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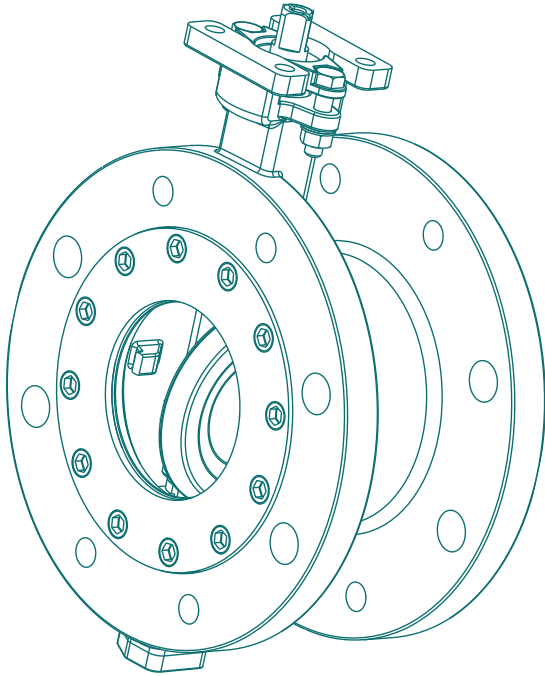
Double Eccentric Butterfly Valves



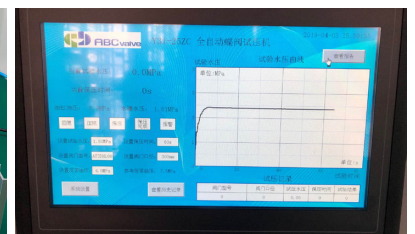
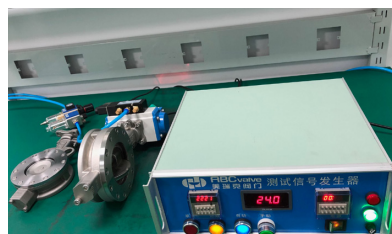
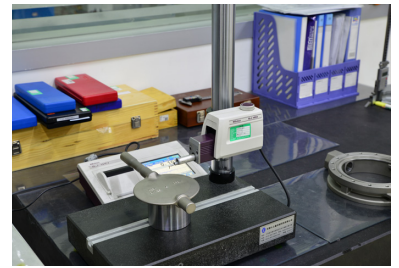
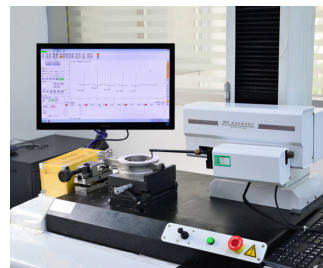
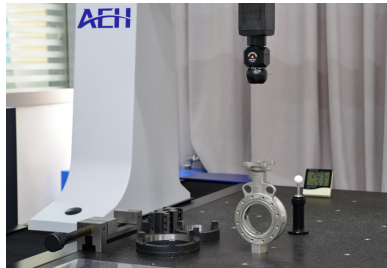
High Performance Butterfly Valves
Series A75 Wafer/Lug
Eccentric Butterfly

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Butterfly valves are one of the fastest growing types of control valves today for a number of reasons. The control provided by today's butterfly valve is more than adequate for many low-pressure-drop applications and other standard services. Size for size, larger flow coefficient, less frictional forces, smaller actuator, naturally high pressure-recovery factor, all these mean that butterfly valves are preferred in applications.



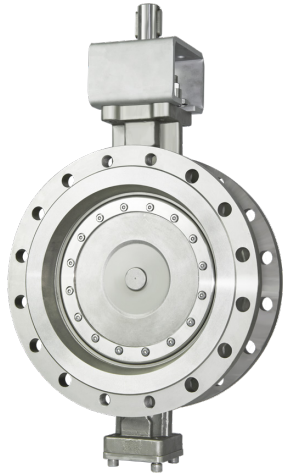
ABC valve focuses on Automatic Butterfly valve Control. Manufacturing systems and products are certified by ISO9001, BV Marine, PED CE, FDA, DVGW, WRAS, KTW, Fire Test Certification. These create good conditions for us to service customers worldwide with ABC high quality products at competitive price.



General information

A73 clamp, A74 lug, A75 flange ,High performance butterfly valves provide cost-effective solution for a wide range of applications where bubble-tight shut-off is required. Utilizing an eccentric disc and offset shaft, the design incorporates the flexible-lip sealing system into a lightweight, compact body. The result is that **in many cases the valve can replace globe valve and gate valve yet easier operating, longer lasting and lower cost.**

Significant performance makes the valve widely used in many applications such as **Airport refueling, Hydrocarbon processing, HVAC, Air treatment, Chemical processing, Purified gas, Steam and vacuum services, Potable water, Powder and pulp processing**, etc.

Series	A75 Flange double eccentric butterfly valve
Picture	
Connection	Flange type
Nominal diameter	DN50-DN2400
Max. working ressure	Up to 50bar (Class300)
Standard working pressure	20bar (Class150), 50bar (Class300)
Vacuum	Full Vacuum
Face to face	API 609 Category B, Flange connection short structure
Top flange	ISO 5211
Tightness check	ISO 5208 Category 3, API 598 Table 5
Temperature range	-40°C to + 287°C (Depending on pressure, medium and material)
Operation	Hand level, gear box, pneumatic actuator, electric actuator

Features & Benefits DN50-DN350

A75 Valve Design

Blow out proof one-piece shaft with position indication

Multiply V type rings of Graphite or RPTFE for safe shaft sealing

Extended valve neck allowing insulation

Self-energized seat resulting in longer life and reduced maintenance

Double offset disc reducing valve torque and friction

ISO5211 top flange together with stem square suitable for direct mounting of actuators

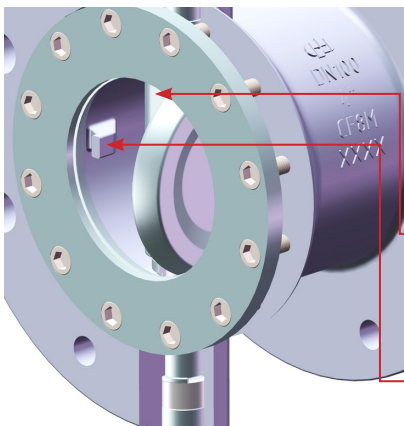
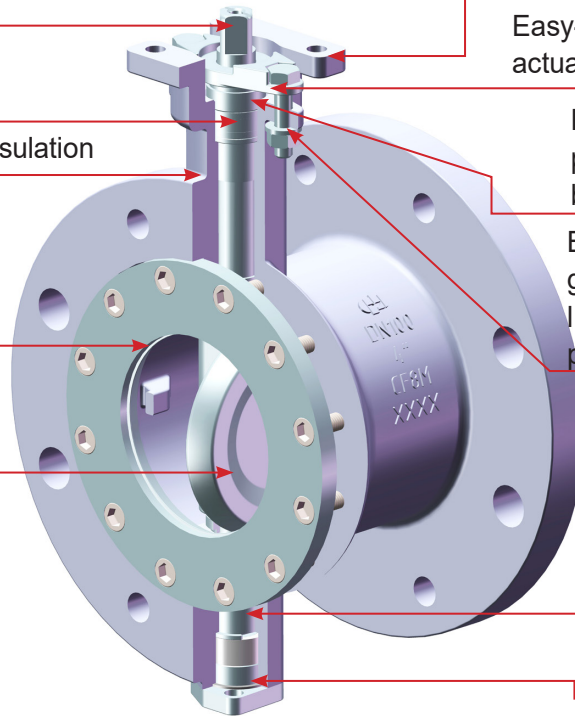
Easy-adjust gland accessible with actuator mounted in place

Retaining ring for both equally pressing on packing and stem blowout proof

Belleville washers on the gland nut offer reliable long lasting pressing on shaft packing

PTFE lined SS316 bearings support shaft and increase life service

Thrust ring for anti-blowout and anti-static



Pin-less shaft to disc connection makes the valve convenient for parts replacement and reliable even under corrosion

Integral disc stop prevent disc from over travel

Features & Benefits DN400-DN2400

Blow out proof one-piece shaft with position indication

Multiply V type rings of Graphite or RPTFE for safe shaft sealing

Extended valve neck allowing insulation

Self-energized seat resulting in longer life and reduced maintenance

Double offset disc reducing valve torque and friction

ISO5211 top flange together with stem square suitable for direct mounting of actuators

