

Car
Division



Truck
Division



GB



NEW:
Engine oils

Fluids

Antifreeze
Brake fluids
Oils
Greases
Thread lock

www.febi.com



Quality and service

febi bilstein is one of the world's leading manufacturers and suppliers of passenger car and commercial vehicle spare parts in the independent aftermarket.

With our products, we produce first-class added value for our customers.

Our customers come first

febi bilstein's quality and service primarily serve the interests of our partners. We continually enhance our product range to stay in line with the highest standards of the market. Our high quality standard applies to each one of our 20,000 different products.

The licence for top-class products

By continuously modernising machinery and testing equipment, we provide for the ever increasing demands on our quality assurance, as this is the only way to meet the high expectations placed on our performance.

febi bilstein added value

- Original equipment quality
- Triple Check System
- Solutions made in Germany
- Premium brand
- Innovative partnerships



febi bilstein applies a simple standard to its products: Original equipment quality. As a result, we have a leading position in the global independent aftermarket.



febi bilstein's head office and production in Ennepetal



Oils - Antifreeze - Greases

febi oils are not universal products but are matched to the vehicle manufacturers' specific requirements. We will supply you with top quality as a value-for-money alternative to original parts.

febi antifreeze offers reliable protection against frost, corrosion and cavitation damage. In many cases, febi antifreeze even exceeds the vehicle manufacturers' requirements.

febi greases are perfectly suited for virtually all types of cars and commercial vehicles and cover all the areas of application on the vehicle. They meet the manufacturers' highest requirements and are suitable, among other things, for use in constant velocity joints or central lubrication systems.


The **design of the packaging** is very user-friendly.

- Clear identification of the products
- Colour coding according to products
- Recessed grip handle to make filling easier
- Vision strip for filling level
- Leakproof
- Recyclable PE plastic bottles



NEW: Engine oils



Applications

	Page	Description	Colour	febi no.	Replacement no.	Manufacturer	Recommended applications
NEW	16	SAE 5 W-30 Longlife Plus		32945 (1 litre)			ACEA A3/B4-04/C3
				32946 (4 litres)			BMW Longlife-04
				32947 (5 litres)			MB 229.51
				32948 (60 litres)			VW 504 00/507 00
NEW	17	SAE 5 W-30 Longlife		32941 (1 litre)			API SN/CF
				32942 (4 litres)			ACEA A3/B4-04/C3
				32943 (5 litres)			BMW Longlife-04
				32944 (60 litres)			GM Dexos 2
							MB 229.51
							VW 502 00/505 00/505 01
NEW	18	SAE 5W-40		32936 (1 litre)			API - SM/SL/CF
				32937 (4 litres)			ACEA A3/B3/B4-04
				32938 (5 litres)			BMW Longlife-98
				32939 (60 litres)			MB 229.3
				32940 (200 litres)			Opel LL-B 025
							Porsche
NEW	19	SAE 10W-40		32931 (1 litre)			API SL/CF
				32932 (4 litres)			ACEA A3/B3/B4-02
				32933 (5 litres)			MB 229.1
				32934 (60 litres)			VW 501 01/505 00
				32935 (200 litres)			
NEW	20	SAE 15W-40	 	32925 (1 litre)			ACEA E7
				32926 (4 litres)			ACEA A3/B3/B4
				32927 (5 litres)			API CI-4/SL
				32928 (25 litres)			VW 501 01/505 00
				32929 (60 litres)			MB 229.1
				32930 (200 litres)			CAT ECF-1-a/ECF-2
				80366 (1000 litres)			Cummins 200 76/77/78
							Deutz DQC-III
							Mack EO-M PLUS
							MAN 3275
							MB 228.3
							MTU Type 2
NEW	21	SAE 20W-50	 	32921 (1 litre)			API - SL/CF/CG-4
				32922 (5 litres)			ACEA A3/B3/E2/E3
				32923 (25 litres)			MB 229.1, 228.1
				32924 (60 litres)			MAN 3275
							Volvo

Applications

Page	Description	Colour	febi no.	Replacement no.	Manufacturer	Recommended applications
22 	SAE 10W-40		34050 (25 litres)			ACEA E9/E7/E6
	Truck Special		34051 (60 litres)			API CI-4
	Longlife Plus		34052 (200 litres)			CATERPILLAR ECF-1a
						DEUTZ DQC III-05
						MACK EO-M PLUS
						MAN M 3477/3271-1
						MB 228.51
						MTU DDC Type 3.1
						Renault RXD RGD
						Volvo VDS-3
					VOITH-RETARDER	
23 	SAE 10W-40		34047 (25 litres)			ACEA E7/E4
	Truck Special		34048 (60 litres)			API CI-4
	Longlife		34049 (200 litres)			CUMMINS CES 20077/8
						DEUTZ DQC III-10
						MACK EO- M PLUS
						MAN M 3277
						MB 228.5
						MTU DDC Type-3
						Renault RXD/RLD-2
						Volvo VDS-3
					DAF	
					Iveco 18-1804	
					Scania LDF-2	
24	Antifreeze	blue	01089 (1.5 litres)	81 22 9 407 454	BMW	
	G 11		22268 (5 litres)	1940 656	Opel	
			22270 (20 litres)	G 011V8BA1	VW	G 11
			05011 (60 litres)	1 047 035	Ford	
			31276 (210 litres)	000 989 08 25	Mercedes-Benz	MB 325.2
25	Antifreeze	yellow-green	02374 (1.5 litres)	81 22 9 407 454	BMW	
	G 11		88541 (5 litres)	1940 656	Opel	
			75011 (60 litres)	G 011V8BA1	VW	G 11
			29428 (210 litres)	1 047 035	Ford	
				000 989 08 25	Mercedes-Benz	MB 325.2
26	Antifreeze	red	80325 (1 litre)	G 012 A8DA1	VW	G 12
	G 12		01381 (1.5 litres)	1089240 S	Volvo trucks	
			22272 (5 litres)	1940 663 S1	Opel	
			22274 (20 litres)			
			12710 (60 litres)			
			33830 (210 litres)			
27	Antifreeze	purple	19400 (1.5 litres)	G 012 A8FA1	VW	VW TL 774 F
	G 12+		19402 (5 litres)	000 989 16 25	Mercedes-Benz	MB 325.3

Page	Description	Colour	febi no.	Replacement no.	Manufacturer	Recommended applications
			22276 (20 litres)	1 336 797	Ford	Ford WSS-M97B44-D
			22278 (60 litres)	1 222 116	Ford	
			33831 (210 litres)			
28	Antifreeze	green	26580 (1.5 litres)	77 11 171 589	Renault	Renault Type D
	Ready Mix -30° C		26581 (5 litres)	77 00 001 144	Renault	
			26582 (25 litres)			
29	Antifreeze	blue	24196 (1.5 litres)	000 989 08 25 S2	universal	
	Ready Mix -30° C					
30	Brake fluid		26746 (0.25 litre)	DOT 4		
			26461 (1 litre)			
			21754 (5 litres)			
31	Brake fluid		26748 (0.25 litre)	DOT 4 Plus		
			23930 (1 litre)			
			23932 (5 litres)			
32	Central hydraulic fluid	green	06161 (1 litre)	81 22 9 407 758	BMW	
	(synthetic)			82 11 1 468 041	BMW	
				000 043 203 33	Porsche	
				G 004 000 M2	VW	VW TL 52146
				G 002 000	VW	
				1940 766	Opel	B 0400070
				93 160 548	Saab	
				09.11003.0427	MAN	MAN M 3289
33	Central hydraulic fluid	green	06162 (1 litre)	81 22 9 407 549	BMW	
	(mineral)					
34	Hydraulic fluid, LHM-plus	green	24704 (1 litre)	9979.A1	Citroën	PSA B71 2710
	(mineral)					
35	Power steering fluid	green	21647 (1 litre)	001 989 24 03	Mercedes-Benz	MB 345.0
36	Central hydraulic fluid	light brown	21648 (1 litre)	001 989 20 03	Mercedes-Benz	MB 344.0
37	Power steering fluid (ATF)	brown	08972 (1 litre)	000 989 88 03/2	Mercedes-Benz	MB 236.3
38	Hydraulic fluid ZH-M	yellow	02615 (1 litre)	000 989 91 03	Mercedes-Benz	MB 343.0
39	Automatic transmission fluid	red	08971 (1 litre)	000 989 92 03	Mercedes-Benz	MB 236.2, 236.6, 236.7
			30017 (5 litres)	81 22 9 400 272	BMW	
				1940 700	Opel	Dexron II-D

