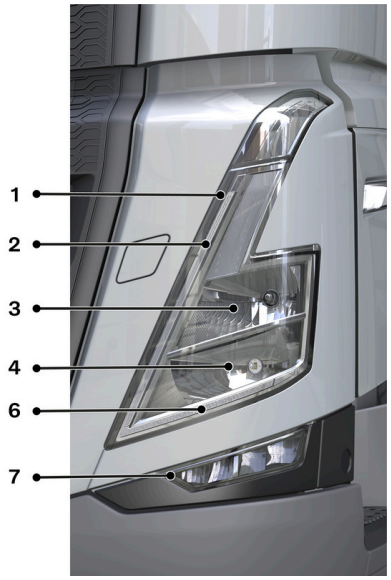
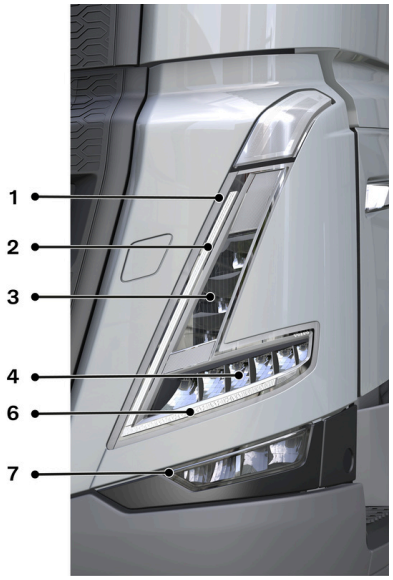
FACT SHEET

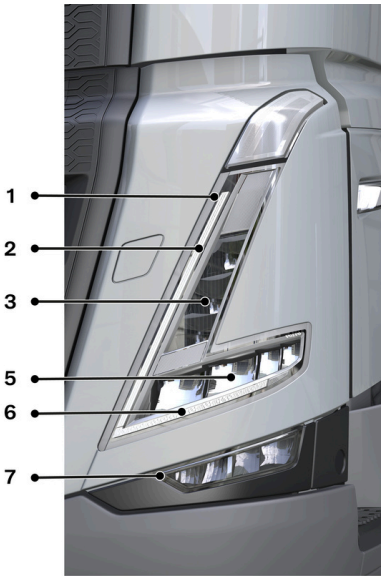
HEADLAMPS



HL-BASIC



HL-LED



HL-LED3

1. Main unit comprising the following: 2. Daytime running lamp and front position lamp, 3. Dipped beam, 4. Main beam, 5. Main beam and adaptive high beam, 6. Front direction indicator.

7. Auxiliary unit.

Headlamps with several functions

The headlamps are divided into a main unit and an auxiliary unit, which gives a choice of performance and features.

The headlamps give the truck a distinctive appearance, primarily thanks to the V-shaped position marker lamps that frame the housing of the main unit. The direction indicator, the dipped beam, the main beam, the front position lamp, and daytime running lamp are all integrated in the housing of the main unit.

The auxiliary unit, which is positioned below the main unit, can be specified with fog lamp and/or extra main beam or static cornering lamp.

The plastic lens of the headlamp is resistant to stone-chip damage and the lamp housing is designed for low air resistance.

SAFETY

- Excellent visibility in all scenarios, including clear sightlines during night-time driving and improved illumination around the parked truck.
- Enhanced visibility near the truck for safer manoeuvring (CL-STAT).
- Maximized visibility in low-light conditions while minimizing disruption to other drivers on the road (HL-LED3 or HBDA-A).

DRIVER APPEAL

- Automatic main beam management (HL-LED3 or HBDA-A) lets the driver focus on the road.

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The main unit

The main unit has a distinct design with daytime running lamps in a unique V-shape. On the Volvo FH and Volvo FM, the lamp housing is chromed and on the Volvo FH16 it is black.

The main unit is offered in up to three versions, see table.

Sales variant	Variant description	FH	FH16	FM	FMX
HL-BASIC*	Halogen lamps	●	●	●	●
HL-LED	LED lamps	●	●	●	●
HL-LED3	LED lamps with adaptive high beam	●	●	-	-

*** Availability depends on market**

● Available, - Not available

The main unit includes the following functions:

- Dipped beam
- Main beam (adaptive high beam as option)
- Direction indicator
- Front position lamp
- Daytime running lamp (option)

The LED headlamps (HL-LED and HL-LED3) are homologated, so there is no need for adjustments or fitting of decals to adopt the asymmetry of the dipped beam.

Optional sales variants

The following options are available for each model. A description of the options follows.

Sales variant	Variant description	FH	FH16	FM	FMX
HBDA-A[1]	Automatic main beam deactivation and activation	-	-	●	●
DRL-LED	Daytime running lamps	●	●	●	●
UDRL[2]	Without daytime running lamps	●	●	●	●
FOGL-WC[3]	White front fog lamps	●	●	●	-
CL-STAT[3,4]	Static cornering light	●	●	●	-
DRIVL2[3,5]	Extra main beam	●	●	●	-
HL-ADJ[6]	Manually adjustable headlamp beam	●	●	●	●
HL-ADJA[7]	Automatically adjusted headlamp beam	●	●	●	●

● Available, - Not available

[1] Requires HL-LED.

[2] Available only for HL-BASIC and HL-LED.

[3] Not available for BUMP-HD.

[4] Requires FOGL-WC. Cannot be combined with DRIVL2.

[5] Requires FOGL-WC. Cannot be combined with CL-STAT.

[6] Requires HL-BASIC.

[7] Mandatory for HL-LED and HL-LED3.