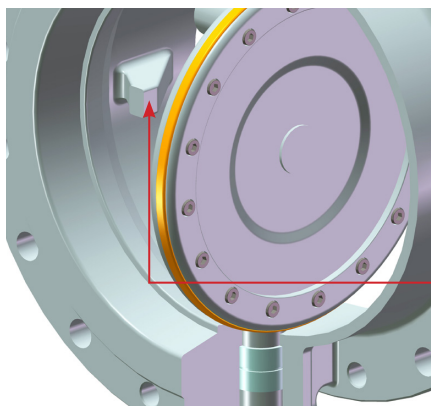
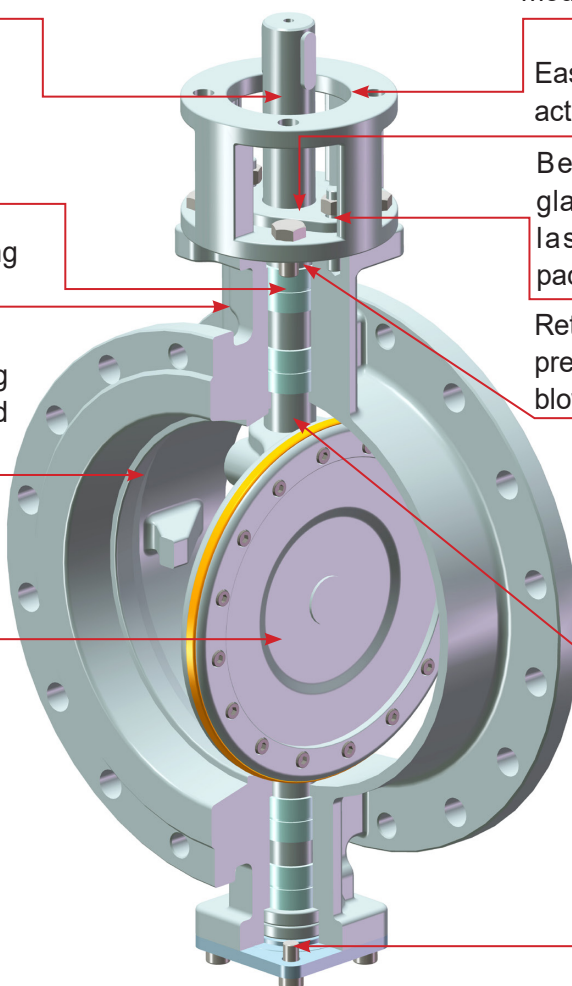
Easy-adjust gland accessible with actuator mounted in place

Belleville washers on the gland nut offer reliable long lasting pressing on shaft packing

Retaining ring for both equally pressing on packing and stem blowout proof

PTFE lined SS316 bearings support shaft and increase life service

Thrust ring for anti-blowout and anti-static



Integral disc stop prevent disc from over travel

Key Component Features

Body



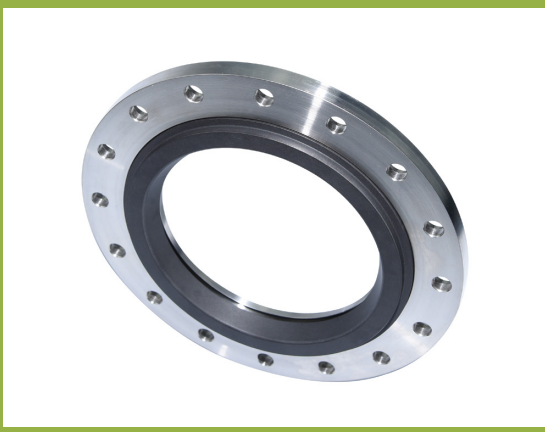
- System 5 corrosion protection coating for WCB, Passivation for CF8M
- Types: Wafer, Lug
- Multi-standard alignment holes suitable for mounting flanges: EN1092 PN16, PN25, PN40; ANSI 150LB, 300LB, AS2129 Table D, Table E, Table F
- ISO 5211 top flange integral on body according to valve torque
- Extended valve neck allowing insulation
- Extra wall thickness for stability of performance

Disc



- Double offset eccentric design limits seat contact through range of motion, reducing torque and friction between disc and seat
- High strength disc design ensures the valve stand on high pressure and frequent quick opening closing movement
- Keyway connection between disc and stem allow replacement of parts easy and avoid pin which may fail because of corrosion or frequent opening closing
- Reinforced disc hub makes the rotary of disc extra strong even for over operation
- Spherically machined disc provides good sealing performance and extended life for RPTFE seat

Seat



- Easy seat replacement
- One-piece self-energized seat without secondary components such as o-rings, springs or wires, resulting in longer life and reduced maintenance
- 25% carbon fiber reinforced PTFE makes the seat long life for regulating
- Trouble-free mounting between flanges of both slip-on and plate type
- Pressure assisting sealing design gives Bi-directional bubble tight shut off at full pressure (Valve must be installed with retaining ring upstream for dead end service)

Key Component Features

Shaft



- ISO 5211 driving square with arrow indicating disc position
- High-strength through shaft for stable disc support
- Keyway connection driving the disc fast and firmly
- Anti-blowout shaft and Anti-static design

Gland and Packing



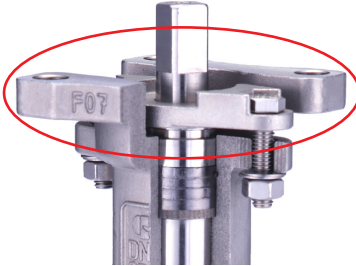
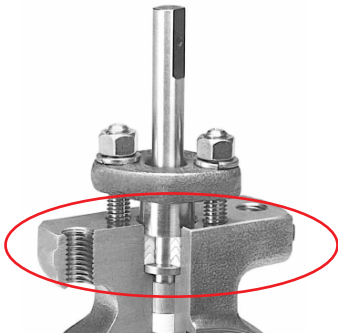
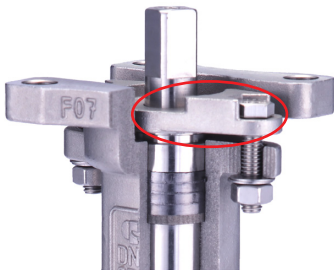
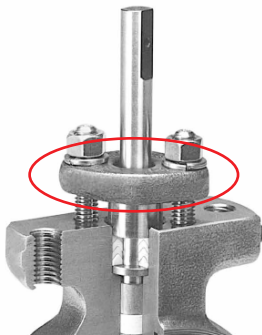
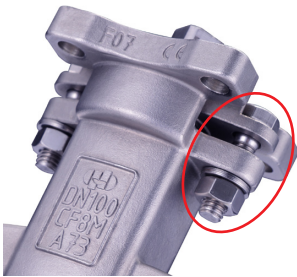
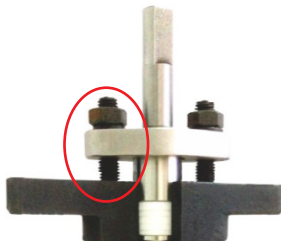
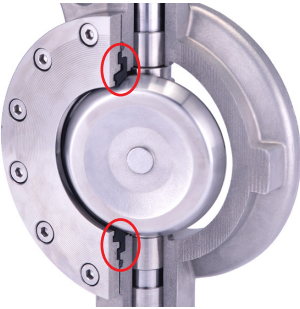
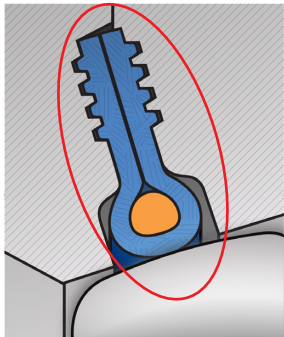
- Easy-adjust gland accessible with actuator mounted in place
- Second blowout proof on stem
- Multiply V type rings of Graphite or RPTFE for stem packing

Seat Retainer



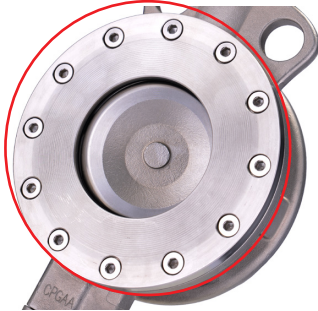
- Full-faced seat retainer is firmly attached by bolts located outside of sealing area, protecting the bolts from corrosion
- Flange face equipped with serrated spiral finish and is compatible with both flat and spiral wound gaskets
- Fully installed bolts keep sure the seat in consistent position under both factory test and user application

Design Advantages Comparing

A73/A74/A75 Eccentric butterfly design	Conventional product design
 ISO5211 top flange integrally casted on valve body for direct mounting.	 Bracket need to be used for actuating. Vibration or fail of actuating may happen.
 Easy-adjust gland bridge accessible with actuator mounted in place and incorporating a conical surface mating with spherical surface on packing press ring which compensates for uneven adjustment of gland nuts.	 Difficult to adjust gland and uneven pressing of gland may happen.
 Belleville springs make the gland pressing self-adjusting.	 For frequent opening and closing situations, gland nut need to be adjusted by manual quite several times, or excessive pressing on packing may happen.
 One-piece self-energized seat without secondary component resulting in longer life and reduced maintenance. Higher sealing force will be created by higher pressure itself.	 Energized by O-ring inside PTFE, O-ring may fail because of temperature or pressure.

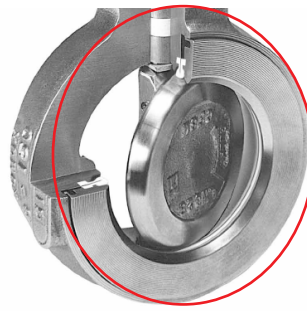
Design Advantages Comparing

A73/A74/A75 Eccentric butterfly design



Seat retainer with bolts in full strength assures the seat in consistent position under both factory test and user application.

