

## Series W-ECBV-16Q

### Flange Electric Control Ball Valve

#### Size: DN65-DN150

W-ECBV series electric control ball valves are widely used in fluid control of central air conditioning, heating, water treatment, industrial processing and other systems. The actuator model used in conjunction is W-A13 series. The actuator receives the standard regulating or switching signals and rotates the ball to the specified position.

#### Features

- Unique conical inlet design realizes accurate equal percentage flow control characteristics
- Concise structure of flow passage largely avoids blockage, safe and reliable
- High flow capacity, low resistance loss
- Double-seal design, no leakage and double-security
- Ultra-silence channel to ensure quiet environment
- High shut-off pressure, high pressure
- Equipped with manual switch and opening indication

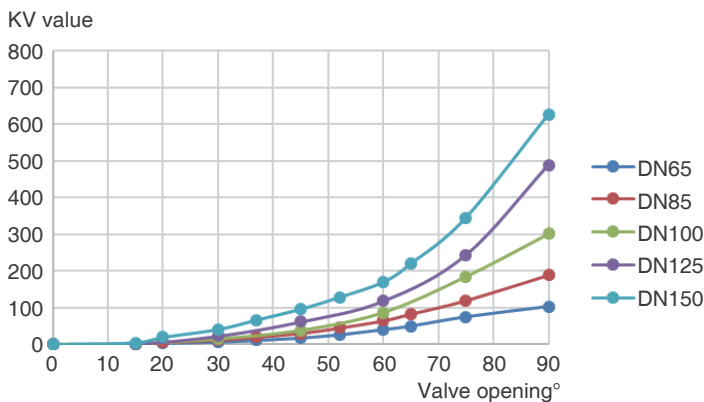
#### Working Principle

W-ECBV series electric control ball valve is driven by the angular travel actuator W-A13. The actuator drives the valve to change the flow area between the ball and the valve seat by receiving the regulating signal (0 (2)-10V or 0 (4)-20mA) or switching signal, so as to control the flow rate passing through the valve and realize the automatic regulation function.

#### Material

Component	Material	Standard
Valve Body	Ductile Cast Iron	QT400-18
Valve Seat	PTFE+EPDM	
Valve Ball	Stainless Steel	304
Valve Shaft	HPB58-2	
Seal Ring	HNBR	

#### Characteristic Curve



#### Specification

- Nominal Pressure: PN16
- Working Temperature: 5~95°C
- Protection Level: IP54
- Connection Standard: GB/T 17241.6
- Turn-off Differential Pressure: 600Kpa
- Flow Characteristics: Equal Percentage characteristic curve
- Leakage Rate: Control path  $\leq 0.01\%Kvs$
- Regulating Mode: Angular travel 90°
- Working Medium: Air conditioning cold and hot water,  $\leq 50\%$  ethylene glycol solution

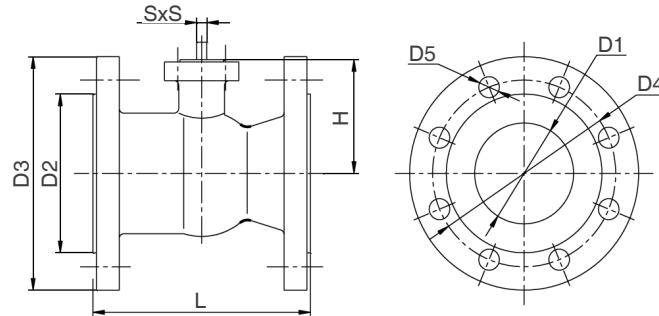
#### Product Model

Model	Type	Size	Kvs	Supporting Actuator
W-ECBV2065D-16Q	Two-way valve	DN65	103	W-A13D series
W-ECBV2080D-16Q	Two-way valve	DN80	185	W-A13D series
W-ECBV2100E-16Q	Two-way valve	DN100	300	W-A13E series
W-ECBV2125F-16Q	Two-way valve	DN125	480	W-A13F series
W-ECBV2150F-16Q	Two-way valve	DN150	600	W-A13F series

#### Model Description

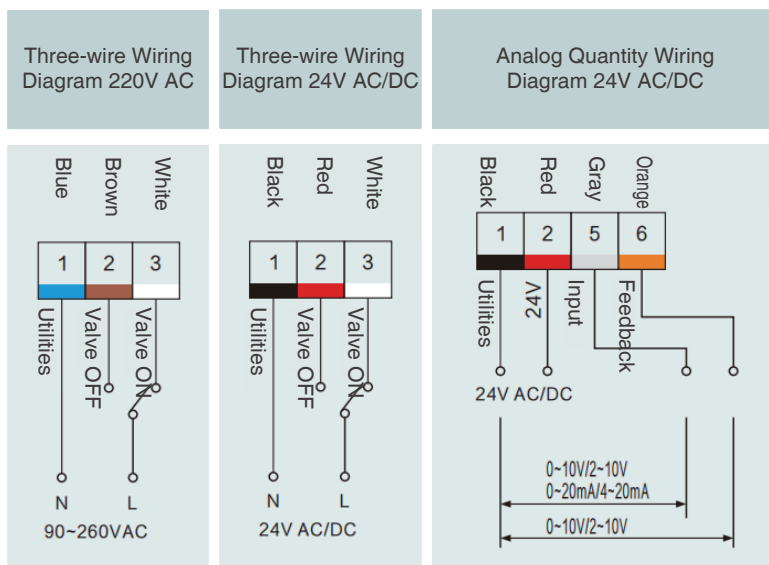
W	WATTS	W-	ECBV	2	065	D	F-	16	Q
ECBV	Electric control ball valve								
Diameter									
2: Two-way									
Size									
065-DN65:		080-DN80							
100-DN100:		125-DN125							
150-DN150:									
Supporting actuator									
D: 15Nm		E: 20Nm							
F: 30Nm		Blank: Not configured							
Control mode									
Blank: regulating type		F: on-off type							
Pressure-bearing grade		PN16							
Valve body material		Ductile iron							

## Installation Dimensions



Size	L (mm)	H (mm)	D1 (mm)	D2 (mm)	D3 (mm)	D4 (mm)	D5 (mm)	SxS (mm)	Number of D5 passing through the bolt holes	Bolt thread Th
DN65	190	86	43	120	185	145	18	10x10	4	M16
DN80	203	94	54	136	200	160	18	10x10	8	M16
DN100	229	103	65	156	220	180	18	12x12	8	M16
DN125	245	117	84	188	250	210	18	12x12	8	M16
DN150	250	130	100	210	285	240	22	12x12	8	M20

## Wiring Diagram



## Installation Instruction

1. The two-way control ball valve is recommended to be installed in the return pipe of the system to reduce the thermal stress on the valve;
2. The three-way control ball valve can be used in the shunting or mixed-flow system respectively. When installing, attention shall be paid to the direction of the T-shaped marking slot and switch at the top of the valve stem, as detailed in the schematic diagram below;
3. The ball valve can be installed horizontally or vertically, but it cannot be installed upside down;
4. The product leaves the factory in a closed state.