# 2500lbs Oil Gas Valve FB A105 Forged Steel Ball Valve With BW Ends Butt Welded

# **Basic Information**

Place of Origin: CHINABrand Name: DEYE

Certification: ISO9001:2015 PED

Model Number: DY-V-12Minimum Order Quantity: 10PCS

• Price: USD2-USD20000 each

• Packaging Details: carton box+ ply wooden cases or carton+

Pallets

• Delivery Time: 20 days for usual order, 7 days for stocked

items

• Payment Terms: T/T, L/C, D/P

• Supply Ability: 1000pcs one month



# **Product Specification**

• Highlight: 2500lbs Oil Gas Valve, Oil Gas Valve A105,

A105 forged steel ball valve

# **Product Description**

**Ball valve** features a spherical disc to open and close the flow of the fluid. They are the industry standard for pipeline shut-off applications, as their design guarantees very tight and leak-free sealing even after years of operation. The two key types of ball valves are the floating and the trunnion designs (side or top entry). The body can be cast or forged and monolithic or split (in 2 or 3 pieces). The API 6D and ASME B16.34 are key specifications.

# Product Information / Product Description / Basis Information / Specification

ADI VAI VE	API6D Gate valve, Plug valve and Ball valve API600 Bolted Bonnet Steel Gate Valves for Petroleum and Natural Gas Industries API602 Forged Steel valves API603 Stainless steel valve API609 Butterfly valve API594 Wafer, Lug check valve BS1868 check valve BS1873//BS 5352 cast and forged Globe valve
Valve Types	Butterfly Valves, Ball valves, gate valves, check valves, globe valves, Plug valves, strainers
	Ball valve with floating ball and trunnion mounted ball, Body with 1pc. 2pcs. 3pcs Split type
Size	1/2"-48 DN15-DN1200"
End Connection	Flange Ends, RF, FF, RTJ, LM, BW ends, threaded ends NPT, BSPT, BSPP, Socket Welded Ends
Pressure Range	CL150LBS, 300LBS, 600LBS, 800LBS 900LBS, 1500LBS, 2500LBS PN6 PN10 PN16 PN25 PN40. PN64 PN110, PN160, PN250, PN420
Surface	Acid pickling, Polished, Galvanized, Painting, epoxy Power Coated
Surface	Acid pickling, Polished, Galvanized, Painting, epoxy Power Coated

### **Material List Grade**

Ball Valve	s supplying scor	ne .			
	ANSI B16.34 / AF		DIN EN		
Constructi on	Side Entry type, 2	2-pc, 3-pc body,	Top Entry Type	1 pc Body	
Ball Type	Floating Balll fron	n size 1/2"-12",	Trunnion Mounte	ed Ball from 2"-	48"
Connectio n	Flanges RF, RTJ	, Threaded End	s NPT BSPT, So	ocket Ends, But	t Welded Ends
Pressure	150LBS-1500LB	S, 1000WOG, 20	000WOG, 3000V	WOG	
Acuators	Manual with leve	r/ Gear box; Mot	or elec. Actuato	r, pneumatic ac	tuator
Materials (	of parts as per di	ifferent Applica	tion		
No	Part Name	Carbon Steel	Stainless Steel	Duplex SS	Carbon S teel
1	Body	A216- WCB	A351- CF8M	4A/5A	A352- LCB
2	Bonnet	A216- WCB	A351- CF8M	4A/5A	A352- LCB
3	Ball	A105+ENP//A1 82- F304	A182- F316	SAF2205/250 7	A182- F304
4	Stem	A276- 304	A276- 316	SAF2205/250 7	A276- 304
5	Seat	A105+ENP	A182- F316	SAF2205/250 7	A350- LF2+ENP
6	Seat Insert	Glass Filled PT	ĖΕ		
7	Seat Spring	A313- 304	Inconel X- 750	Inconel X- 750	A313- 304
8	Seat O- Ring	NPR	Viton	PTFE	Viton
9	Stem O- Ring	NBR 2)	Viton 2)	PTFE	Viton 2)
10	Bonnet Gasket	Graphite+304	Graphite+316	PTFE+2205	Graphite+304
11	Bonnet O- Ring	NBR	Viton	PTFE	Viton
12	Antistatic Spring	A313- 304	A313- 316	SAF2205/250 7	A313- 304
13	Lower Cover	A216- WCB	A182- F316	SAF2205/250 7	A182- F304
14	Bonnet Stud	A193- B7	A193- B8	A193- B8	A320- L7
15	Bonnet Stud Nut	A194- 2H	A194- 8	A194- 8	A194- 4
16	Trunnion	A276- 304	A276- 316	A276- 316	A276- 304
17	Trunnion Bearing	304+PTFE	316+PTFE	316+PTFE	304+PTFE
18	Gland Flange	A216- WCB	A351- CF8M	A351- CF8M	A352- LCB
19	Gland Bolt	A193- B7	A193- B8	A193- B8	A193- B7
20	Stop Plate		Carbon Steel+Zn	Carbon Steel+Zn	Carbon Steel
21	Handle	Carbon Steel	,		

