

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).
- PED Directive 97/23/EEC Modul H1
- Danfoss A/S is certified according to ISO 9001
- Furthermore certified according to ISO 14001 and OHSAS 18001.

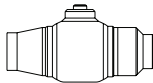
Important message

Please observe the German directive FW 432 from October 1998 (former: AGFW-directive 4.2.8 from June 1995). 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).

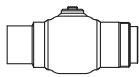
Ordering

Hot tap valves
JIP-WW welding

Hot tap valves Type 1

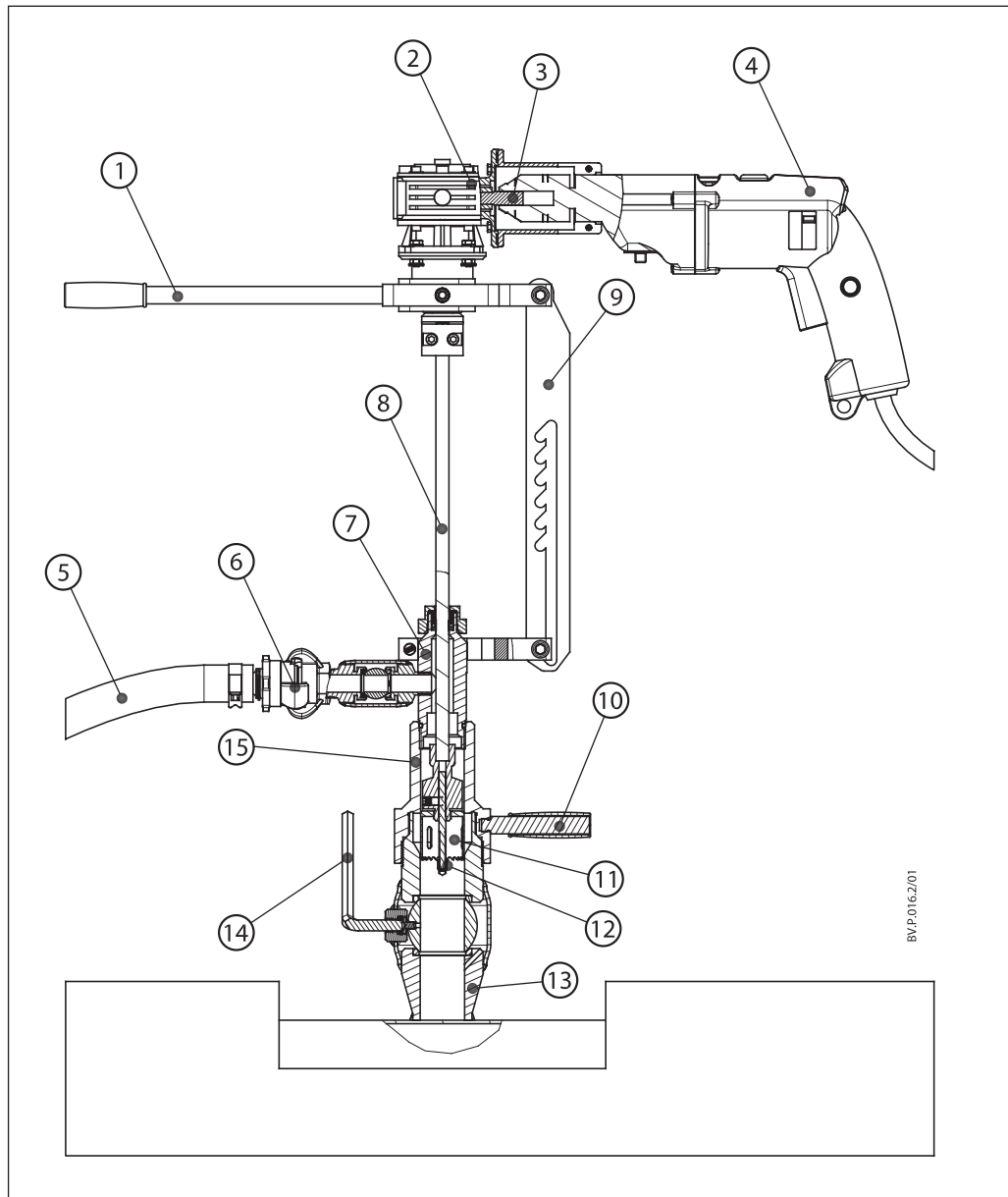
										
DN	mm	20	25	32	40	50	65	80	100	
PN		40					25			
Hole saw diameter	mm	Ø15	Ø24	Ø24	Ø40	Ø40	Ø48	Ø65	Ø79	
Code No.		065N0106	065N0111	065N0116	065N0121	065N0126	065N0131	065N0136	065N0141	

