

Car
Division



Truck
Division



GB



Fluids

Antifreeze

Brake Fluid

Lubrication

Grease

Thread Lock

www.febi.com



Quality and Service

febi bilstein is a global, market leading manufacturer and supplier of car and truck spare parts to the independent aftermarket. The whole is more than the sum of its parts. Allow this “MORE” to be the foundation of your success: Everyday, we create essential added value for our customers.

Our customers come first

febi bilstein's quality and service are first and foremost dedicated to benefit our partners. To meet the highest standards in the market, we continuously develop our product range. Our high quality requirements apply to each and every one of our over 20,000 different items.

Committed to providing first class products

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

Tested Quality

- OE quality
- Triple Checking System
- Technological innovator
- Solutions Made in Germany
- Premium brand
- Innovative partnerships



febi bilstein applies a simple standard to its products: OE quality. This helps us maintain our market-leading position.



febi bilstein's headquarter and production in Ennepetal.



Oils – Antifreezes – Lubricants

febi fluids are not universal products, but are tailored to the vehicle manufacturers' specific requirements. We supply top quality as a value-for-money alternative to original parts.

febi antifreeze provides reliable protection from damage caused by frost, corrosion and cavitation. In many cases, febi antifreeze even exceeds the vehicle manufacturers' requirements.

febi lubricants are suitable for almost all car and truck types, and cover the complete range of applications for a vehicle. They fulfill the vehicle manufacturers' highest requirements and are suitable for use in universal joints and central lubrication systems.

Very user-friendly **packaging design**:

- Clear product identification.
- Colour-coding to match products.
- Easy-to-handle bottle design.
- Visual scale to indicate filling level.
- Leak proof.
- Recyclable PE plastic bottles.



Applications

Page	Description	Colour	febi no.	Reference no.	Manufacturer	Recommended application
12	Antifreeze G 11	blue	01089	81 22 9 407 454	BMW	
				1940 656	Opel	
				G 011V8BA1	VW	G 11
				1 047 035	Ford	
				000 989 08 25	Mercedes-Benz	MB 325.2
13	Antifreeze G 11	yellow green	02374	81 22 9 407 454	BMW	
				1940 656	Opel	
				G 011V8BA1	VW	G 11
				1 047 035	Ford	
				000 989 08 25	Mercedes-Benz	MB 325.2
14	Antifreeze G 12	red	01381	G 012 A8DA1	VW	G 12
				1089240 S	Volvo HGVs	
				1940 663 S1	Opel	
15	Antifreeze G 12+	purple	19400	G 012 A8FA1	VW	VW TL 774 F
				000 989 16 25	Mercedes-Benz	MB 325.3
				1 336 797	Ford	Ford WSS-M97B44-D
				1 222 116	Ford	
16	Antifreeze Ready Mix -30 °C	green	26580	77 11 171 589	Renault	Renault Type D
				77 00 001 144	Renault	
17	Antifreeze Ready Mix -25 °C	blue	24196	000 989 08 25 S2	universal	
18	Brake fluid		26461	DOT 4		
19	Brake fluid		23930	DOT 4 Plus		
20	Hydraulic fluid (synthetic)	green	06161	81 22 9 407 758	BMW	
				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
21	Hydraulic fluid (mineral)	green	06162	81 22 9 407 549	BMW	
22	Hydraulic fluid, LHM-plus (mineral)	green	24704	9979.A1	Citroën	PSA B71 2710
23	Power steering fluid	green	21647	001 989 24 03	Mercedes-Benz	MB 345.0

