

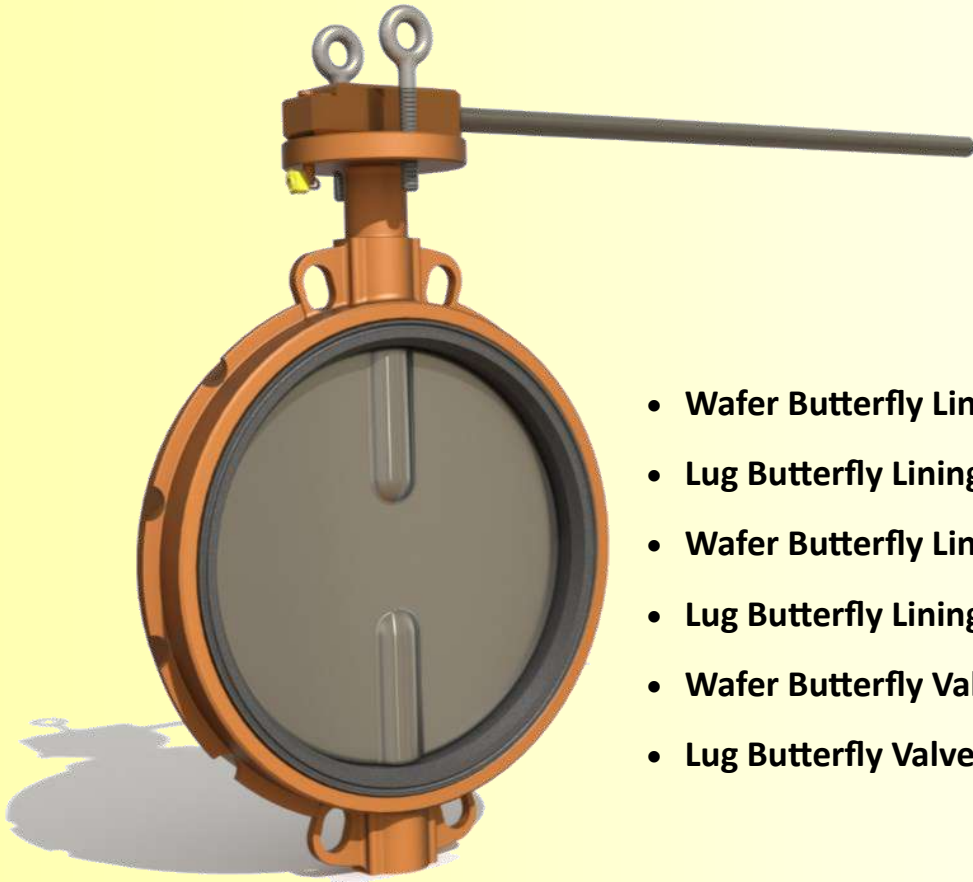


**IOCS S.r.L.**

*Hoses & Ancillaries Equipment Supply for Oil & Gas Industry*

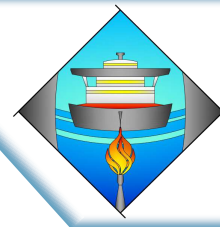
# VALVES

# ΛΥΓΛΕΣ



- Wafer Butterfly Lining Valves - Lever
- Lug Butterfly Lining Valves - Lever
- Wafer Butterfly Lining Valves - Gear
- Lug Butterfly Lining Valves - Gear
- Wafer Butterfly Valves - Metal Seated
- Lug Butterfly Valves - Metal Seated





## Butterfly Valve



IOCS s.r.l. wafer and lug type butterfly valves are designed to meet the stringent requirements of chemical processing plants, power plants, refineries, shipbuilding, pulp and paper mills and wherever positive shut-off is required for water based solutions, oil, gas and gas slurries. They are also the ideal choice for heating, ventilation and air conditioning applications.

**STEMS:** upper stems are flattened for positive drive and for easy installation of handles and actuators. Retained by tangential pins, upper and lower stems are blowout proof for safety when handles or actuators are removed from the valve top.

**FLANGE SEALS:** the IOCS s.r.l. Butterfly Valve seat is constructed by bonding a resilient elastomer to a rigid back-up ring, which forms the outside periphery of the seat. Slip fitted in the valve body, the seat is field replaceable without special tools. In the closed position, the disc rim stem seal boss an uninterrupted line of sealing contact with the resilient seat, to assure drop tight sealing at rated shutoff pressure. IOCS s.r.l. seats are offered in a wide range of materials.

**STEM JOURNAL:** two self-lubricating bronze bearings reduce torsional friction, eliminate galling and seizing of the stem, while supporting the stem against side loading from pressure on the closed disc. IOCS s.r.l. places one bearing at the base of the ribbed body.

**DISC:** IOCS s.r.l. Butterfly Valve discs and seat are configured for low pressure drop and high flow coefficients. Full radius polished edges slide into drop tight seat engagement with little turning effort.

**SEAT:** the IOCS s.r.l. Butterfly Valve seat is constructed by bonding a resilient elastomer to a rigid back-up ring, which forms the outside periphery of the seat. Slip fitted in the valve body, the seat is field replaceable without special tools. In the closed position, the disc rim stem seal boss an uninterrupted line of sealing contact with the resilient seat, to assure drop tight sealing at rated shutoff pressure. IOCS s.r.l. seats are offered in a wide range of materials.

