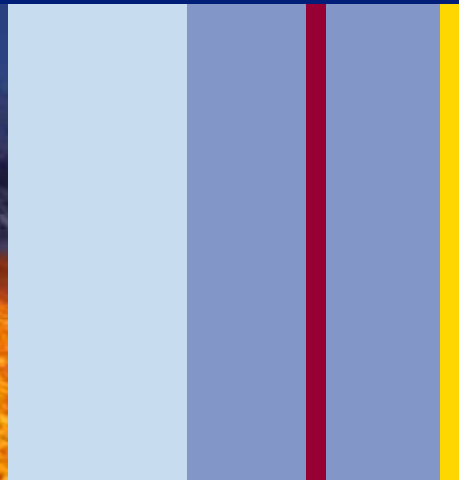


Voith Turbo

VOITH



Voith Retarder
Product Range & Applications

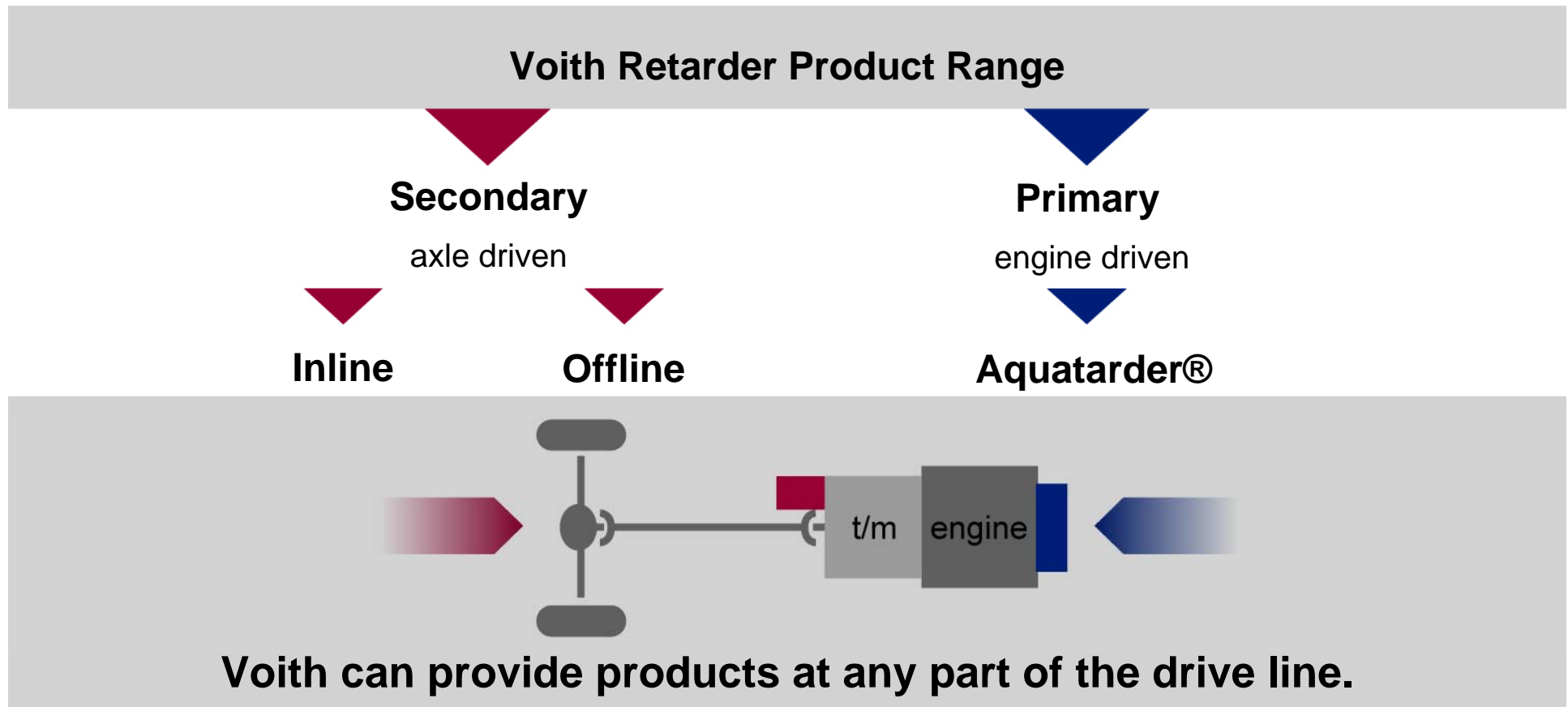
Voith Retarder

Voith provides customized retarder solutions for each

Voith provides customized retarder solutions for each OEM and each demand to meet customer needs.

