Restrained
Joint Range
Fully Restrained Double Flanged Fitting

PIONEERS IN PIPE SOLUTIONS

Viking Johnson

Crane Building Services & Utilities
Dismantling Joint
Overview

Developed for Complete Versatility

The Dismantling Joint range was developed to provide greater versatility for the designer at the planning stage and the engineer in the installation stage of flanged pipe work systems and to allow for simple maintenance programmes.

Allows for Adjustment
The Dismantling Joints are double flanged fittings that accommodate up to 100mm (4") longitudinal adjustment and can be locked at the required length with the tie bars supplied. Not only does this system allow for fast, easy maintenance of valves, pumps or meters, it simplifies future pipe work modifications and reduces downtime when changes need to be made.

Easy to Install
The installation is also straightforward using just a spanner and torque wrench to tighten the high tensile steel or stainless steel tie bars. With fewer tie bars than flange holes that also act as flange jointing bolts, the installation process is quick and easy while offering a secure, rigid, fully end load resistant system with a pressure rating equal to that of the flange.

The Range
A comprehensive range is available from DN40 (1½") to DN4000 (144") with virtually any flange drilling or pressure rating supplied. Larger sizes and custom made Dismantling Joints can be designed and built on request.

Dismantling Joints

Flanged Pipe Materials
Dismantling Joint

Product Design Benefits

Full Flange Sealing
The flange of the spigot piece provides a full flange sealing area, making it ideal for applications where a full-face flange is required, e.g. wafer and butterfly valves.

Excellent Corrosion Protection
The flange adaptor and flange spigot are coated with WRAS approved Rilsan Nylon 11 providing excellent protection from transport, storage, site and corrosion damage. The tie bars are Zn³ Zinc Plated as standard with other coatings, grades and finishes available on request. The nuts and bolts are Sheraplex coated to WIS-4-52-03, offering long term protection against corrosion.

Longitudinal Adjustment
Longitudinal adjustment facilitates installation and removal of flanged equipment.

Compact Design
Harnessing is provided within the bolt circle, eliminating other complex anchoring systems and reducing space requirements.

Independent Gasket Tightening
Studs independent of the tie rods compress the gasket ensuring long term sealing performance that is not effected due to any external loading.

Reduced Weight
The use of high tensile steel in the tie rods reduces the number required to accommodate end load forces, reducing the overall weight of the product.

Customer Benefits

➤ Viking Johnson’s Dismantling Joints are particularly suitable for simplifying the installation and removal of isolation valves, control valves, check valves, non-return valves, flow metering valves, pump sets, pressure reducing valves, flanged pipe and fittings.

➤ The simplicity and versatility of the fittings make them suitable for many applications including pumping stations, water treatment works, sewage treatment works, plant rooms, meter chambers, power generation equipment, gas distribution stations.

➤ Studs independent of the tie rods compress the gasket allowing the use of smaller diameters than those in the flange connecting bolts so improving access for operatives during installation.

➤ Use of high tensile steel in the tie rods reduces the number required to accommodate the end load forces making it easier and quicker for operatives to install, especially in tight spaces, chambers and congested pump stations.

www.vikingjohnson.com

Viking Johnson Dismantling Joint
Qatar - Doha

Dukhan Road Highway
East Construction

Dismantling Joints – DN200 - DN1200
Large Diameter Couplings
Large Diameter Flange Adapters

Project

Dukhan Highway, Qatar development consists of ten grade-separated interchange, seven camel underpasses and an 87km two way collector road which will create a strategic east-west highway.

Client
ASHGAL

Consultant
Parsons

Contractor
UNICORP
**Dismantling Joints DN40 to DN300 (PN10,16,25,40)**

**Dismantling Joint**

![Diagram of a dismantling joint](image)

**Note:** Maximum Longitudinal Adjustment = Maximum Length – Minimum Length

**Dismantling Joints (Standard Product)**

Table provides details of standard product – for products offering longer flange dimensions and / or increased longitudinal adjustment contact Viking Johnson.

<table>
<thead>
<tr>
<th>Nom.</th>
<th>Drilling</th>
<th>Flange OD</th>
<th>Flange Thickness</th>
<th>Flange Details</th>
<th>Tie Rod Details</th>
<th>Flange Adaptor &amp; Spigot Manufacture</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>18</td>
<td>18 150</td>
<td></td>
<td>187 207</td>
<td>M16 x 300 4</td>
<td>7.8 Fabricated</td>
</tr>
<tr>
<td>50</td>
<td>17</td>
<td>17 165</td>
<td></td>
<td>194 214</td>
<td>M16 x 300 4</td>
<td>6.9 Cast/Cast</td>
</tr>
<tr>
<td>65</td>
<td>17</td>
<td>17 185</td>
<td></td>
<td>194 214</td>
<td>M16 x 300 4</td>
<td>7.7 Cast/Cast</td>
</tr>
<tr>
<td>80</td>
<td>17</td>
<td>17 200</td>
<td></td>
<td>194 214</td>
<td>M16 x 300 4</td>
<td>9.4 Cast/Cast</td>
</tr>
<tr>
<td>100</td>
<td>17</td>
<td>17 220</td>
<td></td>
<td>194 214</td>
<td>M16 x 300 4</td>
<td>10.4 Cast/Cast</td>
</tr>
<tr>
<td>100</td>
<td>25</td>
<td>25 235</td>
<td></td>
<td>194 214</td>
<td>M20 x 320 4</td>
<td>19.2 Fabricated</td>
</tr>
<tr>
<td>125</td>
<td>17</td>
<td>17 250</td>
<td></td>
<td>194 214</td>
<td>M16 x 300 4</td>
<td>11.9 Cast/Cast</td>
</tr>
<tr>
<td>125</td>
<td>25</td>
<td>25 270</td>
<td></td>
<td>194 214</td>
<td>M24 x 330 4</td>
<td>26.2 Fabricated</td>
</tr>
<tr>
<td>150</td>
<td>17</td>
<td>17 285</td>
<td></td>
<td>194 214</td>
<td>M20 x 310 4</td>
<td>15.8 Cast/Cast</td>
</tr>
<tr>
<td>150</td>
<td>25</td>
<td>25 300</td>
<td></td>
<td>194 214</td>
<td>M24 x 330 4</td>
<td>28.9 Fabricated</td>
</tr>
<tr>
<td>150</td>
<td>30</td>
<td>25 300</td>
<td></td>
<td>194 214</td>
<td>M24 x 330 4</td>
<td>28.8 Cast/Cast</td>
</tr>
<tr>
<td>200</td>
<td>20</td>
<td>20 340</td>
<td></td>
<td>194 214</td>
<td>M20 x 310 4</td>
<td>21.6 Cast/Cast</td>
</tr>
<tr>
<td>200</td>
<td>25</td>
<td>25 360</td>
<td></td>
<td>194 214</td>
<td>M24 x 340 4</td>
<td>37.5 Fabricated</td>
</tr>
<tr>
<td>200</td>
<td>25</td>
<td>25 375</td>
<td></td>
<td>194 214</td>
<td>M27 x 350 4</td>
<td>42.6 Fabricated</td>
</tr>
<tr>
<td>250</td>
<td>25</td>
<td>25 405</td>
<td></td>
<td>194 214</td>
<td>M20 x 310 4</td>
<td>28.9 Cast/Cast</td>
</tr>
<tr>
<td>250</td>
<td>25</td>
<td>25 425</td>
<td></td>
<td>194 214</td>
<td>M27 x 350 4</td>
<td>49.1 Fabricated</td>
</tr>
<tr>
<td>250</td>
<td>25</td>
<td>25 450</td>
<td></td>
<td>194 214</td>
<td>M30 x 370 4</td>
<td>57.9 Fabricated</td>
</tr>
<tr>
<td>300</td>
<td>20</td>
<td>20 445</td>
<td></td>
<td>194 214</td>
<td>M20 x 310 4</td>
<td>32.8 Cast/Cast</td>
</tr>
<tr>
<td>300</td>
<td>20</td>
<td>20 460</td>
<td></td>
<td>194 214</td>
<td>M24 x 330 4</td>
<td>35.4 Cast/Cast</td>
</tr>
<tr>
<td>300</td>
<td>25</td>
<td>25 485</td>
<td></td>
<td>194 214</td>
<td>M27 x 350 4</td>
<td>57.1 Fabricated</td>
</tr>
<tr>
<td>300</td>
<td>25</td>
<td>25 515</td>
<td></td>
<td>194 214</td>
<td>M30 x 380 4</td>
<td>69.8 Fabricated</td>
</tr>
</tbody>
</table>

Every effort has been made to ensure that the information contained in this publication is accurate at the time of publishing. Crane Ltd assumes no responsibility or liability for typographical errors or omissions or for any misinterpretation of the information within the publication and reserves the right to change without notice.
Dismantling Joints DN40 to DN300 (PN10,16,25,40)

Technical Information

**Working Pressure Rating**
- Water - In accordance with the flange rating: Gas 6 bar

**Vacuum Pressure**
Capable of accommodating a vacuum pressure of -0.7 bar

**Site Test Pressure**
1.5 times working pressure for short duration (2 hours)

**Angularity**
Dismantling joints are in essence double flanged pipe where the flange to flange dimension can be adjusted, and therefore are not able to accommodate any angularity.