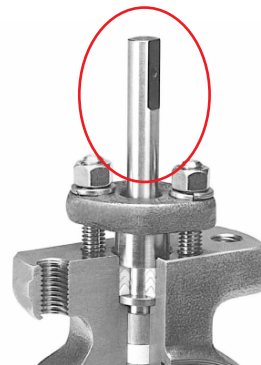
Conventional product design



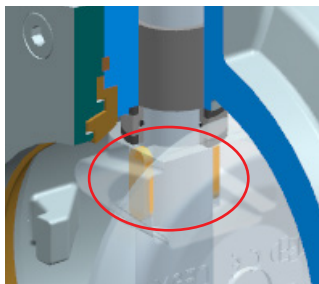
Retainer position depending on pressing from clamping flange, this may cause different station because of different installation or gasket.



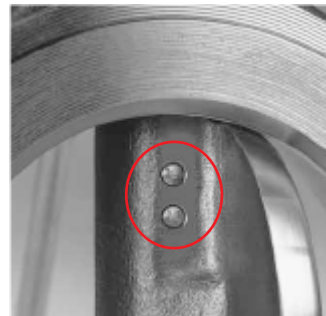
ISO5211 stem square for direct standard actuating.



Special actuator or coupling needed.



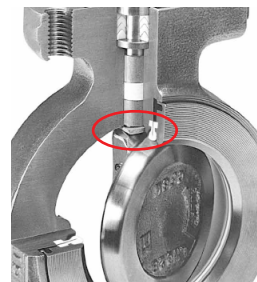
Keyway connection between disc and stem, replaceable and high strength.



Pins may fall off or break. Welded pins make stem and disc not replaceable.



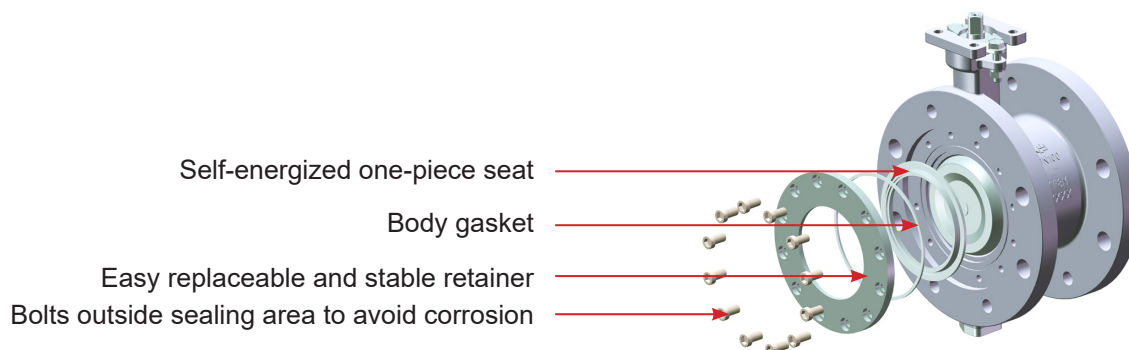
Washer seals brush away particles, avoid penetration of fluid into bushing and shaft clogging.



No seal between disc and body. Minerals, particles, corrosive scale may get into stem bushing and cause shaft clogging.

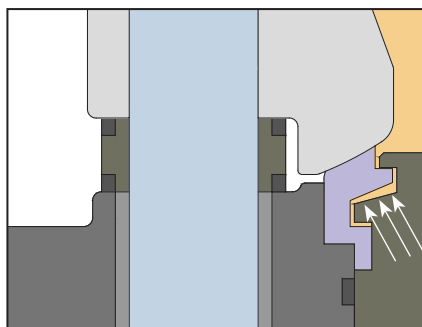
Superior A75 Eccentric Butterfly Design DN50-DN350

Easy Replaceable and Reliable Sealing

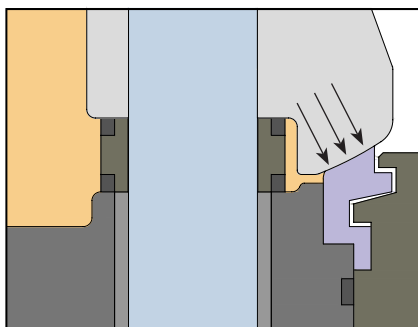


Self Bi-directional sealing

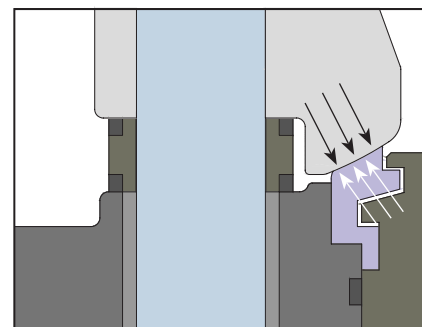
The eccentric seating motion limits sliding contact between the disc and seat, reducing wear and torque. The self-energizing seat is pressure assisted to ensure bubble tight sealing in both directions and does not rely on secondary components such as O-rings or springs. This simplifies maintenance and extends life.



Pressure on the retainer side forces the seat harder onto the disc, further improving the sealing. The higher the pressure, the tighter the sealing.



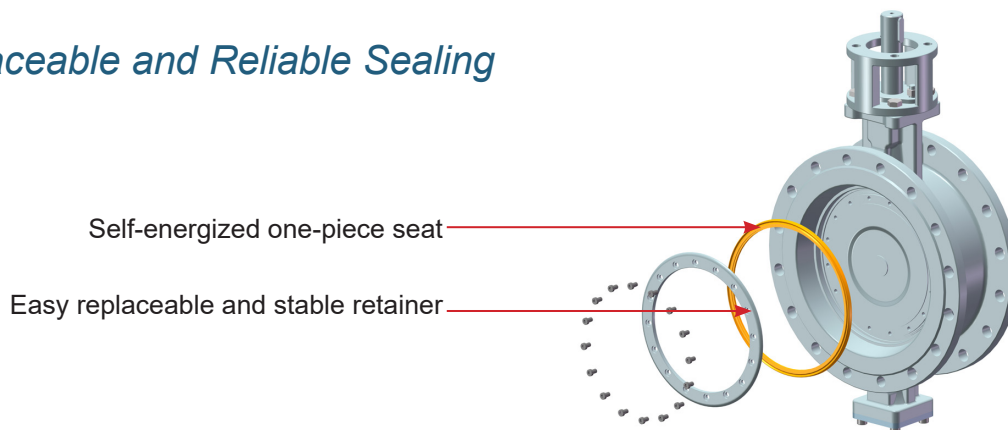
Pressure on the body side forces the disc further onto the self-energized seat, causing tighter shutoff. The seat is contained securely by the seat retainer to prevent excessive deflection.



In the closed position, the eccentric valve plate compresses the seat to form a seal.

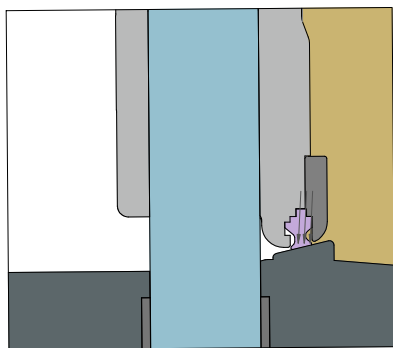
Superior A75 Eccentric Butterfly Design DN400-DN2400

Easy Replaceable and Reliable Sealing

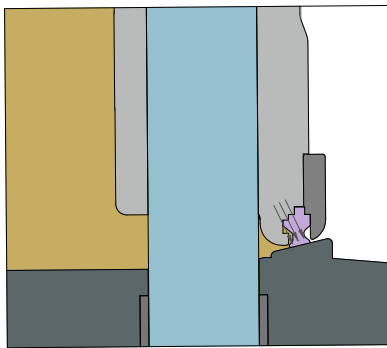


Self Bi-directional sealing

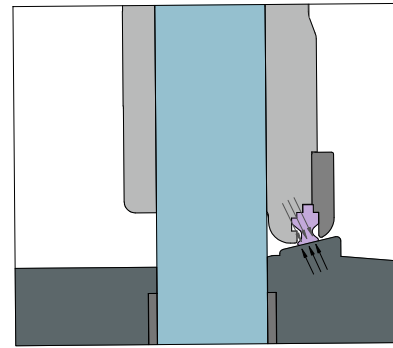
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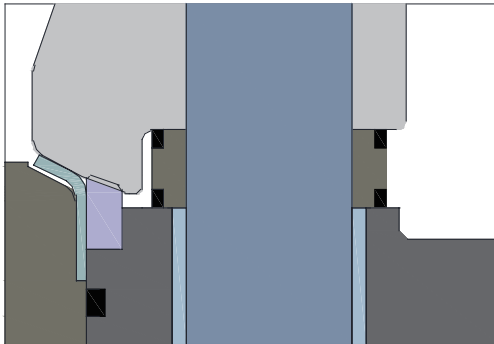


In the closed position, the eccentric valve plate compresses the seat to form a seal.

