



PROSEAL

Butterfly Valves





UNIQUE CUSTOMER FRIENDLY FEATURES

PROSEAL Butterfly Valves for shutoff and control of gas and liquid pipelines upto 16 bar

- DN 40 - 600, PN 3.5, 10, 16 ANSI 150, temperature range 34°C to $+150^{\circ}\text{C}$.
- Revolutionary new design of liner
 - Suitable for high flow velocity & vacuum duties
- Only two wetted parts
 - Transmission by double D spindle
 - No shear / Lock pins required
- 100% Leak proof, liquid & gastight / vacuum proof
- Leak rate BS 6755 Part I rate A, Bubble tight shut off ANSI class VI or better
- Self lubricated bushes
- Quality Assurance according to DIN ISO 9001 / EN 29001
- Neck flange according to ISO 5211
- Design code / face - to - face BS 5155
- Neck height to accommodate insulation



APPLICATIONS

PROSEAL Butterfly Valves are reliable, maintenance - free shutoff and control valves with a permanently gas - tight shut - off. Because of their design and outstanding operating characteristics, PROSEAL Butterfly Valve are economic alternative to plug valves, gate valves and ball valves for pressures up to 16 bar and temoerature range - 34°C to $+150^{\circ}\text{C}$.

PROSEAL Butterfly Valves are extremely adaptable and have numerous application possibilities, including :

- Water treatment
- Chemical Industry
- Waste Effluent Treatment Plants
- Paper Industry
- Sugar Industry
- Construction Industry
- Drilling Rings
- Heating and Air Conditioning
- Cooling Water Crclulation
- Pneumatic Conveyors
- Compressed Air
- Gas Plants

PROSEAL Butterfly Valves



WAFER OR LUG BODY

PROSEAL Butterfly Valve are offered with wafer or lug type body.

Wafer bodies are clamped between the pipe flanges. Their outside diameter is dimensioned such that the centering is effected by the flange bolting.

Flanges or lug bodies are mounted conventionally to the pipeline flanges. In the case of liquid lines they can also be used for end of line service with an operating pressure of up to 16 bar.

This utilization is not allowed with gases.

ACCESSORIES

Automatic Actuators

"PROSEAL Butterfly Valves can be equipped with electric, pneumatic and hydraulic actuator" for on/off or control operation.

Manual Operation

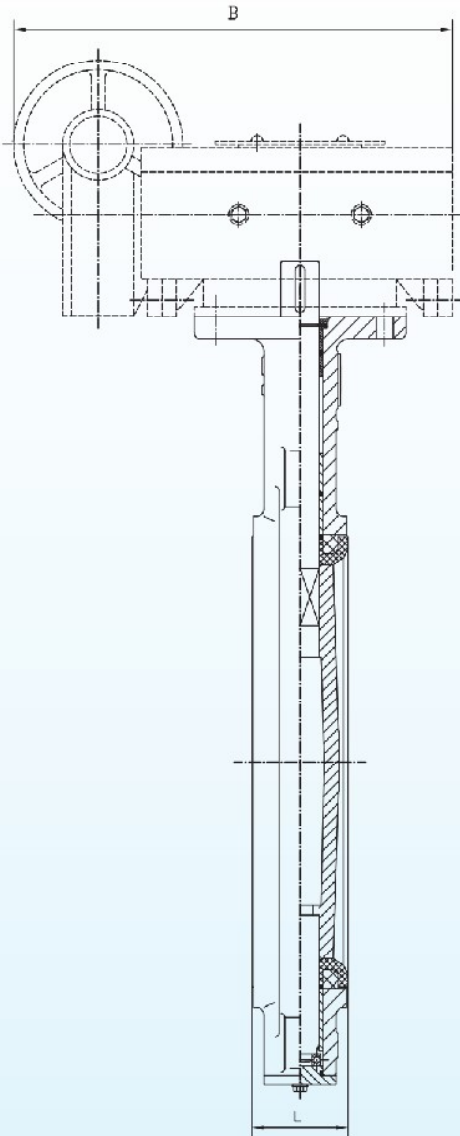
"Adapting the Actuator for emergency manual operation is a straight forward task, as they" "have a protruding, flat headed shaft end. However, for single acting actuators and where higher" "torques are encountered, a self locking gear is required."

Air Reservoir

"For high torques, it is often cost saving to use a double acting actuator with a separate air" vessel instead of a single acting actuator. When there is an compressor breakdown the stored air in the vessel is able to drive the actuator into the required safety position.



CHARACTERISTICS / FEATURES



Corrosion Free

The body lining and disc are the only components of the valve that come into contact with the line medium. These components come in a wide variety of materials which resist degradation from the majority of line media.

Permanently Tight Closure

PROSEAL Butterfly Valve close liquid and gas tight in both flow directions.

