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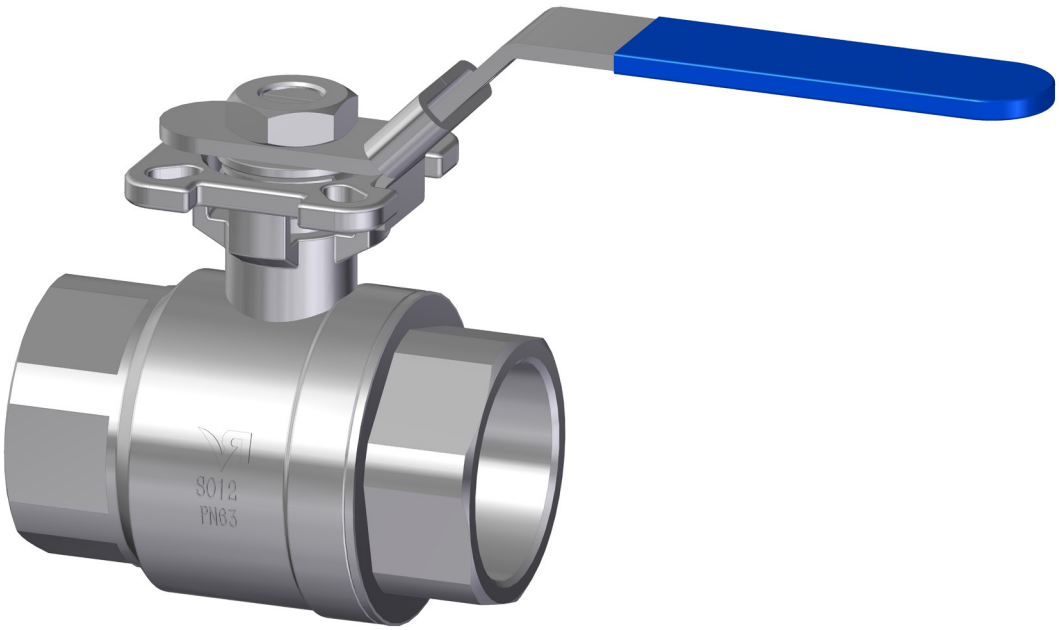
2PC BALL VALVE THREAD RV-2

USER MANUAL

¼"-4"(DN6-DN100)



MER ENN 120 ÅRS ERFARING SOM LEVERANDØR AV VENTILER OG INSTRUMENTERING

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APPLICATION

Threaded floating ball valve, featuring BSPP threads and available with NPT threads by request, suitable for a variety of industrial applications. These stainless steel, 2-piece valves are designed to handle multiple media types, offering a control range of 0° to 90° for precise flow regulation.

The valves come in two distinct designs: the C-version with a simple body and handle for manual operation, and a B-version with an ISO 5211 top flange for straightforward actuator mounting, enhancing suitability for automated systems.

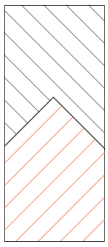
While both models provide cost-effective and reliable performance, the C-version stands out for its lighter weight and affordability, ideal for applications where space and budget are concerns. The ISO top model, in contrast, is engineered for direct actuator attachment, making it an optimal choice for more complex automation requirements without the need for special brackets or modifications.

FEATURES

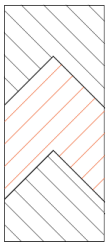
1. Full Bore Design: Offers a large flow passage with minimal resistance to fluid flow, ensuring efficient operation.
2. Quick Actuation: Engineered for rapid opening and closing times, featuring a soft seal that enhances performance and durability.
3. Maintenance-Friendly: The 2-piece design allows for straightforward assembly and disassembly. Maintenance can be performed in-situ, reducing downtime.
4. Safety Assured: Incorporates a blowout-proof stem design, heightening operational safety.
5. Enhanced Sealing: All stainless-steel valves come with V-type packing, designed to improve stability and seal integrity under increased load and temperature conditions.