Applications

Page	Description	Colour	febi no.	Replacement no.	Manufacturer	Recommended applications		
40	Automatic transmission fluid for Asian vehicles	red	29934 (1 litre)	G 055 025	VW	Kia SP-II / SP-III		
						Mazda ATF D-III / M-3		
						Mitsubishi SP-II / SP-III		
						Nissan C/D/J		
						Saab 3309		
						Subaru ATF / Special		
						Suzuki ATF 3309		
						Suzuki ATF 3317		
						Toyota T-II / T-III / T-IV		
						Toyota Type D-2/WS		
41	Automatic transmission fluid		32600 (1 litre)	83 22 0 397 114	BMW	Dexron VI		
			32605 (5 litres)	001 989 69 03	Mercedes-Benz	MB 236.41		
				-	Opel			
				-	GM			
42	Automatic transmission fluid	yellow	14738 (1 litre)	G 052 162 A2	VW	VW TL 521 62		
			29738 (5 litres)				VW LT 71141	
						83 22 9 404 328	BMW	
						001 989 22 03	Mercedes-Benz	MB 236.11
						1940 707	Opel	
43	Automatic transmission fluid		34608 (1 litre)	G 055 005 A2	VW	ZF 6HP		
				83 22 0 144 137	BMW			
				040000C90SG	Hyundai			
				8432	Jaguar			
				TYK500050	Land Rover			
44	Automatic transmission fluid	red	22806 (1 litre)	001 989 21 03	Mercedes-Benz	MB 236.10		
			30018 (5 litres)	8 000 045	Ford	MERCON V		
	Dexron III-H		26680 (60 litres)	-	GM	Dexron III-G / III-H		
			26681 (200 litres)					
45	Automatic transmission fluid	red	27001 (1 litre)	001 989 45 03	Mercedes-Benz	MB 236.12		
				8 000 047	Ford	Ford M2C195-A		
						Ford M2C202-B		
						Ford M2C922-A1		
				G 052 990 A2	VW	VW TL 521 62		
46	Automatic transmission fluid	red	29449 (1 litre)	001 989 68 03	Mercedes-Benz	MB 236.14		
47	Automatic transmission fluid	blue	33889 (1 litre)	001 989 78 03	Mercedes-Benz	MB 236.15		
48	CVT gearbox oil	yellow	27975 (1 litre)	G 052 180 A2	VW	VW TL 521 80		
				001 989 46 03	Mercedes-Benz	MB 236.20		

	Page	Description	Colour	febi no.	Replacement no.	Manufacturer	Recommended applications
NEW	49	DSG gearbox oil		32380 (1 litre) 32390 (5 litres)	G 052 182 A2	VW	VW LT 52 182
NEW	50	Universal transmission fluid SAE 75W-90 (GL-5)		32590 (1 litre)	-	universal	GL4 / GL5
	51	Transmission fluid GL-4	yellow	21829 (1 litre)	001 989 26 03 1940 182	Mercedes-Benz Opel	MB 235.10 API GL-4
		API GL-4			G 052 178	VW	VW TL 521 78
		SAE 75W			G 052 512	VW	VW TL 525 12
					G 055 726	VW	VW TL 726-Y
	52	Brake pad paste	white	26711 (100 g)	G 000 650		
	53	High-temperature anti-friction bearing grease	green	21909 (150 g)	-	universal	MB 265.1
	54	Ring joint grease for constant velocity joints	black	02597 (100 g)	-	universal	
	55	High-temperature grease for constant velocity joints	black	03630 (120 g)	-	universal	
	56	Lubricating grease for constant velocity joints	black	02582 (90 g)	-	universal	
	57	Special grease for injectors and glow plugs	white	26712 (50 g) -	001 989 42 51 universal		
	58	Fluid grease		03514 (1 litre)	001 989 08 51 81495030015		
	59	Multi-purpose EP grease	green	28193 (400 g) 28194 (5 kg)	02.1040.45.00	various trucks	
	60	Thread lock	blue	26707 (10 g) 26708 (50 g)	medium strength	universal	
	61	Thread lock	green	26709 (10 g) 26710 (50 g)	high-strength	universal	

Notes

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2. Our General Terms and Conditions are binding for goods and services.

3. We reserve the right to design changes.

4. The replacement numbers shown in brackets have either been replaced or may be used optionally. We reserve the right to supply febi's current version.
5. All data has been prepared with care. We cannot, however, accept any liability for correctness.

6. The images in this catalogue may differ from the parts supplied.

7. We supply aftermarket parts of consistent first-class quality.

8. The vehicle manufacturers' part numbers must not be used when invoicing vehicle owners.

NEW

febi no. 32945 (1 litre)
febi no. 32946 (4 litres)
febi no. 32947 (5 litres)
febi no. 32948 (60 litres)

febi SAE 5W-30 **longlifeplus** is an advanced state-of-the-art, low-ash universal engine oil for engines with the highest requirements suitable for BMW, Mercedes-Benz and VW with extended oil change intervals, soot particle filter and pump nozzle, common rail injection or petrol direct injection.

**Recommended applications**

· ACEA A3/B4-04/C3	· MB 229.51
· BMW Longlife-04	· VW 504 00/507 00

Properties	Unit	Test method
Density at 15° C	0.85 kg/l	DIN 51757
Boiling point	> 200 ° C	ISO 2592
Solidification point	< -33 ° C	ISO 3016
Viscosity at -30° C	< 6600 mPas	DIN 51377
Viscosity at 40° C	72.5 mm ² /s	DIN 51562
Viscosity at 100° C	11.9 mm ² /s	DIN 51562

NEW

febi no. 32941 (1 litre)
febi no. 32942 (4 litres)
febi no. 32943 (5 litres)
febi no. 32944 (60 litres)

febi SAE 5W-30 **longlife** is an advanced state-of-the-art, low-ash engine oil for petrol and diesel engines with the highest requirements due to extended oil change intervals with and without soot particle filter.

- It meets what are currently the highest requirements for BMW, Mercedes-Benz, GM (Opel) and can also be used in VW petrol and diesel engines with pump-nozzle injection.

**Recommended applications**

· API SN/CF	· GM Dexos 2
· ACEA A3/B4-04/C3	· MB 229.51
· BMW Longlife-04	· VW 502 00/505 00/505 01

Properties	Unit	Test method
Density at 15° C	0.85 kg/l	DIN 51757
Boiling point	> 200 ° C	ISO 2592
Solidification point	< -39 ° C	ISO 3016
Viscosity at -30° C	< 6600 mPas	DIN 51377
Viscosity at 40° C	69.8 mm ² /s	DIN 51562
Viscosity at 100° C	11.8 mm ² /s	DIN 51562

NEW

febi no. 32936 (1 litre)
 febi no. 32937 (4 litres)
 febi no. 32938 (5 litres)
 febi no. 32939 (60 litres)
 febi no. 32940 (200 litres)

SAE 5W-40 is a high-performance engine oil for modern petrol and diesel car engines by Mercedes-Benz, BMW, GM (Opel), Porsche and VW with extended change intervals.

- SAE 5W-40 is not suitable for vehicles with soot particle filter or pump-nozzle injection system.



Recommended applications

- | | |
|--------------------|----------------------|
| • API - SM/SL/CF | • Opel LL-B 025 |
| • ACEA A3/B3/B4-04 | • Porsche |
| • BMW Longlife-98 | • VW 502.00 + 505.00 |
| • MB 229.3 | |

Properties	Unit	Test method
Density at 15° C	0.852 kg/l	DIN 51757
Boiling point	> 200 ° C	ISO 2592
Solidification point	< -36 ° C	ISO 3016
Viscosity at -30° C	< 6600 mPas	DIN 51377
Viscosity at 40° C	90 mm ² /s	DIN 51562
Viscosity at 100° C	13.8 mm ² /s	DIN 51562

NEW

febi no. 32931 (1 litre)
 febi no. 32932 (4 litres)
 febi no. 32933 (5 litres)
 febi no. 32934 (60 litres)
 febi no. 32935 (200 litres)

SAE 10W-40 is a partially synthetic high-performance engine oil for heavy-duty petrol and diesel car engines.

- It is also very well suited for engines with turbochargers.
- The excellent viscosity/temperature ratio enables a high level of wear protection at both low and high temperatures.



Recommended applications

- | | |
|--------------------|--------------------|
| • API SL/CF | • MB 229.1 |
| • ACEA A3/B3/B4-02 | • VW 501 01/505 00 |

Properties	Unit	Test method
Density at 15° C	0.871 kg/l	DIN 51757
Boiling point	> 200 ° C	ISO 2592
Solidification point	< -27 ° C	ISO 3016
Viscosity at -30° C	< 7000 mPas	DIN 51377
Viscosity at 40° C	93.8 mm ² /s	DIN 51562
Viscosity at 100° C	13.7 mm ² /s	DIN 51562



NEW

febi no. 32925 (1 litre)
 febi no. 32926 (4 litres)
 febi no. 32927 (5 litres)
 febi no. 32928 (25 litres)
 febi no. 32929 (60 litres)
 febi no. 32930 (200 litres)
 febi no. 80366 (1000 litres)

SAE 15W-40 is a high-grade, multi-functional multi-purpose engine oil for car and truck engines.