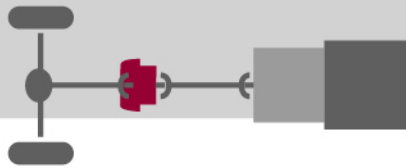
OEM and each demand to meet customer needs.

Voith Retarder – Customized Solutions

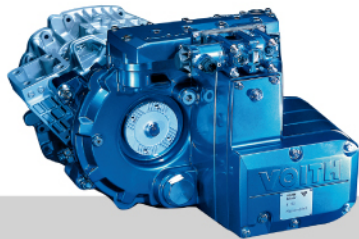


Secondary Retarders – Product Range

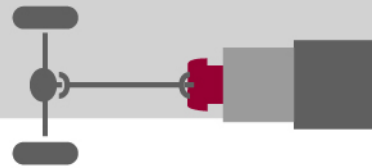
Inline



VR 123



$M_{\max} = 1500 \text{ Nm}$
Weight: 52.5 kg

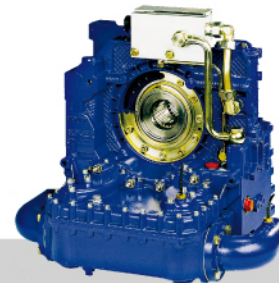


VR 120



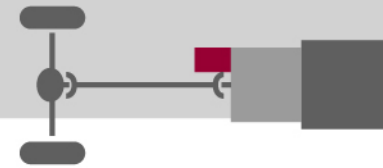
$M_{\max} = 2000 \text{ Nm}$
Weight: 65 kg

