

Lubricating concentrates (Additives)

Designation	ISO VG	Remarks
LA 1 for circulation oils manroland No. 80.94540-0117	68	- concentrate to significantly increase working performance of commercially available mineral oils (to use as CLP gear oils, please consult us) - reduction of wear and temperatures - regular dosage 20% - extreme dosage: pure when heavy duty operation is demanded
LA 7 for gear oils manroland No. 80.94540-0128	320	

EP-high-performance oils

Mineral oils

Designation	ISO VG	Type	Remarks
LFC 1005	5	rinse oil	- high protection against wear and corrosion - best characteristics for work under high load - long service times - stays extremely clean
LFC 1046	46	circulation oil	
LFC 1068 ^{1) 2)}	68	circulation oil	
LFC 1100 ^{1) 3)}	100	circulation and gear oil	
LFC 1150 ¹⁾	150	circulation and gear oil	
LFC 1220	220	gear oil	

1) with FE8 anti-wear test approval

2) long-time service oil manroland

3) long-time service oil KBA Planeta (indent-No. L 082 0639)

Paraffin based oils (with H1-approval)

Designation	ISO VG	Type	Remarks
LFC 3046	46	circulation oil	- good anti-wear and anti-corrosion properties - oil change according to service manual
LFC 3068 ¹⁾	68	circulation oil	
LFC 3100 ¹⁾	100	circulation and gear oil	
LFC 3150 ¹⁾	150	circulation and gear oil	

1) with FE8 anti-wear test approval

Chain lubricants/Chain cleaning agents

Designation	Remarks
LA 8 manroland No. 80.94540-0119 Heidelberg No. 00.580.3275	Synthetic, viscous special lubricant for service of chains running under high load, curve discs, cams and open cog wheels. LA 8 is the ideal lubricant for delivery chains of sheet fed presses.
LA 8P Heidelberg No. 00.580.5591 KBA Planeta No. L 082 0888	LA 8P based on LA 8 works in higher temperature areas and maintains a flat temperature diagram.
LA 8 H1 (with H1-approval) KBA Planeta No. L 082 0880	Basic properties comparable with LA8/LA 8P. It is slightly more liquid to cope with solidification due to influence of printing spray powder.
FLC 8 (spray) FLC 8 H1 (H1-spray)	Extreme adhesion and high resistance to centrifugation, highly loadable with good creeping abilities and anti-corrosion properties: FLC 8 is a special lubricant to operate chains under maximum load.
FLC 1010 (spray) manroland No. 80.94540-0133	Built up on our lubricating concentrate LA 1. Shows paramount creeping abilities and high loadability in joints and gaps. The utmost thin lubricating film significantly prevents the take up of dust and dirt.
FLC 1014 (oil-teflon spray)	This spray has LA 1 as a base. The additive of PTFE reduces the friction resistance enormously.
FLC 1070 (spray)	Base of this spray is the highly loadable lubricating concentrate LA 7. It forms a stronger lubricating film than those of FLC 1010 or FLC 1012.
FLC 9010 (H1-oil spray)	Synthetic oil spray for temperatures from -35°C up to +160°C. Suitable for minor to average UV-influence.
LFC 1460H (adhesive oil) KBA Planeta No. L 082 0971	Mineral oil based, adhesive lubricant to grease delivery chains. H-oils (adhesive) are also available in different viscosity classes.
FLC 675 R+S available in a liquid performance or as spray	A cleaning agent containing non-chlorinated solvents for cleaning extremely fouled chains and machine parts. Leaves a thin adhesive, pressure and corrosion resistant film of lubricant to give protection until re-greasing.

Pneumatic oils

Designation	ISO VG	Remarks
LFC 1010	10	Pneumatic oils with high pressure resistance and load carrying abilities to reduce wear. Special anti-aging additives ensure long operating times and safety of operation.
LFC 1015	15	

Hydraulic oils

Designation	ISO VG	Remarks
LFC 1032	32	Hydraulic oils with high protection against wear and corrosion. Special anti-aging additives ensure long operating times and paramount safety of operation.
LFC 1046	46	
LFC 1068	68	

Oil for cylinder bearers

Designation	Remarks
VP 785 KBA Planeta No. L 082 0728	This oil has been developed for the cylinder bearer lubrication. The product is made for high working pressure loads and offers good cleaning performances. It is in use with sheet fed and web presses.
LA 151	Advanced and optimized oil for cylinder bearers for very high loads.

Gripper seats

Designation	Remarks
FLC 1012 (spray) Heidelberg No. 00.580.5681 KBA Planeta No. L 082 0821	Spray based on our lubricating concentrate LA1 offering good penetration, even into fittings. Guarantees AW-protection, best cleaning abilities and thus ensures grippers to be always in an operating condition. FLC 1012 absorbs very little dust.
FLC 4010 (High-temperature-spray) KBA Planeta No. L 082 0860	Synthetic high-temperature spray employed in UV-lacquering environment. Best results where good anti-corrosion and anti-wear properties are mandatory.
FLC 8010 (UV-spray)	Synthetic oil spray for use under very intense UV-radiation.
FLC 3010 (spray with H1-approval)	This oil spray provides high class anti-wear and corrosion protection. It has superior creeping ability for joints and gaps.
FLC 9010 (spray with H1-approval)	Synthetic oil spray forming a slightly thicker film than FLC 3010. The product is suitable for use under UV-radiation.