**Bolt Torque/Spanner**
- M12; Torque 55-65Nm on every bolt
- M16; Torque 95-110Nm on every bolt

**Tie rods**
Torque is a function of the flange connecting gasket, not supplied by Viking Johnson; consult flange gasket supplier.

**Temperature Rating of Product**
- EPDM: -20°C to +90°C
- Nitrile: -20°C to +90°C

For use on applications with fluctuating and/or elevated temperatures (> 60°C) may require regular maintenance to retighten the bolts and must be included in any maintenance schedule.

**Approvals**
The following water contact materials used in Dismantling Joints are approved for use with potable water:-
- Rilsan Nylon 11:
  - WRAS, AS/NZS 4020, DVGW, W270, ACS & KIWA
  - EPDM Gaskets:
  - WRAS, AS/NZS 4020

In addition to the above, the flange adaptor component in the Dismantling Joint has as a finished product KIWA certification verifying that it complies with the requirements of the Water Supply (Water Fittings) Regulations for England and Wales 1999, the Water Byelaws 2000, Scotland and the Water Regulations Northern Ireland.

Materials & Relevant Standards

**Flange Drilling**
- BS EN1092-1 (formerly BS4504), ISO7005

**Cast Flange Adaptor Body & End Rings**
- Ductile Iron to BS EN1563: Symbol EN-GJS-450-10

**Fabricated Flange Adaptor Body & End Rings**
- Rolled Steel to BS EN 10025-2: Grade S275

**Sleeve Options**
- Steel Tube to BS EN10255
- Steel Tube to BS EN10216-1: Grade P265TR1
- Rolled Steel to BS EN 10025-2: Grade S275

**Cast Flange Spigot:**
- Ductile Iron to BS EN1563: Symbol EN-GJS-450-10

**Fabricated Flange Spigot:**
- Rolled steel to BS EN10025-2: Grade S275

**Steel Spigot Options:**
- Steel tube to BS EN10255
- Steel tube to BS EN10216-1: Grade P265TR1
- Rolled steel to BS EN10025-2: Grade S275

**Gaskets**
- Standard:
  - EPDM to BS EN681-1: Type WA

**Other gasket grades are available contact Viking Johnson.**

**Coatings**
- Flange Adaptor, Spigot & End Ring:
  - Rilsan Nylon 11 to WIS 4-52-01 Part 1
  - Option 1 Flange Adaptor bolts & Nuts:
    - Sheraplex to WIS 4-52-03
    - Steel Tie Rods/Nuts:
      - Zn/Zinc coated

Tie Rods, Studs, Nuts and Washers
The following two options are as standard variants:-

**Option 1: Zinc Plated Steel**

**Tie Rods**
- ASTM A193 (Grade B7/MB7) equivalent to BS EN10269:+A1: Name 42CrMo4 (Yield 725N/mm²)

**Tie Rod Nuts**
- ASTM A194 Grade 2H/M2H equivalent to BS EN20898-2: Property Class 8.00

**Flange Adaptor Studs**
- Steel to BS EN ISO989-1: Property Class 4.8

**Flange Adaptor Nuts**
- Stainless Steel to BS1449: Part 2: Grade 304S15

**Option 2: Stainless Steel**

**Tie Rods**
- Stainless Steel to BS EN3506-1: Grade A4 Property Class 70 (Yield 450N/mm²)

**Tie Rod Nuts**
- Stainless Steel to BS EN3506-2: Grade A4 Property Class 80

**Flange Adaptor Studs**
- Stainless Steel to BS EN ISO 3506-1: grade A4 property class 50

**Flange Adaptor Nuts**
- Stainless Steel to BS EN ISO 3506-2: grade A4 property class 80

**Flange Adaptor Washers**
- Stainless Steel to BS1449: Part 2: Grade 304S15

Every effort has been made to ensure that the information contained in this publication is accurate at the time of publishing. Crane Ltd assumes no responsibility or liability for typographical errors or omissions or for any misinterpretation of the information within the publication and reserves the right to change without notice.
Dismantling Joint
(For diameters over DN2400 contact Viking Johnson)

Dismantling Joints (Standard Product)
Table provides details of standard product – for products offering longer flange dimensions and / or increased longitudinal adjustment contact Viking Johnson.

<table>
<thead>
<tr>
<th>Nom</th>
<th>Drilling</th>
<th>Flange Details</th>
<th>Flange To Flange Details</th>
<th>Tie Rod Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Flange Thickness</td>
<td>Flange OD</td>
<td>Nominal Length</td>
</tr>
<tr>
<td>350</td>
<td>PN10</td>
<td>18</td>
<td>505</td>
<td>295</td>
</tr>
<tr>
<td>400</td>
<td>PN10</td>
<td>18</td>
<td>565</td>
<td>295</td>
</tr>
<tr>
<td>450</td>
<td>PN10</td>
<td>23</td>
<td>615</td>
<td>300</td>
</tr>
<tr>
<td>500</td>
<td>PN10</td>
<td>23</td>
<td>670</td>
<td>300</td>
</tr>
<tr>
<td>550</td>
<td>PN10</td>
<td>23</td>
<td>730</td>
<td>300</td>
</tr>
<tr>
<td>600</td>
<td>PN10</td>
<td>23</td>
<td>780</td>
<td>300</td>
</tr>
<tr>
<td>650</td>
<td>PN10</td>
<td>23</td>
<td>835</td>
<td>300</td>
</tr>
<tr>
<td>700</td>
<td>PN10</td>
<td>23</td>
<td>895</td>
<td>300</td>
</tr>
<tr>
<td>800</td>
<td>PN10</td>
<td>23</td>
<td>1015</td>
<td>300</td>
</tr>
<tr>
<td>900</td>
<td>PN10</td>
<td>25</td>
<td>1115</td>
<td>307</td>
</tr>
<tr>
<td>1000</td>
<td>PN10</td>
<td>25</td>
<td>1230</td>
<td>307</td>
</tr>
<tr>
<td>1100</td>
<td>PN10</td>
<td>25</td>
<td>1340</td>
<td>307</td>
</tr>
<tr>
<td>1200</td>
<td>PN10</td>
<td>28</td>
<td>1455</td>
<td>320</td>
</tr>
<tr>
<td>1300</td>
<td>PN10</td>
<td>28</td>
<td>1575</td>
<td>320</td>
</tr>
<tr>
<td>1400</td>
<td>PN10</td>
<td>28</td>
<td>1675</td>
<td>320</td>
</tr>
<tr>
<td>1500</td>
<td>PN10</td>
<td>28</td>
<td>1785</td>
<td>320</td>
</tr>
<tr>
<td>1600</td>
<td>PN10</td>
<td>28</td>
<td>1915</td>
<td>320</td>
</tr>
<tr>
<td>1800</td>
<td>PN10</td>
<td>28</td>
<td>2115</td>
<td>320</td>
</tr>
<tr>
<td>2000</td>
<td>PN10</td>
<td>30</td>
<td>2325</td>
<td>462</td>
</tr>
<tr>
<td>2200</td>
<td>PN10</td>
<td>30</td>
<td>2550</td>
<td>462</td>
</tr>
<tr>
<td>2400</td>
<td>PN10</td>
<td>30</td>
<td>2760</td>
<td>462</td>
</tr>
</tbody>
</table>