VR 133-2



$M_{\max} = 4000 \text{ Nm}$
Weight: 85 kg

Offline



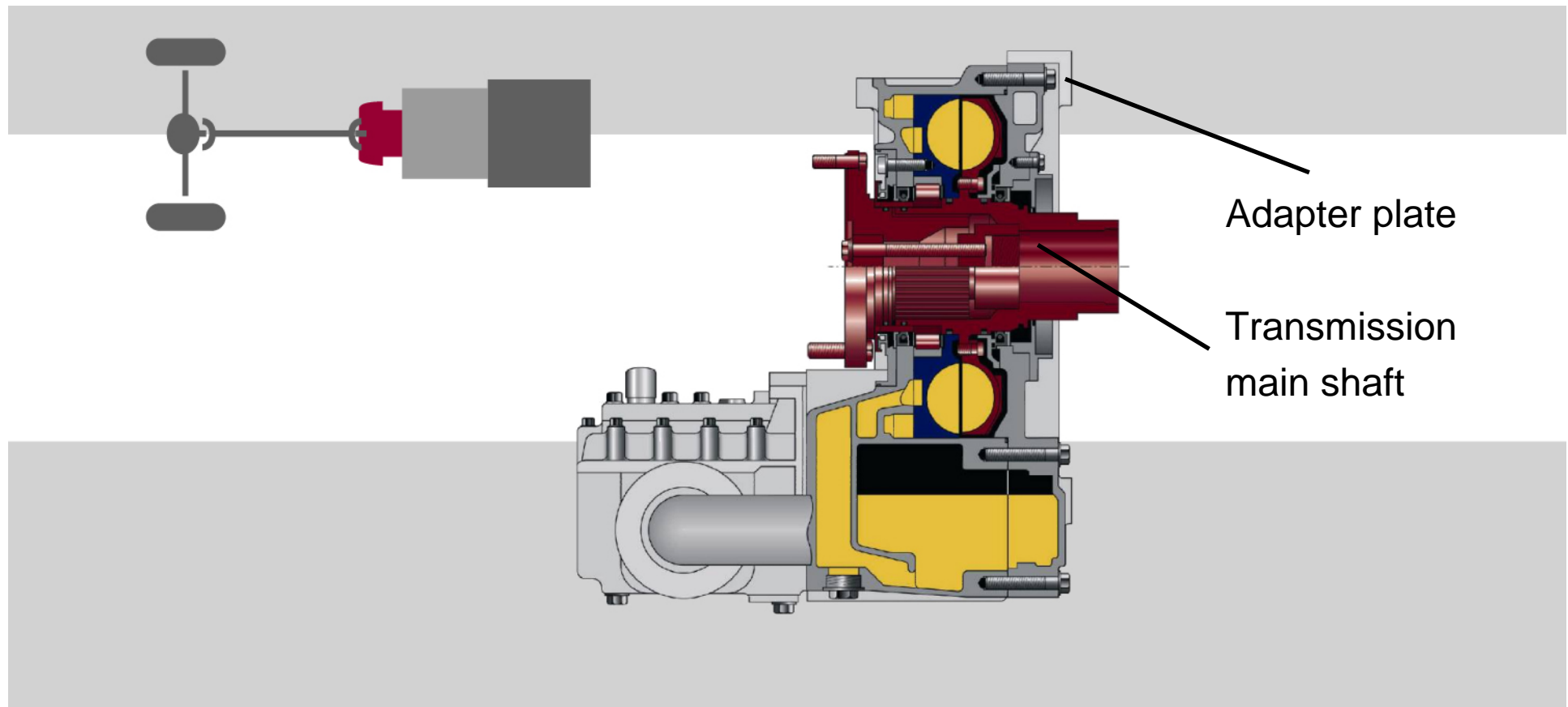
VR 115 family



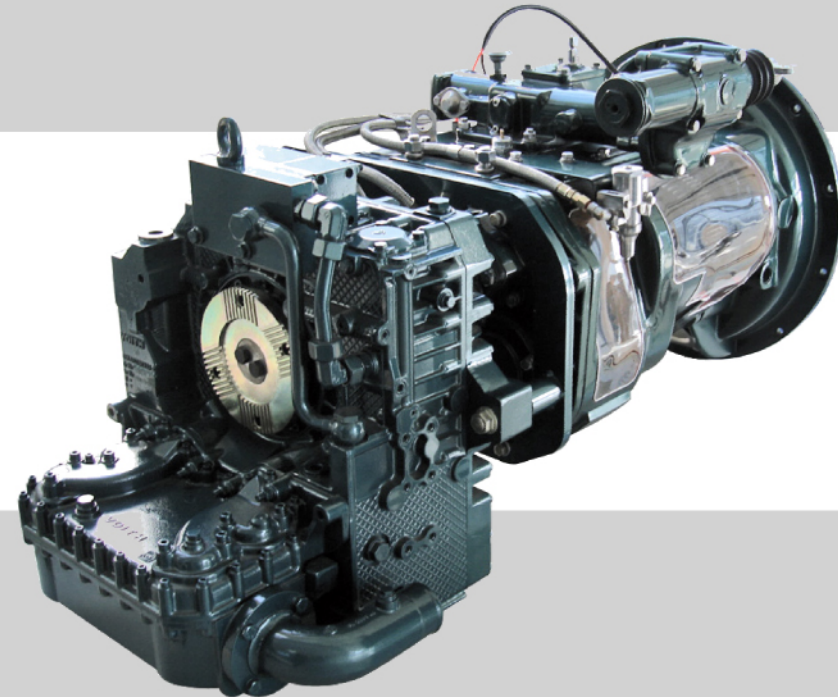
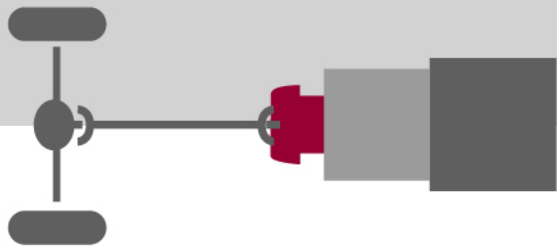
$M_{\max} = 3500 \text{ Nm}$
Weight: 62 kg

Voith covers a performance range from 1500 Nm to 4000 Nm.

