

## FLOW P.O. 320 - 460 - 680

### DESCRIPTION:

Mineral-based lubricant oils with a high degree of refining and latest generation additives. Their advanced formulation lends an extraordinary capacity to withstand large loads (EP properties).

### PROPERTIES & ADVANTAGES:

- ✓ Minimum foam formation, reducing the cavitation phenomenon when lubricating smooth bearings.
- ✓ Reduced tendency to form deposits, keeping the gears in an optimum state of cleanliness.
- ✓ Excellent thermal stability, allowing temperature peaks in excess of 100 °C to be attained.
- ✓ Rapid water separation which prevents the arrival of humidity at metal surfaces.
- ✓ Higher wear-and-tear, anti-rust and anti-corrosion capacity.
- ✓ Reduces power losses owing to friction, ensuring optimum performance and silent operation.
- ✓ Its excellent Extreme Pressure properties make it suitable for usage on heavily loaded elements.

### APPLICATIONS:

- ✓ Guillotines (Polar, Wholemberg, etc.), Folders (Jagenberg, Bremer etc.), mechanical elements in Roland, Heidelberg, König Bauer, Wifag, Chambon machines etc.
- ✓ Gear, reducer systems, plain bearings, guides and rollers where a lubricant is required with EP properties.
- ✓ Lubrication of elements with sliding loads and/or shock loading.

### SPECIFICATIONS / QUALITY LEVEL:

DIN 51517 Parte 3 CLP	FIVES CINCINNATI P-59 (ISO-320)/ P-35 (ISO-460)/ P-34 (ISO-680)
US STEEL 224	AGMA 9005-D94 EP
ISO 12925-1 e ISO 6743/6: CKC/CKD	DAVID BROWN S1.53.101-E

### TECHNICAL DATA:

PHYSICOCHEMICAL CHARACTERISTICS	STANDARD	VALUE		
		320	460	680
ISO Grade	ISO 3448	320	460	680
Viscosity at 40 °C, Typical (cSt)	ASTM D-445	288-352	414-506	612-748
Viscosity index	ASTM D-2270	95	95	95
Density at 15 °C, Typical (kg/l)	ASTM D-1298	0.900	0.905	0.905
Pour point (°C), max.	ASTM D-97	-15	-15	-12
Flash point COC, min. (°C)	ASTM D-92	260	260	280
Copper corrosion (3h, 100 °C), max.	ASTM D-130	1b	1b	1b
FZG, Stage	DIN 51354/2	13	13	13
TIMKEN load (lb)	ASTM D-2782	75	75	75
4-ball EP test, welding load (kg)	IP-239	250	250	250
4-ball wear test, scar (mm)	ASTM D- 4172	≤ 0.4	≤ 0.4	≤ 0.4

*Note : These data represent average values after different tests. Given the wide variety of operating conditions, they do not constitute a basis for specifications. Olipes SL reserves the right to modify the indicated data without prior notice.*

### PACKAGING:

20L jerrycan, 200L drum, 1000L IBC container