

BUTTERFLY VALVE DOUBLE OFFSET WITH SCOTCH ACTUATOR- SERIES-232

INTRODUCTION

Pneucan Double Offset Butterfly Valve design is the most common type of rotary valve and provides low weight to Cv Ratio, Combined with simplicity of design and comparatively low cost. It is simple device to control or block the flow. A single vane or wafer disc pivots in the Valve Body and find wide application for throttling or two position control in the chemical, paper & pulp, sugar Industries, cooling water circulation, water treatment Plants, compressed air, gas plant, flue gas desulphurization plants etc.

SPECIFICATIONS

DESIGN	: Wafer
VALVE SIZE	: 50mm to 900 mm (2" to 36")
RATING	: PN6, PN10, PN16, Suitable to Mount between Flanges 150#,300#
END CONNECTION	: Wafer type
Flow Characteristic.	: Throttling, On-Off.
MOUNTING PAD	: As per ISO 5211
Body Material	: CI, WCB, SS304, 316, 316L etc.
DISC Material	: Solid Dual Shaft / Single Shaft. SGI, SS304, 316, 316L etc.
Soft Seat	: PTFE.
Gland Packing	: PTFE V Rings upto 180° C
Rotary Actuator type:	Double Piston (Rack & Pinion).
Air Supply	: 3.5 – 5 Kg/cm ²
ACTUATOR TYPE	: Double Piston (Rack & Pinion).
ACTUATOR ACTION	: Single Acting - Air failure Spring Return Type. Double Acting - Air failure "Stay Put"
ACTUATOR BODY	: Extruded Hardened Aluminum
PINION SHAFT	: EN8 / SS 304 / 316
PISTON RACK	: Hardened Aluminum LM 24
PISTON GUIDES	: 40% BRONZE FILLED PTFE
SPRINGS	: Pre Loaded Spring SNS (LH/RH) Type
SEALING	: Nitrile (Viton or EPDM available on request)
AIR CONNECTION	: 1/ 4" or 1/ 2" NPT
ACCESSORIES	: 1) Valve Positioner - Pneumatic , Electro Pneumatic,Smart Positioner 2) Air Filter Pressure Regulator 3) Limit Switch with Honeywell Micro Switch / P&F Sensor 4) 3/2 / 5/2 Way Solenoid Valve (220VAC/24VDC) 5) Manual Override (Worm Gear Quarter Turn) (Limit Switch Enclosure & Solenoid Valve available in Weatherproof, Intrically Safe & Flameproof Enclosure.)



**BUTTERFLY VALVE WITH
ROTARY ACTUATOR**



**BUTTERFLY VALVE WITH
ROTARY ACTUATOR & MOR**

BUILT IN RELIABILITY

PVCT-232

DESIGN FEATURES

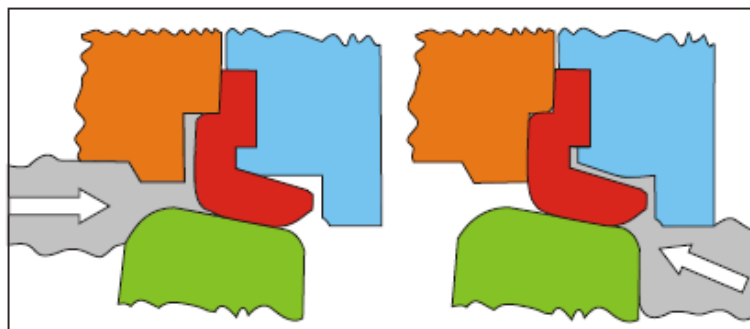
- Compact & simple design, low cost and maintenance free.
- Very high Cv to body size ratio.
- Reliable smooth operation and flow control with assured product quality.
- Long Life Bellows Seal- provides for absolute gland sealing.
- Easy In Line Maintenance- The top entry design eases in-line maintenance and minimizes transfer of pipeline stresses.
- Long life, easy field replaceable seat placed in body, away from flow steam, provides bubble tight shut off. Valve are equally suitable for control and tight shut off. Valves are equally suitable for control and tight shut off applications.
- Recommended for critical applications including high temperature services, throttling steam control, liquor services, gas applications, vacuum applications, corrosive fluids, refinery services, chemical services, hydrocarbon services, etc.
- Seat option includes PTFE, EPDM, Viton Soft Seats and Flexible Metal Seat to suit variety of fluids and applications.
- Valve body is soild, heavy duty. Seat Retainer construction allows gasket conforming to API 609.
- Optimal disc geometry and cavity free flow passage offers minimum flow resistance and high Cv values.
- Heavy duty pins connecting valve shaft to disc avoids lost motion under high torque conditions.

