OKA-V

化工部法兰式蝶阀
HG Flange Butterfly Valve

主要连接尺寸 Main connection dimensions

化工部 HG 20592-2009　　单位Unit:mm

通径 Diameter (mm)	主要尺寸 Main Dimension				0.6MPa					1.0MPa					1.6MPa				
	L1	L2	H	H1	D	D1	D2	Z-Φd	bxf	D	D1	D2	Z-Φd	bxf	D	D1	D2	Z-Φd	bxf
	D343H/F、D643H/F、D943H/F																		
50	108	150	275	200	140	110	90	4-Φ14	14x2	165	125	102	4-Φ18	18x2	165	125	102	4-Φ18	18x2
65	112	170	303	210	160	130	110	4-Φ14	14x2	185	145	122	8*-Φ18	18x2	185	145	122	8*-Φ18	18x2
80	114	180	324	226	190	150	128	4-Φ18	16x2	200	160	138	8-Φ18	20x2	200	160	138	8-Φ18	20x2
100	127	190	380	250	210	170	148	4-Φ18	16x2	220	180	158	8-Φ18	20x2	220	180	158	8-Φ18	20x2
125	140	200	460	295	240	200	178	8-Φ18	18x2	250	210	188	8-Φ18	22x2	250	210	188	8-Φ18	22x2
150	140	210	490	315	265	225	202	8-Φ18	18x2	285	240	212	8-Φ22	22x2	285	240	212	8-Φ22	22x2
200	152	230	600	380	320	280	258	8-Φ18	20x2	340	295	268	8-Φ22	24x2	340	295	268	12-Φ22	24x2
250	165	250	655	405	375	335	312	12-Φ18	22x2	395	350	320	12-Φ22	26x2	405	355	320	12-Φ26	26x2
300	178	270	780	480	440	395	365	12-Φ22	22x2	445	400	370	12-Φ22	26x2	460	410	378	12-Φ26	28x2
350	190	290	875	545	490	445	415	12-Φ22	22x2	505	460	430	16-Φ22	26x2	520	470	438	16-Φ26	30x2
400	216	310	910	550	540	495	465	16-Φ22	22x2	565	515	482	16-Φ26	26x2	580	525	490	16-Φ30	32x2
450	222	330	1000	620	595	550	520	16-Φ22	22x2	615	565	532	20-Φ26	28x2	640	585	550	20-Φ30	40x2
500	229	350	1090	680	645	600	570	20-Φ22	24x2	670	620	585	20-Φ26	28x2	715	650	610	20-Φ33	44x2
600	267	390	1210	750	755	705	670	20-Φ26	30x2	780	725	685	20-Φ30	34x2	840	770	725	20-Φ36	54x2
700	292	430	1350	820	860	810	775	24-Φ26	24x5	895	840	800	24-Φ30	34x5	910	840	795	24-Φ36	42x5
800	318	470	1520	910	975	920	880	24-Φ30	24x5	1015	950	905	24-Φ33	36x5	1025	950	900	24-Φ39	42x5
900	330	510	1570	930	1075	1020	980	24-Φ30	26x5	1115	1050	1005	28-Φ33	38x5	1125	1050	1000	28-Φ39	44x5
1000	410	550	1700	980	1175	1120	1080	28-Φ30	26x5	1230	1160	1110	28-Φ36	38x5	1255	1170	1115	28-Φ42	46x5
1200	470	630	2040	1220	1405	1340	1295	32-Φ33	28x5	1455	1380	1330	32-Φ39	44x5	1485	1390	1330	32-Φ48	52x5
1400	530	710	2240	1310	1630	1560	1510	36-Φ36	32x5	1675	1590	1535	36-Φ42	48x5	1685	1590	1530	36-Φ48	58x5
1600	600	790	2440	1460	1830	1760	1710	40-Φ36	34x5	1915	1820	1760	40-Φ48	52x5	1930	1820	1750	40-Φ56	64x5
1800	670	870	2650	1560	2045	1970	1920	44-Φ39	36x5	2115	2020	1960	44-Φ48	56x5	2130	2020	1950	44-Φ56	68x5
2000	760	950	2860	1670	2265	2180	2125	48-Φ42	38x5	2325	2230	2170	48-Φ48	60x5	2345	2230	2150	48-Φ62	70x5

