

CHINA VIHUNG VALVE CO., LTD.



COMPANY PROFILE

VIHUNG VALVE specialises in the supply of valves for the Oil, Gas, Chemical, Petrochemical, Pipeline and Water Industries Worldwide. Our valves are used in Offshore, Onshore and Sub-Sea applications.

The Management of the Company has many years experience in the Valve Industry. The organisation and flexibility of the Company allows VIHUNG VALVE to offer short lead-times, even on non-standard valves.

All valves are supplied to the highest quality standards and are fully tested before leaving the factory.

The aim of VIHUNG VALVE is to provide valves and services, which meet or exceed our Customers' requirements, at a realistic price and reliable manufacturing time and in so doing remain a market leader supplying a worldwide base of industry leading clients.

VIHUNG VALVE QUALITY SYSTEM

VIHUNG VALVE quality system is Lloyds approved to BS: EN ISO ISO 9001:2015 and API Q1 9th Edition which ensures that our product is controlled through each stage of manufacture. Valves are supplied with full chemical and mechanical material test certificates to BS EN 10204: 2004 3.1. Hydrostatic and pneumatic test certificates are also supplied with each valve.

VIHUNG VALVE is part of the Federal International (2000) Ltd Group. This long standing relationship coupled with our own experience has allowed VIHUNG VALVE to grow and develop into our current and ever improving place within the market.

As part of a large multi-national group, **VIHUNG VALVE** has the benefit and experience of our The PR. of China based operations together with worldwide access to our parent company resources and our numerous sister companies.

These valuable resources afford us global reach, whilst allowing local access and understanding of both global and local markets, allowing us to provide local technical support in almost any region.

Our key position within the group enables us to offer full management and supply of valves, services and subsidiary equipment. We also offer access to a large and continuously replenished inventory of our core in-house designed products and all others available within the group.

We can supply large quantities of varying product ranges almost instantly or equally manufacture at our various VIHUNG VALVE controlled manufacturing sites with short lead times and impeccable quality.

REFERENCE STANDARDS

AMERICAN STANDARD	AMERICAN STANDARDS (ANSI, ASME)					
ANSI / ASME B16.5	Pipe flanges and flanged fittings.					
ANSI / ASME B16.10	Face - to -face and end - to - end dimension of valves					
ANSI / ASME B16.25	Butt -weld ends.					
ANSI / ASME B16.34	Valves -flanged, thread and weld ends.					
ASME B16.11	Forged Fittings, Socket Welding and Threaded					
ASME B1.20.1	Pipe Threads, General Purpose, Inch					

ASTM Material specifications of material used.

API STANDARDS	(API)	
API 6D	Specification for pipeline valves.	
API 602	Specification for Steel Gate Globe Check valves for Size NPS 4 and Smaller.	
API 6FA	Specification for fire test for valves.	
API 607	Fire test for soft - seated quarter - turn valves.	
API 598	Valve inspection and testing.	
API 5L	Specification for line pipe.	

BRITISH STANDARDS (BS)					
BS 5351	Steel ball valves for the petroleum, petrochemical and allied instrument.				
BS 6755	Testing of valves. Specification for fire-type testing requirements.				

MSS STANDARDS (MSS SP)					
SP 25	Standard marking system for valves, fittings, flanges and unions.				
SP 55	Quality Standards for Steel Casting, Visual Method				

INTERNATIONAL STANDARDS					
ISO 5208	Industrial Valves - Pressure Testing of Metallic Valves				
ISO 5211	Industrial Valves - Part Turn Actuator Attachments				
EN ISO 17292	Metal Ball Valves for Petroleum, Petrochemical and allied industries.				
EN 10204	Types of inspection documents.				
NACE MR 01-75	Sulphide stress cracking resistant materials.				



FORGED STEEL BALL VALVES

CONSTRUCTION & FEATURES

- Floating Type Ball Valve
- Designed to BS5351/BS EN 17292
 ASME B16.34
- Full Bore and Reduced Bore
- Two Piece Threaded and Three Piece Bolted Body
- Soft Seated as Standard with wide selection of materials dependant on service conditions
- Bubble Tight Sealing Seat Design
- Anti Blow Out Stem Design
- Anti Static Feature
- Locking Device Option for Manual Operated Valve
- Firesafe Certified to API 607
- Socket Weld ends to ASME B16.11
- Extended Body for Socket welded end piece to prevent heat damage to soft seat during welding
- Pup Piece Welding on ends available upon request
- Threaded(NPT) ends to ASME B1.20.1



MAIN COMPONENT

1. BODY:

Forged from high strength Carbon & Stainless Steel materials to give a robust component. In accordance with BS5351 / BS EN 17292 & ASME B16.34

2. CONNECTOR:

Produced by Forging Process, and available in standard & extended lengths to protect the valve seals during welding installation. Available in Carbon & Stainless Steel Materials

3. BALL:

Single piece, Solid ball, to resist deformation under pressure. Produced in Stainless Steel grades as Standard.

4. STEM:

Produced from High Strength Stainless Steel with generous drive tang to fully engage with the ball for positive drive. Engineered with the weakest point outside the pressure boundary for safety.

5. SEAT:

Produced from a range of Thermoplastic Materials including RPTFE, DEVLON V & PEEK. The seats are carefully engineered to provide bubble tight shut off, whilst maintaining low operating torques.

