

Part number:

136-10002**HYDROMA**

HYDRAULICKÉ SYSTÉMY

**HIDROMA
SYSTEMS**

UKŁADY HYDRAULICZNE

HYDROMA

ГИДРАВЛИЧЕСКИЕ СИСТЕМЫ



INDUSTRIAL OILS CLASSIFICATION

Industrial oils are classified according to viscosity grades and performance classes. Viscosity grades ISO VG determine mean value in mm² at 40°C. This viscosity is mainly contained in oil description and it is mainly a number at the end of a trade oil name. There is a written code under this number which characterizes oil performance. The first number generally labels oil classification according to its main type of use according to standard ISO 6743 or DIN 51502 and further letters usually determine which refining additives the oil should have or closely specify way of use.

ISO 3448 viscosity grades of industrial oils

Viscosity grade at 40°C in mm ² /s	Medium oil viscosity in mm ² /s	Viscosity range at 40 °C
ISO VG 2	2,2	1.98–2.42
ISO VG 3	3,2	2.88–3.52
ISO VG 5	4,6	4.14–5.06
ISO VG 7	6,8	6.12–7.48
ISO VG 10	10	9.0–11.0
ISO VG 15	15	13.5–16.5
ISO VG 22	22	19.8–24.2
ISO VG 32	32	28.8–35.2
ISO VG 46	46	41.4–50.6
ISO VG 68	68	61.2–74.8
ISO VG 100	100	90–110
ISO VG 150	150	135–165
ISO VG 220	220	198–242
ISO VG 320	320	288–352
ISO VG 460	460	414–506
ISO VG 680	680	612–748
ISO VG 1000	1000	900–1100
ISO VG 1500	1500	1350–1650

	ISO 6743	DIN 51 502
Open lubricating system, common oils	A	AN, B
Separators, form oils	B	FS
Gearings, circulatory systems	C	C, HYP
Compressors	D	V, K
Combustion motors	E	HD
Spindles, bearings and related gears	F	C
Gliding conduit	G	CG
Hydraulic systems	H	H, HV, HF, ATF
Metals machining	M	S, W
Electrical insulation	N	J
Pneumatic machines, lubrication by oil vapor	P	D
Heat carrier media	Q	Q
Corrosion protection	R	R
Turbines	T	TD
Heat processing	U	L
Other applications	Y	F
Vapor machines	Z	Z



Bearing oil with PARAMO OL-P 03 additive (spindle)

ISO VG 3: ISO 6743: ISO-L-FD
DIN 51 502 : C

PARAMO OL-PO3 is highly refined oil, containing anti-oxidation, anti-abrasive and anti-foaming additives.

TYPICAL PARAMETERS:	OL-P03
Viscosity at 40 °C (mm ² /s)	3
Pour point (°C)	-30
Flashpoint PM (°C)	83
Corrosive interaction on metals Steel at 20 °C/24h	No corrosion

Use:

- lubrication of high-speed plain-bearing spindles of grinders and machine tools;
- as shear oil designed for finishing operations, grinding and honing, fine machining.

Low pour point oils PARAMO OLN-J

ISO VG 22, 32 46; CETOP RP 91H-HL
ISO 6743: ISO-L-HL
DIN 51 517-CL; DIN 51 524-HL

PARAMO OLN-J are de-waxed deeply refined oils with good oxidative stability, low viscosity temperature dependence and excellent low-temperature attributes.

TYPICAL PARAMETERS:	OLN-J22	OLN-J32	OLN-J46
Viscosity at 40 °C (mm ² /s)	22	32	46
Viscosity index	95	98	93
Pour point (°C)	-39	-33	-33
Flashpoint (°C)	210	225	235
Aniline point (°C)	100	100	100
Acid number (mgKOH/g)	0,02	0,02	0,02

Use:

- hydrostatic equipment;
- in cases where bearing oils OL-J are not suitable due to their low temperature attributes.

Hydraulic oils PARAMO HM

ISO VG 22, 32, 46, 68, 100; CETOP RP 91H-HM
DIN 51 524/II – HLP; ISO 6743: ISO-L-HM

PARAMO HM are highly refined petroleum oils, containing additives improving oxidative stability of oil, anti-corrosion and anti-abrasive additives and additives against foaming.

TYPICAL PARAMETERS:	HM 22	HM 32	HM 46	HM 68	HM 100
Viscosity at 40 °C (mm ² /s)	22	32	46	68	100
Viscosity index	100	100	100	100	100
Pour point (°C)	-42	-33	-30	-27	-27
Flash point (°C)	218	225	238	250	255
Anti-corrosion properties	No corrosion	No corrosion	No corrosion	No corrosion	No corrosion
FZG test (A20/8.3/90) Unsatisfactory degree, min.	11	12	12	12	12

Use:

- hydrostatic equipment with high mechanical and heat load.