Splice Closures
Optimal Solutions for Every Distribution Point
R&M (Reichle & De-Massari AG) is a leading Global cabling and connectivity solution provider for high end-communication networks since 1964. We serve a wide range of industries in the sectors of Local Area Networks, Data Centers and Public Networks. Our worldwide network of over 40 subsidiaries, 10 production sites and 1000 qualified partners ensure proximity where ever you are. Customers and partners benefit from consistently high Swiss quality standards as well as our innovative future-proof solutions.
A network makes a range of different demands on a closure. Depending on which area of the network they are used in, specific characteristics are required, such as splice capacity, flexibility or speed of installation. Generally it is not possible for a closure to fulfill all these demands. Selecting the right closure is thus essential for a sustainable economic use of the network.

Reichle & De-Massari offers a perfect closure solution for every distribution point with a comprehensive range.
The SYNO dome closure fulfills all requirements of a modern FO network with the innovative gel technology. The SYNO closure is particularly characterized by its unique modularity and flexibility.

Thanks to the modular design, the closure can be adapted or extended at any time – even during operation. Whether you need a cable from 2mm to 28mm or micro ducts from 5mm to 14mm, the SYNO dome closure guarantees reliable strain relief and sealing.

- **1.** Optimally protected in the SCM tray system
- **2.** Simple access to individual fibers
- **3.** Simple and reliable installation
- **4.** Strain relief of cables/micro ducts
- **5.** Cable entries can also be adapted during operation

### Diagram

- **Dimensions vs. Capacity**
- **Splice Capacity**
- **Installation Speed**
- **Flexibility: Cable Ports**
- **Flexibility: Fiber Management**
Freely configurable and can be adapted later without having to interrupt operation.

Easily accessible cable entries with individual strain relief for every cable.

Simple and intuitive installation steps for fast and secure installation.

Secure laying of individual fibers thanks to direct access and gentle bending radius.

Benefits

- Flexible use of the closure thanks to cable entries which can be adapted at any time.
- Simple, fast and reliable installation.
- Controlled fiber management for direct access to every fiber.
- Secure and subsequent installation of cables even during operation.
- Seamless adaptations thanks to free access to every cable.
- Suitable for all fields of application – simplified logistics.
The sturdy SCM dome closure seals cables with tried and tested, reliable shrink technology. It cuts a convincing figure with the flexible SCM tray system which ensures simple and safe handling. The modular fiber tray system was designed to ensure simple and safe handling. With a guaranteed bending radius of 40 mm end to end, high power and xWDM applications are possible at all times.

On request, the number as well as the diameter of the cable entries can be adapted to suit every application.
Cable sealing with established heat shrink technology.

Continuous, permanently numbered cable entries with specification of the diameter.

Sturdy strain relief of cable and strength member.

Safe laying of the fibers with gentle bending radius. Access to individual fibers always guaranteed.

Benefits

- Flexible and controlled fiber management for guaranteed access to every fiber.
- Impossible to mistake cables thanks to permanent numbering of the cable entries.
- Reliable cable strain relief in terms of traction and torsion for safe closure handling.
- Diameter and number of cable entries can be adapted on request.
- Established heat shrink technology does not need extensive training.
The sturdy SCM flex dome closure offers a high density of cable entries. Ideal for use in local distribution networks. Flexible entry ports ensure unhindered access for sealing the cable at all times.

It also cuts a convincing figure with the flexible SCM tray system which ensures simple and safe handling. With a guaranteed bending radius of 40 mm end to end, high power and xWDM applications are possible at all times.

On request, the number as well as the diameter of the cable entries can be adapted to suit every application.

1. Guaranteed access to individual fibers. Well protected in the SCM tray system.
2. Reliable strain relief for every cable with fixing of the central strength member.
3. On request, cable entries can be defined according customer needs.
4. Flexible drop cable entries enable good access for reliable sealing.
Cable sealing with established heat shrink technology.

Simple separation for safe and reliable shrinking. Shrink tubes are already prepared.

Sturdy strain relief of cable and strength member.

Safe laying of the fibers with gentle bending radius. Access to individual fibers is always guaranteed.

