

Data sheet

Hot tap JIP™ ball valves

Description



Danfoss JIP™ hot tap 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. Installation can be done using dedicated tool set, while the system is fully operational, which minimizes disruption to endusers and saves time and money.

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.

The valve design makes them ideal for underground installation due to:

- Energy saving: with optimum flow design valves have highest kv on the market and consequently lowest pump energy costs.
- Long lifetime and optimal tightness due to design and material selection in ball seal and stem seal (carbon reinforced PTFE)
- The valves are maintenance free.

Main data:

- DN 20-100
- PN 25/40
- Temperature: 0 ... 180 °C
- Medium: Circulation water / glycolic water up to 50 %
- Min. storage and transport temperature: -40 °C

Approvals and norms:

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

Important message

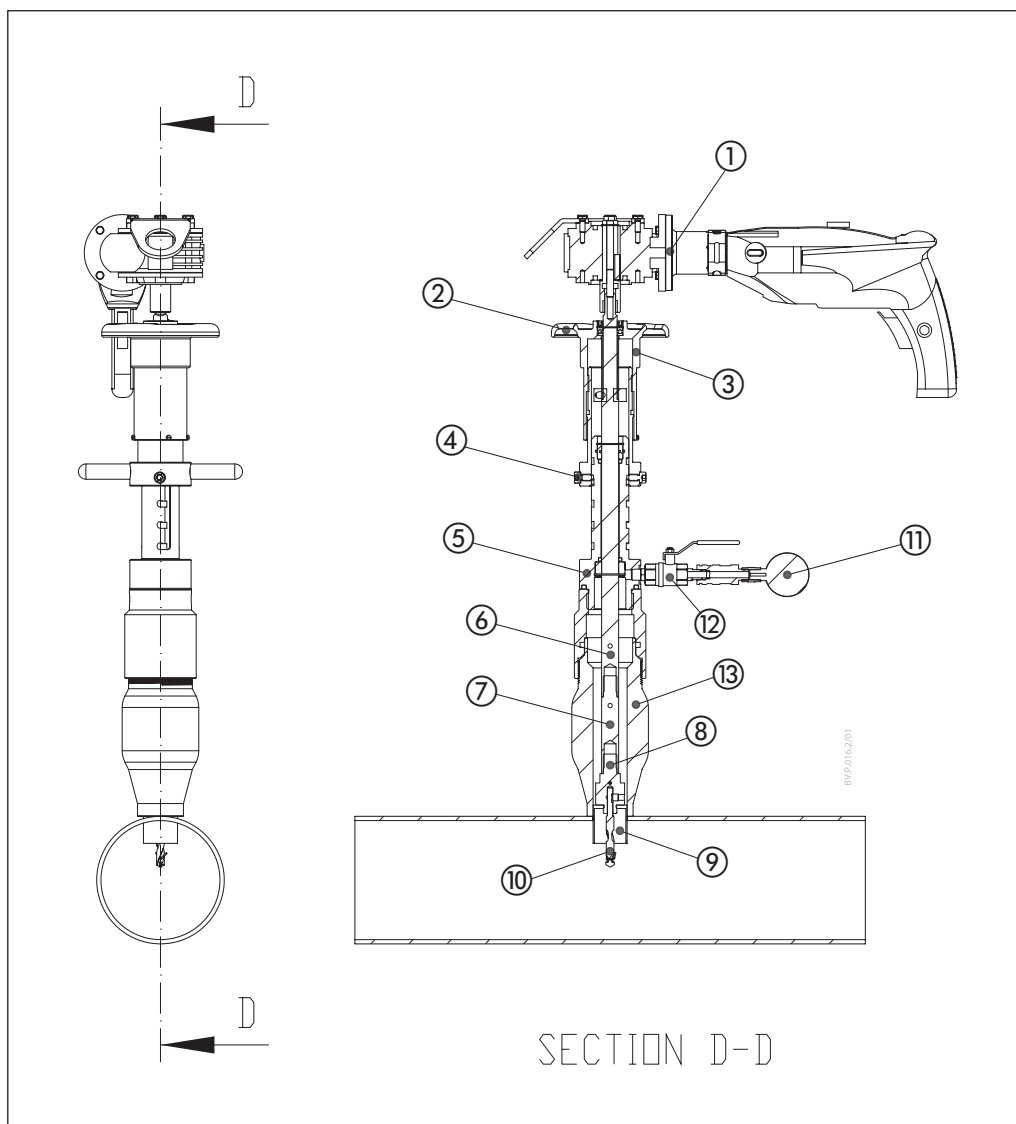
Please observe the German AGFW directive FW 432 and consider latest version. This directive contains: "Betriebliche Mindestanforderungen an die Erstellung eines Rohr-abzweiges an in Betrieb befindlichen Fernwärme-leitungen" (min. working instructions when connection branches to district heating pipes in operation according to the hot tap method).

