

Data sheet

# JIP™ branching valves

Description



**Application:**

Danfoss JIP™ branching ball valves are designed for extensions of district heating systems and other closed loop water systems, where the water is treated to avoid internal corrosion. Having a fully welded body, the valves meet the requirements for valves used in district heating and district cooling systems and offer the highest degree of security.

**Features:**

- External stem hexagon on all dimensions
- Position indicator of the ball on the stem
- 90 degree end stop (DN 15-100 mm)
- The valves are maintenance free

**Main data:**

- DN 15-200
- $k_{vs}$  11-2.300 m<sup>3</sup>/h
- PN 10/16/25/40
- Temperature:  
0...180°C for welding connections  
0...130°C for copper connections
- Medium: Circulation water / glycolic water up to 50%
- Min. storage and transport temperature: -40°C

**Approvals and norms:**

- 100% final inspection. Leak and shell tests as well as dimension and functionality tests are performed on each and every valve according to applicable standard (EN 12266 part 1 P10-P11-P12 & part 2 F20).
- PED 2014/68/EU module H1
- Danfoss A/S is certified according to ISO 9001, ISO 14001 and OHSAS 18001.

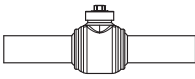
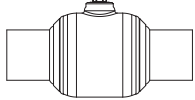
Ordering

JIP-WW reduced bore valves (T = 0 ... 180°C)

| Picture | DN (mm) | kvs (m <sup>3</sup> /h) | PN (bar) | Code No. |
|---------|---------|-------------------------|----------|----------|
|         | 15      | 11                      | 40       | 065N0000 |
|         | 20      | 15                      |          | 065N0001 |
|         | 25      | 34                      |          | 065N0002 |
|         | 32      | 52                      |          | 065N0003 |
|         | 40      | 96                      |          | 065N0004 |
|         | 50      | 184                     | 25       | 065N0005 |
|         | 65      | 200                     |          | 065N0006 |
|         | 80      | 470                     |          | 065N0007 |
|         | 100     | 640                     |          | 065N0009 |
|         | 125     | 1.080                   |          | 065N2148 |
|         | 150     | 1.900                   |          | 065N2153 |
|         | 200     | 2.300                   |          | 065N2158 |

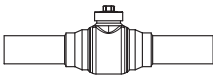
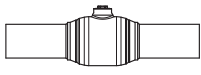
Ordering (continuous)

JIP-WW full bore valves (T = 0 ... 180°C)

| Picture   | DN (mm) | kvs (m³/h) | PN (bar) | Code No.               |
|---|---------|------------|----------|------------------------|
|  | 20      | 50         | 16       | 065N0020               |
|   | 25      | 90         |          | 065N0021               |
|   | 32      | 160        |          | 065N0022               |
|   | 40      | 235        |          | 065N0023               |
|   | 50      | 395        |          | 065N0024               |
|  | 65      | 820        | 25       | 065N0025               |
|   | 80      | 1.100      |          | 065N0026               |
|   | 100     | 2.300      |          | 065N1143 <sup>1)</sup> |

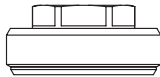
<sup>1)</sup> DN 100 FB does not have the end stop

JIP-CC reduced bore valves (T = 0 ... 130°C)

| Picture   | DN (mm) | kvs (m³/h) | PN (bar) | Code No. |
|---|---------|------------|----------|----------|
|  | 15      | 11         | 16       | 065N0030 |
|   | 20      | 15         |          | 065N0031 |
|   | 25      | 34         |          | 065N0033 |
|   | 32      | 52         |          | 065N0032 |
|   | 40      | 96         |          | 065N0034 |
|  | 50      | 184        | 10       | 065N0035 |
|   | 65      | 200        |          | 065N0036 |
|   | 80      | 470        |          | 065N0037 |