Benefits

- Flexible and controlled fiber management for guaranteed access to every fiber.
- Reliable cable strain relief in terms of traction and torsion for safe closure handling.
- Customer cables can be sealed safely and reliably thanks to the flex entry.
- Pre-assembled shrink tube enables fast installation of customer cables.
- Diameter and number of cable entries can be adapted on request.
- Established heat shrink technology does not need extensive training.
Thanks to its short dome and the optimized dimensions, the standard dome closure finds space even in the smallest shaft. The modular design enables extension with the tried and tested R30 and R40 splice trays, if required. The standard dome closure is perfect for the cable-to-cable splicing of loose tubes. The spacious storage enables the safe accommodation of uncut loose tubes. The standard dome closure can also be used for aerial installations.

On request, the number as well as the diameter of the cable entries can be adapted to suit every application.
Cable sealing with established heat shrink technology.

Splice trays with hinge function for bending radius of 30 mm or 40 mm.

Well protected and generous storage space for spare loose tubes.

**Benefits**

- The closure can be accommodated anywhere thanks to its compact design.
- Simple and easily accessible tray system for cable-to-cable splicing of loose tubes.
- Established heat shrink technology does not need extensive training.
- Diameter and number of cable entries can be adapted on request.
Thanks to its short dome and the optimized dimensions, the standard flex dome closure finds space even in the smallest shaft. With its flexible entry ports it also offers a high density of cable entries. The standard flex dome closure is ideal for use in local distribution networks. The flexible entry ports ensure unhindered access for sealing the cable at all times.

The modular design enables extension with the tried and tested R30 and R40 splice trays, if required. The generous loose tube storage basket enables the safe accommodation of uncut loose tubes.

On request, the number as well as the diameter of the cable entries can be adapted to suit every application.
Cable sealing with established heat shrink technology.

Simple separation for safe and reliable shrinking. Heat shrink sleeves are already prepared.

Well protected and generous storage basket for spare loose tubes.

Splice trays with hinge function for bending radius of 30 mm or 40 mm.

Benefits

- The closure can be accommodated anywhere thanks to its compact design.
- Customer cables can be sealed safely and reliably thanks to the flex entry.
- Pre-assembled heat shrink sleeves enables fast installation of customer cables.
- Simple tray system for cable-to-cable splicing of loose tubes.
- Established heat shrink technology does not need extensive training.
- Diameter and number of cable entries can be adapted on request.

R&M
The GSC dome closure is small, sturdy and always complete. The economical and practical solution for smaller to medium-sized FO networks is always delivered with all the installation material required.

Everything is included, from the heat shrink sleeves for the cable entries to the splice protectors.

1. Well protected fibers with transparent cover for every tray.
2. Generous storage basket for uncut loose tubes.
Hinged splice trays for 24 fibers. All fibers are protected by the removable tray cover.

Integrated storage basket for uncut loose tubes.

Cable sealing with established heat shrink technology.

**Benefits**

- No delay in installation due to missing material. Everything in the delivery scope.
- The removable tray cover prevents the fibers being damaged during installation.
- Established heat shrink technology does not need extensive training.
## R&M – our closures at a glance