The disc is pressed with a defined constant compression over the entire disc circumference, into the elastic bodylining. The power transmission between disc and spindle is effected via a square drive and provides for an axial movement and self centering of the disc, which prevents overstress and wear of the elastomer.

Suitable for Full Vacuum

The replaceable body lining consists of a firm back - up ring onto which the elastic seating material is vulcanised, thus creating stability of the seat which prevents deformation of the elastomer during closing.

The bond between elastomer and back - up ring is strong enough to enable the valve to be used with high flow rates and also full vacuum.

Permanent Lubrication

PROSEAL Butterfly Valve are equipped with self lubricating, PTFE brushes, minimal maintenance is required.

Simple conversion

Mounting flange meets ISO 5211 specification, for mounting a handle, gear operator or actuator. Conversion from manual to actuator drive, or vice versa can be carried out without removing the valve from the pipeline.

Compact Dimensions

The PROSEAL Butterfly Valves has compact face - to - face dimensions and low overall height. These features contribute to a valve that is lighter and smaller than possible alternatives, i.e. gate and plug valves.

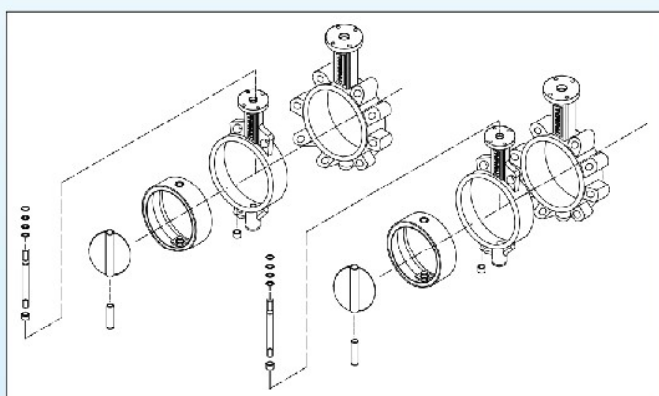
Considerable savings are reflected in packing, transportation, storage, installation and foundation or pipe bridge construction because of the compact design of the valve.

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Chemical Resistance Guide

The following valve seat materials are recommended subject to user's practical experience. However, it as to be taken into account that the temperature range given below is not completely applicable to all the media shown. Moreover, the resistance can be affected by concentration, pressure, flow rate or evaporation of the medium. In case of doubt, the suitability is to be verified by tests under operating conditions.

Valve Seat material	Resistant against
NBR	Petroleum, grease, alcohol, glycol, propane, butane, diesel - fuel and many other media.
EPDM	Ozone, phosphate, ester, ketones, alcohols, glycols, concentrated sulphuric acid, bleaching(20%) alkaline solutions in general, treated water(with caustic soda, sodium sulphate, chlorine), hot water and steam (it is attacked by hydrocarbonaceous solutions and oils, chlorinated hydrocarbons, turpentine and all other petroleum based oils).
EPDM - WHITE	As EPDM including drinking water approval, suitable for white media
PTFE	PTFE is a superior material for use in highly corrosive applications. It is inert to most chemicals at high temperatures and pressures. It also has a low coefficient of friction. PTFE is ideal for use in the chemical industry, in processes with hazardous fluids, in the food and beverage industry, pharmaceutical facilities, electronics production plants and other industries where the media must not come in contact with any organic or metallic materials.
VITON	Strong and weak mineral acids, aliphatic hydrocarbons, aromatic phenolic and halogenated hydrocarbons, ester of aromatic acids, aliphatic acids, phosphoric acids, phosphoric ester, aromatic ethers, aliphatic ethers, ozone, chlorine and hypochlorite. (Viton* is not suitable for dry heat, hot water and steam).


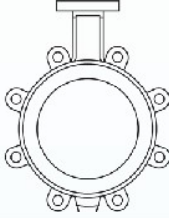
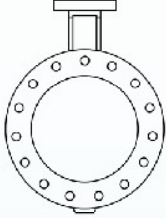



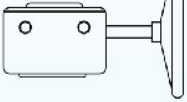
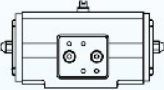
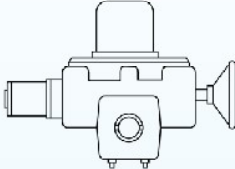
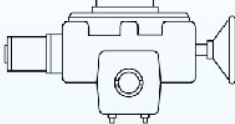
Components not in contact with line fluids other than disc (2) and liner (3)

Component	Material
Body	Cast Iron
	SG Iron
	Stainless steel
	Cast Carbon steel
Upper and Lower Stem	Stainless steel410
Bushing	Stainless steel410
Bushing	PTFE
Circlip	Spring Steel








