

#### **Data sheet**

# JIP™ hot tap ball valves

#### Description



#### **Application:**

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.

With Danfoss JIP™ hot tap ball valves new connections and maintenance of the district heating network can be done while the system is fully operational. This saves time and eliminates interruptions for the users.

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
- New plug construction
- · The valves are maintenance free
- Standard and OEM versions

#### Main data:

- DN 15-100 mm
- k<sub>vs</sub> 11-2.300 m<sup>3</sup>/h
- PN 25/40 bar
- 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 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 ISO 45001
- Hot tapping machine are TUV. A.366 16 approved.

### Ordering

Hot tap JIP-WW and tool boxes  $T = 0 \dots 180 \text{ °C}$ 

#### **Standard version**

Picture	DN (mm)	Kvs (m³/h)	Hole saw diameter (mm)	PN (bar)	Code No.	Hot tapping machine (DN 15-100 mm)	Adapter Box	
	15/20	11	Ø 15		065N0050			
	25*	90	Ø 24		065N0051	065N1000	065N1003	065N1002
	32	52	Ø 24	40	065N0052	0)		
	40*	235	Ø 40		065N0053			
	50	184	Ø 40		065N0054	Ŧ		
	65	200	Ø 48		065N0055	*		
	80	470	Ø 65	25	065N0056	1 🔻	065N1004	
	100	640	Ø 79		065N0057	₩		

#### **OEM version**

Picture	DN (mm)	Kvs (m³/h)	Hole saw diameter (mm)	PN (bar)	Code No.	Hot tapping machine (DN 15-100 mm)	Adapter
_	20*	50	Ø 19		065N0070		065N1022
	25	34	Ø 19	40	065N0071	065N1000	065N1022
	40	96	Ø 32		065N0072		065N1023

<sup>\*</sup> Full bore desian





# Spare Parts for hot tap valves

Top plug for packing box

Picture	Valve size (mm)	Code No.
	15	065N0010
	20	065110010
	25	
	32	0.5110044
	40	065N0011
	50	
	65	065N0012
	80-100	065N0013

Note: Packaging contains 10 pcs

# Spare parts for hot tap tool box

Picture	Description	Details	Code No.
	JIP-HTT Accessory box	Shaft opening pin (5 pcs) Accessory box Pilot Drills (90 mm and 2 pcs 120 mm) Allen key 3, 4 and 5mm Extension socket Gear fastening screw Chip magnet Drill Holder for Hole Saws > 30 and < 32 mm	065N1008
00	JIP-HTT Sealing set (for machine)	Ret.Ring for Upper/Lower Bearing Upper/Lower PTFE-Bearing Base sealing Lip and shaft sealings Jr. Thrust Bearing Jr. Thrust retaining ring O-ring upper bearing	065N1007
	JIP-HTT Sealing adapters set DN 20-100	Sealing adapter DN20-100 mm (8 pcs) Chip Magnet Shaft opening pin (5 pcs)	065N1020
	JIP-HTT Pilot drill normal (95mm)	5 pieces set of drills 95 mm	065N1009
	JIP-HTT Pilot drill short (83mm)	5 pieces set of drills 83 mm	065N1010
	JIP-HTT Tool set	Allen keys - 3, 4 and 5 mm Special wrench (2 pccs) Chip Magnet Shaft opening pin (5 pcs) Pipe wrench 13 mm	065N1006

## Spare parts for ${\bf standard}\ {\bf version}$

Picture	Description	Valve size	Hole saw diameter	Code No.
		DN 15/20	Ø15	065N8020
		DN 25/32	Ø24	065N8012
mular	JIP-HTT Hole saw	DN 40/50	Ø40	065N8013
	JIP-HTT Hole saw	DN 65	Ø48	065N8093
		DN 80	Ø65	065N8014
		DN 100	Ø79	065N8097
		DN 15/20	-	065N7980
		DN 25	*JIP HTT adapter DN 32 +JIP-HTT adapter reduction socket DN 25	-
(9)		DN 32	-	065N7981
	JIP-HT adapters	DN 40	*JIP HTT adapter DN 50 +JIP-HTT adapter reduction socket DN 40	-
		DN 50	-	065N7982
		DN 65	-	065N7983
		DN 80	-	065N7984
		DN 100	-	065N7985
		DN 25	JIP-HT adapter socket DN 25	065N7986
	JIP-HT adapter reduction sockets	DN 40	JIP-HT adapter socket DN 40	065N7987