<table>
<thead>
<tr>
<th>Feature</th>
<th>SYNO</th>
<th>SCM</th>
<th>SCM Flex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of splices</td>
<td>144...1152</td>
<td>144...1152</td>
<td>144...1152</td>
</tr>
<tr>
<td>Sealing method</td>
<td>Gel</td>
<td>Heat shrink</td>
<td>Heat shrink</td>
</tr>
<tr>
<td>Flexibility</td>
<td>⬤⬤⬤⬤⬤</td>
<td>⬤⬤⬤⬤</td>
<td>⬤⬤⬤⬤</td>
</tr>
<tr>
<td>Extendable</td>
<td>⬤⬤⬤⬤⬤</td>
<td>⬤⬤⬤⬤⬤</td>
<td>⬤⬤⬤⬤⬤</td>
</tr>
<tr>
<td>Backbone network</td>
<td>⬤⬤⬤⬤⬤</td>
<td>⬤⬤⬤⬤⬤</td>
<td>-</td>
</tr>
<tr>
<td>Feeder network</td>
<td>⬤⬤⬤⬤⬤</td>
<td>⬤⬤⬤⬤⬤</td>
<td>-</td>
</tr>
<tr>
<td>Distribution network</td>
<td>⬤⬤⬤⬤</td>
<td>-</td>
<td>⬤⬤⬤⬤⬤</td>
</tr>
<tr>
<td>Single Circuit Management</td>
<td>⬤⬤⬤⬤</td>
<td>⬤⬤⬤⬤</td>
<td>⬤⬤⬤⬤</td>
</tr>
<tr>
<td>Multi Circuit Management</td>
<td>⬤⬤⬤⬤</td>
<td>⬤⬤⬤⬤</td>
<td>⬤⬤⬤⬤</td>
</tr>
<tr>
<td>Splices per trays</td>
<td>4/6/12/24</td>
<td>4/6/12/24</td>
<td>4/6/12/24</td>
</tr>
<tr>
<td>Dimensionen</td>
<td>⬤⬤⬤⬤</td>
<td>⬤⬤⬤⬤</td>
<td>⬤⬤⬤⬤</td>
</tr>
<tr>
<td></td>
<td>STD</td>
<td>STD Flex</td>
<td>GSC</td>
</tr>
<tr>
<td>----------------</td>
<td>------</td>
<td>----------</td>
<td>------</td>
</tr>
<tr>
<td>Number of Splices</td>
<td>12...144</td>
<td>12...144</td>
<td>96...288</td>
</tr>
<tr>
<td>Sealing Method</td>
<td>Heat shrink</td>
<td>Heat shrink</td>
<td>Heat shrink</td>
</tr>
<tr>
<td>Flexibility</td>
<td>Extendable</td>
<td>Extendable</td>
<td>Extendable</td>
</tr>
<tr>
<td>Backbone Network</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Feeder Network</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Distribution Network</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Single Circuit Management</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Multi Circuit Management</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Splices per trays</td>
<td>4/6/12/24</td>
<td>4/6/12/24</td>
<td>4/6/12/24, 12, 24</td>
</tr>
</tbody>
</table>

Note: The table above lists the specifications for each model, with columns for number of splices, sealing method, flexibility, backbone network, feeder network, distribution network, single circuit management, and multi circuit management. The values indicated are for demonstration purposes and may not reflect actual product specifications.
1. **What is the expected lifespan of a closure?**
   Temperature fluctuations put a strain on plastic and seals over time and cause the material to age. Thanks to the extensive expertise and high quality, the closures from R&M can be used in full for much longer than the required 30 years. By default, all Reichle & De-Massari closures are subjected to demanding tests in climate chambers to test, and guarantee long term, the tightness.
   Please note that the IP code (e.g. IP68) does not give any reliable indication of the lifespan and the tightness over the entire operational life outdoors (for more information please consult *What does IP68 mean?*).

2. **What does IP68 mean?**
   The first digit 6 means the closure is dust tight. The second digit means that the closure is suitable for permanent immersion in water. The tests are carried out at room temperature. The standard states that the immersion depth and duration are left to the manufacturer. However, code IP68 always has to be better than code 67, i.e. at least 30 minutes and 1 m immersion depth.
   Without specification of the immersion depth and duration, the products cannot be compared with one another. In this case, you should contact the manufacturer for more information to ensure you choose the right product.

3. **What is the advantage of Single Circuit Management?**
   Single Circuit Management enables individual fibers in the system to be accessed, independent of loose tubes or cables. This makes it possible to use all fibers flexibly.

4. **What is the advantage of mechanically sealed cable entries?**
   Mechanically sealed cable entries both simplify and accelerate a first installation. But also later adaptations, such as extending or removing cables, are easy to realize.

5. **What is the advantage of closures with heat shrink sleeve cable sealing?**
   The use of heat shrink sleeve cable sealing is still well established and often used today. In the case of permanent cable splicing where changes are not to be expected, today still a reliable method of (inexpensively) sealing cables.

6. **Do you have any other questions/queries?**
«The R&M SYNO Dome Closure is a high-quality connection with which we are better prepared for the future of ever faster networks»

Mark Zuijdendorp, Field Engineering Manager Benelux & Nordics; GTT Communications
Customizing

Every network is unique – Gain flexibility when planning your network architecture with R&M’s flexible, modular solutions!