Ordering
Hot tap valves
JIP-WW welding

DN	mm	20	25	32	40	50	65	80	100	
PN	bar	40						25		
Hole saw diameter	mm	Ø15	Ø24	Ø24	Ø40	Ø40	Ø48	Ø65	Ø79	
Code No.		065N0106	065N0111	065N0116	065N0121	065N0126	065N0131	065N0136	065N0141	
Adapter box Code No.		065N1003					065N1004			
065N1002										

Main hot tapping parts

1. Jr. Electric Drive unit
2. Jr. Feed Socket
3. Jr. Feed Extension Socket
4. Jr. Adjusting Handle
5. Jr. Body
6. Jr. Base Shaft
7. Jr. Shaft Extension
8. Jr. Chuck
9. Jr. Hole Saw
10. Jr. Pilot Drill
11. Jr. Pressure Gauge unit
12. Jr. Control Cock unit
13. Hot tap Ball valve




Hot tap tool box


Range of Ball Valves DN's	Old Hot tap tool box	New Hot tap tool box
Danfoss Hot Tapping Machine Full range DN20-100	-	065N1000
Danfoss Hot Tapping Machine with Adapter set Full range DN20-100	065N8310 ¹⁾ + 065N8312 ¹⁾	065N1000 + 065N1002
Danfoss Hot Tapping Machine with Adapter set Small range DN20-50	065N8310 ¹⁾	065N1000 + 065N1003
Danfoss Hot Tapping Machine with Adapter set Big range DN65-100	065N8312 ¹⁾	065N1000 + 065N1004


¹⁾Old tool boxes were without METABO Machine


Spare parts for hot tap tool box


Drills, saws and adapters


Picture	Valve size	Hole saw diameter	Complete drill with hole saw
	DN 20	Ø15	not used
	DN 25/32	Ø24	065N8012
	DN 40/50	Ø40	065N8013
	DN 65	Ø48	065N8093
	DN 80	Ø65	065N8014
	DN 100	Ø79	065N8097


JIP-HTT Tool set JR RL	Code No.
	065N1006

JIP-HTT Sealing set JR RL (for machine)	Code No.
	065N1007

JIP-HTT Sealing adapters set DN 20-100	Code No.
	065N1020

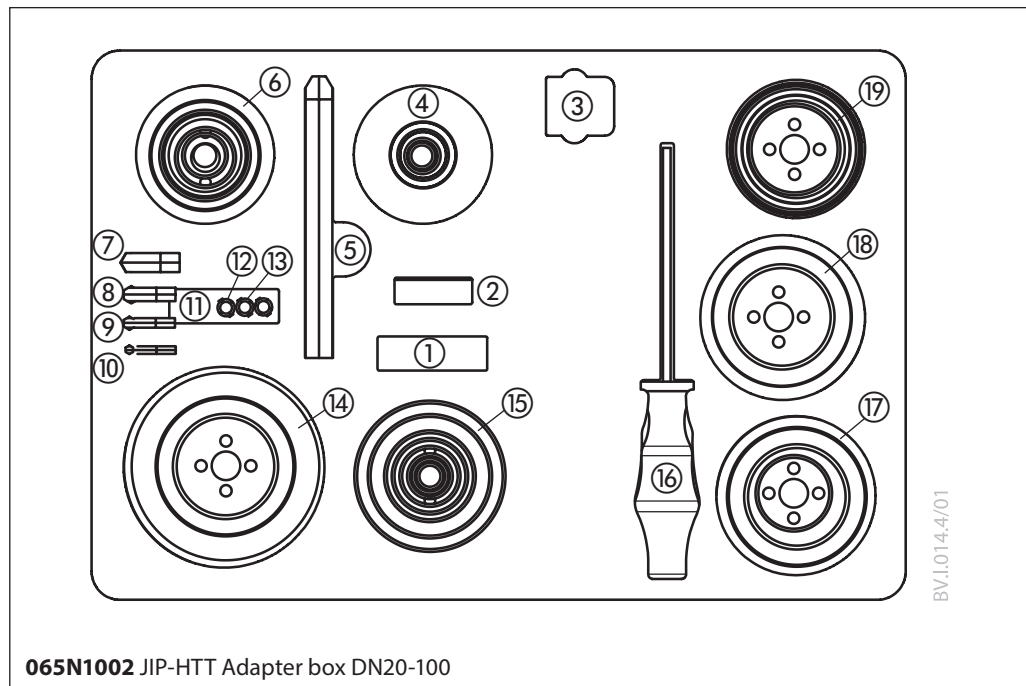
JIP-HTT Accessory box JR RL	Code No.
	065N1008