Hot tap valves Type 2

					
DN	mm	20	25	40	50
PN		25			
Hole saw diameter	mm	Ø19	Ø19	Ø32	Ø40
Code No.		065N4006	065N4007	065N0221	065N0225

Main hot tapping parts

1. Handle for feeding tool
2. Reduction wrench 1:7
3. Stem for drilling machine
4. Drilling machine (not included)
5. Water hose
6. Screw coupling
7. Hot tapping tool
8. Drill
9. Feeding tool
10. Handle for adapter
11. Hole saw
12. Center drill
13. Hot tap valve
14. Allan key
15. Hot tap adapter



BV/P.016.2/01

Hot tap tool box

Description	Code No
Hot tap tool box DN 15-50	065N8310
Hot tap tool box DN 65-100	065N8312
Steam / hot water hose 5 m	065N8244

Spare parts for hot tap tool box

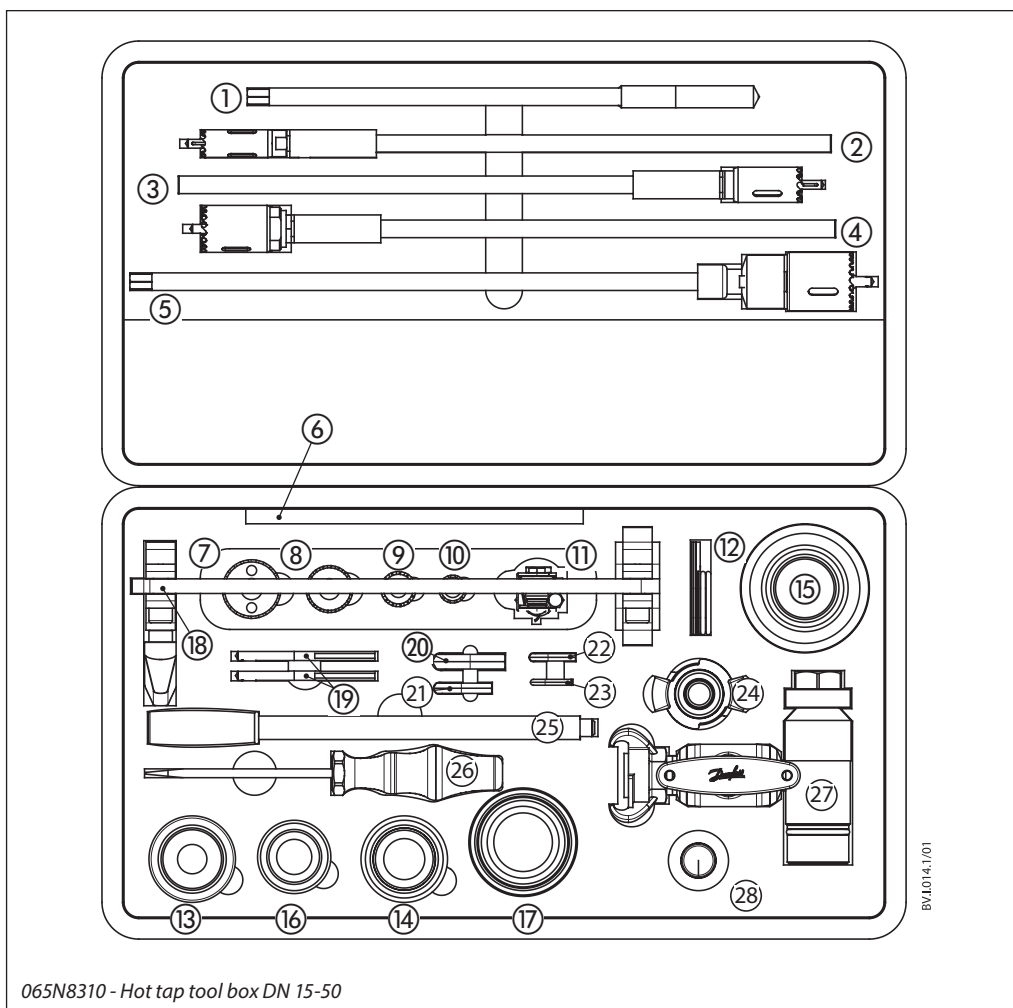
Drills, saws and adapters

Valve size	Hole saw diameter	Complete drill with hole saw	Hole saw	Adapter for hot tap valves
Hot tap valves Type 1				
DN 20	Ø15	065N8006	not used	065N8080
DN 25/32	Ø24	065N8008	065N8012	065N8087
DN 40/50	Ø40	065N8010	065N8013	065N8005
DN 65	Ø48	065N8010	065N8093	065N8091
DN 80	Ø65	065N8192	065N8014	065N8094
DN 100	Ø79	065N8193	065N8097	065N8095
Hot tap valves Type 2				
DN 20	Ø19	065N7997	065N8089	065N8084
DN 25	Ø19	065N7997	065N8089	
DN 40	Ø32	065N7998	065N8086	065N8151
DN 50	Ø40	065N8010	065N8013	

Note! When ordering spare parts we recommend to also order service sets. Please see next page for list of all available spare parts.