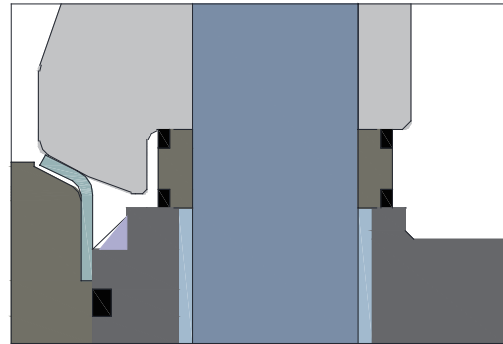
Superior A73/A74 Eccentric Butterfly Design

Fire Safe Seat

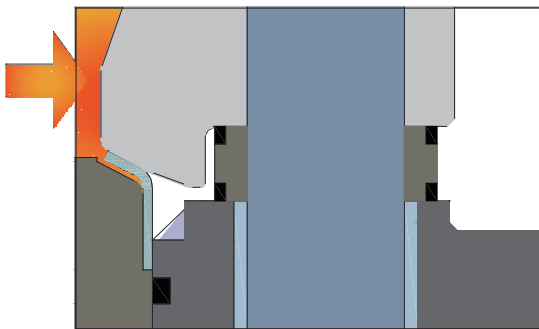
For reliable control of flammable and hazardous fluids in petroleum, petrochemical, chemical and other fire-risk applications, the fire safe design offers a safe protection in accordance with the worldwide fire test standard API 607.



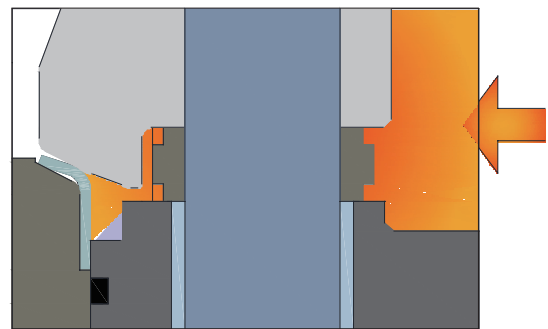
In normal service, the Fire Safe resilient/metal seat seals in both directions of line media flow through the full rated pressure and temperature rating with zero leakage. When closed, the disc remains compressed against the resilient seat, which is securely locked in place by a full-faced retainer. Line media pressure strengthens the seating.



In the event of a fire, if excessive heat destroys the resilient seat materials, either partially or completely, the seat provides a constant metal to metal backup seal because of the seat energizing design and spring mechanism Inconel seat.

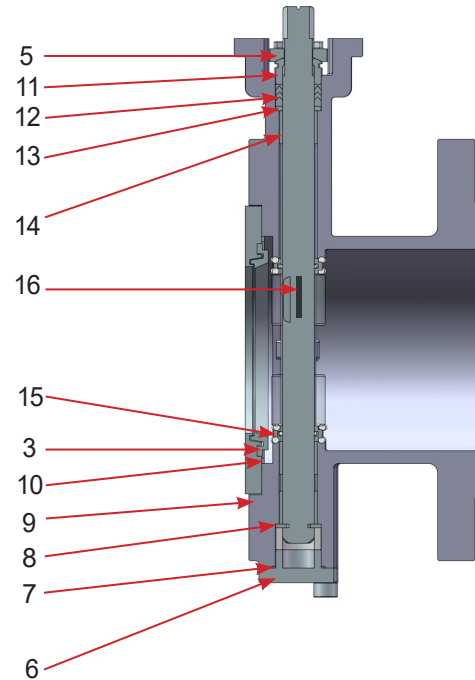
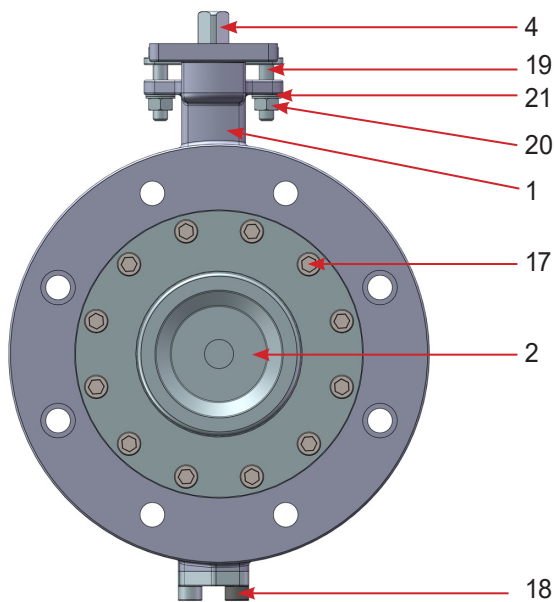


When pressure from retainer side, it forces the metal seat harder onto the disc, further improving the sealing.



When pressure from body side, it forces the disc further onto the metal seat, causing tighter shutoff. The seat is supported securely by the seat retainer to prevent excessive deflection.

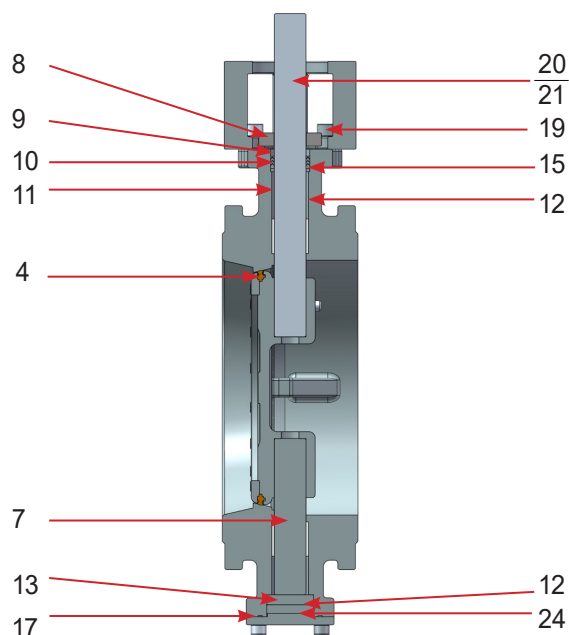
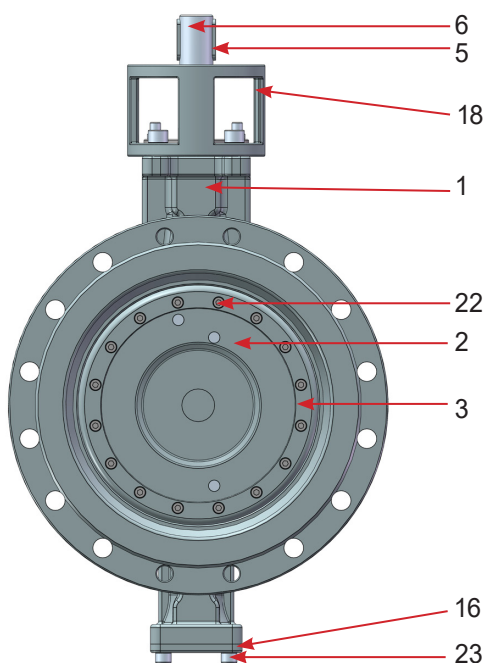
DN50-DN350 Structure and Material



Parts list and material specification

No.	Part name	Material	Standard	Surface Treatment
1	Body	Cast Steel	ASTM A216 WCB	System 5 coating Grey
		Stainless Steel	ASTM A351 CF8	Passivation
			ASTM A351 CF8M	Passivation
2	Disc	Stainless Steel	ASTM A351 CF8	Passivation
			ASTM A351 CF8M	Passivation
3	Seat	RPTFE	PTFE with 25% Carbon fiber	
		RPTFE+SS316	Fire safe	
		According to working condition	Metal or Ceramic	
4	Shaft	Stainless Steel	17-4PHSS	
5	Packing gland	Stainless Steel	ASTM A351 CF8M	Passivation
6	Bottom cover	Stainless Steel	ASTM A351 CF8M	
7	Cover seal	Graphite		
8	Retainer ring	Stainless Steel	SS316	
9	Seat retainer	Same as body		
10	Gasket	Graphite standard, RPTFE optional		
11	Press ring	Stainless Steel	SS304	
12	Packing	Graphite standard, RPTFE optional		
13	Packing support	Stainless Steel	SS316	
14	Bearing	Stainless Steel	SS316+PTFE	
15	Thrust bearing	Stainless Steel	SS316	
16	Keys	Stainless Steel	SS316	
17	Bolts	Stainless Steel	SS304	
18	Bolts	Stainless Steel	SS304	
19	Bolts	Stainless Steel	SS304	
20	Nuts	Stainless Steel	SS304	
21	Belleville washer	Stainless Steel	SS304	