JIP-HTT 5pcs Pilot drill Jr normal (120mm)	Code No.
	065N1009

JIP-HTT 5pcs Pilot drill Jr short (90mm)	Code No.
	065N1010

Toolbox design and parts

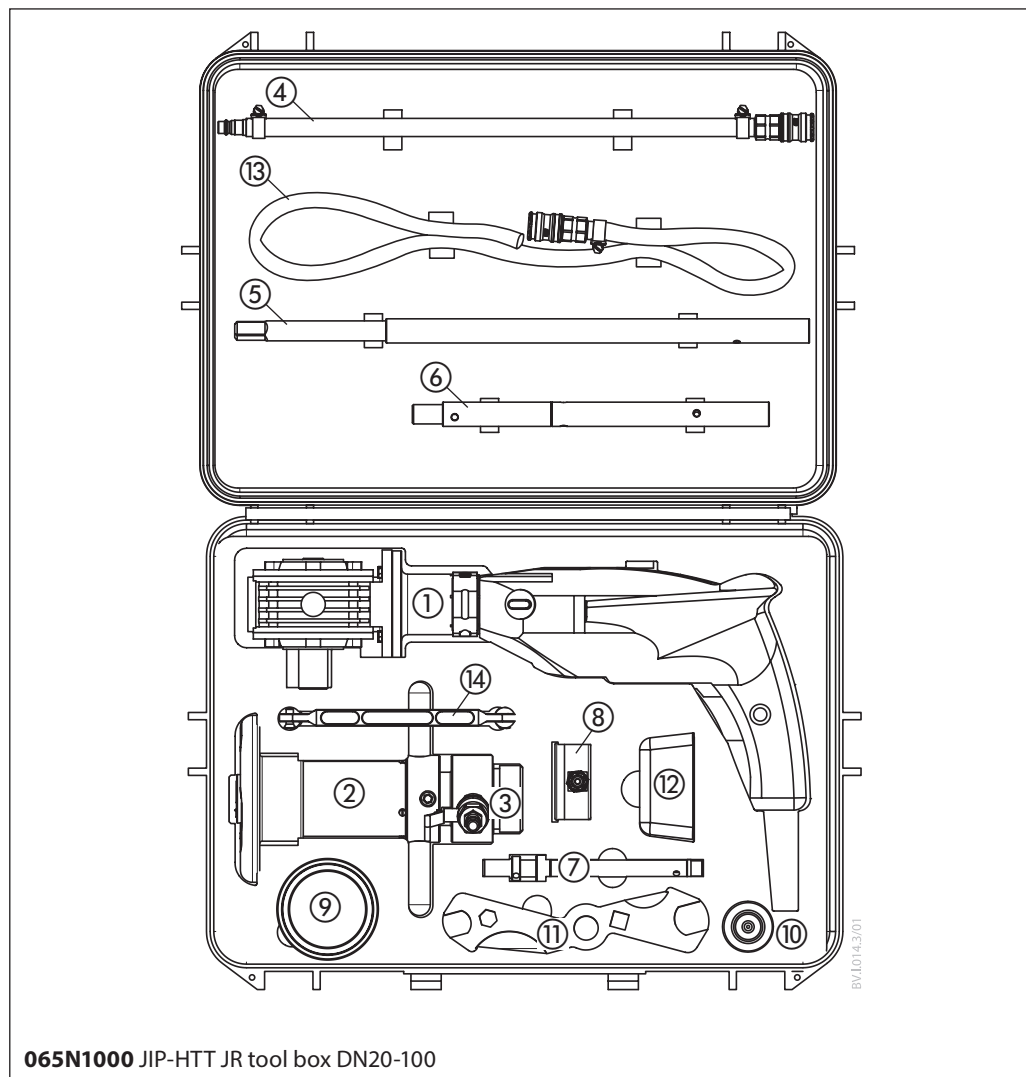
1. Adaptersocket DN40
2. Adaptersocket DN25
3. Allen key set 2.5-10mm
4. Adapter DN20
5. Allen key 14mm
6. Adapter DN32
7. Allen key 10mm
8. Allen key 7mm
9. Allen key 5mm
10. Allen key 4mm
11. Spare sealing set
12. Pilot Drill MH normal (120mm)
13. Pilot Drill MH short (90mm)
14. Adapter DN100
15. Hole Saw HSS 20-100mm
16. Screwdriver 6mm
17. Adapters DN50
18. Adapters DN80
19. Adapters DN65