Spare parts for branching valves

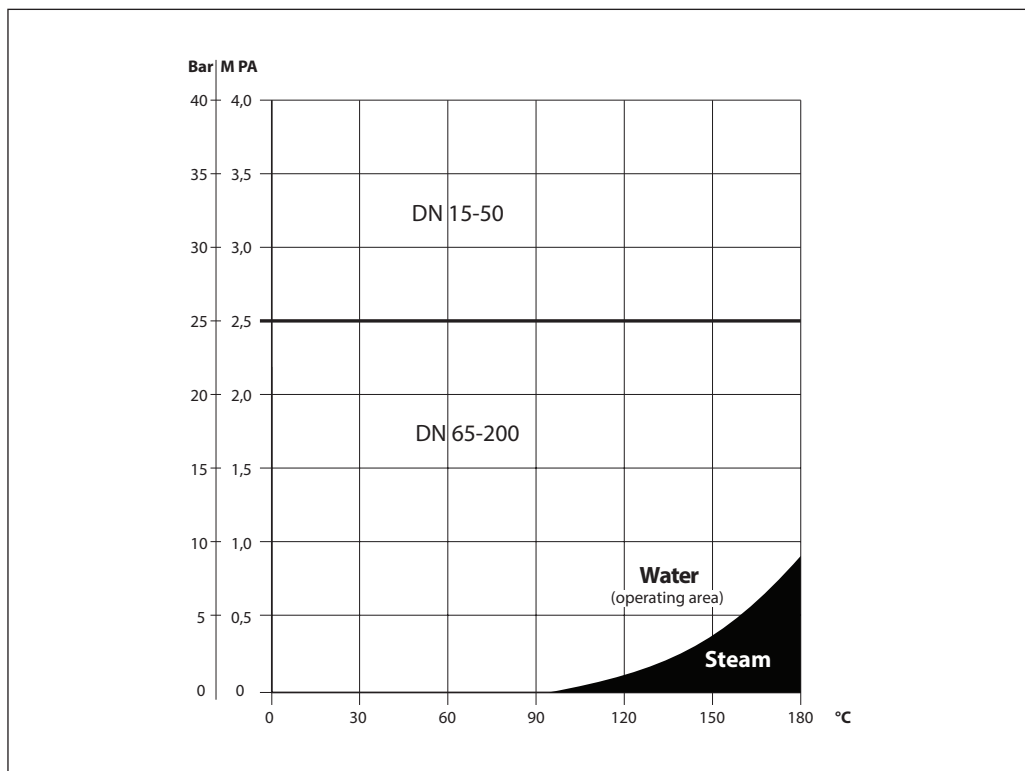
Top plug for stem

| Picture   | DN, Reduced Bore (mm) | DN, Full Bore (mm) | Code No. |
|---|-----------------------|--------------------|----------|
|  | 15                    | -                  | 065N0010 |
|   | 20                    | 20                 |          |
|   | 25                    | 25                 |          |
|   | 32                    | 32                 | 065N0011 |
|   | 40                    | 40                 |          |
|   | 50                    | -                  |          |
|   | 65                    | 50                 | 065N0012 |
|   | 80                    | 65                 |          |
|   | 100                   | 80                 |          |
|   | 125                   | 100                | 065N0013 |
|   | 150                   | -                  |          |
|   | 200                   | -                  |          |
|   | 200                   | -                  |          |