Inline Installation VR 133-2

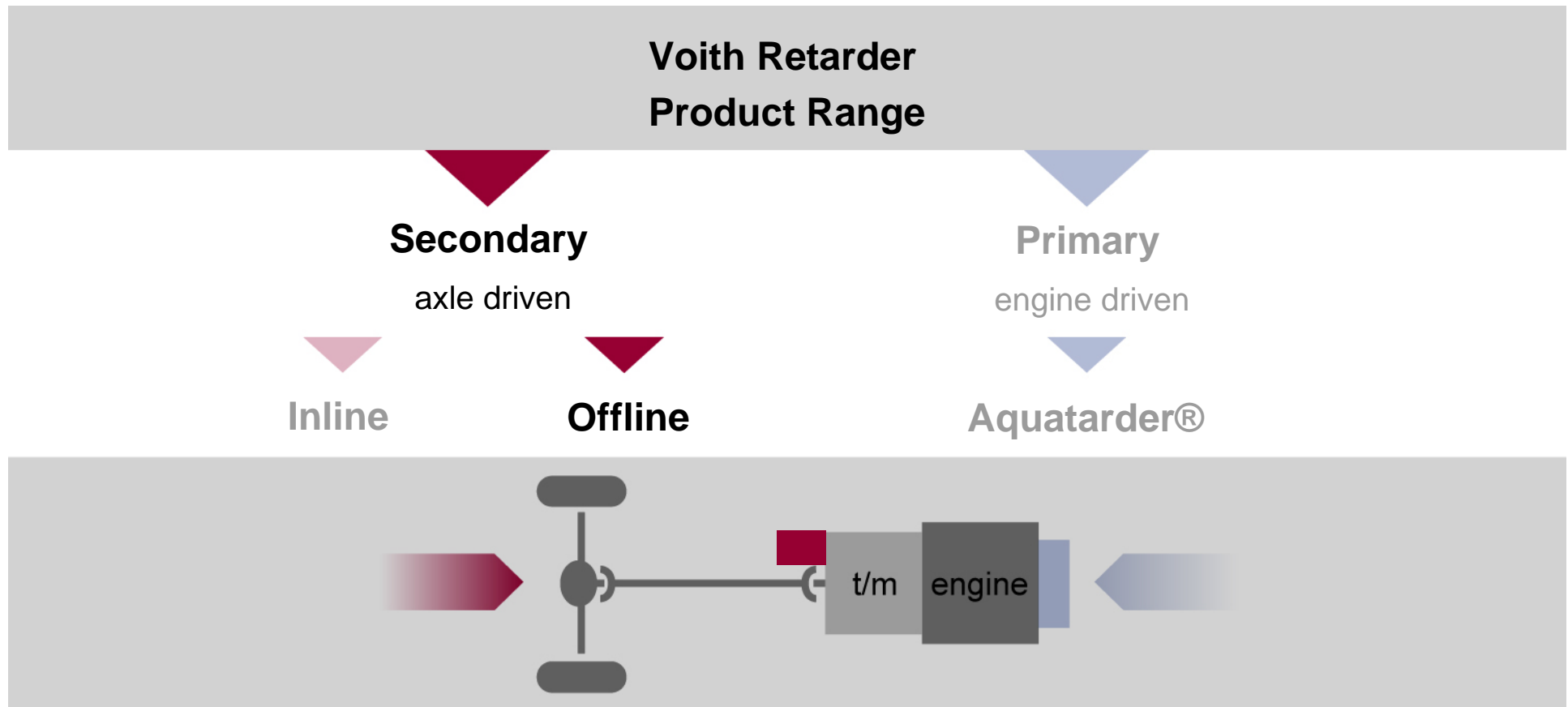


VR 133-2 Attachment to Fast Gear 8JS180T

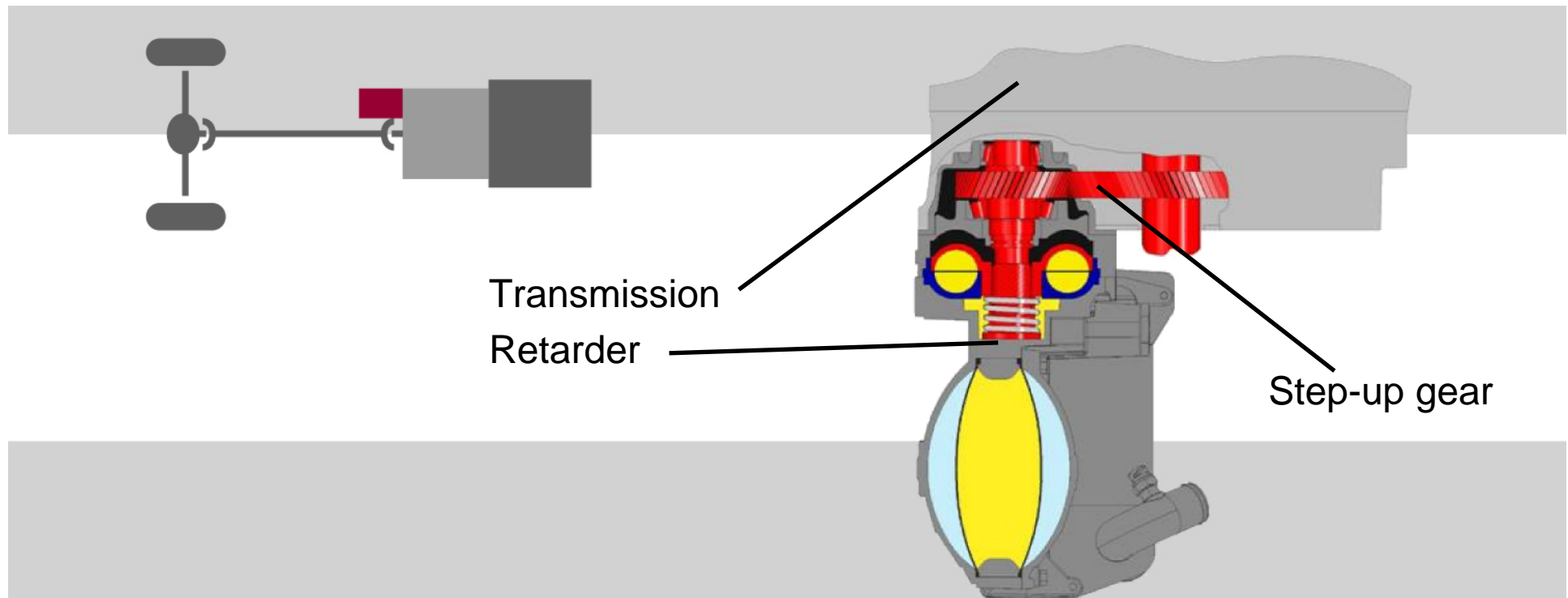


We can attach our retarders to any transmission.

Voith Retarder – Customized Solutions

