

Introduction of the valve



The two pieces of body wafer type butterfly valve and a concentric disc and seat with PTFE . The painting thickness can reach up to 3~4mm .Heavy duty top plate is drilled and slotted to ISO 5211 and other existing valve drillings, thus allowing ease of automation and interchangeability.Discs have a streamlined design, providing higher Cv and lower pressure drop.The Flow Line shaft seal is achieved through a continuous pressure exerted from the flatted area of the seat to the machined flatted area of the disc.The raised flatted area of the seat corresponds precisely with the machined flatted hub area of the disc.These matching flatted surfaces provide a wide sealing area for the elastomer backed PTFE seat to exert pressure against, forming the primary seal.Secondary sealing is provided by a 360° machined radius on the flatted hub.

Features

- The valve body and disc are accurately machined which results in low operating torque and long service life and reliability
- PTFE liner seated prevents corrosion and guarantees long service life
- Splitted body design
- Can be installed in any desired position
- Maintenance-free
- Can be disassembled, material-specific recycling possible

General Applications



The products are used in a wide range of industries worldwide including:

- Chemical and petrochemical industries
- Water & Wastewater Treatment
- Pneumatic materials handling technology
- Shipbuilding
- Food Processing
- Petroleum Refining & Oilfield
- Power generation industry
- Mining
- Irrigation
- Textile
- Desalination
- Steel Production
- Sugar/Ethanol
- HVAC

Parts of name and purpose



NECK: An extended neck design in all valve sizes allows for 2" of piping insulation and provides easy access for mounting actuators.

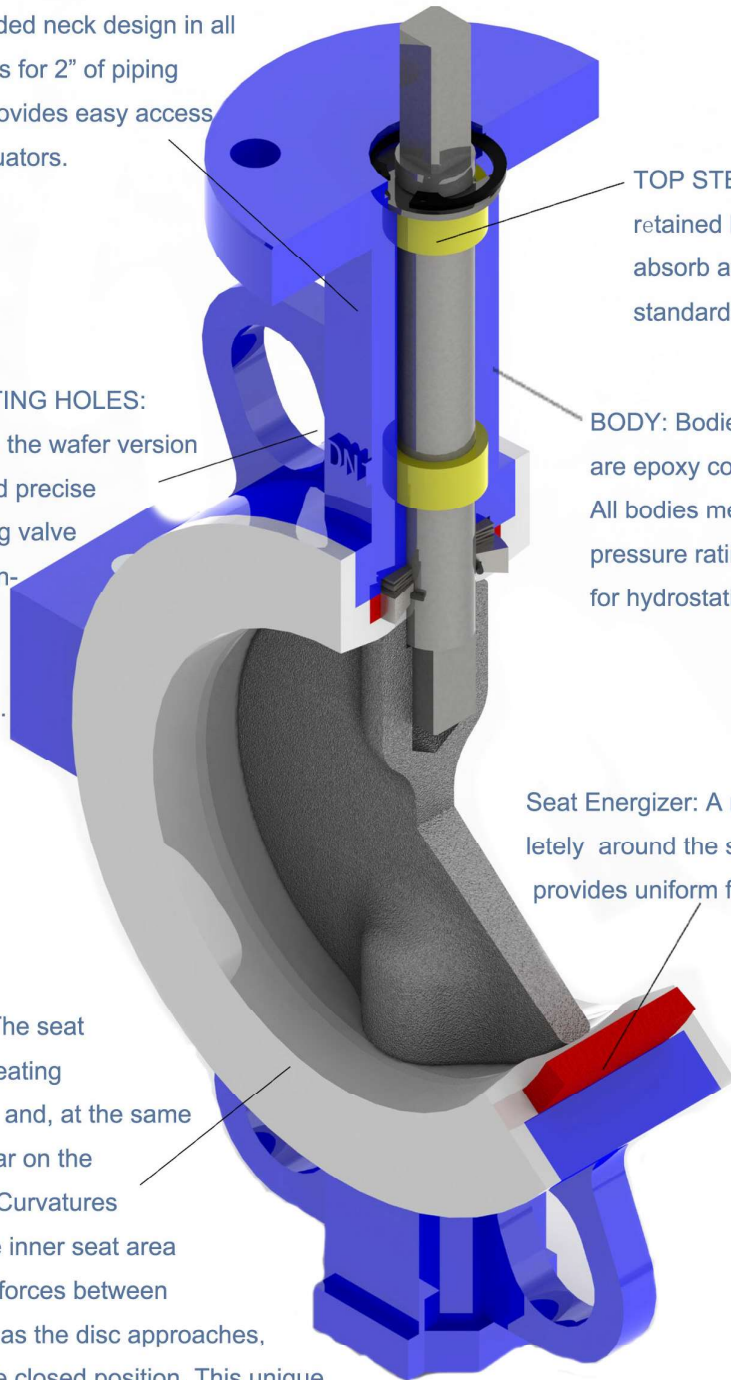
FLANGE LOCATING HOLES: Locating holes in the wafer version provide quick and precise alignment during valve installation eliminating disc interference with adjacent pipe I.D.

