

RENOLIN B HVI

High Quality AW Hydraulic and Lubricating Oils with High Viscosity Index

Description

Proper function and operating safety of hydraulic systems are largely influenced by the quality of the hydraulic fluid. In addition to the task of transferring forces, the operating fluid must seal, cool and lubricate. Since hydraulic oils are exposed to high stress due to the operating conditions, they have to fulfill a large number of requirements. The oils of the RENOLIN B HVI series are formulated on the basis of highly ageing-resistant base oils containing additives that further increase the aging resistance. The products of the RENOLIN B HVI series are zinc-containing HVLP hydraulic and general lubricating oils according to DIN 51524-3: Mineral oil-based, demulsifying.

Applications

RENOLIN B HVI high-quality products are used as hydraulic oil and as lubricating oil for various applications such as bearings and gear boxes, especially when a high viscosity index and good load carrying capacity is required. Especially recommended for applications where a low start-up viscosity at low temperatures and a higher viscosity at higher temperatures is required. Particularly they are well suited for applications in mobile and industrial hydraulic systems with wide ambient and service temperature ranges

Specifications

The products, in appropriate viscosity grades, meet or exceed the requirements according to:

- DIN 51524-3, HVLP
- ISO 6743-4, HV
- Denison HF-1, HF-2, HF-0
- Bosch Rexroth
- Vickers I-286-S, M-2950-S
- US Steel 127, 136
- Cincinnati Milacron P68, P69, P70

Advantages/Benefits

- Low foaming tendency
- Good air release properties
- High ageing resistance
- Good corrosion protection
- Very good viscosity-temperature-behaviour
- Very good wear protection
- High viscosity index
- Wide service temperature range
- Good shear stability

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Properties	Unit	RENOLIN B				Test method
		15 HVI	22 HVI	32 HVI	46 HVI	
Product name		15 HVI	22 HVI	32 HVI	46 HVI	
ISO VG		15	22	32	46	DIN 51519
Kinematic viscosity						
at – 20 °C	mm ² /s	400	950	1858	3486	
at 0 °C	mm ² /s	80.5	140	233.4	401.6	DIN EN ISO
at 40 °C	mm ² /s	15	22	32	46	3104
at 100 °C	mm ² /s	3.8	4.86	6.3	8.1	
Viscosity index	-	151	150	152	150	DIN ISO 2909
Density at 15 °C	kg/m ³	859	863	871	879	DIN 51757
Flash point (COC)	°C	180	180	178	186	DIN ISO 2592
Pour point	°C	- 45	- 45	- 48	- 45	DIN ISO 3016
Neutralization number	mgKOH/g	0.5	0.5	0.5	0.5	DIN 51558-2
Mechanical testing in the FZG gear test rig, A/8.3/90	failure load stage	11	11	11	11	DIN ISO 14635-1
Brugger test – wear protection	N/mm ²	30	30	30	30	DIN 51347-2
VKA shear stability, four-ball test: relative shear loss (viscosity reduction, V ₄₀ and V ₁₀₀) after 20 h	%	< 15	< 15	< 15	< 15	DIN 51350-6

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Properties	Unit	RENOLIN			Test method
		68 HVI	100 HVI	150 HVI	
Product name		68 HVI	100 HVI	150 HVI	
ISO VG		68	100	150	DIN 51519
Kinematic viscosity					
at – 20 °C	mm ² /s	-	-	-	DIN EN ISO 3104
at 0 °C	mm ² /s	618.9	-	-	
at 40 °C	mm ² /s	68	100	150	
at 100 °C	mm ² /s	11.0	13.5	17.7	
Viscosity index	-	153	140	130	DIN ISO 2909
Density at 15 °C	kg/m ³	868	871	881	DIN 51757
Flash point (COC)	°C	240	240	260	DIN ISO 2592
Pour point	°C	- 36	- 24	- 24	DIN ISO 3016
Neutralization number	mgKOH/g	0.5	0.5	0.5	DIN 51558-2
Mechanical testing in the FZG gear test rig, A/8.3/90	failure load stage	11	11	11	DIN ISO 14635-1
Brugger test – wear protection	N/mm ²	30	30	30	DIN 51347-2
VKA shear stability, four-ball test: relative shear loss (viscosity reduction, V ₄₀ and V ₁₀₀) after 20 h	%	< 15	< 20	< 20	DIN 51350-6

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We therefore recommend you consult a FUCHS Lubricants Co. Application Engineer to discuss application conditions and the performance criteria of the products before the product is used. It is the responsibility of the user to test the functional suitability of the product and to use it with the corresponding care.

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