Every effort has been made to ensure that the information contained in this publication is accurate at the time of publishing. Crane Ltd assumes no responsibility or liability for typographical errors or omissions or for any misinterpretation of the information within the publication and reserves the right to change without notice.
## Dismantling Joints DN350 to DN2400 (PN10)

### Technical Information

<table>
<thead>
<tr>
<th>Working Pressure Rating</th>
<th>Materials &amp; Relevant Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Water</strong> - In accordance with the flange rating <strong>Gas 6 bar</strong></td>
<td><strong>Flange Drilling</strong></td>
</tr>
<tr>
<td><strong>Vacuum Pressure</strong></td>
<td><strong>Fabricated Flange Adaptor Body</strong></td>
</tr>
<tr>
<td>Capable of accommodating a vacuum pressure of -0.7 bar</td>
<td>Rolled steel to BS EN 10025-2: Grade S275</td>
</tr>
<tr>
<td><strong>Site Test Pressure</strong></td>
<td><strong>End Rings &amp; Sleeve Options</strong></td>
</tr>
<tr>
<td>1.5 times working pressure for short duration (2 hours)</td>
<td>▶ Rolled steel to BS EN 10025-2: Grade S275</td>
</tr>
<tr>
<td><strong>Angularity</strong></td>
<td>▶ Rolled steel to BS EN 10025-2: Grade S355 (depending on section)</td>
</tr>
<tr>
<td>Dismantling joints are in essence double flanged pipe where the flange to flange dimension can be adjusted, and therefore are not able to accommodate any angularity.</td>
<td><strong>Flange</strong></td>
</tr>
<tr>
<td><strong>Bolt Torque/Spanner</strong></td>
<td>Rolled steel to BS EN 10025-2: Grade S275</td>
</tr>
<tr>
<td>M12; Torque 55-65Nm on every bolt</td>
<td><strong>Spigot Options:</strong></td>
</tr>
<tr>
<td>M16; Torque 95-110Nm on every bolt</td>
<td>▶ Steel tube to BS10216-1: Grade P265TR1</td>
</tr>
<tr>
<td><strong>Tie rods</strong></td>
<td>▶ Rolled steel to BS EN 10025-2: Grade S275</td>
</tr>
<tr>
<td>Torque is a function of the flange connecting gasket, not supplied by Viking Johnson; consult flange gasket supplier.</td>
<td><strong>Gaskets</strong></td>
</tr>
<tr>
<td><strong>Temperature Rating of Product</strong></td>
<td>Standard:</td>
</tr>
<tr>
<td>EPDM -20°C to +90°C</td>
<td>▶ EPDM to BS EN681-1: Type WA</td>
</tr>
<tr>
<td>Nitrile -20°C to +90°C</td>
<td>Other gasket grades are available contact Viking Johnson.</td>
</tr>
<tr>
<td>For use on applications with fluctuating and / or elevated temperatures (&gt; -60°C) may require regular maintenance to re-tighten the bolts and must be included in any maintenance schedule.</td>
<td><strong>Coatings</strong></td>
</tr>
<tr>
<td><strong>Approvals</strong></td>
<td>Flange Adaptor, Spigot &amp; End Ring:</td>
</tr>
<tr>
<td>The following water contact materials used in Dismantling Joints are approved for use with potable water:- Rilsan Nylon 11:</td>
<td>▶ Rilsan Nylon 11 to WIS 4-52-01 Part 1</td>
</tr>
<tr>
<td>WRAS, AS/NZS 4020, DVGW, W270, ACS &amp; KIWA EPDM Gaskets:</td>
<td>Option 1 Flange Adaptor bolts &amp; Nuts:</td>
</tr>
<tr>
<td>WRAS, AS/NZS 4020</td>
<td>▶ Sheraplex to WIS 4-52-03</td>
</tr>
<tr>
<td>In addition to the above, the flange adaptor component in the Dismantling Joint has as a finished product KIWA certification verifying that it complies with the requirements of the Water Supply (Water Fittings) Regulations for England and Wales 1999, the Water Byelaws 2000, Scotland and the Water Regulations Northern Ireland.</td>
<td>Steel Tie Rods/Nuts:</td>
</tr>
<tr>
<td></td>
<td>▶ Zn² Zinc coated</td>
</tr>
</tbody>
</table>

### Materials & Relevant Standards

<table>
<thead>
<tr>
<th>Tie Rods, Studs, Nuts and Washers</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Option 1: Zinc Plated Steel</strong></td>
</tr>
<tr>
<td><strong>Tie Rods</strong></td>
</tr>
<tr>
<td><strong>Tie Rod Nuts</strong></td>
</tr>
<tr>
<td><strong>Flange Adaptor Studs</strong></td>
</tr>
<tr>
<td><strong>Flange Adaptor Nuts</strong></td>
</tr>
<tr>
<td><strong>Flange Adaptor Washers</strong></td>
</tr>
<tr>
<td><strong>Option 2: Stainless Steel</strong></td>
</tr>
<tr>
<td><strong>Tie Rods</strong></td>
</tr>
<tr>
<td><strong>Tie Rod Nuts</strong></td>
</tr>
<tr>
<td><strong>Flange Adaptor Studs</strong></td>
</tr>
<tr>
<td><strong>Flange Adaptor Nuts</strong></td>
</tr>
<tr>
<td><strong>Flange Adaptor Washers</strong></td>
</tr>
</tbody>
</table>

Every effort has been made to ensure that the information contained in this publication is accurate at the time of publishing. Crane Ltd assumes no responsibility or liability for typographical errors or omissions or for any misinterpretation of the information within the publication and reserves the right to change without notice.
Dismantling Joints DN350 to DN2400 (PN16)

Dismantling Joint
(For diameters over DN2400 contact Viking Johnson)

Note: Maximum Longitudinal Adjustment = Maximum Length – Minimum Length

Dismantling Joints (Standard Product)
Table provides details of standard product – for products offering longer flange dimensions and / or increased longitudinal adjustment contact Viking Johnson.