**STEM SEALS:** the stem holes in the disc are surrounded by an annular raised boss which causes position seal every orientation of the disc. The resilient seat presses back with a higher specific force than the line pressure, preventing leakage from the stem. In competitive stem seal designs with boot seats, a seal is accomplished by an interference squeezing of the stem, or an o-ring in the stem journal. The potential for leakage behind the seat is high. As the disc wipes the seat, elongation of the stem seal area allows leakage to collect behind the seat. This condition is eliminated by IOCS s.r.l. dry stem journal and hard-backed seat.

**DISC DRIVE:** proper orientation of the stem/disc connection is assured by the rectangular drive. The disc is permitted to float on the stem to perfectly center in the valve seat.

**BODY:** one piece bodies are ribbed to assure high strength and minimum weight. Bodies are cast in both wafer and tapped-lug patterns, in a wide variety of material choices, to meet virtually every installation requirement. Body rating is ANSI Class 150 (285 psi non-shock). Wafer body diameters are designed to self-center in ANSI 150 flange patterns.

**Do contact us for further sales enquiries.**

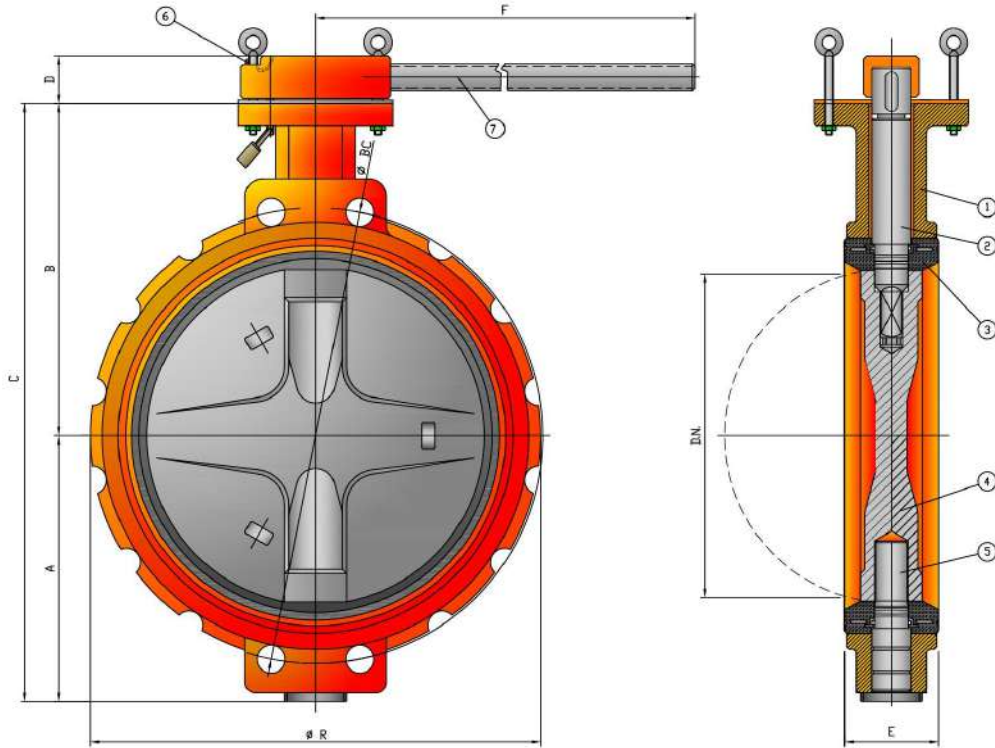




# Wafer Butterfly Lining Valve - Lever

Flange ASME B 16.5 Class 150lb

Prod. Code: 180

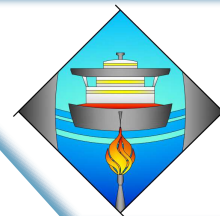


DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 150lb									
HOSE N.D.	A	B	C	D	E	F	Ø R	Ø BC	WEIGHT
Inch / mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg
4" / 100	132	153	285	50	52	430	162	190,5	6.5
6" / 150	165	194	359	50	56	430	220	241,3	8.5
8" / 200	194	225	419	50	60	430	270	298,4	11.8
10" / 250	220	275	495	50	68	600	328	361,9	18.5
12" / 300	262	297	559	50	78	600	392	431,8	29.8
16" / 400	305.5	375.5	681	70	102	838	483	539,7	70
20" / 500	373	425	798	70	127	838	580	635,0	110

MATERIAL LIST		
ITEM	DESCRIPTION	MATERIAL
1	BODY	ASTM A 216 WCB
2	UPPER STEM	ASTM A 182 F 316 or MONEL K500
3	SEAT	BUNA-N (NBR) or VITON (FKM)
4	DISC	ASTM A 351 CF8M or B148 C95800 (Bz/Al)
5	LOWER STEM	ASTM A 182 F 316 or MONEL K500
6	PIN	AISI 316
7	LEVER	AISI 316

