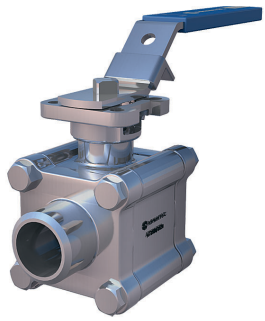
Ball valve
Full bore

AT 3505, 3525

Dimension range	PN	Temperature range	Material
DN 8-100	125-64	-30°C to + 260 °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



Program text
PSB.1 Ball Valves
Ball valve Stainless Steel AT 3505 ..., with full bore, weld ends and stainless steel lever. Packing of carbon filled PTFE.
Ball valve Stainless Steel AT 3525 ..., with full bore, threads and stainless steel lever. Packing of carbon filled PTFE.

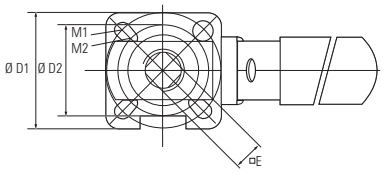
Quality Assurance
Tested according to SS-ISO 5208. Leakage class A applies to this valve type.
The valves are approved by TA-luft.
Certificate SS-EN 10204, type 2.2 and 3.1, has to be specified when ordering.

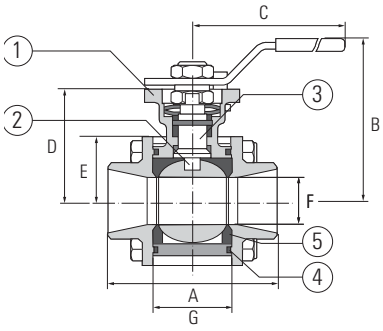
CE-marking
The valves meet the requirements of PED, AFS 2016:1 acc. to category III group 1 and 2. Dimensions to DN 25 satisfies § 8 of the PED, AFS 2016:1.

Surface
Standard surface finish below 3.1 μm for body & ball. Finer surface finish on request.

Material specification

	Components	AT3505/3525
1	Body	Stainless steel 1.4408
2	Ball	Stainless steel 1.4401
3	Stem	Stainless steel 1.4401
4	Body gasket	PTFE
5	Seat ring*	PTFE, carbon filled
6	Stem gasket	PTFE, glass-reinforced
7	Box gasket	PTFE, carbon-filled
8	Centering ring	PTFE, glass-reinforced
9	End piece	Stainless steel 1.4409
10	Lever	Stainless steel
	*Seats in other material on request, such as glass-reinforced PTFE or PEEK.	





Dimension and weight, full bore AT 3505, 3525

DN	15	20	25	32	40	50	65	80	100
A	72,5	85,4	99,3	110,4	126,3	142,6	169,5	214	277
B	100	120	125	135	140	150	154	169	183
C	145	185	185	200	200	250	480	480	480
D	42	53	58	71	76	86	153	168	182
E	32	38	36	42	46	70	99	114	128
F	14,2	20,6	25,4	31,7	38	50	62	82,4	100
G	5,4	7,5	7,5	8,9	8,9	8,9	19	19	19
H	36	42	41,5*	48,5*	54	70	90	125	125
I	36	42	42	50	50	70	70	102	105
J	M5	M5	M5	M6	M6	M8	M8	M10	M10
K	9,5	11	11	14,3	14,3	14,3	22,5	22,5	22,5
L	22	25	25	30	30	45	-	-	-
M	25	30	30	35	35	55	55	70	70
ISO flange	F03	F04	F04	F05	F05	F07	F07	F10	F10
Weight	0,8	1,3	1,8	2,8	3,8	7,0	12,0	21,0	35,0

Measurements in mm, weight in kg.

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 förbehålls.
Armatec ansvarar inte för eventuella tryckfel eller misstorstånd.
Dokumenten får kopieras endast i sin helhet.

