PERC
Cryogenic PERC - High pressure nitrogen activated
The revolutionary Mann Tek Cryogenic PERC offers active safety as other PERC solutions on the market but also combine the passive safety feature known from our breaking pin type breakaways, which are successfully used world wide.

The widest range of breakaway couplings gives full flexibility of the cryogenic product range and offers a safe reliable solution for any applications of LNG transfer.

With the use of Mann Tek's breakaway systems in combination with our reliable and well proven dry cryogenic couplings we offer the market an unbeatable, safe and "easy to use" combinations for any LNG transfer application.

Our PERC is a powered version of the CBC with the advantage that it can be released by external overload or manually operated. When using Mann Tek's PERC, in case of a remote controlled release, a pressurised gas cylinder will open and gas pressure will release the breaking bolts. Mann Tek's PERC systems corresponds to standard EN1474-1:2008.
TECHNICAL INFORMATION

Sizes:
4" (DN100) to 8" (DN200)
Other on request.

Materials:
Stainless steel

Seals:
PTFE

Maximum working pressure:
MWP PN 16 / 25.
MAWP 150 / 300 psi

Connections:
NPT-Thread, EN1092 (DIN) - or ANSI B16.5 - Flanges.
Other on request.

DESIGN CALCULATION

The calculation of the required wall thickness is made according to EN 12516-2. Design temperature range:
-200°C to +65°C
Design pressure: PS25 bar

MATERIAL REQUIREMENTS

The material we specified is suitable for the use with LNG and nitrogen down to -200°C.
The specification is according to the recommendations in EN1160.

<table>
<thead>
<tr>
<th>Size</th>
<th>Nominal size</th>
<th>WP</th>
<th>Temperature range</th>
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<tbody>
<tr>
<td>4&quot;</td>
<td>DN100</td>
<td>PN25</td>
<td>Minimum -200°C</td>
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<tr>
<td>6&quot;</td>
<td>DN150</td>
<td>PN16</td>
<td>Minimum -200°C</td>
</tr>
<tr>
<td>8&quot;</td>
<td>DN200</td>
<td>PN16</td>
<td>Minimum -200°C</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Material</th>
<th>Specification</th>
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<tr>
<td>1.4404</td>
<td>EN10272</td>
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<tr>
<td>316L</td>
<td>ANSI A479</td>
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</tbody>
</table>
About
Mann Tek is a Swedish manufacturer and supplier of Dry Cryogenic Couplings and has during the past years made a significant market leading breakthrough in LNG. We offer a dry cryogenic coupling which operates by our system “push and turn-free flow” and “turn and pull-closed”. We have supplied couplings for several passenger ferries and OSV’s, which runs on LNG, and the world's first LNG-bunker ship. In 2015 a new ISO-standard, in regards to LNG as fuel to ship was published. Mann Tek Dry Cryogenic Coupling is the first manufacturer worldwide, to offer a fully compatible series of products in this new standard, ISO/TS 18683:2015

With more than twenty years of knowledge and experience in the industry it has accumulated extensive expertise about applications in many types of variations in which our couplings have been, and can be used, with excellent results. We constantly strive to develop and improve the performance and design of our products, to meet changes, new market demands and standards. Which, today, is what made us market leading. Our couplings are the obvious choice when certifications and product approvals are required, anywhere in the world.
Mann Tek® is certified to ISO9001:2008

Company Approvals

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