Applications

Page	Description	Colour	febi no.	Reference no.	Manufacturer	Recommended application
24	Hydraulic fluid	light brown	21648	001 989 20 03	Mercedes-Benz	MB 344.0
25	Power steering fluid (ATF)	brown	08972	000 989 88 03/2	Mercedes-Benz	MB 236.3
26	Hydraulic fluid ZH-M	yellow	02615	000 989 91 03	Mercedes-Benz	MB 343.0
27	Manual transmission fluid GL-4	yellow	21829	001 989 26 03	Mercedes-Benz	MB 235.10
				1940 182	Opel	API GL-4
				G 052 178	VW	VW TL 521 78
				G 052 512	VW	VW TL 525 12
	SAE 75W			G 055 726	VW	VW TL 726-Y
28	CVT transmission fluid	yellow	27975	G 052 180 A2	VW	VW TL 521 80
				001 989 46 03	Mercedes-Benz	MB 236.20
29	Automatic transmission fluid	red	08971	000 989 92 03	Mercedes-Benz	MB 236.2, 236.6, 236.7
				81 22 9 400 272	BMW	
				1940 700	Opel	Dexron II-D
30	Automatic transmission fluid	yellow	14738	G 052 162 A2	VW	VW TL 521 62
						VW LT 71141
				83 22 9 404 328	BMW	
				001 989 22 03	Mercedes-Benz	MB 236.11
				1940 707	Opel	
31	Automatic transmission fluid	red	22806	001 989 21 03	Mercedes-Benz	MB 236.10
				8 000 045	Ford	MERCON V
				–	GM	Dexron III-G / III-H
32	Automatic transmission fluid	red	27001	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
33	Automatic transmission fluid	red	29449	001 989 68 03	Mercedes-Benz	MB 236.14
34	Automatic transmission fluid for Asian vehicles	red	29934	G 055 025	VW	
				–		Dexron III
				30713828 SK (BMW)		BMW Mini
				83 22 7 542 290 (BMW)		Daewoo
				83 22 0 402 413 (BMW)		Daihatsu Alumix ATF
				83 22 9 407 858 (BMW Mini)		Fiat Typo T-IV
				NPNSA-TMOILS1 (Kia)		Honda ATF Z-I
				0000-77-114E-0 (Mazda)		Hyundai SP-II, SP-III
				M2312096S1 (Mitsubishi)		Isuzu Besco ATF-II / ATF-III
				08886-80506 (Toyota)		JWS 3309

Page	Description	Colour	febi no.	Reference no.	Manufacturer	Recommended application
34	Automatic transmission fluid for Asian vehicles	red	29934	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
35	Air conditioning compressor fluid PAG 46	transparent	12239	81 22 9 407 724	universal	
				G 052 154 A2		
36	Brake pad paste	white	26711	G 000 650		
37	High temperature grease for roller bearings	green	21909	-	universal	MB 265.1
38	Grease for rear axle shaft	black	02597	-	universal	
39	High temperature grease for universal joints	black	03630	-	universal	
40	Lubricant for universal joints	black	02582	-	universal	
41	Ceramic grease for injectors and glow plugs	white	26712	001 989 42 51		
			-	universal		
42	Heavy-duty grease		03514	001 989 08 51		
				81.49503.0015		
					MAN	MAN 283 Li-PE000
43	EP multi-purpose grease	green	28193	02 1040 45 00	various HGVs	
44	Thread lock	blue	26707	medium strength	universal	
45	Thread lock	green	26709	high strength	universal	

Notes

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5. All data has been carefully prepared. However, accuracy of content cannot be guaranteed.

6. Illustrations in this catalogue may vary from the actual parts supplied.

7. All spare parts we supply are of consistent high quality.

8. The vehicle manufacturers' part numbers must not be used on customer invoices.

Antifreeze



febi no. 01089 (blue)
e.g. reference number 81 22 9 407 454

febi 01089 is a long-life antifreeze and anti-corrosion product for all liquid-cooled combustion engines.

- From a concentration of 25 %, febi 01089 protects against corrosion and cavitation, scale, mud and foam formations. The vehicle manufacturer's instructions must always be followed.
- Can also be used in engines with aluminium cylinder heads and coolers.
- febi 01089 has been successfully tried and tested in units filled to the requirements of MAN 324, MB 325.0 and GM 1825 M.

Also available in 5 litre (febi no. 22268), 20 litre (febi no. 22270) and 60 litre (febi no. 05011) barrels.

Characteristics	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 at 20 °C	< 25 mm²/s	DIN 51562

Total volume of the cooling system	Required quantity in litres			
	Protection against frost			
	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



febi no. 02374 (yellow green)
e.g. reference number 000 989 08 25

febi 02374 is a nitrite-free long-life antifreeze with excellent corrosion protection.