V-Packing Section View

1/4 - 1/2”

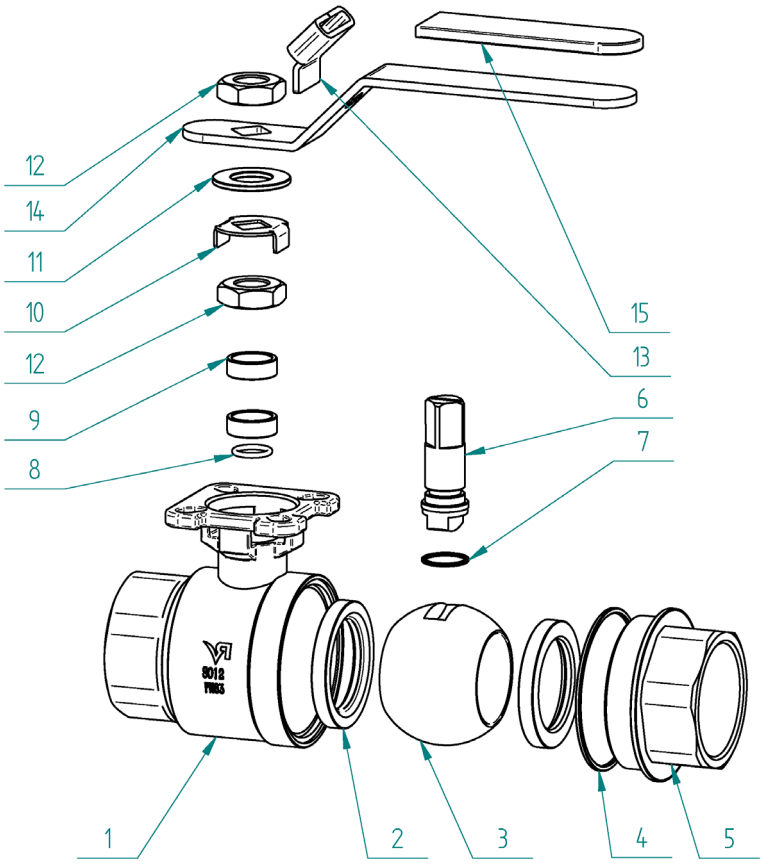


3/4 - 4”