通径 Diameter (mm)	2.5MPa					4.0MPa					6.3MPa					10.0MPa				
	D	D1	D2	Z-Φd	bxf	D	D1	D2	Z-Φd	bxf	D	D1	D2	Z-Φd	bxf	D	D1	D2	Z-Φd	bxf
50	165	125	102	4-Φ18	20x2	165	125	102	4-Φ18	20x2	180	135	102	4-Φ22	26x2	195	145	102	4-Φ26	30x2
65	185	145	122	8-Φ18	22x2	185	145	122	8-Φ18	22x2	205	160	122	8-Φ22	26x2	220	170	122	8-Φ26	34x2
80	200	160	138	8-Φ18	24x2	200	160	138	8-Φ18	24x2	215	170	138	8-Φ22	28x2	230	180	138	8-Φ26	36x2
100	235	190	162	8-Φ22	24x2	235	190	162	8-Φ22	24x2	250	200	162	8-Φ26	30x2	265	210	162	8-Φ30	40x2
125	270	220	188	8-Φ26	26x2	270	220	188	8-Φ26	26x2	295	240	188	8-Φ30	34x2	315	250	188	8-Φ33	40x2
150	300	250	218	8-Φ26	28x2	300	250	218	8-Φ26	28x2	345	280	218	8-Φ33	36x2	355	290	218	12-Φ33	44x2
200	360	310	278	12-Φ26	30x2	375	320	285	12-Φ30	34x2	415	345	285	12-Φ36	42x2	430	360	285	12-Φ36	52x2
250	425	370	335	12-Φ30	32x2	450	385	345	12-Φ33	38x2	470	400	345	12-Φ36	46x2	505	430	345	12-Φ39	60x2
300	485	430	395	16-Φ30	34x2	515	450	410	16-Φ33	42x2	530	460	410	16-Φ36	52x2	585	500	410	16-Φ42	68x2
350	555	490	450	16-Φ33	38x2	580	510	465	16-Φ36	46x2	600	525	465	16-Φ39	56x2	655	560	465	16-Φ48	74x2
400	620	550	505	16-Φ36	40x2	660	585	535	16-Φ39	50x2	670	585	535	16-Φ42	60x2	715	620	535	16-Φ48	78x2
450	670	600	555	20-Φ36	46x2	685	610	560	20-Φ39	57x2	–	–	–	–	–	–	–	–	–	–
500	730	660	615	20-Φ36	48x2	755	670	615	20-Φ42	57x2	–	–	–	–	–	–	–	–	–	–
600	845	770	720	20-Φ39	58x2	890	795	735	20-Φ48	72x2	–	–	–	–	–	–	–	–	–	–
700	960	875	820	24-Φ42	50x5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
800	1085	990	930	24-Φ48	54x5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
900	1185	1090	1030	28-Φ48	58x5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1000	1320	1210	1140	28-Φ55	62x5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1200	1530	1420	1350	32-Φ55	70x5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1400	1755	1640	1560	36-Φ62	76x5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1600	1975	1860	1780	40-Φ62	84x5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
1800	2195	2070	1985	44-Φ70	90x5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
2000	2425	2300	2210	48-Φ70	96x5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–

API

美标蝶阀系列

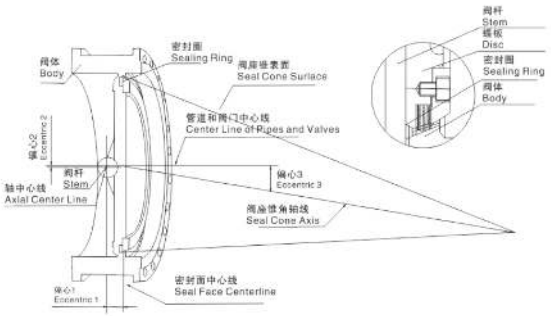
API butterfly valve series



OKA-V

美标蝶阀密封形式
ASME Butterfly Valve Sealing Form

美标三偏心蝶阀几何图American Standard Butterfly Valve Geometric Graph



第一个偏心轴偏离密封面中心线
第二个偏心轴偏管路及阀门中心线
第三个其独特的偏心阀座斜锥角与管路中心的夹角，这样，使得阀座与密封圈在门整个开关过程中完全脱离。这种结构即利用了凸轮效应。又完全消除了摩擦，去除掉了磨损和泄露的可能。

Firstly: The eccentric shaft deflected from the center line of sealing surface.
Secondly: The eccentric shaft deflected from pipe and center line of valve.
Thirdly: The unique design of eccentric seat oblique cone and the angle of centerline, makes the seat and sealing ring completely out from the door during the open and close. This structure adopted the cam effect, completely eliminating the friction, avoiding the possibility of wear and leakage.