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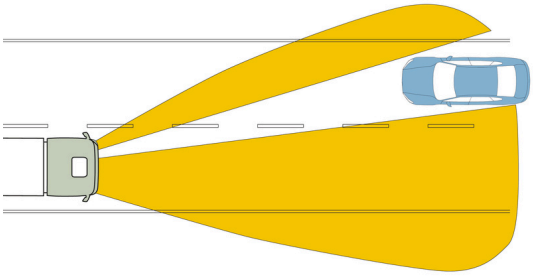
Adaptive high beam



Adaptive high beam.

The LED headlamp with adaptive high beam[8] (HL-LED3) allows the driver to permanently keep the main beam on, giving an optimal illumination at all times without disturbing approaching traffic and vehicles ahead[9]. Each headlamp has four reflectors and twelve LEDs, which can be controlled individually. The surrounding traffic and light is monitored by a radar and a camera. When vehicles are detected in front of your truck, individual LEDs are switched on and off automatically to prevent glaring.

[8] **Available only for Volvo FH and Volvo FH16.**

[9] **If adaptive high beam is combined with additional driving lamps, these lamps must be deactivated manually to avoid glaring opposing traffic, since their range usually exceeds the range of the sensors of the adaptive high beam.**

Automatic main beam deactivation and activation

On Volvo FM and Volvo FMX, where adaptive high beam is not an option, automatic main beam deactivation and activation[10] is offered.

As for adaptive high beam, the surrounding traffic and light is monitored by a radar and a camera. If an oncoming vehicle is detected, the main beam is automatically deactivated. When the vehicle has passed and there are no more oncoming vehicles, the main beam is automatically switched on again.

[10] **HL-LED is required.**

Daytime running lamps

The daytime running lamps are combined with the front position lamps using LED technology. When activated, the daytime running lamps have a distinct V-shape. When the dipped beam is activated, the daytime running lamps are dimmed to V-shaped, normal front position lamps.

Depending on the market, two different options for daytime running lamps are available:

- UDRL — Basic, no light turned on at all
- DRL-LED — Daytime running lamps activated and all position marker lamps[11] on

When the engine is started, trucks with DRL-LED will automatically switch from front position lamps to daytime running lamps mode. With UDRL, the position used at engine shutdown (DRL, D or D+ on the light control switch) will be used.

[11] **The position marker lamps are the following: the front position lamp in the headlamp, the side marker lamp, the rear-end outline marker lamp in the tail lamp, the rear position lamp in the tail lamp and the end outline marker lamps on roof.**

The auxiliary unit

The auxiliary unit[12] can have the following functions:

- Static cornering light – CL-STAT.
- Fog lamp – FOGL-WC.
- Extra main beam – DRIVL2.

The auxiliary unit with fog lamp and static cornering lamp.

The extra main beam and the static cornering lamp share position in the housing and therefore cannot be combined. If neither of these features are specified, the fog lamp gets a more central location in the housing. The auxiliary unit is offered in three versions:

- With fog lamp.
- With fog lamp and extra main beam.
- With fog lamp and static cornering lamp.

On trucks that do not have the auxiliary unit, a plastic cover will be mounted in its place.

[12] **Not available for BUMP-HD.**

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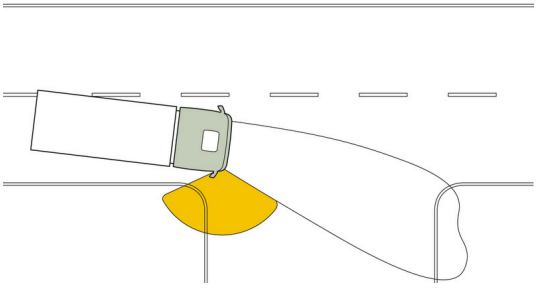
Static cornering light



Static cornering light.

When the truck slows down to turn a corner in the dark, the static cornering lamp[13] lights up the immediate area on the left-hand or right-hand side of the cab and helps spot unprotected road users.

[13] **Not available for BUMP-HD.**

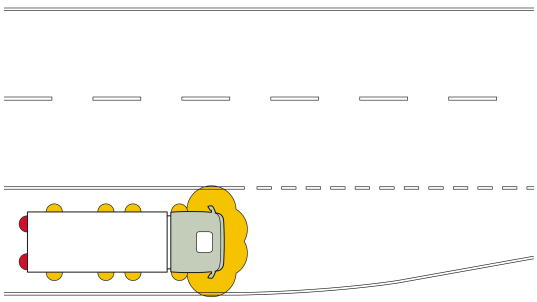
Adjustment of the headlamp beam

When the load of the truck is changed, the inclination of the chassis can change such that the height of the headlamp beam needs to be adjusted. On a truck with LED headlamps (HL-LED or HL-LED3), this adjustment is done fully automatically (HL-ADJA).

On a truck with halogen headlamps (HL-BASIC), the adjustment must be done manually and can be facilitated by an easily accessible control in the instrument panel (HL-ADJ). The control allows for the driver to quickly and easily adjust the headlamp beam without leaving the driver's seat.

Approach light

A feature called approach light is included on all trucks. It is activated by a separate button on the key remote. The approach light illuminates the area close to the truck and increases the visibility around the truck at night.



Approach light.

The following lamps come on for the approach light:

- The position lamps (in the headlamps and tail lamps).
- The instep lamp.
- The side marker lamps.
- The direction indicators.
- The interior lighting.

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HEADLAMPS

Examples of headlamps on different models

HL-BASIC, Volvo FH

HL-BASIC, Volvo FMX

HL-LED, Volvo FH

HL-LED, Volvo FH16

HL-LED, Volvo FM

HL-LED3, Volvo FH

HL-LED3, Volvo FH16