- The special formulation enables it to be used in car engines and also in heavy-duty truck engines with and without turbocharger.

**Recommended applications**

· ACEA E7	· Deutz DQC-III
· ACEA A3/B3/B4	· Mack EO-M PLUS
· API CI-4 /SL	· MAN 3275
· VW 501 01 / 505 00	· MB 228.3
· MB 229.1	· MTU Type 2
· CAT ECF-1-a / ECF-2	· Renault RLD-2
· Cummins 200 76 / 77 / 78	· Volvo VDS-3

Properties	Unit	Test method
Density at 15° C	0.885 kg/l	DIN 51757
Boiling point	> 200 °C	ISO 2592
Solidification point	< -24 °C	ISO 3016
Viscosity at -20° C	< 7000 mPas	DIN 51377
Viscosity at 100° C	14.3 mm ² /s	DIN 51562

NEW

febi no. 32921 (1 litre)
 febi no. 32922 (5 litres)
 febi no. 32923 (25 litres)
 febi no. 32924 (60 litres)

SAE 20W-50 is a high-grade, multi-functional multi-purpose engine oil for car and truck engines.

- The particularly high viscosity ensures a stable lubricating film even under extreme conditions, e.g. high outside temperatures.

**Recommended applications**

· API - SL/CF/CG-4	· MAN 3275
· ACEA A3/B3/E2/E3	· VOLVO
· MB 229.1, 228.1	

Properties	Unit	Test method
Density at 15° C	0.885 kg/l	DIN 51757
Boiling point	> 200 °C	ISO 2592
Solidification point	< -18 °C	ISO 3016
Viscosity at -15° C	< 9500 mPas	DIN 51377
Viscosity at 100° C	18.5 mm ² /s	DIN 51562

SAE 10W-40 Truck Special longlifeplus



SAE 10W-40 Truck Special longlife



NEW

febi no. 34050 (25 litres)
febi no. 34051 (60 litres)
febi no. 34052 (200 litres)

febi SAE 10W-40 **Truck Special longlifeplus** is a low-ash engine oil for the highest requirements.

- Perfectly suited for state-of-the-art turbocharged truck engines with exhaust gas after treatment.
- Very low sulphate ash, phosphorous and sulphur content.
- Excellent wear protection, even with the longest oil change intervals.
- Enables a 3% lower fuel consumption compared to conventional multi-grade oil.



Recommended applications

• ACEA E9/E7/E6	• MB 228.51
• API CI-4	• MTU DDC Type 3.1
• CATERPILLAR ECF-1a	• Renault RXD RGD
• DEUTZ DQC III-05	• Volvo VDS-3
• MACK EO-M PLUS	• VOITH-RETARDER
• MAN M 3477/3271-1	

Properties	Unit	Test method
Density at 15° C	0.861 kg/l	DIN 51757
Boiling point	> 200 °C	ISO 2592
Solidification point	< -33 °C	ISO 3016
Viscosity at 40° C	86 mm ² /s	DIN 51562
Viscosity at 100° C	13.5 mm ² /s	DIN 51562

NEW

febi no. 34047 (25 litres)
febi no. 34048 (60 litres)
febi no. 34049 (200 litres)

febi SAE 10W-40 **Truck Special longlife** is a high-performance engine oil for a large number of diesel engines for trucks, buses and driven machines with and without turbocharger.

- Specially developed for the requirements in heavy-duty engines with extended maintenance intervals.
- High wear protection even under severe operating conditions with full engine output.



Recommended applications

• ACEA E7/E4	• MTU DDC Type-3
• API CI-4	• Renault RXD/RLD-2
• CUMMINS CES 20077/8	• Volvo VDS-3
• DEUTZ DQC III-10	• DAF
• MACK EO-M Plus	• Iveco 18-1804
• MAN M 3277	• Scania LDF-2
• MB 228.5	

Properties	Unit	Test method
Density at 15° C	0.867 kg/l	DIN 51757
Boiling point	> 200 °C	ISO 2592
Solidification point	< -33 °C	ISO 3016
Viscosity at 40° C	100 mm ² /s	DIN 51562
Viscosity at 100° C	14.6 mm ² /s	DIN 51562

Antifreeze (blue)



febi no. 01089 (1 litre)
febi no. 22268 (5 litres)
febi no. 22270 (20 litres)
febi no. 05011 (60 litres)
febi no. 31276 (210 litres)
e.g. repl. no. 81 22 9 407 454

febi 01089 is a longlife antifreeze and corrosion inhibitor for all liquid-cooled combustion engines.

- From a concentration of 25% or more, febi 01089 will protect against corrosion, cavitation, scale, silting up and foaming. The vehicle manufacturer's specifications must be adhered to in all cases.
- Can also be used without problems in engines with aluminium cylinder heads and radiators.
- febi 01089 is proven in practice and has been tested in units with fill specifications MAN 324, MB 325.0 and GM 1825 M.

Properties	Unit	Test method
Density at 15° C	1.13 g/cm³	DIN 51757
Flash point	> 100 ° C	DIN 51758
Ignition temperature	> 400 ° C	DIN 51794
Boiling point	> 170 ° C	ISO 2592
Viscosity 20° C	< 25 mm²/s	DIN 51562

Total volume of the cooling system	Required quantity in litres			
	Low-temperature protection			
	to -20° C	to -25° C	to -30° C	to -35° C
3 l	1.0 l	1.2 l	1.3 l	1.5 l
4 l	1.4 l	1.6 l	1.8 l	2.0 l
5 l	1.7 l	2.0 l	2.2 l	2.5 l
6 l	2.0 l	2.4 l	2.7 l	3.0 l
7 l	2.4 l	2.8 l	3.1 l	3.5 l
8 l	2.7 l	3.2 l	3.5 l	4.0 l
9 l	3.0 l	3.6 l	4.0 l	4.5 l
10 l	3.4 l	4.0 l	4.4 l	5.0 l
12 l	4.0 l	4.8 l	5.3 l	6.0 l
14 l	4.7 l	5.6 l	6.2 l	7.0 l
16 l	5.3 l	6.4 l	7.1 l	8.0 l
18 l	6.0 l	7.2 l	7.9 l	9.0 l
20 l	6.7 l	8.0 l	8.8 l	10.0 l

Antifreeze (yellow-green)



febi no. 02374 (1 litre)
febi no. 88541 (5 litres)
febi no. 75011 (60 litres)
e.g. repl. no. 000 989 08 25

febi 02374 is a nitrite-free longlife antifreeze with a high level of corrosion protection.

- Developed for use in modern, liquid-cooled combustion engines.
- Provides the cooling water with adequate corrosion protection even at concentrations as low as 20%.
- Protection against corrosion and cavitation, prevents deposits and foaming.
- Corresponds to MB 325.2.

Properties	Unit	Test method
Density at 20° C	1.115 g/cm³	DIN 51757
Flash point	> 100 ° C	DIN 51758
Ignition temperature	> 400 ° C	DIN 51794
Boiling point	> 170 ° C	ISO 2592
Viscosity 20° C	< 25 mm²/s	DIN 51562

Total volume of the cooling system	Required quantity in litres			
	Low-temperature protection			
	to -20° C	to -25° C	to -30° C	to -35° C
3 l	1.0 l	1.2 l	1.3 l	1.5 l
4 l	1.4 l	1.6 l	1.8 l	2.0 l
5 l	1.7 l	2.0 l	2.2 l	2.5 l
6 l	2.0 l	2.4 l	2.7 l	3.0 l
7 l	2.4 l	2.8 l	3.1 l	3.5 l
8 l	2.7 l	3.2 l	3.5 l	4.0 l
9 l	3.0 l	3.6 l	4.0 l	4.5 l
10 l	3.4 l	4.0 l	4.4 l	5.0 l
12 l	4.0 l	4.8 l	5.3 l	6.0 l
14 l	4.7 l	5.6 l	6.2 l	7.0 l
16 l	5.3 l	6.4 l	7.1 l	8.0 l
18 l	6.0 l	7.2 l	7.9 l	9.0 l
20 l	6.7 l	8.0 l	8.8 l	10.0 l

Antifreeze (red)



febi no. 80325 (1 litre)
febi no. 01381 (1.5 litres)
febi no. 22272 (5 litres)
febi no. 22274 (20 litres)
febi no. 12710 (60 litres)
febi no. 33830 (210 litres)
e.g. repl. no. G 012 A8D A1

febi 01381 is a longlife, antifreeze and corrosion inhibitor for grey cast iron and all-aluminium engines and meets the requirements of VW, Audi, Seat and Škoda with the following properties:

- Antifreeze down to -40° C – provides excellent protection against corrosion and deposits.
- Raises the boiling point. As a result an even discharge of heat is achieved.
- As little as 33% in the cooling system provides adequate corrosion protection and in addition frost protection down to -22° C.
- Meets the specification VW TL 774 D (G12).

