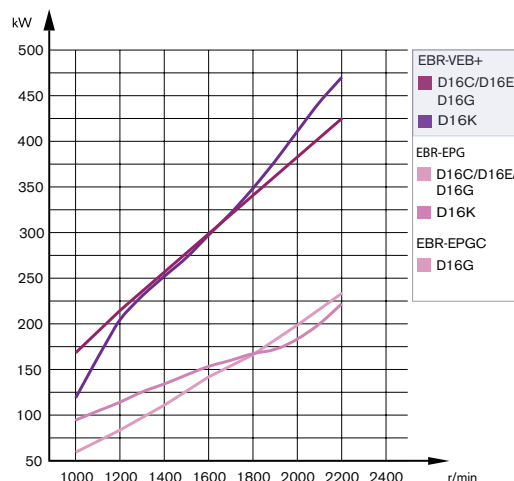
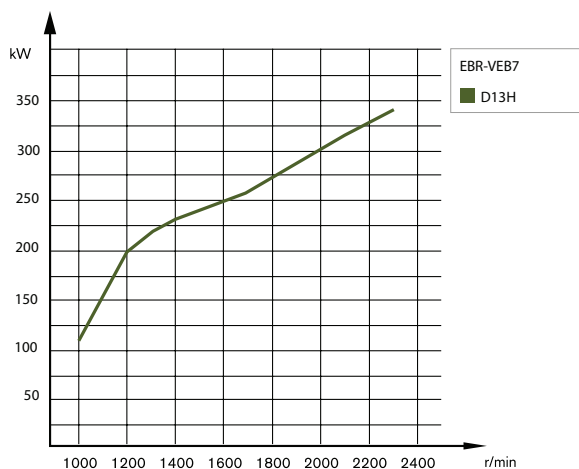
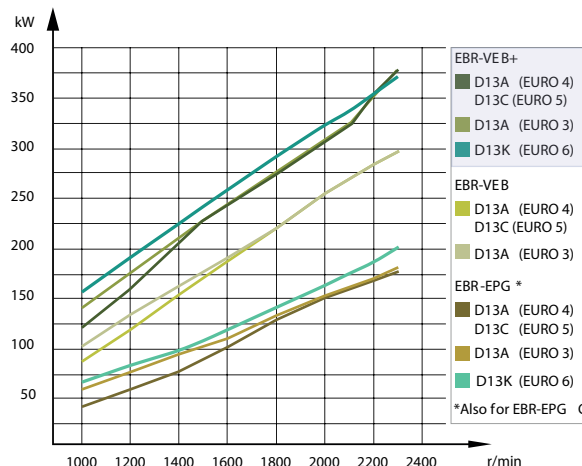
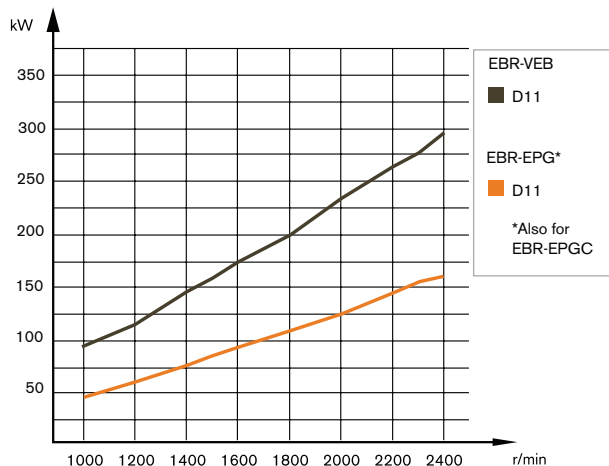


# FACT SHEET

Engine brake type EBR-VEB+



## Engine brake - VEB+

VEB+ (Volvo Engine Brake) is Volvo's high-efficiency engine braking system. It is based on interaction between the exhaust pressure governor and Volvo's patented compression brake.

With the help of a camshaft featuring a special profile and four rocker arms, gas pressure inside the cylinders can be regulated as necessary. In this way, it is possible to create considerable overpressure during engine braking, thus maximising braking effect on the pistons. This produces smooth, extremely high braking output throughout the rev range.

This system makes VEB+ into a highly effective auxiliary brake. By using the engine brake, safety can be boosted at the same time as wheel brake wear is reduced. In combination with cruise control, VEB+ also creates the necessary preconditions for better fuel economy and higher average speeds.

# FACT SHEET

Engine brake type EBR-VEB+

## Multifunction control stalk

The control stalk for auxiliary brakes has three or five positions, depending on the type of gearbox that the truck is equipped with.

**A** Automatic mode. Brake Blending is active if Cruise Control is inactive. When the brake pedal is depressed, the braking force is blended between the ordinary brakes and the auxiliary brakes.

**O** All auxiliary brakes are off.

**1-3** Brake level settings. Provides settings between 20 and 100%. The total brake torque depends on which auxiliary brakes that are fitted on the vehicle, load condition and retarder temperature. The auxiliary brake is activated when the accelerator pedal is released. On control stalk with setting 1 only gives full braking effect from the Exhaust Pressure Governor.

**B** Brake program mode. On vehicles with I-Shift or Powertronic, there is also a “B-button” that is used to activate the “brake program”. This function provides faster down-changes during braking.



Control stalk for auxiliary brakes	
Gearbox	Stalk design
<b>I-Shift</b>	
Exhaust Pressure Governor without Retarder	A, 0, 1 and B-button
Volvo Engine Brake without Retarder	A, 0, 1, 2, 3 and B-button
Retarder	A, 0, 1, 2, 3 and B-button
<b>Powertronic</b>	
<b>Manual</b>	
Exhaust Pressure Governor without Retarder	A, 0, 1
Volvo Engine Brake without Retarder	A, 0, 1, 2, 3
Retarder	A, 0, 1, 2, 3



Auxiliary brake symbol.



Trailer brake symbol. When the truck is equipped with trailer brake this function is also controlled with the auxiliary brake control stalk.

# VOLVO

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