065N1002 JIP-HTT Adapter box DN20-100

Toolbox design and parts

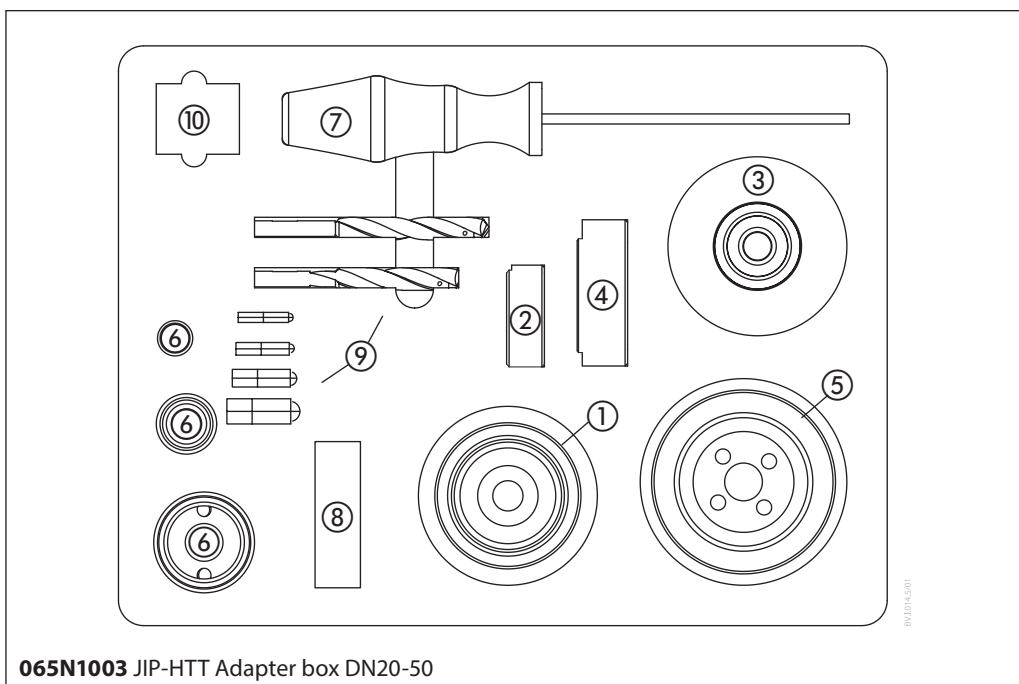
1. Electric drive Jr. compl.
2. Feed device Jr. compl.
3. Jr. Body Complete
4. Drill Shaft 350/475 mm
5. Extension shaft 180 mm
6. Extension 90 mm
7. Special shaft DN20
8. Pressure Monitoring Set 40 bar
9. Cut-paste
10. Sealant lubricant
11. Wrench
12. Accessory box Jr.
Gear Fastening Screw
Shaft extension Socket
Chuck for Hole-Saws < 30 mm
Chuck for Hole-saws > 30 mm
Magnet for JR./B30
Allen key 3 mm
Allen key 4 mm
Allen key 5 mm
Shaft opening pin Jr/B30
13. Pressure relief hose
14. Pipe wrench