6. GASKET:

Graphite, Optional PTFE on request

7. PACKING:

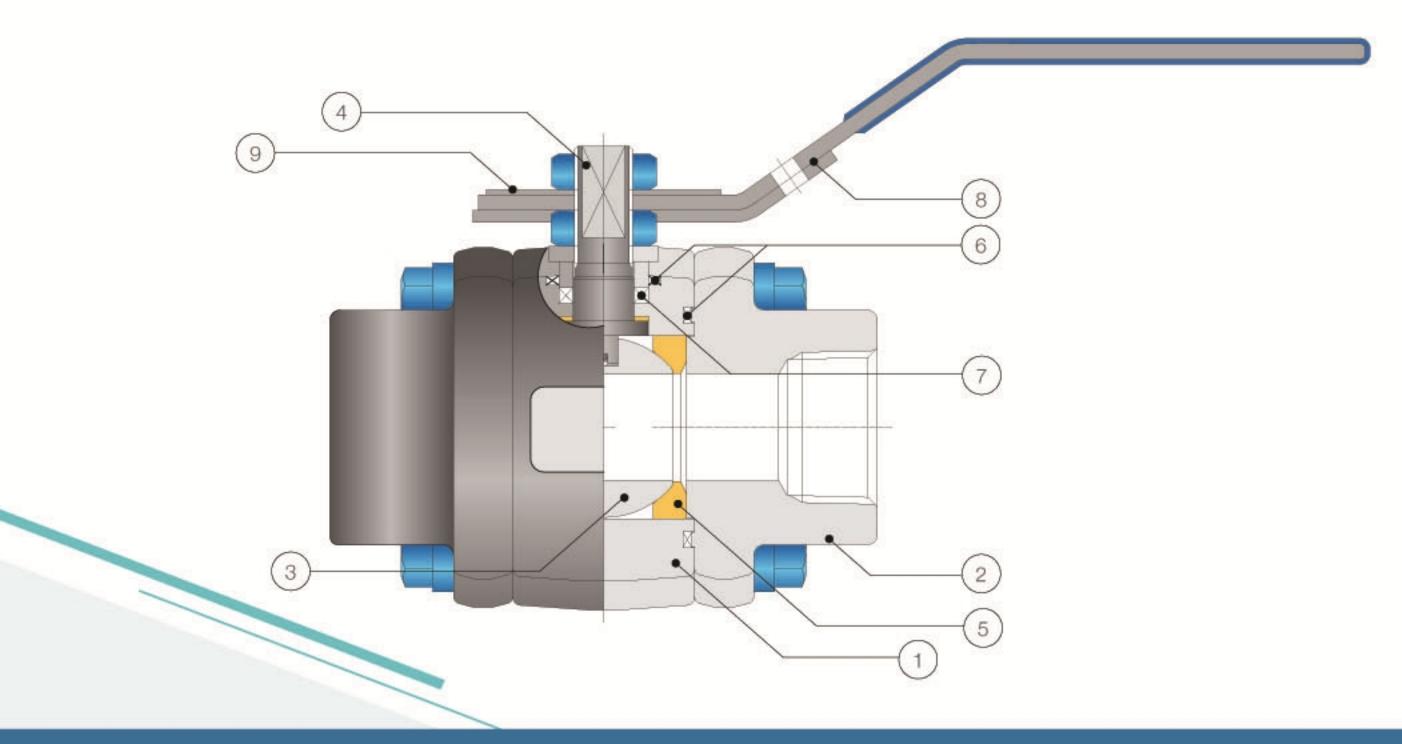
Graphite. Optional PTFE on request

8. LEVER:

Heavy Duty, and fitted with a plastic sleeve for operator safety. Incorporating padlock locating position.

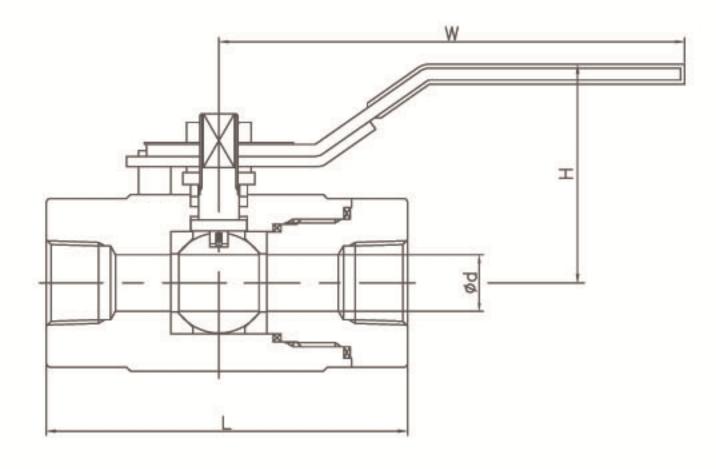
9. NAME PLATE:

Permanently fixed, manufactured from Stainless Steel, to protect from environmental exposure.



CLASS 800# FLOATING BALL VALVE

Threaded Ends, Full & Reduce Bore.



STANDARD COMPONENT MATERIAL

NO	DESCRIPTION	CARBON STEEL	EL					
		A105N	F304	F316	F316L			
1	BODY	A105N	A182-F304	A182-F316	A182-F316L			
2	CONNECTOR	A105N	A182-F304	A182-F316	A182-F316L			
3	BALL	Stain	Stainless Steel A276-T316					
4	STEM	Stain	Stainless Steel A276-T316					
5	SEAT-RING		RPTFE, De	vlon V, Peek				
6	GASKET		PTFE(TEFLO	N), GRAPHITE				
7	PACKING		PTFE(TEFLO	N), GRAPHITE				
8	LEVER	Steel						
9	NAME PLATE	SS						
10	STOP PIN		5	SS				

SPECIFICATION

Valve Body Pressure Rating

Class 800, Max 1975 psig @ 100 F (Carbon Steel)

Temperature Rating

As per ASME B16.34 dependant on Seat Material selection. Please consult KVC UK Ltd.

Body

Two-piece construction.

Ball and Stem

316 Stainless Steel, Solid Ball as standard. Other materials available.

Seats

RPTFE, Devlon V & Peek. Options are available.

Body Seal and Stem Packing

PTFE and Graphite packing as standard. Other packings are available.