- Has been developed for use in modern liquid-cooled combustion engines.
- Provides sufficient cooling water protection even at concentrations of only 20 %.
- Protects against corrosion and cavitation, and prevents sedimentation and foam formation.
- Matches MB 325.2.

Also available in a 5 litre bottle (febi no. 88541), and 60 litre (febi no. 75011) and 210 litre (febi no. 89428) barrels.

Characteristics	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 at 20 °C	< 25 mm²/s	DIN 51562

Total volume of the cooling system	Required quantity in litres			
	Protection against frost			
	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



febi no. 01381 (red)
e.g. reference number G 012 A8D A1

febi 01381 is a lifetime frost and corrosion protection for grey cast iron and full aluminium engines, and meets the requirements of VW, Audi, Seat and Škoda; it features the following characteristics:

- Frost protection down to -40 °C, excellent protection against corrosion and sedimentation.
- Raises the boiling point. This allows an even heat transfer.
- Even a concentration of 33 % in the cooling system provides sufficient corrosion protection and additional frost protection down to -22 °C.
- Meets specifications of MB 325.3/ MAN 324, Renault Type D/VW TL 774 D.

Also available in a 1 litre bottle (febi no. 80325), 5 litre (febi no. 22272), 20 litre (febi no. 22274) and 60 litre (febi Nr. 12710) barrels.

Characteristics	Unit	Test method
Density at 20 °C	1,116 g/ml	DIN 51757
Flash point	> 100 °C	DIN 51758
Ignition temperature	> 400 °C	DIN 51794
Boiling point	> 160 °C	ISO 2592
Viscosity at 20 °C	< 15 mm²/s	DIN 51562

Total volume of the cooling system	Required quantity in litres			
	Protection against frost			
	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

febi no. 19400 (purple)
e.g. reference number G 012 A8F A1

febi 19400 is a silicate free long-life antifreeze for use in modern liquid-cooled combustion engines with replacement intervals of up to eight years. Due to its outstanding characteristics, febi 19400 meets and exceeds the requirements of numerous manufacturers and international standards.

- Provides excellent protection for engines against corrosion and cavitation.
- Prevents sedimentation and foam formation.
- Prevents damage to hoses and seals.
- Can be mixed with silicate-free antifreezes.
- Is equivalent to the VW antifreeze “G12 plus” and can be mixed with antifreezes G11 and G12.

Also available in 5 litre (febi no. 19402), 20 litre (febi no. 22276) and 60 litre (febi no. 22278) barrels.



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

Characteristics	Unit	Test method
Density at 20 °C	1,116 g/ml	DIN 51757
Boiling point	> 170 °C	ASTM D 1120
Solidifying point 1:1	-38 °C	ISO 3016
Viscosity at 20 °C	< 15 mm²/s	DIN 51562

Frost protection to	Proportion of antifreeze	Proportion of water
-38 °C	50%	50%

Antifreeze Ready Mix -30 °C Renault, Type D

febi no. 26580 (green)
e.g. reference number 77 11 171 589 S1

febi 26580 is a Ready Mix with frost protection down to -30 °C, and has been developed specifically for use in Renault engines.

- Ready Mix, does not require further dilution.
- Protects against corrosion and cavitation, and prevents sedimentation and foam formation.
- The production is based on Texaco technology, and is therefore perfectly suitable for all Renault engines.



Also available in 5 litre
(febi no. 26581) and 25 litre
(febi no. 26582) barrels.

Recommended applications

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

Characteristics	Unit	Test method
Density at 20 °C	1,07 g/ml	DIN 51757
Boiling point	> 170 °C	ASTM D 1120
Solidifying point 1:1	-30 °C	ISO 3016
Viscosity at 20 °C	< 15 mm ² /s	DIN 51562

Antifreeze Ready Mix -25 °C

febi no. 24196 (blue)
e.g. reference number 000 989 08 25 S2

febi 24196 is a Ready Mix antifreeze with 40 % anticorrosion/antifreeze agent.