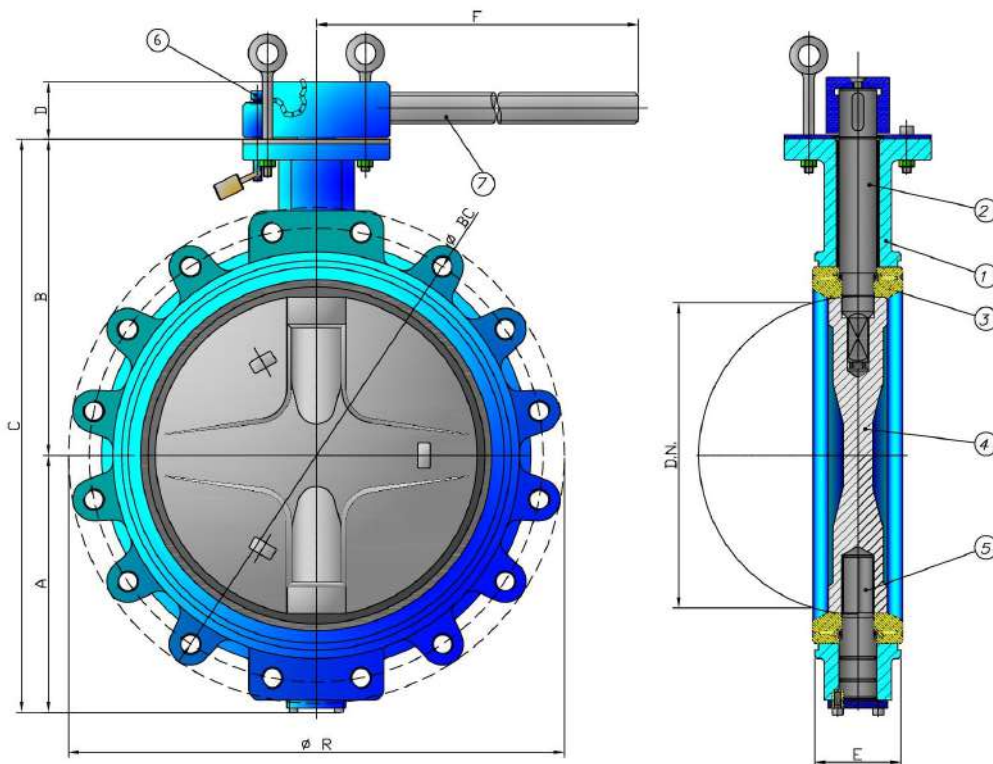
## Notes

- 1) Valves suitable for Flange drilled ASME B 16.5 Class 150 lbs.
- 2) Body painting Carboguard 878 - minimum Thickness 300 micron Color RAL 9002-Grey White. Suitable for seawater max dept -20 m.
- 3) Manufactured according to API 609 and Tested according to API 598.
- 4) Hydrostatic test:  
Body at 30 Bars with water  
Seat at 22 Bars with water and 5.5 Bars with air



# Lug Butterfly Lining Valve - Lever

Flange ASME B 16.5 Class 150lb



DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 150lb									
HOSE N.D.	A	B	C	D	E	F	Ø R	Ø BC	WEIGHT
Inch / mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg
4" / 100	132	153	285	50	52	430	217	190,5	9
6" / 150	165	194	359	50	56	430	267	241,3	11.1
8" / 200	194	225	419	50	60	430	320	298,4	17
10" / 250	220	275	495	50	68	600	402	361,9	27.4
12" / 300	262	297	559	50	78	600	473	431,8	40.4
16" / 400	305.5	375.5	681	70	102	838	590	539,7	70
20" / 500	373	425	798	70	127	838	715	635,0	110

MATERIAL LIST		
ITEM	DESCRIPTION	MATERIAL
1	BODY	ASTM A 216 WCB
2	UPPER STEM	ASTM A 182 F 316 or MONEL K500
3	SEAT	BUNA-N (NBR) or VITON (FKM)
4	DISC	ASTM A 351 CF8M or B148 C95800 (Bz/Al)
5	LOWER STEM	ASTM A 182 F 316 or MONEL K500
6	PIN	AISI 316
7	LEVER	AISI 316