Operation

Valves are supplied with Lever operator.

Locking device or pneumatic and electric actuated

Other options are available.

Seat / Seal Leakage

Conform to API 598.

All valves are tested to bubble-tight standards.

Design Specification

ASME 16.34

BS 5351 / BS EN 17292

Threaded ends to ASME B1.20.1

NACE MR-01-75 material (where required).

Firesafe to API 607 (where required).

Anti Static Feature.

Special materials are available to customer requirement.

End to End (L) dimensions are to manufacturer standard.

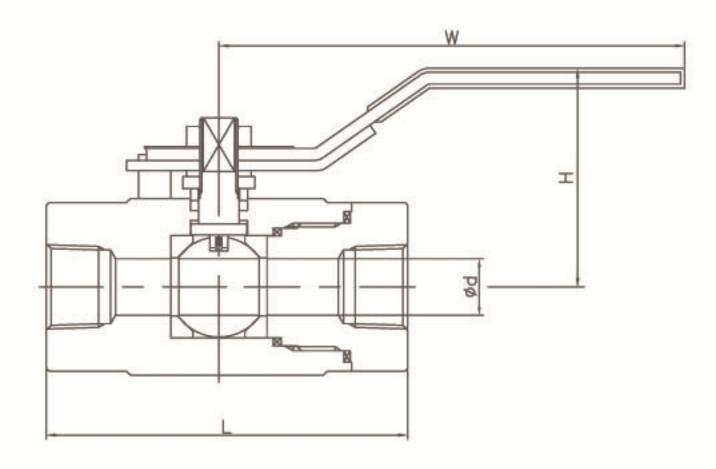
DIMENSION TABLE (UNIT - mm)

REDUCE	FULL			.,		WEIGHT(kg)	CV FA	CTORS
BORd	BORE	<u> </u>	d	н	W	(Approx.)	R/B	F/B
1/4"		85	11	52	120	0.9	8	
3/8"	1/4"	85	11	52	120	0.9	8	8
1/2"	3/8"	85	11	52	120	0.9	8	8
3/4"	1/2"	90	14	55	120	1.0	13	32
1"	3/4"	110	20	73	160	1.9	32	54
1 1/4"	1"	120	25	89	182	3.3	46	105
1 1/2"	1 1/4"	135	32	93	182	4.1	83	190
2"	1 1/2"	150	38	99	182	5.4	120	275
	2"	170	50	125	280	7.0		460

NOTE: Dimensions are for information only.

CLASS 1500# FLOATING BALL VALVE

Threaded Ends, Full & Reduce Bore.



STANDARD COMPONENT MATERIAL

NO	DESCRIPTION	CARBON STEEL	EL					
		A105N	F304	F316	F316L			
1	BODY	A105N	A182-F304	A182-F316	A182-F316L			
2	CONNECTOR	A105N	A182-F304	A182-F316	A182-F316L			
3	BALL	Stain	Stainless Steel A276-T316					
4	STEM	Stain	Stainless Steel A276-T316					
5	SEAT-RING		Devlon	V, Peek				
6	GASKET		PTFE(TEFLO	N), GRAPHITE				
7	PACKING		PTFE(TEFLO	N), GRAPHITE				
8	LEVER	Steel						
9	NAME PLATE	SS						
10	STOP PIN		SS					

SPECIFICATION

Valve Body Pressure Rating

Class 1500, Max 3705 psig @ 100 F (Carbon Steel)

Temperature Rating

As per ASME B16.34 dependant on Seat Material selection. Please consult KVC UK Ltd.

Body

Two-piece construction.

Ball and Stem

316 stainless steel, Solid Ball as standard. Other materials are available.

Seats

Devlon V, Peek

Other options are available.

Body Seal and Stem Packing

PTFE and Graphite packing as standard.

Other packings are available.

Operation

Valves are supplied with Lever operator.

Locking device or pneumatic and electric actuated Option are available.

Seat / Seal Leakage

Conform to API 598.

All valves are tested to bubble-tight standards.

Design Specification

ASME 16.34

BS 5351 / BS EN 17292

Threaded ends to ASME B1.20.1

NACE MR-01-75 material (where required)

Firesafe to API 607 (where required).

Anti Static Feature

Special materials are available to customer requirement

End to End (L) dimensions are to manufacturer standard.

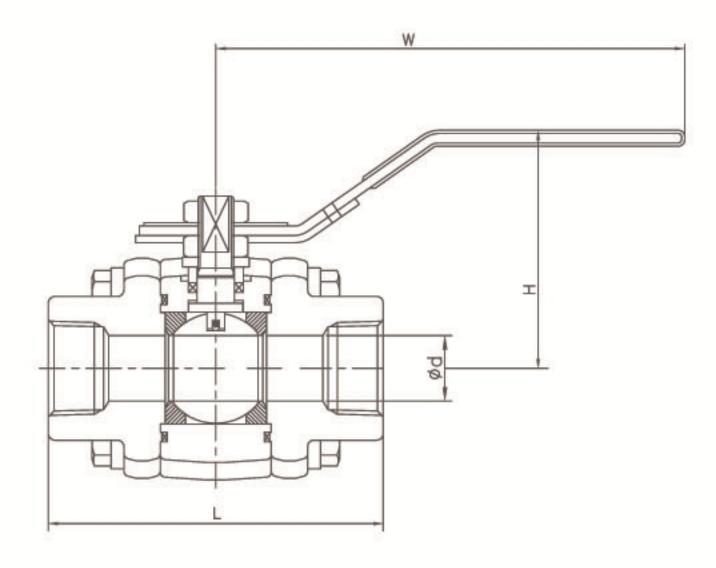
DIMENSION TABLE (UNIT - mm)

REDUCE	FULL					WEIGHT(kg)	CV FA	CTORS
BORE	BORE	<u>.</u>	d	Н	W	(Approx.)	R/B	F/B
1/4"		93	11	68	160	1.2	8	
3/8"	1/4"	93	11	68	160	1.2	8	8
1/2"	3/8"	93	11	68	160	1.2	8	8
3/4"	1/2"	115	14	82	160	2.3	13	32
1"	3/4"	140	20.5	88	182	4.0	32	54
1 1/4"	1"	140	25	93	182	4.5	46	105
1 1/2"	1 1/4"	157	32	102	182	6.5	83	190
2"	1 1/2"	192	38	115	182	8.5	120	275
	2"	220	50	136	280	13.0		460

NOTE: Dimensions are for information only.

