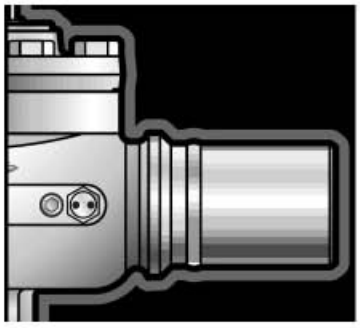
VARIANTS



PUPS

Butt Weld vales may be supplied with transition pieces(PUPS) to avoid any risk of seat and seal damage during welding and post weld heat treatment operations. Length of pups and type of pipe and grade to be specified by customer.

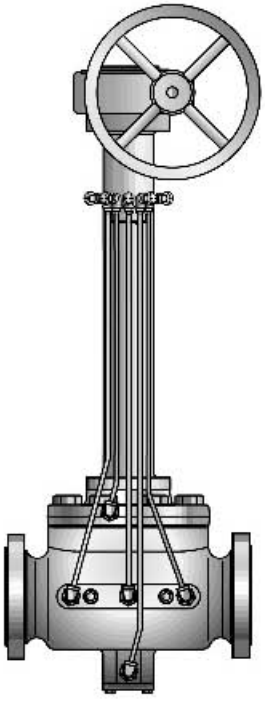
ACTUATORS

The bonnet design of Vatac Top Entry Ball Valves permits easy adaptation to mount manual, electric, hydraulic, or pneumatic actuators.

METAL SEATED BALL VALVES

Vatac Top Entry Metal Seated ball valves have been designed to provide a reliable, efficient and safe method to handle services where high temperatures and/or the presence of solid particles in the fluid make in impossible, or not recommended, to use soft seated ball valves.

SUB-SEA OPTIONS: Sub-Sea vales are optionally available upon request



EXTENSIONS

Vatac top entry ball valves are available for below ground or buried service with fully operational extensions to meet your specifications. Body Bleed and Sealant Injection functions are maintained along with total valve control by manual or powered actuators. Extension dimensions for Gear Operator or Actuator are given with reference from the valve center line to the center of hand wheel.

INSTALLATION

FLANGE END (RF & RTJ):

Top Entry Ball Valves may be mounted in either vertical or horizontal piping systems. The stem may be positioned vertically to horizontally.

Mating flanges must be correctly aligned. Alignment included bolt bole placement, parallelism, and perpendicularity.

Use proper size gasket or RTJ metal seal. Flange studs or bolting must be correct size and properly tightened.

Properly constructed piping systems do not cause undo stress in valve assemblies. Valves are not intended to make up for insufficient pipe tolerances.

WELD ENDS (WE):

Keep ball in open position prior to installation/welding of Vatac Top Entry Weld End Ball Valve.

Place the valve in position by aligning Weld Ends to the pipe.

Prior to welding it is imperative that all welding surfaces be clean from contamination such as dirt, dust and grease which may affect weld performance.

Caution: During the welding process. Valve body temperatures should be monitored around the circumference at a location inline with the sealant injection fittings. The temperatures at this plane should be checked with Temperature Stick or other reliable temperature indicator and not allowed to exceed 300° F. This precaution is necessary to assure that non-metallic seals do not sufer heat damage.

Tack weld valve in position and check for proper alignment.

Finish weld following proper weld procedure for material grade and condition, and the above Caution.

VATAC FULL WELDED BALL VALVE DESIGN FEATURES

SEAMLESS CARBON STEEL BODY
All welded ball valve body is compact and streamline for maximum strength and minimum weight.

STAINLESS STEEL BALL
The stainless steel ball is produced to extremely tight tolerances, and ground to within microns of perfect roundness to assure smooth operations and a tight seal.

OPTIONAL LOCKING DEVICE WITH POSITION INDICATOR
Instantly readable locking device that shows the valve operating position.

STEM BEARINGS
These bearings are produced from an electrically conductive material that provides a safety grounded stem to eliminate static build-up and potential arcing.

