Arriving Quickly and Safely.
Retarder 115 HV
Increase Transport Performance Safely. With Voith Retarders.

Economy, safety and driving comfort – this is what our hydrodynamic Retarders ensure.
Economy

Get your customers on the road to success. Voith Retarders pay off – for you and your customers.

Active retarder utilisation saves fuel and time
- Motivation to drive with foresight
- Pay-back of retarder: usually within 1 – 2 years

Reduction of vehicle operating cost
- Service life of service brake is considerably extended
- Experience value in long-distance traffic factor 4 and higher
- Fewer workshop stops
- Protection of drive line

Advantages for vehicle resale
- Retained value of retarder up to 2,000 €
- Increased demand for retarder-fitted vehicles in the used vehicle market

Highest product quality
- Innovative hydrodynamics through rotor shifting
- Series-fitted stainless steel heat exchanger
- Oil-air separation optimises control air consumption
- Standard PTOs and emergency steering pump can be integrated
Safety

This means your customers do not have to get into lower gear to ensure braking power.

High braking power across the entire speed range
• Effective adaptation braking at maximum speed without gear-change
• Winner of braking performance comparison (braking torque 3 500 Nm)

Safety reserves thanks to cold service brakes

Can be linked with distance control (Code ET5)

Brake power

Example Actros 1848/1851, OM 501 LA / OM 502 LA, G231-16
IHa: 2.929 (Actros 1851LS) / 2.846 (Actros 1851LS)
Tires: 315 / 70R22.5
Engine speed rpm: 1100 … 2300
Display of curves in simplified mode
Comfort

In this way, your customers can be relaxed even in difficult conditions.

Reduced activation of brake foot pedal

Noticeably fewer gear-shifting operations

Stress-free driving

Smooth braking operations

Combined drive / braking tempomat
- Tempomat function on level roads, ascends and descends
- “VERA” retarder control is part of Telligent system
Total Cost of Ownership (TCO)

Earning money with the Retarder

<table>
<thead>
<tr>
<th>Investment</th>
<th>Without Retarder</th>
<th>With Retarder</th>
</tr>
</thead>
<tbody>
<tr>
<td>Purchase price 115 HV</td>
<td>0 €</td>
<td>4 000 € *</td>
</tr>
<tr>
<td>Maintenance (oil change including oil) 115 € per year x 3 years</td>
<td>0 €</td>
<td>345 €</td>
</tr>
<tr>
<td>Costs for renewal of service brakes of Mercedes-Benz truck-tractor (1x pads and discs) service life 3 years</td>
<td>2 900 €</td>
<td>0 €</td>
</tr>
<tr>
<td>Costs for renewal of brakes for trailer (1x 3-axles / pads and discs) service life 3 years</td>
<td>4 500 €</td>
<td>0 €</td>
</tr>
<tr>
<td>Fuel saving with Retarder 115 HV with a far-sighted manner of driving approx. 738 € per year x 3 years</td>
<td>2 214 €</td>
<td>0 €</td>
</tr>
<tr>
<td>Resale value of Retarder</td>
<td>0 €</td>
<td>-2 000 €</td>
</tr>
<tr>
<td>Total costs</td>
<td>9 614 €</td>
<td>2 345 €</td>
</tr>
<tr>
<td>Saving with Retarder within 3 years</td>
<td>7 269 €</td>
<td></td>
</tr>
</tbody>
</table>

* Assumed net sales price. Price base is Germany.

This is a worthwhile investment! More than EUR 7 000 in 3 years earned by the Retarder by less service costs, fuel savings and higher resale value.
Eco-friendly

Voith Retarders have a substantial share in preserving the environment.
Up to 80% less brake dust emissions (depending on application and topography).

By using a Retarder there is an under-consumption of ~0.33 l/100 km
By using a Retarder, fuel consumption is reduced by ~0.33 l/100 km. Road tests carried out by “TÜV Süd Automotive” revealed: when combined with an automated transmission, the Retarder leads to an under-consumption of approx. 0.33 l/100 km. This means approx. 0.87 kg less CO₂.

Test drives confirm fuel savings

with Voith Retarder