CLASS 800# FLOATING BALL VALVE

Threaded Ends, Full & Reduce Bore.



STANDARD COMPONENT MATERIAL

NO	DESCRIPTION	CARBON STEEL	STAINLESS STEEL				
		A105N	F304	F316	F316L		
1	BODY	A105N	A182-F304	A182-F316	A182-F316L		
2	CONNECTOR	A105N	A182-F304	A182-F316	A182-F316L		
3	BALL	Stain	Stainless Steel A276-T316				
4	STEM	Stain	Stainless Steel A276-T316				
5	SEAT-RING		RPTFE, De	Ivon V, Peek			
6	GASKET		PTFE(TEFLO	N), GRAPHITE			
7	PACKING		PTFE(TEFLO	N), GRAPHITE			
8	LEVER	Steel					
9	NAME PLATE	SS					
10	STOP PIN		8	SS			

SPECIFICATION

Valve Body Pressure Rating

Class 800, Max 1975 psig @ 100 F (Carbon Steel)

Temperature Rating

As per ASME B16.34 dependant on Seat Material selection. Please consult KVC UK Ltd.

Body

Three-piece construction.

Body Bolts & Nuts

ASTM A193 Gr B7 or ASTM A194 Gr 2H Other Bolts are available according to body material.

Ball and Stem

316 stainless steel, Solid Ball as standard. Other materials are available.

Seats

RPTFE, Devlon V, Peek. Other options are available.

Body Seal and Stem Packing

PTFE and Graphite as standard. Other packings are available.

Operation

Valves are supplied with Lever operator.

Locking device or pneumatic and electric actuated

Option are available.

Seat / Seal Leakage

Conform to API 598.

All valves are tested to bubble-tight standards.

Design Specification

ASME 16.34

BS 5351 / BS EN 17292

Threaded ends to ASME B1.20.1

NACE MR-01-75 material (where required)

Firesafe to API 607 (where required)

Anti Static Feature

Special materials are available to customer requirement End to End (L) dimensions are to manufacturer standard.

DIMENSION TABLE

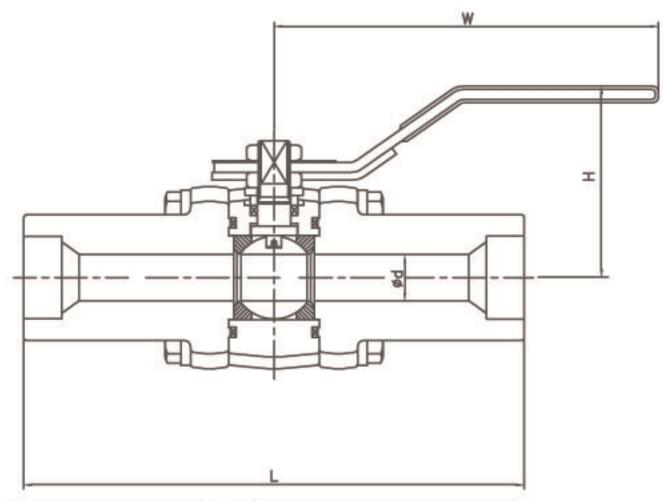
(UNIT - mm)

REDUCE	FULL	•				WEIGHT(kg)	CV FA	CTORS
BORE	BORE	E	d	н	W	(Approx.)	R/B	F/B
1/4"		78	11	52	120	0.9	8	
3/8"	1/4"	78	11	52	120	0.9	8	8
1/2"	3/8"	78	11	52	120	0.9	8	8
3/4"	1/2"	85	14	55	120	1.2	13	32
1"	3/4"	105	20.5	73	160	2.0	32	54
1 1/4"	1"	117	25	89	182	4.3	46	105
1 1/2"	1 1/4"	130	32	93	182	5.0	83	190
2"	1 1/2"	142	38	99	182	7.8	120	275
	2"	160	50	130	280	11.6		460

NOTE: Dimensions are for information only.

CLASS 800# FLOATING BALL VALVE

Socket Weld Ends, Full & Reduce Bore.



Extended SW End Piece, soft seat is safe from welding heat.

STANDARD COMPONENT MATERIAL

NO	DESCRIPTION	CARBON STEEL	STAINLESS STEEL				
		A105N	F304	F316	F316L		
1	BODY	A105N	A182-F304	A182-F316	A182-F316L		
2	CONNECTOR	A105N	A182-F304	A182-F316	A182-F316L		
3	BALL	Stain	Stainless Steel A276-T316				
4	STEM	Stain	Stainless Steel A276-T316				
5	SEAT-RING		RPTFE, De	vlon V, Peek			
6	GASKET		PTFE(TEFLO	N), GRAPHITE			
7	PACKING		PTFE(TEFLO	N), GRAPHITE			
8	LEVER	Steel					
9	NAME PLATE	SS					
10	STOP PIN		8	SS			

SPECIFICATION

Valve Body Pressure Rating

Class 800, Max 1975 psig @ 100 F (Carbon Steel)

Temperature Rating

As per ASME B16.34 dependant on Seat Material selection. Please consult KVC UK Ltd.

Body

Three-piece construction.

