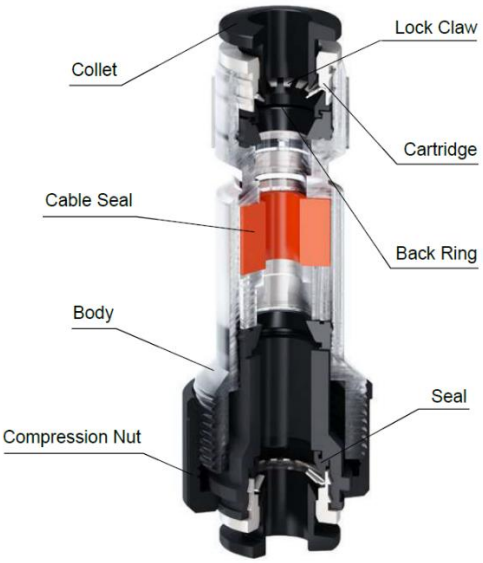
Installation Instruction

Nestor Optimus Gas Blocks



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Application

Gas block connector for microducts. Used for sealing the inside of a microduct route. Prevents moisture, water and gas passing through the connector.

Installation Instruction

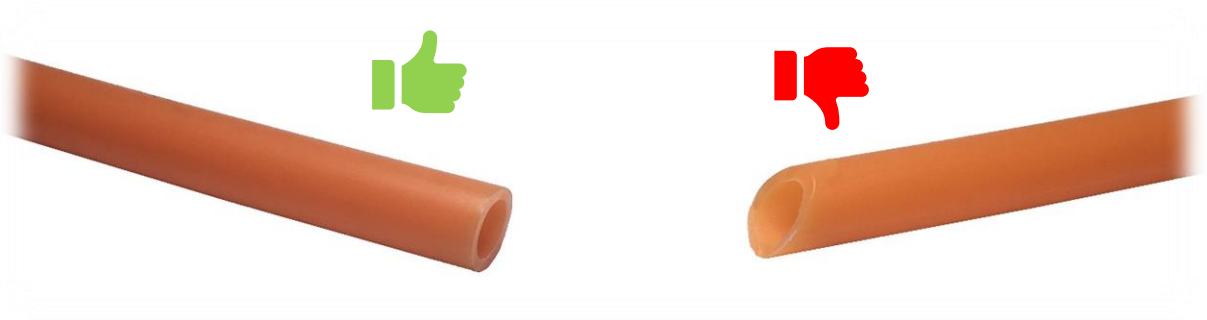
We recommend the installer to read and follow all the instructions, precautions and warnings contained in this document before using the products in pressurized systems. Unfollowing all instructions, precautions and warnings may result in injuries or property damage. Nestor Cables Ltd. disclaims any responsibility in the case of damage caused by product misusing or incorrect installation.

Preparations

- Pay attention to the installation location of the gas block connector. The installation location must be selected so that the connector can be accessed after cable installation, like in cabinets or termination boxes. Therefore, the gas block connector should never be used for direct buried installation.
- To avoid any possible problem during the cable blowing process, the connectors must be installed in straight sections of the microduct route. Never install connectors to a curved section of a microduct with a tight bend radius.
- Before installation work, make sure that the microduct external size and the push-in system size of the gas block connector are same by checking the external diameter of the microduct.

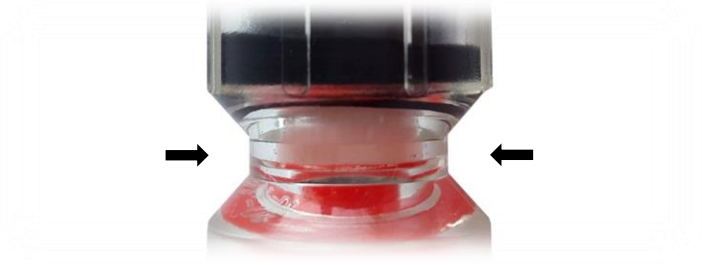
- The duct end must be round, and it must be cut to 90° angle by using the correct duct cutter. Never use saw, pliers or knife.
- When necessary, deburr and break off sharp edges of the microduct end before inserting it into the connector using the correct tool.

Installation



- Make sure that the microduct is clean and does not contain any scratches, cracks, cuts or deformities on its surface.
- Avoid putting any foreign material into the gas block connector or microduct before and during the installation.

- Align the microduct correctly with the gas block connector to ensure the correct installation.
- Push the microduct into the connector. This may need a moderate force and a slight rotation.
- The microduct or the connector seal should not be scratched or damaged during the insertion, otherwise there may be leaks or further misfunctioning.
- The microduct must be connected by hand without using any kind of tool.
- Nestor Optimus Gas Blocks are pre-fitted with tamper proof locking clips as standard. Please note that there is no need to remove locking clips during the installation.