- Ready for use.
- Provides frost protection down to -25 °C.
- Nitrite-free antifreeze and anti-corrosion agent.
- Can also be used in engines with an aluminium cylinder head.



Characteristics	Unit	Test method
Density at 20 °C	1,05 g/ml	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 litre)

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

- Can be mixed with any fully synthetic brake fluid.
- The following application recommendations are met, and even exceeded in many cases.



Recommended applications

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

Characteristics	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 litre)

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.
- Can be mixed with any fully synthetic brake fluid.
- Especially recommended for modern brake systems with ABS and stability systems.
- The following application recommendations are met, and even exceeded in many cases.



Recommended applications

- | | |
|-----------------------------------|--|
| • FMVSS 116 DOT 3, DOT 4 | • 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) |
- as well as many national and international standards

Characteristics	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

Hydraulic fluid

febi no. 06161 synthetic (green)
e.g. reference number 81 22 9 407 758

Central hydraulic fluid febi 06161 (synthetic) has been developed for use in central hydraulic systems/level control/hydropneumatic suspension as well as damping and steering within an operating range from -40 °C to +130 °C.

- Excellent properties under cold conditions (synthetic oil) in combination with an outstanding shear stability ensure reliable operation even in high temperature zones.
- The excellent wear protection, measured in FZGA/8, 3/90 damage power level <12, means high wear protection for hydraulic pumps and valves.



Recommended applications

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

Characteristics	Unit	Test method
Viscosity at 40 °C	18 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

febi no. 06162 mineral (green)
e.g. reference number 81 22 9 407 549

Central hydraulic system fluid febi 06162 (mineral) has been developed for use in central hydraulic systems/level control/hydropneumatic suspension as well as damping and steering within an operating range from -40 °C to +100 °C.

- In addition to the excellent cold viscosity, which ensures reliable operation in cold countries, febi 06162 (mineral) central hydraulics system fluid is also suitable for high temperatures up to approx. +100 °C, due to its additive/base oil composition.



Characteristics	Unit	Test method
Viscosity at 40 °C	16 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

febi no. 24704 (green)
e.g. reference number 9979.A1

febi 24704 is a mineral hydraulic fluid with outstanding low temperate characteristics and is particularly suitable for the hydropneumatic Citroën suspension.

- Designed for a working range from -40 °C to +100 °C, and is therefore also recommended for the latest developments in vehicle hydraulics.



Recommended applications

- | | |
|----------------|--------------------|
| • PSA B71 2710 | • LHM-plus |
| • ISO 7308 | • DIN 51621 part 2 |

Characteristics	Unit	Test method
Viscosity at 40 °C	16 - 23 mm²/s	DIN 51562
Viscosity at 100 °C	6 - 7,7 mm²/s	DIN 51562
Density at 15 °C	0,86 g/ml	DIN 51757
Flash point	> 100 °C	DIN ISO 2592
Pour point	< -50 °C	DIN ISO 3116

Power steering fluid

febi no. 21647 (green)
e.g. reference number 001 989 24 03

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

- Temperature resistance has been optimized.
- Has been developed for heavy duty central hydraulic systems, power steering systems and shock absorbers, which can experience constant oil temperatures as high as +140 °C.



Recommended applications

- MB 345.0

Characteristics	Unit	Test method
Viscosity at 40 °C	18,9 mm²/s	DIN 51562
Viscosity at 100 °C	6,3 mm²/s	DIN 51562
Density at 15 °C	0,813 g/ml	DIN 51757
Flash point	150 °C	DIN ISO 2592
Pour point	< -54 °C	DIN ISO 3016

Central hydraulic fluid

febi no. 21648 (light brown)
e.g. reference number 001 989 20 03

febi 21648 is a top quality central hydraulic fluid, based on mainly synthetic hydrocarbons. It contains a highly effective combination of active ingredients, and is characterised by its excellent wear protection for the hydraulic system components, whilst at the same time providing low friction levels.