Body Bolts & Nuts

ASTM A193 Gr B7 or ASTM A194 Gr 2H Other Bolts are available according to body material.

Ball and Stem

316 stainless steel, Solid Balls as standard. Other materials are available.

Seats

RPTFE, Devlon V, Peek. Other options are available.

Body Seal and Stem Packing

PTFE and Graphite as standard. Other packings are available.

Operation

Valves are supplied with Lever operator.

Locking device or pneumatic and electric actuated

Option are available.

Seat / Seal Leakage

Conform to API 598.

All valves are tested to bubble-tight standards.

Design Specification

ASME 16.34

BS 5351 / BS EN 17292

Socket Weld Ends to ASME B16.11

NACE MR-01-75 material (where required)

Firesafe to API 607 (where required)

Anti Static Feature

Special materials are available to customer requirement End to End (L) dimensions are to manufacturer standard.

DIMENSION TABLE

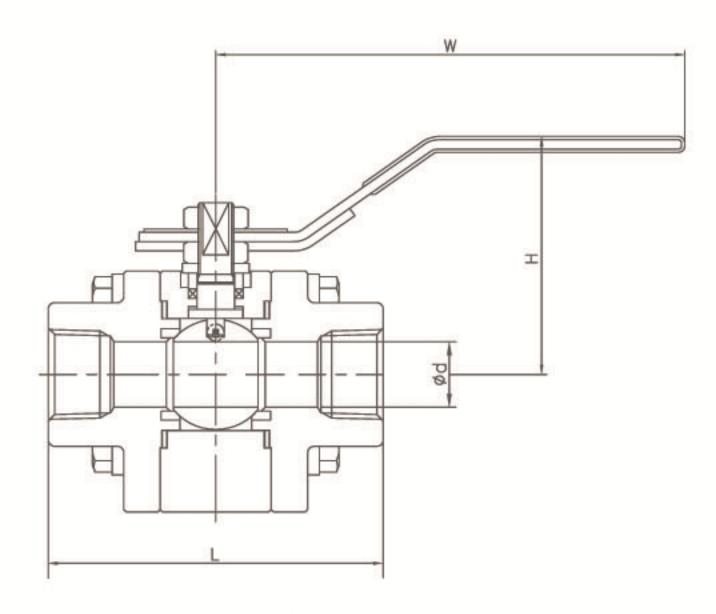
(UNIT - mm)

REDUCE	FULL				w	WEIGHT(kg)	CV FACTORS	
BORE	BORE	E.	d	н	W	(Approx.)	R/B	F/B
1/4"		146	11	52	120	1.3	8	
3/8"	1/4"	146	11	52	120	1.3	8	8
1/2"	3/8"	146	11	52	120	1.3	8	8
3/4"	1/2"	151	14	55	120	1.7	13	32
1"	3/4"	157	20.5	73	160	2.5	32	54
1 1/4"	1"	170	25	89	182	5.1	46	105
1 1/2"	1 1/4"	181	32	93	182	6.2	83	190
2"	1 1/2"	190	38	99	182	8.7	120	275
	2"	205	50	130	280	12.2		460

NOTE: Dimensions are for information only.

CLASS 1500# FLOATING BALL VALVE

Threaded Ends, Full & Reduce Bore.



STANDARD COMPONENT MATERIAL

NO	DESCRIPTION	CARBON STEEL	STAINLESS STEEL					
		A105N	F304	F316	F316L			
1	BODY	A105N	A182-F304	A182-F316	A182-F316L			
2	CONNECTOR	A105N	A182-F304	A182-F316	A182-F316L			
3	BALL	Stain	Stainless Steel A276-T316					
4	STEM	Stain	Stainless Steel A276-T316					
5	SEAT-RING		Devlon	V, Peek				
6	GASKET	0-	RING, PTFE(TE	FLON), GRAPH	HITE			
7	PACKING		PTFE(TEFLO	N), GRAPHITE				
8	LEVER		Steel					
9	NAME PLATE	SS						
10	STOP PIN		8	SS				

SPECIFICATION

Valve Body Pressure Rating

ASME Class 1500, Max 3705 psig @ 100 F (Carbon Steel)

Temperature Rating

As per ASME B16.34 dependant on Seat Material selection. Please consult KVC UK Ltd.

Body

Three-piece construction.

Body Bolts & Nuts

ASTM A193 Gr B7 or ASTM A194 Gr 2H Other Bolts are available according to body material.

Ball and Stem

316 stainless steel, Solid Balls as standard.

Other materials are available.

Seats

Devlon V, Peek.

Other options are available.

Body Seal and Stem Packing

PTFE and Graphite as standard.

Other packings are available.

Operation

Valves are supplied with Lever operator.

Locking device or pneumatic and electric actuated Options are available.

Seat / Seal Leakage

Conform to API 598.

All valves are tested to bubble-tight standards.

Design Specification

ASME 16.34

BS 5351 / BS EN 17292

Threaded Ends to ASME B1.20.1

NACE MR-01-75 material (where required)

Firesafe to API 607 (where required)

Anti Static Feature

Special materials are available to customer requirement End to End (L) dimensions are to manufacturer standard.

