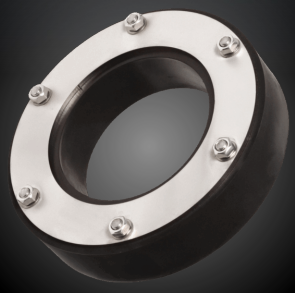
Master-ring

Mechanical sealing sleeve for pipe and cable penetrations



Drykos® **Master-ring** is a pre-assembled mechanical sealing sleeve designed for the watertight sealing of pipe, cable, and conduit penetrations passing through concrete walls, core-drilled holes, or wall sleeves.
The system consists of an EPDM rubber sealing element, two metal pressure plates, and a tightening system using screws and nuts. In the configuration shown in the supplier's technical data sheet, the pressure plates and screws are made of V2A stainless steel, while the nuts are made of V4A stainless steel.
The operating principle is based on the controlled compression of the elastomeric element: the progressive tightening of the screws causes the gasket to expand, compressing it against the internal surface of the hole or wall sleeve and against the external surface of the pipe or cable, creating a continuous, stable seal resistant to water pressure.
Drykos® **Master-ring** is suitable for both new constructions and interventions on existing penetrations when an inspectable, adjustable, and durable mechanical seal is required.

CHARACTERISTICS

Main characteristics

- pre-assembled system ready for installation
- watertight mechanical sealing without the use of additional sealants
- EPDM rubber sealing element
- V2A stainless steel pressure plates and screws, V4A stainless steel nuts in the reference configuration
- controlled tightening via defined torque
- simple, fast, and inspectable installation
- possibility of inspection and re-tightening after initial settling
- suitable for installation in core-drilled holes or wall sleeves
- water pressure resistance up to 3.0 bar without position indicator and up to 5.0 bar with in-place position indicator

Fields of use

- Sealing of water, sewage, gas, and utility pipe penetrations
- Watertight closure of cable passages and technical conduits
- Suitable for use in retaining walls, technical rooms, tanks, reservoirs, hydraulic works, underground structures, and retrofit interventions on existing holes or sleeves

SPECIFICHE TECNICHE

Color
Black and steel.

Appearance
Metal-elastomeric sleeve

Shelf life
The product has no storage limitations if correctly stored.

Storage conditions
Store in the original intact packaging, in a dry, clean environment protected from direct sunlight. Avoid storage near heat sources, aggressive chemicals, or conditions that could damage the elastomeric elements and tightening parts.

APPLICATION DATA

Theoretical consumption
1 piece for each penetration to be sealed.

Application temperature
Minimum +5 °C | Maximum +35 °C

APPLICATION INFO

Substrate preparation
Before installing Drykos® **Master-ring**, it is necessary to verify that the core-drilled hole, wall sleeve, or penetration sleeve is correctly sized relative to the external diameter of the pipe or cable to be sealed and the specific product configuration. The internal surfaces of the hole or wall sleeve must be clean, smooth, and free of dust, oils, grease, processing residues, loose parts, sharp edges, or any contaminant that could compromise the correct seating of the gasket. The external surface of the pipe, cable, or through-conduit must also be thoroughly cleaned before installation.
In the case of installation in a core-drilled hole or wall sleeve, it is recommended to pre-treat the internal surface with a suitable epoxy resin to protect any reinforcement intercepted by the coring and to create a closed, continuous, and load-bearing surface, especially in the presence of porous, irregular, or grooved substrates.
The pipe or cable must be dimensionally stable in the sealing area and must not show deformations, crushing, breaks, or irregularities that could compromise the uniform compression of the elastomeric element.

Product preparation
Drykos® **Master-ring** is supplied pre-assembled and ready for installation. Before installation, it is necessary to verify the integrity of the elastomeric element, pressure plates, screws, and nuts, checking for any deformations, cuts, damage, or contamination.
The size of the sleeve must be selected based on the diameter of the hole or wall sleeve and the actual external diameter of the through-pipe or cable. Before insertion into the hole, it is advisable to check the installation direction and the accessibility of the nuts, which must remain facing the inspectable side to allow for monitoring and potential re-tightening after installation.

Application

Drykos® **Master-ring** must be inserted into the previously prepared wall sleeve or core-drilled hole, then the pipe or cable must be passed through the sealing sleeve. Alternatively, depending on the site configuration, the sleeve can be positioned on the through-element and subsequently inserted into the hole or wall sleeve. The system must be installed as close as possible to the external side of the wall, i.e., towards the soil/water side, keeping the nuts facing the internal side or, in any case, the inspectable side. This configuration allows for torque control and potential re-tightening over time.
Once correctly positioned, the screws must be tightened progressively and in a crosswise pattern, performing one turn at a time on each screw and repeating the sequence until the maximum torque specified for the specific configuration is reached. This procedure allows for uniform compression of the rubber against the internal wall of the hole or wall sleeve, avoiding localized deformations and ensuring the continuity of the seal.
Approximately 1–2 hours after the first tightening, it is necessary to check the applied torque again and, if necessary, proceed with re-tightening the screws, as the elastomeric element may undergo an initial settling after the initial compression. Installation must be carried out with suitable tools and, where specified, using a torque wrench, respecting the tightening torque indicated in the technical data sheet for the specific size.

Other indications

- Always verify the correct match between the hole diameter, the external diameter of the pipe or cable, and the size of the selected Drykos® **Master-ring**
- Do not install the product in irregular, dirty, contaminated holes or those characterized by sharp surfaces that have not been adequately prepared. In the case of a core-drilled hole, internal smoothing and protection with a suitable epoxy resin is recommended, especially in the presence of porous or grooved surfaces or intercepted reinforcement
- Do not install on pipes or cables that are deformed, damaged, out-of-round, or not dimensionally stable in the tightening area. The correct operation of the system depends on the uniform compression of the elastomeric element between the hole and the through-pipe
- Always position the nuts towards the inspectable side to allow for torque control and potential re-tightening after initial settling
- Tighten the screws progressively and in a crosswise pattern, avoiding localized or excessively rapid tightening. Respect the maximum torque specified for the specific product configuration
- Check the tightening approximately 1–2 hours after installation and proceed with re-tightening if necessary
- In the presence of particularly aggressive chemical, thermal, or environmental conditions, verify the suitability of the system in advance
- For anything not covered, contact Technical Support at +39 0171 1874992 or write to info@drykos.com

ENVIRONMENT AND SAFETY

Safety

The product is classified as an article and, in accordance with Regulation (EC) No. 1907/2006 (REACH), does not require the preparation of a Safety Data Sheet. During handling and use, it is nonetheless recommended to use appropriate personal protective equipment, such as gloves and protective goggles, and to comply with the safety procedures established at the workplace.

Use

For professional use.

WARRANTIES AND LEGAL NOTES

Should the product be defective, the liability of Drykos S.r.l. shall be limited solely to its replacement. The information and instructions in this technical data sheet regarding the application and end-use of the products are provided in good faith and reflect current scientific and technical knowledge; however, they do not constitute any guarantee or assumption of liability regarding the final outcome of the work involving their use. Given the variety of operating conditions and external factors beyond the control of Drykos S.r.l. during execution, it is the user's responsibility to verify the product's suitability for the specific application, assuming all risks and liabilities. Drykos S.r.l. reserves the right to modify the properties of its products at any time. Always refer to the most recent version of the product's technical data sheet. This edition cancels and replaces all previous versions. The latest updated technical data sheets are available on our portal at www.drykos.com.