Properties	Unit	Test method
Density at 20° C	1.116 kg/cm ³	DIN 51757
Flash point	> 100 ° C	DIN 51758
Ignition temperature	> 400 ° C	DIN 51794
Boiling point	> 160 ° C	ISO 2592
Viscosity 20° C	< 15 mm ² /s	DIN 51562

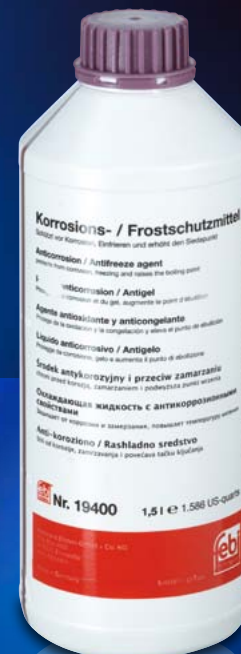
Total volume of the cooling system	Required quantity in litres			
	Low-temperature protection			
	to -20° C	to -25° C	to -30° C	to -35° C
3 l	1.0 l	1.2 l	1.3 l	1.5 l
4 l	1.4 l	1.6 l	1.8 l	2.0 l
5 l	1.7 l	2.0 l	2.2 l	2.5 l
6 l	2.0 l	2.4 l	2.7 l	3.0 l
7 l	2.4 l	2.8 l	3.1 l	3.5 l
8 l	2.7 l	3.2 l	3.5 l	4.0 l
9 l	3.0 l	3.6 l	4.0 l	4.5 l
10 l	3.4 l	4.0 l	4.4 l	5.0 l
12 l	4.0 l	4.8 l	5.3 l	6.0 l
14 l	4.7 l	5.6 l	6.2 l	7.0 l
16 l	5.3 l	6.4 l	7.1 l	8.0 l
18 l	6.0 l	7.2 l	7.9 l	9.0 l
20 l	6.7 l	8.0 l	8.8 l	10.0 l

Antifreeze (purple)

febi no. 19400 (1.5 litres)
febi no. 19402 (5 litres)
febi no. 22276 (20 litres)
febi no. 22278 (60 litres)
febi no. 33831 (210 litres)
e.g. repl. no. G 012 A8F A1

febi's 19400 outstanding properties meet and exceed the requirement of numerous manufacturers and foreign standards.

- febi 19400 meets and exceeds the requirements of many manufacturers and foreign standards due to its outstanding properties.
- Provides engines with excellent protection against corrosion and cavitation.
- Prevents deposits and foaming.
- Protects hoses and gaskets.
- Mixable with silicate-free antifreezes.
- Equates to VW antifreeze "G12 plus" and is mixable with antifreezes 01089 (blue), 02374 (yellow), 01381 (red) and the antifreezes of other brand manufacturers.



Recommended applications	
• ASTM D3306	• MAN 324 SNF
• ASTM D4340	• MB 325.3
• ASTM D4985	• NF R 15 601
• Ford ESE-M978B4H-A	• NATO S-759
• GM 1825M	• SAE J1034
• GM 1899M	• VW-TL 774 F
• GM Saturn	

Properties	Unit	Test method
Density at 20° C	1.116 g/ml	DIN 51757
Boiling point	> 170 ° C	ASTM D 1120
Solidification point 1:1	-38 ° C	ISO 3016
Viscosity at 20° C	< 15 mm ² /s	DIN 51562
Frost protection down to	Proportion of antifreeze	Proportion of water
-38° C	50%	50%

Antifreeze (green) Ready Mix -30° C Renault, Type D

febi no. 26580 (1.5 litres)
febi no. 26581 (5 litres)
febi no. 26582 (25 litres)
 e.g. repl. no. 77 11 171 589 S1

febi 26580 is a ready-mix with frost protection down to -30° C and was developed specifically for use in Renault engines.

- Ready-mix; no further dilution necessary.
- Protection against corrosion and cavitation, prevents deposits and foaming.
- Manufactured based on Texaco technology; therefore perfectly suited for all Renault engines.



Recommended applications

- | | |
|-------------------------------|-------------|
| • Renault Type D | • SAE J1034 |
| • GM 1825M | • GM 1899M |
| • Ford ESE-M978B4H-A, AF plus | and other |

Properties	Unit	Test method
Density at 20° C	1.07 g/ml	DIN 51757
Boiling point	> 170 ° C	ASTM D 1120
Solidification point 1:1	-30 ° C	ISO 3016
Viscosity at 20° C	< 15 mm ² /s	DIN 51562

Antifreeze (blue) Ready Mix -30° C

febi no. 24196 (1.5 litres)
 e.g. repl. no. 000 989 08 25 S2

febi 24196 is a coolant ready-mix with 40% proportion of antifreeze.

- Ready for use immediately.
- Achieves low-temperature protection down to -30° C.
- Nitrite-free antifreeze and corrosion inhibitor.
- Can also be used in engines with aluminium cylinder head.



Properties	Unit	Test method
Density at 20° C	1.05 kg/cm ³	DIN 51757
Flash point	> 100 ° C	DIN 51758
Ignition temperature	> 400 ° C	DIN 51794

Brake fluid DOT 4

febi no. 26746 (0.25 litre)
febi no. 26461 (1 litre)
febi no. 21754 (5 litres)

febi 26461 is a fully synthetic brake fluid with oxidation and corrosion inhibitors.

- Mixable with any fully synthetic brake fluid.
- The requirements currently applicable in the recommended applications shown below are met and even exceeded on many points.



Recommended applications

- | | |
|-----------------------------|---------------------|
| • FMVSS 116 DOT 3, DOT 4 | • SAE J 1703 |
| • ISO 4985 | • FORD SAM 6C9103 A |
| • DBL 7760 Typ DOT 4 | • FIAT |
| • General Motors GME L5 104 | • Renault 41-02-001 |
| • VAG TL 7766 X/Y | |

Properties	Unit	Test method
Viscosity at -40° C	max. 1500 cSt	DIN ASTM D 445
Density at 20° C	1.05 g/ml	DIN 51757
Wet boiling point (ERBP)	165 °C	DIN FMVSS 116
Boiling point (ERBP)	260 °C	DIN FMVSS 116

Brake fluid DOT 4 Plus

febi no. 26748 (0.25 litre)
febi no. 23930 (1 litre)
febi no. 23932 (5 litres)

febi 23930 is a fully synthetic brake fluid with oxidation and corrosion inhibitors.

- Fully synthetic brake fluid for hydraulic brake and clutch systems with a boiling point of at least 265° C and a wet boiling point of at least 180° C.
- Mixable with any other fully synthetic brake fluid.
- Particularly recommended for modern brake systems with anti-lock and stability systems.
- The requirements currently applicable in the recommended applications shown below are met and even exceeded on many points.



Recommended applications

- | | |
|-----------------------------------|--|
| • FMVSS 116 DOT 4, DOT 3 | • SAE J 1703 |
| • ISO 4925 | • VW TL 766 X/Y |
| • GM/OPEL GME L5 104 | • FORD SAM 6C9103 A |
| • FIAT | • Renault 41-02-001 |
| • VAG TL 766 X/Y DOT 4 | • Jaguar XR83 M6C25 A, MNA 2829 AA |
| • Porsche brake fluid Super DOT 4 | • Daimler Chrysler DBL 7760, Type DOT 4 plus (A 000 989 08 07) |
- and a large number of national and international standards

Properties	Unit	Test method
Viscosity at -40° C	max. 1500 cSt	DIN ASTM D 445
Density at 20° C	1.07 g/ml	DIN 51757
Wet boiling point (ERBP)	> 180 °C	DIN FMVSS 116
Boiling point (ERBP)	> 265 °C	DIN FMVSS 116

Central hydraulic fluid synthetic (green)

febi no. 06161 (1 litre)
e.g. repl. no. 81 22 9 407 758

febi 06161 (synthetic) central hydraulic fluid was developed for use in systems for the central hydraulic system level control, hydropneumatic suspension as well as active damping and steering in the application range from -40° C to +130° C.