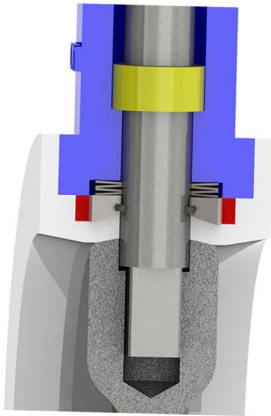
SEAT DESIGN: The seat design reduces seating unseating torque and, at the same time, reduces wear on the contacting parts. Curvatures machined into the inner seat area minimize contact forces between the disc and seat as the disc approaches, or opens from, the closed position. This unique seat geometry permits lower torques and reduces seat wear.

TOP STEM BUSHING: A top stem bushing, retained by a stainless steel ring, is provided to absorb actuator side thrusts and is acetal as standard or PTFE as an option

BODY: Bodies are two piece wafer or lug style and are epoxy coated. All bodies meet full ASME Class 150 and DIN 3840 pressure ratings for hydrostatic requirements.

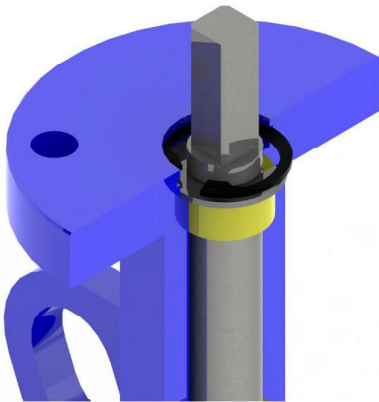
Seat Energizer: A resilient seat energizer extends completely around the seat, including the disc hub. This provides uniform force sufficient for bubble-tight shut off.





Disc spring, two sets for a group, is a state of compressive deformation in the body. It will impose elastic force on the press sleeve, compact the O ring and seat, improve axial sealing, then provided the bearing stress for the seat and disc, to cover the shortage of elasticity about PTFE seat.

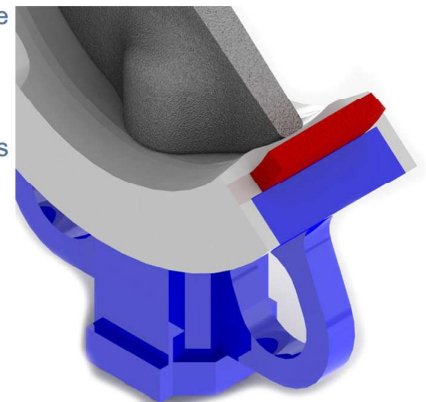
The seat is designed as shown in the figure, the advantage of this design is better sealing, effectively preventing the media leakage from the valve cavity .



TOP STEM BUSHING:

The bushing can assure the correct interaction between the upper shaft and the lower shaft, at the same time, it can make sure the smooth running of the shaft.

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CBF05E-TA01



Extensive field research and engineering have developed this state of the art design which provides excellent shut off protection (bubbletight shut off) and high Cv values. The Series CBF05E-TA01 is crafted in a variety of materials such as PTFE, tainless Steel, UHMWPE and special alloys to fit a wide range of customer requirements. As with all WORLDS's products, precision manufacturing and exceptional quality remain the keys to a proven record of long service life.

Technical Data(DN50-DN600)

Design Standard

EN593 API 609 BS5155 MSS SP-67

Face to Face

DIN558-1 API609 DIN3202 K1 ISO5752 BS5155

Testing Inspection

EN 12266-1 ISO5208 API598

Flange Accommodation

ASME B 16.1 125LB
 ASME B 16.5 150LB
 BS 4504 PN10/16
 DIN 2501 PN10/16
 ISO7005 PN10/16
 EN1092 PN10/16
 JIS B 2220 10K

Top Flange

ISO 5211(accroding to the customer need)

Temperature Range

- 35 to +200(depending on pressure,medium and material)

Suitable Medium

flesh water, waste water,sewage,seawater,air,vapor,food,oils,medicine
 alkailis, salt, ect