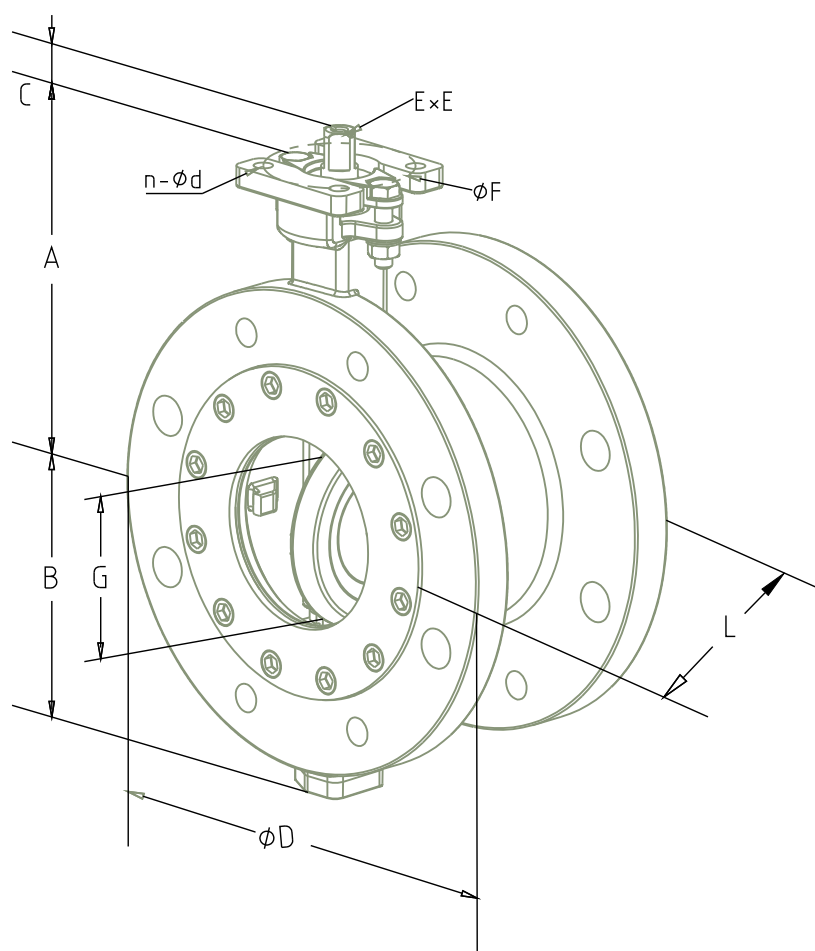
DN400-DN1200 Structure and Material



Part list and material

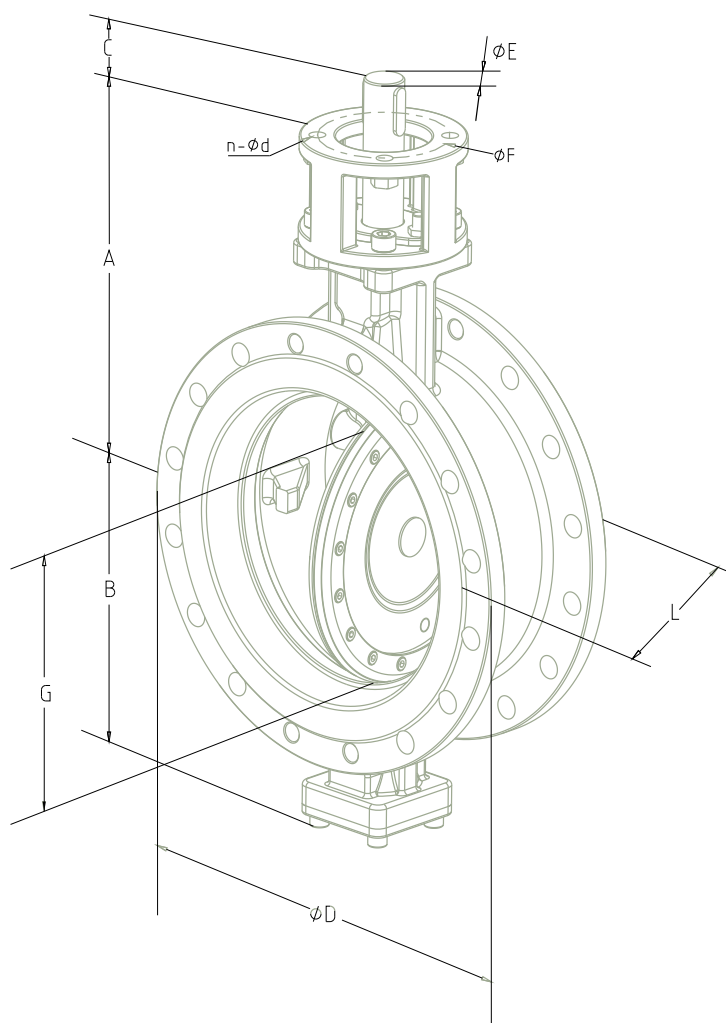
No.	Part name	material	Standard	Surface treatment
1	Body	Cast steel	ASTM A216 WCB	System 5 coating Grey
		Stainless steel	ASTM A351 CF8	passivation
			ASTM A351 CF8M	passivation
2	Disc	Stainless steel	ASTM A351 CF8	passivation
			ASTM A351 CF8M	passivation
3	seat ring	RPTFE		
4	Seat	RPTFE	PTFE with 25% Carbon fiber	
		RPTFE+SS316	Fire safe	
		According to working condition	Metal or Ceramic	
5	Flat key	Stainless steel	SS431	
6	Upper valve shaft	Stainless steel	17-4PHSS	passivation
7	Lower valve shaft	Stainless steel	17-4PHSS	
8	Packing gland	Stainless steel	ASTM A351 CF8M	
9	Packing ring	Stainless steel	ASTM A351 CF8M	
10	Filler	Graphite,RPTFE		
11	Bushing	Stainless steel	SS304	
12	O-ring	fluororubber		
13	Fixed ring	Stainless steel	SS304	
14	Fixed ring -1	Stainless steel	SS304	
15	Packing bottom ring	Stainless steel	SS304	
16	Lower cap	Same as body		
17	Bottom cover gasket	Graphite,RPTFE		
18	Support	Stainless steel	SS304	
19	Hexagon bolt	Stainless steel	SS304	
20	Hexagon nut	Stainless steel	SS304	
21	Double stud	Stainless steel	SS304	
22	Hexagon socket bolt	Stainless steel	SS304	
23	Hexagon socket bolt	Stainless steel	SS304	
24	Hexagon socket bolt	Stainless steel	SS304	

A75 Dimensions DN50-DN350(mm)



尺寸		A	B	C	D	E	F	G	L	WT (kg)	A	B	C	D	E	F	G	L	WT (kg)
DN	INCH	Class150									Class300								
80	3"	145	100	17.5	190	11*11	F07	72	114	11	145	100	17.5	210	11*11	F07	72	114	13
100	4"	170	124	17.5	230	14*14	F07	91	127	16	170	124	17.5	255	14*14	F07	91	127	18
125	5"	185	144	17.5	255	14*14	F07	114	140	25	185	144	17.5	280	14*14	F07	114	140	27
150	6"	203	150	18.5	280	17*17	F10	145	140	35	203	150	18.5	320	17*17	F10	145	140	39
200	8"	239	186	24.5	345	22*22	F10	192	152	40	257	204	24.5	380	22*22	F10	192	152	46
250	10"	275	226	24.5	405	22*22	F10	240	165	55	288	238	30	445	27*27	F12	240	165	60
300	12"	307	251	30	485	27*27	F12	285	178	90	330	268	30	520	27*27	F12	284	178	100
350	14"	337	294	30	535	27*27	F12+F14	328	190	120	337	294	39	585	36*36	F14	320	190	135

A75 Dimensions DN400-DN1200(mm)



尺寸		A	B	C	D	E	F	G	L	WT (kg)	A	B	C	D	E	F	G	L	WT (kg)
DN	INCH	Class150									Class300								
400	16"	520	394	76.2	595	50.8	F16	373	216	270	520	396	76.2	650	50.8	F16	365	216	350
450	18"	550	430	76.2	635	50.8	F16	422	222	290	550	430	76.2	710	57.2	F16	390	222	400
500	20"	582	444	76.2	700	57.2	F16	470	229	360	647	474	95	775	63.3	F25	419	229	500
600	24"	637	464	95	815	63.3	F25	575	267	520	657	514	95	915	76.2	F25	530	267	705
750	30"	750	550	95	985	76.2	F25	718	318	900	750	550	115	1092	92.1	F25	690	318	1000
900	36"	900	702	115	1170	92.1	F30	860	330	1200	900	702	150	1270	111	F30	851	330	1200
1050	42"	1120	850	150	1345	111	F40	1000	410	1800	1120	850	190	1289	127	F40	990	410	2100
1200	48"	1166	943	190	1510	127	F40	1170	470	2000	1166	943	214	1467	143	F40	1162	470	3100

