

Features and usage

Three biased multi-level metals hard seal butterfly valve series, is the long life which the our company newly develops, not divulges, the energy conservation butterfly valve. The product conforms to national standard DIN 3354-1982 (metal hardly to seal reed valve), EN 12266.1-2003 (general valve pressure test) the standard and the valve other correlation standards stipulations, unifies the domestic and foreign advanced technologies, uses the three dimensional eccentric principle design, the seal packing collar uses hardly softly seals the concurrently multi-level structure, is suitable to the medium temperature $\leq 65^{\circ}\text{C}$ metallurgy, the electric power, the petroleum chemical industry, the air, the coal gas, as well as for medium pipeline on and so on the draining water makes the adjustment current capacity and the interruption fluid, the sealing property is reliable, is the general reed valve presses, center high temperature domain extending to the center with the development.

In this structure foundation, may use the teflon to substitute the multi-level seal packing collar, forms the new generation of three biased four fluorine seals reed valve, widespread application in temperature $\leq 200^{\circ}\text{C}$ corrosive medium environment.

Features

1. The butterfly board seal packing collar for hard is soft double-decked, has the hard soft seal dual seal merit, regardless of in the low temperature or under the high temperature operating mode, has the fine sealing property.
2. Uses three eccentric structures, the valve seat and the butterfly board nearly no friction, has the pass tighter sealing property, achieved zero leakage.
3. Opens shuts the moment of force slightly, the operation nimble, the vigor energy conservation, the service life is longer.
4. Thermostable, bears the high pressure, the anti-corrosive applicable scope is broad.
5. The new generation of three biased four fluorine seals reed valve concurrently has had three biased seals structure and the soft seal merit, the sealing property more reliable, the applicable scope broader, the service life is longer.
6. Electrically operated, the pneumatics uses the domestic and foreign famous products, the performance is more reliable (may assign by user).

Material for main parts

Parts name	Parts material
Body	Carbon steel, Stainless, Cr-Mo steel, Alloy steel
Disc	Carbon steel, Stainless, Cr-Mo steel, Alloy steel
Seal ring	316 stainless steel+flexible graphite, Teflon
Stem	Stainless steel, Cr-Mo steel
Packing	Flexible graphite, Teflon
Note: WCB, WC6, WC9, ZG1Cr5Mo, ZG20GrMo, CF8, CF8M, CF3, CF3M	

Applicable standard

Design: DIN 3354-1982
 Face to face: EN558-2008
 Flange end: EN1092-2007
 Leakage Class: Class V ANSI B16.10
 Inspection & Test: EN 12266.1-2003

Main technical parameter

Nominal diameter	DN(mm)	100-3000				100-600
	PN(Mpa)	0.6	1.0	1.6	2.5	4.0
Test pressure	shell structural testing	0.9	1.5	2.4	3.75	6.0
	Seal test	0.66	1.1	1.76	2.75	4.0
	Air test	0.6	0.6	0.6	0.6	0.6
Applicable medium	Water, steam, oil, quality, acids, corrosive, medium and so on and dust pellet					
Applicable temperature	$-29^{\circ}\text{C} \leq \text{Carbon steel} \leq 425^{\circ}\text{C}$, $-40^{\circ}\text{C} \leq \text{Stainless steel} \leq 600^{\circ}\text{C}$, $\text{Cr-Mo steel} \leq 650^{\circ}\text{C}$					
Actuation form	Handle, worm gear, electrically operated, air operated					