 $<sup>*</sup> For the sizes \, DN\,25 \, as \, well \, as \, for \, DN40 \, reduction \, sockets \, have \, to \, be \, added \, to \, adapter \, of \, the \, next \, size \, details a constant of the extraction of the ext$ 

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# Spare parts for hot tap tool

**box** (continuous)

#### Spare parts for **OEM** version

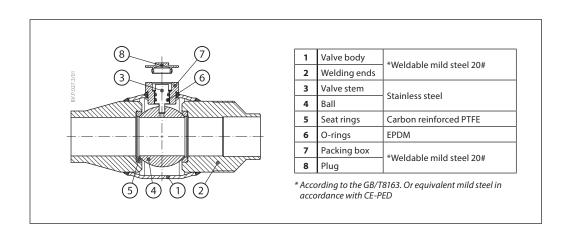
Picture	Description	Valve size	Hole saw diameter	Code No.
		DN 20	Ø19	065N8086
	JIP-HTT Hole saw	DN 25	919	06518086
		DN 40	Ø32	065N8089

#### **Technical data**

Nominal diameter	DN	15/20	25	32	40	50	65	80	100		
Nominal pressure	PN			40	25						
Temp range	°C		0-180								
Medium				Circulatio	n water / gly	colic water	up to 50 %				

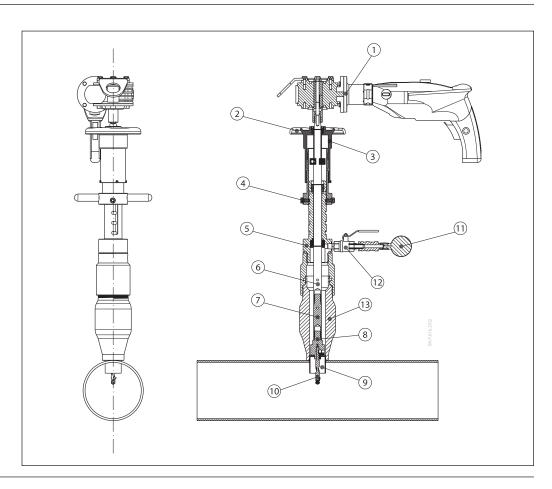
## Design and material:

JIP Hot tap



## Hot tapping tool design

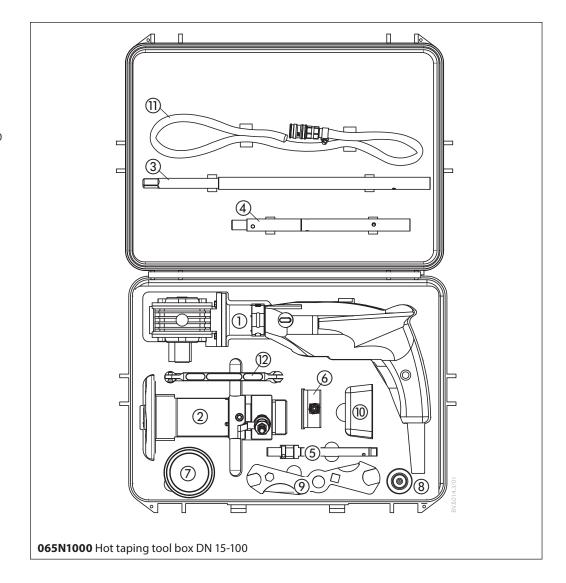
- 1. Metabo drilling machine with mounted reduction gear as a part of Hot taping tool box DN 15-100 code 065N1000 / Manual Jr-Ratchet drive as a part of the Hot taping adapter tool box DN 15-32 code 065N1021
- 2. Feeding wheel
- 3. Feed Extension Socket
- 4. Adjusting Handle
- 5. Tool body
- **6.** Base Shaft
- 7. Shaft Extension
- 8. Drill holder
- 9. Hole Saw
- 10. Pilot Drill
- 11. Pressure Gauge
- **12.** Shut off valve
- 13. Hot tap Ball valve





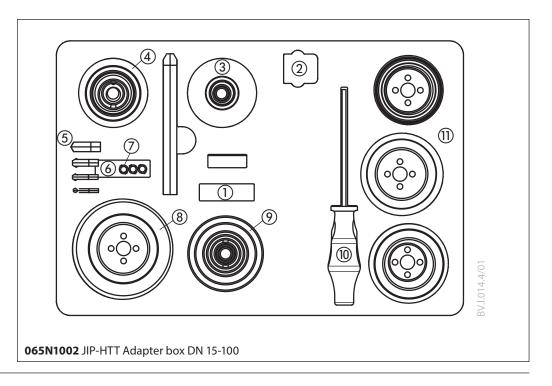
#### Toolbox design and parts

- 1. Metabo drilling machine with mounted reduction gear
- Feed device
- 3. Base Shaft
- 4. Extension shaft
- Special shaft DN 20
- **6.** Pressure Monitoring Set 40 bar
- **7.** Cutting paste
- 8. Sealant lubricant
- 9. Wrench
- **10.** Accessory box
- 11. Pressure relief hose
- 12. Pipe wrench