Cv and Valve Torque

Cv

尺寸		Class150 Cv (U.G.P.M at 1psi ΔP)									Class300 Cv (U.G.P.M at 1psi ΔP)								
DN	英寸	10°	20°	30°	40°	50°	60°	70°	80°	90°	10°	20°	30°	40°	50°	60°	70°	80°	90°
50	2"	2	5	12	23	40	59	78	110	130	2	5	12	23	40	59	78	110	130
65	2 1/2"	3	8	16	30	50	77	100	130	160	3	8	16	30	50	77	100	130	160
80	3"	4	14	30	55	88	120	150	175	180	4	14	30	55	88	120	150	175	180
100	4"	9	25	60	115	177	255	310	365	375	9	25	60	115	177	255	310	365	375
125	5"	15	40	75	143	232	362	500	675	790	15	40	75	143	232	362	500	675	790
150	6"	30	70	140	215	330	511	750	1000	1350	30	70	140	215	330	511	750	1000	1350
200	8"	60	150	260	456	688	1062	1550	2200	2800	50	135	230	410	615	950	1395	1980	2520
250	10"	95	250	450	700	1052	1633	2450	3400	4300	65	225	400	630	940	1460	2205	3060	3870
300	12"	150	380	690	1050	1632	2532	3740	5300	6655	95	342	623	945	1450	2270	3366	4770	5980
350	14"	170	430	810	1220	1893	2900	4300	6100	7652	110	387	729	1098	1700	2610	3870	5490	6880
400	16"	222	570	1022	1510	2420	3705	5500	7890	9800	180	513	910	1359	2178	3333	4950	7101	8820
450	18"	170	610	1160	2230	3522	5100	6900	9150	10600	160	549	1045	2007	3169	4590	6210	8235	9540
500	20"	195	880	1530	2825	4508	6530	8800	11800	13400	175	792	1370	2540	4057	5877	7920	10620	12060
600	24"	238	1020	2200	3890	6645	9570	12900	17200	20000	220	918	1980	3501	5980	8613	11610	15480	18000

Note:

1. The charted values are based for water, Temp: 0°C to 40°C .
2. The charted values are based on the initial breakaway torque under operating pressure.
3. The torque values listed above do not include a safety factor. Recommended safety factor see Service Factor Guide Chart below.
4. The effect of dynamic torque is not considered in tabulation.

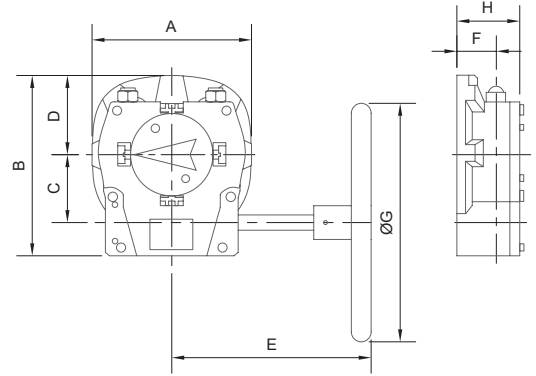
Valve Torque

SIZE		Class150 Valve torque under pressure(N*M)						Class150 Stem deform torque (N*M)	Class300 Valve torque under pressure(N*M)						Class300 Stem deform torque (N*M)
		6.9bar (100psi) differential pressure		13.8bar (200psi) differential pressure		19.7bar (285psi) differential pressure			20.7bar (300psi) differential pressure		34.5bar (500psi) differential pressure		50bar (725psi) differential pressure		
DN	INCH	PTFE/ RPTFE seat	Firesafe seat	PTFE/ RPTFE seat	Firesafe seat	PTFE/ RPTFE seat	Firesafe seat		PTFE/ RPTFE seat	Firesafe seat	PTFE/ RPTFE seat	Firesafe seat	PTFE/ RPTFE seat	Firesafe seat	
50	2	30	55	32	60	42	65	180	43	66	50	70	55	80	180
65	1 1/2	30	55	32	60	42	65	180	43	66	50	70	55	80	180
80	3	35	70	38	78	48	80	180	49	82	55	85	60	90	180
100	4	50	90	55	100	72	110	380	73	113	85	130	105	160	380
125	5	65	130	75	150	100	170	380	115	175	150	192	190	290	380
150	6	100	180	115	205	150	225	700	160	230	210	260	265	400	700
200	8	190	290	195	345	260	390	1200	310	419	420	600	539	850	1200
250	10	300	461	310	550	320	632	1200	460	640	660	990	870	1200	1800
300	12	390	690	410	861	470	1005	1800	660	1090	910	1296	1160	1365	1800
350	14	520	820	685	1020	850	1200	1800	1105	1350	1600	2380	2120	2530	3200
400	16	900	1060	950	1200	1120	1300	1800	1320	1510	1900	2629	2550	3259	5600
450	18	1000	1310	1145	1856	1425	2320	3200	1700	2510	2500	2970	3270	4150	5600
500	20	1200	1880	1545	2682	1923	3360	5600	2305	3620	3360	3997	4400	4925	5600
600	24	2600	2780	3200	3660	3500	4315	5600	3900	5820	4550	7100	6009	9536	12000

Service Factor Rating

Service Condition	Service Type	Media Type	Safety Factor	Multiplier
1	Ideal	Lubricating Oil	20%	1.2
2	Normal	Water	30%	1.3
3	Severe	Dry Air, Solvents	50%	1.5
4	Extreme	Abrasives	100%	2.0

A75 Manual operation

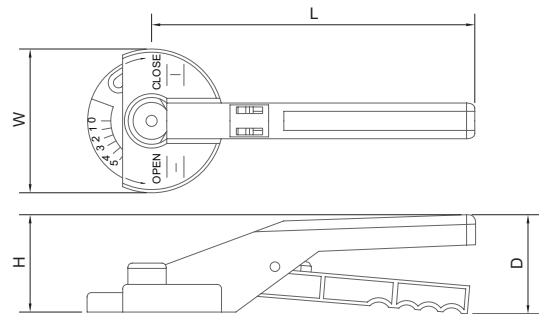


Turbine Cast Iron

SIZEclass150		SIZEclass150		Ratio	Gear torque	A	B	C	D	E	F	G	H	重量
DN	INCH	DN	INCH											
50-65	2"-2 1/2"	50-65	2"-2 1/2"	40:1	200	92	111	39	46	151	31	100	55	3
80-125	3"-5"	80-125	3"-5"	40:1	200	92	111	39	46	151	31	140	55	3
150-200	6"-8"	150-200	6"-8"	42:1	500	118	145	53	61	214	35	260	61	6
250-300	10"-12"	250	10"	42:1	1000	165	182	66	76	210	42	300	72	11
350-400	14"-16"	300-350	12"-14"	60:1	1800	200	231	89	100	277	50	400	81	14
450-500	18"-20"	400-450	16"-18"	68:1	3400	252	296	123	118	357	50	400	91	32
600	24"	500	20"	88:1	4400	315	354	153	145	382	50	500	93	44

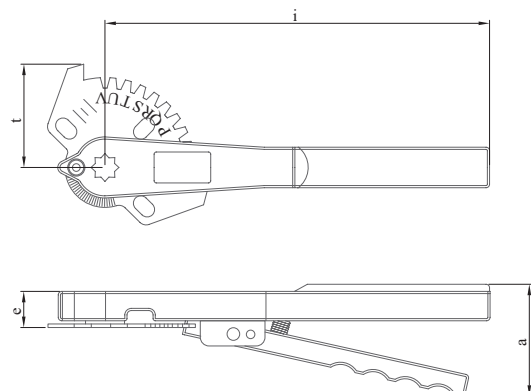
Standard Handle

SIZE		D	H	L	W	WT
DN	INCH					
50-65	2"-2 1/2"	56	65	195	74	0.3
80	3"	73	82	200	101	0.52
100-125	4"-5"	78	82	269	101	0.6
150-200	6"-8"	101	100	330	145	1.5

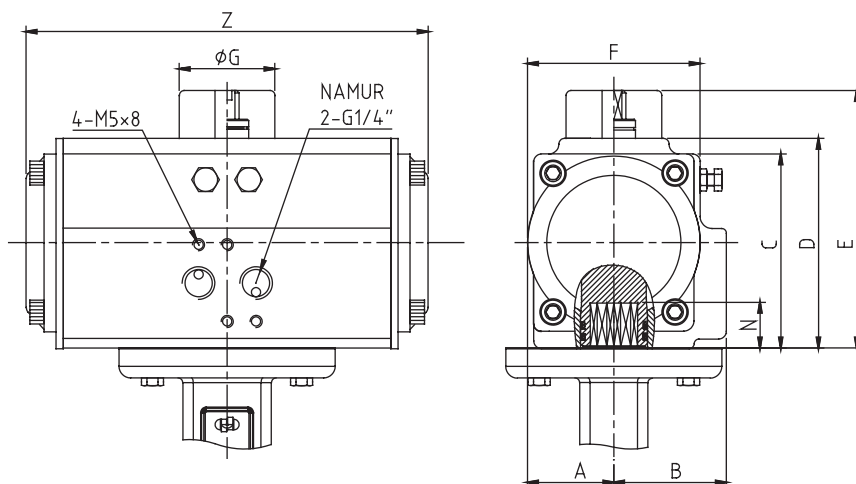


Adjustable HandleCF8

SIZE		D	H	L	W	WT
DN	INCH					
50-65	2"-2 1/2"	56	23	195	60	0.8
80-125	3"-5"	77	30	267	73	1.2
150-200	6"-8"	77	30	330	102	1.8



