

TECHNICAL PRODUCT SHEET

# HYDRAULIC R<sup>2</sup>

## ISO 32, 46, 68



### DESCRIPTION

HYDRAULIC R2 series consists of high-quality re-refined mineral base oils and selected performance additives, meeting the international classification ISO 6743-4 (ISO-L-HM) and offering a wide selection of viscosity grades. The lubricants are enhanced by a special additive system designed to minimize corrosion, oxidation, foaming, and machinery wear. Owing to their extreme pressure (EP) performance, they are suitable for applications such as lightly loaded gears, certain variable-speed units, and bearings. The series meets the filtration requirements of modern hydraulic systems, including systems equipped with fine filters down to 6 microns.

### APPLICATIONS

The series is suitable for use in industrial and marine hydraulic systems fitted with vane, gear axial and pistons pumps, especially those operating under high pressures and with increased wear protection requirements. They can also be used in lifts, presses, coal mining machinery and various machine components. They comply with pump constructors' requirements for all the metallurgical materials (excl. silver-plated ones, which require a zinc-free hydraulic lubricant).

### SPECIFICATIONS

DIN	51524 Part 2 HLP	Fives Cincinnati	P-68, P-69, P-70
ISO	6743-4 (ISO-L-HM)	AFNOR NFE	48-603 HM
ISO	11158 HM	SS	155434:2015
Bosch Rexroth	RE 90235	SEB	181222
Parker (Denison)	HF-0, HF-1, HF-2	JCMAS	HK P041
Danfoss (Eaton)	Brochure 03-401-2010	Danielli	0.000.001 Type 10 & 11
Danfoss (Eaton)	E-FDGN-TB002	CS	GB 11118.1 L-HL & L-HM
Eaton Vickers	I-286-S & M-2950-S	U.S. Steel	126
ASTM	D6258 HM	ZF	TE-ML 07H
SAE	MS1004	ZF	TE-ML 21M

### PROPERTIES

HYDRAULIC R2 series offer outstanding protection and performance, inhibiting rust and oxidation while providing superior thermal stability and exceptional anti-wear properties. They resist foam formation, ensure rapid air release, and deliver excellent water separation for reliable operation. Fully compatible with common seal materials such as Nitrile, Buna-N, Viton, and Silicone, it also guarantees very good filterability, making it ideal for demanding applications.

### BENEFITS

The use of re-refined base oils allows HYDRAULIC R2 to deliver reliable performance with reduced environmental impact, while ensuring long equipment life and trouble-free operation. It helps prevent sludge formation and filter blockage, enhances system efficiency, and supports extended maintenance intervals, making it a sustainable and dependable choice for demanding hydraulic applications.



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### PHYSICAL-CHEMICAL CHARACTERISTICS

HYDRAULIC R2	METHOD	ISO 32	ISO 46	ISO 68
Density at 15°C, g/cm <sup>3</sup>	ASTM D4052	0.870	0.865	0.878
Viscosity, Kinematic (cSt) 40°C	ASTM D445	32	46	68
Viscosity, Kinematic (cSt) 100°C	ASTM D445	5.6	7.2	9.23
Viscosity index	ASTM D2270	115	115	112
Flash point, COC, °C	ASTM D92	210	230	240
Pour point, °C	ASTM D97	-30	-30	-24
Copper corrosion	ASTM D 130	1a	1a	1a
Foam Tendency / Stability, ml				
Sequence I	ASTM D892	20 / 0	20 / 0	30 / 0
Sequence II		20 / 0	20 / 0	30 / 0
Sequence III		20 / 0	20 / 0	30 / 0
Demulsibility, min.	ASTM D1401	10	10	20
Air release, min	ASTM D3427	3.5	3.8	4.0

The above mentioned characteristics represent mean values.

### STORAGE

All packages must be stored in covered, well-ventilated areas. If outdoor storage cannot be avoided, barrels must be placed horizontally to prevent water ingress and to protect labels and markings from damage. Products must not be stored at temperatures above 60 °C and must not be exposed to direct sunlight, freezing conditions, or extreme temperature fluctuations.



### HEALTH & SAFETY

This product is not considered to pose significant risks to health or safety when used as intended and in accordance with recommended personal hygiene practices. It must not be applied for purposes other than those for which it has been formulated. For detailed guidance on safe handling and use, refer to the Safety Data Sheet (SDS).



### USED OILS

Used lubricants must be collected at designated collection points to prevent environmental contamination. They must not be mixed with solvents, brake fluids, or antifreeze.

