

5. F A Q



Frequently Asked Questions

Q1) What kind of preparations and management are required for the air supply?

A1)

- We recommend an air pressure of 0.5MPa. (This is within the range of air equipment normally used in plants)
 - Ensure that the output flow rate of the air supply is at least twice the consumption flow rate
- *For information on the consumption flow rate, please speak to your Oiles sales representative.
- The purity grade should be equivalent to JIS B 8392-1 Compressed air purity grade 1.6.1.
<Recommended equipment>
Compressor -> Air tank -> Refrigerated air dryer -> Mist separator
-> Membrane dryer -> Oiles Air bearing

Q2) What is the temperature range for use?

A2)

As a rough guide, we recommend the following.

Temperature: 23° C ± 5° C / Humidity: max. 70%

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Q3) Are there any particular points for attention during installation?

A3)
Be sure to supply air during installation.
After installation, use a tester to check conduction, and make sure there is no contact.

Q4) How precise does the mating part need to be?

A4)
The installation surface and mating component must have a tolerance measured in micrometers (including geometric tolerance).
Please speak to us for more details.

Q5) How precise does ABB and ABF inner diameter tolerance need to be?

A5)
Normally, shafts used with bushes need to be gauged to fit.
Oiles can also provide shafts.

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Q6) Do you recommend any particular dryer unit*?

***A device that removes moisture content from compressed air in order to supply dry air.**

A6)

We do not recommend any particular dryer unit.
You can use any commercial dryer unit sold by pneumatic equipment manufacturers.

Q7) Do you recommend any particular sources of driving force?

A7)

Direct drive motors: Linear motors, shaft motors
Rotary motors: Servo motors, induction motors
However, special consideration may be required depending on the intended use, so please contact us.

Q8) How should contact with the bearing surface (floating surface) be handled?

A8)

Depending on the extent, maintenance is possible.
Please speak to us for more details.

Q9) Are they suitable for use in a clean room?

A9)
Yes. Oiles Air Bearings meet ISO Class 4 (FED Class 10) cleanliness standards.

Q10) Can they handle a moment load?

A10)
Handling moment loads is not a particular strength of air bearings.
Whether or not they can handle a moment load depends on the conditions, so please contact us.

Q11) Can they be used in a vacuum?

A11)
Yes.
However, when using them in a vacuum, exhaust gas needs to be removed with a suction device.