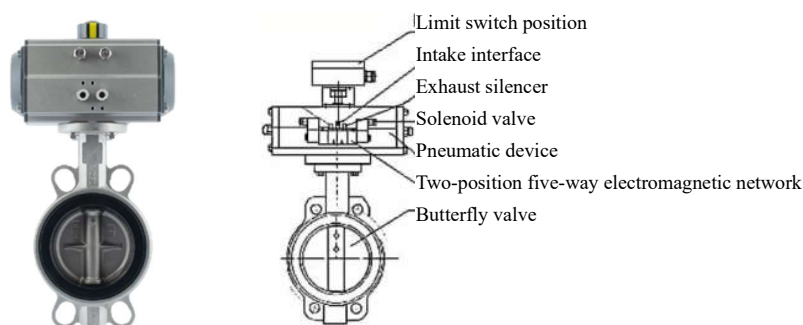


Product overview

The VPB pneumatic butterfly valve is a pneumatic valve for realizing the enabling action with circular butterfly plate rotating with valve rod for opening/closing, mainly used as block valve, can be designed to be of regulating or segment valve and regulating function, and is usually used on the low-pressure medium and large-caliber pipelines. There are two seal styles (including elastic seal and metal seal). As for the elastic seal valve, the seal ring can be mounted on the valve body or attached to the butterfly plate periphery.

Product features

- Small and portable, easy dismantling and repair and installation in any position;
- Simple and compact structure, small operating torque and quick 90° rotation enabling;
- The flow characteristics tend to be linear with good regulation performance;
- The connection between butterfly plate and valve rod is subject to structure without pin, overcoming the possible internal leakage point;
- The butterfly plate excircle is of spherical shape, improving the sealing property and prolonging the service life of the valve;
- Keeping zero leakage at the moment of opening and closing under pressure for more than 0.05 million times;
- The sealing element is replaceable and sealed reliably with two-way sealing;
- The butterfly plate can be sprayed with coating (such as nylon or PTFE) as per user requirements;
- The valve can be designed to be of flange connection and butt clamp connection;



Butterfly valve parameter

Nominal diameter DN(mm)	DN50 ~ 1000mm
Nominal pressure (MPa)	PN1.0, 1.6 and 2.5MPa
Valve form	Straight in cast valve body
Connection type	Flange type and butt clamp type
Valve element form	Butterfly plate type
Gland packing	Flexible graphite and PTFE
Intrinsic error	With locator: Less than $\pm 2\%$ of total travel
Return difference	With locator: Less than $\pm 2\%$ of total travel
Control mode	Switch type (switch two-step control) and regulating type (4 ~ 20mA control)

Actuator parameter

Actuator model	Single and double acting on pneumatic actuator by PHR/PHW series
Gas supply pressure	0.4 ~ 0.7MPa
Air source port	G1/4", G1/8", G3/8" and G1/2"
Ambient temperature	-30 ~ +70°C
Acting form	Single acting actuator: Air-to-close type (B)--the valve is opened when gas leakage (FO); Air-to-open type (K)--the valve is closed when gas leakage (FC) Double-acting actuator: Air-to-close type (B)--the valve is kept when gas leakage (FL); Air-to-open type (K)--the valve is kept when gas leakage (FL)
Accessories available	Locator, solenoid valve, air filtering pressure reducer, lock-up valve, travel switch, valve position transmitter and handwheel

Butterfly valve material

Part name	Main materials
Valve body	Spheroidal graphite steel, cast steel, alloy steel and stainless steel
Butterfly plate	Gray pig iron, spheroidal graphite steel, cast steel, stainless steel and special material
Sealing ring	Various rubbers and PTFE
Valve rod	2Cr13 and stainless steel
Packing	O-ring and flexible graphite O

Performance specification

Nominal diameter	DN (mm)	50 ~ 1000		
Nominal pressure	PN (MPa)	0.6	1.0	1.6
Test pressure	Strength test	0.9	1.5	2.4
	Sealing test	0.66	1.1	1.76
	Air seal test	0.6	0.6	0.6
Applicable medium	Air, water, sewage, steam, gas and oil.			
Drive form	Pneumatic drive			

Design standard

Design standard	GB/T12238-1989
Flange connecting size	GB/T9113.1-2000; GB/T9115.1-2000; JB78
Structure length	GB/T12221-1989
Pressure test	GB/T13927-2000; JB/T9092-1999

Sealing material and applicable temperature

Description of materials	Chloroprene rubber	Buna-N rubber	Ethylene propylene rubber	Polytetrafluoroethylene	Silicone rubber	Fluororubber	Natural rubber	Nylon
English abbreviation	CR	NBR	EPDM	PTFE	SI	VITON	NR	PA
Model and code	X or J	XA or JA	XB or JB	F, XC or JC	XD or JD	XE or JE	X1	N
Higher temperature resistance	82°C	93°C	150°C	232°C	250°C	204°C	85°C	93°C
Lower temperature resistance	-40°C	-40°C	-40°C	-268°C	-70°C	-23°C	-20°C	-73°C
Applicable operating temperature	0~+80°C	-20~+82°C	-40~+125°C	-30~+150°C	-70~+150°C	-23~+150°C	-20~+85°C	-30~+93°C

Butterfly valve model selection

VPB	Pneumatic butterfly valve				
	Valve classification R Butt clamp centerline soft seal butterfly valve X Support lug centerline soft seal butterfly valve V Flange centerline soft seal butterfly valve S Butt clamp triple eccentric metal rigidity seal butterfly valve M Flange triple eccentric metal rigidity seal butterfly valve				
	Nominal diameter *** (100 indicates nominal diameter DN100 or inch used to express 4 ")				
	Valve body material C Cast iron D Ductile iron W A216-WCB valve 0 CF8/304SS 1 CF8M/316SS				
	Valve plate material W A216-WCB A Aluminium bronze 0 CF8/304SS 1 CF8M/316SS 2 CF3M/316L 3 Dual-phase steel 5 Other material				
	Valve rod material W 45# steel S 1Cr13 or 2Cr13 H 17-4H stainless steel 0 304SS 1 316SS				
	Valve seat material P PTFE E EPDM N NBR V VITON				
	Nominal pressure *** (16 indicates nominal pressure PN1.6Mpa or ANSI used to express 150lb)				
VPB-					