Technical Information

Pressure and temperature, valves with full bore 3505, 3525				
Seat material		**8-25**	**32-40**	**50-100**
Standard, carbon filled PTFE 25%	Max. working pressure bar(e)*	125 (T ≤ 50°C)	100 (T ≤ 80°C)	70 (T ≤ 80°C)
	Max. temperature °C**	205 (P ≤ 10 bar)	205 (P ≤ 10 bar)	200 (P ≤ 10 bar)
PEEK	Max. working pressure bar(e)*	125 (T ≤ 100°C)	100 (T ≤ 100°C)	70 (T ≤ 100°C)
	Max. temperature °C**	250 (P ≤ 10 bar)	245 (P ≤ 10 bar)	235 (P ≤ 10 bar)
PTFE, glass-reinforced	Max. working pressure bar(e)*			
	Max. temperature °C**			

Pressure and temperature acc. to applied standards. Note that the pressure- and temperatures above is not related.

*Max pressure bar(g) up to specified temperature.

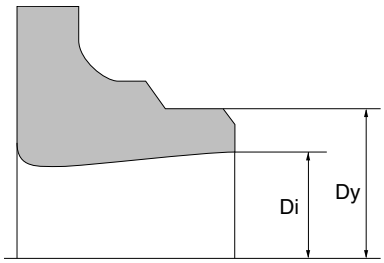
**Max temperature °C up to the specified pressure.

Torque

Torque											
DN	**8**	**10**	**15**	**20**	**25**	**32**	**40**	**50**	**65**	**80**	**100**
Nm	9	9	11	12	19	28	37	52	68	100	112

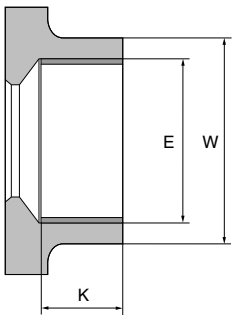
Torque above applies for: Carbon filled PTFE, PEEK and glass-reinforced PTFE.

Kv-value											
DN	**8**	**10**	**15**	**20**	**25**	**32**	**40**	**50**	**65**	**80**	**100**
K_{VS}	6,9	6,9	12,7	29,2	48,2	73,1	107,5	215,0	275,2	498,8	877,2



Welded ends

AT 3505 Meassurements weld ends											
DN	**8**	**10**	**15**	**20**	**25**	**32**	**40**	**50**	**65**	**80**	**100**
Dy	13,5	17,2	21,3	26,9	33,7	42,4	48,3	60,3	76,1	88,9	114,3
Di	10,3	14,0	18,1	23,7	29,7	38,4	44,3	55,1	70,9	83,7	109,1
Material thickness	1,6	1,6	1,6	1,6	2,0	2,0	2,0	2,6	2,6	2,6	2,6



Internal thread

Measurements internal threads

AT 3525 Measurements BSP threads

DN	8	10	15	20	25	32	40	50
G	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
E	13,1	16,67	20,95	26,44	33,25	41,91	47,8	59,61
K	13,5	13,5	16,5	17,5	20,5	20,5	24,5	25,5
W	21	21	27	33	41	51	56	68
No. of threads	19	19	14	14	11	11	11	11

Measurements in mm.

Accessories and Options

Can be provided with different types of actuators and limit switches. (See separate datasheet AT 3830, AT 3831, AT3840, AT3841, AT 3940, AT 3941, AT 3910, AT 3911). Can also be supplied with stem extensions and dead-mens handle (open or close).

Other ends available:

Weld ends:

- SMS3008
- DIN/SCH40
- Costumer specific weld ends on request
-
- <U>
  </U>
- NPT
- BSPT
- Firesafe acc. API607 and ISO 10497
- Heating jacket
- V-port ball with 30, 60 or 90 degree angle.

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.

Marking

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

How to order

DN	AT 3505, weld ends	AT 3525, threads
	Article No.	Article No.

How to order cont.

Options:

Rätten till ändringar utan föregående meddelande förbehålls.
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Seals:

FS = Fire-safe

GF = 25% glass-filled PTFE

PEEK = Seats in PEEK-material

See separate Pressure/temperature diagrams for differents seats.

Connections:

DIN = Weld ends acc. DIN/SCH40

SMS = Weld ends acc. SMS3008

NPT = NPT-threads

Exemple:

AT 3500-25FS (Fire-safe execution)

AT 3500-25GF (Seats of glass-filled PTFE)

AT 3520-25PEEK (Seats of PEEK)

AT 3500-25DIN (Weld ends acc. DIN3239, 1 and 2)

AT 3500-25SMS (Weld ends acc. SMS3008)

AT 3520-25NPT (NPT-threads)