065N1000 JIP-HTT JR tool box DN20-100

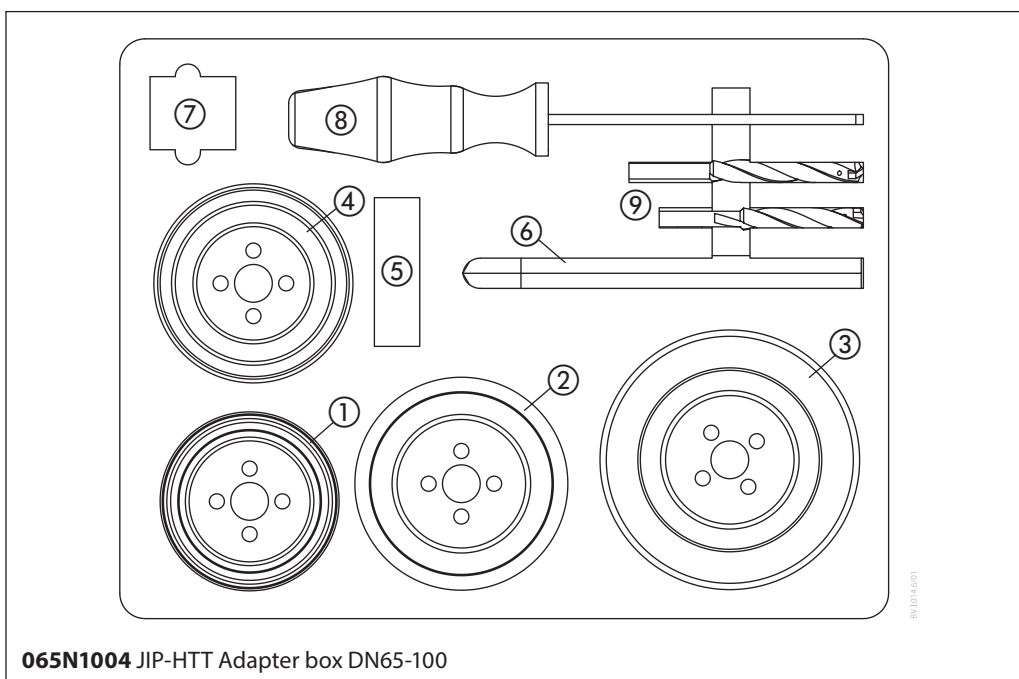
Toolbox design and parts

1. Adapter DN20
2. Adaptersocket DN25
3. Adapter DN32
4. Adaptersocket DN40
5. Adapter DN50
6. Hole saws DN20-DN50
7. Screwdriver 6 mm
8. Spare sealing set
9. Pilot Drills Jr-HM normal and short
10. Allen key set 2,5-10 mm



Toolbox design and parts

1. Adapter DN65
2. Adapter DN80
3. Adapter DN100
4. Hole saws DN65-DN100
5. Spare sealing set
6. Allen key 14 mm
7. Allen key set 2,5-10 mm
8. Screwdriver 6 mm
9. Pilot Drills Jr-HM normal and short

