

BB00.40-P-0231-02A	Specified transmission oils (commercial vehicle, van) - Overview		
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These tables serve only as an overview!

- Should be used.
- Can be used.



With conversion to another oil:

Change service life factors in the maintenance system (WS) and pay attention to specified service interval processors.

Note:

For commercial vehicle axle applications in the service fill area 235.6 can be used equivalently to 235.0.

Commercial vehicles, vans - axles, sheets 235.0 up to 235.31								
Major assembly		Sheet No. 235						
		.0	.1	.5	.6	.8	.20	.31
	SAE grade		80, 80W, 80W/85 W	80, 80W, 80W/85 W		75W-90, 80W-90	75W-90, 80W-90	75W-85
			Hot zones 90, 85W-90	Hot zones 90, 85W-90		85W-90, 90	85W-90, 90	
Hypoid differential D741.160, D746.209/305, D746.301/302 (tandem), D746.301 (solo drive) up to 12/2013, D748.595						●	○1.)	
Hypoid differential D746.301 (solo drive) as of 01/2014							○1.)	●
all other hypoid differentials		○			○	●	●	
Planetary axle		○			○	●	●	
Pinion shaft			●	●				
Hypoid differential D741.161/421/422/423/453/454/455						○		●

1.) Reduced maintenance interval.

Commercial vehicles, vans - transfer case, sheets 235.1 up to 235.41						
Major assembly		Sheet No. 235				
		.1	.4	.5	.11	.41
	SAE grade	80, 80W, 80W/85 W	80W/85 W	80, 80W, 80W/85 W	80W/85 W	
		Hot zones 90, 85W-90		Hot zones 90, 85W-90	75W-90	
ZF transfer case, Fuller transmission		•		•		
Transfer case		○	•		•	
MB transfer case		○ 2.)	•	○ 2.)	•	
Transfer case VG 1600 major assembly model designation D750.807, VG 2800 major assembly model designation D750.854, VG 3000 Z major assembly model designation D750.855		○ 3.)		○ 3.)	•	
Transfer case VG 1000 Z major assembly model designation D750.010, VG 1000 (permanent) major assembly model designation D750.011						•

2.) Only use in exceptional cases! If no synthetic oil in accordance with 235.4 or 235.11 available.

3.) Only use in exceptional cases! If no synthetic oil as per 235.11 available.

Commercial vehicles, vans - transmissions, sheets 235.1 up to 235.41									
Major assembly		Sheet No. 235							
		.1	.3	.5	.10	.11	.12	.13	.41
	SAE grade	80W		80W					
		Hot zones 90, 85W-90		Hot zones 90, 85W-90	75W/85W	75W-90	30, 40	75W-90	75W-85
WSK400							• 8.)		
Model 447, 639, 900, 906 with transmission 711.6 (TSG 360)			•		•				
G 1/15, 1/17, 1/18 4.), G 2/24, 2/27, G 3/36, 3/49, 3/50, 3/60 4.), 3/61, 3/70 4.), G 3/36, 3/49, 3/50, 3/60 4.)		• 4.)		• 4.)		• 4.)			
G 1/D 14, G 3/45-6, 3/55-6, 3/65, 3/90, G 4/65-6, 4/95-6, 4/95-7, 4/110-6, G 65-7, GO 3/60, GO 3/80, GO 4/95/105/120/130, GTO 24-5, GV 4/65-6, 4/95-6, 4/110-6		•		•		•	• 5.)		
G 16/28/20/32/33					•				
G 56/60/85 5.), 9.), G 70-6/71-6/90-6 9.), GO 110 5.)		• 6.)					• 7.)	•	•
G 85hybrid major assembly model designation D715.068									•

- 4.) Only for: G 1/18-5, G 3/50, G 3/60, G 3/70 without brass synchronization.
- 5.) Engine oils as per sheet 235.12, SAE 30 must be used for common oil circuit with ZF torque converter clutch 400.
- 6.) Only in temperate zones.
- 7.) Except in temperate zones, SAE 40.
- 8.) SAE 30.
- 9.) Sheet 235.1 is not permitted for cold countries (from -20 °C). Use sheet 235.41.

Commercial vehicles, vans - transmissions, sheets 235.1 up to 235.41							
Major assembly		Sheet No. 235					
		.1	.5	.11	.12	.16	.41
	SAE grade	80W Hot zones 90, 85W-90	80W Hot zones 90, 85W-90	75W-90	30, 40	75W-85	75kW-8 5
G 100/125/135 155/180/200		•	•	•	• 10.)		
GO 160/170/190/210/230/240/250		• 12.)	• 12.)	•			
G 140-8 major assembly model designation D715.310, G 141-9 major assembly model designation D715.571				•			
G 100, G 131, G 210, G 221, G 240, G 140-8 major assembly model designation D715.310, G 141-9 major assembly model designation D715.571, G 211 major assembly model designation D715.350/362/510, G 230 major assembly model designation D715.508, G 231 major assembly model designation D715.513/518, G 241 major assembly model designation D715.515, G 260 major assembly model designation D715.528/540, G 280 major assembly model designation D715.523/525, G 281 major assembly model designation D715.370, G 330 major assembly model designation D715.380		• 11.)	• 11.)	•			
Without code 07A (Powertrain Pack 1) up to manufacture date April 30, 2017 G 211 major assembly model designation D715.352, G 230 major assembly model designation D715.360, G 281 major assembly model designation D715.371, G 330 major assembly model designation D715.381				•			
With code 07A (Powertrain pack 1) up to manufacturing date April 30, 2017 G 211 major assembly model designation D715.352, G 230 major assembly model designation D715.360, G 281 major assembly model designation D715.371, G 330 major assembly model designation D715.381				○		•	
As of manufacture date April 30, 2017 G 211 major assembly model designation D715.352, G 230 major assembly model designation D715.360, G 281 major assembly model designation D715.371, G 330 major assembly model designation D715.381				○		•	
With fluid coupling or live power take-off G 281 major assembly model designation D715.371, G 330 major assembly model designation D715.381				•			