Technical data

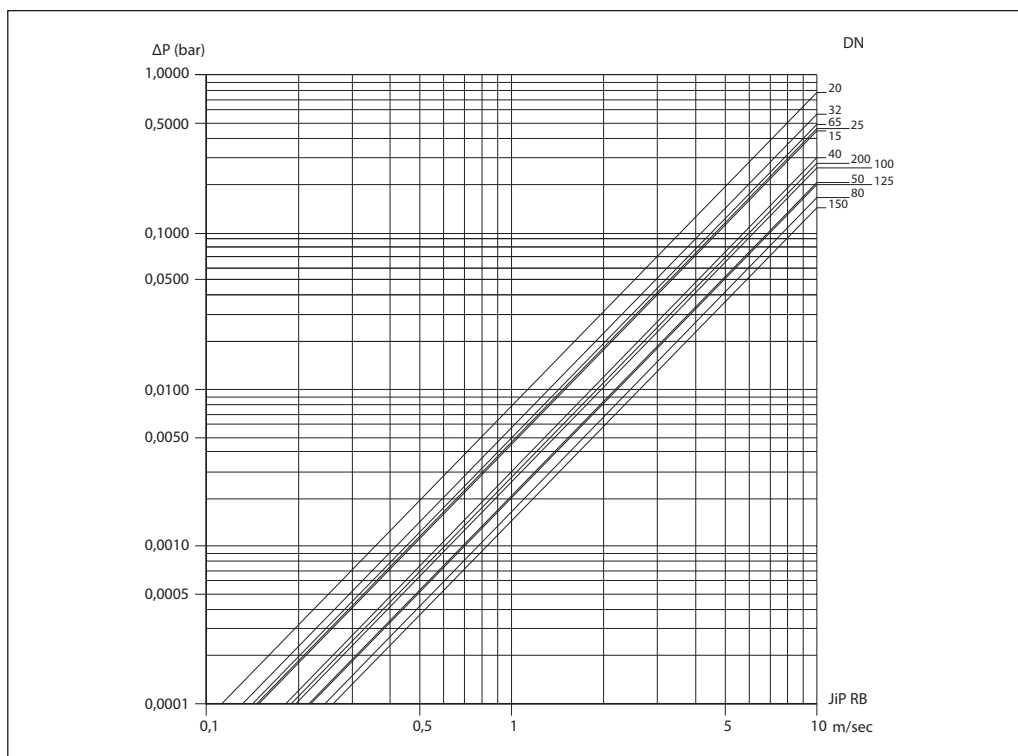
| Nominal diameter         | DN  | 15                | 20 | 25 | 32  | 40  | 50  | 65  | 80    | 100   | 125   | 150   | 200   |
|--------------------------|---|-------------------|----|----|-----|-----|-----|-----|-------|-------|-------|-------|-------|
| $k_{vs}$ reduced bore    | m <sup>3</sup> /h                             | 11                | 15 | 34 | 52  | 96  | 184 | 200 | 470   | 640   | 1.080 | 1.900 | 2.300 |
| $k_{vs}$ full bore       |   | -                 | 50 | 90 | 160 | 235 | 395 | 820 | 1.100 | 2.300 | -     | -     | -     |
| Nominal pressure         | PN  | 10 / 16 / 25 / 40 |    |    |     |     |     |     |       |       |       |       |       |
| Temperature range WW     | °C  | 0 ... 180         |    |    |     |     |     |     |       |       |       |       |       |
| Temperature range copper |   | 0 ... 130         |    |    |     |     |     |     |       |       |       |       |       |
| Medium                   | Circulation water / glycolic water up to 50 % |                   |    |    |     |     |     |     |       |       |       |       |       |