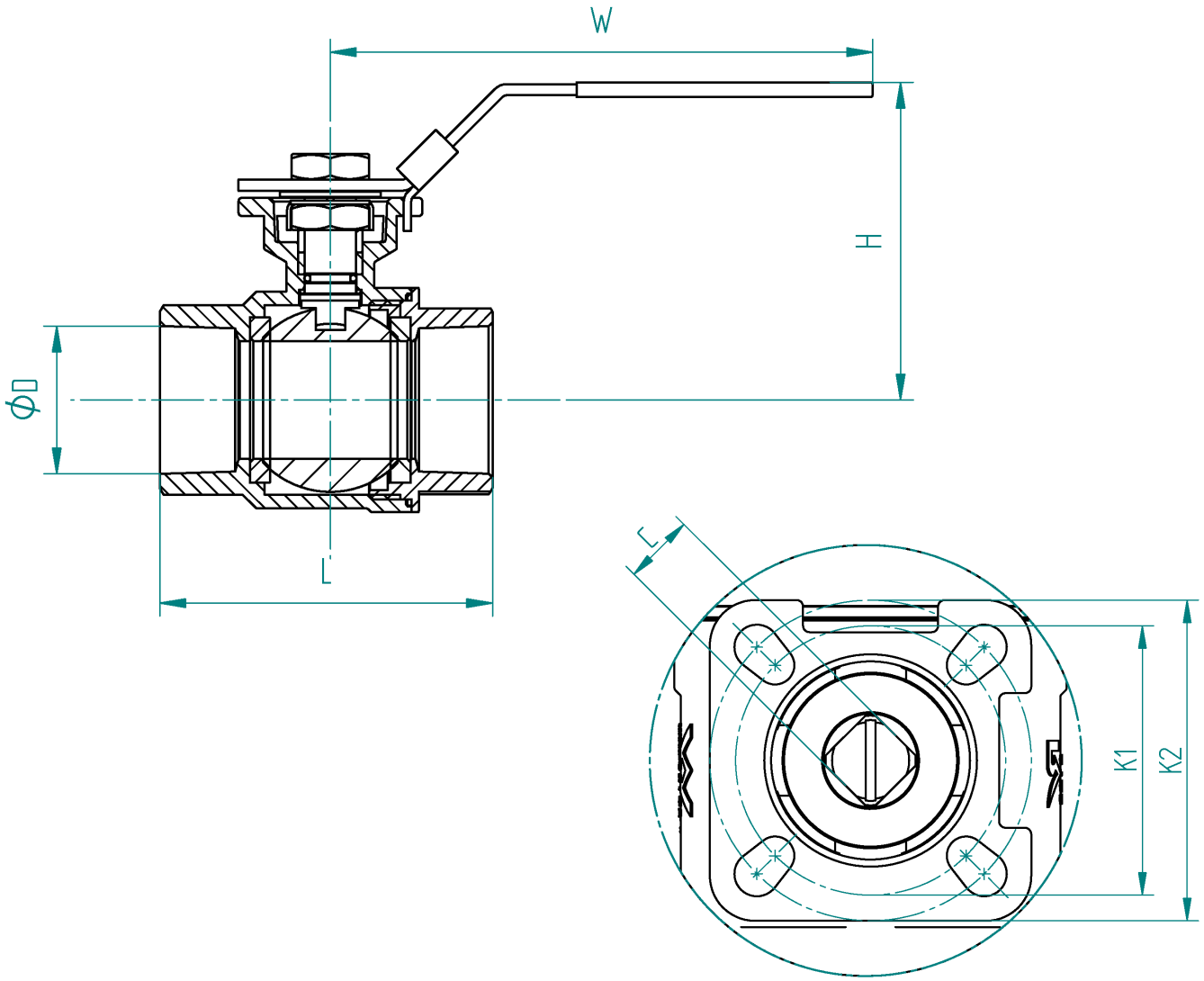


B-VERSION - MATERIALS

Item	Part	Material
1	Body	CF8M
2	Seat	R-PTFE
3	Ball	SS316
4	Body Gasket	PTFE
5	Cap	CF8M
6	Stem	SS316
7	Thrust Washer	PTFE
8	O-Ring	Viton
9	Stem Packing	PTFE
10	Packing Ring	SS304
11	Washer	SS301
12	Nut	SS304
13	Lock Device	SS304
14	Handle	SS304
15	Handle Cover	Plastic



