

Thank you for purchasing SMC's Moisture Control Tube.

Read this operation manual before using this product, and utilze the product properly. Keep this

Operation manual

operation manual at hand, and refer to it whenever a question or failure arises.

Product Name/ Series

Moisture Control Tube / IDK series

Safety Instructions

Explanation of warnings

This product has certain specifications. If the product is used beyond the scope of these specifications, an unexpected accident or failure may be occur. Please pay attention to the precautions and product

specifications.

1. Specification(Two moisture tubes are included.)

| Part no. | | IDK02-100 | IDK02-200 | IDK04-100 | IDK04-200 | IDK06-100 | IDK06-200 |
|------------------------------|-----------|---|-----------|-----------|-----------|-----------|-----------|
| T 1 1 1 | O.D. (mm) | 2 | | 4 | | 6 | |
| Tube dimensions | I.D. (mm) | 1. 2 | | 2. 5 | | 4 | |
| Tube effective length | (mm) | 100 | 200 | 100 | 200 | 100 | 200 |
| material | | fluropolymer | | | | | |
| Fluid | | Compressed air | | | | | |
| Max. operating pressure | | 0. 7MPa | | | | | |
| Operating temperature °C | | 0~40 (No freezing) | | | | | |
| Environment | | Indoor (temperature of 40 °C, humidity of 75 %RH or less) | | | | | |
| Min. bending radius mm(20°C) | | 10 | | 20 | | 40 | |
| Applicable fittings | | KQ2, KJ | | | | | |

*1. Avoid using the product where it would be bent beyond it's smallest bending radius.

This would cause the tube or the sleeve to be crushed or to come loose.

*2. Moisture control tube requires stationary installation. Do not use moisture control tubing in applications where tubuing is required travel. Tubing that travels may sustain abrasion, extention, or severance due to tensile force, or may result in removal of tubing from fittir

Caution 2. Precautions for operation

•Although the outer color of the moisture control tube changes over time, this does not affect the condensation prevention performance.

Discoloration process: The transparent type will turn brown.

- Keep the product specifications.
- •The moisture control tube is used to prevent condensation to actuators such as air operated valves etc.. If the moisture control tube is used for any other purposes, it might not function properly. In those cases, please contact SMC beforehand.
- The relative humidity of the ambient environment should be 75 RH% or less. If the ambient humidity is higher, condensation prevention may not occur.
- •If the ambient temperature exceeds the product specifications, the outside diameter will become swollen due to the absorption of moisture. Due to this swollen outer diameter, it may become difficult to insert it into a fitting, however, this is a characteristic of the product and is not abnormal. When the product is placed in dry air, it will return to the original condition. The condensation prevention performance will not deteriorate due to this swelling.

3.Usage Method

AMX-OM-M064

• Connect this product as close to the actuator as possible. If the actuator is an air operated valve with condensation prevention specification, connect this product as close to the pilot as possible.



Caution 4. Precautions for setting

Recommended equipment

 Install a refrigerated dryer and mist separator in the compressed air line. The condensation prevention performance may deteriorate depending on the quality (oil and dew point)

| Description | Series | | |
|------------------------|----------|--|--|
| Refrigerated air dryer | IDF/ IDU | | |
| Mist separator | AM/ AFM | | |

- of the compressed air supplied.
- •Please only use the IDK in with a non-lubricated line. The condensation prevention performance decreases when oil adheres to moisture control tube.
- If the ambient humidity is higher, the inner sleeve might come off. Please install it on the coupling after inserting the sleeve again before the fitting is installed when if it slips off.
- Select a moisture control tube size which is the same size as the connected pipe. (Ex.: IDK06-*00 should be connected with TU0604.)
- After inserting the product to the end of the one-touch fitting, pull on it gently to make sure it does not come out. If it is not inserted properly, air may leak or the tube may come out.
- Do not cover the moisture control tube with a duct hose, etc. Water vapor will not be released outside, and condensation prevention will not occur.
- It is not possible to cut the moisture control tube. The inner sleeve inserted into the end is an essential part to ensure safety. The use of the product without the sleeve is dangerous. Therefore, never use the product without the sleeve.
- Do not use the product in conditions of compressed air or an environment containing solvents.
- Do not wipe or clean the product with alcohol.
- If the product is bent to less than the minimum bending radius, the moisture control tube will be

squashed and cannot be used.

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