### **Toolbox design and parts**

- 1. Adapter socket DN 25/40
- 2. Allen key set
- **3.** Adapter DN 15/20
- 4. Adapter DN 32
- 5. Allen key set6. Spare sealing set
- **7.** Pilot Drills
- 8. Adapter DN 100
- Hole Saw HSS 15-100mm 9.
- 10. Screwdriver 6mm
- **11.** Adapters DN 50-80



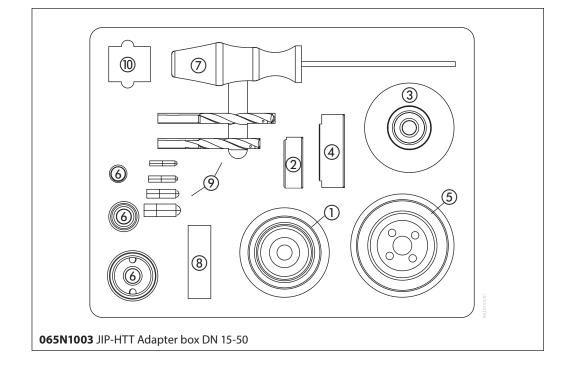
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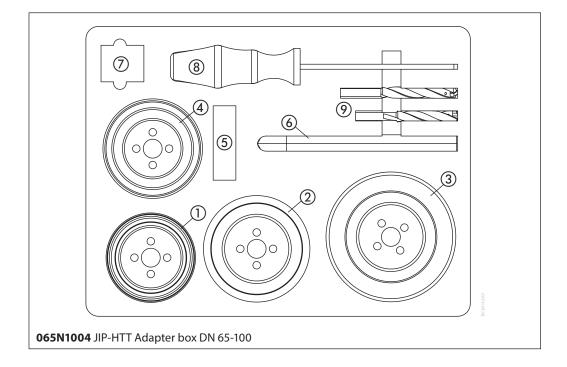
#### Toolbox design and parts

- Adapter DN 15/20
   Adapter socket DN 25
- 3. Adapter DN 32
- 4. Adapter socket DN 40
- 5. Adapter DN 50
- **6.** Hole saws DN 15-DN 50
- 7. Screwdriver 6 mm
- 8. Spare sealing set
- 9. Pilot Drills HM normal and short
- 10. Allen key set 2.5-10 mm



### **Toolbox design and parts**

- Adapter DN 65
   Adapter DN 80
- 3. Adapter DN 100
- **4.** Hole saws DN 65-DN 100
- **5.** Spare sealing set
- **6.** Allen key 14 mm
- **7.** Allen key set 2.5-10 mm
- 8. Screwdriver 6 mm
- 9. Pilot Drills HM normal and short

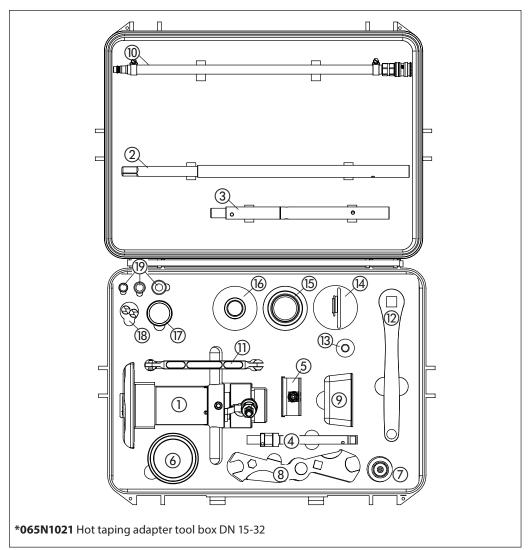


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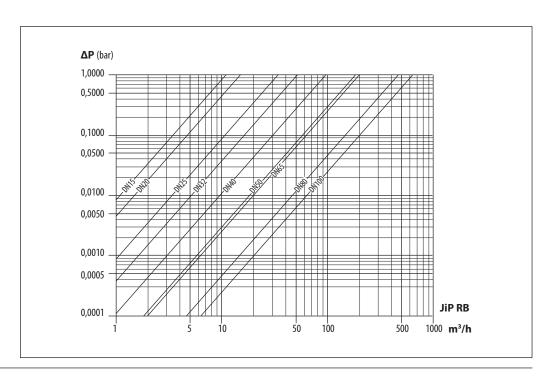
#### Toolbox design and parts