<table>
<thead>
<tr>
<th>Nom</th>
<th>Drilling</th>
<th>Flange Thickness</th>
<th>Flange OD</th>
<th>Flange To Flange Details</th>
<th>Tie Rod Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Nominal Length</td>
<td>Minimum Length</td>
<td>Maximum Length</td>
<td>Steel Tie Rod</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dia x Length (mm)</td>
<td>No.</td>
<td>Total Weight of DJ (kg)</td>
<td>Dia x Length (mm)</td>
</tr>
<tr>
<td>350</td>
<td>PN16</td>
<td>18 520</td>
<td>295 270 320</td>
<td>M24 x 450 4</td>
<td>63.4 M24 x 450 4</td>
</tr>
<tr>
<td>400</td>
<td>PN16</td>
<td>18 580</td>
<td>295 270 320</td>
<td>M27 x 460 4</td>
<td>75.2 M27 x 460 4</td>
</tr>
<tr>
<td>450</td>
<td>PN16</td>
<td>23 640</td>
<td>300 275 325</td>
<td>M27 x 470 5</td>
<td>99.0 M27 x 470 5</td>
</tr>
<tr>
<td>500</td>
<td>PN16</td>
<td>23 715</td>
<td>300 275 325</td>
<td>M30 x 480 5</td>
<td>121.0 M30 x 480 5</td>
</tr>
<tr>
<td>550</td>
<td>PN16</td>
<td>23 775</td>
<td>300 275 325</td>
<td>M30 x 490 5</td>
<td>134.0 M30 x 490 5</td>
</tr>
<tr>
<td>600</td>
<td>PN16</td>
<td>23 840</td>
<td>300 275 325</td>
<td>M33 x 500 5</td>
<td>154.0 M33 x 500 5</td>
</tr>
<tr>
<td>650</td>
<td>PN16</td>
<td>23 860</td>
<td>300 275 325</td>
<td>M33 x 510 6</td>
<td>153.0 M33 x 510 6</td>
</tr>
<tr>
<td>700</td>
<td>PN16</td>
<td>23 910</td>
<td>300 275 325</td>
<td>M33 x 520 6</td>
<td>162.0 M33 x 520 6</td>
</tr>
<tr>
<td>750</td>
<td>PN16</td>
<td>23 970</td>
<td>300 275 325</td>
<td>M33 x 530 6</td>
<td>177.0 M33 x 530 6</td>
</tr>
<tr>
<td>800</td>
<td>PN16</td>
<td>23 1025</td>
<td>300 275 325</td>
<td>M36 x 540 6</td>
<td>184.0 M36 x 540 6</td>
</tr>
<tr>
<td>900</td>
<td>PN16</td>
<td>25 1125</td>
<td>307 277 337</td>
<td>M36 x 570 7</td>
<td>232.0 M36 x 570 7</td>
</tr>
<tr>
<td>1000</td>
<td>PN16</td>
<td>25 1255</td>
<td>307 277 337</td>
<td>M39 x 590 7</td>
<td>282.0 M39 x 590 7</td>
</tr>
<tr>
<td>1100</td>
<td>PN16</td>
<td>38 1355</td>
<td>320 290 350</td>
<td>M39 x 610 8</td>
<td>406.0 M39 x 610 8</td>
</tr>
<tr>
<td>1200</td>
<td>PN16</td>
<td>38 1485</td>
<td>320 290 350</td>
<td>M45 x 640 8</td>
<td>505.0 M45 x 640 10</td>
</tr>
<tr>
<td>1300</td>
<td>PN16</td>
<td>38 1585</td>
<td>320 290 350</td>
<td>M45 x 650 8</td>
<td>533.0 M45 x 650 12</td>
</tr>
<tr>
<td>1400</td>
<td>PN16</td>
<td>38 1685</td>
<td>320 290 350</td>
<td>M45 x 660 9</td>
<td>583.0 M45 x 660 14</td>
</tr>
<tr>
<td>1500</td>
<td>PN16</td>
<td>38 1820</td>
<td>320 290 350</td>
<td>M52 x 690 9</td>
<td>760.0 M52 x 770 12</td>
</tr>
<tr>
<td>1600</td>
<td>PN16</td>
<td>38 1930</td>
<td>320 290 350</td>
<td>M52 x 710 10</td>
<td>850.0 M52 x 800 12</td>
</tr>
<tr>
<td>1800</td>
<td>PN16</td>
<td>38 2130</td>
<td>320 290 350</td>
<td>M52 x 730 11</td>
<td>962.0 M52 x 810 16</td>
</tr>
<tr>
<td>2000</td>
<td>PN16</td>
<td>60 2345</td>
<td>462 412 512</td>
<td>M56 x 930 12</td>
<td>1,662.0 M56 x 1020 18</td>
</tr>
<tr>
<td>2200</td>
<td>PN16</td>
<td>60 2555</td>
<td>462 412 512</td>
<td>M56 x 950 13</td>
<td>1,871.0 M56 x 1040 20</td>
</tr>
<tr>
<td>2400</td>
<td>PN16</td>
<td>60 2765</td>
<td>462 412 512</td>
<td>M56 x 980 16</td>
<td>2,144.0 M56 x 1070 24</td>
</tr>
</tbody>
</table>

Every effort has been made to ensure that the information contained in this publication is accurate at the time of publishing. Crane Ltd assumes no responsibility or liability for typographical errors or omissions or for any misinterpretation of the information within the publication and reserves the right to change without notice.
Technical Information

Working Pressure Rating
Water - In accordance with the flange rating
Gas 6 bar

Vacuum Pressure
Capable of accommodating a vacuum pressure of -0.7 bar

Site Test Pressure
1.5 times working pressure for short duration (2 hours)

Angularity
Dismantling joints are in essence double flanged pipe where the flange to flange dimension can be adjusted, and therefore are not able to accommodate any angularity.

Bolt Torque/Spanner
M12; Torque 55-65Nm on every bolt
M16; Torque 95-110Nm on every bolt

Tie rods
Torque is a function of the flange connecting gasket, not supplied by Viking Johnson; consult flange gasket supplier.

Temperature Rating of Product
EPDM -20°C to +90°C
Nitrile -20°C to +90°C

For use on applications with fluctuating and / or elevated temperatures (> 60°C) may require regular maintenance to re-tighten the bolts and must be included in any maintenance schedule.

Approvals
The following water contact materials used in Dismantling Joints are approved for use with potable water:-
Rilsan Nylon 11:
➤ WRAS, AS/NZS 4020, DVGW, W270, ACS & KIWA
EPDM Gaskets:
➤ WRAS, AS/NZS 4020

In addition to the above, the flange adaptor component in the Dismantling Joint has as a finished product KIWA certification verifying that it complies with the requirements of the Water Supply (Water Fittings) Regulations for England and Wales 1999, the Water Byelaws 2000, Scotland and the Water Regulations Northern Ireland.

Materials & Relevant Standards

Flange Drilling
BS EN1092-1
(formerly BS4504), ISO7005

Fabricated Flange Adaptor Body
Rolled Steel to BS EN 10025-2:
Grade S275

End Rings & Sleeve Options
➤ Rolled Steel to BS EN 10025-2:
Grade S275
➤ Rolled Steel to BS EN 10025-2:
Grade S355
(depending on section)

Flange
Rolled Steel to BS EN 10025-2:
Grade S275

Spigot Options:
➤ Steel Tube to BS10216-1:
Grade P265TR1
➤ Rolled steel to BS EN10025-2:
Grade S275

Gaskets
Standard:
➤ EPDM to BS EN681-1: Type WA
Other gasket grades are available contact Viking Johnson.

Coatings
Flange Adaptor, Spigot & End Ring:
➤ Rilsan Nylon 11 to
WIS 4-52-01 Part 1
Option 1 Flange Adaptor bolts & Nuts:
➤ Sheraplex to WIS 4-52-03
Steel Tie Rods/Nuts:
➤ Zn² Zinc coated

Tie Rods, Studs, Nuts and Washers
The following two options are as standard variants:-

Option 1: Zinc Plated Steel

Tie Rods
ASTM A193 (Grade B7/MB7) equivalent to BS EN10269:+A1:
Name 42CrMo4 (Yield 725N/mm²)

Tie Rod Nuts
ASTM A194 Grade 2H/M2H equivalent to BS EN20898-2:
Property Class 8.00

Flange Adaptor Studs
Steel to BS EN ISO898-1:
Property Class 4.8

Flange Adaptor Nuts
Steel to BS4190: Grade 4

Flange Adaptor Washers
Stainless Steel to BS1449:Part 2:
Grade 304S15

Option 2: Stainless Steel

Tie Rods
Stainless Steel to BS EN3506-1:
Grade A4 Property Class 70
(Yield 450N/mm²)

Tie Rod Nuts
Stainless Steel to BS EN3506-2:
Grade A4 Property Class 80

Flange Adaptor Studs
Stainless Steel to
BS EN ISO 3506-1: grade A4
property class 50

Flange Adaptor Nuts
Stainless Steel to
BS EN ISO 3506-2: grade A4
property class 80

Flange Adaptor Washers
Stainless Steel to BS1449:
Part 2: Grade 304S15
Dismantling Joints DN350 to DN1800 (PN25)

Dismantling Joint
(For diameters over DN1800 contact Viking Johnson)

Note: Maximum Longitudinal Adjustment = Maximum Length – Minimum Length

Dismantling Joints (Standard Product)
Table provides details of standard product – for products offering longer flange dimensions and / or increased longitudinal adjustment contact Viking Johnson.

