

Ball Valve

Reduced or full bore
Cryo design

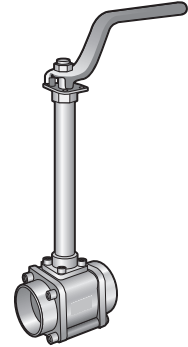
AT 3502C, 3507C

Dimension range	PN	Temperature range	Material
DN 8-150	10/100	-196 - 200 °C	Acid proof stainless steel

Range of Application

As shut-off valve for cryogenic applications for temperatures is down to -196°C.

- Liquid gases
- Conveying pipes
- Food industries
- Depots
- Test stations

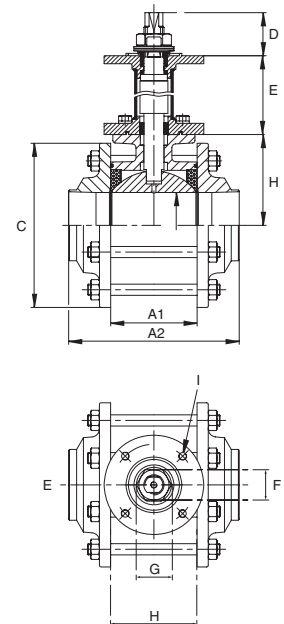


Quality Assurance

Testing is carried out according to SS-ISO 5208 leakage class 3 and applies to the valve type. The valves are type approved according to TA-Luft. Certificate SS-EN 10204, type 2.2 and 3.1B type of certificate has to be specified upon ordering. DIN-GOST is available on request.

CE-marking

Fulfill PED 97/23/EC acc. to category III group 1 and 2.



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Material specification

		AT3502C			AT3507C		
1	Body	stainless steel	DN 8-32	X2CrNiMo18.10	DN 8-25	X2CrNiMo18.10	
		stainless steel	DN 40-250	G-X6CrNiMo18.10	DN 32-250	G-X6CrNiMo18.10	
2	Ball	stainless steel	DN 8-50	X2CrNiMo18.10	DN 8-40	X2CrNiMo18.10	
		stainless steel	DN 65-150	G-X6CrNiMo18.10	DN50-125	G-X6CrNiMo18.10	
3	Stem	stainless steel		X2CrNiMo18.10		X2CrNiMo18.10	
4	Body gasket			PTFE, carbon-filled		PTFE, carbon-filled	
5	Seat ring*			PTFE, carbon-filled		PTFE, carbon-filled	
6	Stem seal			PTFE, glass reinforced		PTFE, glass reinforced	
7	Stem packing			PTFE, carbon-filled and glass reinforced		PTFE, carbon-filled and glass reinforced	
8	Centering ring		DN 65-150	PTFE, carbon-filled	DN65-125	PTFE, carbon-filled	
9	End piece	stainless steel	DN 8-150	X2CrNiMo18.10	DN 8-125	X2CrNiMo18.10	
10	Stem extension	stainless steel	150/300mm		150/300mm		
11	Lever			steel/epoxi coated		steel/epoxi coated	

* Seat rings in Cryo TF4215 (25% carbon filled PTFE) for -196 °C. Other seat material on request.

Dimension and weight

AT3502C													
DN	8	10	15	20	25	32	40	50	65	80	100	125	150
A1	20,4	20,4	20,5	24,5	31,4	41,3	48,4	56,3	71,4	88,9	108,5	134,6	134,6
A2	65	65	65	72,5	85,4	99,3	110,4	126,3	142,6	169,5	214	277	307
C	45	45	45	52	60	68	76	88	143	165	206	234	234
D	7	7	7	7	12	12	16,5	16,5	21,5	28	28	28	28
E	150/300	150/300	150/300	150/300	150/300	150/300	150/300	150/300	150/300	150/300	150/300	150/300	150/300
F	5,4	5,4	5,4	5,4	7,5	7,5	8,9	8,9	12	19	19	19	19
G	9,5	9,5	9,5	9,5	11,1	11,1	14,3	14,3	18	22,5	22,5	22,5	22,5
H	36	36	36	36	42	42	50	50	70	70	102	102	102
I	M5	M5	M5	M5	M5	M5	M6	M6	M8	M8	M10	M10	M10
ISO Flange	F03	F03	F03	F03	F04	F04	F05	F05	F07	F07	F10	F10	F10
Weight	0,5	0,5	0,5	0,8	1,1	1,7	2,7	4,1	6,6	12,6	23	37	40

Measurements in mm, weight in kg. The table is valid for AT 3502C with reduced bore. For full bore valves, AT 3507C, please use values for one DN bigger.