High Temperature Material CF8, 304, 304H CF8M, 316, 316H CK-20, 310, 310H WC4, WC5, F2, WC6, F11C1.2, F12C1.2, WC9, F22C1.3, C5, F5, WC4, WC5, F2, WC6, F11C1.2, F12C1.2, WC9, F22C1.3, C5, F5

Low Temperature Material A352 LCB, LCC, LC1 LC2, LC3, LC4, CF8M, CF8, CF3M Alloy Material: Bronze, IN Conoy, DUPLEX SS, Alloy 20, Hastelloy C 276, Hastelloy B

#### **Technical Pressure Test**

Shell Test	1.5xworking	pressure			
Seal Test	1.1x Workin	g Pressure			
air test for seal	0.6Mpa by a	air			
Valve Size		Minimum Tes	t Duration (Se	conds)	
DN	NPS	Shell	Backseat (for Valves with Backseat Featu_re)	Closure Check Valves (API 594)	Closure Other Valves
≤50	≤ 2"	15	15	60	15
65 to 150	2 1/2" to 6"	60	60	60	60
200 to 300	8"-12"	120	60	120	120
≥350	≥14"	300	60	120	120

a The test duration is the period of inspection aft the valve is fully prepared and is unde full pressure.

Valve Si	ze	All	Metal Sea Except Ch		Metal Se	ated Check	Valves
DN (mm)	NPS	Resilient Seated Valves		t Gas. Test (bubbles/ minute)	Liquid Test (cc/min)	Gas Test (m3/h)	Gas Test (ft3/h)
≤50	≤2	0	0	0	6	0.08	3
65	21/2	0	5	10	7.5	0.11	3.75
80	3	0	6	12	9	0.13	4.5
100	4	0	8	16	12	0.17	6
125	5	0	10	20	15	0.21	7.5
150	6	0	12	24	18	0.25	9
200	8	0	16	32	24	0.34	12
250	10	0	20	40	30	0.42	15
300	12	0	24	48	36	0.5	18
350	14	0	28	56	42	0.59	21
400	16	0	32	64	48	0.67	24
450	18	0	36	72	54	0.76	27
500	20	0	40	80	60	0.84	30
600	24	0	48	96	72	1.01	36
650	26	0	52	104	78	1.09	39
700	28	0	56	112	84	1.18	42
750	30	0	60	120	90	1.26	45
800	32	0	64	128	96	1.34	48
900	36	0	72	144	108	1.51	54
1000	40	0	80	160	120	1.68	60
1050	42	0	84	168	126	1.76	63
1200	48	0	96	192	144	2.02	72

a For the liquid test, 1 ml is considered equivalent to 16 drops.

Ball Valves catalogue pages/Dimension List

b There shall be no leakage for the minimum specified test duration . For liquid test, 0 drops means no visible leakage per minimum specified test duration. For gas test, 0 bubbles means less than 1 bubble per minimum specified test duration.





### 锻钢球阀

Forged steel ball valves





全径或缩径;

采用以下结构Construction is as follows





Screwed ends (NPT) to ANSI/ASME B1.20.1.

远高银铜球閥有两种设计形式。一种是二片式结构,其中部螺纹连接,以RPTFE 或PEEK密封;另一种是三片式结构,中部用螺栓连接。根据所选的阀座与垫片/填料的材料不同,适应不同的工作温度和介质。YUANGAO Forged steel ball valves have two structures. one is of 2PCS structure, threaded bonnet, RPTFE or PEEK seal. The other is of 3PCS structure. Boited tailpieces. Disfferent materials for seats, gaskets and packing may bechosen acc. to different using conditions. Construction is as follows.