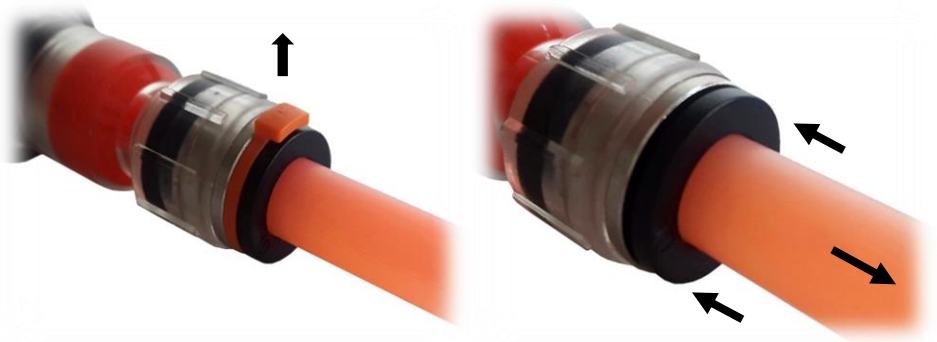
- Make sure that the microduct is correctly and fully inserted into the gas block connector seat. The transparent body of the connector allows a visual inspection of the correct installation.

- To make sure that the microduct is properly connected, please pull it outwards slightly, without releasing the collet. Do not use too much force.
- If the microduct is not fully inserted into the gas block connector, it may cause failures and leakages.

- If locking clips have been removed, please install the correct locking clip after connecting the microduct. By inserting the locking clip between the connector main body and the collet any possible microduct accidental disconnection can be avoided.
- All connection and disconnection operations, including the locking clip installation and removal, must be performed manually without the use of any kind of tools to prevent damages.

- Before the optical fibre cable installation, the gas block connector nut must be completely unscrewed to open position. In that position the system is not sealed, and the cable can pass through the gas block connector freely.
- The gas block connector nut has a mechanical stop to confirm when it's completely open. Do not force the nut beyond the fully open position to avoid any possible damage to the connector.
- The nut must be screwed and unscrewed by hand only.

- After the cable installation and in order to seal the system, the nut must be screwed firmly to closed position.
- Do not pull the cable when the gas block connector is in the closed position to prevent possible damage to the gas seal.



- In order to disconnect the microduct from the gas block connector, make sure that the pressure has been completely eliminated from the system before any operation.
- First, remove the locking clip. If it is the first time the locking clip is removed, a small part of it will be broken to identify that it is removed.
- To disconnect the microduct, push the collet in the direction of the connector body and pull the microduct outwards while keeping the collet pushed against the connector body.
- Never press collets towards the body unless you need to separate the microducts from the connector in an unpressurized line.

Product reuse

- Nestor Optimus Gas Blocks can be reused after checking that they are not damaged and correctly working.
- Even if the gas block connector reuse is possible, it's only recommended in case of maintenance. The microduct network should never be built by reused gas block connectors.
- In case of gas block connector reuse, the operator must verify reused components and carefully check the correct functioning of the whole system.
- In the case of reuse of a microduct, the part previously inserted into the gas block connector must be cut back and the whole line has to be re-verified.
- It is necessary to follow all the instructions as a precaution, in the same way as for the first-time installation.

Lubricants

- In case of use with lubricants, it is the end user or customer responsibility to check the chemical compatibility of the fluid with the construction materials of the gas block connector.
- Please contact our technical department if you would like to receive more information regarding suggested lubricants.

Modifications

- Do not disassemble or modify the individual products as this may cause product malfunctions, leaks or failure.
- In any case the tampering, modification or dismantling of the products invalidates the guarantee.

Excessive forces

- Do not over-stress the products by rotation, twist, bending, shock, fatigue or other excessive forces. This may damage the fittings and cause malfunctions, leaks or failure.
- The performance limits of the connectors are detailed in the technical specifications and must be respected during the installation.
- Do not use the products where ambient temperature and/or fluid temperature and pressure may exceed the limits indicated in our technical specifications.

Additional notices

Nestor Cables Ltd. reserves the right to modify the products from time to time when required by quality improvements and by market requirements. The actual product may differ from the pictures and drawings shown in the catalogues.

We recommend to only use Nestor Optimus accessories when building the microduct network. Using non-recommended products could invalidate the guarantee. The customer is responsible for checking the performance of the products after the installation.

It is end user's responsibility to keep the correct traceability of the product. The production codes of the items are clearly indicated on the packaging. In the case of a claim, the correct production code must be communicated to Nestor Cables Ltd. The failure in communicating the production code may invalidate the guarantee.