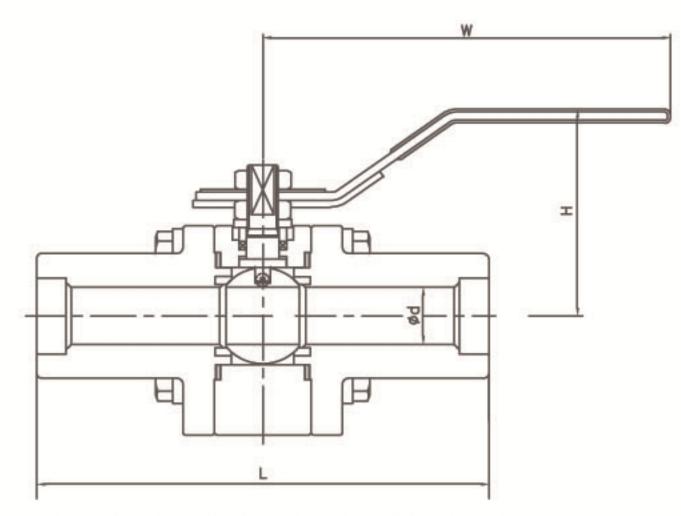
DIMENSION TABLE (UNIT - mm)

REDUCE	FULL		241		2002	WEIGHT(kg)	CV FA	CTORS
BORE	BORE	<u>.</u>	d	н	W	(Approx.)	R/B	F/B
1/4"		90	11	69	160	2.8	8	
3/8"	1/4"	90	11	69	160	2.8	8	8
1/2"	3/8"	90	11	69	160	2.8	8	8
3/4"	1/2"	100	14	72	160	3.4	13	32
1"	3/4"	120	20	85	182	5.0	32	54
1 1/4"	1"	130	25	89	182	10	46	105
1 1/2"	1 1/4"	145	32	94	182	12	83	190
2"	1 1/2"	160	38	103	182	15	120	275
	2"	170	50	134	280	19		460

NOTE: Dimensions are for information only.

CLASS 1500# FLOATING BALL VALVE

Socket Weld Ends, Full & Reduce Bore.



Extended SW End Piece, soft seat is safe from welding heat.

STANDARD COMPONENT MATERIAL

NO	DESCRIPTION	CARBON STEEL	STAINLESS STEEL					
		A105N	F304	F316	F316L			
1	BODY	A105N	A182-F304	A182-F316	A182-F316L			
2	CONNECTOR	A105N	A182-F304	A182-F316	A182-F316L			
3	BALL	Stain	Stainless Steel A276-T316					
4	STEM	Stain	Stainless Steel A276-T316					
5	SEAT-RING		Devlon	V, Peek				
6	GASKET	0-	RING, PTFE(TE	FLON), GRAPH	HITE			
7	PACKING		PTFE(TEFLO	N), GRAPHITE				
8	LEVER	Steel						
9	NAME PLATE	SS						
10	STOP PIN		8	SS				

SPECIFICATION

Valve Body Pressure Rating

ASME Class 1500, Max 3705 psig @ 100 F (Carbon Steel)

Temperature Rating

As per ASME B16.34 dependant on Seat Material selection. Please consult KVC UK Ltd.

Body

Three-piece construction.

Body Bolts & Nuts

ASTM A193 Gr B7 or ASTM A194 Gr 2H Other Bolts are available according to body material.

Ball and Stem

316 stainless steel, Solid Balls as standard. Other materials are available.

Seats

Devlon V, Peek.

Other options are available.

Body Seal and Stem Packing

PTFE and Graphite as standard.

Other packings are available.

Operation

Valves are supplied with Lever operator.

Locking device or pneumatic and electric actuated Option are available.

Seat / Seal Leakage

Conform to API 598.

All valves are tested to bubble-tight standards.

Design Specification

ASME 16.34

BS 5351 / BS EN 17292

Socket Weld Ends to ASME B16.11

NACE MR-01-75 material (where required)

Firesafe to API 607 (where required)

Anti Static Feature

Special materials are available to customer requirement End to End (L) dimensions are to manufacturer standard.

Butt Weld Ends to ASME B16.25 Option available

DIMENSION TABLE

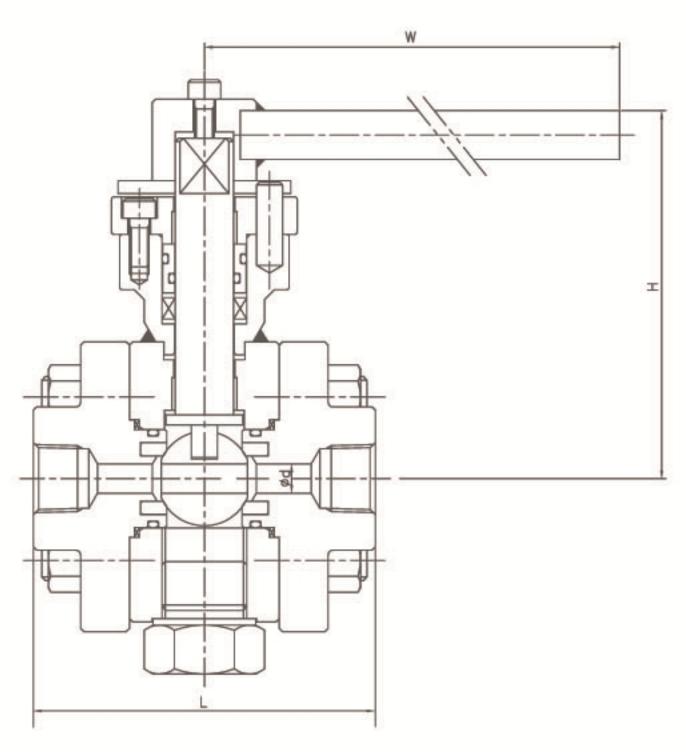
(UNIT - mm)

REDUCE	FULL					WEIGHT(kg)	CV FACTORS	
BORE	BORE	-	d	н	W	(Approx.)	R/B	F/B
1/4"		176	11	69	160	3.2	8	
3/8"	1/4"	176	11	69	160	3.2	8	8
1/2"	3/8"	176	11	69	160	3.2	8	8
3/4"	1/2"	181	14	72	160	3.9	13	32
1"	3/4"	190	20	85	182	7.1	32	54
1 1/4"	1"	200	25	89	182	13.5	46	105
1 1/2"	1 1/4"	211	32	94	182	15	83	190
2"	1 1/2"	220	38	103	182	19	120	275
	2"	235	50	134	280	23.5		460

NOTE: Dimensions are for information only.

