



# SHADECO VALVES & PUMPS CC

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**VALVES - DECO, AMCO, NINGBO AND ACTUATORS  
PUMPS - SHADECO AND EXCELLENT PUMPS  
SERVICE - INSTALLATIONS AND REPAIRS**

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*Look, Think, Take Action and Stay Alive*

**DECO V-PORT WAFER TYPE SEGMENTED HALF BALL VALVES**

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# DECO V-PORT WAFER TYPE SEGMENTED HALF BALL VALVES

ISO9001 & CE Accredited



## Overview

The v-port segmented ball valve is primarily designed for flow control, and it can also be used to shut-off operation. The notched v-port on the segment ball contributes to strong shear stress to cut through media with fiber and particles. Consequently, this V-port segment valve is a good general control valve for most pulp and paper process applications, or similar flow contains fibers and particles.

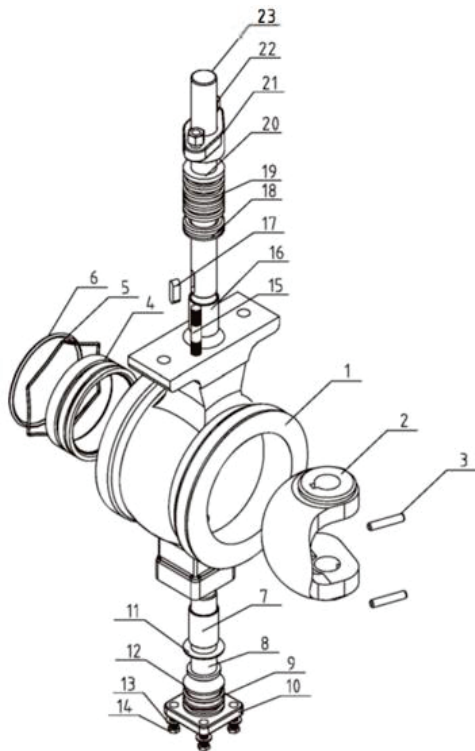
## 1. Technical Data

- Size Range:** 1" ~10" (DN25~DN250)
- Pressure Rate:** DIN PN10, PN16, PN25; ANSI 150
- Body Material:** WCB, WCC, WC6, WC9, LCB, CF8, CF8M, CF3. etc
- Trim Material:** CF8+HCr/304+STL, CF8M+HCr/316+STL, CF3+HCr/304L+STL. Etc
- Hard Treatment:** Tungsten Carbide/Satellite Alloy/Ni60 Coated sealing surface
- Face to Face:** According to Hiton internal standard
- Temp. Range:** -29 ~ 220
- Seal Tightness:** Metal Seat, V Class (standard), VI Class (with Tungsten Carbide coated trim)  
\*Soft Seat is not available.
- Flow Characteristic:** Equal Percentage

### Application:

Pulp and Paper/ Mining /Waste Water Treatment/ Food and Beverage/Chemical Plants/ Power Plants/ Steel Industry/Etc.

## 2. Design Features



### BODY:

- Single-piece body, which prevents leaks caused by separate flanges or locking rings.

### V-port Segment:

- Specially designed V-notch ball provides strong cutting stress and tight sealing.
- Hard chromium, nitriding, and HCOF treatments are all available for the ball surface treatment, Improving hardness, abrasion resistance, fatigue resistance, corrosion resistance and performance under high temperature.
- Well ground notched ball surface ensures small operating torque and tight seal, especially for metal seated segment valve.

### SEAT:

- Special seat design eliminate cavity between seat and valve body. This consequently prevents media from jamming between seat and body, ensure reliable sealing.

### Other:

- Stem is finely ground to match actuator excellently, which prevents rocking motion and potential failure of the v-port segmented valve.
- Close-fit spline or pin-key are available for stem-core connection to provide reliable transmission without motion lost or dead band.

### STANDARD PART LIST

Parts	WCB	CF8	CF8M
1. Body	WCB	CF8	CF8M
2. V-port Segment	CF8+HCr	CF8+HCr	CF8M+HCr
3. Pin	304	304	316
4. Seat	304+STL	304+STL	316+STL
5. Spring		316L	
6. O-ring	VITON		
7. Bearing	WCB	CF8	CF8M
8. Lower Stem	PTFE		
9. O-ring	WCB	CF8	CF8M
10. Packing Gland	WCB	304	304
11/12. Gasket		PTFE	
13. Washer	Q235	304	316
14. Bearing Housing	WCB	WCB	WCB
15. Hand wheel	GGG30 (Epoxy Coated)		
16. Stem Protector	304	304	304
17. Fasteners	A2-70	A2-70	A4-70
18/19/20. Packing	PTFE or Graphite		
21. Packing Gland	WCB	CF8	CF8M
22. Nut	35	304	304
23. Upper Stem	304	304	316

### Seat Design



Flow Direction →

### 3. Actuator Options

#### Manual

Handle Bar  
Worm Gear

#### Automatic

Electric  
Pneumatic (single & double-acting)

**\*Note: for other options, please contact us for availability.**

#### Accessories

Actuator Manual Override  
Limit Switches  
Air Filter

Positioners  
Solenoid Valves  
ISO Mount



Handle bar



Worm Gear



Pneumatic (ZS)