Pressure temperature diagram

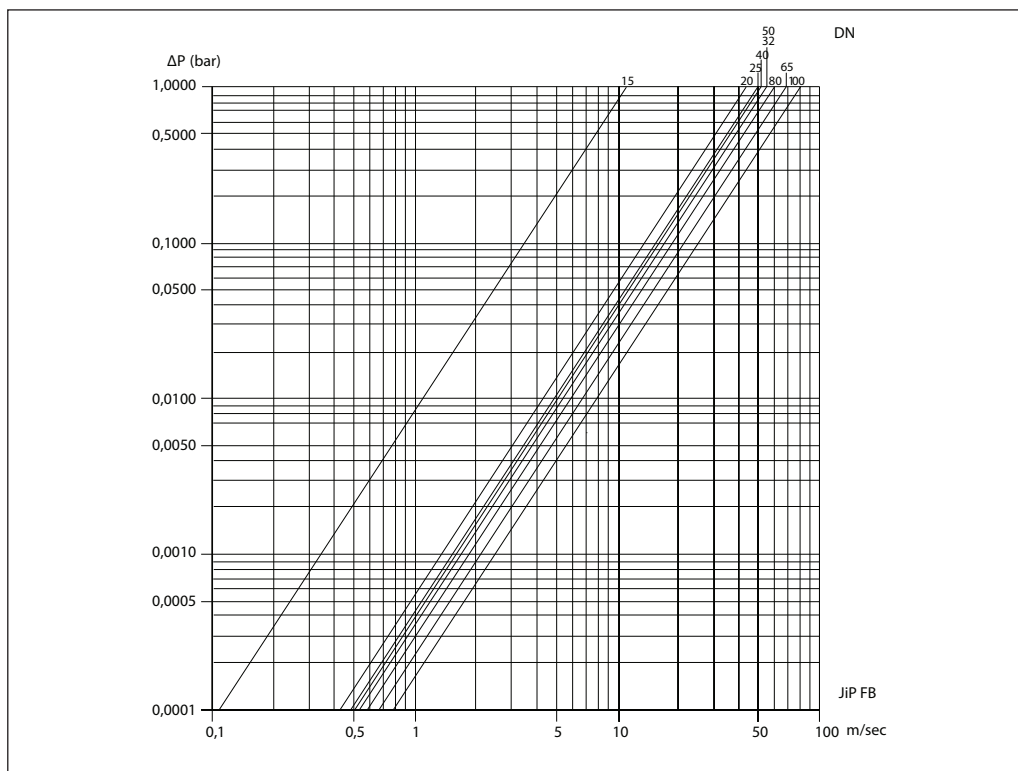


Pressure drop/velocity diagrams

Reduced bore

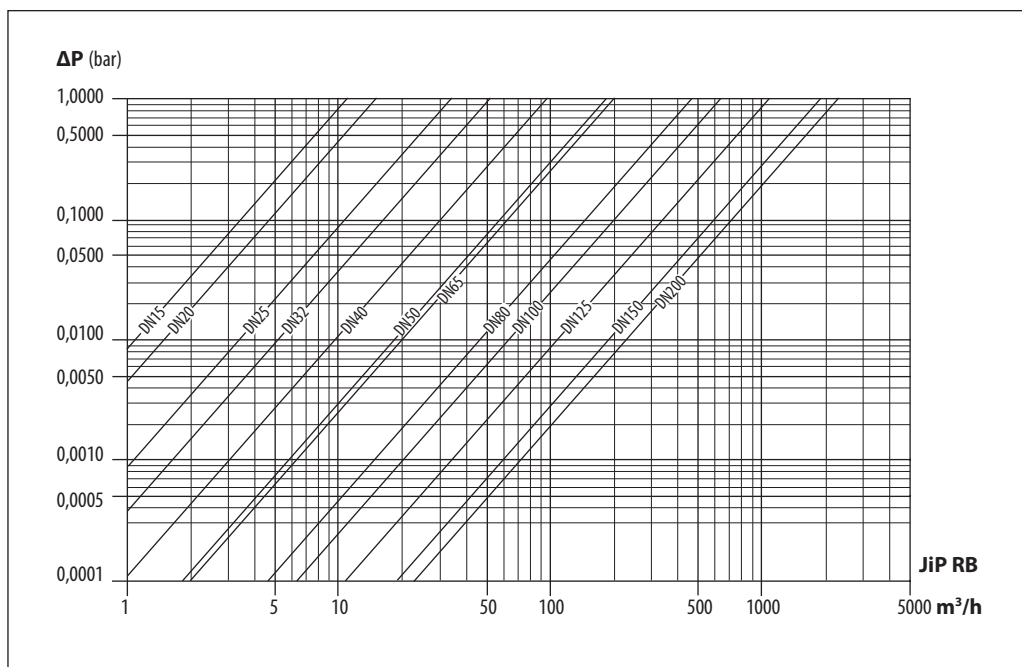


Full bore

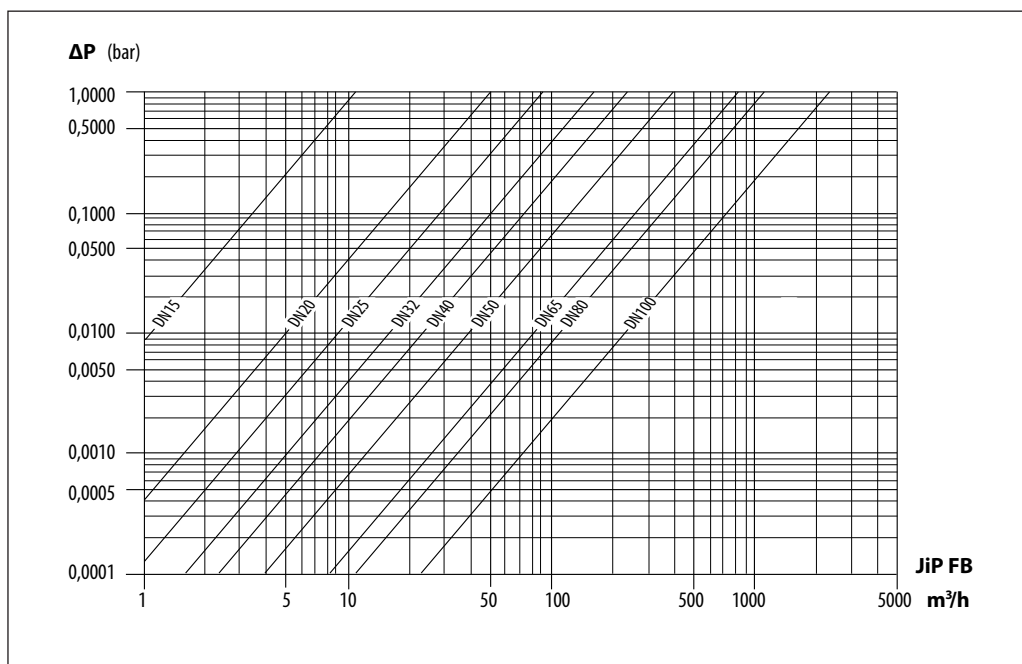


**Pressure drop/velocity diagrams**

Reduced bore



Full bore

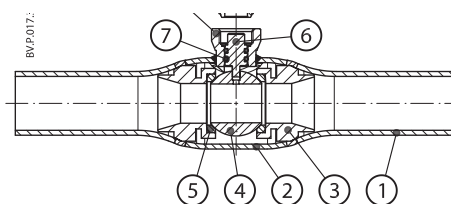


**Design & material**

Reduced bore  
JIP-WW  
JIP-CC

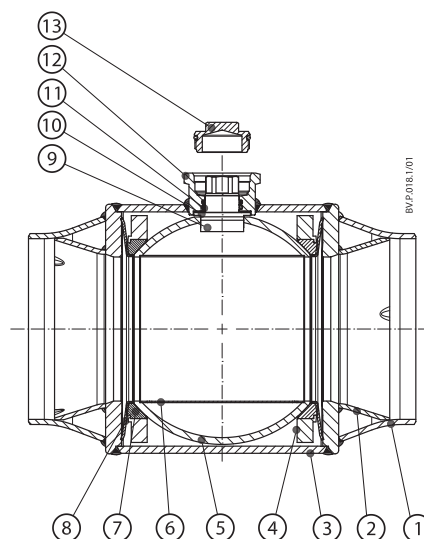
DN 15-100

|   |                    |                        |
|---|--------------------|------------------------|
| 1 | Welding end        | Steel P235GH           |
| 2 | Shell              | Steel P235GH           |
| 3 | Ball seal retainer | Steel P235             |
| 4 | Ball               | Stainless steel        |
| 5 | Ball seal          | Carbon reinforced PTFE |
| 6 | Stem               | Stainless steel        |
| 7 | O-ring             | EPDM                   |
| 8 | Packing box        | Steel P235GH           |
| 9 | Plug               | Steel P235GH           |