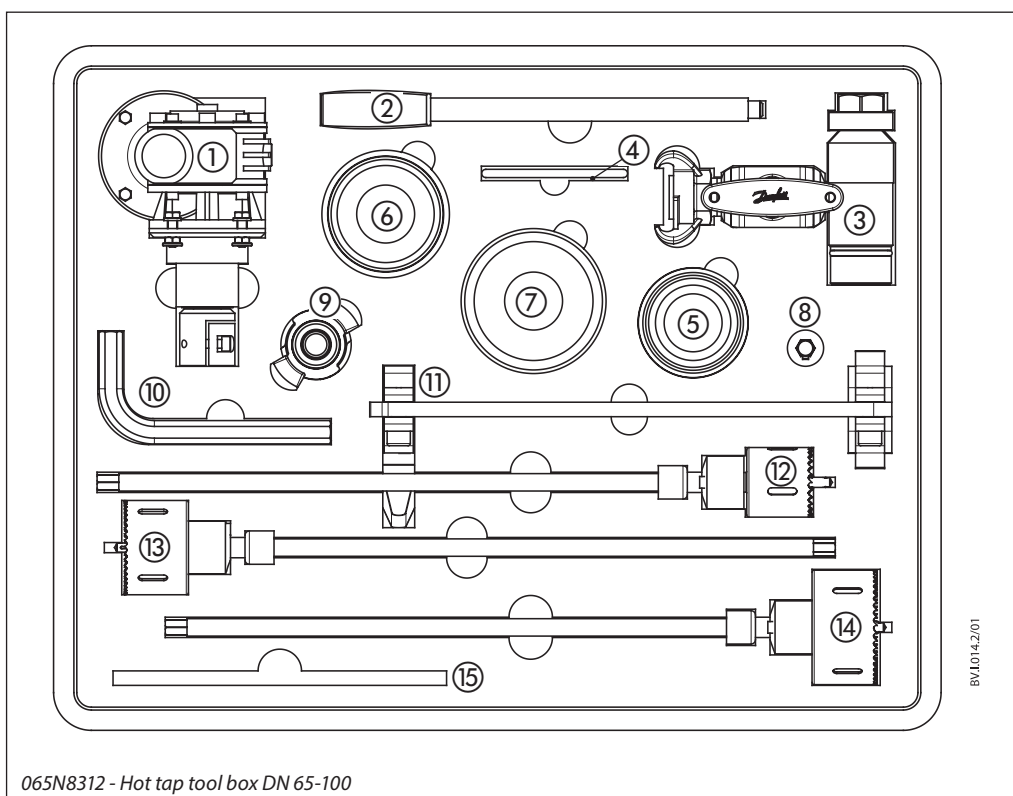
Toolbox design and parts

1. 065N8006 - Complete drill Ø15
2. 065N7997 - Complete drill Ø19
3. 065N8008 - Complete drill Ø24
4. 065N7998 - Complete drill Ø32
5. 065N8010 - Complete drill Ø40
6. 20100098 - Center drill inst.
- 20100100 - Hot tapping inst.
- 20100101 - Table of contents
7. 065N8013 - Hole saw ø40
8. 065N8089 - Hole saw ø32
9. 065N8012 - Hole saw ø24
10. 065N8086 - Hole saw ø19
11. 065N8099 - Allen key set
12. 065N8101 - Service set DN15-50 (O-rings)
13. 065N8080 - Adapter ø26,9
14. 065N8087 - Adap. ø33,7-ø42,4
15. 065N8005 - Adap. ø48,3-ø60,3
16. 065N8084 - Adap. ø26,9-ø33,7
17. 065N8151 - Adap. ø48,3-ø60,3
18. 065N8103 - Feed tool
19. 065N8016 - Center drill ¼"
20. 065N8241 - Allen key 10 mm
21. 065N8247 - Allen key 7 mm
22. 065N2124 - Allen key 5 mm
23. 065N8248 - Allen key 4 mm
24. 065N7996 - Screw coupling
25. 065N8109 - Handle for feeding tool
26. 065N8090 - Screwdriver
27. 065N8130 - Hot tapping tool
28. 065N8126 - Handle for adapters



065N8310 - Hot tap tool box DN 15-50

1. 065N8102 - Reduction wrench 1:7
2. 065N8109 - Handle for feeding tool
3. 065N8130 - Hot tapping tool
4. 065N8112 - Service set DN65-100 (O-rings)
5. 065N8091 - Adapter ø76,1
6. 065N8094 - Adapter ø88,9
7. 065N8095 - Adapter ø114,3
8. 065N7995 - Stem for drilling machine
9. 065N7996 - Screw coupling
10. 065N8242 - Allen key 14 mm
11. 065N8103 - Feeding tool
12. 065N8172 - Complete drill ø48
13. 065N8192 - Complete drill ø65
14. 065N8193 - Complete drill ø79
15. 20100099 - Center drill inst.
- 20100100 - Hot tapping inst.
- 20100102 - Table of contents