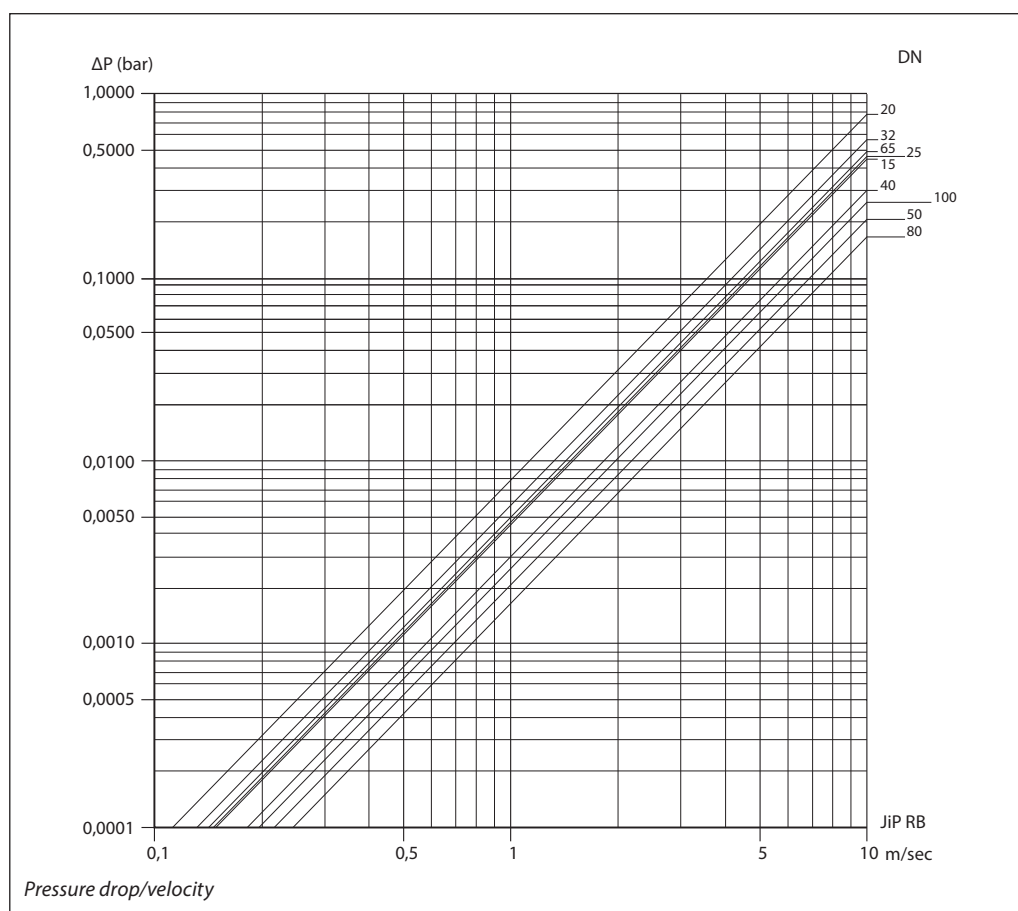


Technical data

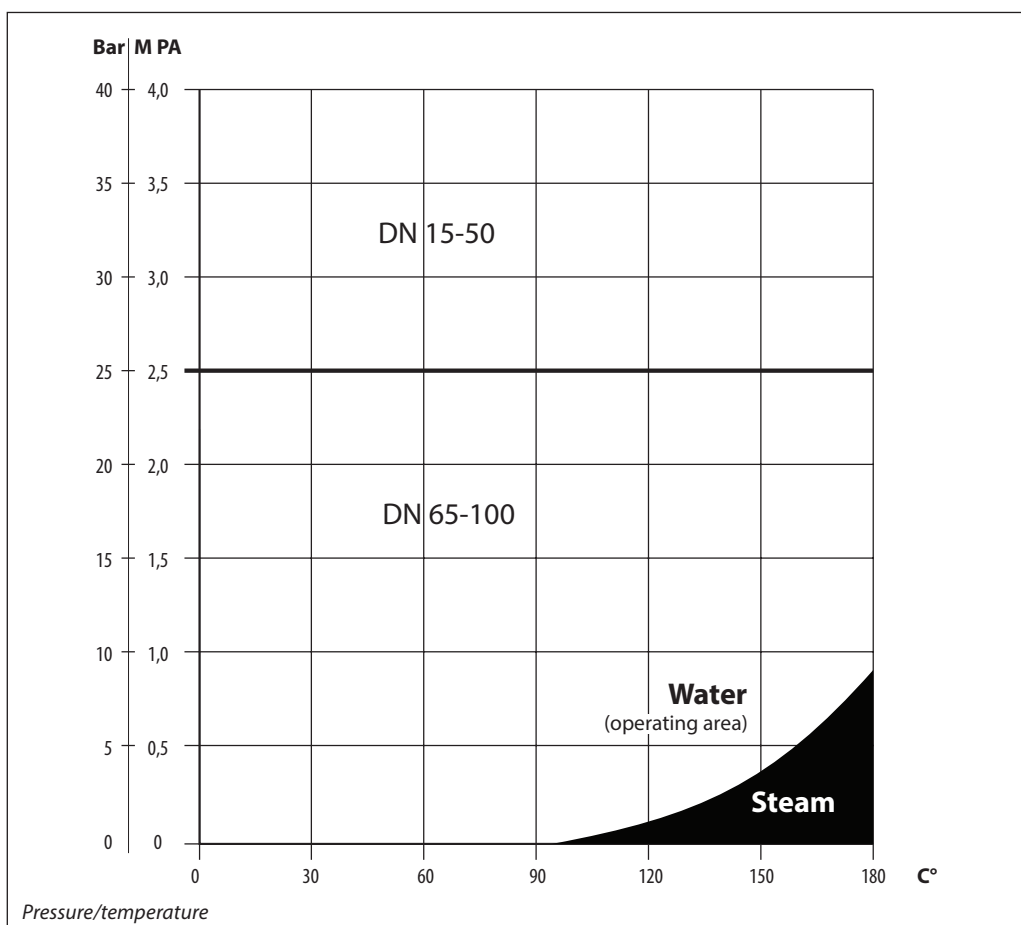
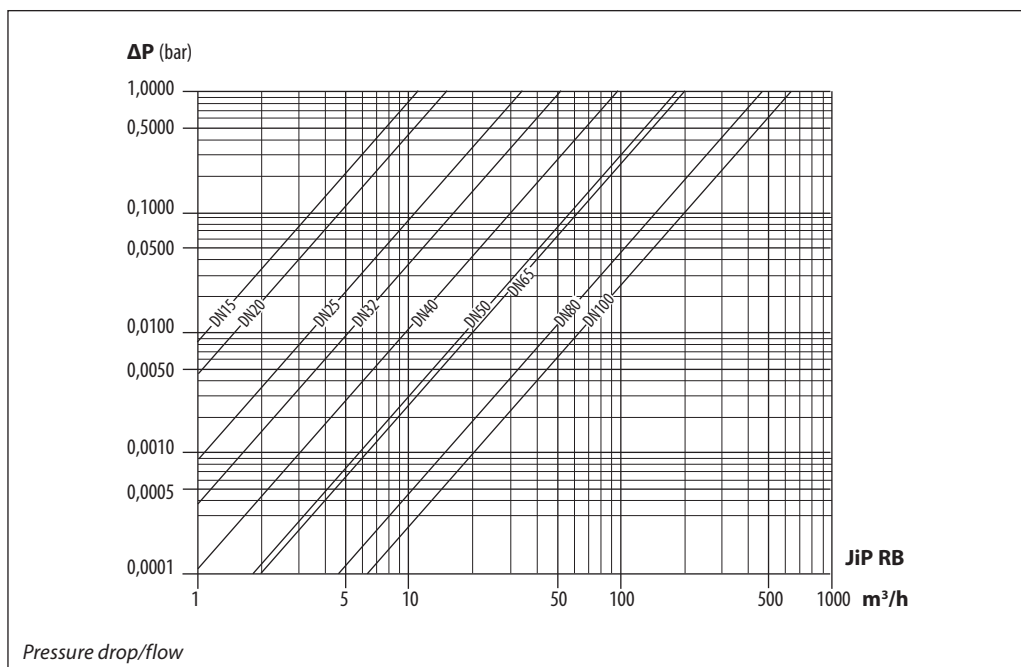
DN	mm	20	25	32	40	50	65	80	100	
PN	bar	40					25			
Temp range	°C	0-180								
Medium		Circulation water / glycolic water up to 50 %								

Material

Shell (Valve body)	Weldable mild steel* e.g. P235GH / Mat. no. 1.0345 (~ St. 37.0)
Welding ends	Weldable mild steel* e.g. P235GH / Mat. no. 1.0345 (~ St. 37.0)
Valve Stem	Stainless steel e.g. X5CrNi18-10 (EN 10088) / W.nr. 1.4301 (~ AISI 304)
Ball	
Seat rings	Carbon reinforced PTFE
Stem sealings	EPDM



Technical data (continuous)



Data sheet

Hot tap JIP™ ball valves

Dimensions

JIP hot tap