SEAT SEALS
The special 25% carbonized PTFE (Teflon) (G-453) seals tightly, yet allows easy, low-torque, quarter-turn operation.

STAINLESS LABELS
Every label is permanently stamped, color coded with traceable serial numbers for each valve.

SEAT QUALITY FEATURES
Do not absorb water, and does not expand
Chemical resistant
High friction charateristics
Good temperature stability
Tested and approved up to 250℃

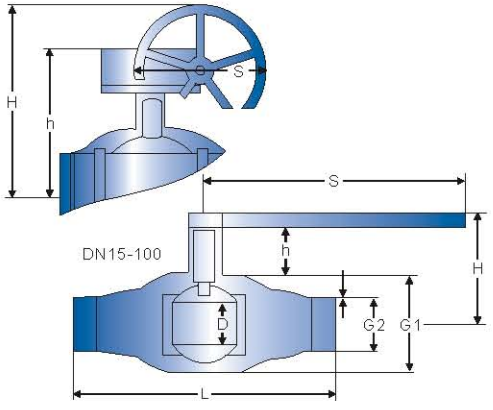
VATAC FULL WELDED BALL VALVES GENERAL FEATURES
Uni-body Top Entry
Double Block and Bleed
Fire Safe, Anti-static, Stem Blow-out
Optional Locking Device and Position Indicator
Size Ranges: 1/2" through 16" (DN15 through DN400)
Pressure Ratings: ASME Class 150 through Class 900
(PN10 through PN150)
Standard Materials Ranges: Cast Carbon Steel, Stainless Steel,
Alloy Steel etc

FULL WELDED BALL VALVE - WEIDED END

- One Piece Uni-body, Top Entry,Full Port, WeldedEnds
- Floating Ball, Fire Safe, Blow-outProof Stem
- Anti-static Device, Cavity RelievingSeats
- NACE MR-01-75, Optional Locking Device
- Designed to EN12516, DIN3357-1

Face to Face	EN558-1/DIN 3202
End Flange	EN1092/DIN 2542
Buttweld	EN12627
Class	PN25/PN40

DN125-250



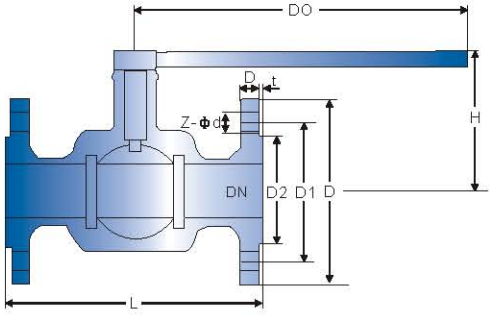
PN25/PN40 DIMENSION

SIZE (DN)	PN	L	D	G1	G2	H	h	t	S
									Unit: mm
15	40	230	15	42.4	26.9	82	38	2.3	120
20	40	230	20	48.3	33.7	105	36	2.6	120
25	40	230	25	60.3	42.4	95	38	2.6	130
32	40	260	32	76.1	48.3	125	49	2.6	160
40	40	260	40	88.9	60.3	135	49	2.9	180
50	40	300	50	108	76.1	118	53	2.9	300
65	25	300	65	127	88.9	141	65	3.2	300
80	25	325	80	159	114.3	188	82	3.6	400
100	25	325	100	193.7	139.7	208	78	4	400
125	25	350	125	219.1	168.3	400	230	4.5	320
150	25	400	150	275	219.1	450	330	4.5	350
200	25	530	200	357	273	525	400	5	350
250	25	550	250	427	325	595	450	5.6	400

FULL WELDED BALL VALVE - FLANGED END

- One Piece Uni-body, Top Entry,Full Port, FlangedEnds
- Floating Ball, Fire Safe, Blow-outProof Stem
- Anti-static Device, Cavity RelievingSeats
- NACE MR-01-75, Optional Locking Device
- Designed to EN12516, DIN3357-1

Face to Face	EN558-1/DIN 3202
End Flange	EN1092/DIN 2542
Buttweld	EN12627
Class	PN16/PN25/PN40