QUALITY AND PERFORMANCE GUARANTEE

- Produced with Quality Systems accredited to ISO 9001: 2008 by Bureau Veritas.
- Full material certification available for all major component Parts.
- Full guarantee on design and Performance.
- All testing are performed to the requirements of ANSI B16.34.

SEAT DESIGN OPTIONS

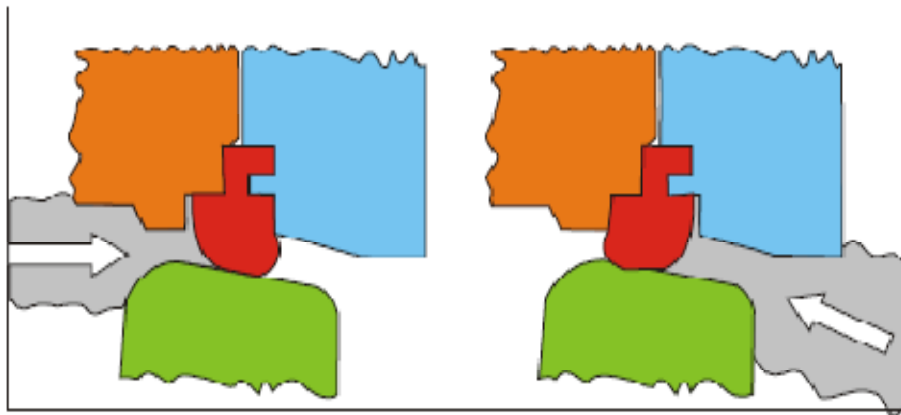
- Pneucon Butterfly valve offers a wide variety of seat design options which are cost-effective and provide solutions to your service requirements. The double offset disc construction minimizes the interference between seat & disc edges allowing longer seat life even under frequent valve operations. Seats are available in both rigid & flexible construction to suit specific requirements. The seats are held rigidly by the seat retainer which is inserted within the body per API 609 Design requirements. This construction allows use of gasket conforming to API 601 (ANSI 16.5) Standard and eliminated the possibility of joint leakage from body to the atmosphere.
- Virgin PTFE seat having a flexi lip provided bubble tight shut off in both the directions. Suits to wide range of applications. Maximum working temperature 200°C.



Flexible PTFE Seat

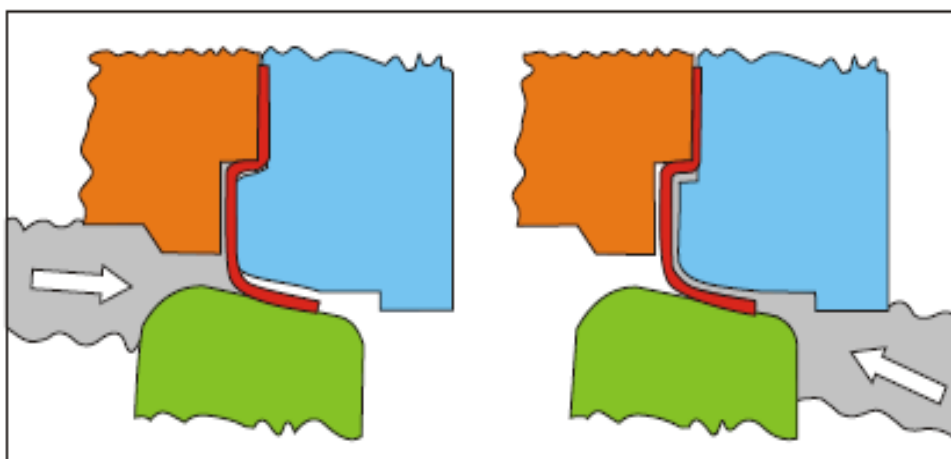
BUILT IN RELIABILITY

- Rubber seats are available in EPDM, NBR and VITON materials. Rigid seats allow a clean flow passage & prevents fluid deposition within the seat. These seats are ideal for many applications in sugar industry Rigid seats allows unidirectional flow providing tight shut off under positive & vacuum applications. With this configuration the shaft side is upstream side.