■ D343_F^H-PN10/10K(DN50-3000) Main dimensions

DN(mm) Nominal diameter	Main contour and connection size									
	L	D	D1	D2	b	H	H1	L1	L2	Z-Φd
50	108	165	125	102	18	320	85	40	130	4-18
65	112	185	145	122	18	370	90	40	130	4-18
80	114	200	160	138	20	370	100	40	130	8-18
100	127	220	180	158	20	370	125	48	145	8-18
125	140	250	210	188	22	420	135	70	175	8-18
150	140	285	240	212	22	505	172	70	175	8-22
200	152	340	295	268	24	610	240	90	200	8-22
250	165	395	350	320	26	665	265	90	200	12-22
300	178	445	400	370	26	755	295	125	280	12-22
350	190	505	460	430	26	860	330	125	280	16-22
400	216	565	515	482	26	890	370	125	280	16-26
450	222	615	565	532	28	966	395	130	280	20-26
500	229	670	620	585	28	1040	430	130	280	20-26
600	267	780	725	685	34	1285	490	175	365	20-30
700	292	895	840	800	34	1395	545	175	365	24-30
800	318	1015	950	905	36	1560	615	225	440	24-33
900	330	1115	1050	1005	38	1700	700	225	440	28-33
1000	410	1230	1160	1110	38	1865	715	290	490	28-36
1200	470	1455	1380	1330	44	2125	865	290	490	32-39
1400	530	1675	1590	1535	48	2340	950	290	490	36-42
1600	600	1915	1820	1760	52	2580	1070	410	600	40-48
1800	670	2115	2020	1960	56	2880	1200	500	600	44-48
2000	760	2235	2230	2170	60	3200	1350	500	800	48-48
2200	590	2500	2440	2370	64	3750	1350			52-56
2400	650	2760	2650	2570	65	4350	1550			56-56
2600	700	2960	2850	2780	67	4600	1650			60-56
2800	760	3180	3070	3000	68	4900	1760			64-56
3000	810	3405	3290	3210	68	5300	1980			68-62

■ D343_F^H-PN16(DN50-2000) Main dimensions

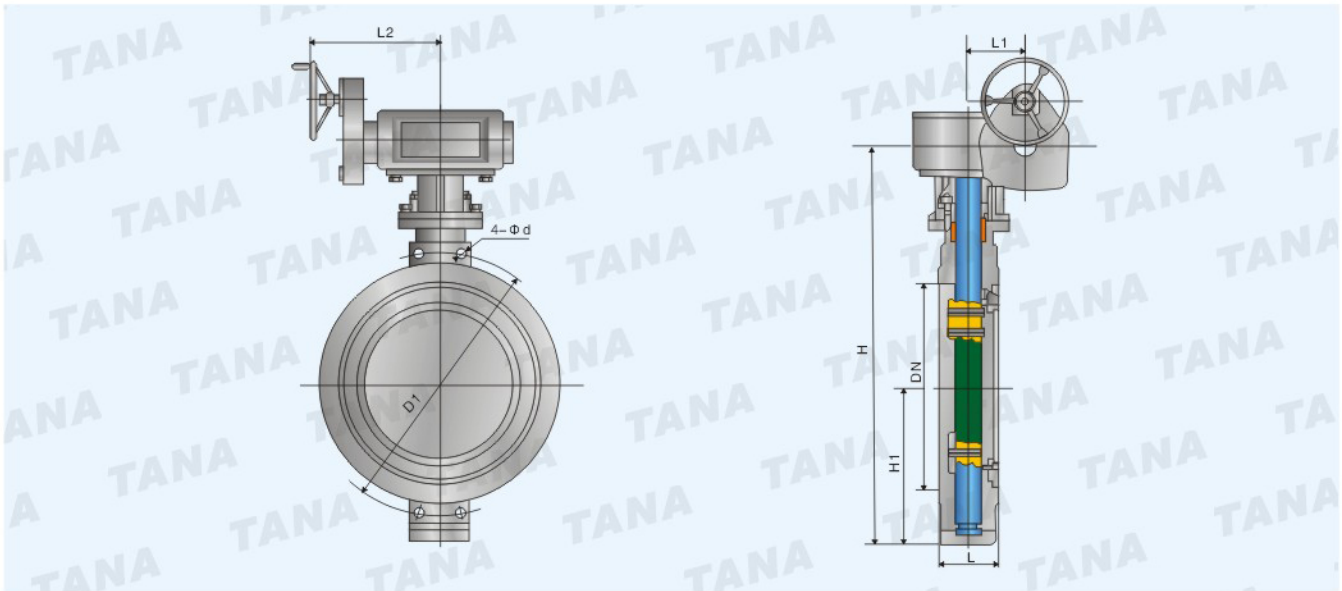
DN(mm) Nominal diameter	Main contour and connection size									
	L	D	D1	D2	b	H	H1	L1	L2	Z-Φd
50	108	165	125	102	20	320	85	40	130	4-18
65	112	185	145	122	20	320	90	40	130	4-18
80	114	200	160	138	20	370	100	40	130	8-18
100	127	220	180	158	22	370	125	48	145	8-18
125	140	250	210	188	22	420	135	70	175	8-18
150	140	285	240	212	24	505	172	70	175	8-22
200	152	340	295	268	24	610	240	90	200	12-22
250	165	405	355	320	26	665	265	90	200	12-26
300	178	460	410	378	28	755	295	125	280	12-26
350	190	520	470	438	30	860	330	125	280	16-26
400	216	580	525	490	32	890	370	125	280	16-30
450	222	640	585	550	34	966	395	130	280	20-30
500	229	715	650	610	36	1040	430	130	280	20-33
600	267	840	770	725	40	1285	490	175	365	20-36
700	292	910	840	795	42	1395	545	175	365	24-36
800	318	1025	950	900	42	1560	615	225	440	24-39
900	330	1125	1050	1000	44	1700	700	225	440	28-39
1000	410	1255	1170	1115	46	1865	715	290	490	28-42
1200	470	1485	1390	1330	52	2125	865	290	490	32-48
1400	530	1685	1590	1530	58	2340	950	290	490	36-48
1600	600	1930	1820	1750	64	2580	1070	410	600	40-56
1800	670	2130	2020	1950	68	2880	1200	500	600	44-56
2000	760	2345	2230	2150	70	3200	1350	500	800	48-64