## Notes

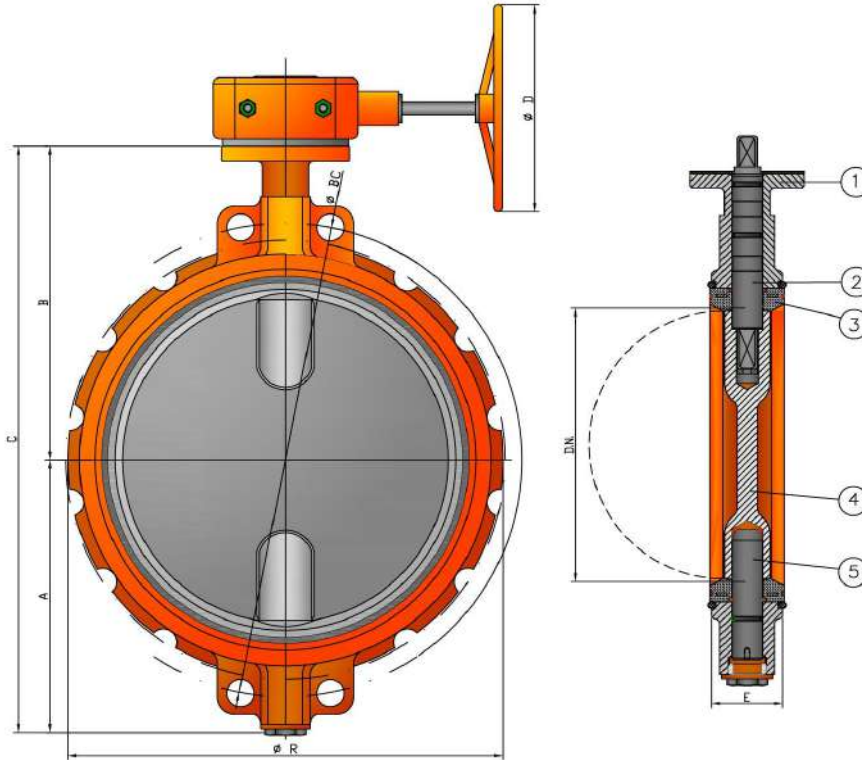
- 1) Valves suitable for Flange drilled ASME B 16.5 Class 150 lbs.
- 2) Body painting Carboguard 878 - minimum Thickness 300 micron Color RAL 9002-Grey White. Suitable for seawater max dept -20 m.
- 3) Manufactured according to API 609 and Tested according to API 598.
- 4) Hydrostatic test:  
Body at 30 Bars with water  
Seat at 22 Bars with water and 5.5 Bars with air



# Wafer Butterfly Lining Valve - Gear

Flange ASME B 16.5 Class 150lb

Prod. Code: 200

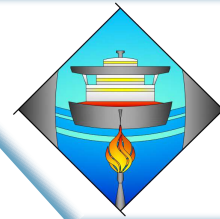


DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 150lb									
HOSE N.D.	A	B	C	Ø D	E	F	Ø R	Ø BC	WEIGHT
Inch / mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg
4" / 100	132	153	285	200	52	214	162	190,5	N.A.
6" / 150	165	194	359	200	56	214	220	241,3	11.1
8" / 200	194	225	419	200	60	214	270	298,4	17
10" / 250	220	275	495	200	68	214	328	361,9	27.4
12" / 300	262	297	559	200	78	214	392	431,8	40.4
16" / 400	305.5	375.5	681	300	102	343	483	539,7	70
20" / 500	373	425	798	300	127	343	580	635,0	110

MATERIAL LIST		
ITEM	DESCRIPTION	MATERIAL
1	BODY	ASTM A 216 WCB
2	UPPER STEM	ASTM A 182 F 316 or MONEL K500
3	SEAT	BUNA-N (NBR) or VITON (FKM)
4	DISC	ASTM A 351 CF8M or B148 C95800 (Bz/Al)
5	LOWER STEM	ASTM A 182 F 316 or MONEL K500

## Notes

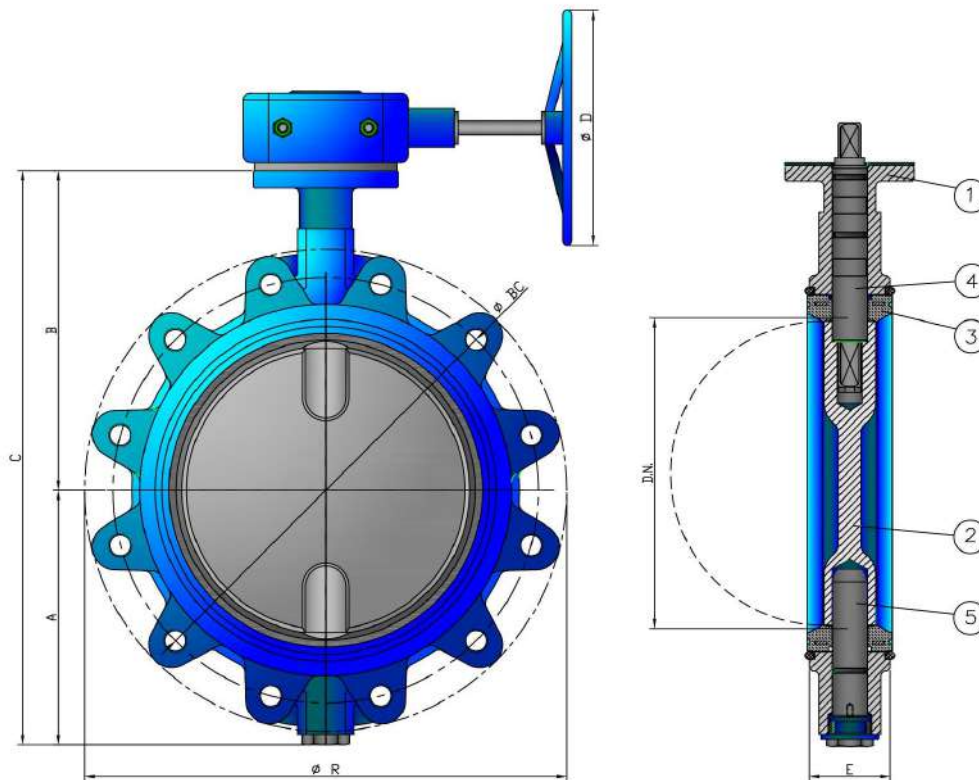
- 1) Valves suitable for Flange drilled ASME B 16.5 Class 150 lbs.
- 2) Body painting Carboguard 878 - minimum Thickness 300 micron Color RAL 9002-Grey White. Suitable for seawater max dept -20 m.
- 3) Manufactured according to API 609 and Tested according to API 598.
- 4) Hydrostatic test:  
Body at 30 Bars with water  
Seat at 22 Bars with water and 5.5 Bars with air