CLASS 2500# FLOATING BALL VALVE

Threaded Ends, Full & Reduce Bore.



STANDARD COMPONENT MATERIAL

NO	DESCRIPTION	CARBON STEEL	STAINLESS STEEL					
		A105	F304	F316	F316L			
1	BODY	A105	A182-F304	A182-F316	A182-F316L			
2	CONNECTOR	A105	A182-F304	A182-F316	A182-F316L			
3	BALL	Stain	Stainless Steel A276-T316					
4	STEM	Stain	Stainless Steel A276-T316					
5	SEAT-RING		PE	EK				
6	GASKET	0-	RING, PTFE(TE	FLON), GRAPH	HITE			
7	PACKING		PTFE(TEFLO	N), GRAPHITE				
8	LEVER		Steel					
9	NAME PLATE	SS						
10	STOP PIN		8	SS				

SPECIFICATION

Valve Body Pressure Rating

ASME Class 2500, Max 6170 psig @ 100 F (Carbon Steel)

Temperature Rating

As per ASME B16.34 dependant on Seat Material selection. Please consult KVC UK Ltd.

Body

Three-piece construction.

Body Bolts & Nuts

ASTM A193 Gr B7 or ASTM A194 Gr 2H
Other Bolts are available according to body material.

Ball and Stem

316 stainless steel, Solid Balls as standard. Other materials are available.

Seats

Peek seats.

Body Seal and Stem Packing

O-Ring Seal, PTFE and Graphite as Standard. Other Packings are available.

Operation

Valves are supplied with Lever operator.

Locking device or pneumatic and electric actuated

Option are available.

Seat / Seal Leakage

Conform to API 598.

All valves are tested to bubble-tight standards.

Design Specification

ASME 16.34

BS 5351 / BS EN 17292

Threaded Ends to ASME B1.20.1

NACE MR-01-75 material (where required)

Firesafe to API 607 (where required)

Anti Static Feature

Special materials are available to customer requirement End to End (L) dimensions are to manufacturer standard.

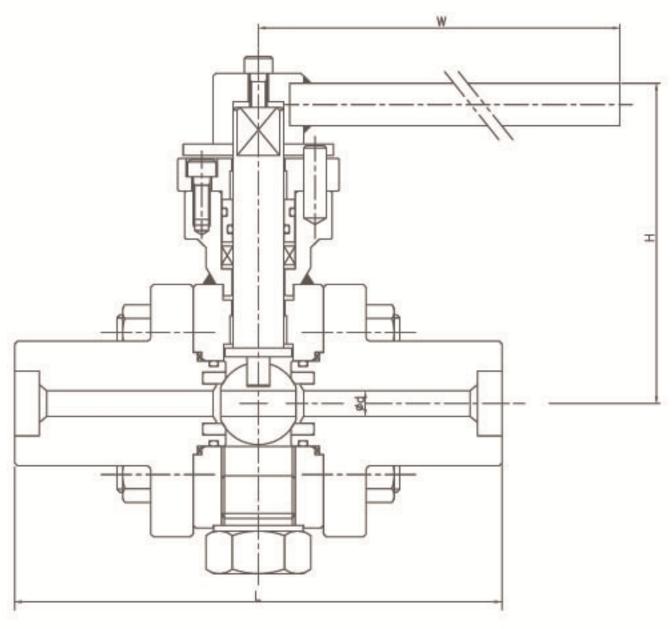
DIMENSION TABLE (UNIT - mm)

REDUCE	FULL				344	WEIGHT(kg)	CV FA	CTORS
BORE	BORE	15	d	н	W	(Approx.)	R/B	F/B
1/4"		105	9	110	250	5	8	
3/8"	1/4"	105	9	110	250	5	8	8
1/2"	3/8"	105	9	110	250	5	8	8
3/4"	1/2"	115	12	130	300	6.6	13	32
1"	3/4"	134	18	149	350	10	32	54
1 1/4"	1"	142	22	157	380	13	46	105
1 1/2"	1 1/4"	158	26	155	453	16	83	190
2"	1 1/2"	172	32	163	453	21	120	275
	2"	190	42	186	500	28		460

NOTE: Dimensions are for information only.

CLASS 2500# FLOATING BALL VALVE

Socket Weld Ends, Full & Reduce Bore.



Extended SW End Piece, soft seat is safe from welding heat.

STANDARD COMPONENT MATERIAL

NO	DESCRIPTION	CARBON STEEL	STAINLESS STEEL					
	12 3 5 5 7 10 C S S S S S S S S S S S S S S S S S S	A105	F304	F316	F316L			
1	BODY	A105	A182-F304	A182-F316	A182-F316L			
2	CONNECTOR	A105	A182-F304	A182-F316	A182-F316L			
3	BALL	Stain	Stainless Steel A276-T316					
4	STEM	Stain	Stainless Steel A276-T316					
5	SEAT-RING		PE	EK				
6	GASKET	0-	RING, PTFE(TE	FLON), GRAPH	HITE			
7	PACKING		PTFE(TEFLO	N), GRAPHITE				
8	LEVER		A2	83D				
9	NAME PLATE		SS					
10	STOP PIN		SS					

SPECIFICATION

Valve Body Pressure Rating

ASME Class 2500, Max 6170 psig @ 100 F (Carbon Steel)

Temperature Rating

As per ASME B16.34 dependant on Seat Material selection. Please consult KVC UK Ltd.

Body

Three-piece construction.

Body Bolts & Nuts

ASTM A193 Gr B7 or ASTM A194 Gr 2H Other Bolts are available according to body material.

Ball and Stem

316 stainless steel, Solid Balls as standard. Other materials are available.