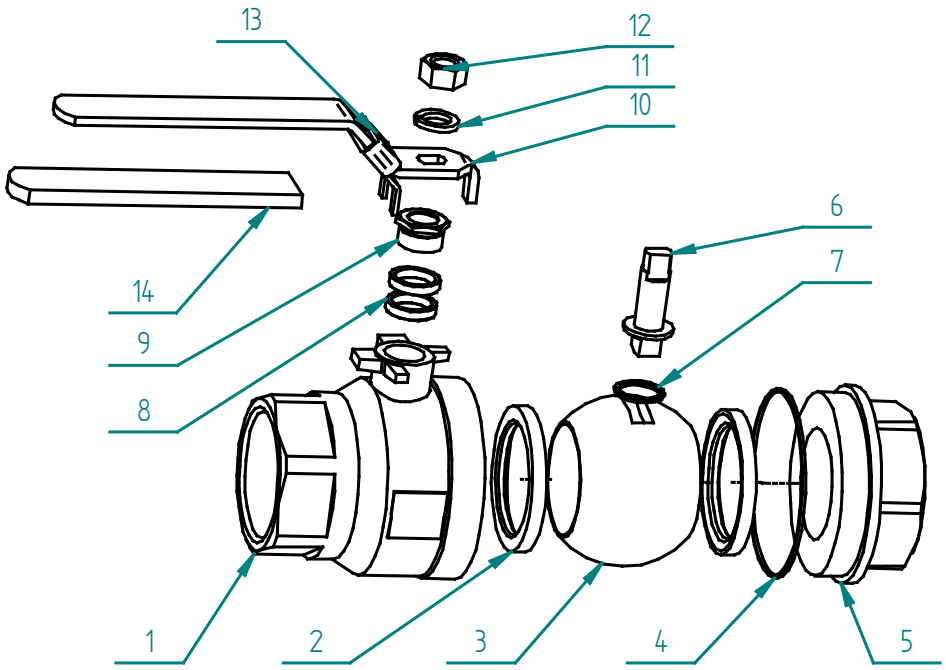
B-VERSION - DIMENSIONS



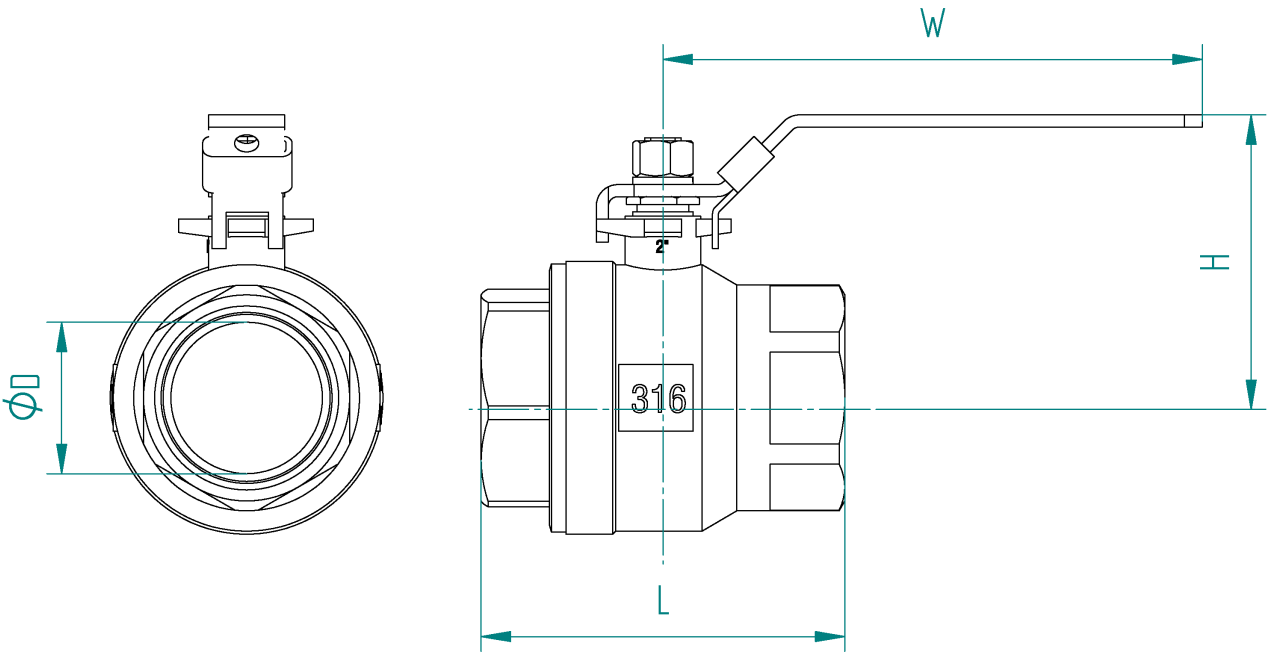
Size		ØD	L	H	W	C	K1/K2	Weight (kg)
DN15	1/2"	15	57	63	120	9	F03/F04	0.38
DN20	3/4"	20	64	70	120	9	F03/F04	0.51
DN25	1"	25	77	74	140	11	F04/F05	0.87
DN32	1-1/4"	32	90	88	149	11	F04/F05	1.26
DN40	1-1/2"	40	105	94	200	14	F05/F07	2.25
DN50	2"	50	125	102	200	14	F05/F07	3.05
DN65	2-1/2"	65	154	140	255	17	F07/F10	5.45
DN80	3"	76	173	153	255	17	F07/F10	8.2
DN100	4"	94	221	175	302	17	F07/F10	15

C-VERSION - MATERIALS

Item	Part	Material	
		DN15-DN50	DN65-DN100
1	Body	A351-CF8M	A351-CF8M
2	Seat	PTFE	PTFE
3	Ball	SS316	SS316
4	Body Gasket	PTFE	PTFE
5	Cap	A351-CF8M	A351-CF8M
6	Stem	SS316	SS316
7	Thrust washer	PTFE	PTFE
8	Stem Packing	PTFE	PTFE
9	Gland Nut	SS316	SS304
10	Handle	SS316	SS304
11	Washer	SS316	SS304
12	Nut	SS316	SS304
13	Lock Device	SS316	SS304
14	Handle Cover	Plastic	Plastic



C-VERSION - DIMENSIONS



Size		ØD	L	H	W	Weight (kg)
DN8	1/4"	12.5	50	49	106	0.19
DN10	3/8"	12.5	50	49	106	0.19
DN15	1/2"	15	56	51	104	0.26
DN20	3/4"	20	66	58	116	0.41
DN25	1"	25	79	73	148	0.66
DN32	1-1/4"	32	91	79	148	1.00
DN40	1-1/2"	38	99	85	182	1.30
DN50	2"	50	120	95	182	2.10
DN65	2-1/2"	65	148	126	252	3.83
DN 80	3"	76	173	138	252	5.74
DN100	4"	94	222	158	283	10.70