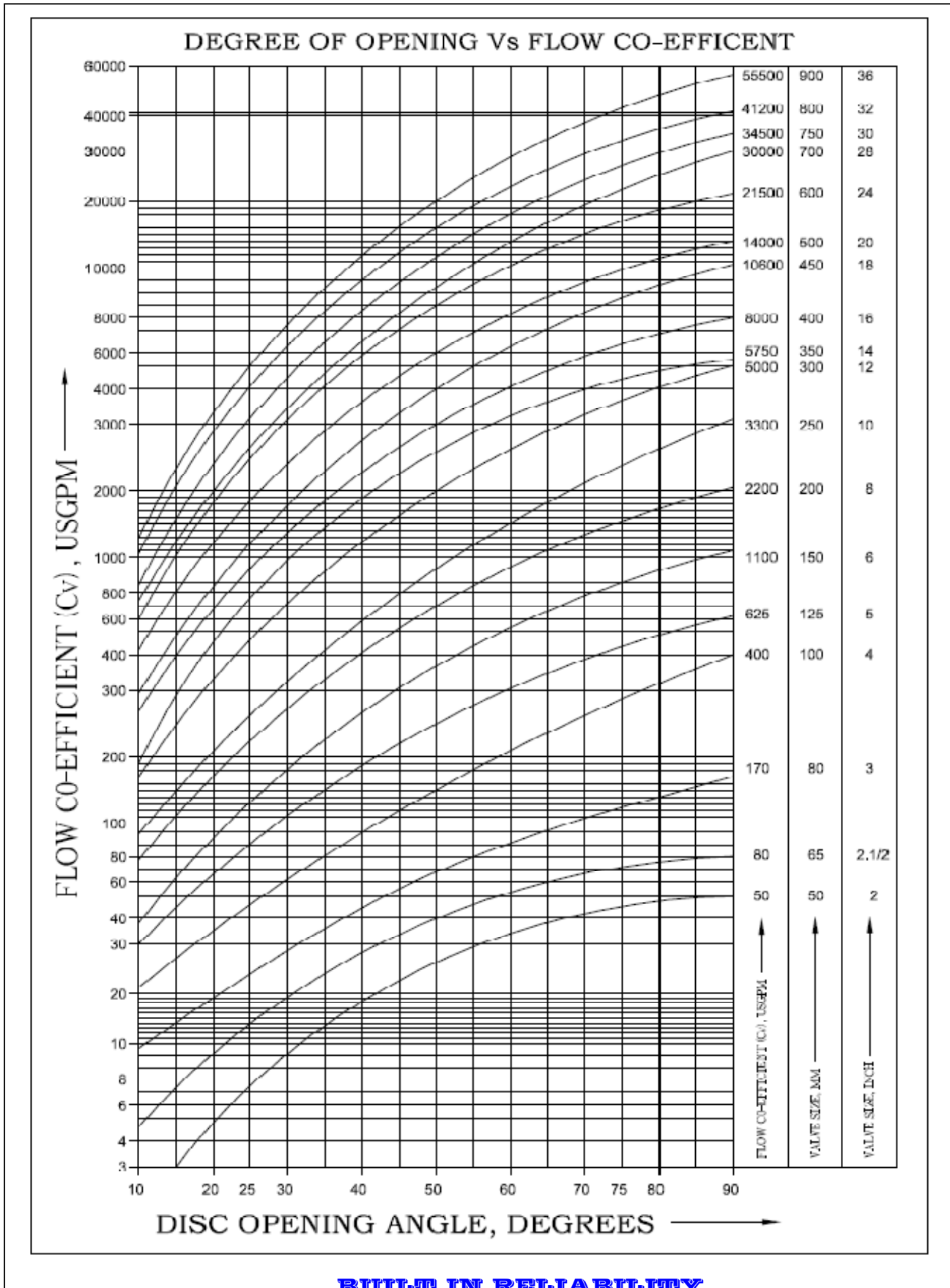
Flexible Rubber (EPDM / NBR / Viton) Seat

- Most suitable for high consistency fluids having suspended hard particles, for erosive services, for high temperature services >200° to 550°C. Die pressed stainless steel seats with inbuilt flexible property gives class IV Leakage with minimum torque requirements.