# Lug Butterfly Lining Valve - Gear

Flange ASME B 16.5 Class 150lb

**Prod. Code: 210**



DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5 CLASS 150lb									
HOSE N.D.	A	B	C	Ø D	E	F	Ø R	Ø BC	WEIGHT
Inch / mm	mm	mm	mm	mm	mm	mm	mm	mm	Kg
4" / 100	132	153	285	200	52	214	217	190,5	N.A.
6" / 150	165	194	359	200	56	214	267	241,3	11.1
8" / 200	194	225	419	200	60	214	320	298,4	17
10" / 250	220	275	495	200	68	214	402	361,9	27.4
12" / 300	262	297	559	200	78	214	473	431,8	40.4
16" / 400	305.5	375.5	681	300	102	343	590	539,7	70
20" / 500	373	425	798	300	127	343	715	635,0	110

MATERIAL LIST		
ITEM	DESCRIPTION	MATERIAL
1	BODY	ASTM A 216 WCB
2	UPPER STEM	ASTM A 182 F 316 or MONEL K500
3	SEAT	BUNA-N (NBR) or VITON (FKM)
4	DISC	ASTM A 351 CF8M or B148 C95800 (Bz/Al)
5	LOWER STEM	ASTM A 182 F 316 or MONEL K500

## Notes

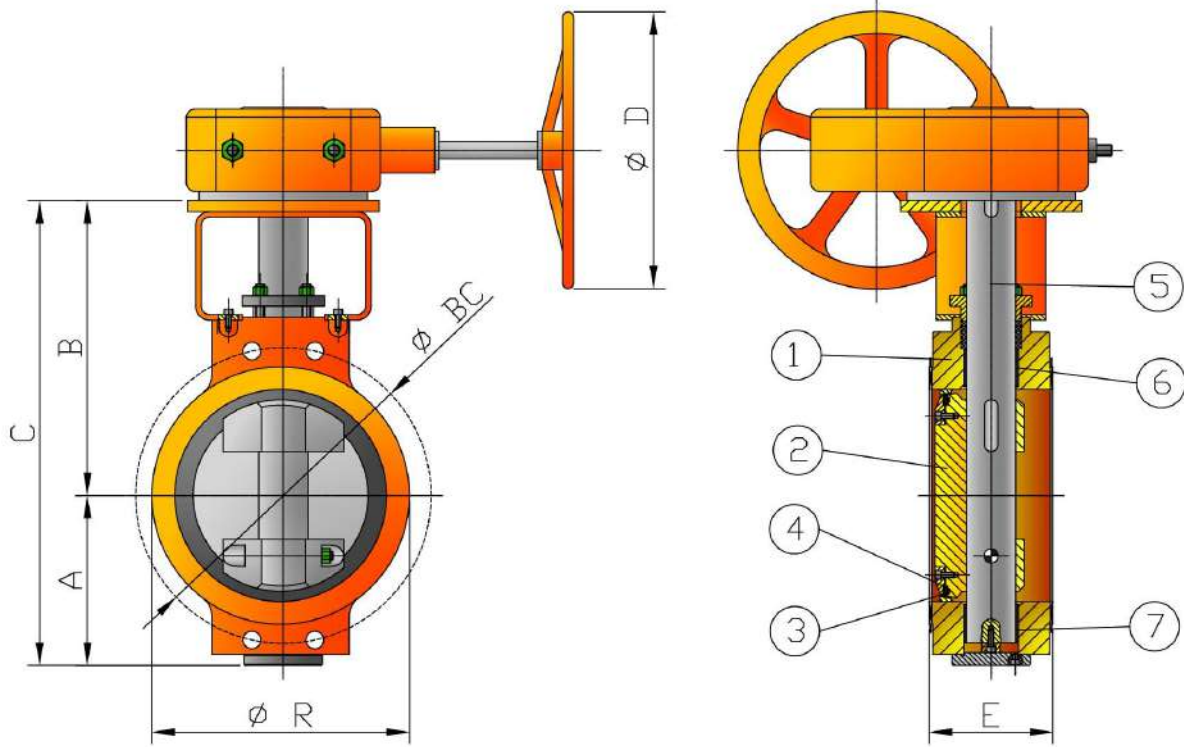
- 1) Valves suitable for Flange drilled ASME B 16.5 Class 150 lbs.
- 2) Body painting Carboguard 878 - minimum Thickness 300 micron Color RAL 9002-Grey White. Suitable for seawater max dept -20 m.
- 3) Manufactured according to API 609 and Tested according to API 598.
- 4) Hydrostatic test:  
 Body at 30 Bars with water  
 Seat at 22 Bars with water and 5.5 Bars with air