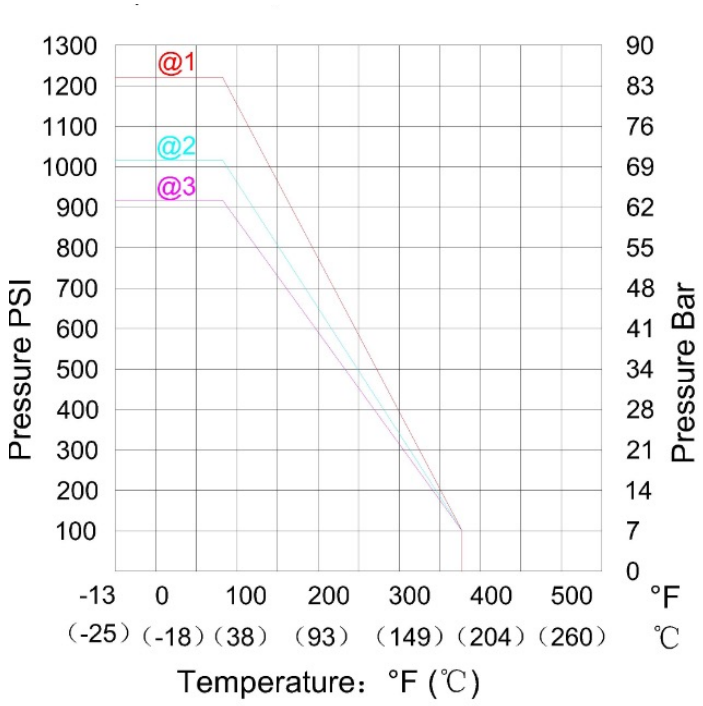
STANDARDS

- Threads: BSPP as standard, NPT by request
- Pressure Test: API598
- Mounting Flange: ISO 5211(B-version)

TECHNICAL PERFORMANCE

	DN6 to DN25	DN32 to DN40	DN50 to DN100
Nominal Pressure	1200PSI	1000PSI	800PSI
Shell Test	12MPa	10MPa	8MPa
Air Seal Test	0.6MPa		
Service Temperature	-25°C-180°C		
Suitable Media	Water, steam, oil, etc.		

PRESSURE-TEMPERATURE CHART



@1 : 1/4"~1" ;
@2 : 1 1/4"~ 1 1/2" ;
@3 : 2"~4".

BALL VALVE TORQUE

The following torque values are net values excluding a safety factor. Please apply a safety factor of 30%.

DN	Size	Torque (Nm)	
		B	C
DN6	¼"	-	4
DN10	3/8"	-	4
DN15	½"	5	5
DN20	¾"	8	8
DN25	1"	10	10
DN32	1¼"	14	14
DN40	1½"	18	25
DN50	2"	25	40
DN65	2½"	48	48
DN80	3"	75	80
DN100	4"	110	103

Note:
The above torque values were measured during wet (water and other non-lubricating media) on-off use.
For dry use (non-lubricating, dry gas media), multiply values by 1.6.
For lubricating media use (clean, non-abrasive lubricating media), multiply values by 0.85.

OPERATION

1. Turn the handle clockwise 1/4 circle (90°) to close the valve. Turn the handle counterclockwise 1/4 circle (90°) to open the valve. The direction arrow shows "ON" as "open", or "OFF" as "close" on the plastic cover of the handle.
2. When the handle is parallel to the pipeline, the valve is open. When the handle is at a 90° angle to the pipeline, the valve is closed.

FLOW CHARACTERISTICS

Size		Kv (m^3/h)
DN6	¼"	8.6
DN10	3/8"	11.1
DN15	½"	21.2
DN20	¾"	56.5
DN25	1"	88.3
DN32	1¼"	96.5
DN40	1½"	204
DN50	2"	353.2
DN65	2½"	597
DN80	3"	816.2
DN100	4"	1248.5

INSTALLATION

1. In order to prevent damage to the seat and ball surface, the pipeline needs to be flushed, free of dirt, welding residue, etc. Check the inside of the pipe and ball valve before installation. If necessary, clean with clean water and a soft brush.
2. Make sure that the valve pressure class and operating temperature is suitable for the intended use and pipeline settings. Please consult the pressure-temperature chart to verify.
3. Connect the female thread of the valve to the male thread (BSPT, DIN259/2999 or ISO 7/1) of the piping. PTFE tape can be used during installation to prevent leaks.
4. The recommended tightening torques are shown in the table below.

RECOMMENDED TIGHTENING TORQUES

DN	Size	Torque (Nm)
DN6	¼"	25
DN10	3/8"	35
DN15	½"	40
DN20	¾"	50
DN25	1"	60
DN32	1¼"	80
DN40	1½"	100
DN50	2"	125
DN65	2½"	150
DN80	3"	200
DN100	4"	250

MAINTENANCE

1. Disassembly: Loosen the bolt and stem nuts. Check all parts and place them safely to prevent damage during disassembly.
2. Clean all metal parts with clean water and a soft brush. Clean PTFE (teflon) parts with clean water. Check all parts and replace if necessary.
3. It is recommended that you replace all PTFE (Teflon) parts before re-assembly to avoid leakages due to deformation.

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