- The outstanding low-temperature properties (synthetic oil) in conjunction with excellent shear stability ensure functional reliability even at high temperatures.
- The outstanding wear protection, measured in the FZG A/8 oil test, 3/90 damage performance level <12, means high wear-resistance for hydraulic pumps and valves.



Recommended applications

· VW TL 52146	· MAN M 3289
· Opel B 0400070	· Opel 1940 715
· Opel 1940 766	· GM 1193160548

Properties	Unit	Test method
Viscosity at 40° C	18.0 mm²/s	DIN 51562
Viscosity at 100° C	6.2 mm²/s	DIN 51562
Flash point	> 150 ° C	DIN ISO 2592
Pour point	54 ° C	DIN ISO 3016

Central hydraulic fluid mineral (green)

febi no. 06162 (1 litre)
e.g. repl. no. 81 22 9 407 549

febi 06162 (mineral) central hydraulic fluid was developed for use in systems for the central hydraulic system/level control/hydropneumatic suspension as well as active damping and steering in the application range from -40° C to +100° C.

- In addition to the extremely favourable low-temperature viscosity, which ensures safe operation when used in cold countries, the mineral-based central hydraulic fluid is also perfectly suited to high temperatures up to approx. +100° C due to the composition of the additive base oil.



Properties	Unit	Test method
Viscosity at 40° C	16.0 mm²/s	DIN 51562
Viscosity at 100° C	6.2 mm²/s	DIN 51562
Flash point	> 150 ° C	DIN ISO 2592
Pour point	54 ° C	DIN ISO 3016

Hydraulic fluid LHM-plus (green)

febi no. 24704 (1 litre)

e.g. repl. no. 9979.A1

febi 24704 is a mineral-based hydraulic fluid with excellent behaviour at low temperatures specifically for Citroën's hydropneumatic suspension.

- Designed for the application range from -40°C to $+100^{\circ}\text{C}$ and therefore also recommended for the latest developments in the vehicle hydraulics sector.



Recommended applications

- PSA B71 2710
- ISO 7308
- LHM-plus
- DIN 51621 Part 2

Properties	Unit	Test method
Viscosity at 40°C	16 - 23 mm^2/s	DIN 51562
Viscosity at 100°C	6 - 7.7 mm^2/s	DIN 51562
Density at 15°C	0.86 g/ml	DIN 51757
Flash point	$> 100^{\circ}\text{C}$	DIN ISO 2592
Pour point	$< -50^{\circ}\text{C}$	DIN ISO 3116

Power steering fluid (green)

febi no. 21647 (1 litre)

e.g. repl. no. 001 989 24 03

febi 21647 is a fully synthetic product which meets the requirements of MB 345.0.

- Optimised temperature resistance.
- Developed for maximum load central hydraulic systems, power steering systems and shock absorbers which can reach continuous oil temperatures up to $+140^{\circ}\text{C}$.



Recommended applications

- MB 345.0

Properties	Unit	Test method
Viscosity at 40°C	18.9 mm^2/s	DIN 51562
Viscosity at 100°C	6.3 mm^2/s	DIN 51562
Density at 15°C	0.813 g/ml	DIN 51757
Flash point	150°C	DIN ISO 2592
Pour point	$< -54^{\circ}\text{C}$	DIN ISO 3016

Central hydraulic fluid (light brown)

febi no. 21648 (1 litre)
e.g. repl. no. 001 989 20 03

febi 21648 is a high-grade central hydraulic fluid based on predominantly synthetic hydrocarbons.

- Contains a highly effective combination of active substances.
- Excellent wear protection of central hydraulic system components combined with a very low friction coefficient.



Recommended applications

- MB 344.0

Properties	Unit	Test method
Viscosity at 40° C	28.8 mm ² /s	DIN 51562
Viscosity at 100° C	6.2 mm ² /s	DIN 51562
Density at 15° C	0.850 kg/cm ³	DIN 51757
Shear stability KRL 20 h 5 kn	-10 %	DIN 51350-6
Flash point	200 ° C	DIN ISO 2592

Power steering fluid (yellow)

febi no. 08972 (1 litre)
e.g. repl. no. 000 989 88 03/2

Power steering fluid febi 08972 is a universal ATF at the performance level of Dexron II and is optimised specifically for use in steering gears.

- Particularly resistant to ageing, protects reliably against wear and corrosion and is therefore especially suitable for use in hydraulic power steering systems.



Recommended applications

- | | |
|----------------------------------|------------------|
| • Dexron II | • MB 236.3 |
| • Voith 55.6335 (standard drain) | • ZF - TE-ML 09 |
| • ZF - TE-ML 11 | • ZF - TE-ML 14A |
| • ZF - TE-ML 03D | • ZF - TE-ML 04D |
| • ZF - TE-ML 17C | |

Properties	Unit	Test method
Viscosity at 40° C	35.7 mm ² /s	DIN 51562
Viscosity at 100° C	7.5 mm ² /s	DIN 51562
Density at 15° C	0.882 kg/cm ³	DIN 51757
Flash point	200 ° C	DIN ISO 2592
Pour point	-45 ° C	DIN ISO 3016

Hydraulic fluid ZH-M (yellow)

febi no. 02615 (1 litre)

e.g. repl. no. 000 989 91 03

febi 02615 mineral-based hydraulic fluid was developed for use in level control systems and central hydraulic systems of vehicles.

- Ensures excellent protection against oxidation and ageing due to a selected combination of additives.
- Is used when mineral oil based hydraulic media are recommended because of the operating conditions.



Recommended applications

- MB 343.0

Properties	Unit	Test method
Viscosity at 40° C	17.1 mm ² /s	DIN 51562
Viscosity at 100° C	4.5 mm ² /s	DIN 51562
Density at 15° C	877 kg/m ³	DIN 51757
Flash point	152 °C	DIN ISO 2592
Pour point	-60 °C	DIN ISO 3016

Automatic transmission fluid (red)

febi no. 08971 (1 litre)

febi no. 30017 (5 litres)

e.g. repl. no. 000 989 92 03

febi 08971 (ATF) is a very high-grade transmission fluid for automatic gearboxes based on solvent-refined base oils.

- Developed for use in automatic transmissions, hydraulic steering systems, torque converters and power transmissions.
- Usable in transmissions with ATF Dexron II D fill specification.



Recommended applications

- GM Dexron II D
- Ford SQM-9010B
- Voith
- Ford M2C-138CJ, 166 H, 185 A, CVT
- Allison C3/C4, ZF TE-ML-03, 09, 11, 14
- MB 236.2, 236.6, 236.7
- Cat-TO-2
- Renk
- Mercon

Properties	Unit	Test method
Viscosity at 40° C	43.20 mm ² /s	DIN 51562
Viscosity at 100° C	8.25 mm ² /s	DIN 51562
Density at 15° C	0.870 kg/l	DIN 51757
Flash point	198 °C	DIN ISO 2592
Pour point	-42 °C	DIN ISO 3016

Automatic transmission fluid for Asian vehicles (red)

febi no. 29934 (1 litre)
e.g. repl. no. 08886-80506

febi 29934 is a state-of-the-art high-performance automatic transmission fluid specially designed for automatic transmissions of Asian vehicles. It is distinguished by an increased torque capacity which meets and in many cases even exceeds the vehicle manufacturers' requirements.

- Particularly suitable for use in AISIN-WARNER automatic transmissions which are fitted mainly in Asian vehicles but also in US and European vehicles. It is characterised by:
 - Permanently high friction coefficient.
 - Excellent stability to ageing and oxidation.
 - Maximum wear protection.



Recommended applications

• Aisin Warner JWS 3309/Type T-IV	• KIA SP-II, SP-III
• BMW Mini 83 22 0 402 413, 83 22 7 542 290	• Mazda ATF D-III, M-3
• Daewoo	• GM 9986195
• Daihatsu Alumix ATF Multi	• Mitsubishi SP-II, SP-III
• DEXRON III	• Nissan ATF C, D, J
• Fiat Typo T-IV	• Saab 3309
• Ford Mercon M2C924-A	• Subaru ATF, ATF Special
• Honda ATF Z-I	• Suzuki ATF 3309, 3317
• Hyundai SP-II, SP-III	• Toyota Type T, T-II, T-III, T-IV, D-2, WS
• Isuzu Besco ATF-II, ATF-III	• VW G 052 990
• JASO M315 Type 1A	• VW G 055 025

Properties	Unit	Test method
Viscosity at 40° C	37.3 mm ² /s	DIN 51562
Viscosity at 100° C	7.3 mm ² /s	DIN 51652-1
Density at 15° C	0.852 kg/m ³	DIN 51757
Flash point	216 °C	DIN ISO 2592
Pour point	-44 °C	DIN ISO 3016

Automatic transmission fluid

febi no. 32600 (1 litre)
febi no. 32605 (5 litres)
e.g. repl. no. Dexron VI

febi 32600 is a state-of-the-art automatic transmission fluid for the highest requirements in automatic transmissions and power steering systems with fill specifications according to DEXRON VI.