PN16 DIMENSION

SIZE (DN)	L	D	D1	D2	H	b-f	Z-Φ d	Do
								Unit: mm
15	130	95	65	45	60	14-2	4-14	108
20	140	105	75	55	64	14-2	4-14	120
25	150	115	85	65	90	16-2	4-14	165
32	165	135	100	78	105	16-2	4-18	180
40	180	145	110	85	150	16-3	4-18	240
50	200	160	125	100	190	16-3	4-18	240
65	220	180	145	120	195	18-3	4-18	320
80	250	195	160	135	215	20-3	8-18	350
100	280	215	180	155	250	20-3	8-18	400
125	320	245	210	185	280	22-3	8-18	500
150	360	280	240	210	320	24-3	8-23	600
200	400	335	295	265	370	26-3	12-23	800

PN25 DIMENSION

SIZE (DN)	L	D	D1	D2	H	b-f	Z-Φ d	Do
								Unit: mm
40	180	145	110	85	160	18-3	4-18	240
50	200	160	125	100	205	20-3	4-18	270
65	220	180	145	120	215	22-3	8-18	350
80	250	195	160	135	230	22-3	8-18	400
100	280	230	190	160	270	24-3	8-23	500
125	320	270	220	188	300	28-3	8-25	600
150	360	300	250	218	340	30-3	8-25	900
200	400	360	310	278	400	34-3	12-25	1100

PN40 DIMENSION

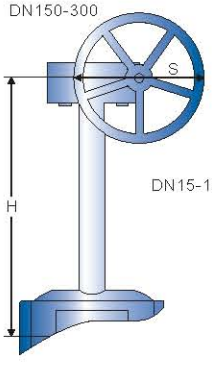
SIZE (DN)	L	D	D1	D2	H	b-f	Z-Φ d	Do
								Unit: mm
15	130	95	65	45	60	16-2	4-14	40
20	140	105	75	55	65	16-2	4-14	50
25	150	115	85	65	90	18-2	4-14	58
32	180	135	100	78	105	18-3	4-18	66
40	200	145	110	85	170	18-3	4-18	76
50	220	160	125	100	230	20-3	4-18	88
65	250	180	145	120	250	22-3	8-18	110
80	280	195	160	135	250	22-3	8-18	121
100	320	230	190	160	295	24-3	8-23	150
125	400	270	220	188	330	28-3	8-25	176
150	400	300	250	218	375	30-3	8-25	204
200	550	375	320	282	440	38-3	12-30	260

FULL WELDED BALL VALVE
WEIDED END WITH STEM EXTENSION

- One Piece Uni-body, Top Entry, Reduced Bore, WeldedEnds
- Long Stem, Floating Ball, FireSafe, Blow-out ProofStem
- Anti-static Device, Cavity RelievingSeats
- NACE MR-01-75, Optional Locking Device
- Designed to EN12516, DIN3357-1

Face to Face	EN558-1/DIN 3202
End Flange	EN1092/DIN 2542
Buttweld	EN12627
Class	PN25/PN40

DN150-300



DN15-125

PN25/PN40 DIMENSION

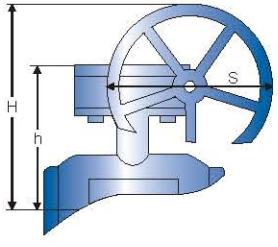
SIZE (DN)	PN	L	D	G1	G2	Hmax	t	S
								Unit: mm
15	40	230	10	33.7	21.3	3000	2	120
20	40	230	15	42.4	26.9	3000	2.3	120
25	40	230	20	48.3	33.7	3000	2.6	120
32	40	260	25	60.3	42.4	3000	2.6	130
40	40	260	32	76.1	48.3	3000	2.6	160
50	40	300	40	88.9	60.3	3000	2.9	180
65	25	300	50	108	76.1	3000	2.9	300
80	25	300	65	127	88.9	3000	3.2	300
100	25	325	80	159	114.3	3000	3.6	400
125	25	325	100	193.7	139.7	3000	4	400
150	25	350	125	219.1	168.3	3000	4.5	320
200	25	400	150	275	219.1	3000	4.5	350
250	25	530	200	357	273	3000	5	350
300	25	550	250	427	325	3000	5.6	400