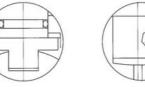


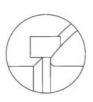
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#### 锻钢球阀

Forged steel ball valves







防阀杆吹出结构

防静电结构

防火结构 Fire safe

锻钢球阀采用紧凑型与接体结构,由于结构合理,占地空间少,密封性能好,深受广大用户信赖。

Compact ball valves are tructed by many customers because of ifs reasonable structures small space-occupation and good sealing performance

# 设计结构Design structure

阀座采用PTFE+25%玻纤或PEEK。PTFLE+25%玻纤在高压下能获得比PTFE更好的性能,而且还能减少酸性介质腐蚀,通常在800磅级的压 力下采用,PEEK在高温高压下能获得较好的性能,通常在1500磅级压力下采用。

具有防火、防静电能为防阀杆吹出结构。

Seat is made of PTFE reinforced with 25% glass fibre of PEEK, PTFE with 25% glass fibre can gain better performances normally used for class 800 ball valves. PEEK can gain better performances under high pressure and high temperature normanlly used of class 1500 ball valves. Anti static/fire safe/blow out proof stem



流量系数Flow coefficient Cv

NOO	Cv系	数 Value
NPS  1/4  3/8  1/2  3/4  1  1 1/4	全径 Full port	缩径 Reduced port
1/4	8	-
3/8	8	-
1/2	12	8
3/4	33	12
1	48	33
1 1/4	83	48
1 1/2	120	83
2	250	120

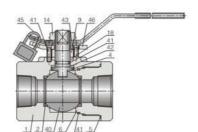
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### 二片式锻钢球阀

2PCS Forged steel ball valves



# 碳锅温压等级 Carbon steel temperature-pressure rate

CL150-285 P.S.I @100° F CL300-740 P.S.I @100° F CL600-1480 P.S.I @100° F CL800-1975 P.S.I @100° F CL1500-3705 P.S.I @100° F

#### 应用规范Application standards

- 1、设计制选Design and manufacture conform to; BS5351
- 2、连接端尺寸Connection ends conform to:
  - 1) 承插口尺寸按Screw ends dimension conform to
  - ANSI B16.11; JB/T1751
  - 2) 螺纹端尺寸按Screw ends dimension conform to
  - ANSI B1.20.1; JB/T7306
  - 3) 对焊端尺寸按Test and inspection conform to
  - ANSI B16.25; JB/T12224
  - 4) 法兰端尺寸按Structure features: ANSI B16.5; JB79
- 3、阀门检查和试验Test and inspection conform to:
- API598; GB/T13927; JB/T9092 4、结构特征structure features;
- 螺栓连接阀盖;两段式;
- Bolted bonnet; two-piece;
- 5、材料按Materials conform to ANSI/ASTM的规定。
- 6、主体材料Main materials; A105; LF2; F5; F11;

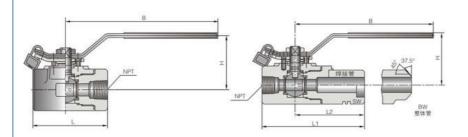
F22; 304(L); 316(L); F347; F321; F51; Monel; 20合金等。

序号 NO.	零件名称 Part name	A105/F6a	A105/F6aHFS	F11/F6aHF	F304(L)/304(L)	F316(L)/316(L)
1	阅体Body	A105	LF2	F304(L)	F316(L)	F51
2	阀座Seat	RPTFE或PEEK	RPTFETEPEEK	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEP
4	阀杆Stem	410	304	304(L)	316(L)	F51
5	垫片Gasket	PTFE	PTFE	PTFE	PTFE	PTFE
6	阀盖Bonnet	A105	LF2	F304	F316	F51
9	填料压套Gland	410	304	304(L)	316(L)	F51
11	填料压板 Gland flange	A105	LF2	F304	F316	F51
14	扁螺母Flat nut	8	8	8	8	8M
18	填料Packing	PTFE	PTFE	PTFE	PTFE	PTFE
40	球体Ball	F6	F304	F304(L)	F316(L)	F51
41	O型密封圈O-ring	VITON	VITON	VITON	VITON	VITON
42	上密封垫片 Back seat gasket	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEE
43	手柄Wrench	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025
44	内六角螺钉Screw	88	88	88	88	.88
45	锁Lock	成品	成品	成品	成品	成品
46	定位片Locator	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025



# 二片式锻钢球阀

2PCS Forged steel ball valves



未调连接可按一调螺纹和一端按管【矛插焊或对焊】设计按BS 5351

CL800 Connection ends may be pipe-welded (butt-welding or socket welding) and/or threaded, design to BS\$351