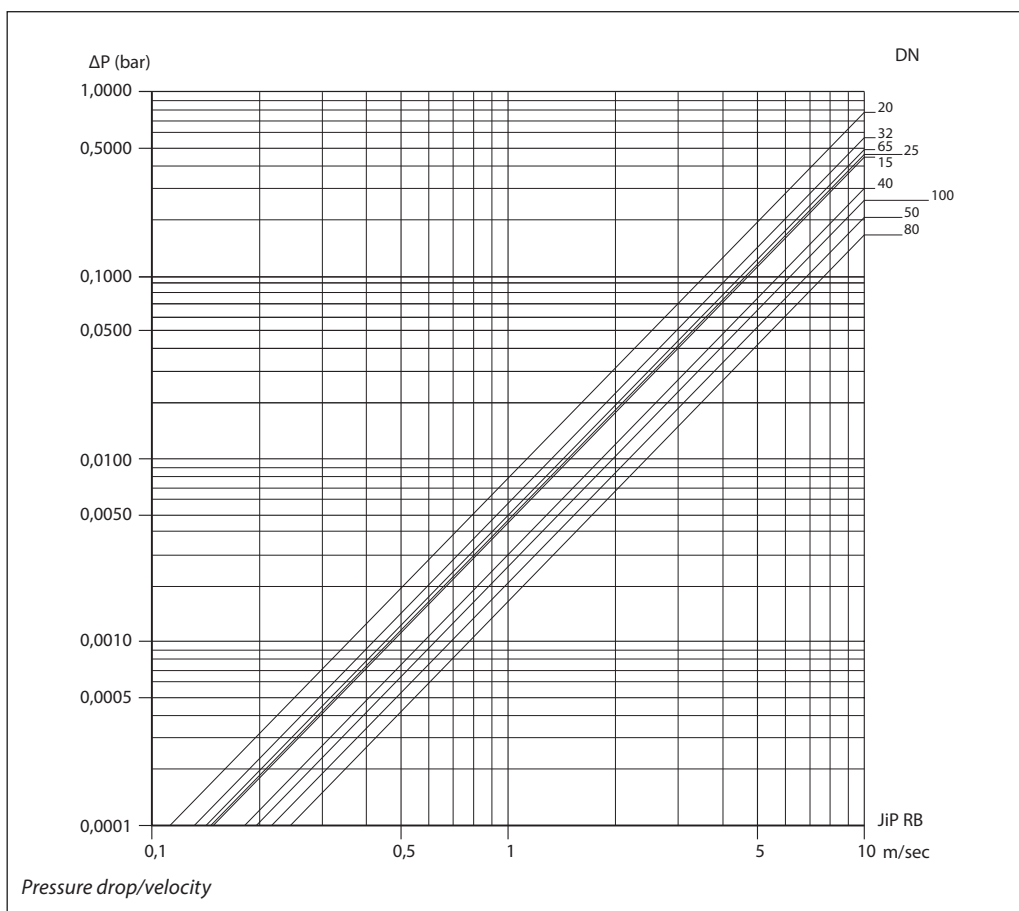
065N8312 - Hot tap tool box DN 65-100

Technical data

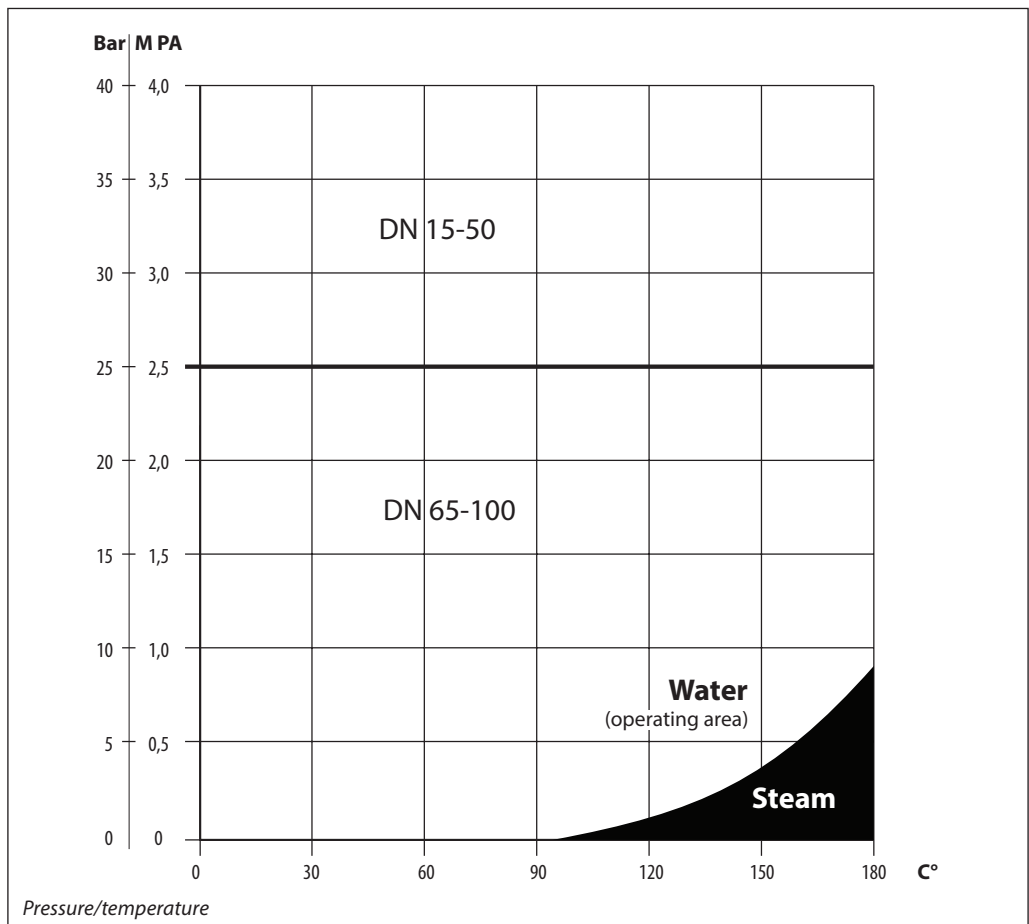
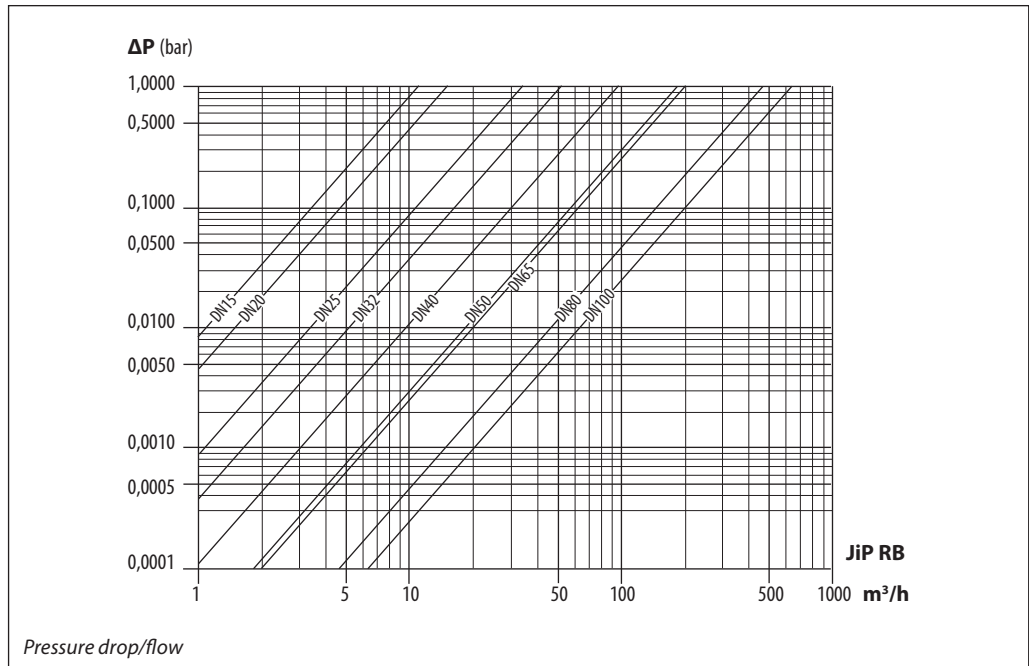
DN	mm	20	25	32	40	50	65	80	100	
PN	bar	40						25		
Temp range	°C	0-180								
Medium		Circulation water / glycolic water up to 50 %								

