

PRODUCT TECHNICAL BRIEF

ULVAC MBS-053 Mechanical Booster Pump

ULVAC MBS-053 Mechanical Booster Pump - LeakLab solutions for leak testing, vacuum systems and test equipment.

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Technical Data

PARAMETER	PUBLISHED VALUE / INFORMATION
Actual pumping speed	50 m ³ /h, backing-pump dependent
Ultimate pressure	4 × 10 ⁻² Pa under ULVAC's stated backing conditions
Motor	200 W brushless DC, 3,500 rpm nominal
Power	Single-phase 100-120 or 200-240 V AC, 50/60 Hz
Maximum consumption	250 W
Inlet / outlet	JIS VG-40 / JIS VF-40
Recommended backing pump	130-240 L/min two-stage oil-sealed rotary pump in the ULVAC specification
Oil	70 mL SMR-200
Ambient / weight	0-40 °C / 11 kg
Dimensions	167 × 410 × 130 mm
Product Label	New

Technical and Project Information

Compact Roots-type booster with 50 m³/h actual pumping speed, 4 × 10⁻² Pa stated ultimate pressure, brushless DC drive and magnetic coupling. It must be used with a suitable backing pump.

The MBS-053 increases pumping speed where a backing pump's performance falls in the medium-vacuum range. Its load-dependent brushless drive permits startup from atmospheric inlet pressure, although near atmosphere the effective speed remains limited by the backing pump.

The booster cannot operate as a stand-alone pump. Verify gas compatibility, backing pump, flange adapters, mounting support, inlet valve sequence, voltage setting, power cable and exhaust arrangement. Standard MBS-053 service is specified for dry air or dry nitrogen; other gases require manufacturer approval.

- Vacuum Pumps Atmosphere-to-High-Vacuum Dry Pumps High-Vacuum Pumping Stations Ion Pumps KYKY RV Rotary-Vane Pumps Roots Booster Pumps Screw Vacuum Pumps Tank Evacuation Systems Turbomolecular Pumps
- Atmosphere-to-High-Vacuum Dry Pumps
- High-Vacuum Pumping Stations
- KYKY RV Rotary-Vane Pumps
- Roots Booster Pumps
- Screw Vacuum Pumps
- Tank Evacuation Systems
- Turbomolecular Pumps
- Helium Reference Leaks
- Scanning Electron Microscopes
- Leak-Detector Accessories

WORLDWIDE PROJECT CONTACT

Send the test object or system, operating conditions, target sensitivity or pressure range, applicable standard, destination country, quantity and schedule. LeakLab will review the project scope.

mail@leaklab.org

Regarding: ULVAC MBS-053 Mechanical Booster Pump

Specifications, standards, verification scope, availability and commercial terms must be confirmed for the exact configuration and destination jurisdiction before order or project acceptance.