規格 ( NPS ) Specification	全径(F.P)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2	2 1/2
结构长度(mm) Face to face	L	60	60	75	80	90	110	120	140	-
中心至手柄端(mm) Center to handle end	В	160	160	160	160	170	230	230	280	140
中心高度(开)(mm) Heingt	н	60	60	60	65	85	105	105	125	-
流遊孔径(mm) Flow port dimension	d	6	9	13.5	19	24	32	38	49	-
重量Weight(约)	(Kg)	1.2	0.9	1.3	2.2	3.5	6.5	6.5	11	-

CL1500-CL2500 本端连接可按一端螺纹和一端按管(承插焊或对焊)设计按API 6D Connection ends may be pipe-welded (butt-welding or socket welding) and/or threaded, design to BS5351

規格 ( NPS ) Specification	全径(F.P)		1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
结构长度(mm) Face to face L1	14	CL1500	70	75	85	95	105	120	130	150
	Li	CL2500	1.5	II E	125	135	155	7.0	155	173
中心至手柄端(mm) Center to handle end	В	CL1500	160	160	160	170	230	230	280	280
中心高度(开)(mm) Heingt	н	CL1500	60	60	65	85	105	105	125	*
遠進孔径 (mm) Flow port dimension	đ	CL1500	6	6	13	19	25	32	38	49
重量Weight(约)	(Kg)	CL1500	1.2	1.5	2.5	3.7	5.8	2	11.5	13.7

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#### 三片式锻钢球阀

### 3PCS Forged steel ball valves

### 应用规范Application standards

- 1、设计制造Design and manufacture conform to: BS5351
- 2、连接端尺寸Connection ends conform to:
  - 1) 承插口尺寸按Screw ends dimension conform to ANSI B16.11; JB/T1751
  - 2) 螺纹端尺寸按Screw ends dimension conform to ANSI B1.20.1; JB/T7306
  - 3) 对焊端尺寸按Test and inspection conform to
  - ANSI B16.25; JB/T12224
  - 4) 法兰端尺寸按Structure features:
  - ANSI B16.5; JB79
- 3、阀门检查和试验Test and inspection conform to; API598; GB/T13927; JB/T9092
- 4、结构特征structure features:

螺栓连接阀盖; 三段式;

- Bolted bonnet; three-piece;
- 5、材料按Materials conform to ANSI/ASTM的规定。
- 6、主体材料Main materials; A105; LF2; F5; F11;

F22; 304(L); 316(L); F347; F321; F51; Monel; 20合金等。

碳铜温压等级 Carbon steel temperature-pressure rate

#### CL600-1480 P.S.I @100° F CL800-1975 P.S.I @100° F

CL150-285 P.S.I @100° F

CL300-740 P.S.I @100° F

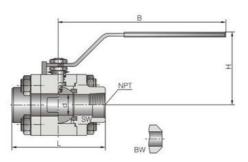
CL1500-3705 P.S.I @100° F

## 典型零件材料表Main part materials list

序号 NO.	零件名称 Part name	A105/F6a	LF2/304	F304(L)/304(L)	F316(L)/316(L)	F51/F51
1	阀体Body	A105	LF2	F304(L)	F316(L)	F51
2	阀座Seat	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK
4	倒杆Stem	410	304	304(L)	316(L)	F51
5	垫片Gasket	PTFE	PTFE	PTFE	PTFE	PTFE
8	圆柱销Pin	25	304	304	304	304
9	压套Gland	410	304	304(L)	316(L)	F51
14	扁螺母Flat nut	8	8	8	8M	8M
18	填料Packing	PTFE	PTFE	PTFE	PTFE	PTFE
37	双头螺栓Bolt	B7	B8	B8	B8M	B8M
38	螺母Nut	2H	8	8	8M	8M
40	球体Ball	F6	F304	F304(L)	F316(L)	F51
41	O型密封圈O-ring	VITON	VITON	VITON	VITON	VITON
42	上密封垫片 Back seat gasket	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEEK	RPTFE或PEE
43	手柄Wrench	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025	ANSI 1025
49	左阀盖Left bonnet	A105	LF2	F304	F316	F51
50	右阀盖Right bonnet	A105	LF2	F304	F316	F51
51	碟簧Butterfly spring	65Mn	65Mn	304	304	304
52	弹垫Elastic washer	65Mn	65Mn	304	304	304
53	静电弹簧 Anti-static spring	304	304	304	316L	316L



# 三片式锻钢球阀 3PCS Forged steel ball valves



来端连接可接一端螺纹和一端按管(承插焊或对焊)设计按BS 5351 Connection ends may be pipe-welded (butt-welding or socket welding) and/or threaded, design to BS5351 CL800-CL1500