FULL WELDED BALL VALVE - WEIDED END

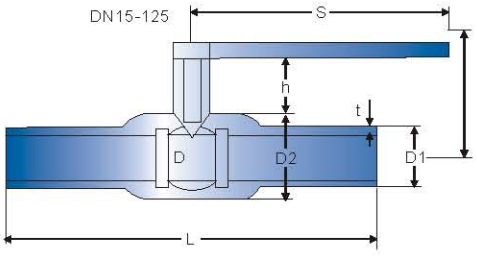
One Piece Uni-body, Top Entry, Reduced Bore, WeldedEnds
Floating Ball, FireSafe, Blow-out ProofStem
Anti-static Device, Cavity RelievingSeats
NACE MR-01-75, Optional LockingDevice
Designed to EN12516, DIN3357-1

Face to Face	EN558-1/DIN 3202
End Flange	EN1092/DIN 2542
Buttweld	EN12627
Class	PN25/PN40

DN150-300



DN15-125



PN25/PN40 DIMENSION

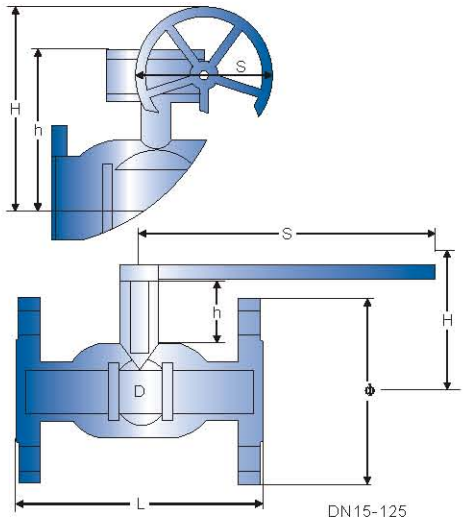
SIZE (DN)	PN	L	D	D1	D2	h	H	S	t	Kv
										Unit: mm
15	40	230	10	21.3	33.7	38	80	120	2.0	8
20	40	230	15	26.9	42.4	38	82	120	2.3	14
25	40	230	20	33.7	48.3	36	105	120	2.6	25
32	40	260	25	42.4	60.3	38	95	130	2.6	41
40	40	260	32	48.3	76.1	49	125	160	2.6	65
50	40	300	40	60.3	88.9	49	135	180	2.9	108
65	25	300	51	76.1	108.0	53	118	300	2.9	180
80	25	300	66	88.9	127.0	65	141	300	3.2	290
100	25	325	81.5	114.3	159.0	82	188	400	3.6	470
125	25	325	102	139.7	193.7	78	203	400	4.0	880
150	25	350	125	168.3	219.1	280	400	320	4.5	1150
200	25	400	152	219.1	275.0	330	450	350	4.5	1750
250	25	530	203	273.0	357.0	400	525	350	5.0	3200
300	25	550	254	325	427.0	450	595	400	5.6	4600

FULL WELDED BALL VALVE - FLANGED END

- One Piece Uni-body, Top Entry,Reduced Bore, FlangedEnds
- Floating Ball, Fire Safe, Blow-outProof Stem
- Anti-static Device, Cavity RelievingSeats
- NACE MR-01-75, Optional Locking Device
- Designed to EN12516, DIN3357-1

Face to Face	EN558-1/DIN 3202
End Flange	EN1092/DIN 2542
Buttweld	EN12627
Class	PN25/PN40