DN 125-200

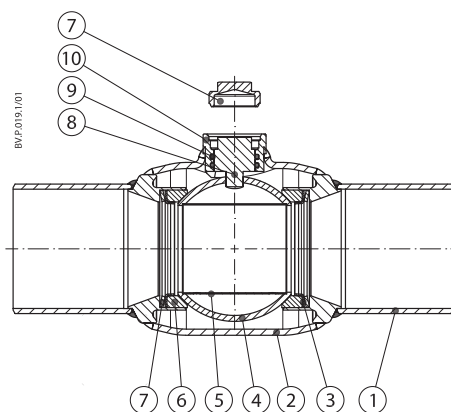
|    |                    |                        |
|----|--------------------|------------------------|
| 1  | Welding end        | Steel P235GH           |
| 2  | Guiding pipe       | Steel P235             |
| 3  | Shell              | Steel P235GH           |
| 4  | Ball seal retainer | Steel P235             |
| 5  | Ball               | Stainless steel        |
| 6  | Pipe insert        | Stainless steel        |
| 7  | Ball seal          | Carbon reinforced PTFE |
| 8  | Disc spring        | Domex 650 MC           |
| 9  | Stem               | Stainless steel        |
| 10 | Washer             | Carbon reinforced PTFE |
| 11 | O-ring             | EPDM                   |
| 12 | Packing box        | Steel P235GH           |
| 13 | Plug               | Steel P235GH           |