# Wafer Butterfly Valve - Metal Seated

Flange ASME B 16.5 Class 150lb

Prod. Code: 220



**DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5**

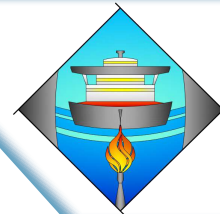
HOSE N.D. Inch / mm	A mm	B mm	C mm	Ø D mm	E mm	Ø R mm	Ø BC mm	WEIGHT Kg
6" / 150	190	270	480	200	57	216	241,3	34
8" / 200	210	310	520	200	64	272	298,4	40
10" / 250	250	354	604	200	71	332	361,9	62
12" / 300	288	426	714	200	81	402	431,8	95
16" / 400	364	536	900	300	102	506	539,7	155
20" / 500	432	588	1020	300	127	598	635,0	268

**MATERIAL LIST**

ITEM	DESCRIPTION	MATERIAL
1	BODY	A216 WCB or P355NH+STL Gr.21
2	DISC	ASTM A351 CF8M
3	DISC SEAL	ASTM A182 F316+GRAPHITE
4	RETAINING RING	S.S. 316
5	SHAFT	ASTM A479 XM-19
6	UPPER BEARING	A182 F316+H.T.
7	BOTTON BEARING	A182 F316+H.T.

## Notes

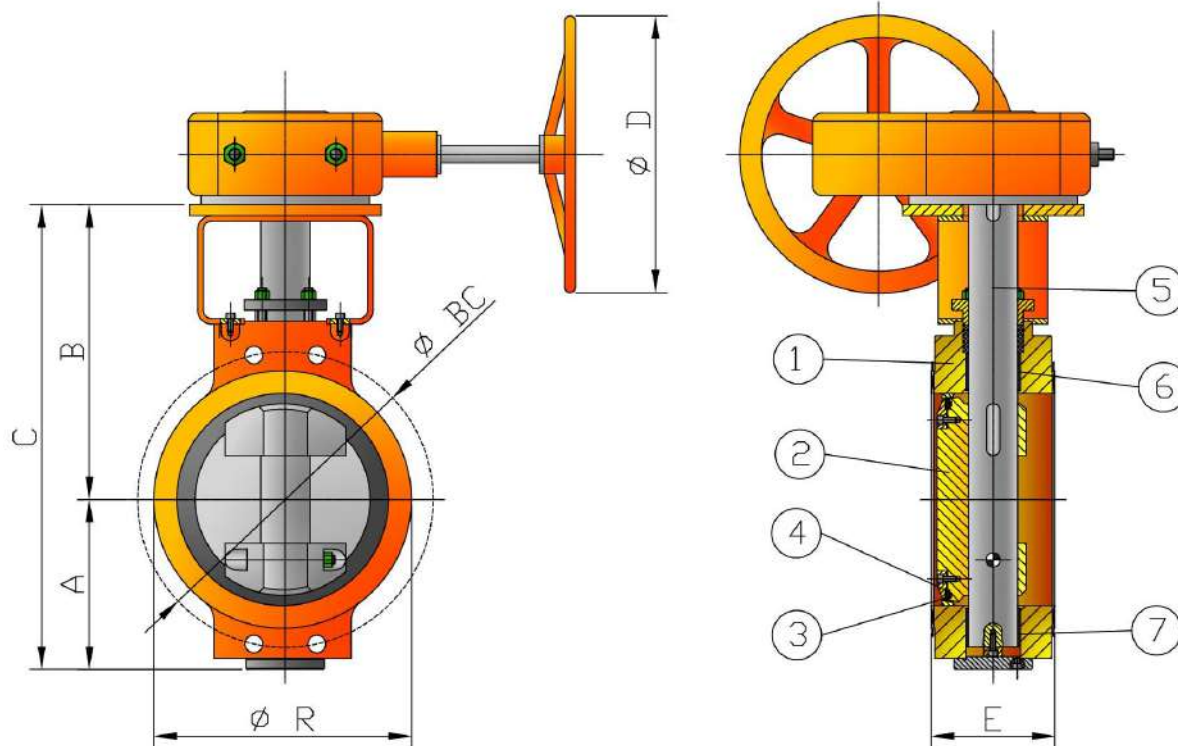
- 1) Valves suitable for Flange drilled ASME B 16.5 Class 150 lbs.
- 2) Body painting Carboguard 878 - minimum Thickness 300 micron Color RAL 9002-Grey White. Suitable for seawater max dept -20 m.
- 3) Manufactured according to API 609 and Tested according to API 598.
- 4) Hydrostatic test:  
Body at 30 Bars with water  
Seat at 22 Bars with water and 5.5 Bars with air



# Wafer Butterfly Valve - Metal Seated

Flange ASME B 16.5 Class 300lb max op. pressure 20 bar

**Prod. Code: 221**



**DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5**

HOSE N.D. Inch / mm	A mm	B mm	C mm	Ø D mm	E mm	Ø R mm	Ø BC mm	WEIGHT Kg
6" / 150	185	292	474	200	59	244	269,9	35
8" / 200	220	350	570	200	73	302	330,2	52
10" / 250	255	386	641	200	83	355	387,3	84
12" / 300	300	452	752	200	92	416	450,8	98
16" / 400	370	535	905	300	133	534	571,5	212
20" / 500	450	622	1072	300	159	648	685.8	322

**MATERIAL LIST**

ITEM	DESCRIPTION	MATERIAL
1	BODY	A216 WCB or P355NH+STL Gr.21
2	DISC	ASTM A351 CF8M
3	DISC SEAL	ASTM A182 F316+GRAPHITE
4	RETAINING RING	S.S. 316
5	SHAFT	ASTM A479 XM-19
6	UPPER BEARING	A182 F316+H.T.
7	BOTTON BEARING	A182 F316+H.T.

