

## HYFLOW ZF

Zinc-free and Ashless  
Hydraulic Oils

**MaxPro1 Hyflow ZF** oils are formulated from selected highly refined base stocks and premium additive packages. They are free from ash-forming components such as zinc-based antiwear agents.

**MaxPro1 Hyflow ZF** oils are high performance lubricants that use ashless technology to provide outstanding protection and performance. They resist breakdown under heat or mechanical stresses, minimising damaging deposits that can affect the efficiency of the hydraulic system.

### APPLICATIONS

- **MaxPro1 Hyflow ZF** ashless formulations meet or exceed major vane, piston and gear pump manufacturer's requirements for viscosity, rust and corrosion protection, hydrolytic stability, water separability, foam inhibition, and filterability. Suitable for a wide range of hydraulic power applications found in manufacturing and industrial environments, especially applications involving yellow metals found in piston pumps.
- Hydraulic applications that demand ashless chemistry due to silver-plated pump components

### FEATURES AND BENEFITS

- Reduced environmental impact in the event of a leak or accidental spillage compared to conventional zinc-based hydraulic fluids.
- Effective rust and corrosion inhibition protects metal surfaces under severe operating conditions.
- High oxidation stability makes possible stable performance under high-temperature, high-pressure conditions for a long period of time.
- Low foaming tendency, even at high circulation rates.
- Good water separation allows removal of water to reduce damages caused by corrosion.
- Compatible with all gaskets, O-rings and sealing materials used in hydraulic and circulating lubrication systems.

### PERFORMANCE LEVEL

**MaxPro1 Hyflow ZF** oils meet or exceed the requirements of industrial and mobile hydraulic systems, which call for:

- DIN 51524 Part 2 (HLP)
- DIN 51515 Part 1 (L-TD)
- DIN 51515 Part 2 (L-TG)



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- MIL-PRF-17672D
- Cincinnati Machine P-38 (HL-32), P-54 (HL-68), P-55 (HL-46)
- AIST 120, 126
- AFNOR E-48600 HL

## TYPICAL PROPERTIES

ISO VG Grade	Test Method	32	46	68	100
Product Code		<b>6020</b>	<b>6021</b>	<b>6022</b>	<b>6023</b>
Density @ 15°C, kg/l	ASTM D4052	0.860	0.866	0.876	0.880
Viscosity, cSt @ 40°C @ 100°C	ASTM D445	30.9	45.6	66.2	96.7
		5.31	6.71	8.45	10.92
Viscosity Index	ASTM D2270	104	99	97	97
Flash Point COC, °C	ASTM D92	218	220	235	240
Pour Point, °C	ASTM D97	-30	-30	-24	-21
Demulsibility, min.	ASTM D1401	10	10	15	10
Rust Prevention	ASTM D665A	Pass	Pass	Pass	Pass
Copper Corrosion	ASTM D130	1a	1a	1a	1a

## AVAILABLE SIZE AND PART NUMBER

	18L	200L
Hyflow ZF 32	6020-18	6020-200
Hyflow ZF 46	6021-18	6021-200
Hyflow ZF 68	6022-18	6022-200
Hyflow ZF 100	6023-18	6023-200

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