规格(NPS) Specification	全征	준(F.P)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
结构长度(mm) Face to face		L	75	75	85	100	115	130	150	180
中心至手柄端(mm) Center to handle end		В	108	108	108	146	178	178	200	200
中心高度(mm) Height		н	51	51	51	108	81	85	105	105
流道孔径(mm) Height (andle	d	CL800	6	9	13	18	23	28	35	49
dinmensions)	a	CL1500	6	9	13	19	25	32	38	49

CL1500 末滿连接可按一端螺紋和一端按管(承插桿或对焊)设计按BS 5351 Connection ends may be pipe-welded (butt-welding or socket welding) and/or threaded, design to BS5351

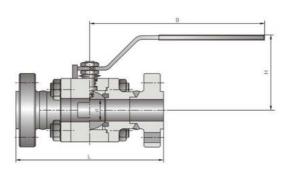
规格(NPS) Specification	全征	ž(F.P)	1/4	3/8	1/2	3/4	1	1 1/4	1 1/2	2
结构长度(mm) Face to face		L	85	85	100	120	135	160	185	220
中心至手柄端(mm) Center to handle end		В	108	108	108	146	178	178	200	200
中心高度(mm) Height		н	51	51	51	108	81	85	105	105
流道孔径(mm) Height (andle	4	CL800	6	9	13	18	23	28	35	49
Height (andle d dinmensions)		CL1500	6	9	13	19	25	32	38	49

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#### 三片式锻钢球阀

3PCS Forged steel ball valves



CL1500-CL2500

末端连接可接法兰或对焊,设计按API 6D结构长度接工厂标准

esign to API 6D face face conforms to manufacture standard

规格(NPS) Specification	全径(F.P)		1/2	3/4	-1	1 1/4	1 1/2	2
结构长度(mm)		CL1500	216	229	254	279	305	368
Face to face	L	CL2500	264	273	308	349	384	451
中心至手柄端(mm)		CL1500	230	230	350	280	400	400
中心主子物線(mm) Center to handle end	В	CL2500	280	280	95	350	400	400
中心高度(mm)	н	CL1500	75	85	85	105	110	130
Height		CL2500	75	85	95	105	110	130
流道孔径(mm)		CL1500	13	19	25	32	38	49
Height (andle dinmensions)	d	CL2500	13	19	25	32	38	42
# # (A) (V - W)	Malaka	CL1500	2.5	5.8	5.8	6.8	11.5	13.7
重量(約)(Kg)V	vergrit	CL2500	2.7	6.3	6.3	6.8	12	15

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# Application:

Steam, LPG.

Valve is a universal component industrial product that is widely used in many industries, such as petroleum, petrochemical, chemical, metallurgy, power, water conservancy, urban construction, machinery, coal, food, Sea water, 0il Refining, environment, energy.

# Reference Standard:

API 600: cast carbon and alloy valves

API 603: stainless steel valves API 602/BS 5352: forged valves

API 6D: slab and through conduit valves for pipelines

API 598 and BS EN 12266-1: valves testing ASME B16.10: face to face dimensions for valves ASME B16.5 and ASME B16.47: flanged connections

ASME B16.25: butt weld connections design

ASME B16.34: Pressure ratings pressure and temperature ratings by material grade

ISO 7-1:1994, Pipe threads where pressure-tight joints are made on the threads — Part 1: Dimensions, tolerances and designation.

ISO 4200:1991, Plain end steel tubes, welded and seamless — Dimensions.

ISO 5208:1993, Industrial valves — Pressure testing of valves.

ISO 5209:1977, General purpose industrial valves — Marking.

ISO 5210:1991, Industrial valves — multi-turn valve actuator attachments.

ISO 5752: — 1), Metal valves for use in flanged pipe systems — Face-to-face and center-to-face dimensions. ISO 6708:1995, Pipework components — Definition and selection of DN (nominal size) .

ISO 7005-1:1992, Metallic flanges — Part 1: Steel flanges. ISO 7268:1983, Pipe components — Definition of nominal pressure.

ASME B1.1:1989, Unified inch screw threads (UN and UNR thread form) .

ASME B1.5:1988 (R1994), Acme screw threads.

ASME B1.8:1988 (R1994), Stub Acme screw threads.

ASME B1.12:1987 (R1992), Screw threads — Class 5 interference — Fit thread.

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1) To be published. (Revision of ISO 5752:1982)

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