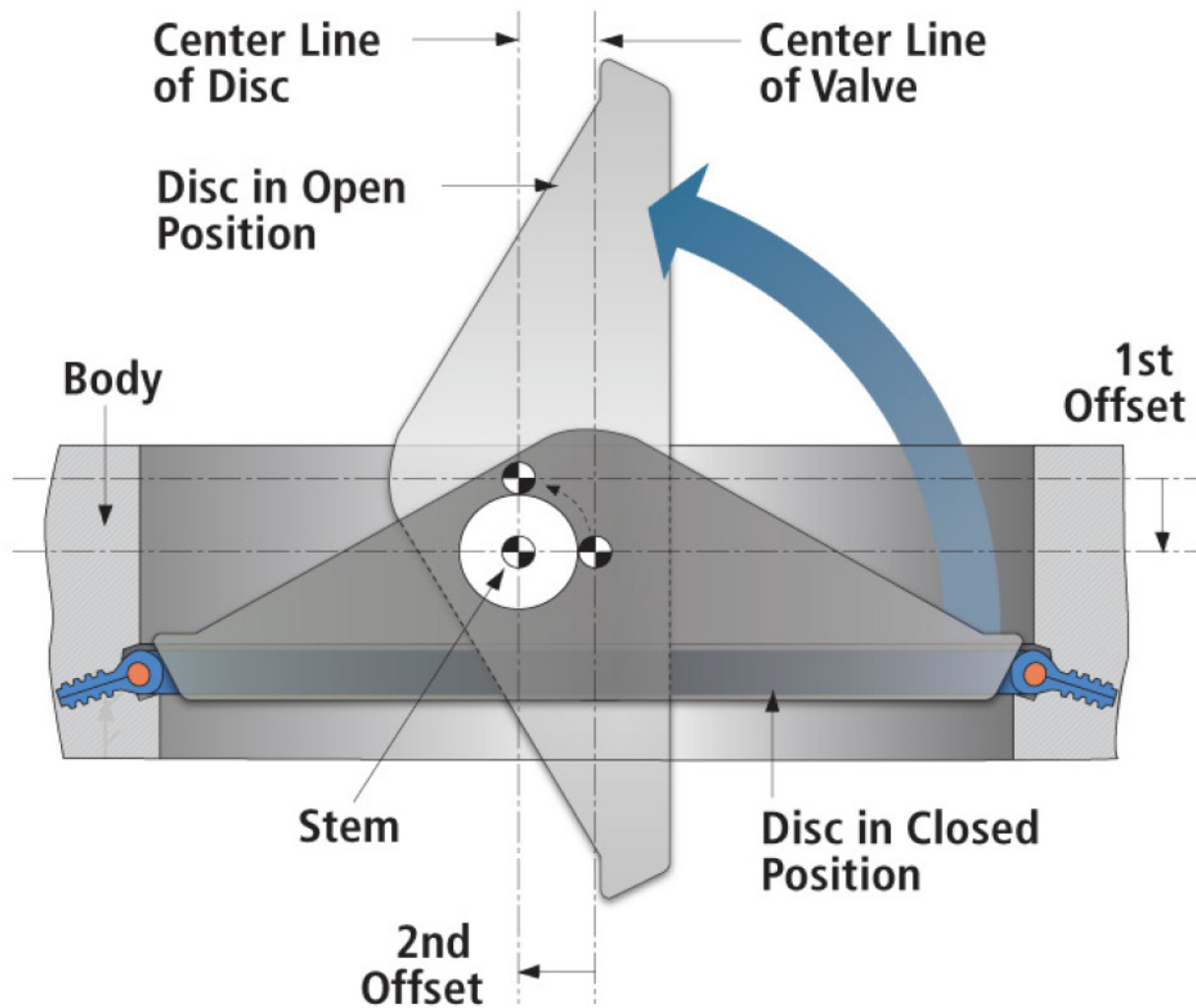


Flexible Metal

BUILT IN RELIABILITY



DOUBLE OFFSET INDICATING POSITION OF VALVE OPENING



TESTING AND INSPECTION

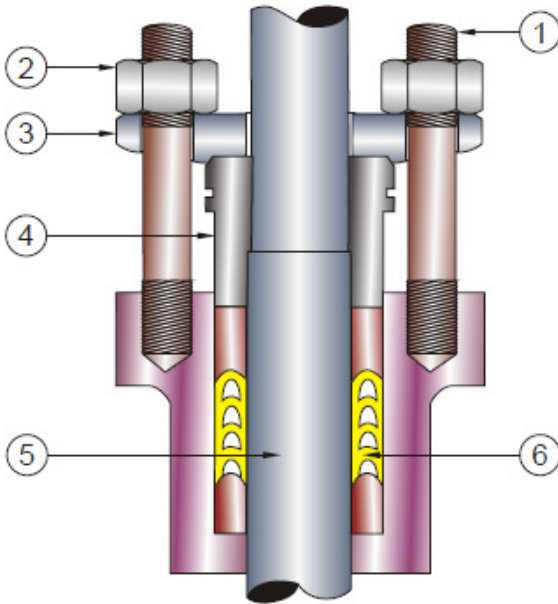
Test	Test Pressure	Test Stds	Test Medium	Acceptance Criteria
Hydro Test	30 bar (ANSI 150#)	API 598	Water	No Leakage
Seat Leakage Test	Max ΔP Shut Off	FCI 70-2	Water	Class VI
	20 Bar (ANSI 150#)	API 598	Water	No Leakage