DN150-300



DN15-125

PN25/PN40 DIMENSION

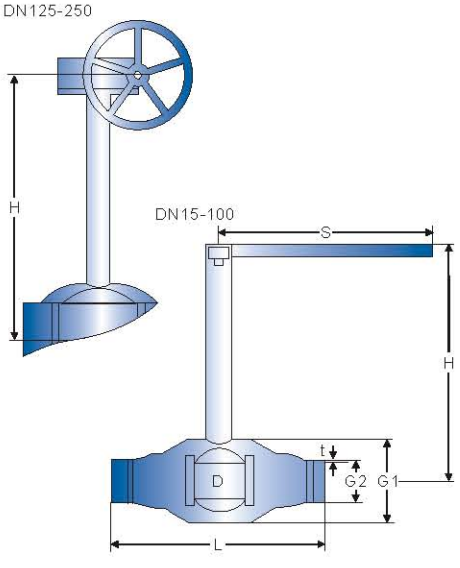
SIZE (DN)	PN (body)	PN (FLG)	L	D	ϕ	ϕ1	d	Holes	h	H	S
											Unit: mm
15	40	40	130	10	95	65	14	4	40	80	120
20	40	40	150	15	105	75	14	4	40	82	120
25	40	40	160	20	115	85	14	4	45	105	120
32	40	40	180	25	140	100	18	4	38	95	130
40	40	40	200	32	150	110	18	4	44	125	160
50	40	40	230	40	165	125	18	4	49	135	180
65	25	16	270	51	180	145	18	4	53	118	300
80	25	16	280	66	200	160	18	8	65	141	300
100	25	16	300	81.5	220	180	18	8	82	188	400
125	25	16	325	102	250	210	18	8	78	203	400
150	25	16	350	125	285	240	22	8	280	400	320
200	25	16	400	152	340	295	22	12	330	450	350
250	25	16	500	203	405	355	26	12	400	525	350
300	25	16	500	254	480	410	26	12	450	595	400

FULL WELDED BALL VALVE WEIDED END WITH STEM EXTENSION

- One Piece Uni-body, Top Entry,Reduced Bore, WeldedEnds
- Long Stem, Floating Ball, FireSafe, Blow-out ProofStem
- Anti-static Device, Cavity RelievingSeats
- NACE MR-01-75, Optional Locking Device
- Designed to EN12516, DIN3357-1

Face to Face	EN558-1/DIN 3202
End Flange	EN1092/DIN 2542
Buttweld	EN12627
Class	PN25/PN40

DN125-250



PN25/PN40 DIMENSION

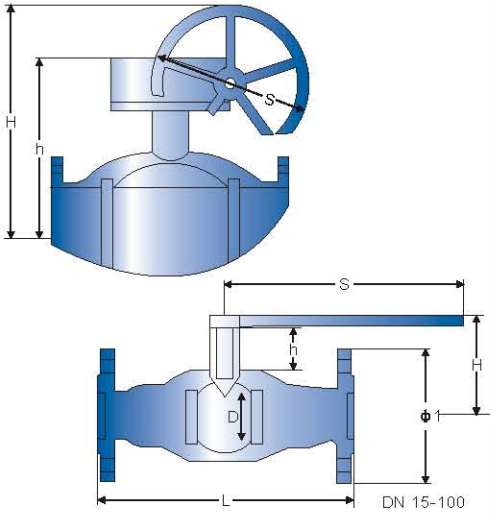
SIZE (DN)	PN	L	D	G1	G2	Hmax	t	s
								Unit: mm
15	40	230	15	42.4	26.9	3000	2.3	120
20	40	230	20	48.3	33.7	3000	2.6	120
25	40	260	25	60.3	42.4	3000	2.6	130
32	40	260	32	76.1	48.3	3000	2.6	160
40	40	300	40	88.9	60.3	3000	2.9	180
50	40	300	50	108	76.1	3000	2.9	300
65	25	300	65	127	88.9	3000	3.2	300
80	25	325	90	159	114.3	3000	3.6	400
100	25	325	100	193.7	139.7	3000	4	400
125	25	350	125	219.1	168.3	3000	4.5	320
150	25	400	150	275	219.1	3000	4.5	350
200	25	530	200	357	273	3000	5	350
250	25	550	250	427	325	3000	5.6	400