Possible Combinations

Body Type			Material	2" to 24"
  	Wafer Body	Cast Iron Stainless steel	ANSI 150	
	Lug Body	Ductile Iron Cast Carbon Steel	PN 10/16 JIS 10K	

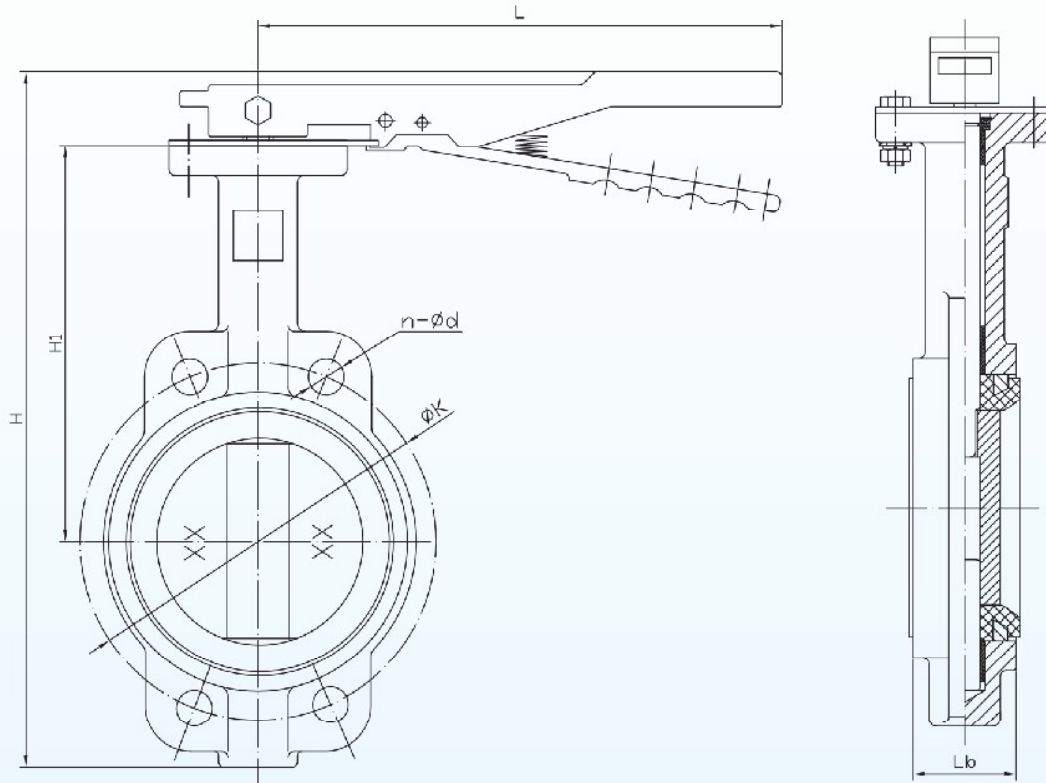
Component	Design	DN
    	10 Position Lever	2" to 8"
	10 Position SS304 Lever	2" to 8"
	Gear Operator	2" to 24"
	Pneumatic Actuator	2" to 24"
	Electric actuator	2" to 24"



Component	DN	Material
Upper Stem 	2" to 24"	Stainless Steel grade ASTM A477
		Stainless Steel grade ASTM A479
Seat 	2" to 24"	Buna - N
		EPDM
		Fluoroelastomer
		Hypalon
Disc 	2" to 24"	EPDM
		SBR (Copolymer of Styrene + Butadiene)
		HNBR (Hydrogenated Nitrile)
Disc 	2" to 24"	Aluminum - Bronze
		Stainless Steel grade ASTM A351 CF - 8M
		Ductile Iron - Nickel Plated
		Ductile Iron - Rilsan Plated
		Stainless Steel(Polished) grade ASTM A351 CF - 8M
		Ductile Iron - ECTFE Coated
Lower Stem 	2" to 24"	Stainless Steel grade ASTM A477
		Stainless Steel grade ASTM A479