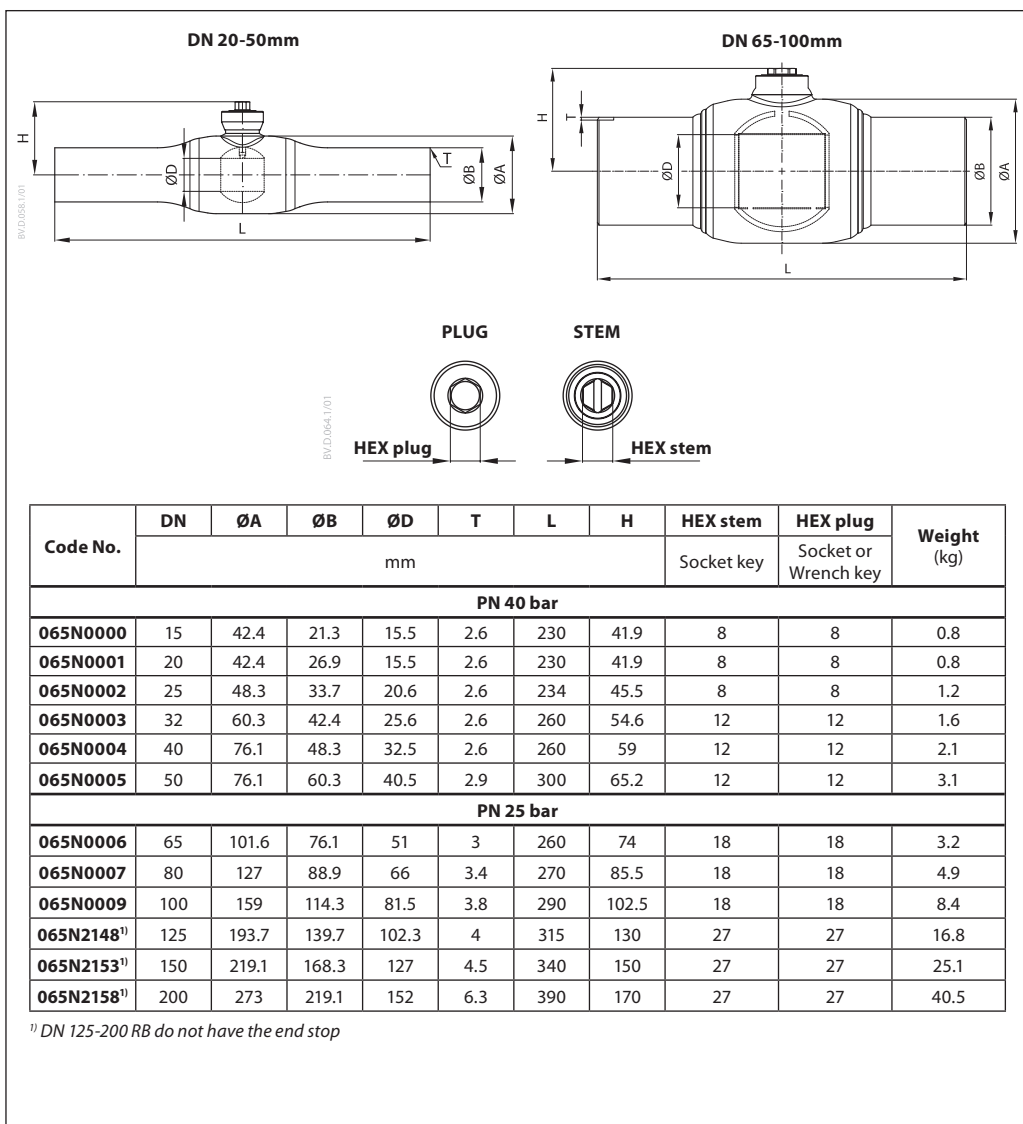
Full bore  
JIP-WW

DN 20-100

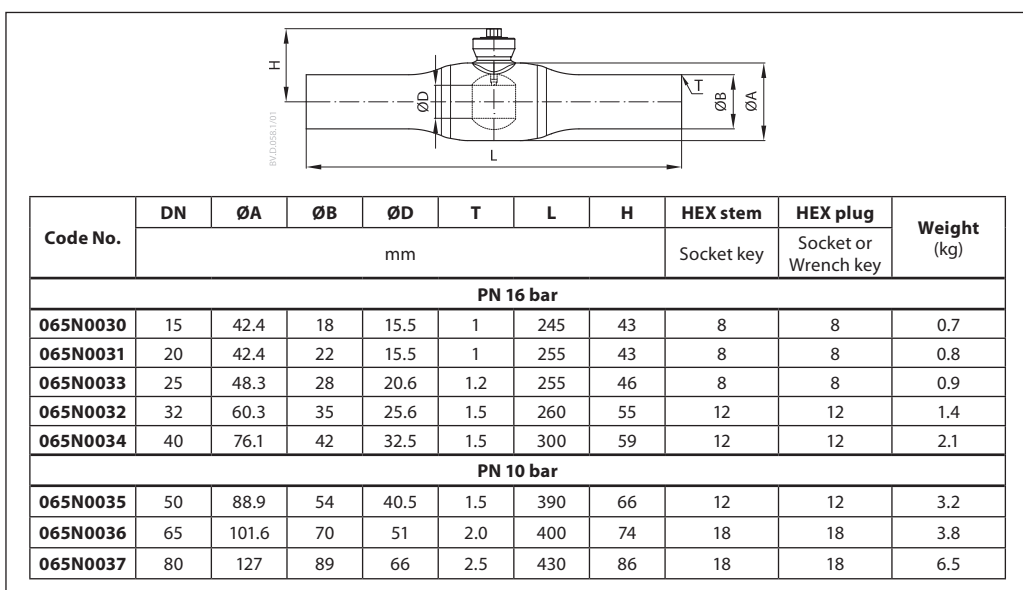
|    |                    |                        |
|----|--------------------|------------------------|
| 1  | Welding end        | Steel P235GH           |
| 2  | Shell              | Steel P235GH           |
| 3  | Ball seal retainer | Steel P235GH           |
| 4  | Ball               | Stainless steel        |
| 5  | Pipe insert        | Stainless steel        |
| 6  | Ball seal          | Carbon reinforced PTFE |
| 7  | Disc spring        | Stainless steel        |
| 8  | Stem               | Stainless steel        |
| 9  | O-ring             | EPDM                   |
| 10 | Packing box        | Steel P235GH           |
| 11 | Plug               | Steel P235GH           |