我公司生产的三偏心蝶阀，依靠安装在蝶板上的复合不锈钢密封圈来实现真正的零泄漏。

Our triple eccentric butterfly valve realizes zero leakage relying on the composite stainless steel sealing ring installed in the disc.

零泄漏是通过蝶板上密封圈的弹性来实现的，该密封圈的弹性(如右图)是通过其径向的压缩和柔动生产的。密封圈与阀座接触面为斜锥面。密封圈与阀座之间的接触角产生轻微的“楔式效应”使密封圈发生柔动和径向压缩。正由于阀座与密封圈之间均匀接触以及密封圈的柔性，使得加载在阀座上的载荷均匀，从而用最小的扭矩实现最严密的切断。扭矩产生的弹性使得阀门严密关断，而与介质流向或介质力无关。

Zero leakage is implemented by the elastic sealing ring mounted on the disc. The elasticity of sealing ring (see to the right picture) is produced by its radial compression and flexibility. The contact surface between the sealing ring and seat is an oblique cone. The contact angle between them gives slight "wedge effect", making the sealing ring producing flexibility and radial compression. The even contact between the seat and sealing ring, and the elasticity of sealing makes the load on the seat even, thus to perform closest cut off by the lowest torque. The elasticity produced by the torque makes the valve closely cut off, regardless of the flow direction or pressure of medium.



美标蝶阀性能、用途、特点
ASME Butterfly Valve’s Performance, Use and Characteristic

OKA-V

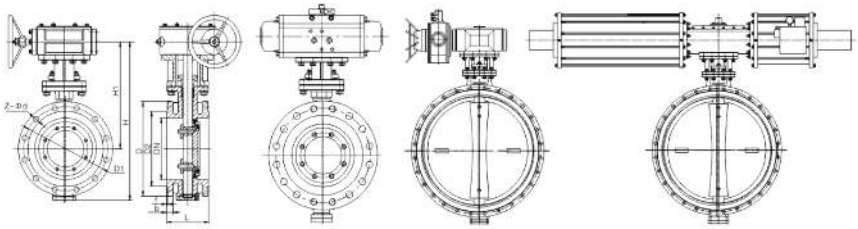
用途及特点 Purpose and Characteristic

复合金属密封圈的弹性特性使得阀门具有零泄漏性能。
扭矩密封确保阀门持续的双向零泄漏特性。
直角旋转无摩擦设计是通过一个独特的三偏心原理来实现的，它消除了90开关旋转中阀座与密封圈之间的摩擦。
STL一体式硬面阀座可满足许多工况要求，使用寿命，维修方便。
一体式铸造(板焊)阀体，结构长度符合ISO5752、ASME16.10和API609.可替换高性能蝶阀以及其他种类的阀门，安装简单、灵活全金属结构加上零泄漏性能，使阀门有具有‘本质防火安全’特性。
阀杆防吹出设计安全可靠，完全符合API609的要求。
阀杆杆上的阀位指示器以及顶部安装法兰有利于蝶板位置指示。
美标三偏心蝶阀的阀杆采用一根通轴式结构，阀杆与蝶阀连接采用键或销键组全。

Elastic property of composite metal sealing ring performs zero leakage.
Torque sealing ensures the persistent bi-directional zero leakage.
The design of right- angled rotation with zero friction is implemented by the distinctive triple eccentric principle; it eliminates the friction between the seat and sealing ring in 90° rotation.
STL one-piece hard-surface seat may adapt to many working conditions, which is featured with long service life and easy maintenance.
One-piece cast (sheet welded) body, face to face dimensions conforming to ISO05752, ASME16.10 and API609, replacement of high performance butterfly valves and other types of valves, easy and flexible installation, intrinsical fireproof property thanks to all metal structure and leak tight performance.
Anti-blowout stem designs for high dependability, completely conforming to API6109.
The valve position indicator on the stem and the flange mounted at the top of are in the favor of the indication of disc position.
The stem of American standard triple eccentric butterfly valve, is a shaft structure, stem and disc are connected by key or pin-key combination.

