

# Ball valve

Reduced Bore

AT 3500, 3520

## Internet\_Variants

Dimension range	PN	Temperature range	Material
DN 15-100	125-64	-30 - 260 °C	Stainless Steel

## Range of Application

Shut-off valve mainly for:

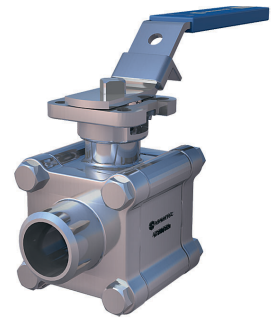
- Caustic solutions, acid and salt solutions
- Solvents and alcohols
- LPG, natural gas and petroleum products.
- Warm and cold water, compressed air.
- Saturated steam

## Program text

### PSB.1 Ball Valves

Ball valve in Stainless Steel AT 3500 ..., with reduced bore, weld ends and stainless steel lever. Gasket box of CPTFE.

Ball valve Stainless Steel AT 3520 ..., with reduced bore, threads and stainless steel lever. Gasket box of CPTFE.



## 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 demands from PED, AFS 2016:1, the directive for pressure equipment, according to category III, fluid group 1 and 2. Dimensions to DN 25 satisfies § 8 of the PED, AFS 2016:1.

## Surface

Standard surface finish below 3.1  $\mu\text{m}$  for body & ball. Finer surface finish on request.

## Material specification

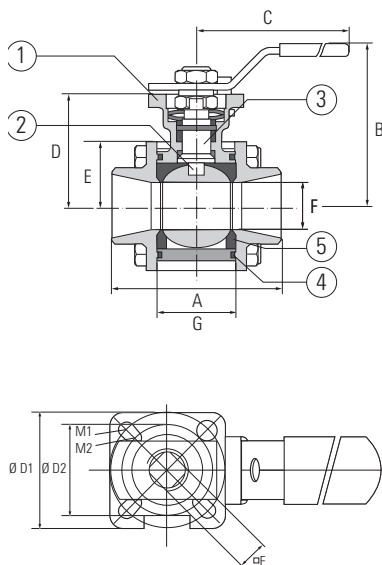
		AT3500/3520
1	Body	Stainless Steel 1.4408
2	Ball	Stainless Steel 1.4401
3	Stem	Stainless Steel 1.4401
4	Body gasket	PTFE
5	Seat ring*	PTFE, carbon-filled
6	Stem seal	PTFE, glass-reinforced
7	Stem gasket	PTFE, carbon-filled
8	Centering ring	PTFE, glass-reinforced
9	End piece	Stainless Steel 1.4409
10	Lever	Stainless steel

\*Also available with Glass-filled PTFE or PEEK.

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## 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 for simple service and maintenance.

When valve is in open position, no disassembling or changing of gaskets is necessary when the valve is welded in.

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

Self-compensating stem packing gives a tight valve even 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 bigger than DN50 have round body and mounting flange.

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

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AT 3500, 3520

## Technical Information

Pressure and temperature, reduced bore AT 3500, 3520				
Seat material		DN 15-32	DN 40-65	DN 80-100
Standard, CPTFE, Carbon filled PTFE 25%	Max. working pressure bar(g)*	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(g)*	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, glasfiberar- merad	Max. working pressure bar(g)*			
	Max. temperature °C**			

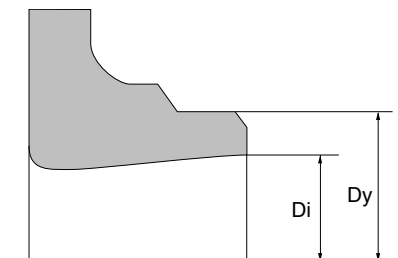
Pressure and temperature acc. to applied standards. Note that the pressure- and temperatures above is not related.\*Max pressure bar(g) up to specified temperature.\*\*Max temperature °C up to the specified pressure.

## Torque

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

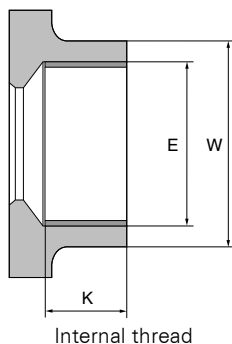
Torque above is applied for all seating material available, CPTFE, PEEK or Glass-filled PTFE

Kv-value reduced and full bore										
DN	15	20	25	32	40	50	65	80	100	
KvS	6,9	12,7	29,2	48,2	73,1	107,5	215	275,2	498,8	



Welded ends

AT 3500 Measurements welded ends										
DN	15	20	25	32	40	50	65	80	100	
Dy	21,3	26,9	33,7	42,4	48,3	60,3	76,1	88,9	114,3	
Di	18,1	23,7	29,7	38,4	44,3	55,1	70,9	83,7	109,1	
Material thickness	1,6	1,6	2,0	2,0	2,0	2,6	2,6	2,6	2,6	



## Measurements internal threads

AT 3520 Measurements BSP threads						
DN	15	20	25	32	40	50
G	1/2	3/4	1	1 1/4	1 1/2	2
E	20,95	26,44	33,25	41,91	47,8	59,61
K	16,5	17,5	20,5	20,5	24,5	25,5
W	27	33	41	51	56	68
No. of threads	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

#### Threaded ends:

- NPT
- BSPT

## Special executions:

- 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 open position. See separate manual.

## Maintenance and Spare parts

The valve construction permits a simple exchanging of all parts. See separate installation- and maintenance instructions.

## Marking

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

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## How to order

DN	AT 3500, weld ends		AT 3520, threads	
	Article No.	RSK-No.	Article No.	RSK-No.

## How to order cont.

### Options:

#### Seals:

FS = Fire-safe

GF = 25% glass-filled PTFE

PEEK = Seats in PEEK-material

See separate Pressure/temperature diagrams for different seats.

#### Anslutningar:

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)