BUILT IN RELIABILITY

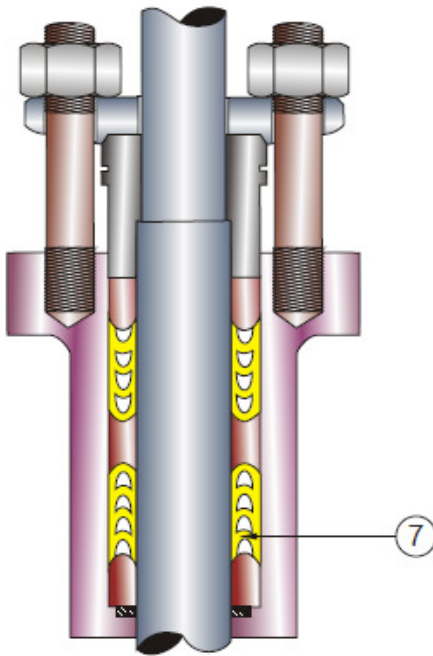
GLAND PACKING OPTIONS

Pneucon offers Single & Double set of V-PTFE rings (upto 200°C) & Graphite Moulded rings (>200°C upto 600°C) as standard. Inverted V-fered for vacuum application with upper set of V-Rings positioned PTFE packings are reverse direction. Low fugitive Emission packings are provided on the LFE packing arrangement request comprises of live loaded packings. The packing gland is loaded with spring washers to maintain a continuous compressive lead to gland packings as shown in figure below.

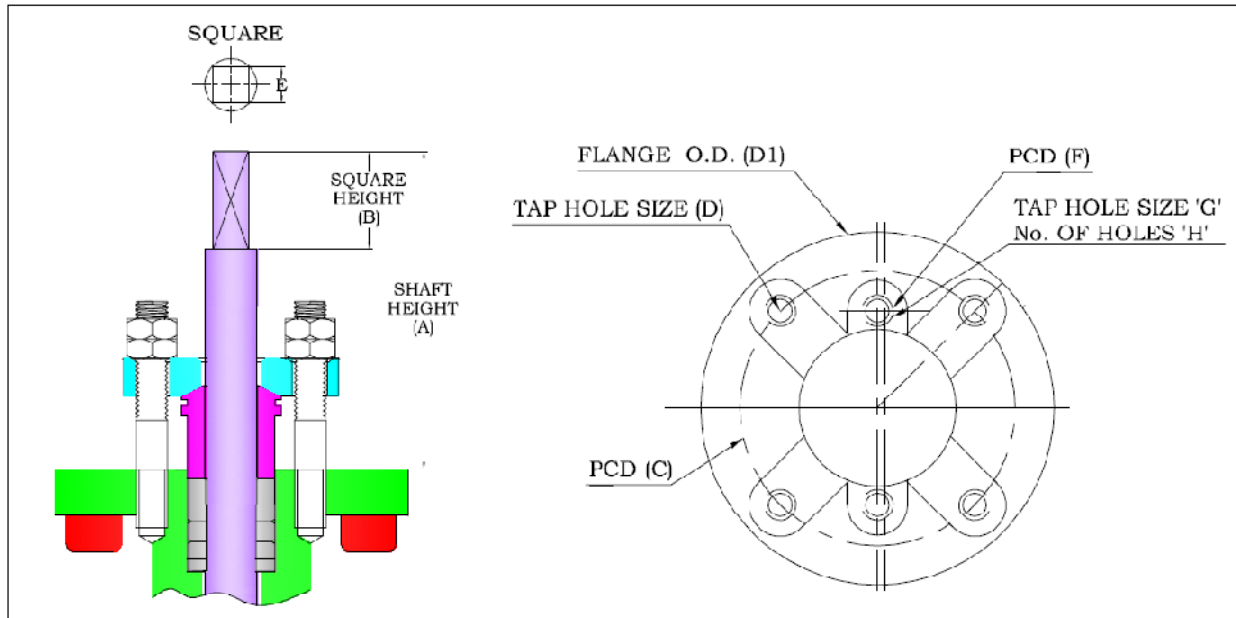
➤ SINGLE V-PTFE GLAND PACKING



➤ INVERTED V-PTFE GLAND PACKING FOR VACUUM APPLICATION



Sr. No	Part Name
01	GLAND STUD
02	NUT
03	GLAND PUSHER
04	GLAND
05	STEM
06	V-RING PTFE GLAND PACKING
07	V-RING PTFE GLAND PACKING



