

CHECK VALVES · SWING PATTERN

CVFWA300 ANSI 300 Flanged Cast Steel Swing Check Valve

Full bore metal seated cast carbon steel (WCB) swing check valve with a recess for the disc to sit in when fully open, giving a large flow rate and low head loss. DN50 to DN300, ANSI 300 raised face flanges, 50 bar at ambient.

CARBON STEEL WCB

DN50 – DN300

ANSI 300 · 50 BAR

METAL SEAT · FULL BORE



FEATURES

- Sizes 50 mm to 300 mm
- Cast carbon steel (WCB) body
- Metal seat, full bore design
- 50 bar rated at ambient temperature
- Media temperature to 315 °C at 38 bar
- Recessed disc pocket for low head loss and pressure drop when fully open
- ANSI 300 raised face flange pattern

APPLICATIONS

- Liquid fuels and diesel
- Oils
- Steam and high temperature service
- General industrial liquid service

STANDARDS

- Designed to API 594
- RF flanges to ASME B16.5
- Face to face to ASME B16.10
- Testing and inspection to API 598

OPERATIONAL SPECIFICATIONS

Model	DN (mm)	Pressure range (ambient)	Media temperature	Weight (kg)
CVFWA300-050	50	0 to 50 bar	315 °C at 38 bar	16
CVFWA300-065	65	0 to 50 bar	315 °C at 38 bar	23
CVFWA300-080	80	0 to 50 bar	315 °C at 38 bar	29
CVFWA300-100	100	0 to 50 bar	315 °C at 38 bar	46
CVFWA300-150	150	0 to 50 bar	315 °C at 38 bar	82
CVFWA300-200	200	0 to 50 bar	315 °C at 38 bar	136
CVFWA300-250	250	0 to 50 bar	315 °C at 38 bar	204
CVFWA300-300	300	0 to 50 bar	315 °C at 38 bar	302

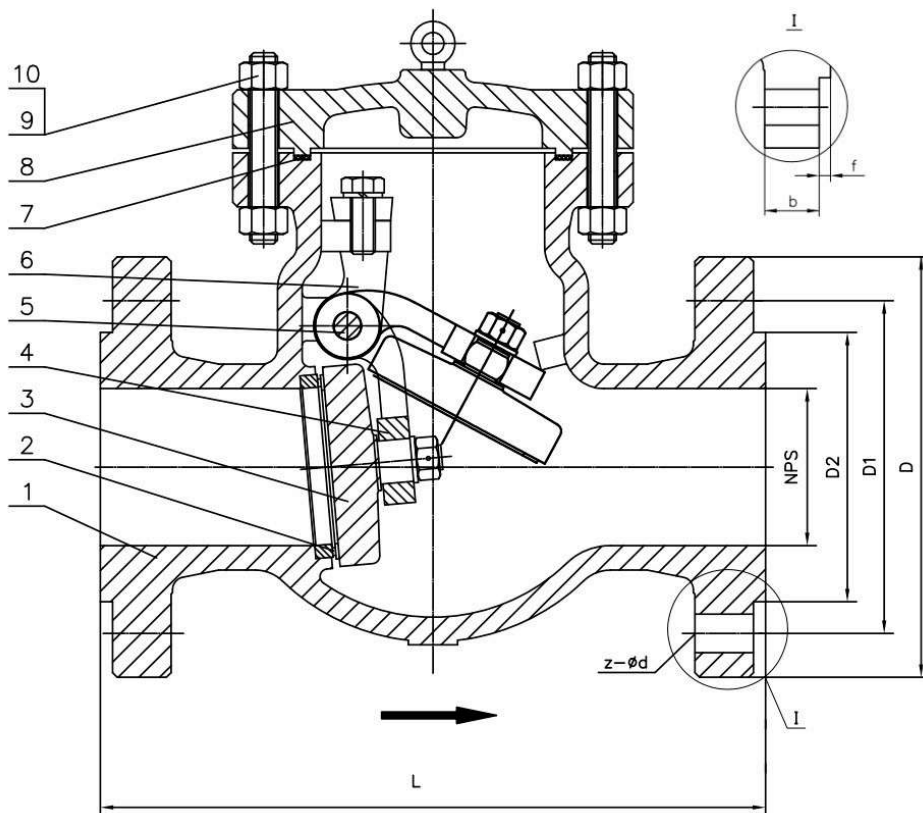
Other configurations can be manufactured upon request.

DIMENSIONS

Model	NPS	L	D	D1	D2	b	f	z-ød
CVFWA300-050	2"	267	165	127	92.1	20.7	2	8-19
CVFWA300-065	2-1/2"	292	190	149.2	104.8	23.9	2	8-22
CVFWA300-080	3"	318	210	168.3	127	27	2	8-22
CVFWA300-100	4"	356	255	200	157.2	30.2	2	8-22
CVFWA300-150	6"	445	320	269.9	215.9	35	2	12-22
CVFWA300-200	8"	533	380	330.2	269.9	39.7	2	12-26
CVFWA300-250	10"	622	445	387.4	323.8	46.1	2	16-29
CVFWA300-300	12"	711	520	450.8	381	49.3	2	16-32

All dimensions in millimetres unless specified. L face-to-face, D flange OD, D1 bolt circle, D2 raised face, b flange thickness, f raised face height, z-ød number and diameter of bolt holes.

CONSTRUCTION DETAIL



No	Part name	Material
1	Body	ASTM A216-WCB
2	Seat	ASTM A105 deposited 13Cr
3	Disc	ASTM A216-WCB deposited 13Cr
4	Hinge	ASTM A216-WCB
5	Hinge pin	ASTM A276-420
6	Support	ASTM A216-WCB
7	Gasket	Flexible graphite / 304
8	Bonnet	ASTM A216-WCB
9	Bonnet bolt	ASTM A193 Gr.B7
10	Bonnet bolt nut	ASTM A194 Gr.2H

Sectional view — item numbers as tabled alongside; arrow indicates flow direction.

Intended for industrial applications only — do not use where pressures or temperatures can exceed those listed above. System designers must consider the failure modes of all components and provide adequate safeguards against personal injury or equipment damage. Designs, materials and specifications are subject to change without notice due to our continuing program of product development.