Curves and eccentrics

Designation	Remarks
FLC 8 (spray) FLC 8 H1 (H1-spray)	Due to high adhesion properties and outstanding lubricating qualities it is in use with curves and eccentric devices where no automatic greasing by means of an automatic central greasing unit is offered (vide LA8/LA8P/LA8H1).

Silicone-spray

Designation	Remarks
FLC 700	Forms an almost invisible non moistering/non dirt accepting both high adhesive slide film of silicone lubricant on paper and cardboard. The layer protects against moisture. Short evaporation after spraying is advantageous.
FLC 710	FLC 710 is similar to FLC 700, but much thinner and a less adhesive, lubricating film will remain. The advantage is the use during full production run.
FLC 745 (with H1-approval)	FLC 745 is a silicone lubricant with an H1 food-grade approval. Its consistency is between FLC 700 and FLC 710.

Corrosion inhibitors

Designation	Remarks
MBF 370 as liquid performance as spray with H1-approval	Conservation film easily applied with brush or rag. Prevents corrosion between printing plate and plate cylinder. MBF 370 can be removed with a carbon-dissolving agent.

Vacuum-pressure pumps, blowers, compressors

Designation	ISO VG	Remarks
LFC 9046	46	PAO based, fully synthetic oil for temperature areas up to +150°C, (short term up to +180°C). These oils do not carbonize and are miscible with mineral oils. Because of the high oxidation resistance and the very good demulsibility and air release characteristics they can be very well used in piston and in screw compressors. Evaluation of oil should be done according to lubrication manuals of the individual machinery manufacturers. These oils possess an H1 food-grade approval.
LFC 9068	68	
LFC 9100	100	
LFC 9150	150	
LFC 9220	220	
LFC 9320	320	
GLS 962/N2 manroland No. 80.94540 0408		Special high-temperature grease PAO-based and thickener (polyurea) to lubricate bearings of vacuum pressure pumps (dry runner) and blowers. The grease can be used up to a temperature of +170°C.

Lubricating greases

Designation	Remarks
GLS 75/N2 (KP2K-20) KBA Planeta No. L 082 5440	Lithium saponified EP-multi-purpose grease for lubrication of roller and slide bearings under medium and heavy loads in temperatures of -20°C to +120°C.
GLS 135/N2 (KP2K-20) Lithium based special grease	Short fibred and very homogeneous grease with special lithium soap, for the greasing of roller and slide bearings between medium and heavy work loads. This is suitable for central lubrication systems.
GLS 163 manroland No. 8D.94540-0390	Very thixotropic polyurea grease for roller- and slide bearings with paramount feeding in central lubrication devices. Grease containers of central greasing devices must be filled free of bubbles and be equipped with a pressurized follower piston. GLS 163 is ideal for the gripper shaft lubrication.
GLS 964/N2 (KP2K-20) (with H1-approval) KBA Planeta No. L 082 5460	Thixotropic polyurea type grease for roller- and slide bearings. Under normal lubrication the thixotropic characteristics will minimize spin-off of the grease. GLS 964/N2 is particularly recommended for lubrication of gripper shafts.
GLG 16/N00 and N000 Semi-liquid grease for gears	Lithium saponified semi-liquid grease with outstanding sliding-friction behaviour and high load carrying abilities. This semi-liquid grease is approved for central lubrication devices.
GLS 815/N1 Grease for UV-lacquering with lacquer dissolving properties	Entirely synthetic special grease for bearings, gears and chains in UV-lacquering installations. Proved and recommended by Messrs. Billhöfer, Nürnberg. The grease is not water resistant. Not to be mixed with mineral oil type greases.
GLS 835/N2 (KPPG2K-20) Grease for UV-dryer devices friendly to lacquer	Special grease, polyglycol based with best UV-resistance for the lubrication of roller and slide bearings running under high working load. The grease can be mixed with lithium saponified mineral oil based greases.
GLS 37/N1 manroland No. 80.94540-0137	Strongly resistant to pressure and spin-off. A grease with peak adhesion values for use with slide bars, slide rails and curve discs. For grease application a heavy duty grease gun is necessary.
GLL 10/N2 and N1 (KPF2K-20 and KPF1K-20) MoS ₂ -grease	Lithium saponified multi-purpose grease with best adhesion properties for heavy loads in roller- and slide bearings as well as open lubricating points. Above a temperature of +60°C the adhesion quality will be reduced.
VP 873 (with H1-approval))	High-load and adhesive grease for anti-friction bearings, plain bearings, and open lubricating points. Appropriate for lubricating toothed segments.
VP 886 (H1-grease for UV-use)	The grease has been specially developed for use under UV-conditions. Because of its lacquer-dissolving properties the product keeps the grippers movable.
VP 890 H1-fluid grease	This grease specially matches the requirements for Heidelberg printing machines.

Above mentioned indications are given as per our best knowledge. This should serve for evaluation and advise only. A commitment and warranty can't be taken over due to manifold applications and use.