Recommended applications

- MB 344.0

Characteristics	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 g/ml	DIN 51757
Shear stability KRL 20 h 5 kn	-10 %	DIN 51350-6
Flash point	200 °C	DIN ISO 2592

Power steering fluid

febi no. 08972 (yellow)
e.g. reference number 000 989 88 03/2

The power steering fluid febi 08972 is a universal ATF with the same operating performance as Dexron II, and has been optimised particularly for use in steering gears.

- Especially resistant to ageing, protects effectively against wear and corrosion, and is therefore particularly well suited 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 | |

Characteristics	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 g/ml	DIN 51757
Flash point	200 °C	DIN ISO 2592
Pour point	-45 °C	DIN ISO 3016

Hydraulic fluid ZH-M

febi no. 02615 (yellow)
e.g. reference number 000 989 91 03

The mineral hydraulic fluid febi 02615 has been developed for use in level control and central hydraulic systems of motor vehicles.

- Ensures outstanding oxidation and ageing protection, thanks to a selected combination of additives.
- Is used when operating conditions require mineral hydraulic media.



Recommended applications

- MB 343.0

Characteristics	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	0,877 g/ml	DIN 51757
Flash point	152 °C	DIN ISO 2592
Pour point	-60 °C	DIN ISO 3016

Manual transmission fluid SAE 75W

febi no. 21829 (yellow)
e.g. reference number 001 989 26 03

febi 21829 is a top quality universal FE (Fuel Economy) manual transmission fluid for all gearboxes which require, according to the manufacturers' instructions, low viscosity fluids to reduce wear.

- Increases fuel economy.
- High thermal resilience.
- Protects reliably against wear, mud, corrosion, and adhesion.
- Excellent viscosity/temperature properties.
- Can be mixed with all branded manual transmission fluids.
- Low foaming even under most severe conditions.
- Possible to rationalise to one single manual transmission fluid with many potential applications.



Recommended applications

- API GL-4
- MB 235.10
- VW TL 521 78 (G 052 178)
- VW TL 525 12 (G 052 512)
- VW TL 726 Y (G 055 726)

Characteristics	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

CVT transmission fluid

febi no. 27975 (yellow)
e.g. reference number G 052 180 A2

febi 27975 is a high performance automatic transmission fluid for use in CVT transmissions with thrust belt in Audi (Multitronic) and Mercedes-Benz A and B class BM 169, 245 (Autotronic).

- Special synthetic fluids ensure:
- Excellent wear protection, especially for heavy duty conditions in CVT transmissions.
 - Optimum low temperature properties.
 - Low friction losses.
 - Optimum friction properties throughout the whole replacement interval.



Recommended applications

- VW TL 52 180 (G 052 180)
- MB 236.20 (001 989 46 03)

Characteristics	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

Automatic transmission fluid

febi no. 08971 (red)
e.g. reference number 000 989 92 03

febi 08971 (ATF) is an extremely high quality fluid for automatic transmissions based on solvent-refined base oils.

- Developed for use in automatic gearboxes, hydraulic steering systems, converters and power transmissions.
- For use in transmissions requiring AFT Dexron II D.



Also available in a 5 litre (febi 30017) barrel.

Recommended applications

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

Characteristics	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 g/ml	DIN 51757
Flash point	198 °C	DIN ISO 2592
Pour point	-42 °C	DIN ISO 3016

Automatic transmission fluid

febi no. 14738 (yellow)
e.g. reference number G 052 162 A2

febi 14738 is a top quality automatic transmission fluid with long-life properties for extended oil change intervals.

- This partially synthetic oil is based on top quality base oils and special additives, which are specifically combined for use in automatic transmissions and converter clutches.



Also available in a 5 litre (febi 29738) barrel.

Recommended applications

• MB 236.11	• ZF TE-ML 11B, 14B
• VOITH G 607	• VOITH G 1363
• VW TL 521 62	• VW LT 71141 (ESSO)

Characteristics	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	0,855 g/ml	DIN EN ISO 12185
Flash point	219 °C	DIN ISO 2592
Pour point	-54 °C	DIN ISO 3016

Automatic transmission fluid

febi no. 22806 (red)
e.g. reference number 001 989 21 03

febi 22806 is a universal ATF for all automatic transmissions with or without controlled torque converter clutches.