The quality, performance and precision of the R&M systems will give you security and high availability for decades. With R&M’s ingenious assembly technology, installing, extending and maintaining your infrastructure is a piece of cake.

And what about customized solutions?
R&M is happy to implement your ideas in exact accordance with your specifications to perfectly suit your application. We will also help you find the best solution for your particular task. Benefit from the knowledge of our experts’ long international experience in the telecommunications sector: They will provide specialist advice on finding solutions and help you with the implementation. Whether customized or modular standard solutions, all R&M developments fully comply with the specifications in the standards because we have been pacemakers in connection and distribution technology for more than 45 years. Copper or FO technology, all R&M products are compatible with the transmission systems of both today and tomorrow.
**Complementary products**

**Distribution housing**
Sturdy wall boxes for indoor and outdoor applications.

The fiber optic terminal boxes from R&M for modular FO termination indoor and outdoors. These boxes extend the R&M FTTH solutions to include the connection of anything from a family home to a building complex. From the building entry point through risers and floor distributors to optical termination outlets. All the typical FTTH topologies are easy to implement.

**Above-ground street cabinets**
Compact and flexible range of street cabinets in various sizes.

R&M has sturdy above-ground street cabinets in its portfolio for flexible and economic expansion in the field. The R&M street cabinets fit seamlessly into the FTTH end-to-end solution R&Mfoxs. They give network operators the perfect scope with maximum packing density and can be equipped, if required, with the modular Single Circuit Management System (SCM).

**Installation cables**
Complete range of cables for individual requirements.

R&M sees itself as a system supplier for FO installations. The extension of our own products with FO cables is a further plus for us in terms of customized solutions.
R&M supports projects from start to finish, i.e. from the planning of the networks, via installation, through to ongoing operation. Personal service and numerous satisfied customers worldwide. We give you the security of knowing you are working with the right partner!

Global network

The worldwide network of proprietary companies and certified partners creates the basis for the greatest possible customer proximity. Products and solutions from Reichle & De-Massari are available locally in more than 100 countries. The company’s branches in Europe, Asia Pacific, the Middle East, North and Latin America together with partners guarantee that the sales/distribution, installation and maintenance of R&M solutions around the globe take place quickly and that local customer requirements are satisfied.
“I still find the Swissness of R&M solutions compelling. Products from R&M satisfy customers’ needs better than those of the competition.”

Stéphane Gottraux, Manager Service Delivery and Customer Experience, Colt

Success stories
Together with our customers, we are constantly developing meaningful success stories that give valuable insight into the complex world of connectivity. A number of publications from all over the world and from various sectors and industries bear witness to R&M’s partnership-based collaboration with its business partners. Manufacturers, partners and end customers all benefit from the content and diversified publication of the success stories.

Seminars, training and workshops
R&M regularly offers practice-oriented seminars, training sessions and workshops worldwide. Field reports and customer contributions illustrate the successful implementation of our products and solutions.

Warranty program
R&M pursues an uncompromising quality policy that encompasses everything from components to the running operation of the installations. R&M offers one of the most complete warranty programs in the structured cabling industry based on EN 50173-x, ISO/IEC 11801 and ANSI with 25-year warranty and life-long application guarantee.

Qualified Partner Program
R&M supports and promotes specialists in network technology and structured building cabling all over the world with its Qualified Partner Program. The partners qualified and certified by R&M thus guarantee identical, top quality standards worldwide.
# Headquarters