- Downwardly compatible and mixable with older DEXRON II and DEXRON III fill specifications.
- Perfectly suited for streamlining of grades.
- Consists of high-grade base oils and a state-of-the-art additive package.
- Very high level of wear protection and high functionality over the entire life cycle.
- Good wear protection even at high temperatures.
- Its excellent viscosity/temperature ratio ensures outstanding lubrication capacity even at low temperatures.
- To achieve full performance of febi 32600, it is recommended to change the transmission fluid completely and to flush the gearbox thoroughly before the final filling takes place.



Recommended applications

• DEXRON VI	• Mercedes MB 236.41
• VOITH H55.6335.3X	(A 001 989 6903)
• BMW 81 22 9 400 275, 81 22 3 407 738, 81 33 9 400 272, 83 22 0 142 156, 83 22 0 403 248, 83 22 0 403 249, 83 22 0 432 807, 83 22 9 407 858, 83 22 9 407 859	

Properties	Unit	Test method
Viscosity at 40° C	30.6 mm ² /s	DIN 51562
Viscosity at 100° C	6.1 mm ² /s	DIN 51562
Density at 15° C	0.845 g/ml	DIN 51757
Flash point	205 °C	DIN ISO 2592
Pour point	-50 °C	DIN ISO 3016

NEW

Automatic transmission fluid (yellow)

febi no. 14738 (1 litre)
febi no. 29738 (5 litres)
e.g. repl. no. G 052 162 A2

febi 14738 is a high-grade automatic transmission fluid with long-term properties for extended oil change intervals.

- The basis of this semi-synthetic oil are high-grade base oils and special additives which are specifically matched in their composition for use in automatic transmissions and lock-up clutches.



Recommended applications

- | | |
|-----------------------------|------------------------|
| • BMW 83 22 9 404 328 | • VOITH G 1363 |
| • BMW/Mini 83 22 9 407 858 | • VW/Audi G 052 162 A2 |
| • Jaguar JLM 20238 | • VW LT 71141 (ESSO) |
| • Peugeot 9736.22 | • VW TL 521 62 |
| • MB 236.11 (001 989 22 03) | • ZF TE-ML 11B, 14B |
| • VOITH G 607 | |

Properties	Unit	Test method
Viscosity at 40° C	37 mm ² /s	DIN 51562-T1
Viscosity at 100° C	7.4 mm ² /s	DIN 51562-T1
Density at 15° C	855 kg/m ³	DIN EN ISO 12185
Flash point	219 °C	DIN ISO 2592
Pour point	-54 °C	DIN ISO 3016

Automatic transmission fluid (yellow)

febi no. 34608 (1 litre)
e.g. repl. no. G 055 005 A2

febi 34608 is state-of-the-art automatic transmission fluid, specially developed for use in ZF 6-speed automatic gearboxes.

- ZF 6HP19
- ZF 6HP19X (ex. Audi Q7)
- ZF 6HP21
- ZF 6HP21X
- ZF 6HP26
- ZF 6HP26X
- ZF 6HP26A61 (ex. Audi W12)
- ZF 6HP28
- ZF 6HP28X
- ZF 6HP28A61
- ZF 6HP32
- ZF 6HP32A
- ZF 6HP32X

The vehicle manufacturers' change intervals must be adhered to!



Recommended applications

- | | |
|--------------------------------|-------------------------------|
| • BMW 83 22 0 144 137 | • Land Rover TYK500050 |
| • BMW 1375.4 | • VW/Audi G 055 005 A1/A2/A6 |
| • BMW 83 22 0 142 516 | • ZF gearboxes (S671 090 255) |
| • Hyundai 040000C90SG | • Bentley PY 112995PA |
| • Jaguar Fluid 8432 (C2C 8432) | • Maserati 231603 |

Properties	Unit	Test method
Viscosity at 40° C	29.6 mm ² /s	DIN 51562
Density at 15° C	0.85 g/ml	DIN 51757
Flash point	200 °C	DIN ISO 2592

NEW

Automatic transmission fluid (red)

febi no. 22806 (1 litre)
febi no. 30018 (5 litres)
febi no. 26680 (60 litres)
febi no. 26681 (200 litres)
e.g. repl. no. 001 989 21 03

febi 22806 is a universal ATF for all automatic transmissions with and without regulated torque converter lock-up clutch.

- Ensures maximum wear protection in any operating condition.
- Very high thermal stability.
- Provides reliable protection against wear, silting up, corrosion and seizing.
- Particularly good. viscosity/temperature ratio.
- Can be mixed with all branded ATFs without problem.
- Low-foam even in severe conditions.



Recommended applications

- | | |
|---|----------------------------|
| • Dexron III-H | • Dexron III, Dexron III-G |
| • Dexron II-D | • Ford Mercon & Mercon V |
| • Type Allison C-4 | • ZF TE-ML11, 14 |
| • MB 236.1, 236.6, 236.7, 236.9, 236.10 | |

Properties	Unit	Test method
Viscosity at 40° C	31.8 mm ² /s	DIN 51562
Viscosity at 100° C	7.1 mm ² /s	DIN 51562
Density at 15° C	0.85 g/ml	DIN 51757
Flash point	> 170 °C	DIN ISO 2592
Pour point	-48 °C	DIN ISO 3016

Automatic transmission fluid (red)

febi no. 27001 (1 litre)
e.g. repl. no. 001 989 45 03 (ATF 3353)

febi 27001 is based on selected base oils for use in fully-automatic car transmissions. febi 27001 is also characterised by its fuel efficiency potential as a result of the balance between viscosity and additive systems.

- Can also be used in units with Dexron III fill specification.



Recommended applications

- | | |
|-----------------|------------------|
| • Ford M2C195-A | • Ford M2C922-A1 |
| • Ford M2C202-B | • MB 236.12 |

Properties	Unit	Test method
Viscosity at 100° C	6.3 mm ² /s	DIN 51562
Density at 15° C	0.848 g/ml	DIN 51757
Flash point	190 °C	DIN ISO 2592
Pour point	-54 °C	DIN ISO 3016

Automatic transmission fluid (red)

febi no. 29449 (1 litre)

e.g. repl. no. 001 989 68 03 (ATF 134)

febi 29449 is an ultra high performance automatic transmission fluid for 5 and 7-speed automatic gearboxes by Mercedes-Benz up to production date 18.06.2010 to optimise gearshift comfort (gears 722.6XX and 722.9XX).

Selected base oils and special additives enable:

- Outstanding behaviour at low temperatures.
- Optimised, exceptionally constant friction behaviour and as a result good gear changing behaviour over the entire operating time.
- Mixable with conventional branded ATFs.

We recommend that you change the transmission oil completely and flush out the gearbox and the torque converter so that you can utilise the advantages of febi 29449 to the full.



Recommended applications

- MB 236.14

Properties	Unit	Test method
Viscosity at 40° C	29.6 mm ² /s	DIN 51562-1
Density at 15° C	0.85 g/ml	DIN 51757
Flash point	200 °C	DIN ISO 2592
Pour point	-51 °C	DIN ISO 3016

Automatic transmission fluid (blue)

febi no. 33889 (1 litre)

e.g. repl. no. 001 989 78 03

febi 33889 is a new generation, state-of-the-art fuel economy ATF for Mercedes-Benz latest 7-speed automatic gearboxes after production date 21.06.2010.

- Was developed specifically for the requirements of the latest 7-speed gearboxes (722.9).
- Has a particularly low viscosity and therefore increases gearbox efficiency.
- Very high level of wear protection over the entire life cycle.
- Ensures a very stable friction coefficient and optimum low-temperature properties.

Note:

febi 33889 is not downwardly compatible with the previous ATFs. It may only be used from the production date of 21.06.2010. It is not suitable for vehicles with engine OM 629 (8-cylinder diesel) and older transmissions with fill specification 236.14 (red ATF)!

This ATF is therefore dyed blue to make it easier to distinguish between the fluids and to prevent errors.

The vehicle manufacturers' change intervals must be adhered to!



Recommended applications

- Mercedes MB 236.15

Properties	Unit	Test method
Viscosity at 40° C	18.8 mm ² /s	DIN 51562
Viscosity at 100° C	4.5 mm ² /s	DIN 51562
Density at 15° C	0.848 kg/cm ³	DIN 51757
Flash point	> 200 °C	DIN ISO 2592
Pour point	-50 °C	DIN ISO 3016

NEW

CVT gearbox oil (yellow)

febi no. 27975 (1 litre)
e.g. repl. no. G 052 180 A2

febi 27975 is a high-performance automatic transmission fluid for use in CVT gearboxes with thrust link belt or traction chain. As a result, it is very well suited for the CVT Autotronic transmission of Mercedes-Benz A and B class (BM 169, 245), Audi Multitronic and also for use in CVT transmissions of Ford, BMW Mini, Nissan, Subaru and Toyota.