采用标准 Adoption Standard

设计标准 Design Standard		API 609		
法兰连接尺寸 Flange Connection Dimension		口径≤24"根据 ANSI B16.5　口径>24" 根据 ANSI B16.47 Series B Size≤24" according to ANSI B16.5,Size>24" according to ANSI B16.47 Series B		
试验和检验 Test and Inspection		API 598		
温压等级 Pressure-Temperature Rate		ASEM B16.34		
结构长度 Face to Face Dimension	短结构 Short Structure	API609.ISO5752 basic series 13		
	长结构 Long Structure	ASME B16.10		
防火制造 Fire Safe		API 607		
压力等级 Pressure Rating		150LB	300LB	600LB
常温试验压力(Mpa) Test Pressure at Room Temperature	壳体试验 Shell Test	2.93	7.58	15.0
	高压密封 High Pressure Seal Test	2.07	5.52	11.03
	低压密封 Low Pressure Seal Test	0.6	0.6	0.6
适用介质 Applicable Medium		水、油、气及各类腐蚀性介质(不同的介质选用不同的材质) Water, Oil, Gas and Other Causticity Media (Different Media Use Different Materials)		
适用温度 Applicable Temperature		-46℃~550℃(不同的工况温度选用不同的材质) (Different Raw Material for Different Work Temperature)		



D341H　　D641H　　D941H

主要性能参数及采用标准 Main Performance Parameters and Standard

设计标准 Design Standard		API 609		
法兰连接尺寸 Flange Connection Dimension		口径≤24"根据 ANSI B16.5　口径>24" 根据 ANSI B16.47 Series B Size≤24" according to ANSI B16.5,Size>24" according to ANSI B16.47 Series B		
试验和检验 Test and Inspection		API 598		
温压等级 Temperature and Pressure Level		ASEM B16.34		
结构长度 Face to Face Dimension	短结构 Short Structure	API609.ISO5752 basic series 13		
	长结构 Long Structure	ASME B16.10		
防火制造 Fire Safe		API 607		
压力等级 Pressure Rating		150LB	300LB	600LB
常温试验压力(Mpa) Test Pressure at Room Temperature	壳体试验 Shell Test	2.93	7.58	15.0
	高压密封 High Pressure Seal	2.07	5.52	11.03
	低压密封 Low Pressure Seal	0.6	0.6	0.6
适用介质 Applicable Medium		水、油、气及各类腐蚀性介质(不同的介质选用不同的材质) Water, Oil, Gas and Other Corrosive Media (Different Media Use Different Materials)		
适用温度 Applicable Temperature		-46℃~550℃(不同的工况温度选用不同的材质) (Different Temperature Conditions Use Different Materials)		

主要零件材质 Material for main parts

零件名称Parts Name	材料 Material
阀体Body	铸铁、不锈钢、铬钼钢、合金钢 Cast iron,Stainless steel ,Cr.Mo.Steel,alloy steel
蝶板Disc	铸钢、合金钢、不锈钢、铬钼钢 Cast steel,Alloy steel,Stainless steel, Cr.Mo.Steel
密封圈Sealing Ring	不锈钢与耐高温石棉板组合成多层次Stainless steel and high temperature resistant asbestos composed of multiple layers
阀杆Stem	2Cr13、1Cr13不锈钢、铬钼钢Stainless steel,Cr.Mo.Steel
轴承Bearing	奥氏体不锈钢、304氮化ZG00CrNi10,304 nitrification
填料Packing	柔性石墨 Flexible Graphite

