

Internet_Variants

Dimension range	PN	Temperature range	Material
DN 8-100	10/100	-20°C to + 200°C	Carbon 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)

Program text

PSB.1 Ball Valves

Ball valve in steel AT 3542 ..., with reduced bore, weld ends and steel lever. Gasket box of graphite.

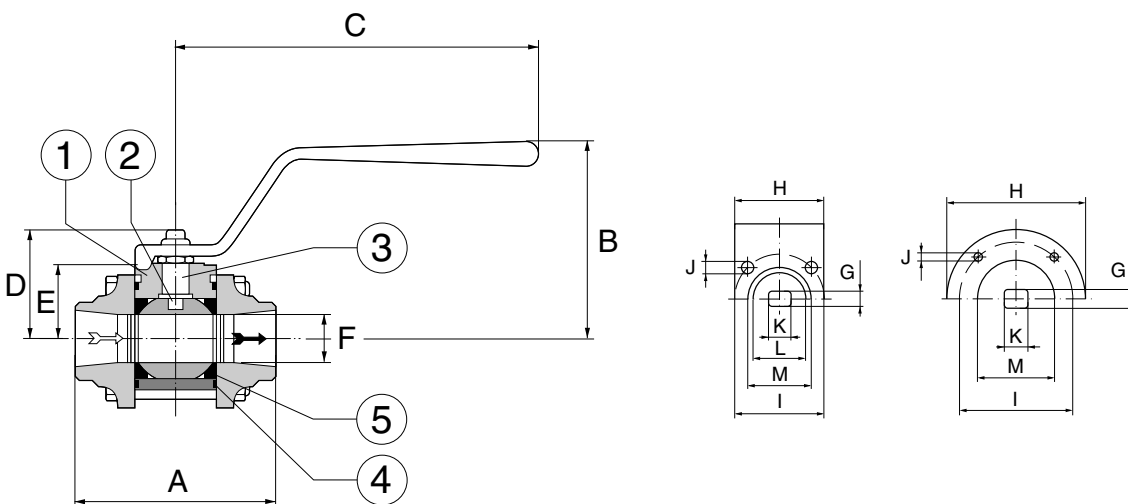
Ball valve in steel AT 3547 ..., with reduced bore, internal thread and steel lever. Gasket box of graphite.

Quality Assurance

Tested according to SS-ISO 5208. Leakage class 3 applies to this valve type. The valves are approved according to 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 demands from PED, AFS 2016:1, the directive for pressure devices, according to category III fluid group 1 and 2. Dimensions up to DN 25 satisfies § 8 of the PED, AFS 2016:1.



Material specification

		AT3542 AT3547	
1	Body	Steel 1.0352 / 1.0460 / 1.0619 P250GH / P240GH	
2	Ball	Stainless steel 1.4404	
3	Stem	Stainless steel 1.4404 / 1.4462	
4	Body gasket	PTFE	
5	Seat ring*	PTFE	
6	Stem packing	PTFE, glass-reinforced	
7	Gasket box	PTFE, carbon-filled and glass reinforced	
8	Centering ring	PTFE, glass-reinforced	DN65-150 DN200-250
9	End piece	Stainless steel 1.4404	
10	Lever	Steel/epoxi coated	

*Seat in high temperature performance, carbon-filled (25%) PTFE, additional designation HT. Seat rings in different material on request, I.A. glass-reinforced PTFE, PEEK or metallic seal valve.