**SWITZERLAND**  
Reichle & De-Massari AG

**www.rdm.com**  
Please choose your country on our global website

## Europe

<table>
<thead>
<tr>
<th>Country</th>
<th>Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>AUSTRIA</strong></td>
<td>Reichle &amp; De-Massari Austria GmbH</td>
</tr>
<tr>
<td><strong>BELGIUM</strong></td>
<td>Reichle &amp; De-Massari Benelux Sales Office</td>
</tr>
<tr>
<td><strong>BULGARIA</strong></td>
<td>Reichle &amp; De-Massari EOOD</td>
</tr>
<tr>
<td><strong>CZECH REPUBLIC</strong></td>
<td>Reichle &amp; De-Massari Czech Sales Office</td>
</tr>
<tr>
<td><strong>FRANCE</strong></td>
<td>Reichle &amp; De-Massari France Sarl</td>
</tr>
<tr>
<td><strong>GERMANY</strong></td>
<td>Reichle &amp; De-Massari GmbH</td>
</tr>
<tr>
<td><strong>HUNGARY</strong></td>
<td>Reichle &amp; De-Massari (Mo.) Kft</td>
</tr>
<tr>
<td><strong>ITALY</strong></td>
<td>Reichle &amp; De-Massari Italia Srl</td>
</tr>
<tr>
<td><strong>NETHERLANDS</strong></td>
<td>Reichle &amp; De-Massari Netherlands B.V.</td>
</tr>
<tr>
<td><strong>NORDICS</strong></td>
<td>Reichle &amp; De-Massari Nordics Sales Office</td>
</tr>
<tr>
<td><strong>POLAND</strong></td>
<td>Reichle &amp; De-Massari Polska Sp. z o.o.</td>
</tr>
<tr>
<td><strong>PORTUGAL</strong></td>
<td>Reichle &amp; De-Massari Portugal Sales Office</td>
</tr>
<tr>
<td><strong>ROMANIA</strong></td>
<td>Reichle &amp; De-Massari Romania Sales Office</td>
</tr>
<tr>
<td><strong>RUSSIAN FEDERATION</strong></td>
<td>Reichle &amp; De-Massari Russia Sales Office</td>
</tr>
<tr>
<td><strong>SERBIA</strong></td>
<td>Reichle &amp; De-Massari Serbia Sales Office</td>
</tr>
<tr>
<td><strong>SLOVAKIA</strong></td>
<td>Reichle &amp; De-Massari Slovakia Sales Office</td>
</tr>
<tr>
<td><strong>SLOVENIA</strong></td>
<td>Reichle &amp; De-Massari Slovenia Sales Office</td>
</tr>
<tr>
<td><strong>SPAIN</strong></td>
<td>Reichle &amp; De-Massari Iberia SL</td>
</tr>
<tr>
<td><strong>SWITZERLAND</strong></td>
<td>Reichle &amp; De-Massari AG, Sales Office</td>
</tr>
<tr>
<td><strong>UNITED KINGDOM</strong></td>
<td>Reichle &amp; De-Massari (UK) Ltd</td>
</tr>
</tbody>
</table>

## North America

- **UNITED STATES**  
  Reichle & De-Massari USA Inc.

## Latin America

- **BRASIL**  
  Reichle & De-Massari Brasil Ltd
- **COLOMBIA**  
  Reichle & De-Massari Colombia Sales Office

## Asia Pacific

- **AUSTRALIA & NEW ZEALAND**  
  Reichle & De-Massari Australia Pty Ltd
- **GREATER CHINA GROUP**  
  Reichle & De-Massari China Co. Ltd.
- **INDIA**  
  R&M India Pvt Ltd
- **INDONESIA**  
  Reichle & De-Massari Indonesia Sales Office

## Middle East, Turkey & Africa

- **EGYPT**  
  Reichle & De-Massari Egypt Sales Office
- **JORDAN**  
  Reichle & De-Massari Jordan Sales Office
- **KENYA**  
  Reichle & De-Massari Kenya Sales Office
- **KUWAIT**  
  Reichle & De-Massari Kuwait Sales Office
- **MOROCCO**  
  Reichle & De-Massari Maroc Sarl
- **OMAN**  
  Reichle & De-Massari Oman Sales Office
- **QATAR**  
  Reichle & De-Massari Qatar Sales Office
- **SAUDI ARABIA**  
  Reichle & De-Massari Saudi Arabia Ltd
- **TURKEY**  
  Reichle & De-Massari Elektronik Sanayi VE Ticaret Ltd Sirketi
- **UNITED ARAB EMIRATES**  
  Reichle & De-Massari MEA FZE

---

We are represented by more than 100 qualified partners worldwide.  
Find your local partner at: www.rdm.com