- 10.) Engine oils as per sheet 235.12, SAE 30 must be used for the common oil circuit with ZF torque converter clutch 400.
- 11.) Only in combination with oil cooler.
- 12.) Except in Latin America.

Commercial vehicles, vans - transmissions, sheets 235.1 up to 235.41										
Major assembly		Sheet No. 235								
		.1	.4	.5	.9	.11	.12	.27	.28	.29
	SAE grade	80W								
		Hot zones 90, 85W-90				75W-90	30, 40			
ZF manual transmission		•	• 13.)	•						•
ZF manual transmission with ZF torque converter clutch 400 MB transmission G240 with ZF torque converter clutch 400							•			
ZF 95-1115 major assembly model designation D710.580/581/582										•
Retarder (VOITH)*								•	•	•
Sprintshift transmission						•				
AT 4 - axle drive					•					

13.) with secondary retarder.

Work status

*mileages for Voith retarder without commercial vehicle maintenance computer, every 2 years at the latest			
Mercedes-Benz Specifications for Operating Fluids	235.27	235.28	235.29
Voith	A oils	B oils	C oils
Long-distance haulage (driven distances over 80 %)	90,000 km	135,000 km	180,000 km
Climate conditions corresponding to Central Europe			
Distribution haulage (driven distances over 50 %)	65,000 km	90,000 km	135,000 km
Construction site vehicles and logging trucks	45,000 km	65,000 km	90,000 km
Routes with a high amount of downward slopes			
Used at heights over 1500 m above sea level MSL			
Regions with higher outside temperatures than Central Europe			
*mileage for Voith retarder without bus maintenance computer, every 2 years at the latest			
Mercedes-Benz Specifications for Operating Fluids	235.27	235.28	235.29
Voith	A oils	B oils	C oils
Intercity passenger transportation (driven distances over 80 %)	135,000 km	180,000 km	240,000 km
Climate conditions corresponding to Central Europe			
Regular service (local public transport stop & go)	90,000 km	120,000 km	180,000 km
Amount of time driven in urban traffic higher than 50 %			
Routes with a high amount of downward slopes	65,000 km	90,000 km	135,000 km
Used at heights over 1500 m above sea level MSL			
Regions with higher outside temperatures than Central Europe			

Commercial vehicles, vans, sheets 236.1 up to 236.91, 238.22													
Major assembly	Sheet No. 236												238
	.1	.2	.3	.7	.8	.9	.11	.14	.15	.81	.82	.91	.22
Power steering system model 638, 639, 901, 902, 903, 904, 905, 906, 909			•										
MB manual transmission 15.) G 1/15, 1/17, 1/18 G 2/24, 2/27 G 3/36, 3/40 G 3/50 G 3/60, 3/61 G 3/70		•											
MB power steering		•	•	•									
ZF power steering/Robert Bosch power steering			•	•									
HEMA steering, Shibao steering			•	•									
Hydrostatic fan drive for additional engine radiator		•	•										
Hydrostatic fan drive			•	•									
MB automatic transmission, except 722.6/9	•			•	•					•			
Automatic transmission 722.6								•					
Automatic transmission 722.9									•				
ZF FAT transmission 700.750 in model 910											•		
MB automatic transmission W 4 B 035 14.)				•									
Voith/ZF automatic transmission	•			•	•	•				•			
Allison transmission 15.)						•						•	
Allison transmission 3000 P major assembly model designation D723.677/678, 3000 PR major assembly model designation D723.693/694/695, 3500 P major assembly model designation D723.668/669												•	
Fluid coupling (code GK8 or G3Y)												•	•
ZF 4 HP 20								•					
AG 4													
- automatic part								•					
- final-drive assembly													
Hydraulic lowering system in model 905.613		•											

14.) Only install W 4 B 035 as of major assembly end no. 00 57 33 and/or modified valve body assembly. ATFs acc. to sheets 236.1, 236.8, and 236.81 may not be used in W 4 B 035.

15.) For Allison transmissions, the application instructions on sheet 231.0 must be observed!

16.) Automatic transmission fluids (ATF), sheet 236.91 and TES 295 for Allison automatic transmission. This oil permits much longer oil change intervals, in particular for Allison transmissions.