<table>
<thead>
<tr>
<th>Nom</th>
<th>Flange Details</th>
<th>Flange To Flange Details</th>
<th>Tie Rod Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flange Thickness</td>
<td>A (mm)</td>
<td>B (mm)</td>
</tr>
<tr>
<td>350</td>
<td>25</td>
<td>555</td>
<td>302</td>
</tr>
<tr>
<td>400</td>
<td>25</td>
<td>620</td>
<td>302</td>
</tr>
<tr>
<td>450</td>
<td>25</td>
<td>670</td>
<td>302</td>
</tr>
<tr>
<td>500</td>
<td>25</td>
<td>730</td>
<td>302</td>
</tr>
<tr>
<td>550</td>
<td>25</td>
<td>785</td>
<td>302</td>
</tr>
<tr>
<td>600</td>
<td>25</td>
<td>845</td>
<td>302</td>
</tr>
<tr>
<td>650</td>
<td>25</td>
<td>895</td>
<td>307</td>
</tr>
<tr>
<td>700</td>
<td>25</td>
<td>960</td>
<td>302</td>
</tr>
<tr>
<td>800</td>
<td>25</td>
<td>1085</td>
<td>307</td>
</tr>
<tr>
<td>900</td>
<td>25</td>
<td>1185</td>
<td>307</td>
</tr>
<tr>
<td>1000</td>
<td>38</td>
<td>1320</td>
<td>320</td>
</tr>
<tr>
<td>1200</td>
<td>38</td>
<td>1530</td>
<td>320</td>
</tr>
<tr>
<td>1400</td>
<td>60</td>
<td>1755</td>
<td>462</td>
</tr>
<tr>
<td>1600</td>
<td>60</td>
<td>1975</td>
<td>462</td>
</tr>
<tr>
<td>1800</td>
<td>60</td>
<td>2185</td>
<td>462</td>
</tr>
</tbody>
</table>

Every effort has been made to ensure that the information contained in this publication is accurate at the time of publishing. Crane Ltd assumes no responsibility or liability for typographical errors or omissions or for any misinterpretation of the information within the publication and reserves the right to change without notice.
Technical Information

**Working Pressure Rating**
Water - In accordance with the flange rating
Gas 6 bar

**Vacuum Pressure**
Capable of accommodating a vacuum pressure of -0.7 bar

**Site Test Pressure**
1.5 times working pressure for short duration (2 hours)

**Angularity**
Dismantling joints are in essence double flanged pipe where the flange to flange dimension can be adjusted, and therefore are not able to accommodate any angularity.

**Bolt Torque/Spanner**
M12; Torque 55-65Nm on every bolt
M16; Torque 95-110Nm on every bolt

**Tie rods**
Torque is a function of the flange connecting gasket, not supplied by Viking Johnson; consult flange gasket supplier.

**Temperature Rating of Product**
EPDM -20°C to +90°C
Nitrile -20°C to +90°C
For use on applications with fluctuating and / or elevated temperatures (> 60°C) may require regular maintenance to retighten the bolts and must be included in any maintenance schedule.

**Approvals**
The following water contact materials used in Dismantling Joints are approved for use with potable water:-
Rilsan Nylon 11:
➤ WRAS, AS/NZS 4020, DVGW, W270, ACS & KIWA
EPDM Gaskets:
➤ WRAS, AS/NZS 4020

Materials & Relevant Standards

**Flange Drilling**
BS EN1092-1 (formerly BS4504), ISO7005

**Fabricated Flange Adaptor Body**
Rolled Steel to BS EN 10025-2: Grade S275

**End Rings & Sleeve Options**
➤ Rolled Steel to BS EN 10025-2: Grade S275
➤ Rolled Steel to BS EN 10025-2: Grade S355 (depending on section)

**Flange**
Rolled Steel to BS EN 10025-2: Grade S275

**Spigot Options:**
➤ Steel Tube to BS10216-1: Grade P265TR1
➤ Rolled steel to BS EN10025-2: Grade S275

**Gaskets**
Standard:
➤ EPDM to BS EN681-1: Type WA
Other gasket grades are available contact Viking Johnson.

**Coatings**
Flange Adaptor, Spigot & End Ring:
➤ Rilsan Nylon 11 to WIS 4-52-01 Part 1
Option 1 Flange Adaptor bolts & Nuts:
➤ Sheraplex to WIS 4-52-03
Steel Tie Rods/Nuts:
➤ Zn² Zinc coated

**Tie Rods, Studs, Nuts and Washers**
The following two options are as standard variants:-

**Option 1: Zinc Plated Steel**

**Tie Rods**
ASTM A193 (Grade B7/MB7) equivalent to BS EN10269:+A1:
Name 42CrMo4 (Yield 725N/mm²)

**Tie Rod Nuts**
ASTM A194 Grade 2H/M2H
equivalent to BS EN20898-2: Property Class 8.00

**Flange Adaptor Studs**
Steel to BS EN ISO988-1: Property Class 4.8

**Flange Adaptor Nuts**
Steel to BS4190: Grade 4

**Flange Adaptor Washers**
Stainless Steel to BS1449:Part 2: Grade 304S15

**Option 2: Stainless Steel**

**Tie Rods**
Stainless Steel to BS EN3506-1: Grade A4 Property Class 70
(Yield 450N/mm²)

**Tie Rod Nuts**
Stainless Steel to BS EN3506-2: Grade A4 Property Class 80

**Flange Adaptor Studs**
Stainless Steel to BS EN ISO 3506-1: grade A4 property class 50

**Flange Adaptor Nuts**
Stainless Steel to BS EN ISO 3506-2: grade A4 property class 80

**Flange Adaptor Washers**
Stainless Steel to BS1449: Part 2: Grade 304S15
# Dismantling Joints

**DN350 to DN1600 (PN40)**

## Dismantling Joint

(For diameters over DN1600 contact Viking Johnson)

![Diagram of Dismantling Joint]

**Note:** Maximum Longitudinal Adjustment = Maximum Length – Minimum Length

## Dismantling Joints (Standard Product)

Table provides details of standard product – for products offering longer flange dimensions and / or increased longitudinal adjustment contact Viking Johnson.

<table>
<thead>
<tr>
<th>Nom</th>
<th>Flange Details</th>
<th>Flange To Flange Details</th>
<th>Tie Rod Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flange Thickness</td>
<td>Flange OD</td>
<td>Nominal Length</td>
</tr>
<tr>
<td>350 PN40</td>
<td>25</td>
<td>580</td>
<td>307</td>
</tr>
<tr>
<td>400 PN40</td>
<td>25</td>
<td>660</td>
<td>307</td>
</tr>
<tr>
<td>450 PN40</td>
<td>25</td>
<td>685</td>
<td>307</td>
</tr>
<tr>
<td>500 PN40</td>
<td>25</td>
<td>755</td>
<td>307</td>
</tr>
<tr>
<td>550 PN40</td>
<td>38</td>
<td>835</td>
<td>320</td>
</tr>
<tr>
<td>600 PN40</td>
<td>38</td>
<td>890</td>
<td>320</td>
</tr>
<tr>
<td>650 PN40</td>
<td>38</td>
<td>945</td>
<td>320</td>
</tr>
<tr>
<td>700 PN40</td>
<td>38</td>
<td>995</td>
<td>320</td>
</tr>
<tr>
<td>800 PN40</td>
<td>38</td>
<td>1140</td>
<td>320</td>
</tr>
<tr>
<td>900 PN40</td>
<td>38</td>
<td>1250</td>
<td>320</td>
</tr>
<tr>
<td>1000 PN40</td>
<td>38</td>
<td>1360</td>
<td>320</td>
</tr>
<tr>
<td>1200 PN40</td>
<td>38</td>
<td>1575</td>
<td>320</td>
</tr>
<tr>
<td>1400 PN40</td>
<td>60</td>
<td>1795</td>
<td>462</td>
</tr>
<tr>
<td>1600 PN40</td>
<td>60</td>
<td>2025</td>
<td>462</td>
</tr>
</tbody>
</table>

**Note:** Stainless steel tie rods cannot accommodate this working pressure so not available.

---

Every effort has been made to ensure that the information contained in this publication is accurate at the time of publishing. Crane Ltd assumes no responsibility or liability for typographical errors or omissions or for any misinterpretation of the information within the publication and reserves the right to change without notice.
Every effort has been made to ensure that the information contained in this publication is accurate at the time of publishing. Crane Ltd assumes no responsibility or liability for typographical errors or omissions or for any misinterpretation of the information within the publication and reserves the right to change without notice.

### Technical Information

**Working Pressure Rating**
- Water: In accordance with the flange rating
- Gas: 6 bar

**Vacuum Pressure**
Capable of accommodating a vacuum pressure of -0.7 bar

**Site Test Pressure**
1.5 times working pressure for short duration (2 hours)

**Angularity**
Dismantling joints are in essence double flanged pipe where the flange to flange dimension can be adjusted, and therefore are not able to accommodate any angularity.