## Notes

- 1) Valves suitable for Flange drilled ASME B 16.5 Class 300 lbs.
- 2) Body painting Carboguard 878 - minimum Thickness 300 micron Color RAL 9002-Grey White. Suitable for seawater max dept -20 m.
- 3) Manufactured according to API 609 and Tested according to API 598.
- 4) Hydrostatic test:  
Body at 30 Bars with water  
Seat at 22 Bars with water and 5.5 Bars with air

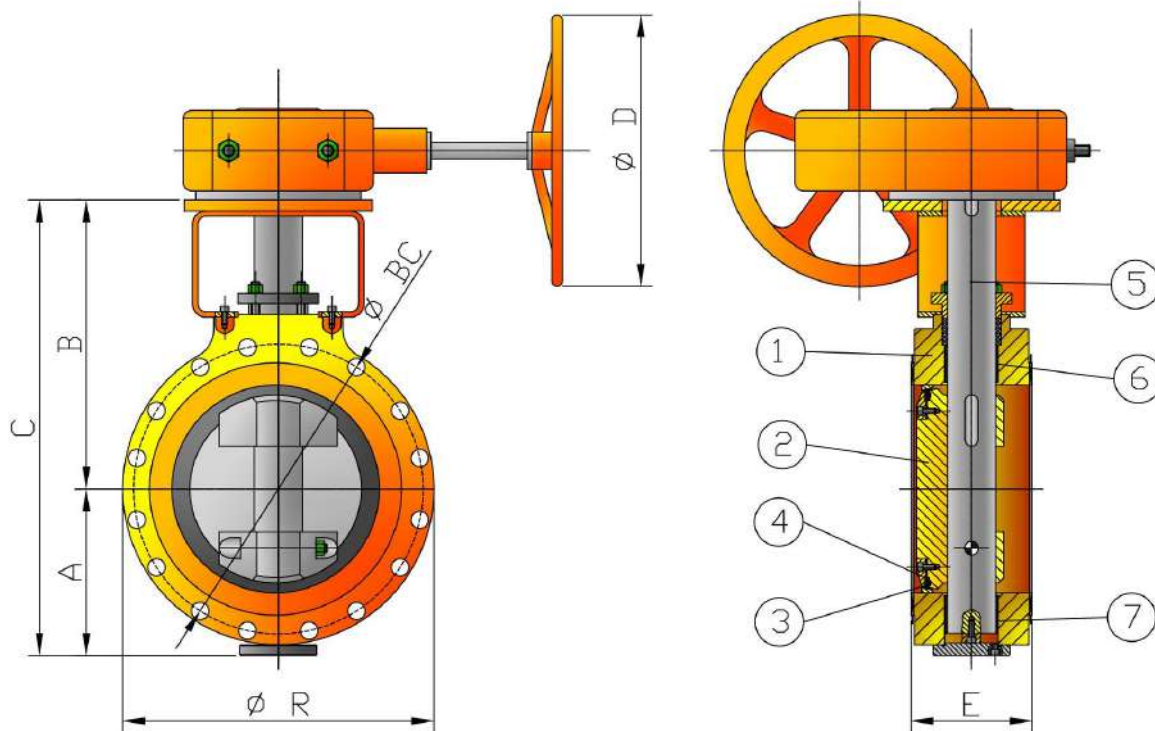




# Lug Butterfly Valve - Metal Seated

Flange ASME B 16.5 Class 150lb

Prod. Code: 230

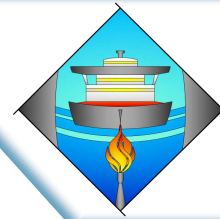


DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5								
HOSE N.D. Inch / mm	A mm	B mm	C mm	$\varnothing$ D mm	E mm	$\varnothing$ R mm	$\varnothing$ BC mm	WEIGHT Kg
6" / 150	190	270	480	200	57	280	241,3	32
8" / 200	210	310	520	200	64	344	298,4	37.5
10" / 250	250	354	604	200	71	406	361,9	60
12" / 300	288	426	714	200	81	484	431,8	95
16" / 400	364	536	900	300	102	598	539,7	162
20" / 500	432	588	1020	300	127	700	635,0	265

MATERIAL LIST		
ITEM	DESCRIPTION	MATERIAL
1	BODY	A216 WCB or P355NH+STL Gr.21
2	DISC	ASTM A351 CF8M
3	DISC SEAL	ASTM A182 F316+GRAPHITE
4	RETAINING RING	S.S. 316
5	SHAFT	ASTM A479 XM-19
6	UPPER BEARING	A182 F316+H.T.
7	BOTTON BEARING	A182 F316+H.T.