**Dimensions**  
Reduced bore  
JIP-WW

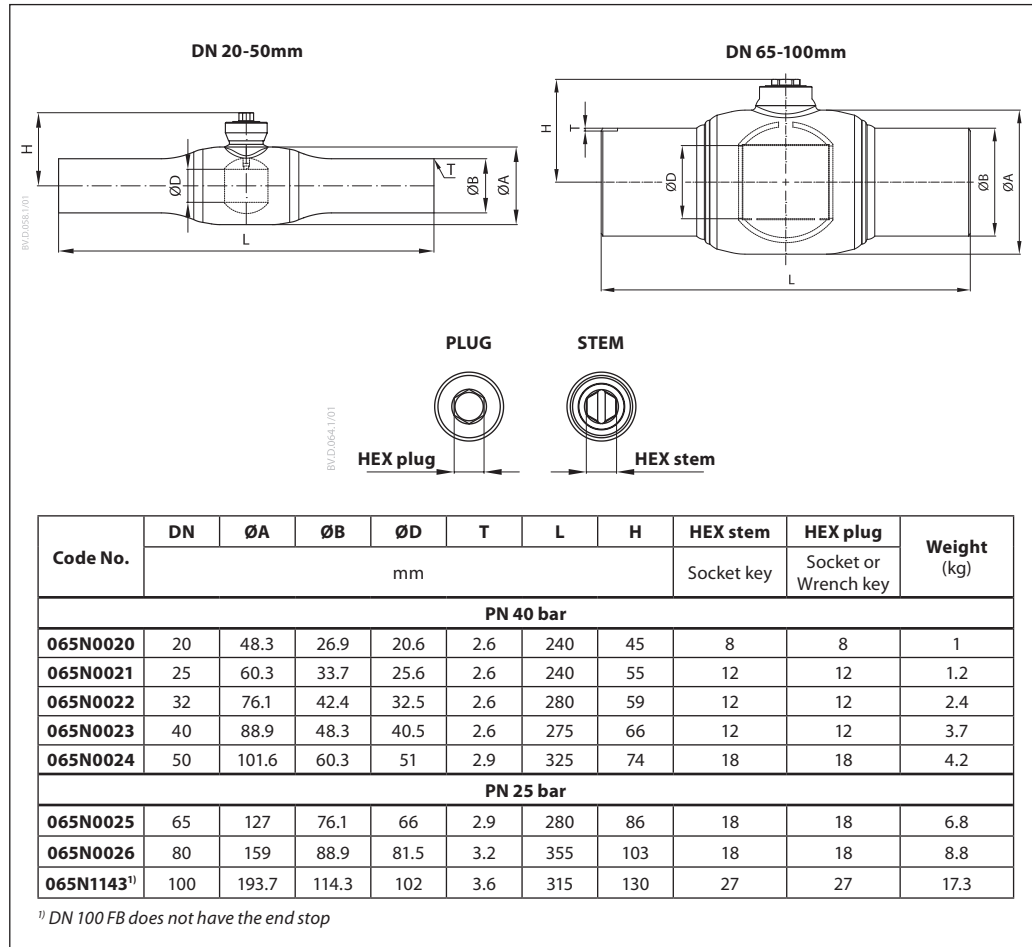


Full bore  
JIP-CC



Dimensions

Full bore  
JIP-WW



Danfoss A/S

Heating Segment • heating.danfoss.com • +45 7488 2222 • E-Mail: heating@danfoss.com

Danfoss can accept no responsibility for possible errors in catalogues, brochures and other printed material. Danfoss reserves the right to alter its products without notice. This also applies to products already on order provided that such alterations can be made without subsequential changes being necessary in specifications already agreed. All trademarks in this material are property of the respective companies. Danfoss and all Danfoss logotypes are trademarks of Danfoss A/S. All rights reserved.