**Bolt Torque/Spanner**
- M12; Torque 55-65Nm on every bolt
- M16; Torque 95-110Nm on every bolt

**Tie rods**
Torque is a function of the flange connecting gasket, not supplied by Viking Johnson; consult flange gasket supplier.

**Temperature Rating of Product**
- EPDM: -20°C to +90°C
- Nitrile: -20°C to +90°C

For use on applications with fluctuating and/or elevated temperatures (> 60°C) may require regular maintenance to re-tighten the bolts and must be included in any maintenance schedule.

**Approvals**
The following water contact materials used in Dismantling Joints are approved for use with potable water:
- Rilsan Nylon 11:
  - WRAS, AS/NZS 4020, DVGW, W270, ACS & KIWA
  - EPDM Gaskets:
  - WRAS, AS/NZS 4020

### Materials & Relevant Standards

**Flange Drilling**
- BS EN1092-1 (formerly BS4504), ISO7005

**Fabricated Flange Adaptor Body**
- Rolled Steel to BS EN 10025-2: Grade S275

**End Rings & Sleeve Options:**
- Rolled Steel to BS EN 10025-2: Grade S275
- Rolled Steel to BS EN 10025-2: Grade S355 (depending on section)

**Flange**
- Rolled Steel to BS EN 10025-2: Grade S275

**Spigot Options:**
- Steel tube to BS10216-1: Grade P265TR1
- Rolled steel to BS EN10025-2: Grade S275

**Gaskets**
- Standard:
  - EPDM to BS EN681-1: Type WA
  - Other gasket grades are available contact Viking Johnson.

**Coatings**
- Flange Adaptor, Spigot & End Ring:
  - Rilsan Nylon 11 to WIS 4-52-01 Part 1
  - Option 1 Flange Adaptor bolts & Nuts:
    - Sheraplex to WIS 4-52-03
    - Steel Tie Rods/Nuts:
    - Zn² Zinc coated

**Tie Rods, Studs, Nuts and Washers**
The following two options are as standard variants:

**Option 1: Zinc Plated Steel**

**Tie Rods**
- ASTM A193 (Grade B7/MB7) equivalent to BS EN10269:+A1: Name 42CrMo4 (Yield 725N/mm²)

**Tie Rod Nuts**
- ASTM A194 Grade 2H/M2H equivalent to BS EN20898-2: Property Class 8.00

**Flange Adaptor Studs**
- Steel to BS EN ISO898-1: Property Class 4.8

**Flange Adaptor Nuts**
- Steel to BS4190: Grade 4

**Flange Adaptor Washers**
- Stainless Steel to BS1449: Part 2: Grade 304S15

**Option 2: Stainless Steel**

**Tie Rods**
- Stainless Steel to BS EN3506-1: Grade A4 Property Class 70 (Yield 450N/mm²)

**Tie Rod Nuts**
- Stainless Steel to BS EN3506-2: Grade A4 Property Class 80

**Flange Adaptor Studs**
- Stainless Steel to BS EN ISO 3506-1: grade A4 property class 50

**Flange Adaptor Nuts**
- Stainless Steel to BS EN ISO 3506-2: grade A4 property class 80

**Flange Adaptor Washers**
- Stainless Steel to BS1449: Part 2: Grade 304S15
Dismantling Joints 4” to 40” AWWA (Class D)

Dismantling Joint
(For diameters over 40” contact Viking Johnson)

Dismantling Joints (Standard Product)
Table provides details of standard product – for products offering longer flange dimensions and / or increased longitudinal adjustment contact Viking Johnson.

<table>
<thead>
<tr>
<th>Nom</th>
<th>Flange Details</th>
<th>Flange To Flange Details</th>
<th>Tie Rod Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Flange Thickness</td>
<td>Flange OD</td>
<td>Nominal Length</td>
</tr>
<tr>
<td></td>
<td>E (mm)</td>
<td>A (mm)</td>
<td>B (mm)</td>
</tr>
<tr>
<td>4”</td>
<td>Class D</td>
<td>18</td>
<td>229</td>
</tr>
<tr>
<td>6”</td>
<td>Class D</td>
<td>18</td>
<td>279</td>
</tr>
<tr>
<td>8”</td>
<td>Class D</td>
<td>18</td>
<td>343</td>
</tr>
<tr>
<td>10”</td>
<td>Class D</td>
<td>18</td>
<td>406</td>
</tr>
<tr>
<td>12”</td>
<td>Class D</td>
<td>18</td>
<td>483</td>
</tr>
<tr>
<td>14”</td>
<td>Class D</td>
<td>18</td>
<td>533</td>
</tr>
<tr>
<td>16”</td>
<td>Class D</td>
<td>18</td>
<td>597</td>
</tr>
<tr>
<td>18”</td>
<td>Class D</td>
<td>23</td>
<td>635</td>
</tr>
<tr>
<td>20”</td>
<td>Class D</td>
<td>23</td>
<td>698</td>
</tr>
<tr>
<td>24”</td>
<td>Class D</td>
<td>23</td>
<td>813</td>
</tr>
<tr>
<td>28”</td>
<td>Class D</td>
<td>23</td>
<td>927</td>
</tr>
<tr>
<td>30”</td>
<td>Class D</td>
<td>23</td>
<td>984</td>
</tr>
<tr>
<td>32”</td>
<td>Class D</td>
<td>23</td>
<td>1060</td>
</tr>
<tr>
<td>36”</td>
<td>Class D</td>
<td>25</td>
<td>1168</td>
</tr>
<tr>
<td>40”</td>
<td>Class D</td>
<td>25</td>
<td>1289</td>
</tr>
</tbody>
</table>

Note: Maximum Longitudinal Adjustment = Maximum Length – Minimum Length
Dismantling Joints 4” to 40” AWWA (Class D)

Datasheet 2/2

Technical Information

Working Pressure Rating
- Water - In accordance with the flange rating
- Gas 6 bar

Vacuum Pressure
- Capable of accommodating a vacuum pressure of -0.7 bar

Site Test Pressure
- 1.5 times working pressure for short duration (2 hours)

Angularity
- Dismantling joints are in essence double flanged pipe where the flange to flange dimension can be adjusted, and therefore are not able to accommodate any angularity.

Bolt Torque/Spanner
- M12; Torque 55-65Nm on every bolt
- M16; Torque 95-110Nm on every bolt

Tie rods
- Torque is a function of the flange connecting gasket, not supplied by Viking Johnson; consult flange gasket supplier.

Temperature Rating of Product
- EPDM -20°C to +90°C
- Nitrile -20°C to +90°C
- For use on applications with fluctuating and/or elevated temperatures (>60°C) may require regular maintenance to re-tighten the bolts and must be included in any maintenance schedule.

Approvals
- The following water contact materials used in Dismantling Joints are approved for use with potable water:-
  - Rilsan Nylon 11:
    - WRAS, AS/NZS 4020, DVGW, W270, ACS & KIWA
  - EPDM Gaskets:
    - WRAS, AS/NZS 4020

Materials & Relevant Standards

Flange Drilling
- ANSI/WWA C207-01

Fabricated Flange Adaptor Body
- Rolled Steel to BS EN 10025-2:
  - Grade S275

End Rings Options:
- ▶ Ductile Iron to BS EN1563:
  - Symbol EN-GJS-450-10
- ▶ Rolled Steel to BS EN 10025-2:
  - Grade S275

Sleeve Options:
- ▶ Steel Tube to BS EN10255:
- ▶ Steel Tube to BS EN10216-1:
  - Grade P265TR1
- ▶ Rolled Steel to BS EN 10025-2:
  - Grade S275
- ▶ Rolled Steel to BS EN 10025-2:
  - Grade S355
  (depending on section)

Flange
- Rolled Steel to BS EN 10025-2:
  - Grade S275

Spigot Options:
- ▶ Steel Tube to BS EN10255
- ▶ Steel Tube to BS EN10216-1:
  - Grade P265TR1
- ▶ Rolled Steel to BS EN 10025-2:
  - Grade S275

Gaskets
- Standard:
  - ▶ EPDM to BS EN681-1: Type WA
- Other gasket grades are available contact Viking Johnson.