The special synthetic base oils ensure:

- Very good wear protection, particularly under difficult ambient conditions in CVT gearboxes.
- Optimum low-temperature properties.
- Low friction losses.
- Optimum friction behaviour over the entire change interval.



Recommended applications

- | | |
|-----------------------------|----------------------------|
| • BMW Mini 83 22 0 136 376 | • Nissan NS-II |
| • BMW Mini 83 22 0 429 | • Subaru NS-II |
| • Ford WSS-M2C928-A | • Toyota TC |
| • MB 236.20 (001 989 46 03) | • VW TL 52 180 (G 052 180) |

Properties	Unit	Test method
Viscosity at 40° C	34 mm ² /s	DIN 51562
Density at 15° C	0.848 g/ml	DIN 51757
Flash point	210 °C	DIN ISO 2592

DSG gearbox oil

febi no. 32380 (1 litre)
febi no. 32390 (5 litres)

febi DSG gearbox oil is a partially synthetic high-performance transmission oil specially for the 6-speed DSG gearbox, also known as direct shift gearbox or dual clutch gearbox, for VW, Audi, Seat and Škoda.

- Specially matched to the requirements of the DSG transmissions of the VW group.
- Was able to meet and exceed all requirements in intensive tests and therefore impressively demonstrated high performance and efficiency.
- Achieves very high wear protection and at the same time enables trouble-free and comfortable function of the dual clutch.
- Has an almost constant friction coefficient and thus enables low wear over the whole change interval/between all changes.
- Ensures outstanding lubrication even at low temperatures.
- Has high thermal stability.
- To achieve full performance of febi DSG gearbox oil, it is recommended to change the transmission fluid completely and to flush the gearbox thoroughly with febi DSG gearbox oil before the final filling takes place.



Recommended applications

- VW G 052 182 A2

Properties	Unit	Test method
Density at 15° C	0.841 kg/m ³	DIN 51757
Flash point	> 200 °C	DIN ISO 2592
Pour point	-45 °C	DIN ISO 3016

NEW

Universal transmission fluid SAE 75W-90 (GL-5)

Transmission fluid SAE 75W (yellow)

NEW

febi no. 32590 (1 litre)

febi no. 21829 (1 litre)

e.g. repl. no. G 052 171 A1 / A2

febi 32590 is a partially synthetic multi-purpose transmission fluid for manual gearboxes and axle drives

febi 21829 is a high-grade universal FE transmission fluid (fuel economy) for all manual gearboxes that require low-viscosity oils to reduce fuel consumption in accordance with manufacturers' specifications.

- Highly shear-resistant.
- Offers reliable protection against wear even under severe conditions in heavy-duty axle gears and at high temperatures.
- Also excellently suitable for manual gearboxes due to the particularly good viscosity/temperature ratio.
- Offers good gear changing comfort even at low temperatures.
- Good wear protection even at high temperatures.
- Protects against corrosion.
- Universally usable in gear shifts and axle drives but only if no multi-plate LSD is fitted.

- Allows to save fuel.
- Very high thermal stability.
- Provides reliable protection against wear, silting up, corrosion and seizing.
- Particularly good. viscosity/temperature ratio.
- Can be mixed with all branded manual transmission fluids without problem.
- Low-foam even in severe conditions.
- Streamlining to one manual transmission fluid with many possible applications.



Recommended applications

- | | |
|-----------------------|-----------|
| • API GL-5 / API GL-4 | • SAE 80W |
| • SAE 75W-90 | • SAE 85W |
| • SAE 80W-90 | • SAE 90W |

Recommended applications

- | | |
|-----------------------------|----------------------------|
| • API GL-4 | • VW TL 525 12 (G 052 512) |
| • MB 235.10 (001 989 26 03) | • VW TL 726 Y (G 055 726) |
| • VW TL 521 71 (G 052 171) | • VW G 052 171 A2 |
| • VW TL 521 78 (G 052 178) | |

Properties	Unit	Test method
Viscosity at 40° C	114 mm ² /s	DIN 51562
Viscosity at 100° C	15.2 mm ² /s	DIN 51562
Density at 15° C	0.866 g/ml	DIN 51757
Flash point	> 170 °C	DIN ISO 2592
Pour point	-44 °C	DIN ISO 3016

Properties	Unit	Test method
Viscosity at 40° C	41 mm ² /s	DIN 51562-T1
Density at 15° C	0.877 g/ml	DIN 51757
Flash point	221 °C	DIN ISO 2592
Pour point	-42 °C	DIN ISO 3016

Brake pad paste (white)

febi no. 26711 (100 g)
e.g. repl. no. G 000 650

febi 26711 is a white, metal-free, anti-seize ceramic paste. Use this product to prevent noise (squealing) in disc brake pads.

- Metal-free and therefore suitable for all aluminium and cast iron brake calipers.
- Resistant to hot and cold water and to most acids and bases.
- Usable in the temperature range from -30° C to +1400° C.
- Perfectly suited for separation and as corrosion protection for threads, bolts, pins etc. exposed to high temperatures.



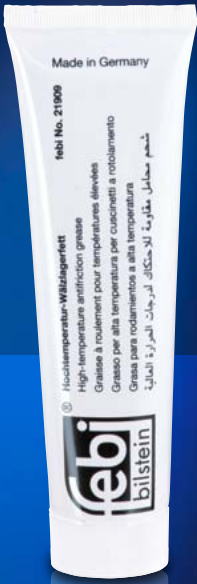
Properties	Unit	Test method
Density at 15° C	1400 kg/m³	SEB 181301
Dropping point	without ° C	DIN ISO 2176

High-temperature anti-friction bearing grease (green)

febi no. 21909 (150 g)
e.g. repl. no. 002 989 00 51

febi 21909 is a multi-purpose EP grease suitable for use in a wide range of temperatures. It consists of a mineral base oil in conjunction with high-grade lithium complex soap and a special combination of additives.

- The special active EP substances improve pressure absorption capacity so that safe lubrication is guaranteed even in extreme conditions.
- Lifetime lubrication for anti-friction bearings exposed to high thermal loads.
- Excellent corrosion protection properties.
- Area of application: : -30° C to +150° C (to +200° C with continuous relubrication).



Properties	Unit	Test method
Base oil viscosity at 40° C	170 mm²/S	DIN 51562
Solid lubricants	> 200 ° C	DIN ISO 2592
Flow pressure at -35° C	< 1600 hPa	DIN 51805
Dropping point	> 250 ° C	DIN ISO 2176
Density	0.9 g/cm³	CB Stan 0001

Ring joint grease for constant velocity joints

febi no. 02597 (100 g)
e.g. repl. no. 001 989 03 51/10
Suitable for Mercedes-Benz

febi 02597 is a high-grade ring joint grease with good emergency run characteristics. It contains a highly shear-resistant lithium 12-hydroxystearate soap and the solid lubricant additive MoS2 to improve pressure absorption capacity, corrosion protection and adhesion.

- Ideal for friction partners with low glide speed and high pressure.
- Versatile applications, for example lubrication of joints, PTO drive shafts, plain bearings, fifth wheel couplings and king pins.



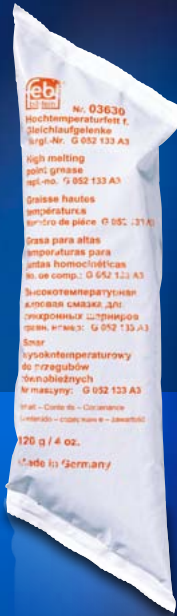
Properties	Unit	Test method
Base oil viscosity at 40° C	125 mm²/s	DIN 51562
Flow pressure at -35° C	1200 mbar	DIN ISO 2592
Dropping point	> 180 °C	DIN ISO 2176
Density	890 kg/m³	CB Stan 0001

High-temperature grease for constant velocity joints

febi no. 03630 (120 g)
e.g. repl. no. G 052 133 A3

febi 03630 is a high-performance grease based on high-temperature resistant base materials. The composition ensures long-term lubrication at low and high temperatures and enables lifetime lubrication of CV joints.

- Resistant to hot and cold water.
- Usable in the temperature range from -35° C to +150° C (short-term up to +170° C).