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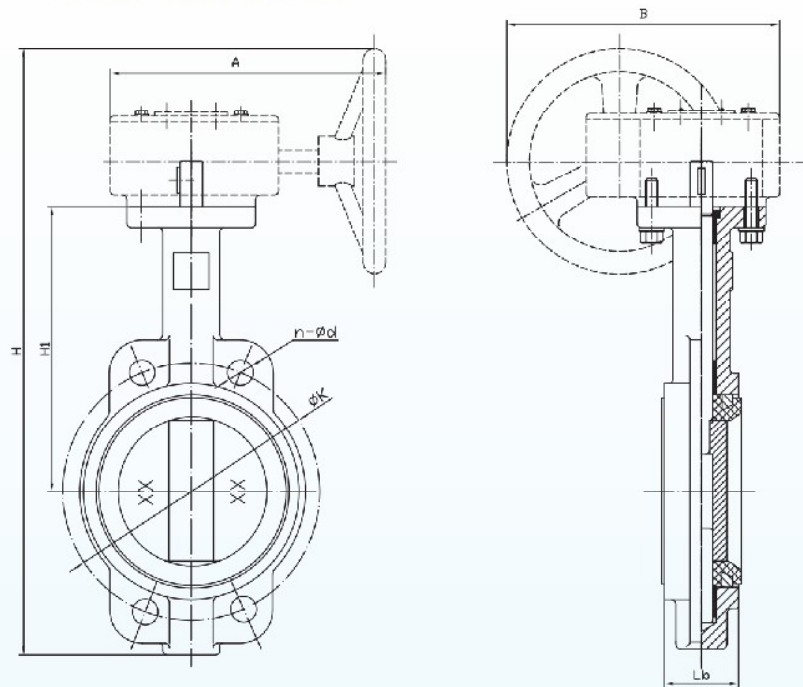
Butterfly Valves : DN50 - 200 LEVER



	øK				n - ød				L	H1	H	Lb
	PN10	PN16	10K	CL150	PN10	PN16	10K	CL150				
DN50	125	125	120	120.7	4 - ø18	4 - ø18	4 - ø19	4 - ø19	265	140	246	43±2
DN65	145	145	140	139.7	4 - ø18	4 - ø18	4 - ø19	4 - ø19	265	150	269	46±2
DN80	160	160	150	152.4	8 - ø18	8 - ø18	8 - ø19	4 - ø19	265	160	284	46±2
DN100	180	180	175	190.5	8 - ø18	8 - ø18	8 - ø19	8 - ø19	265	180	324	52±2
DN125	210	210	210	215.9	8 - ø18	8 - ø18	8 - ø23	8 - ø22	265	190	347	56±2
DN150	240	240	240	241.3	8 - ø22	8 - ø22	8 - ø23	8 - ø22	265	200	370	56±2
DN200	295	295	290	298.5	8 - ø22	2 - ø22	12 - ø23	8 - ø22	360	240	450	60±2

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Butterfly Valves : DN50-350 GEAR



	øK				n - ød				H1	H	A	B	L	ØF	ØF1	n-ød1
	PN10	PN16	10K	CI.150	PN10	PN16	10K	CI.150								
DN50	125	125	120	120.7	4 - ø18	4 - ø18	4 - ø19	4 - ø19	140	327	226	172.5	43±2	Ø90	Ø70	4-Ø10
DN65	145	145	140	139.7	4 - ø18	4 - ø18	4 - ø19	4 - ø19	150	350	226	172.5	46±2	Ø90	Ø70	4-Ø10
DN80	160	160	150	152.4	8 - ø18	8 - ø18	8 - ø19	4 - ø19	160	365	226	172.5	46±2	Ø90	Ø70	4-Ø10
DN100	180	180	175	190.5	8 - ø18	8 - ø18	8 - ø19	8 - ø19	180	405	226	172.5	52±2	Ø90	Ø70	4-Ø10
DN125	210	210	210	215.9	8 - ø18	8 - ø18	8 - ø23	8 - ø22	190	428	226	172.5	56±2	Ø90	Ø70	4-Ø10
DN150	240	240	240	241.3	8 - ø22	8 - ø22	8 - ø23	8 - ø22	200	451	226	172.5	56±2	Ø90	Ø70	4-Ø10
DN200	295	295	290	298.5	8 - ø22	12 - ø22	12 - ø23	8 - ø22	240	612	313	289	60±2	Ø125	Ø102	4-Ø12
DN250	350	355	355	362	12 - ø22	12 - ø26	12 - ø25	12 - ø25	270	673	313	289	68±2	Ø125	Ø102	4-Ø12
DN300	400	410	400	431.8	12 - ø22	12 - ø26	16 - ø25	12 - ø25	310	746	307	310	78±3	Ø150	Ø125	4-Ø14
DN350	460	470	445	476.3	16 - ø22	12 - ø26	16 - ø25	12 - ø29	368	831	307	310	78±3	Ø150	Ø125	4-Ø14
DN400	515	525	510	539.8	16 - ø28	16 - ø31	16 - ø27	16 - ø28.5	400	974	385	419	102±2	Ø175	Ø140	4-Ø18
DN450	565	585	565	577.9	20 - ø28	20 - ø31	20 - ø27	16 - ø31.8	422	1015	385	419	114±2	Ø175	Ø140	4-Ø18
DN500	620	650	620	635	20 - ø28	20 - ø34	20 - ø27	20 - ø32	480	1139	378	771	127±3	Ø210	Ø165	4-Ø22
DN600			730				24 - ø33		562	1367	437	536	156±4	Ø210	Ø165	4-Ø22