Coatings
- Flange Adaptor, Spigot & End Ring:
  - ▶ Rilsan Nylon 11 to
    - WIS 4-52-01 Part 1
    - Option 1 Flange Adaptor bolts & Nuts:
    - Sheraplex to WIS 4-52-03
    - Steel Tie Rods/Nuts:
    - Zn³ Zinc coated

Tie Rods, Studs, Nuts and Washers
- The following two options are as standard variants:-

Option 1: Zinc Plated Steel

<table>
<thead>
<tr>
<th>Tie Rods</th>
<th>Tie Rod Nuts</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASTM A193 (Grade B7/MB7) equivalent to BS EN10269:+A1: Name 42CrMo4 (Yield 725N/mm²)</td>
<td>ASTM A194 Grade 2H/M2H equivalent to BS EN20898-2: Property Class 8.00</td>
</tr>
</tbody>
</table>

Flange Adaptor Studs
- Steel to BS EN ISO989-1: Property Class 4.8

Flange Adaptor Nuts
- Steel to BS4190: Grade 4

Flange Adaptor Washers
- Stainless Steel to BS1449:Part 2: Grade 304S15

Option 2: Stainless Steel

<table>
<thead>
<tr>
<th>Tie Rods</th>
<th>Tie Rod Nuts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stainless Steel to BS EN3506-1: Grade A4 Property Class 70 (Yield 450N/mm²)</td>
<td>Stainless Steel to BS EN3506-2: Grade A4 Property Class 80</td>
</tr>
</tbody>
</table>

Flange Adaptor Studs
- Stainless Steel to BS EN ISO 3506-1: grade A4 property class 50

Flange Adaptor Nuts
- Stainless Steel to BS EN ISO 3506-2: grade A4 property class 80

Flange Adaptor Washers
- Stainless Steel to BS1449: Part 2: Grade 304S15

Every effort has been made to ensure that the information contained in this publication is accurate at the time of publishing. Crane Ltd assumes no responsibility or liability for typographical errors or omissions or for any misinterpretation of the information within the publication and reserves the right to change without notice.

www.vikingjohnson.com
Dismantling Joints 3” to 40” (ANSI 150)

Dismantling Joint
(For diameters over 40” contact Viking Johnson)

Dismantling Joints (Standard Product)
Table provides details of standard product – for products offering longer flange dimensions and / or increased longitudinal adjustment contact Viking Johnson.

<table>
<thead>
<tr>
<th>Nom.</th>
<th>Flange Details</th>
<th>Flange To Flange Details</th>
<th>Tie Rod Details</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Nom.</td>
<td>Drilling</td>
<td>Flange OD</td>
</tr>
<tr>
<td></td>
<td>E (mm)</td>
<td>A (mm)</td>
<td>B (mm)</td>
</tr>
<tr>
<td>3” ANSI 150</td>
<td>25</td>
<td>190</td>
<td>194</td>
</tr>
<tr>
<td>4” ANSI 150</td>
<td>25</td>
<td>229</td>
<td>194</td>
</tr>
<tr>
<td>6” ANSI 150</td>
<td>25</td>
<td>279</td>
<td>194</td>
</tr>
<tr>
<td>8” ANSI 150</td>
<td>25</td>
<td>343</td>
<td>194</td>
</tr>
<tr>
<td>10” ANSI 150</td>
<td>25</td>
<td>406</td>
<td>194</td>
</tr>
<tr>
<td>12” ANSI 150</td>
<td>25</td>
<td>483</td>
<td>194</td>
</tr>
<tr>
<td>14” ANSI 150</td>
<td>25</td>
<td>533</td>
<td>302</td>
</tr>
<tr>
<td>16” ANSI 150</td>
<td>25</td>
<td>597</td>
<td>302</td>
</tr>
<tr>
<td>18” ANSI 150</td>
<td>25</td>
<td>635</td>
<td>302</td>
</tr>
<tr>
<td>20” ANSI 150</td>
<td>25</td>
<td>698</td>
<td>302</td>
</tr>
<tr>
<td>24” ANSI 150</td>
<td>25</td>
<td>813</td>
<td>302</td>
</tr>
<tr>
<td>28” ANSI 150</td>
<td>25</td>
<td>927</td>
<td>302</td>
</tr>
<tr>
<td>30” ANSI 150</td>
<td>25</td>
<td>984</td>
<td>302</td>
</tr>
<tr>
<td>32” ANSI 150</td>
<td>25</td>
<td>1060</td>
<td>302</td>
</tr>
<tr>
<td>36” ANSI 150</td>
<td>25</td>
<td>1168</td>
<td>307</td>
</tr>
<tr>
<td>40” ANSI 150</td>
<td>38</td>
<td>1289</td>
<td>320</td>
</tr>
</tbody>
</table>

Note: Maximum Longitudinal Adjustment = Maximum Length – Minimum Length

Every effort has been made to ensure that the information contained in this publication is accurate at the time of publishing. Crane Ltd assumes no responsibility or liability for typographical errors or omissions or for any misinterpretation of the information within the publication and reserves the right to change without notice.
## Technical Information

### Working Pressure Rating
- Water: In accordance with the flange rating
- Gas: 6 bar

### Vacuum Pressure
Capable of accommodating a vacuum pressure of -0.7 bar

### Site Test Pressure
1.5 times working pressure for short duration (2 hours)

### Angularity
Dismantling joints are in essence double flanged pipe where the flange to flange dimension can be adjusted, and therefore are not able to accommodate any angularity.

### Bolt Torque/Spanner
- M12: Torque 55-65Nm on every bolt
- M16: Torque 95-110Nm on every bolt

### Tie rods
Torque is a function of the flange connecting gasket, not supplied by Viking Johnson; consult flange gasket supplier.

### Temperature Rating of Product
- EPDM: -20°C to +90°C
- Nitrile: -20°C to +90°C
For use on applications with fluctuating and / or elevated temperatures (> -60°C) may require regular maintenance to re-tighten the bolts and must be included in any maintenance schedule.

### Approvals
The following water contact materials used in Dismantling Joints are approved for use with potable water:-
- Rilsan Nylon 11:
  - WRAS, AS/NZS 4020, DVGW, W270, ACS & KIWA
- EPDM Gaskets:
  - WRAS, AS/NZS 4020

## Materials & Relevant Standards

### Flange Drilling
- ASME/ANSI B16.5/B16.47

### Fabricated Flange Adaptor Body
- Rolled Steel to BS EN 10025-2: Grade S275

### End Rings Options:
- Ductile Iron to BS EN1563: Symbol EN-GJS-450-10
- Rolled Steel to BS EN 10025-2: Grade S275

### Sleeve Options:
- Steel Tube to BS EN10255:
- Steel Tube to BS EN10216-1:
  - Grade P265TR1
  - Rolled Steel to BS EN 10025-2: Grade S275
  - Rolled Steel to BS EN 10025-2: Grade S355
  (depending on section)

### Flange
- Rolled Steel to BS EN 10025-2: Grade S275

### Spigot Options:
- Steel Tube to BS EN10255:
- Steel Tube to BS EN10216-1:
  - Grade P265TR1

### Gaskets
- Standard:
  - EPDM to BS EN681-1: Type WA
- Other gasket grades are available contact Viking Johnson.

### Coatings
- Flange Adaptor, Spigot & End Ring:
  - Rilsan Nylon 11 to WIS 4-52-01 Part 1
- Option 1 Flange Adaptor bolts & Nuts:
  - Sheraplex to WIS 4-52-03
- Steel Tie Rods/Nuts:
  - Zn: Zinc coated

### Tie Rods, Studs, Nuts and Washers
The following two options are as standard variants:-

#### Option 1: Zinc Plated Steel

<table>
<thead>
<tr>
<th>Tie Rods</th>
<th>ASTM A193 (Grade B7/MB7) equivalent to BS EN10269:+A1: Name 42CrMo4 (Yield 725N/mm²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tie Rod Nuts</td>
<td>ASTM A194 Grade 2H/M2H equivalent to BS EN20898:2: Property Class 4.8</td>
</tr>
<tr>
<td>Flange Adaptor Studs</td>
<td>Steel to BS EN ISO989-1: Property Class 4.8</td>
</tr>
<tr>
<td>Flange Adaptor Nuts</td>
<td>Steel to BS4190: Grade 4</td>
</tr>
<tr>
<td>Flange Adaptor Washers</td>
<td>Stainless Steel to BS1449:Part 2: Grade 304S15</td>
</tr>
</tbody>
</table>