■ D343_F^H-PN25/20K(DN50-2000) Main dimensions

DN(mm) Nominal diameter	Main contour and connection size									
	L	D	D1	D2	b	H	H1	L1	L2	Z-Φd
50	108	165	125	102	18	320	85	40	130	4-18
65	112	185	145	122	22	320	90	40	130	4-18
80	114	200	160	138	24	370	100	40	130	8-18
100	127	235	190	162	24	370	125	48	145	8-22
125	140	270	220	188	26	420	135	70	175	8-26
150	140	300	250	218	28	505	172	70	175	8-26
200	152	360	310	278	30	610	240	90	200	12-26
250	165	425	370	335	32	665	265	90	200	12-30
300	178	485	430	395	34	755	295	125	280	16-30
350	190	555	490	450	38	860	330	125	280	16-33
400	216	620	550	505	40	890	370	125	280	16-36
450	222	670	600	560	42	966	395	130	280	20-36
500	229	730	660	615	44	1040	430	130	280	20-36
600	267	845	770	720	46	1285	490	175	365	20-39
700	292	960	875	820	50	1395	545	175	365	24-42
800	318	1085	990	930	54	1560	615	225	440	24-48
900	330	1185	1090	1030	58	1700	700	225	440	28-48
1000	410	1320	1210	1140	62	1865	715	290	490	28-56
1200	470	1530	1420	1350	70	2125	865	290	490	32-56
1400	530	1755	1640	1560	76	2340	950	290	490	36-62
1600	600	1975	1860	1780	84	2580	1070	410	600	40-62
1800	670	2195	2070	1985	90	2880	1200	500	600	44-70
2000	760	2425	2300	2210	96	3200	1350	500	800	48-70

■ D343_F^H-PN40(DN50-600) Main dimensions

DN(mm) Nominal diameter	Main contour and connection size									
	L	D	D1	D2	b	H	H1	L1	L2	Z-Φd
50	108	165	125	102	18	320	110	40	130	4-18
65	112	185	145	122	22	320	110	40	130	8-18
80	114	200	160	138	24	370	120	40	130	8-18
100	190	235	190	162	24	370	142	160	223	8-22
125	200	270	220	188	26	420	157	160	223	8-26
150	210	300	250	218	28	505	192	195	130	8-26
200	230	375	320	285	34	620	255	195	130	12-30
250	250	450	385	345	38	680	270	195	300	12-33
300	270	515	450	410	42	770	350	250	635	16-33
350	290	580	510	465	46	885	375	250	635	16-36
400	310	660	585	535	50	910	420	250	635	16-39
450	330	685	610	560	57	980	440	250	635	20-39
500	350	755	670	615	57	1060	500	250	635	20-42
600	390	890	795	735	72	1315	550	295	680	20-48



