

# Ball Valve

All-welded

AT 3590, 3591

<b>Dimension range</b> DN 10-300	<b>PN</b> 25	<b>Temperature range</b> Max 200 °C	<b>Material</b> Steel
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## Range of Application

As shut-off valve for cooling and heating systems, compressed air and non combustible gases.

## Quality Assurance

### CE-marking

Fulfil 97/23/EC PED acc. to

DN 10-40 article 3.3.

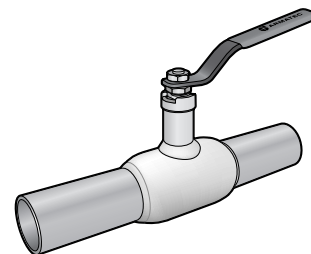
DN 50-125: Category I group 2.

DN 150-200: Category II group 2.

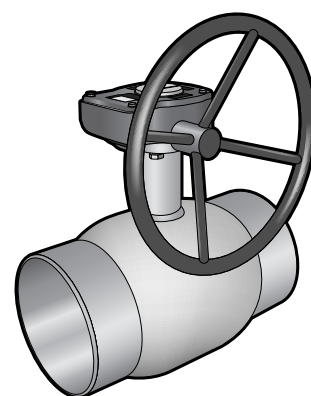
DN 250-300: Category III group 2.

## Material Specification

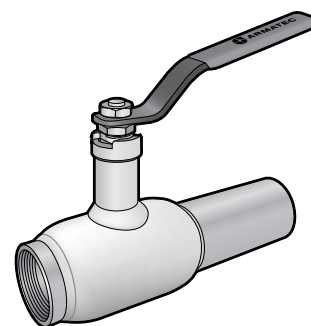
1	Body/weld ends	steel	RSt 37.2
2	Ball	stainless steel	X6CrNiTi18.10
3	Seat rings	carbon filled PTFE	
4	Stem	stainless steel	X30Cr13
5	Stem gasket	carbon filled PTFE	



AT 3590



AT 3590V



AT 3591

## Dimension and Weight

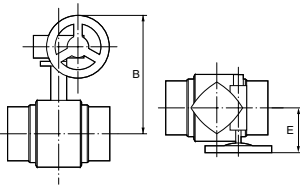
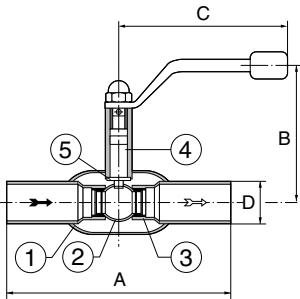
Ansl.		10	15	20	25	32	40	50	65	80	100	125	150	200	250	300
A	AT 3590	230	230	230	230	260	260	300	300	300	325	325	350	390	520	620
A	AT 3591	158	165	175	185	200	-	-	-	-	-	-	-	-	-	-
B		115	115	120	115	120	150	160	165	165	165	182	213	-	-	-
B	AT 3590V	-	-	-	-	-	-	-	-	-	-	-	390	410	600	700
C		140	140	140	140	140	200	200	200	320	320	320	570	570	-	-
D	AT 3590	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	323,9
E	AT 3590V	-	-	-	-	-	-	-	-	-	-	-	210	240	285	360
	Weight		1,4	1,5	1,8	2,0	2,4	3,5	4,2	5,2	8	15	34	39	70	120

Measurements in mm, weight in kg.

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## Function and Design

Ball valve in all-welded construction with reduced bore and welding ends for welding in directly.

The ball is fixed between two seat rings of carbon filled PTFE.

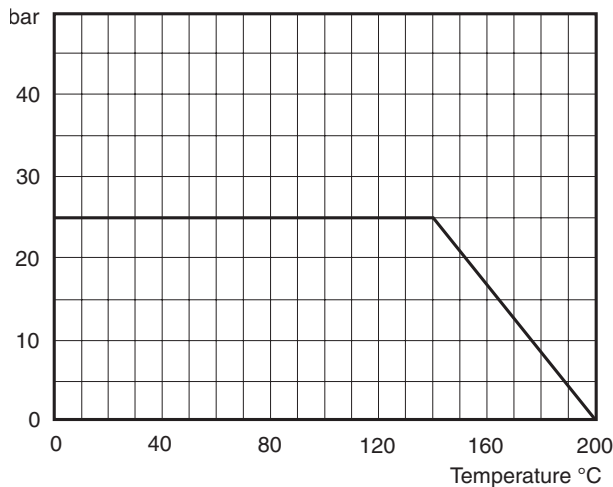
As standard, the valve is delivered with extended stem for full insulation and the upper part of stem is visible and inspectable.

## Technical Information

Fig.no.	DN	Max. working pressure
AT 3590	10-300	25
AT 3591	10-32	25

## Pressure and temperature

Pressure bar (e)



## Kv-value

DN	10	15	20	25	32	40	50	65	80	100	125	150	200	250	300
Kvs	10	10	15	26	41	67	105	164	276	419	655	1022	1472	2617	4090

## Torque at differential 16 bar

DN	25	32	40	50	65	80	100	125	150	200	250	300
Nm	6	8	20	27	40	80	140	200	380	550	1500	1800

**Note:** To make sure correct dimensioning, the torque has to be multiplied by a factor of 2,0.

## Installation

The valve can be mounted in any position independent of the flow direction.

The valve must be welded in with the valve in full open position.

Note, in the case of gas welding the valve must be cooled down to protect the seat rings from damage.

## Accessories and Options

The valves can be equipped with locking device (AT 3619) for open and closed

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position.

Separate stem extensions (AT 3603) and lever of stainless steel (AT 3604RF) are available on request. Stem's square-measure has to be specified when ordering. Valve performed with external/internal threads AT 3640.

## Maintenance and Spare parts

The valve is a shut-off valve and shall be in full open or closed position.

The valve is maintenance free, but regular checking-up and operating control needs to secure a safe handling and function.

The stuffing box is follow-up draftable.

## Marking

Manufacturer, DN, PN, type, year and month of manufacturing are marked on the identification label.

## How to order

DN	Weld ends		Weld ends		Weld end/internal thread	
	Fig. no.		with warm gear		Fig. no.	
10	3590-10				3591-10	
15	-15				-15	
20	-20				-20	
25	-25				-25	
32	-32				-32	
40	-40					
50	-50					
65	-65					
80	-80					
100	-100					
125	-125					
150	-150			3590V150		
200				V200		
250				V250		
300				V300		