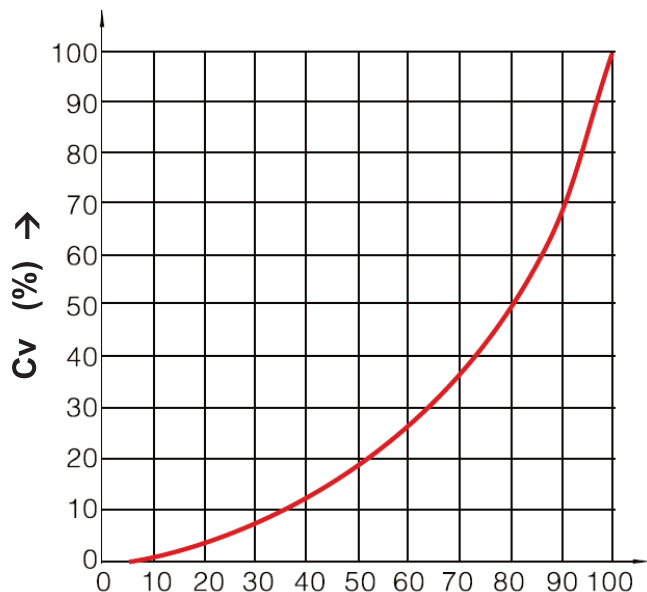
Pneumatic (AT)



Electric



## 4. Flow Characteristic



### Rated Cv

Size	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250
Rated Cv	36	56	94	152	262	358	540	906	1424	2176	3532

### Micro flow ball rated Cv

Size	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250
Rated Cv	36	56	94	152	262	358	540	906	1424	2176	3532

## 5. Valve Torque

PN10/16, tested under 1.0Mpa differential pressure

Size	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250
Torq. NM	20	25	30	35	50	60	80	110	170	240	430

PN25/ANSI 150LB, tested under 2.0Mpa (differential pressure)

Size	DN25	DN32	DN40	DN50	DN65	DN80	DN100	DN125	DN150	DN200	DN250
Torq. NM	30	36	40	42	62	95	140	220	360	590	1100

## Dimension – Bare Stem

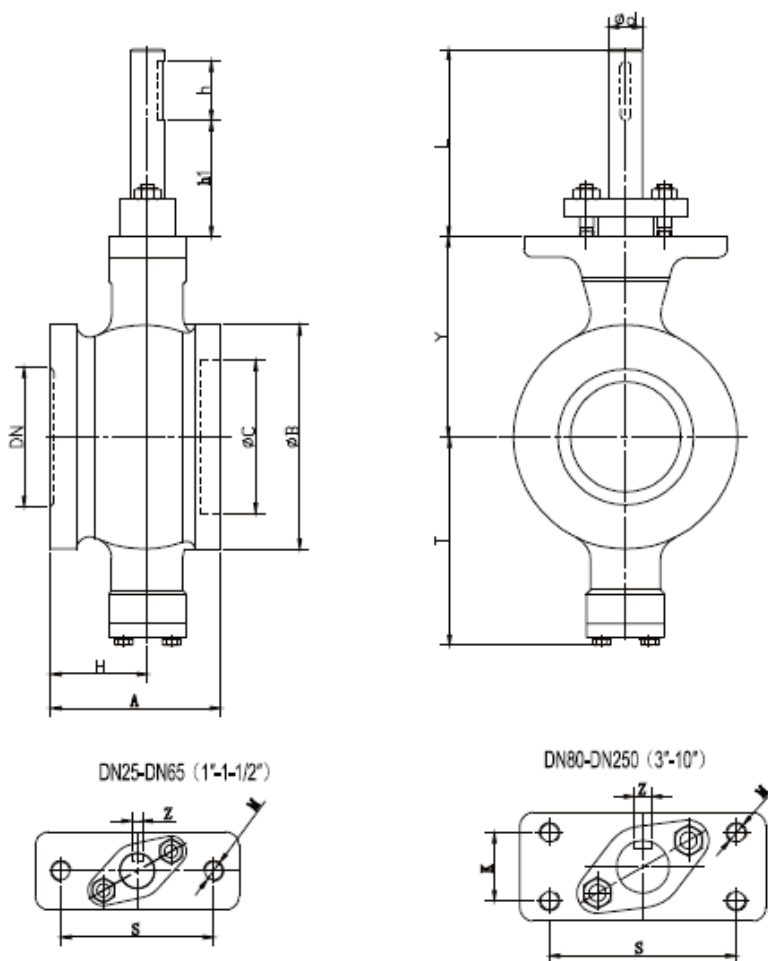
- Bare Stem

- Size Range:

- ⊕ DN50-DN250
- ⊕ Handle Bar is available for DN25~DN100
- ⊕ Gearbox is available for DN25~DN250

- Options:

- ⊕ Stem Adapter (round to square)
- ⊕ ISO5211 Mounting Bracket



DIN PN10/16/25, ANSI 150

DN	A	B	C	T	Y	L	d	h	S	K	M	Z	Weight kg	
													PN10/16	PN25
25	50	68	38	81	73	75	16	35	75	/	2-M10	5	2.6	2.9
32	60	76	45	86	78	75	16	35	75	/	2-M10	5	3	3.3
40	60	84	50	90	80	75	16	35	75	/	2-M10	5	3.5	4
50	75	100	62	93	90	75	16	35	75	/	2-M10	5	4.5	5
65	85	118	73	108	105	75	16	35	75	/	2-M10	5	6	7
80	100	132	90	123	118	75	20	35	90	8	4-M10	6	8	9
100	115	158	115	138	130	75	20	35	90	28	4-M10	6	12	13
125	129	184	134	148	145	80	25	40	90	28	4-M10	8	19	20
150	160	216	164	170	170	94	30	50	110	40	4-M12	8	30	33
200	200	268	206	200	201	94	30	50	110	40	4-M12	8	47	51
250	240	326	260	240	237	98	40	60	135	40	4-M16	12	79	87