Properties	Unit	Test method
Base oil viscosity at 40° C	150 mm²/s	DIN 51562
Flash point	> 200 °C	DIN ISO 2592
Solid lubricants	45 mm²/s	DIN 51562-1
Dropping point	180 °C	DIN ISO 2176
Density	0.9 g/cm³	CB Stan 0001

Lubricating grease for constant velocity joints

febi no. 02582 (90 g)
e.g. repl. no. G 000 603

febi 02582 PTO drive shaft grease is a high-grade lithium soap grease with MoS2 as solid lubricant which was developed specifically for highly-stressed homokinetic joints.

- febi 02582 PTO drive shaft grease is suitable for lifetime lubrication of both plunge joints and fixed joints.
- Application range -35° C to +130° C.



Recommended applications

- Ford SMIC-9004A
- Opel B 0400265
- VW TL 738

Properties	Unit	Test method
Density	approx. 900 kg/m ³	DIN 51757
Flash point	224 °C	DIN ISO 2592
Dropping point	180 °C	DIN ISO 2176
Consistency class	2	DIN 51818

Special grease (white) for injectors and glow plugs

febi no. 26712 (50 g)
e.g. repl. no. 001 989 42 51

febi 26712 is a special paste to prevent corrosion between injectors and glow plugs and the cylinder head.

- Reliably prevents corrosion between injectors and cylinder head.
- Temperature resistant up to +1400° C
 - specifically for use under the most extreme conditions.
- Recommended for all common rail injectors and glow plugs.
- Resistant to most acids and bases.



Application

Clean surface and apply a thin film of febi 26712 evenly on the surfaces. Wipe off excess.

Do not use as lubricant!

Properties	Unit	Test method
Dropping point	without °C	DIN ISO 2176
Density at 15° C	1400 kg/m ³	SEB 181301

Fluid grease

febi no. 03514 (1 litre)
e.g. repl. no. 001 989 08 51

febi 03514 is a high-grade, ageing-resistant liquid grease with distinctive rust protection based on lithium soap, selected base oils and active substances.

- Temperature stable, pressure resilient, wear reducing and water resistant.
- Good adhesion to metal surfaces.
- Can be conveyed well even at low temperatures in central lubrication systems for fluid grease.
- Application range -40° C to +120° C.



Recommended applications

- MB 6833.00
- Willy Vogel AG

Properties	Unit	Test method
Dropping point	160 °C	DIN ISO 2176
Flow pressure at -35 °C	< 60 hPa	DIN 51805
Base oil viscosity at 40° C	45 mm²/s	DIN 51562-1
Base oil viscosity at 100° C	6 mm²/s	DIN 51562-1
Marking: KP000 K-40	890	DIN 51502

High-temperature multi-purpose EP grease (green)

febi no. 28193 (400 g)
febi no. 28194 (5 kg)
e.g. repl. no. 02.1040.45.00

febi 28193 is a universal HT, EP multi-purpose grease (high temperature, extreme pressure) with a wide temperature range for all areas of application that require a lubricating grease based on lithium complex soap. Mineral base oils in conjunction with high-grade lithium complex soap and special additives give the product its outstanding properties.

- Active EP substances facilitate use in anti-friction and plain bearings, particularly also for heavy-duty truck wheel bearings.
- Perfect for long-term and lifelong lubrication of universal joints, cardan and PTO drive shafts thanks to the excellent corrosion protection.
- Area of application: -30° C to +150° C (to +200° C with continuous relubrication).
- Resistant to ageing.
- Anti-corrosion.
- Reduces wear.
- General plastics compatibility.



Properties	Unit	Test method
Base oil viscosity at 100° C	14 mm²/S	DIN 51562
Flow pressure at -30° C	< 1400 hPa	DIN 51805
Dropping point	> 250 °C	DIN ISO 2176
Density	0.9 g/cm³	DIN 51757

Thread lock medium strength (blue)

febi no. 26707 (10 g)
febi no. 26708 (50 g)
e.g. repl. no. 243

febi 26707 is an anaerobic liquid synthetic which hardens on contact with metals in the absence of oxygen. Its short hardening times and high functional reliability make the product ideal for locking and sealing screws, nuts, threaded bolts and stud bolts. This reliably prevents loosening of the connections due to vibrations even under the most extreme ambient conditions.

- Highly resistant to heat, corrosion, vibration, water and oil.
- Easily loosened.
- Usable in the temperature range from -55° C to +150° C.
- Hand-tight after 10-20 minutes.
- Secure after three hours.



Properties	Unit
Density at 25° C	1.05 g/ml
Flash point	> 100 °C
Viscosity	2000 - 7500 mPas
Breakaway torque (ISO 10964)	17 - 22 Nm

Thread lock high strength (green)

febi no. 26709 (10 g)
febi no. 26710 (50 g)
e.g. repl. no. 270

febi 26709 is an anaerobic liquid synthetic which hardens on contact with metals in the absence of oxygen. Its short hardening times and high functional reliability make the product ideal for locking and sealing screws, nuts, threaded bolts and stud bolts. This reliably prevents loosening of the connections due to vibrations even under the most extreme ambient conditions.

- Difficult to remove and resistant to heat, corrosion, vibration, water and oil.
- Usable in the temperature range from -55° C to +150° C.
- Hand-tight after 10-20 minutes.
- Secure after five to ten hours.



Properties	Unit
Density at 25° C	1.1 g/ml
Flash point	> 100 °C
Viscosity	500 - 600 mPas
Breakaway torque (ISO 10964)	28 - 35 Nm

febi Benelux N.V.

Bouw 18, 9255 Buggenhout, Belgium
Tel. +32-52-399039
Fax +32-52-330393
E-mail info@febi.be

febi Bulgaria EOOD

Apostol Karamitev 7, 1172 Sofia, Dianabad, Bulgaria
Tel. +359-2441-2659
Fax +359-888-107-066
E-mail office@febi.bg

Ferdinand Bilstein GmbH + Co. KG

Shanghai Representative Office
YuanZhong R&D Building, Rm. 808
1905 Hongmei Road, Xuhui District, Shanghai 200233
Tel. +86-21-5445 3322
Fax +86-21-5445 2768
E-mail info@febi.cn

febi Automotive Services doo

Vladimira Vidrica 10, 10410 Velika Gorica, Croatia
Tel. +385-01-62-157-57
Fax +385-01-62-157-57
E-mail office@febias.com

febi France s.a.r.l.

11, Village d'Entreprises, Avenue de la Mauldre
Z.A. de la Couronne des Prés, 78680 Epône, France
Tel. +33-1-30999400
Fax +33-1-30999401
Hotline technique
+33-8-20140078
E-mail info@febi.fr

febi UK Limited

Bilstein House, Green Lane Industrial Park
Featherstone, Pontefract
West Yorkshire WF7 6TA, Great Britain
Tel. +44-1977-699777
Fax +44-1977-707222
E-mail sales@febiuk.co.uk

febi Italia srl

Via Enrico de Nicola, 25,
10036 Settimo Torinese (TO), Italy
Tel. +39-011-8977558
Fax +39-011-8977623
E-mail febi@febiitalia.it

febi Polska Sp. z o.o.

Pl. Przymierza 6
03-944 Warszawa, Poland
Tel. +48-22-403 47 29
Fax +48-22-403 47 28
E-mail febipolska@febi.pl

febi GAP D.O.O.

Brdanska, 412
11232 Beograd (Ripanj), Serbia
Tel. +381-11-8652874
+381-11-8652333
Fax +381-11-8652603
E-mail office@febiganap.co.rs

febi Asia Pacific Pte Ltd

10 Ubi Crescent
#05-99 Ubi Techpark, Singapore 408564
Tel. +65-62600116
Fax +65-6744 4626
E-mail chris_seah@febi.com.sg

febi bilstein, S.L.

Pol. Ind. Malpica,
Calle E parcela 32-39, nave 32
Parque Empresarial Inbisa – Malpica II
50016 Zaragoza, Spain
Tel. +34-976-582067
Fax +34-976-574377
E-mail info@febi.es

**febi TR Otomotiv Yedek Parça
Sanayi ve Ticaret Limited Şirketi**

Ataşehir Bulvarı Ata 2/3 Plaza
No:6 Cat:10 D:88
34758 Ataşehir / İstanbul / Turkey
Tel. +90 216 629 06 00
Fax +90 216 629 06 10
E-mail infotr@febi.com

febi North America Corp.

P.O. Box 329
Valley Ford, CA 94972-0329, USA
Tel. +1-707-665 98 42
Toll free +1-800-798-febi (3324)
Fax +1-707-665 97 52
E-mail febi@comcast.net

Ferdinand Bilstein GmbH + Co. KG

Wilhelmstr. 47 | 58256 Ennepetal | Germany

Tel. +49 2333 911-0

Fax +49 2333 911-444

E-Mail info@febi.com

www.febi.com