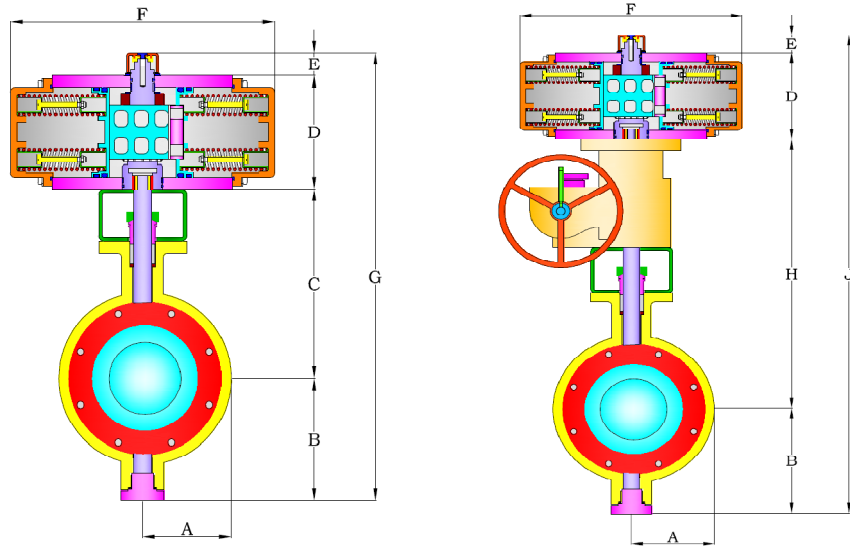
ACTUATOR MOUNTING DETAIL *

VALVE SIZE	SHAFT HEIGHT	PCD	TAP HOLE SIZE	PCD	TAP HOLE SIZE	NO. TAP HOLES	SQURE	SQUARE HEIGHT	FLANGE O.D.		
	A	C	D	F	G	H	E	B	D1		
2"	81	70	M8	40	M8	2	9	20	90		
2.1/2"	81	70					9	20	90		
3"	81	70	M10	50.8			11	25	90		
4"	81	70					11	25	90		
5"	85	90					14	25	110		
6"	85	90					14	25	110		
8"	95	102	M12	65	M10	2	17	25	130		
10"	95	114.3					17	25	150		
12"	105	114.3					27	29	150		
14"	105	114.3					27	29	150		
16"	120	130	M16	89			M12	4	36	38	165
18"	120	140							36	38	175
20"	135	150			46	48			190		
24"	135	165			46	48			210		

* :- For Higher Sizes Dimensions Shall be Furnished on request

BUILT IN RELIABILITY

PVCT-232



*** DIMENSION OF DOUBLE OFFSET BUTTERFLY VALVE (SERIES-232)**

VALVE SIZE	ACTUATOR MODEL	MOR	A	F / F	B	C	D	E	F	G	H	J
2"	SA-065	100	46	43	78	170	88	20	216	336	353	539
2.1/2"	SA-075	100	52	46	87	180	98	20	232	385	372	577
3"	SA-075	100	63	48	112	195	98	20	232	425	412	642
4"	SA-100	100	80	54	122	211	126	20	293	479	438	706
5"	SA-100	100	93	56	141	214	126	20	293	501	460	747
6"	SA-115	450	107	57	154	231	141	20	346	546	510	825
8"	SA-125	450	135	64	210	275	153	20	405	658	610	993
10"	SA-150	450	162	71	243	313	187	30	475	773	681	1141
12"	SA-150	450	190	81	283	370	187	30	475	870	778	1278
14"	SA-175	750	206	92	317	370	215	30	521	932	812	1374
16"	SA-200	1000	235	102	348	450	248	30	641	1076	923	1549

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The Company's policy is one of continuous product improvement and the right is reserved to modify the specifications contained here in without notice.



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