- Guarantees maximum wear protection under all operating conditions.
- High thermal resilience.
- Protects reliably against wear, mud, corrosion, and adhesion.
- Excellent viscosity/temperature properties.
- Can be mixed with all branded ATFs.
- Low foaming even under most severe conditions.



Also available in 5 litre (febi no. 30018), 60 litre (febi no. 26680) and 200 litre (febi no. 26681) barrels.

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	

Characteristics	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	0,850 g/ml	DIN 51757
Flash point	> 170 °C	DIN ISO 2592
Pour point	-48 °C	DIN ISO 3016

Automatic transmission fluid

febi no. 27001 (red)

e.g. reference number 001 989 45 03
(ATF 3353)

febi 27001 is a product based on selected base oils for use in cars with fully automatic transmission. Due to its balanced combination of viscosity and additive systems, febi 27001 is characterised by its fuel efficiency potential.

- Can also be used in units that require Dexron III.



Recommended applications

- MB 236.12
- FORD M2C195-A
- FORD M2C202-B
- FORD M2C922-A1
- VW TL 521 62

Characteristics	Unit	Test method
Viscosity at 40 °C	29 mm ² /s	DIN 51562
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

febi no. 29449 (red)

e.g. reference number 001 989 68 03 (ATF 134)

febi 29449 is an ultra-high performance latest generation automatic transmission fluid for Mercedes-Benz 5 and 7 speed automatic gearboxes for optimised gear shifts (gearboxes 722.6XX and 722.9XX).

Selected base oils and special additives allow:

- Outstanding low-temperature performance.
- Optimised, exceptionally constant friction behaviour, which allows smooth gear-shifts throughout the whole lifetime.
- febi 29449 can be mixed with all common, branded ATFs.

We recommend to change the transmission fluid and flush the gearbox and torque convertor to maximize the benefits of febi 29449.



Recommended applications

- MB 236.14

Characteristics	Unit	Test method
Viscosity at 40 °C	29,6 mm ² /s	DIN 51562-1
Density at 15 °C	0,850 g/ml	DIN 51757
Flash point	200 °C	DIN ISO 2592
Pour point	-51 °C	DIN ISO 3016

Automatic transmission fluid for Asian vehicles

febi no. 29934 (red)
e.g. reference number 08886-80506

febi 29934 is a high performance latest generation automatic transmission fluid made especially for the requirements of automatic transmissions in Asian vehicles. It is distinguished by its increased torque capacity which meets, and in many cases exceeds, the vehicle manufacturer's performance 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:
 - Continuous high friction level.
 - Outstanding ageing and oxidation stability.
 - The highest level of wear protection.



Recommended applications

· AISIN WARNER	· JASO M315 Type 1A
· BMW Mini 83 22 0 402 413, 83 22 7 542 290	· KIA SP-II, SP-III
· Daewoo	· Mazda ATF D-III, M-3
· Daihatsu Alumix ATF Multi	· Mitsubishi SP-II, SP-III
· DEXRON III	· Nissan ATF C, D, J
· Fiat Typo T-IV	· Saab 3309
· GM 9986195	· 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 055 025

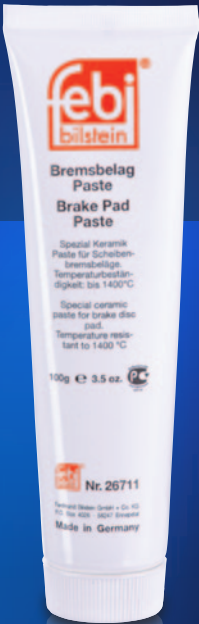
Characteristics	Unit	Test method
Viscosity at 40 °C	37,3 mm²/s	DIN 51562
Viscosity at 100 °C	7,3 mm²/s	DIN 51562
Density at 15 °C	0,848 g/ml	DIN 51757
Flash point	216 °C	DIN ISO 2592
Pour point	-43 °C	DIN ISO 3016

Brake pad paste

febi no. 26711 (white), 100 g
e.g. reference number G 000 650

febi 26711 is a white, metal-free anti-seize ceramic paste. You can use this product to prevent noise in disc brake pads.