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



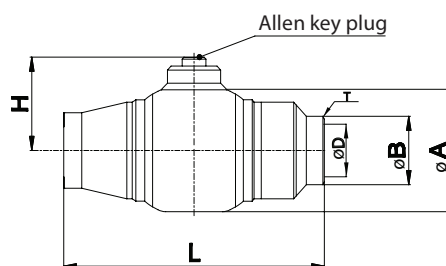
Technical data (continuous)



Dimensions

JIP hot tap

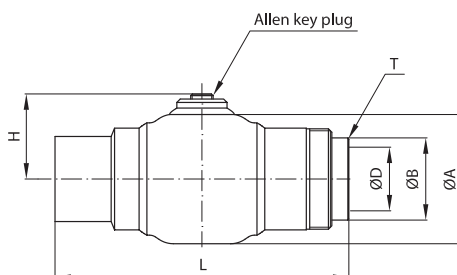
JIP-WW Type 1



DN	ØA	ØB	ØD*	T	L	H	Plug operation	Valve operation	Hole saw diameter	Weight (kg)
mm										
20	42.4	24.0	15	2.6	128	34	Allan key 5mm	flat screw driver	Ø15	0.6
25	60.3	33.7	25	2.9	145	46	Allan key 7mm	Allan key 10mm	Ø24	1.3
32	60.3	42.4	25	2.9	145	46	Allan key 7mm	Allan key 10mm	Ø24	1.3
40	88.9	48.3	40	2.9	200	57	Allan key 7mm	Allan key 10mm	Ø40	3.5
50	88.9	60.3	40	3.2	200	57	Allan key 7mm	Allan key 10mm	Ø40	3.5
65	114.3	76.1	50	3.2	260	70	Allan key 10mm	Allan key 14mm	Ø48	5.1
80	133.0	88.9	65	3.2	265	80	Allan key 10mm	Allan key 14mm	Ø65	6.7
100	159.0	114.3	80	3.6	275	90	Allan key 10mm	Allan key 14mm	Ø79	11.3

ØD* - Internal nominal diameter

JIP-WW Type 2



DN	ØA	ØB	ØD*	T	L	H	Plug operation	Valve operation	Hole saw diameter	Weight (kg)
mm										
20	42,4	26,9	20	2,6	140	34	Allan key 5mm	flat screw driver	Ø19	0,7
25	42,4	33,7	20	2,9	140	34	Allan key 7mm	Allan key 10mm	Ø19	0,8
40	76,1	48,3	32	2,9	172	51	Allan key 7mm	Allan key 10mm	Ø32	2,3
50	76,1	60,3	40	3,2	172	57	Allan key 7mm	Allan key 10mm	Ø40	2,4

ØD* - Internal nominal diameter

