

## PRODUCT TECHNICAL BRIEF

# CBVAC JFB-160/401 Hybrid-Bearing Turbomolecular Pump, 400 L/s

CBVAC JFB-160/401 Hybrid-Bearing Turbomolecular Pump, 400 L/s - LeakLab solutions for leak testing, vacuum systems and test equipment.

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## Technical Data

| PARAMETER                         | PUBLISHED VALUE / INFORMATION                                                            |
|-----------------------------------|------------------------------------------------------------------------------------------|
| Pumping speed                     | 400 L/s for nitrogen; 320 L/s for helium                                                 |
| Ultimate pressure                 | $\leq 5 \times 10^{-7}$ Pa with CF inlet; $\leq 5 \times 10^{-6}$ Pa with LF/ISO-K inlet |
| Compression ratio                 | $1 \times 10^{10}$ for nitrogen; $5 \times 10^3$ for helium                              |
| Main inlet                        | DN160 LF/ISO-K or CF160                                                                  |
| Foreline connection               | KF40                                                                                     |
| Recommended backing pump          | 3-8 L/s                                                                                  |
| Maximum continuous inlet pressure | 10 Pa for nitrogen; 3 Pa for helium in the source record                                 |
| Nominal rotor speed               | Approximately 36,000 rpm                                                                 |
| Acceleration time                 | $\leq 5$ min                                                                             |
| Controller supply                 | 48 V DC integrated version or 220 V AC external-controller version                       |
| Interfaces                        | RS-485 Modbus RTU and DB15 logic I/O                                                     |
| Cooling                           | Air or water                                                                             |
| Approximate weight                | 10-11 kg LF; approximately 12 kg CF depending on revision                                |

## Technical and Project Information

DN160 turbomolecular pump with 400 L/s nitrogen and 320 L/s helium pumping speed. LF and CF inlet versions, ceramic ball-bearing rotor support, RS-485 control and air or water cooling serve coating, analytical and research vacuum systems.

## CBVAC JFB-160/401 Turbomolecular Pump

The JFB-160/401 is a DN160 turbomolecular pump with grease-lubricated ceramic ball bearings. It is designed for high-vacuum chambers requiring higher conductance than the DN100 family.

Confirm ordering code, flange, controller, cable, cooling, purge option, magnetic-field limits and mounting orientation. System pressure and effective speed depend on chamber conductance, leaks, outgassing, process gas and backing performance.

Use interlocked start, cooling and vent sequences. Prevent particles, condensate, shock and sudden air inrush.

- 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 Grease-Lubricated KYKY Turbomolecular Pumps JFB Ceramic-Bearing Turbomolecular Pumps KYKY CXF Magnetically Levitated Turbomolecular Pumps KYKY FF Turbomolecular Pumps for Vacuum Insulation MTP Magnetically Levitated Turbomolecular Pumps
- Atmosphere-to-High-Vacuum Dry Pumps
- High-Vacuum Pumping Stations
- KYKY RV Rotary-Vane Pumps
- Roots Booster Pumps
- Screw Vacuum Pumps
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- Turbomolecular Pumps Grease-Lubricated KYKY Turbomolecular Pumps JFB Ceramic-Bearing Turbomolecular Pumps KYKY CXF Magnetically Levitated Turbomolecular Pumps KYKY FF Turbomolecular Pumps for Vacuum Insulation MTP Magnetically Levitated Turbomolecular Pumps
- Grease-Lubricated KYKY Turbomolecular Pumps
- JFB Ceramic-Bearing Turbomolecular Pumps
- KYKY CXF Magnetically Levitated Turbomolecular Pumps
- KYKY FF Turbomolecular Pumps for Vacuum Insulation
- MTP Magnetically Levitated 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](mailto:mail@leaklab.org)

Regarding: CBVAC JFB-160/401 Hybrid-Bearing Turbomolecular Pump, 400 L/s

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