- Metal-free and therefore suitable for all aluminium or cast iron brake callipers.
- Resistant to hot and cold water, and to most acids and alkalis.
- Can be used across a temperature range from -30 °C to +1400 °C.
- Is also suitable for the protection of threads, bolts, studs, etc. experiencing high temperatures from corrosion.



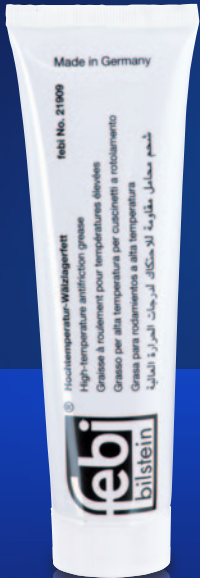
Characteristics	Unit	Test method
Density at 15 °C	1400 kg/m²	SEB 181301
Dropping point	without °C	DIN ISO 2176

High temperature grease for roller bearings

febi no. 21909 (green), 150 g
e.g. reference number 002 989 00 51

febi 21909 is an EP multi-purpose grease which can be used within a wide temperature range. It consists of mineral base oil together with high quality lithium complex soap and a special combination of additives.

- The special EP active agents improve the pressure absorption capacity, so that reliable lubrication is ensured even under extreme conditions.
- Lifetime lubrication for roller bearings under high thermal strains.
- It provides outstanding corrosion protection properties.
- Range of application: between -30 °C to +150 °C (up to +200 °C under continuous relubrication).



Characteristics	Unit	Test method
Base oil viscosity at 40 °C	170 mm ² /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	900 kg/m ³	CB Stan 0001

Rear axle shaft grease for universal joints

febi no. 02597, 100 g
e.g. reference number 001 989 03 51/10
Suitable for Mercedes-Benz

febi 02597 is a high-quality grease for rear axle shafts which performs under the most demanding conditions. It contains a very shear-stable lithium-12-hydroxyterate soap and a solid lubricant additive, MoS₂, to improve pressure absorption capacity, corrosion protection and adhesion performance.

- Ideal where facing friction surfaces are subject to high pressure at low friction speed.
- Various applications, i.e. to lubricate joints, universal shafts, sliding contact bearings, semi-trailer couplings and king pins.



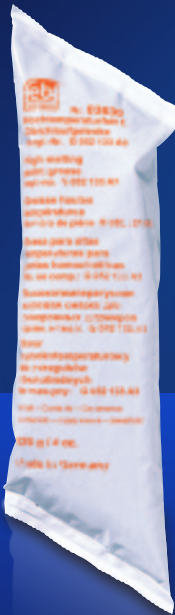
Characteristics	Unit	Test method
Base oil viscosity at 40 °C	125 mm ² /s	DIN 51562
Flow pressure at -35 °C	1200 mbar	DIN ISO 2592
Dropping point	> 180 °C	DIN ISO 2176
Density	890 kg/m ³	CB Stan 0001

High temperature grease for universal joints

febi no. 03630, 120 g
e.g. reference number G 052 133 A3

febi 03630 is a high performance grease based on extremely temperature resistant products. Its configuration ensures long term lubrication at high and low temperatures, and allows lifetime lubrication of CV joints.

- Resistant to hot and cold water.
- Can be used within a temperature range from -35 °C to +150 °C (for short periods up to +170 °C).



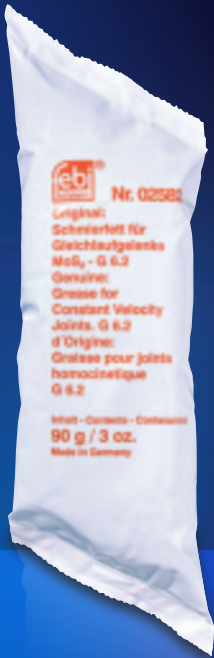
Characteristics	Unit	Test method
Base oil viscosity at 40 °C	150 mm ² /s	DIN 51562
Flash point	> 200 °C	DIN ISO 2592
Solid lubricants	45 mm ² /s	DIN 51562-1
Dropping point	180 °C	DIN ISO 2176
Density	900 kg/m ³	CB Stan 0001

Lubricant for universal joints

febi no. 02582, 90 g
e.g. reference number G 000 603

febi 02582 universal shaft grease is a top quality lithium soap lubricant with MoS₂ as a solid lubricant; it has been specifically developed for highly strained homokinetic joints.