Seats

Peek seats.

Body Seal and Stem Packing

O-Ring Seal, PTFE and Graphite as Standard. Other Packings are available.

Operation

Valves are supplied with Lever operator. Locking device or pneumatic and electric actuated Option are available.

Seat / Seal Leakage

Conform to API 598.

All valves are tested to bubble-tight standards.

Design Specification

ASME 16.34

BS 5351 / BS EN 17292

Socket Weld Ends to ASME B16.11.

NACE MR-01-75 material (where required)

Firesafe to API 607 (where required)

Anti Static Feature

Special materials are available to customer requirement End to End (L) dimensions are to manufacturer standard.

Butt Weld Ends to ASME B16.25 Option available.

DIMENSION TABLE

(UNIT - mm)

REDUCE	FULL					WEIGHT(kg)	CV FACTORS	
BORE	BORE		d	н	W	(Approx.)	R/B	F/B
1/4"		180	9	110	250	6	8	
3/8"	1/4"	180	9	110	250	6	8	8
1/2"	3/8"	180	9	110	250	6	8	8
3/4"	1/2"	200	12	130	300	7.5	13	32
1"	3/4"	220	16	149	350	11	32	54
1 1/4"	1"	240	22	151	380	15	46	105
1 1/2"	1 1/4"	250	26	155	453	18	83	190
2"	1 1/2"	300	32	163	453	23	120	275
	2"	370	42	186	500s	30		460

NOTE: Dimensions are for information only.

Engineering Data

Materials

Cross Reference of ASTM Material Designation Between Cast and Equivalent Forge

ASTM FORGED	ASTM CAST
CARBON	N STEEL
A105	A216 WCB
LOW TEMPER	ATURE STEEL
A350 LF2	A352 LCB
	A352 LCC
ALLOY	STEEL
A182 F1	A217 WC 1
A182 F11	A217 WC 6
A182 F22	A217 WC 9
A182 F5	A217 C5
A182 F9	A217 C12
STAINLES	SS STEEL
A182 F6	A217 CA15
A182 F304	A351 CF8
A182 F304L	A351 CF3
A182 F316	A351 CF8M
A182 F316L	A351 CF3M
A182 F347	A351 CF8C
DUPLEX ST	EEL STEEL
A182 F51	A890 4A / A351 CD3MN
A182 F53	A351 CD4MCU
A182 F55	A995 CD3MWCuN
NICKEL	ALLOY
INCONEL 825 - B564 N08825	A484 CU 5MCuC
INCONEL 625 - B564 N06625	A494 CW6MC
MONEL 400 - B564 N04400	A494 M35-1

Important Note: Data provided on this chart is for information purposes only. Always refer to current ASTM standards to verify information and cross reference data.

Pressure Temperature

Rating

PRESSURE TEMPERATURE RATING FOR ASTM A105

SER'	A CONTRACTOR OF THE PARTY OF TH	CLASS 150	CLASS 300	CLASS 600	CLASS 800	CLASS 1500	CLASS 2500
°F	°C	psi	psi	psi	psi	psi	psi
-20 to 100	-29 to 38	285	740	1480	1975	3705	6170
200	93	260	680	1360	1810	3395	5655
300	149	230	655	1310	1745	3270	5450
400	204	200	635	1265	1690	3170	5280
500	260	170	605	1205	1610	3015	5025
600	316	140	570	1135	1515	2840	4730
650	343	125	550	1100	1465	2745	4575
700	371	110	530	1060	1415	2665	4425
750	399	95	505	1015	1350	2535	4230
800	427	80	410	825	1100	2055	3430
850	454	65	320	640	850	1595	2655
900	482	50	230	460	615	1150	1915
950	510	35	135	275	365	685	1145
1000	538	20	85	170	225	430	715

Note: ASME B16.34 Group 1.1. For A105, permissible, but not recommended for prolonged use above 800°F

PRESSURE TEMPERATURE RATING FOR ASTM A182 F316

SER ¹ TEMPER	VICE RATURE	CLASS 150	CLASS 300	CLASS 600	CLASS 800	CLASS 1500	CLASS 2500
"F	°C	psi	psi	psi	psi	psi	psi
-20 to 100	-29 to 38	275	720	1440	1920	3600	6000
200	93	235	620	1240	1655	3095	5160
300	149	215	560	1120	1495	2795	4660
400	204	195	515	1025	1370	2570	4280
500	260	170	480	955	1275	2390	3980
600	316	140	450	900	1205	2255	3760
650	343	125	440	885	1180	2210	3680
700	371	110	435	870	1160	2170	3620
750	399	95	425	855	1140	2135	3560
800	427	80	420	845	1125	2110	3520
850	454	65	420	835	1115	2090	3480
900	482	50	415	830	1105	2075	3460
950	510	35	385	775	1030	1930	3220
1000	538	20	365	725	970	1820	3030

Note: ASME B16.34 Group 2.2. A182 F316.

PRESSURE TEMPERATURE RATING FOR ASTM A182 F51

SERVICE TEMPERATURE		CLASS 150	CLASS 300	CLASS 600	CLASS 800	CLASS 1500	CLASS 2500
°F	°C	psi	psi	psi	psi	psi	psi
-20 to 100	-29 to 38	290	750	1500	2000	3750	6250
200	93	260	745	1490	1985	3720	6200
300	149	230	665	1335	1780	3335	5560
400	204	200	615	1230	1640	3070	5120
500	260	170	580	1160	1545	2905	4840
600	316	140	555	1115	1485	2785	4640
650	343	125	545	1095	1460	2735	4560
700	371	110	540	1085	1445	2710	4520
750	399	95	530	1065	1420	2660	4430

Note: ASME B16.34 Group 2.8. This steel may become brittle after service at moderately elevated temperatures. Not to be used over 600°F



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