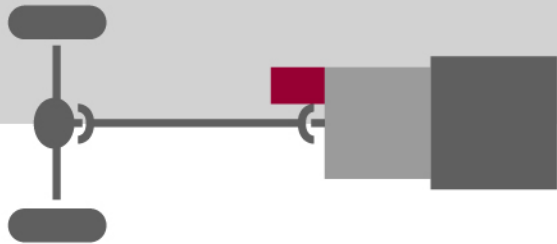


Offline Installation VR 115



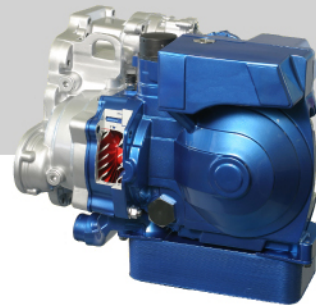
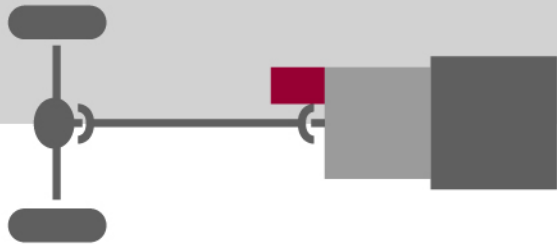
This solution offers compact design and no restriction for PTO use.