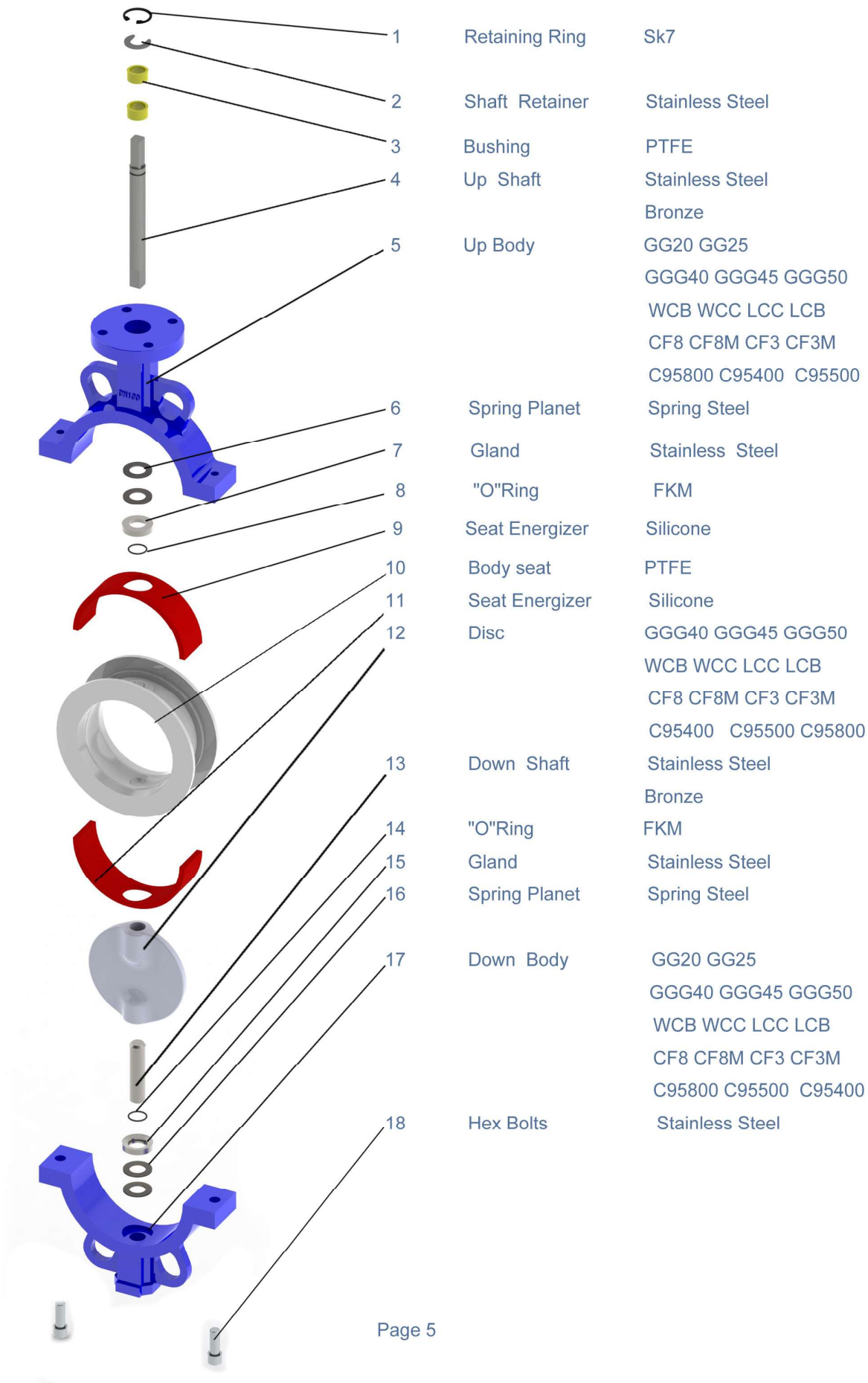
Max Working Pressure

DN50-DN250 16Bar
 DN300-DN600 10Bar



Butterfly Valve

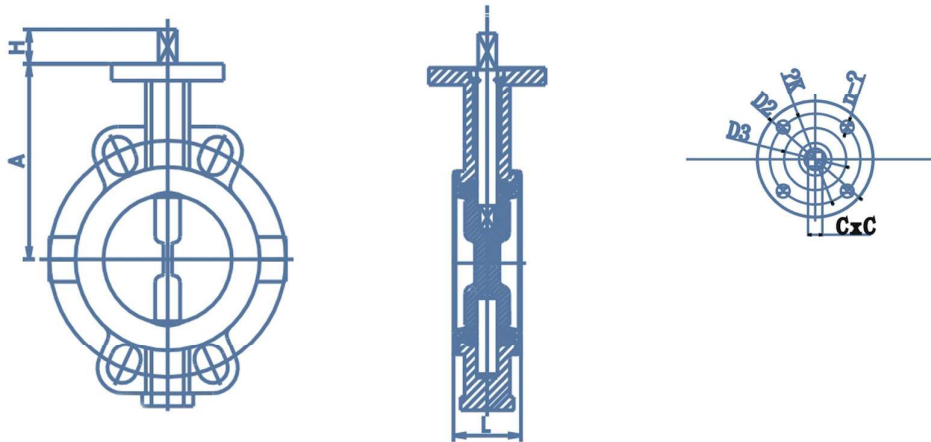
Main Spare Part Material Quality



1	Retaining Ring	Sk7
2	Shaft Retainer	Stainless Steel
3	Bushing	PTFE
4	Up Shaft	Stainless Steel
5	Up Body	Bronze GG20 GG25 GGG40 GGG45 GGG50 WCB WCC LCC LCB CF8 CF8M CF3 CF3M C95800 C95400 C95500
6	Spring Planet	Spring Steel
7	Gland	Stainless Steel
8	"O"Ring	FKM
9	Seat Energizer	Silicone
10	Body seat	PTFE
11	Seat Energizer	Silicone
12	Disc	GGG40 GGG45 GGG50 WCB WCC LCC LCB CF8 CF8M CF3 CF3M C95400 C95500 C95800
13	Down Shaft	Stainless Steel
14	"O"Ring	Bronze FKM
15	Gland	Stainless Steel
16	Spring Planet	Spring Steel
17	Down Body	GG20 GG25 GGG40 GGG45 GGG50 WCB WCC LCC LCB CF8 CF8M CF3 CF3M C95800 C95500 C95400
18	Hex Bolts	Stainless Steel

Butterfly Valve

Drawing



Outline Dimensions

SIZE	L	A	H	CxC	IS05211	D2	D3	k	n-d	ø2
DN50	43	140	14	9x9	F07/F05	90/65	55/35	70/50	4-10/7	12.6
DN65	46	150	14	9x9	F07/F05	90/65	55/35	70/50	4-10/7	12.6
DN80	46	160	14	9x9	F07/F05	90/65	55/35	70/50	4-10/7	12.6
DN100	52	178	14	11x11	F07	90	55	70	4-10	15.77
DN125	56	190	17	14x14	F07	90	55	70	4-10	18.92
DN150	56	200	17	14x14	F07	90	55	70	4-10	18.92
DN200	60	240	22	17x17	F10	125	70	102	4-12	22.10
DN250	68	273	22	22x22	F10	125	70	102	4-12	28.45
