Ball valve

Full bore

Internet_Variants

Dimension range	PN	Temperature range	Material		
DN 8-150	10/100	-50°C to + 200 °C	Stainless steel		

Range of Application

Shut-off valve mainly for:

- Caustic solutions, acid and saline solutions
- Solvents and alcohols
- LPG, natural gas and petroleum products.
- Warm and cold water, compressed air.
- Saturated steam (see pressure-temperature table)



PSB.1 Ball Valves

Ball valve Stainless Steel AT 3507 ..., with full bore, weld ends and stainless steel lever. Gasket box of graphite.

Ball valve Stainless Steel AT 3527 ..., with full bore, internal threads and stainless steel lever. Gasket box of graphite.



Tested according to SS-ISO 5208. Leakage class 3 applies to this valve type. The valves are approved by TA-luft, and fulfil the requirements in EGN94 for combustible gases, maximum 4 bar(e).

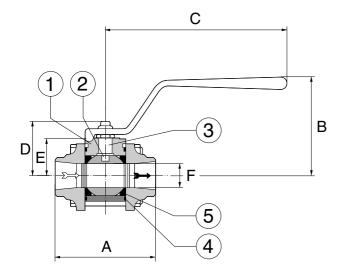
Certificate SS-EN 10204, type 2.2 and 3.1, has to be specified when ordering.

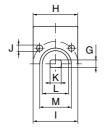
CE-marking

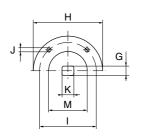
The valves meet the requirements of PED, AFS 2016:1 acc. to category III group 1 and 2. Dimensions to DN 25 satisfies § 8 of the PED, AFS 2016:1.

Surface

Standard surface finish from 3.1 to 6.3 μm for body & ball. Finer surface finish on request.









Ball valveFull bore

Material specification

Components	AT3507/3527	
	Stainless steel	
Body	1.4404 / 1.4408	
	Stainless steel	
Ball	1.4404	
	Stainless steel	
Stem	1.4404	
Body gasket	PTFE	
Seat ring*	PTFE	
Stem gasket	PTFE, glass-reinforced	
Box gasket	PTFE, carbon-filled and glass-reinforced	
Centering ring	PTFE, glass-reinforced	DN65-150
	Stainless steel	DN200-250
	Stainless steel	
End piece	1.4404	
Lever	Steel/epoxi coated	

Dimension and weight, full bore AT 3507, 3527

82,4	169 480	277 183 480 182 128 100 19	307 409 183 262 480 720 182 258 128 186 100 150 19 28,5
480 168 114 82,4	480 168 114 82,4	480 182 128 100	480 720 182 258 128 186 100 150
168 114 82,4	168 114 82,4	182 128 100	182 258 128 186 100 150
114 82,4	114	128 100	128 186 100 150
82,4	82,4	100	100 150
19	19	19	19 28.5
10		10	. 5 20,0
125	125	125	125 150
102	102	105	102 125
M10	M10	M10	M10 M12
22,5	22,5	22,5	22,5 35
-		-	
70	70	70	70 85
F10	F10	F10	F10 F12
	21,0	35,0	40,0 85,0
	,	70 F10	 70 70 F10 F10

Function and Design

Three-piece ball valve in antistatic design for simple service and maintenance. No disassembling or changing of gaskets is necessary when the valve is welded in.

Homogenous floating ball for tight shut-off and low pressure drop.

Self-compensating stem packing gives a tight valve also with high operation frequency.

The design with blow-out safe stem prevents the stem to blow out at pressure hammer.

Mounting flange according to ISO 5211 for actuators.

No dismantling of valve at service and maintenance.

Valves from DN50 have round body and end piece.

Rätten till ändringar utan föregående meddelande förby Amratec ansvarar inte för eventuella tryckfel eller miss Dokumenten får kopieras andast i sin helhet.



Pressure and temperature full bore

Pressure and temperature, valves with full bore 3507, 3527									
DN		15-25	32-40	50-80	100-200				
Max. working pressure bar(e)*		100	70	50	40				
Working temperature °C*	Standard	200	200	200	200				
	High temperature (HT)	250	250	250	250				

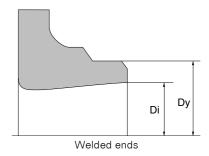
Pressure and temperature acc. to applied standards. Note that the pressure- and temperatures above is <u>not</u> related.*See also pressure and temperature graph.

Torque

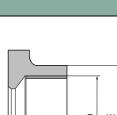
Torqu	e by d	P 25 ba	ır										
DN	10	15	20	25	32	40	50	65	80	100	125	150	200
Nm	5	6	11	18	24	30	78	120	180	250	180	420	840

For cavity filled valves and other seat materials please ad 20% to the torque above.Cryo seats decreases the torque by 50% under room temperature, but it increases by 50% under low temperatures, like 196 °C.

Kv-va	lue														
				20/	25/	32/	40/	50 /	65/	80/	100/	125/	150/	200/	250/
DN	8	10	15	15	30	25	32	40	50	65	80	100	125	150	200
K _{VS}	8	8	8	13	30	48	80	120	250	470	700	1250	1250	1800	2800

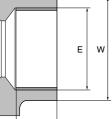


AT 3507 Meassurements weld ends															
DN	8	10	15	20	25	32	40	50	65	80	100	125	150	200	250
Dy	13,5	17,2	21,3	26,9	33,7	42,4	48,3	60,3	76,1	88,9	114,3	139,7	168,3	219,1	273
Di	9,5	12,6	16,2	20,6	26	32	40	50	65	80	100	125	150	200	260
Material thickness	2,0	2,3	2,55	3,15	3,85	5,2	4,15	5,15	5,55	4,45	7,15	7,35	9,15	9,55	6,5









Internal thread







Accessories and Options

Can be provided with different types of actuators and limit switches. (See separate datasheet AT 3830..., AT 3831..., AT 3900...)

The valve is available with different types of accessories and in different performance as:

Stem extension, Cavity filling, spring return lever with spring-to-open or spring-to-close function. Fire-safe design, three-way valves, heating jacket, Cryo performance, double gasket box, tank bottom valve, high pressure performance. Three-piece valves give many variations for connection, for example one weld end and one threaded end.

NPT threads and customer related welded ends.

Installation

Valves with weld ends can be welded in without disassembling, provided that the ball is in the open position. See separate manual.

Maintenance and Spare parts

The valve construction permit a simple exchanging of all parts. See separate installation- and maintenance instructions AT 9980-3502.

Marking

Manufacturer, DN, PN, material, CE and on special valves flow direction arrow.

How to order

DN	AT 3507	AT 3527
	Article No.	Article No.
8		
10	3507-10	3527-10
15	3507-15	3527-15
20	3507-20	3527-20
25	3507-25	3527-25
32	3507-32	3527-32
40	3507-40	3527-40
50	3507-50	3527-50
65	3507-65	3527-65
80	3507-80	
100	3507-100	

How to order cont.

AT3507 = Acid proof steel, weld ends, full bore

AT3527 = Acid proof steel, internal thread, full bore

HT = High temperature performance

FS= Fire-safe

C= Cryogenic

HP = High pressure performance

Rätten till ändringar utan föregående meddelande förbehålis. Amratee ansvaar inte föreventuella trycktel eller missförsrånd. Dokumenten får kopienas endast i sin helhet.

Ball valve Full bore

AT 3507, 3527

G = 15% glass-filled PTFE

GF = 25% glass-filled PTFE

See separate pressure and temperature curves for selection of seat packaging.