Dimension and weight for valves with reduced bore AT 3542, 3547

DN	8	10	15	20	25	32	40	50	65	80	100	125	150	200	250
A	65	65	65	72,5	85,4	99,3	110,4	126,3	142,6	169,5	214	277	307	409	460
A1**	-	130	130	150	160	180	200	230	290	310	350	400	480	600	730
B	95	95	95	100	120	125	135	140	150	154	169	183	183	262	310
C	145	145	145	145	185	185	200	200	250	480	480	480	480	720	800
D	40	40	40	42	53	58	71	76	86	153	168	182	182	258	305
E	30	30	30	32	38	36	42	46	70	99	114	128	128	186	232
F	11,1	11,1	11,1	14,2	20,6	25,4	31,7	38	50	62	82,4	100	100	150	200
G	5,4	5,4	5,4	5,4	7,5	7,5	8,9	8,9	8,9	19	19	19	19	28,5	30
H	36	36	36	36	42	41,5*	48,5*	54	70	90	125	125	125	150	175
I	36	36	36	36	42	42	50	50	70	70	102	102	102	125	140
J	M5	M5	M5	M5	M5	M5	M6	M6	M8	M8	M10	M10	M10	M12	M16
K	9,5	9,5	9,5	9,5	11	11	14,3	14,3	14,3	22,5	22,5	22,5	22,5	35	38
L	22	22	22	22	25	25	30	30	45	-	-	-	-	-	-
M	25	25	25	25	30	30	35	35	55	55	70	70	70	85	100
ISO flange	F03	F03	F03	F03	F04	F04	F05	F05	F07	F07	F10	F10	F10	F12	F14
Weight	0,5	0,5	0,5	0,8	1,3	1,8	2,8	3,8	7	12	21	35	40	85	150
Weight AT3552		2,0	2,2	3,1	3,9	6,1	7,4	10,0	16,0	26,0	34,0	47,0	56,0	134,0	200,0

*Body length

** A1, face to face AT3552

Measurements in mm. weight in kg

Function and Design

Three-piece ball valve for easy service and maintenance.

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 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.

Technical Information

Pressure and temperature, reduced bore AT 3542, 3547

DN		8-32	40-50	65-100	125-200
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. See also pressure and temperature diagram. Note that the pressure- and temperatures above is not related.

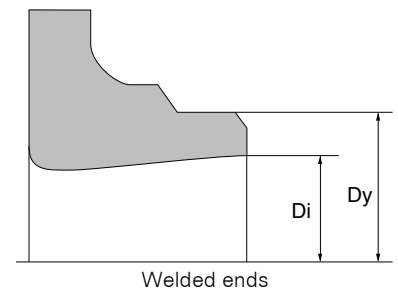
Torque

Torque

DN	8	10	15	20	25	32	40	50	65	80	100	125	150	200	250
Nm	4	4	4	5	9	15	20	25	50	80	130	180	180	270	350

Kv-value

DN	8	10	15	20	25	32	40	50	65	80	100	125	150	200	250
Kvs	8	8	8	13	30	48	80	120	250	470	700	1250	1250	1800	2800



3542 measurements welded ends

AT 3542 Measurements welded 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	13,2	17,3	22,3	28,5	37,2	43,1	54,5	70,3	82,5	107,1	131,7	159,3	206,5	260
Material thickness	2	2	2	2,3	2,6	2,6	2,6	2,9	2,9	3,2	3,6	4	4,5	6,3	6,5

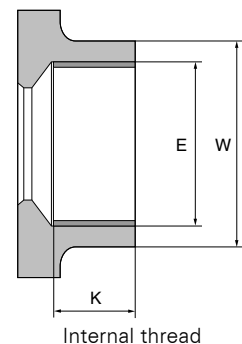
Measurements in mm.

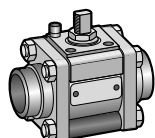
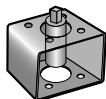
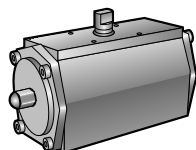
Measurements internal threads

AT 3547 Measurements internal thread

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 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, 3-way valves, heating jacket, Cryo performance, double stuffing

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 admit a simple exchanging of all parts. See separate installation- and maintenance instructions AT 9980-3502.

Marking

Manufacturer, DN, PN, material, CE.

How to order

DN	AT 3542		AT 3547	
	Order No.	RSK-no.	Order no.	RSK-no.
8	3542-8	451 57 06	3547-8	450 59 88
10	3542-10	451 57 14	3547-10	450 59 96
15	3542-15	451 57 22	3547-15	450 60 02
20	3542-20	451 57 30	3547-20	450 60 10
25	3542-25	451 57 48	3547-25	450 60 28
32	3542-32	451 57 55	3547-32	450 61 27
40	3542-40	451 57 63	3547-40	450 61 35
50	3542-50	451 57 71	3547-50	450 61 43
65	3542-65	451 57 89		
80	3542-80	451 57 97		
100	3542-100	451 58 05		

How to order cont.

HT = High temperature performance

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