- febi 02582 universal joint grease is suitable for lifetime lubrication for both moving and fixed joints.
- Range of application between -35 °C and +130 °C.



Recommended applications		
· Ford SMIC-9004A	· Opel B 0400265	
· VW TL 738		

Characteristics	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 ceramic grease for injectors and glow plugs

febi no. 26712 (white)
e.g. reference number 001 989 42 51

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

- Reliable prevention against corrosion between injectors and cylinder heads.
- Temperature resistant up to +1400 °C – specifically developed for use under the most severe conditions.
- Recommended for all Common Rail injectors and glow plugs.
- Resistant to most acids and alkalis.



Application

Clean the surfaces and evenly apply a thin film of febi 26712 to the surfaces. Wipe off any excess. **Do not use in the same way as a lubricant!**

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

Heavy-duty grease

febi no. 03514
e.g. reference number 001 989 08 51

febi 03514 is a top quality, age-resistant heavy-duty grease which provides excellent corrosion protection; it is based on lithium soap, selected base oils and active ingredients.

- Temperature stable, pressure resistant, water resistant and reduces wear.
- Characterised by good adhesion to metal surfaces.
- Can be easily conveyed in central lubrication units for liquid greases, even at low temperatures.
- Range of application between -40 °C to +120 °C.



Recommended applications

- MB 6833.00
- Willy Vogel AG

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

High temperature EP multi-purpose grease

**febi no. 28193 (green),
150 g cartridge**
e.g. reference number 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 types of application requiring a lubricant based on lithium complex soap. Mineral base oils combined with top quality lithium soap and special additives ensure outstanding product properties.

- Its EP active ingredients allow use in roller and sliding contact bearings, and particularly in highly strained HGV wheel bearings.
- Due to its excellent corrosion protection, febi 28193 is particularly suitable for long term and lifetime lubrication of universal joints, cardan joints, and universal shafts.
- Range of application between -30 °C and +150 °C (up to +200 °C under continuous relubrication).
- Ageing resistant.
- Protects against corrosion.
- Reduces wear.
- Generally compatible with plastics.



Also available in a 5 litre
(febi 28194) bucket.

Characteristics	Unit	Test method
Base oil viscosity at 100 °C	14 mm ² /s	DIN 51562
Flow pressure at -30 °C	< 1400 hPa	DIN 51805
Dropping point	> 250 °C	DIN ISO 2176
Density	0,9 g/cm ³	DIN 51757

Thread lock, medium strength (blue)

**febi no. 26707 (10 g)
febi no. 26708 (50 g)**
e.g. reference number 243

febi 26707 is an anaerobic liquid plastic which hardens on contact with metal in the absence of oxygen. Its short hardening times and high operation reliability mean it is perfectly suited to lock and seal bolts, nuts, threaded bolts and stud bolts. This reliably prevents loosening due to vibration even under the most severe conditions of use.

- High resistance to heat, corrosion, vibration, water and oil.
- Can easily be removed.
- Can be used within a temperature range from -55 °C to +150 °C.
- Hand-tight after 10 to 20 minutes.
- Achieves final locking force after 3 hours.



Characteristics	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. reference number 270

febi 26709 is an anaerobic liquid plastic which hardens on contact with metals in the absence of oxygen. Its short hardening times and high operation reliability mean it is perfectly suited to lock and seal bolts, nuts, threaded bolts and stud bolts. This reliably prevents loosening due to vibration even under the most severe conditions of use.

- Very difficult to remove, and has a high resistance to heat, corrosion, vibration, water and oil.
- Can be used within a temperature range from -55 °C to +150 °C.
- Hand-tight after 10 to 20 minutes.
- Achieves final locking force after 5 to 10 hours.



Characteristics	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 bilstein international

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