## Notes

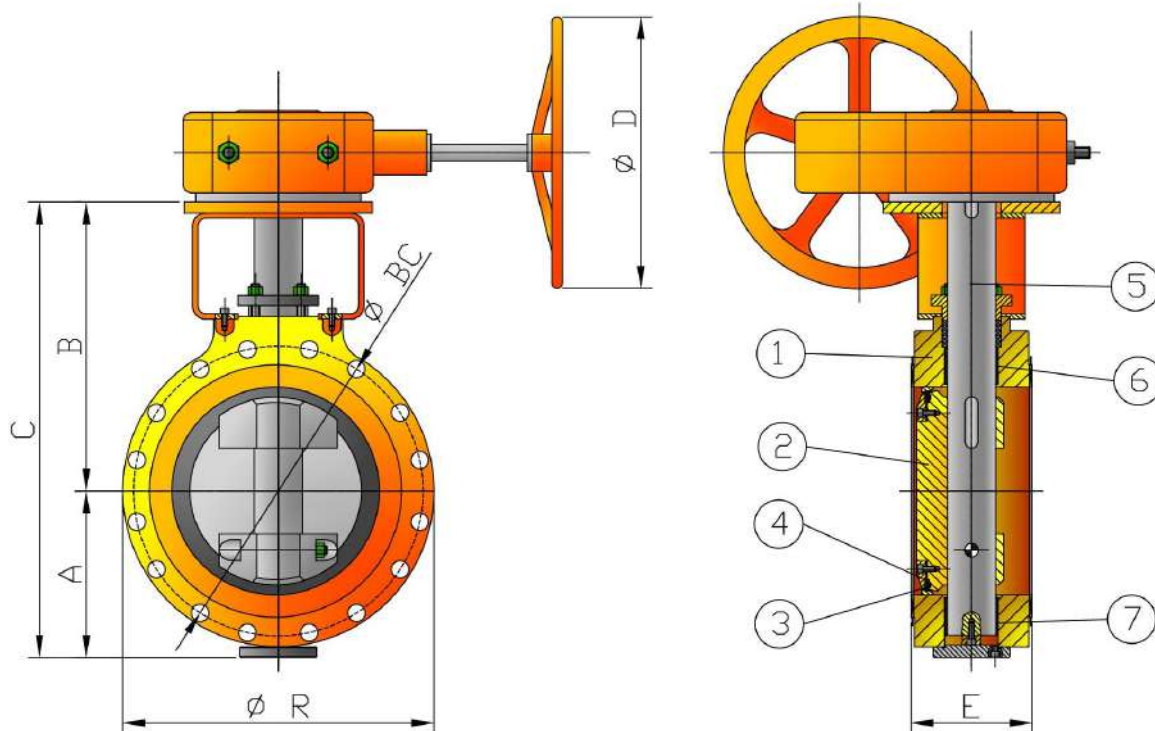
- 1) Valves suitable for Flange drilled ASME B 16.5 Class 150 lbs.
- 2) Body painting Carboguard 878 - minimum Thickness 300 micron Color RAL 9002-Grey White. Suitable for seawater max dept -20 m.
- 3) Manufactured according to API 609 and Tested according to API 598.
- 4) Hydrostatic test:  
Body at 30 Bars with water  
Seat at 22 Bars with water and 5.5 Bars with air



# Lug Butterfly Valve - Metal Seated

Flange ASME B 16.5 Class 300lb max op. pressure 20 bar

**Prod. Code: 231**



DIMENSIONS AND TOLERANCES ACCORDING TO ASME B 16.5								
HOSE N.D. Inch / mm	A mm	B mm	C mm	Ø D mm	E mm	Ø R mm	Ø BC mm	WEIGHT Kg
6" / 150	185	292	474	200	59	320	269,9	41
8" / 200	220	350	570	200	73	380	330,2	70
10" / 250	255	386	641	200	83	445	387,3	115
12" / 300	300	452	752	200	92	520	450,8	125
16" / 400	370	535	905	300	133	650	571,5	318
20" / 500	450	622	1072	300	159	775	685.8	504

MATERIAL LIST		
ITEM	DESCRIPTION	MATERIAL
1	BODY	A216 WCB or P355NH+STL Gr.21
2	DISC	ASTM A351 CF8M
3	DISC SEAL	ASTM A182 F316+GRAPHITE
4	RETAINING RING	S.S. 316
5	SHAFT	ASTM A479 XM-19
6	UPPER BEARING	A182 F316+H.T.
7	BOTTON BEARING	A182 F316+H.T.

## Notes

- 1) Valves suitable for Flange drilled ASME B 16.5 Class 300 lbs.
- 2) Body painting Carboguard 878 - minimum Thickness 300 micron Color RAL 9002-Grey White. Suitable for seawater max dept -20 m.
- 3) Manufactured according to API 609 and Tested according to API 598.
- 4) Hydrostatic test:  
Body at 30 Bars with water  
Seat at 22 Bars with water and 5.5 Bars with air