DN300	78	310	22	22x22	F10	125	70	102	4-12	31.60
DN350	78	346	22	22x22	F10	125	70	102	4-12	31.60
DN400	102	375	36	27x27	F14	175	100	140	4-18	33.15
DN450	114	406	36	27x27	F14	175	100	140	4-18	37.95
DN500	127	438	36	36x36	F14	175	100	140	4-18	41.12
DN600	154	495	46	36x36	F16	210	130	165	4-22	50.65

Connection Dimensis

DN	Outer Diameter Of Flange				Diameter Of Center Circle				Number And Diameter Of Bolt Holes			
	150LB	PN10	PN16	JIS10K	150LB	PN10	PN16	JIS10K	150LB	PN10	PN16	JIS10K
50	150	165	165	155	120.7	125	125	120	4-19	4-19	4-19	4-19
65	180	185	185	175	139.7	145	145	140	4-19	4-19	4-19	4-19
80	190	200	200	185	152.4	160	160	150	4-19	8-19	8-19	8-19
100	230	220	220	210	190.5	180	180	175	8-19	8-19	8-19	8-19
125	255	250	250	250	215.9	210	210	210	8-22	8-19	8-19	8-23
150	280	285	285	280	241.3	240	240	240	8-22	8-23	8-23	8-23
200	345	340	340	330	298.5	295	295	290	8-22	8-23	12-23	12-23
250	405	395	405	400	362	350	355	355	12-26	12-23	12-28	12-25
300	485	445	460	445	431.8	400	410	400	12-26	12-23	12-28	16-25
350	535	505	520	490	476.3	460	470	445	12-29	16-23	16-28	16-25
400	595	565	580	560	539.8	515	525	510	16-29	16-28	16-31	16-27
450	635	615	640	620	577.9	565	585	565	16-32	20-28	20-31	20-27
500	700	670	715	675	635	620	650	620	20-32	20-28	20-34	20-27
600	815	780	840	795	749.3	725	770	730	20-35	20-31	20-37	24-33