- 1. Feed device
- 2. Base Shaft
- 3. Extension shaft
- 4. Special shaft DN 20
- **5.** Pressure Monitoring Set 40 bar
- 6. Cutting paste
- 7. Sealant lubricant
- 8. Wrench
- **9.** Accessory box
- **10.** Pressure relief hose
- **11.** Pipe wrench
- **12.** Jr-Ratchet drive
- **13.** Drill turning socket ½" 10 mm HEX
- **14.** Adapter sealing set
- 15. Adapter DN 32
- 16. Adapter DN 20
- 17. Adapter DN 25
- 18. Jr. Pilot drill D14
- **19.** Hole saws DN 15-DN 32



<sup>\*</sup>Hot tap-manual ratchet driven machine toolbox for valves DN 15/20-32 with included adapters

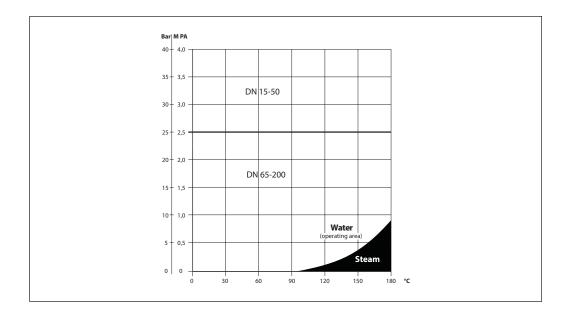
#### Pressure drop/flow diagram



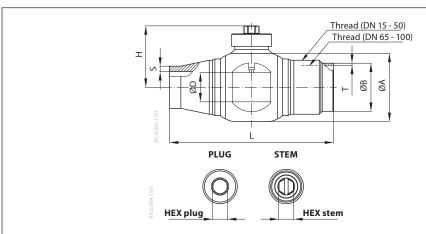
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# Pressure/temperature diagram



# **Dimensions** *JIP hot tap*



#### **Standard version**

		~-	<b>~</b> 5	<b>~</b> 5	_	_						
	DN	ØA	ØB	ØD	1	S	L	Н	Thread	HEX stem	HEX plug	Weight
Code No.				mm	1				ISO 228	Socket key	Socket or Wrench key	(kg)
						F	PN 40 l	ar				
065N0050	15/20	42.4	24.0	15.5	2.5	3.9	128	42	G 3/4	8	8	0.7
065N0051	25	60.3	33.7	25.6	3.2	5.9	145	54.1	G 1 1/2	12	12	1.5
065N0052	32	60.3	42.4	25.6	3.2	5.9	145	54.1	G 1 1/2	12	12	1.5
065N0053	40	88.9	48.3	40.5	3.2	6.7	200	64.4	G 2 1/2	12	12	3.9
065N0054	50	88.9	60.3	40.5	3.2	6.7	200	64.4	G 2 1/2	12	12	3.9
						F	PN 25 l	ar				
065N0055	65	101.6	76.1	51.6	3.0	5.5	260	72	G 2 1/4	18	18	4.0
065N0056	80	127.0	88.9	66.3	3.5	6	265	84	*G 2 3/4	18	18	7.0
065N0057	100	159.0	114.3	81.8	3.7	7.5	275	101	G 3 1/2	18	18	9.6

<sup>\*</sup>JIP Special thread. Deviation to standard G 2 3/4 (ISO 228) is in smaller major diameter (79,3 mm)

### **OEM version**

	DN	ØA	ØB	ØD	T	S	L	Н	Thread	HEX stem	HEX plug	Weight
Code No.				mm	1				ISO 228	Socket key	Socket or Wrench key	(kg)
PN 40 bar												
065N0070	20	48.3	26.9	20.6	3.1	4	140	44.5	M 36 x 1.5	8	8	0.8
065N0071	25	48.3	33.7	20.6	3.2	4	140	42	M 36 x 1.5	8	8	0.8
065N0072	40	76.1	48.3	32.5	3.2	6.3	172	59	G 2	12	12	2.4

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#### Danfoss A/S

**Data sheet** 

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