美标法兰式蝶阀
ASME Flange Butterfly Valve

主要连接尺寸 Main Connection Dimensions

ASME 16.5 ASME 16.47 B　单位：Unit：mm

通径Diameter		150Lb								300Lb							
Inch	mm	L	H	H1	D	D1	D2	Z-Φd	bxf	L	H	H1	D	D1	D2	Z-Φd	bxf
2	50	108	300	210	150	120.5	92	4-19	18x2	108	385	240	165	127	92	8-19	23x2
2 1/2	65	112	320	220	180	139.5	105	4-19	20x2	112	400	250	190	149	105	8-22	26x2
3	80	114	340	230	190	152.5	127	4-19	22x2	114	410	260	210	168.5	127	8-22	29x2
4	100	127	400	265	230	190.5	157	8-19	24x2	127	420	270	255	200	157	8-22	32x2
5	125	140	480	325	255	216	186	8-22	24x2	140	530	345	280	235	186	8-22	35x2
6	150	140	530	345	280	241.5	216	8-22	26x2	140	590	380	320	270	216	12-22	37x2
8	200	152	620	395	345	298.5	270	8-22	29x2	152	650	410	380	330	270	12-26	42x2
10	250	165	680	425	405	362	324	12-25	31x2	165	750	470	445	387.5	324	16-29	48x2
12	300	178	800	495	485	432	381	12-25	32x2	178	860	545	520	451	381	16-32	51x2
14	350	190	880	555	535	476	413	12-29	35x2	190	940	590	585	514.5	413	20-32	54x2
16	400	216	950	590	595	540	470	16-29	37x2	216	990	640	650	571.5	470	20-35	58x2
18	450	222	1000	630	635	578	533	16-32	40x2	222	1100	690	710	628.5	533	24-35	61x2
20	500	229	1100	680	700	635	584	20-32	43x2	229	1200	740	755	686	584	24-35	64x2
24	600	267	1230	750	815	749.5	692	20-35	48x2	267	1360	850	915	813	692	24-41	70x2
28	700	292	1260	770	835	795.3	762	40-22	43.0x2	430	1410	980	920	857.2	787	36-36	87.4x2
30	750	318	1350	820	885	846.1	813	44-22	43.0x2	450	1495	1010	990	920.8	845	36-39	92.1x2
32	800	318	1400	850	940	900.1	864	48-22	44.6x2	470	1535	1080	1055	977.9	902	32-42	101.6x2
36	900	330	1550	930	1055	1009.6	972	44-26	50.9x2	510	1585	1110	1170	1089.0	1010	32-45	101.6x2
40	1000	410	1650	980	1175	1120.8	1080	44-30	54.1x2	550	1605	1150	1275	1190.6	1114	40-45	114.3x2
44	1100	450	1850	1100	1275	1222.4	1181	52-30	58.9x2	590	2100	1380	1385	1295.4	1219	40-48	125.5x2
48	1200	470	1950	1150	1390	1335.1	1289	44-33	63.6x2	630	2270	1410	1510	1416.0	1327	40-51	127.0x2
52	1300	470	2050	1200	1495	1436.7	1391	52-33	68.4x2	–	–	–	–	–	–	–	–
56	1400	530	2200	1400	1600	1543.0	1492	60-33	71.6x2	–	–	–	–	–	–	–	–
60	1500	530	2350	1460	1725	1662.1	1600	52-36	74.7x2	–	–	–	–	–	–	–	–
通径Diameter		600Lb								900Lb							
Inch	mm	L	H	H1	D	D1	D2	Z-Φd	bxf	L	H	H1	D	D1	D2	Z-Φd	bxf
2	50	150	355	230	165	127	92	8-19	26x7	–	–	–	–	–	–	–	–
2 1/2	65	170	430	260	190	149.2	105	8-22	29x7	–	–	–	–	–	–	–	–
3	80	180	480	290	210	168.3	127	8-22	32x7	–	–	–	–	–	–	–	–
4	100	190	510	320	275	215.9	157	8-26	38x7	–	–	–	–	–	–	–	–
5	125	200	590	380	330	266.7	186	8-29	45x7	–	–	–	–	–	–	–	–
6	150	210	620	400	355	292.1	216	12-29	48x7	250	760	460	380	317.5	216	8-32	55.6x7
8	200	230	730	460	420	349.2	270	12-32	56x7	310	850	530	470	393.7	270	8-39	63.5x7
10	250	250	870	550	510	431.8	324	16-35	64x7	350	980	635	545	469.9	324	12-39	69.9x7
12	300	270	930	600	560	489	381	20-35	67x7	380	1050	690	610	533.4	381	16-39	79.4x7
14	350	290	1005	630	605	527	413	20-39	70x7	400	1130	720	640	558.8	413	16-42	85.8x7
16	400	310	1135	705	685	603.3	470	20-42	76x7	430	1195	740	705	616	470	16-45	88.9x7
18	450	330	1200	750	745	654	533	20-45	83x7	460	1340	840	785	685.8	533	16-52	101.6x7
20	500	350	1270	780	815	723.9	584	24-45	89x7	490	1410	865	855	749.3	584	16-54	108x7
24	600	390	1440	880	940	838.2	692	24-51	102x7	530	1645	990	1040	901.7	692	16-67	139.7x7
28	700	430	1700	1065	950	863.6	784	28-48	115.9x7	–	–	–	–	–	–	–	–
32	800	470	1835	1130	1085	984.2	895	28-55	130.2x7	–	–	–	–	–	–	–	–