Double Acting Pneumatic Actuators



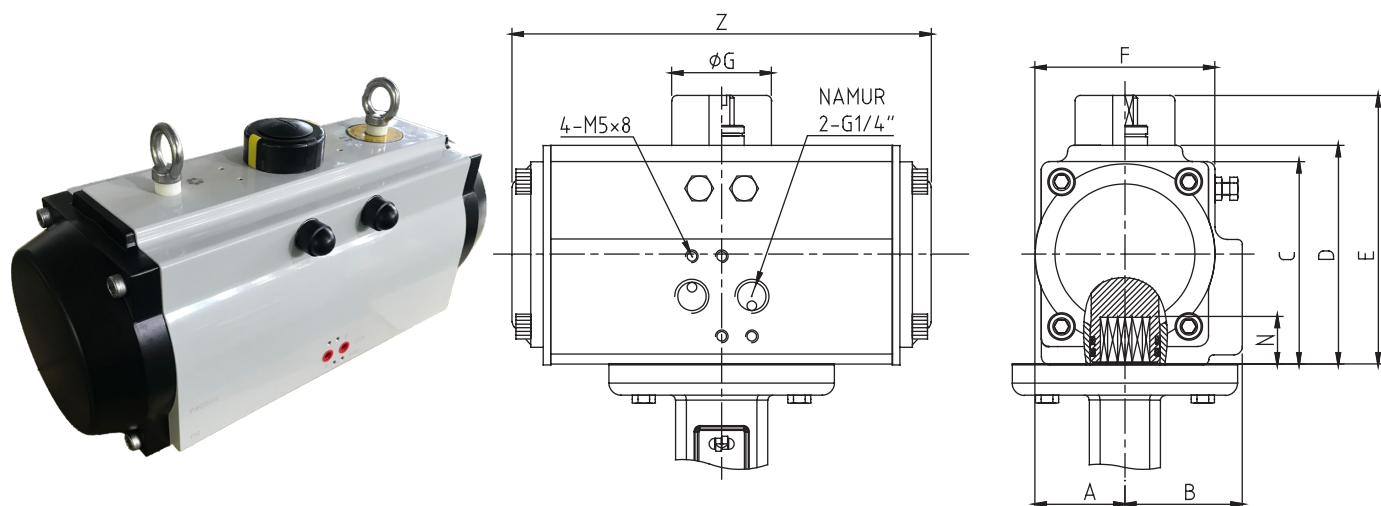
ABC P40 Double acting actuators for A73/A74 CLASS150

Pneumatic Actuators-Standard Conditions-4bar Air Supply

A73/A74 size	Valve rating	Actuator size	Actuator No.	Actuator output torque (NM)	Actuator ISO 5211	A	B	C	D	E	F	N	G	Z
DN50	CLASS150	83	P4010507083	63	F05+F07	46	57	98.5	108.7	128.7	92	21	40	211
DN65	CLASS150	83	P4010507083	63	F05+F07	46	57	98.5	108.7	128.7	92	21	40	211
DN80	CLASS150	83	P4010507083	63	F05+F07	46	57	98.5	108.7	128.7	92	21	40	211
DN100	CLASS150	105	P4010710105	132	F05+F07	58	64	128	133	153	110	26	40	270
DN125	CLASS150	125	P4010710125	200	F07+F10	67.5	74.5	145.5	155	175	127.5	26	55	303
DN150	CLASS150	132	P4011012132	278	F10+F12	71	73	154	164	184	133	26	55	368
DN200	CLASS150	160	P4011012160	532	F10+F12	87	87	184	197	217	158	31	55	458
DN250	CLASS150	160	P4011012160	532	F10+F12	87	87	184	197	217	158	31	55	458
DN300	CLASS150	190	P4010012190	851	F12	103	103	216	230	260	189	40	80	528
DN350	CLASS150	210	P4010014210	1064	F14	113	113	235.5	255	285	210	40	80	532
DN400	CLASS150	270	P4010014270	2339	F14	147	147	299	326	356	273	50	80	722
DN450	CLASS150	270	P4010014270	2339	F14	147	147	299	326	356	273	50	80	722
DN500	CLASS150	300	P4011625300	3052	F16+F25	165	170	324	348	378	290	60	80	758
DN600	CLASS150	350	P4011625350	4570	F16+F25	190	195	400	410	440	362	60	80	920

For size bigger than DN600, consult our technical department

Single Acting Pneumatic Actuators



ABC P41 Single acting actuators for A73/A74 CLASS150

Pneumatic Actuators-Standard Conditions-4bar Air Supply

A73/ A74 size	Valve rating	Actuator size	Actuator No.	Actuator torque air (NM)	Actuator Spring torque (NM)	Actuator ISO 5211	A	B	C	D	E	F	N	G	Z
DN50	CLASS150	105	P4110710105	53	50	F07+F10	58	64	128	133	153	110	26	40	270
DN65	CLASS150	105	P4110710105	53	50	F07+F10	58	64	128	133	153	110	26	40	270
DN80	CLASS150	125	P4110710125	75	84	F07+F10	67.5	74.5	145	155	175	127.5	21	55	303
DN100	CLASS150	132	P4111012132	109	97	F10+F12	71	73	154	164	184	133	26	55	368
DN125	CLASS150	160	P4111012160	199	223	F10+F12	87	87	184	197	217	158	31	55	458
DN150	CLASS150	190	P4110012190	356	320	F12	103	103	216	230	260	189	40	80	528
DN200	CLASS150	210	P4110014210	456	440	F14	113	113	235.5	255	285	210	40	80	532
DN250	CLASS150	240	P4110012240	653	656	F12	130	130	264.5	289	319	245	50	80	602
DN300	CLASS150	270	P4110012270	923	1007	F12	147	147	299	326	356	273	50	80	722
DN350	CLASS150	300	P4111614300	1166	1168	F14	203	203	324	348	378	290	60	80	758
DN400	CLASS150	350	P4111614350	1922	1640	F14	230	230	379	408	438	336	60	80	888
DN450	CLASS150	400	P4111616400	2396	2362	F16	258	258	450	480	510	360	60	80	930

For size bigger than DN450, consult our technical department

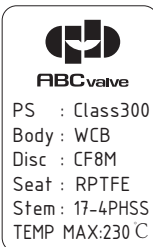
Installation, Use, Maintenance Instructions

1. Storage

- 1) A75 eccentric butterfly valve is dispatched with the disc closed on the seat and the flange faces and valve internals protected with covers. Machined ferrous surfaces are protected with an removable rust preventative. If the valve is used for cleaning gases with a "degrease" label, it is recommended that the valve be unpacked until installation.
- 2) It is suggested that the valve is kept packed until it is to be installed in the pipeline.

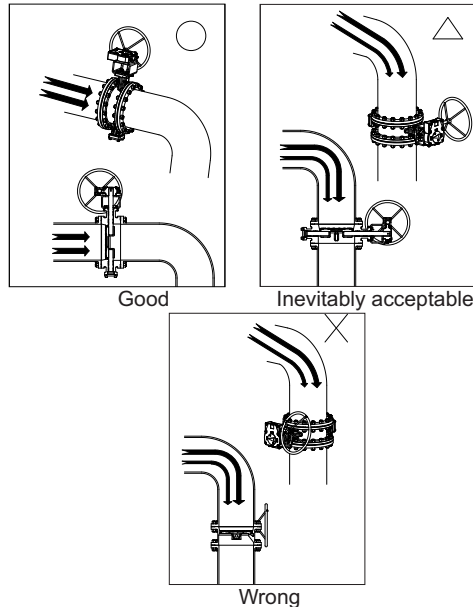
2. Check before installation

- 1) Open the valve package
- 2) Check the valve flow path to ensure that there are no debris in the flow path.
- 3) Make sure there are no foreign matter, welding slag, etc. in the supporting pipeline.
- 4) All operating devices, whether manual or automatic, should be installed before the valve is installed in the pipeline and ensure that it is installed correctly.
- 5) Check the valve plate to ensure that the valve material meets the expected operating conditions.



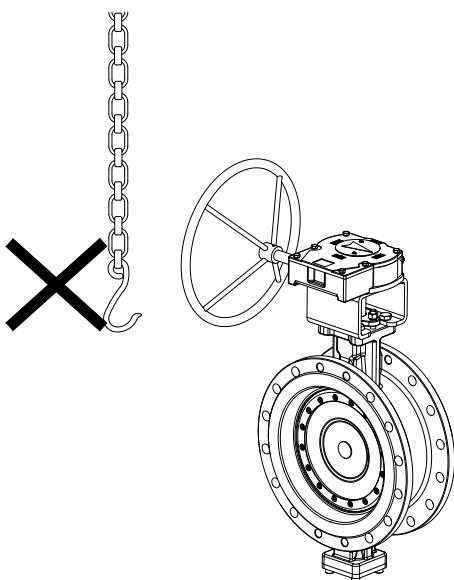
3. Installation

- 1) The valve is designed to seal against bidirectional flow and can therefore be installed with flow in either direction. However better sealing life will be obtained with downstream flow against the shaft side of disc. Installation location attention

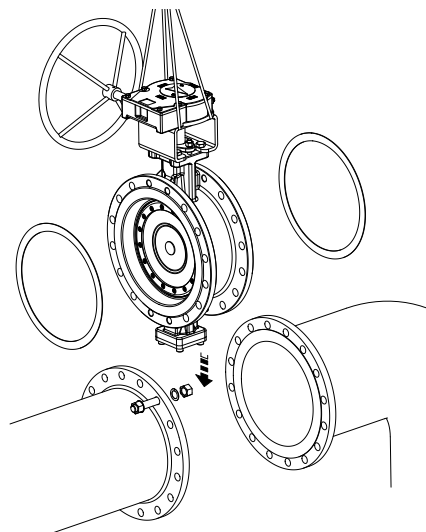


2) Lifting attention

Valves above DN200 are not allowed to use valve flange correction holes or handwheel as hook points.