#### Option 2: Stainless Steel

<table>
<thead>
<tr>
<th>Tie Rods</th>
<th>Stainless Steel to BS EN3506-1: Grade A4 Property Class 70 (Yield 450N/mm²)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tie Rod Nuts</td>
<td>Stainless Steel to BS EN3506-2: Grade A4 Property Class 80</td>
</tr>
<tr>
<td>Flange Adaptor Studs</td>
<td>Stainless Steel to BS EN ISO 3506-1: grade A4 property class 50</td>
</tr>
<tr>
<td>Flange Adaptor Nuts</td>
<td>Stainless Steel to BS EN ISO 3506-2: grade A4 property class 80</td>
</tr>
<tr>
<td>Flange Adaptor Washers</td>
<td>Stainless Steel to BS1449: Part 2: Grade 304S15</td>
</tr>
</tbody>
</table>

Every effort has been made to ensure that the information contained in this publication is accurate at the time of publishing. Crane Ltd assumes no responsibility or liability for typographical errors or omissions or for any misinterpretation of the information within the publication and reserves the right to change without notice.
Dismantling Joints 3” to 40” (ANSI 300)

Dismantling Joint
(For diameters over 40” contact Viking Johnson)

Note: Maximum Longitudinal Adjustment = Maximum Length – Minimum Length

Dismantling Joints (Standard Product)
Table provides details of standard product – for products offering longer flange dimensions and / or increased longitudinal adjustment contact Viking Johnson.

<table>
<thead>
<tr>
<th>Nom Flange Details</th>
<th>Flange To Flange Details</th>
<th>Tie Rod Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flange Drilling</td>
<td>Flange Thickness E (mm)</td>
<td>Flange OD A (mm)</td>
</tr>
<tr>
<td></td>
<td>Nominal Length B (mm)</td>
<td>Maximum Length C (mm)</td>
</tr>
<tr>
<td></td>
<td>Minimum Length D (mm)</td>
<td>Maximum Length</td>
</tr>
<tr>
<td>3” ANSI 300</td>
<td>25</td>
<td>210</td>
</tr>
<tr>
<td>4” ANSI 300</td>
<td>25</td>
<td>254</td>
</tr>
<tr>
<td>6” ANSI 300</td>
<td>25</td>
<td>318</td>
</tr>
<tr>
<td>8” ANSI 300</td>
<td>25</td>
<td>381</td>
</tr>
<tr>
<td>10” ANSI 300</td>
<td>25</td>
<td>444</td>
</tr>
<tr>
<td>12” ANSI 300</td>
<td>25</td>
<td>521</td>
</tr>
<tr>
<td>14” ANSI 300</td>
<td>25</td>
<td>584</td>
</tr>
<tr>
<td>16” ANSI 300</td>
<td>25</td>
<td>648</td>
</tr>
<tr>
<td>18” ANSI 300</td>
<td>38</td>
<td>711</td>
</tr>
<tr>
<td>20” ANSI 300</td>
<td>38</td>
<td>775</td>
</tr>
<tr>
<td>24” ANSI 300</td>
<td>38</td>
<td>914</td>
</tr>
<tr>
<td>28” ANSI 300</td>
<td>38</td>
<td>1035</td>
</tr>
<tr>
<td>30” ANSI 300</td>
<td>38</td>
<td>1092</td>
</tr>
<tr>
<td>32” ANSI 300</td>
<td>38</td>
<td>1149</td>
</tr>
<tr>
<td>36” ANSI 300</td>
<td>38</td>
<td>1270</td>
</tr>
<tr>
<td>40” ANSI 300</td>
<td>60</td>
<td>1238</td>
</tr>
</tbody>
</table>

Every effort has been made to ensure that the information contained in this publication is accurate at the time of publishing. Crane Ltd assumes no responsibility or liability for typographical errors or omissions or for any misinterpretation of the information within the publication and reserves the right to change without notice.
**Technical Information**

**Working Pressure Rating**
- Water: In accordance with the flange rating
- Gas: 6 bar

**Vacuum Pressure**
- Capable of accommodating a vacuum pressure of -0.7 bar

**Site Test Pressure**
- 1.5 times working pressure for short duration (2 hours)

**Angularity**
- Dismantling joints are in essence double flanged pipe where the flange to flange dimension can be adjusted, and therefore are not able to accommodate any angularity.

**Bolt Torque/Spanner**
- M12: Torque 55-65Nm on every bolt
- M16: Torque 95-110Nm on every bolt

**Tie Rods**
- Torque is a function of the flange connecting gasket, not supplied by Viking Johnson; consult flange gasket supplier.

**Temperature Rating of Product**
- EPDM: -20°C to +90°C
- Nitrile: -20°C to +90°C
- For use on applications with fluctuating and / or elevated temperatures (> 60°C) may require regular maintenance to re-tighten the bolts and must be included in any maintenance schedule.

**Approvals**
- The following water contact materials used in Dismantling Joints are approved for use with potable water:-
  - Rilsan Nylon 11:
    - WRAS, AS/NZS 4020, DVGW, W270, ACS & KIWA
  - EPDM Gaskets:
    - WRAS, AS/NZS 4020

**Flange Drilling**
- ASME/ANSI B16.5/B16.47

**Fabricated Flange Adaptor Body**
- Rolled Steel to BS EN 10025-2: Grade S275

**End Rings Options:**
- Ductile Iron to BS EN1563: Symbol EN-GJS-450-10
- Rolled Steel to BS EN 10025-2: Grade S275

**Sleeve Options:**
- Steel Tube to BS EN10255:
- Steel Tube to BS EN10216-1: Grade P265TR1
- Rolled Steel to BS EN 10025-2: Grade S275
- Rolled Steel to BS EN 10025-2: Grade S355 (depending on section)

**Flange**
- Rolled Steel to BS EN 10025-2: Grade S275

**Spigot Options:**
- Steel Tube to BS EN10255:
- Steel Tube to BS EN10216-1: Grade P265TR1

**Gaskets**
- Standard:
  - EPDM to BS EN681-1: Type WA
  - Other gasket grades are available contact Viking Johnson.

**Coatings**
- Flange Adaptor, Spigot & End Ring:
  - Rilsan Nylon 11 to WIS 4-52-01 Part 1
- Option 1 Flange Adaptor bolts & Nuts:
  - Sheraplex to WIS 4-52-03
- Steel Tie Rods/Nuts:
  - Zn³ Zinc coated

**Materials & Relevant Standards**

**Tie Rods, Studs, Nuts and Washers**
- The following two options are as standard variants:-

**Option 1: Zinc Plated Steel**

**Tie Rods**
- ASTM A193 (Grade B7/MB7) equivalent to BS EN10269:+A1: Name 42CrMo4 (Yield 725N/mm²)

**Tie Rod Nuts**
- ASTM A194 Grade 2H/M2H equivalent to BS EN20898-2: Property Class 8.00

**Flange Adaptor Studs**
- Steel to BS EN ISO898-1: Property Class 4.8

**Flange Adaptor Nuts**
- Steel to BS4190: Grade 4

**Flange Adaptor Washers**
- Stainless Steel to BS1449:Part 2: Grade 304S15

**Option 2: Stainless Steel**

**Tie Rods**
- Stainless Steel to BS EN3506-1: Grade A4 Property Class 70 (Yield 450N/mm²)

**Tie Rod Nuts**
- Stainless Steel to BS EN3506-2: Grade A4 Property Class 80

**Flange Adaptor Studs**
- Stainless Steel to BS EN ISO 3506-1: grade A4 property class 50

**Flange Adaptor Nuts**
- Stainless Steel to BS EN ISO 3506-2: grade A4 property class 80

**Flange Adaptor Washers**
- Stainless Steel to BS1449: Part 2: Grade 304S15
Ekaterinburg
Dismantling Joints
Large Diameter Couplings
Stepped Couplings
Flange Adaptors

Project
Repair of existing pipeline to prevent water losses which were estimated at 30%.

Client
Water Utility Ekaterinburg.

Contractor
Renessance

Crane BS&U are solely the provider of products and have no direct influence on, or take any responsibility for any working practices employed or depicted in the images enclosed to install such products.