FULL WELDED BALL VALVE - FLANGED END

- One Piece Uni-body, Top Entry, Reduced Bore, FlangedEnds
- Floating Ball, Fire Safe, Blow-outProof Stem
- Anti-static Device, Cavity RelievingSeats
- NACE MR-01-75, Optional Locking Device
- Designed to EN12516, DIN3357-1

Face to Face	EN558-1/DIN 3202
End Flange	EN1092/DIN 2542
Buttweld	EN12627
Class	PN25/PN40

DN 125-250



PN25/PN40 DIMENSION

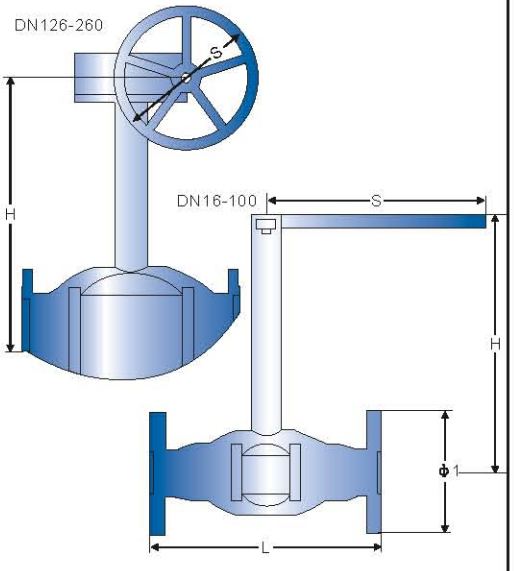
SIZE (DN)	PN (body)	PN (FLG)	L	D	Φ1	Φ2	d	Holes	H	S
										Unit: mm
15	40	40	245	15	95	65	14	4	40	120
20	40	40	245	20	105	75	14	4	45	120
25	40	40	275	25	115	85	14	4	38	130
32	40	40	275	32	140	100	18	4	44	160
40	40	40	320	40	150	110	18	4	49	180
50	25	40	320	50	165	125	18	4	53	300
65	25	16	325	65	180	145	18	4	65	300
80	25	16	350	80	200	160	18	8	82	400
100	25	16	350	100	220	180	18	8	78	400
125	25	16	375	125	250	210	18	8	280	320
150	25	16	515	150	285	240	22	8	330	350
200	25	16	560	200	340	295	22	12	400	350
250	25	16	595	250	405	355	26	12	450	400

FULL WELDED BALL VALVE FLANGED END WITH STEM EXTENSION

- One Piece Uni-body, Top Entry, Reduced Bore, FlangedEnds
- Floating Ball, Fire Safe, Blow-outProof Stem
- Anti-static Device, Cavity RelievingSeats
- NACE MR-01-75, Optional Locking Device
- Designed to EN12516, DIN3357-1

Face to Face	EN558-1/DIN 3202
End Flange	EN1092/DIN 2542
Buttweld	EN12627
Class	PN25/PN40

DN126-260



PN25/PN40 DIMENSION

DN	PN (body)	PN (FLG)	L	D	Φ1	Φ2	d	Holes	Hmax	S
										Unit: mm
15	40	40	245	15	85	65	14	4	3000	120
20	40	40	245	20	105	75	14	4	3000	120
25	40	40	275	25	115	85	14	4	3000	130
32	40	40	275	32	140	100	18	4	3000	160
40	40	40	320	40	150	110	18	4	3000	180
50	40	16	320	50	165	125	18	4	3000	300
65	25	16	325	65	185	145	18	4	3000	300
80	25	16	350	80	200	160	18	8	3000	400
100	25	16	350	100	220	180	18	8	3000	400
125	25	16	375	125	250	210	18	8	3000	320
150	25	16	515	150	285	240	22	8	3000	350
200	25	16	560	200	340	295	22	12	3000	350
250	25	16	595	250	405	355	26	12	3000	400