Offline Installation

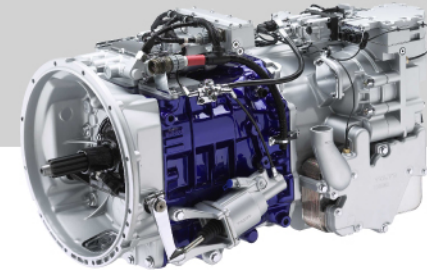


VR 115 HV

Offline Solutions



Mercedes-Benz



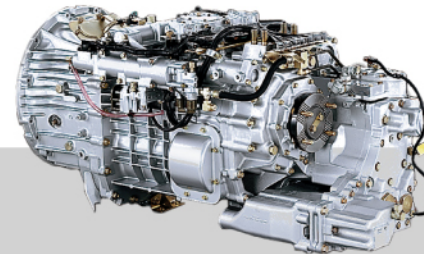
Volvo



Renault



Eaton/Hino



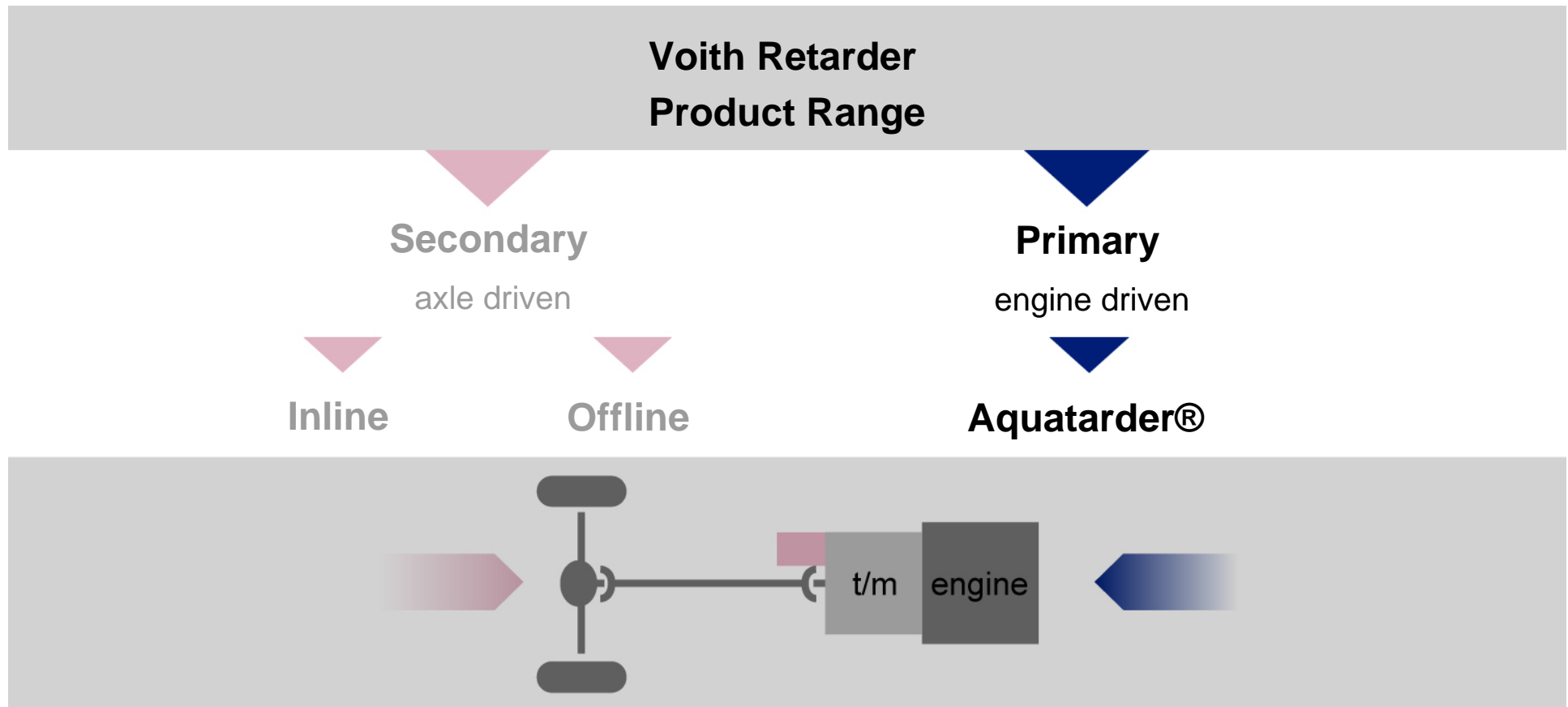
MFTBC/Nissan Diesel



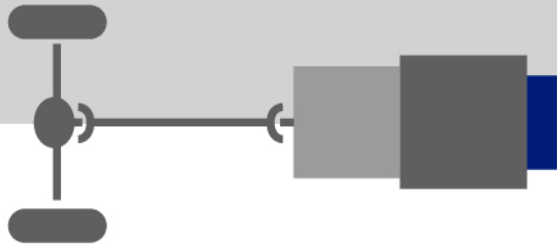
EvoBus, MAN, VDL

Voith creates individual solutions for customers.

Voith Retarder – Customized Solutions



Primary Retarder - Aquatarder®



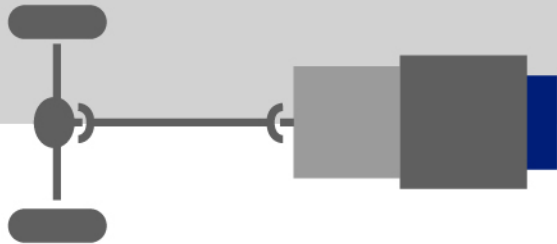
- Operates with engine coolant
- Driven by crank shaft
- Maintenance free



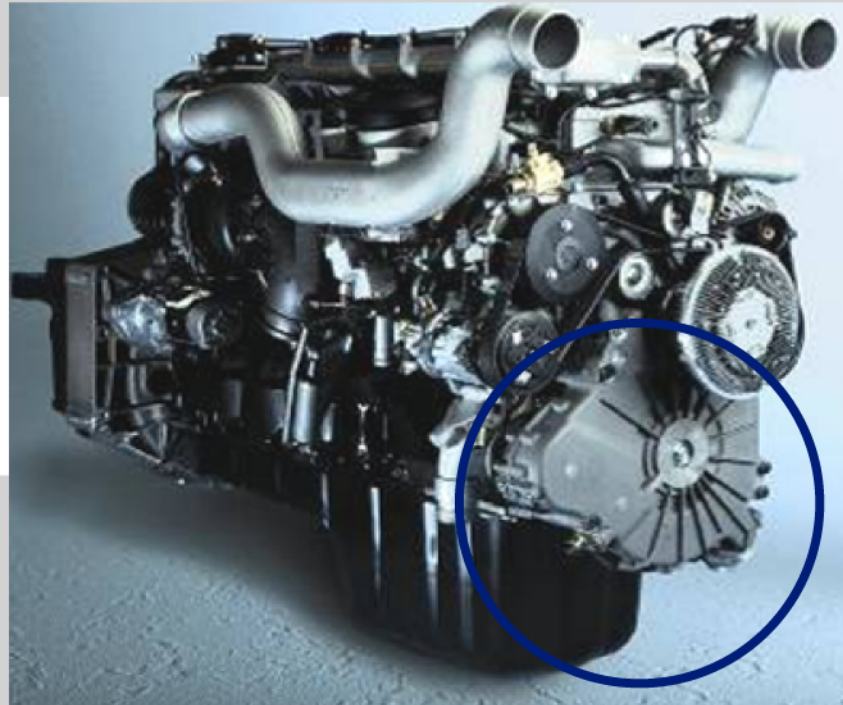
$M_{\max} = 1450 \text{ Nm}$ (at crank-shaft)

Weight = 30 kg

Primary Retarder - Aquatarder®



At MAN the combination of engine brake and the Aquatarder® is called PriTarder® braking system.



Trucks and Tractors



Coaches



Construction Vehicles



Voith Retarder – Customized Solutions

For Everybody

Sole independent manufacturer of hydrodynamic retarders worldwide

Anywhere

Attachment solutions anywhere in the drive line

For every vehicle

Customized retarder for each OEM

Everywhere

On every continent

We are able to respond to all customer demands!