing zone, the exhaust gas is sprayed with AdBlue – which is an ammonia NH<sub>3</sub> solution. When they reach the catalyst, the oxides or nitrogen (NO<sub>x</sub>) are efficiently transformed into harmless nitrogen gas and water.

#### AMMONIA SLIP CATALYST (ASC)

The last step before the tailpipe where the remaining ammonia (NH<sub>3</sub>), if any, is removed.

### EUROPEAN EMISSION STANDARDS 1993-2013

PM (g/kWh)



PM = Particulate Matter

NO<sub>x</sub> = Oxides of Nitrogen

### GEARBOXES

The manual gearboxes are operated with servo assistance. The short gear lever is integrated into the dash, is vibration-free and gear lever movement is short and crisp. The automatic transmission is operated via push-buttons in the instrument panel. The I-Sync can be set for manual or automatic gearchanging. In manual mode, the steering column stalk is used. All gearboxes can be specified with a power take-off.

### GEARBOXES

| Type                     |         | Number of gears | Max torque (Nm) | GCW approval (tonnes) | D5K210 | D5K240 | D8K250 | D8K280 |
|--------------------------|---------|-----------------|-----------------|-----------------------|--------|--------|--------|--------|
| <input type="checkbox"/> | ZTO1006 | Manual          | 6               | 1050                  | 19     | •      |        |        |
| <input type="checkbox"/> | ZTO1006 | Manual          | 6               | 1050                  | 32     |        | •      | •      |
| <input type="checkbox"/> | ATO1056 | Automated       | 6               | 1050                  | 19     | •      |        |        |
| <input type="checkbox"/> | ATO1056 | Automated       | 6               | 1050                  | 32     |        | •      | •      |
| <input type="checkbox"/> | ZTO1109 | Manual          | 9               | 1200                  | 36     |        | •      | •      |
| <input type="checkbox"/> | STO8006 | Manual          | 6               | 850                   | 19     | •      |        |        |
| <input type="checkbox"/> | ATO8006 | Automated       | 6               | 850                   | 19     | •      |        |        |
| <input type="checkbox"/> | AL306   | Automatic       | 6               | 1300                  | 32     |        | •      | •      |

### POWER TAKE-OFFS

| Name/Variant             | Gearbox  | Type                | Speed ratio | Max torque (Nm) | Rotation |         |
|--------------------------|----------|---------------------|-------------|-----------------|----------|---------|
| <input type="checkbox"/> | PR-FH4   | STO8006 and ATO8006 | Flange      | 1:0.962         | 450      | Same    |
| <input type="checkbox"/> | PR-FH4   | STO8006 and ATO8006 | Pump        | 1:0.962         | 450      | Same    |
| <input type="checkbox"/> | PTR-ZF4  | ZTO1006 and ATO1056 | Flange      | 1:1.700         | 320      | Same    |
| <input type="checkbox"/> | PTR-ZF5  | ZTO1006 and ATO1056 | Pump        | 1:1.700         | 320      | Same    |
| <input type="checkbox"/> | PTR-ZF6  | ZTO1006 and ATO1056 | Flange      | 1:2.030         | 270      | Same    |
| <input type="checkbox"/> | PTR-FH5  | ZTO1006 and ATO1056 | Flange      | 1:0.962         | 450      | Same    |
| <input type="checkbox"/> | PTR-PH4  | ZTO1006 and ATO1056 | Pump        | 1:0.962         | 450      | Same    |
| <input type="checkbox"/> | PTRA-PH3 | ZTO1006 and ATO1056 | Pump        | 1:0.962         | 450      | Same    |
| <input type="checkbox"/> | PTR-ZF2  | ZTO1109             | Flange      | 1:1.900         | 410      | Same    |
| <input type="checkbox"/> | PTR-ZF3  | ZTO1109             | Pump        | 1:1.900         | 410      | Same    |
| <input type="checkbox"/> | PTR-FH1  | ZTO1109             | Flange      | 1:0.970         | 800      | Inverse |
| <input type="checkbox"/> | PTR-PH1  | ZTO1109             | Pump        | 1:0.970         | 800      | Inverse |
| <input type="checkbox"/> | PTR-FH2  | ZTO1109             | Flange      | 1:1.253         | 430      | Same    |
| <input type="checkbox"/> | PTR-PH2  | ZTO1109             | Pump        | 1:1.253         | 430      | Same    |
| <input type="checkbox"/> | PTR-FH5  | ZTO1109             | Flange      | 1:1.778         | 450      | Same    |
| <input type="checkbox"/> | PTR-PH4  | ZTO1109             | Pump        | 1:1.778         | 450      | Same    |
| <input type="checkbox"/> | PTRA-PH1 | ZTO1109             | Pump        | 1:0.970         | 600      | Inverse |
| <input type="checkbox"/> | PTRA-PH2 | ZTO1109             | Pump        | 1:1.253         | 430      | Same    |
| <input type="checkbox"/> | PR-HP4S  | AL306               | Pump        | 1:0.933         | 400      | Same    |
| <input type="checkbox"/> | PR-HF4S  | AL306               | Flange      | 1:0.933         | 400      | Same    |
| <input type="checkbox"/> | PR-HP6S  | AL306               | Pump        | 1:0.933         | 600      | Same    |
| <input type="checkbox"/> | PR-HF6S  | AL306               | Flange      | 1:0.933         | 600      | Same    |
| <input type="checkbox"/> | PR-HP4SH | AL306               | Pump        | 1:1.615         | 400      | Same    |
| <input type="checkbox"/> | PR-HF4SH | AL306               | Flange      | 1:1.615         | 400      | Same    |

## 2 DRIVELINE

### REAR AXLES

| Type                              | Axle | Gear   | Max torque<br>(Nm) | Max axle load<br>(tonnes) | GCW approval<br>(tonnes) |
|-----------------------------------|------|--------|--------------------|---------------------------|--------------------------|
| <b>Single reduction</b>           |      |        |                    |                           |                          |
| <input type="checkbox"/> RSS0819A | Solo | Hypoid | 950                | 8.5                       | 19                       |
| <input type="checkbox"/> RSS1125A | Solo | Hypoid | 1050               | 11.5                      | 25                       |
| <input type="checkbox"/> RSS1132A | Solo | Hypoid | 1050               | 11.5                      | 32.5                     |

### REAR AXLE RATIOS

| RSS0819A | RSS1125A | RSS1132A |
|----------|----------|----------|
| 3.31:1   | 3.58:1   | 3.78:1   |
| 3.58:1   | 3.73:1   | 4.13:1   |
| 3.73:1   | 3.90:1   | 4.50:1   |
| 3.91:1   | 4.11:1   | 5.14:1   |
| 4.10:1   | 4.33:1   | 5.67:1   |
| 4.30:1   | 4.63:1   | 6.17:1   |
| 4.56:1   | 4.88:1   |          |
| 4.88:1   | 5.13:1   |          |
| 5.13:1   | 5.29:1   |          |
| 5.29:1   | 5.57:1   |          |
| 5.57:1   | 5.86:1   |          |
| 5.86:1   |          |          |