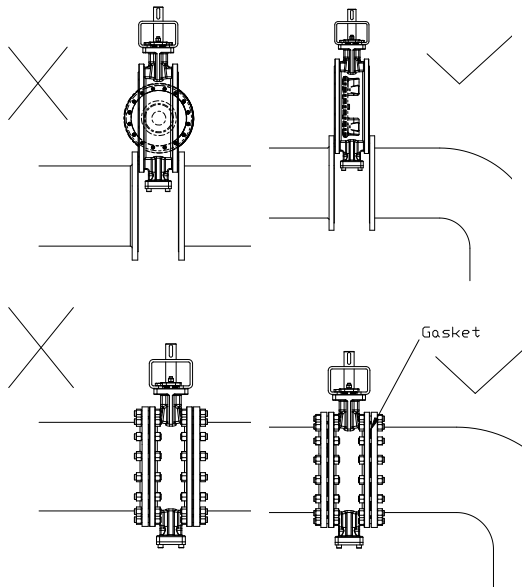


- 3) There should be enough space between the flanges to allow the valve easily enter between the flanges. If the flange distance is not enough for the valve, the valve seal will be damaged.

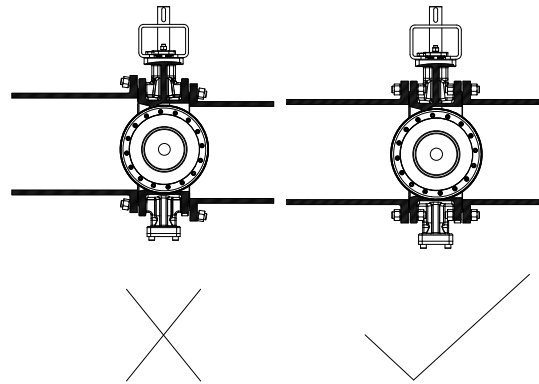


4) Flange gaskets is necessary

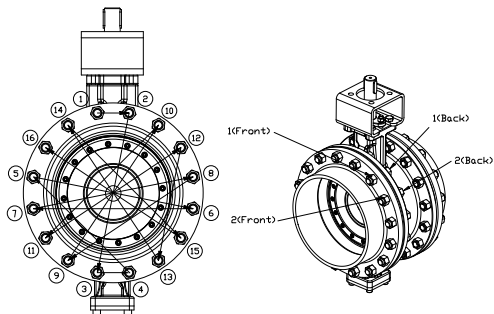
Place the valve between the flanges and gaskets as shown in Figure 1, position the valve with flange bolts.



5) Before tightening the bolts, make sure that there is no collision during the valve plate switching process and carefully open the valve as shown in Figure 3.



6) Tighten the flange bolts in the order shown in Figure 4.



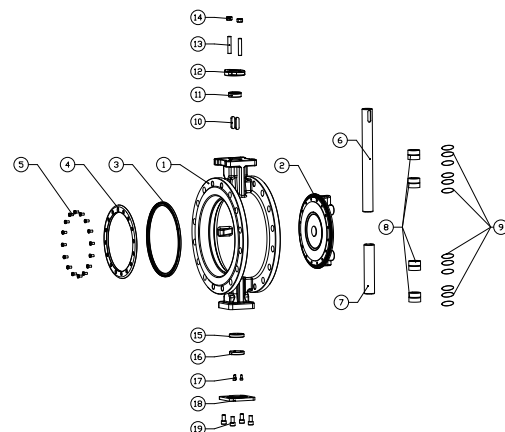
7) Flange bolt tightening force refers to the following table

Bolt specification	bolt tightening torque (N*M)
M16	230
M20	450
M24	780
M30	1550
M36	2700

4、Valve Maintenance

1) The valve is recommended to be fully open and closed several times every three months without special maintenance.

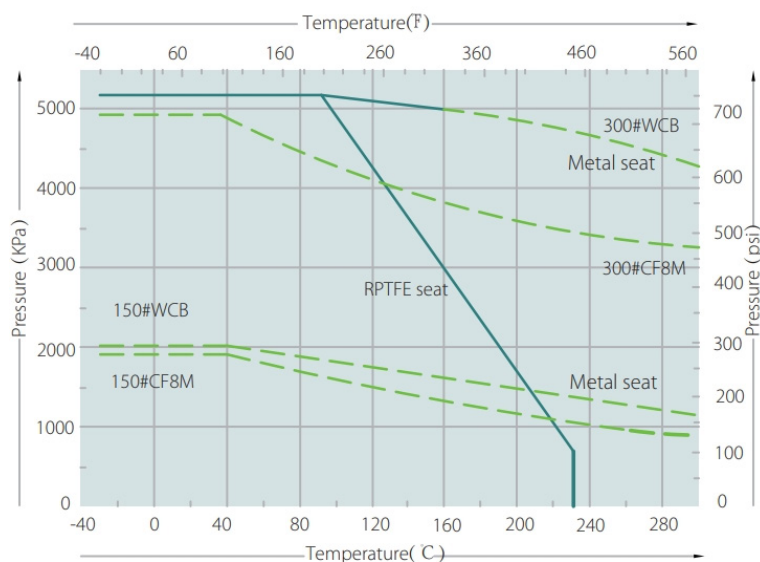
2) If the parts need to be replaced, please refer to the valve structure in Figure 5. In general, please contact ABC Valves before replacing parts.



A75 Ordering Guidelines

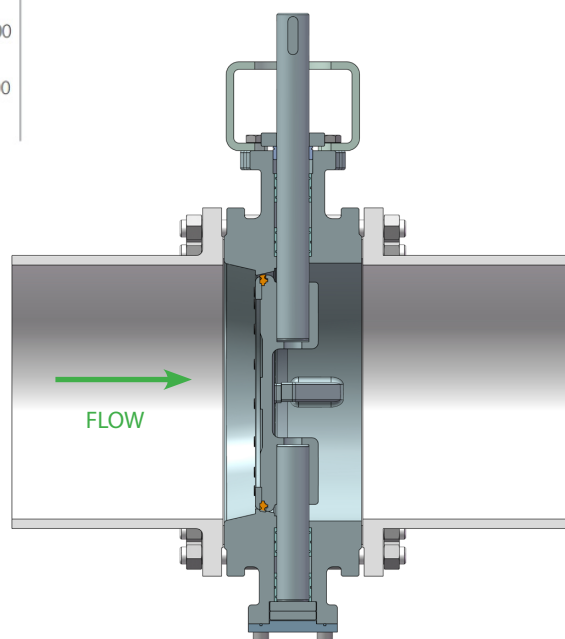
Valve Series			Matching of Material (Body/Disc/Seat/Stem)		Operator Type		Nominal Size			Additional
A	7	3	0	1	1	0	0	0	5	0
A75 flange type			01 = WCB/CF8/RPTFE/17-4		10 = Bare Shaft		005 = DN50			0 = Standard Pressure
			02 = CF8M/CF8M/RPTFE/17-4		11 = Lever Operated		006 = DN65			1 = Class150
			03 = WCB/CF8M/ RPTFE/17-4		12 = Gear Operated		008 = DN80			2 = Class300
					13 = Single Acting Pneumatic Actuator		010 = DN100			A = A74 Class150
					14 = Double Acting Pneumatic Actuator		012 = DN125			C = A74 PN16
					15 = Electric Actuator		015 = DN150			D = A74 TABLE D
					16 = Hydraulic actuator		020 = DN200			E = A74 TABLE E
					17 = Electro-hydraulic actuator		025 = DN250			F = A74 TABLE F
							030 = DN300			

Temperature-pressure Diagram



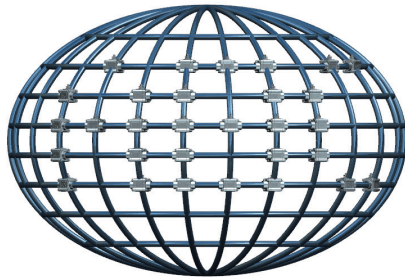
Flow can be executed in both directions and following advantages can be approached while using suggested flow direction:

- 1) Minimal initial breakaway torque.
- 2) Reduced seat wear.
- 3) No wetted shaft when closing.



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