



Application

Lubricating unit LU-60 is used for circulating lubrication of bearings, where total demand for oil does not exceed 60 dm³/min. It can be used for circulating lubrication of bearings both in the mining industry (winding machines, mine fans, ...) and other sectors of industry.

Design of the lubricating unit

Lubricating unit LU-60 is equipped with two independent pumping assemblies designed based on very quiet screw pumps; two independent overflow valves of high stability of setting; two independent pressure filters with electrical control of contamination and complete arrangement of sensors used to control tech-

nical parameters of lubricating medium, such as: temperature, tank level, flow rate. Tank of volume approx. 630 dm³ provides high temperature stability as well as proper oil exchange. The tank is equipped with heating elements used to stabilize working temperature of the whole bearing lubrication system. As an option, the lubricating unit may be equipped with automatic by-pass filtering and cooling system. Because of the device design structure, selection of the pumping assembly may be performed remotely from the machine operator seat. Additional equipment of the unit: oil flow signalling unit, element used to control oil flow rate in the bearing, oil pressure indicator. The above elements are installed on supply pipeline, near each bearing.

Conditions of work and application parameters

Lubricating unit LU-60 meets the requirements of the Decision of the Minister of Economy 1) of 20 December 2005 on essential requirements put before safety machines and elements, 2) introducing Directive 98/37/EC (Journal of Laws 05.259.2170).

supply voltage	500V AC 50 Hz (as an option 400V AC 50 Hz)
ambient temperature	5 ÷ 40°C
working fluid viscosity range	16 – 200 mm ² /s
declared corrected level of acoustic pressure A	L < 85 dB

Specifications

oil tank volume	630 dm ³
hydraulic pump	screw with built-in overflow valve P=10 bar
delivery	60 dm ³ /min at 1450 rpm
working pressure	0.5 – 4.0 bar controlled with overflow valve setting
electric motor	three-phase induction approx. 2.2 kW
filtering accuracy	25 mm
panel heater	3x1.6 kW
range of admissible oil working temperatures	25 ÷ 50°C
total weight of the unit without oil	approx. 560 kg
overall dimensions	length: ≈ 1760 mm; width: ≈ 970 mm; height: ≈ 1200 mm
hydraulic connections	2 x 2" – downflow; 1 x Ø 35 mm – supplied.