Function and Design

3-piece ball valve for simple service and maintenance.

No disassembling or changing of the gaskets is necessary when the valve shall be welded in

With the valve in full open position the valve can be welded in without disassembling or changing the gaskets.

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

The ball is pressure released drilled.

Self-compensating stem packing gives a tight valve even at high operation frequency.

Scalloped seat design to prevent the torque to rise at low temperatures.

The valves are degreased according to EN 12300 and individually packed in closed polyethylene bags at delivery.

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

Standard length of stem extension for Cryo valves are 150 mm alternatively 300 mm with an extra stuffing box erected in the top.

Mounting flange according to ISO 5211 for actuators.

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Valves from DN65, reduced bore AT 3502C, and full bore AT 3507C from DN50, have round body and end piece.

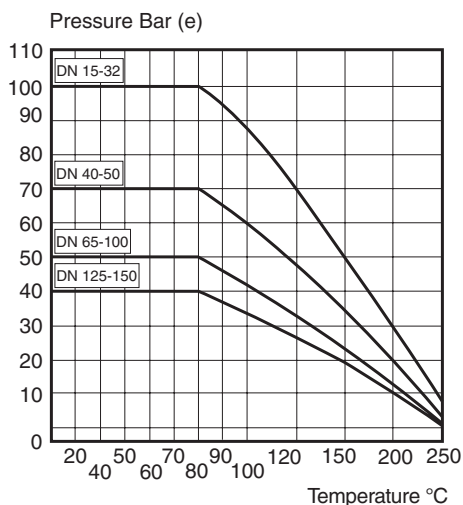
Technical Information

Pressure and temperature				
DN	8-32	40-50	65-100	125-150
Max. working pressure bar(e)*	100	70	50	40
Max. temperature °C*	Carbon-filled PTFE -196-200			

Pressure and temperature acc. to applied standards.
* See also pressure and temperature chart below.

Pressure and Temperature

Note, the chart below is valid for valves with sealing of carbon filled PTFE and reduced bore, AT 3502C. If valves with full bore, AT 3507C, are requested please choose the curve for one DN bigger i.e. full bore DN32, read the curve related to. DN40.



AT3502C (at 25bar)													
DN	8	10	15	20	25	32	40	50	65	80	100	125	150
Nm	6	6	6	8	14	23	30	38	98	150	225	317	317

To size actuators please add 50% to value above as safety factor.

AT3507C (at 25bar)													
DN	10	15	20	25	32	40	50	65	80	100	125	150	
Nm	6	8	14	23	30	38	98	150	225	317	317	525	

To size actuators please add 50% to value above as safety factor.

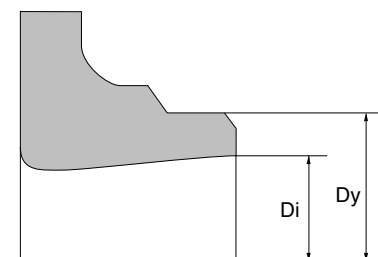
Kv-value

AT3507C											
DN	15	20	25	32	40	50	65	80	100	125	150
K _{VS}	13	30	48	80	120	250	470	700	1250	1250	1800

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Welded ends

AT 3502C Measurements 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

AT 3507C Measurements weld ends												
DN	15	20	25	32	40	50	65	80	100	150	200	
Dy	21,4	26,9	33,7	42,4	48,3	60,3	76,1	88,9	114,3	168,3	219,1	
Di	16,2	20,6	26	32	40	50	65	80	100	150	200	
Material thickness	2,55	3,15	3,85	5,2	4,15	5,15	5,55	4,45	7,15	9,15	9,55	

Accessories and Options

Can be provided with different types of actuators and limit switches, see separate datasheet.

Standard length of stem extension is 150 mm alternatively 300 mm. Other lengths are available on request.

On request the valve is available with different types of sealing material, socket weld ends and in flanged version.

Installation

Valves with weld ends can be welded in without disassembling if the valve is in full open position.

Maintenance and Spare Parts

The valve construction admits a simple exchanging of all parts.

Marking

Manufacturer, DN, PN, material and flow arrow.

How to order

Example: AT 3502C150-25				
AT 35	02	C	150	25
Art.no.	Flow area 02 = Reduced bore 07 = Full bore	Design C = Cryo	Stem extension 150 = 150mm 300 = 300mm	DN

Rätten till ändringar utan föregående meddelande förbehålls.
Armatec ansvarar inte för eventuella tryckfel eller missförstånd.
Dokumentet får kopieras endast i sin helhet.