

## LUBETOOLS MINIMAL LUBRICATION

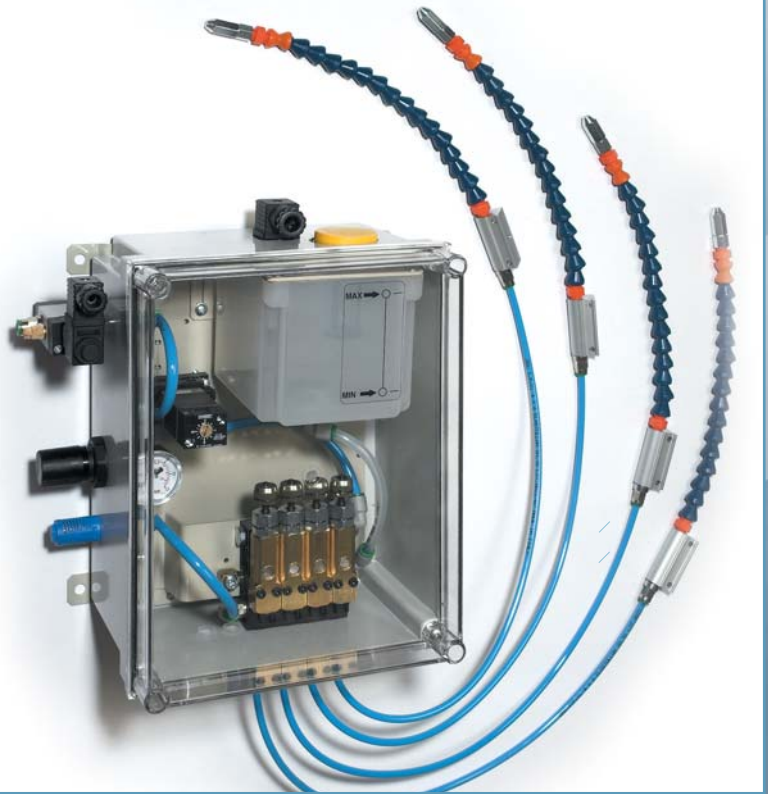
Lubricant	oil
Lubricant nominal flow rate	0 - 39 mm <sup>3</sup> /stroke
Number of lubricant doses	1 - 66/min.
Number of pumps	1 - 6
Reservoir capacity	1, 2, 3 and 6 dm <sup>3</sup> , transparent plastics 8, 12 and 50 dm <sup>3</sup> metal
Drive	pneumatic

Highly variable lubrication system with cooling for metering an exact and very small lubricant quantity, distributors for all spheres machining, material cutting and forming.

Optimization of micro-lubrication is carried out by combination of setting the number of cycles for dosing pumps and step regulation with seven basic series of nominal oil flow rates and their individual adjustment of quantity. Each pump is connected with a coaxial line to the final tube with nozzle. By means of low pressure air flow the metered lubricant from the nozzle is spread onto specified location without generation of oil mist, cooling of tool takes place at the same time.

Plastic and metal reservoirs of various capacities, output filters and lubricant level signalling.

Supply voltages for air supply solenoid valve 24V DC, 115/230V AC, other voltages available on request. Pressure air from 5 to 10 bar. Basic version of Lubetools with one up to six dosing pumps in transparent plastic housing can be modified by customer request.



## SPOA AIR-OIL LUBRICATION

Lubricant	oil
Lubricant nominal flow rate	1.5 - 35 mm <sup>3</sup> /stroke
Number of lubricant doses	1 - 60/min.
Number of pumps	1 - 6
Reservoir capacity	3 dm <sup>3</sup>
Drive	pneumatic

Lubricator with full control of lubricant and air supply, for lubrication systems intended for ultra-high speed bearings.

Pneumatic pumps dose low and exact amounts of lubricant into a mixing block, oil is mixed with air, it is drifted with air flow along the line and friction areas are covered with a uniform mixture of minimum dose of oil and air. Continuous flow of pressure air also provides for cooling.

The exact oil flow rate is adjusted on individual dosing pumps separately and by step regulation of nominal flow rates. Each pump is connected by a line to the nozzle. Transparent reservoir made of plastics with outlet filter and lubricant level signalling. Optional connection of a vacuum drain pump with reservoir.

Supply voltages for air supply solenoid valves 24V DC, 115/230V AC, other voltages available on request. Pressure air from 5 to 10 bar. Integrated control and automation system, adjustment of number of cycles for dosing pumps, evaluation of lubrication system status (oil dosing control, the pressure of air in the outlet pipe), optional external outputs and signalling. Basic version of Lubetools with one up to six dosing pumps in transparent housing made of plastics can be modified by customer request.