■ D373^H_F-PN6、10/10K(DN50-2000) Main dimensions

DN(mm) Nominal diameter	Main contour and connection size								
	L	H	H1	L1	L2	PN0.6MPa		PN1.0MPa	
						D1	4-Φd	D1	4-Φd
50	43	250	80	48	145	110	4-14	125	4-18
65	46	265	95	48	145	130	4-14	145	4-18
80	49	275	100	48	145	150	4-18	160	4-18
100	56	370	125	48	145	170	4-18	180	4-18
125	64	420	135	70	175	200	4-18	210	4-18
150	70	505	172	70	175	225	4-18	240	4-22
200	71	610	240	90	200	280	4-18	295	4-22
250	76	665	265	90	200	335	4-18	350	4-22
300	83	755	295	125	280	395	4-22	400	4-22
350	92	860	330	125	280	445	4-22	460	4-22
400	102	890	370	125	280	495	4-22	515	4-26
450	114	966	395	130	280	550	4-22	565	4-26
500	127	1040	430	130	280	600	4-22	620	4-26
600	154	1285	490	175	365	705	4-26	725	4-30
700	165	1395	545	175	365	810	4-26	840	4-30
800	190	1560	615	225	440	920	4-30	950	4-33
900	203	1700	700	225	440	1020	4-30	1050	4-33
1000	216	1865	715	290	490	1120	4-30	1160	4-36
1200	254	2125	865	290	490	1340	4-33	1380	4-39
1400	279	2340	950	290	490	1560	4-36	1590	4-42
1600	318	2580	1070	410	600	1760	4-36	1820	4-48
1800	356	2880	1200	500	600	1970	4-39	2020	4-48
2000	406	3200	1350	500	800	2180	4-42	2230	4-48

■ **D373_F^H-16₂₅ (DN50-2000) Main dimensions**

DN(mm) Nominal diameter	Main contour and connection size								
	L	H	H1	L1	L2	PN1.6MPa		PN2.5MPa	
						D1	4-Φd	D1	4-Φd
50	43	250	80	48	145	125	4-18	125	4-18
65	46	265	95	48	145	145	4-18	145	4-18
80	49	275	100	48	145	160	4-18	160	4-18
100	56	370	125	48	145	180	4-18	190	4-22
125	64	420	135	70	175	210	4-18	220	4-26
150	70	505	172	70	175	240	4-22	250	4-26
200	71	610	240	90	200	295	4-22	310	4-26
250	76	665	265	90	200	355	4-26	370	4-30
300	83	755	295	125	280	410	4-26	430	4-30
350	92	860	330	125	280	470	4-26	490	4-33
400	102	890	370	125	280	525	4-30	550	4-36
450	114	966	395	130	280	585	4-30	600	4-36
500	127	1040	430	130	280	650	4-33	660	4-36
600	154	1285	490	175	365	770	4-36	770	4-39
700	165	1395	545	175	365	840	4-36	875	4-42
800	190	1560	615	225	440	950	4-39	990	4-48
900	203	1700	700	225	440	1050	4-39	1090	4-48
1000	216	1865	715	290	490	1170	4-42	1210	4-55
1200	254	2125	865	290	490	1390	4-48	1420	4-55
1400	279	2340	950	290	490	1590	4-48	1640	4-60
1600	318	2580	1070	410	600	1820	4-56	1860	4-62
1800	356	2880	1200	500	600	2020	4-56	2070	4-70
2000	406	3200	1350	500	800	2230	4-62	2300	4-70

■ **D373_F^H-PN40 (DN100-DN600) Main dimensions**

DN(mm) Nominal diameter	Main contour and connection size							
	L	D1	H	H1	L1	L2	4-Φd	
50	43	125	320	110	130	180	4-18	
65	46	145	320	110	130	180	4-18	
80	64	160	320	120	140	205	4-18	
100	64	190	370	142	160	223	4-22	
125	70	220	420	157	160	223	4-26	
150	76	250	505	192	195	230	4-26	
200	89	320	620	255	195	230	4-30	
250	114	385	680	270	195	300	4-33	
300	114	450	770	350	250	635	4-33	
350	127	510	885	375	250	635	4-36	
400	140	585	910	420	250	635	4-39	
450	152	610	980	440	250	635	4-39	
500	152	670	1060	500	250	635	4-42	
600	178	795	1315	550	295	680	4-48	