

Series W-ECBV-16Z (DN65-DN150)

Electric Control Ball Valve

◆ Application

Series W-ECBV electric control ball valve is widely used to regulate the flow in center air-conditioning, heating, water treatment and industry processing systems. It is driven by the Series W-A12 rotary actuator. After receiving a standard regulation signal or a floating point signal, the actuator rotates the ball in the valve body to the designated opening position.

◆ Features

- Accurate equal percentage flow control characteristic achieved by its unique coned water inlet
- Concise structure of flow passage largely avoids blockage
- High flow capacity and low resistance loss
- No leakage by using double shaft seal
- Super silence design achieves quiet operation
- High shutoff pressure and high working pressure
- Equipped with manual lever and opening degree indicator

◆ Operating Principles

Series W-ECBV electric control ball valve is driven by the Series W-A12 rotary actuator. After receiving a standard regulation signal (0-10V or 4-20mA) or a floating point signal, the actuator rotates the ball in the valve body to the designated opening position. Because the flow area between the valve ball and the valve seat is increased / decreased by this rotation, the flow through the valve is regulated correspondingly. This is the valve's auto-control process.

◆ Technical specification

Dimensions	DN65-DN150
Working Temperature:	2~94°C
Working Pressure:	PN16
Fluid Medium:	Water, ≤ 50% Glycol Solution
Connection:	Flange Connection
Connection Standard:	GB/T 9113.1-2000
Shutoff Pressure:	600KPa
Control Characteristic:	Equal Percentage
Leak Rate:	Control Path ≤ 0.01% Kvs
Adjustment:	Rotary Motion 90°

Material:

- Valve Body: Casting Iron HT250
- Valve Seat: PTFE
- Valve Ball: Stainless Steel 304
- Valve Shaft: Stainless Steel 304
- Sealing: NBR

◆ Technical Parameters

Valve Type:

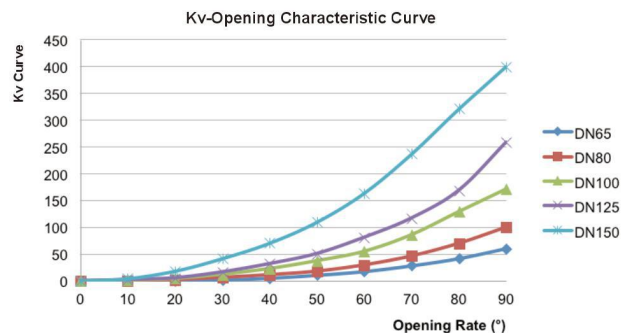
Type	Description	Size	Kvs	Actuator
W-ECBV2065C-16Z	Two-way	DN65	64	Series W-A12C
W-ECBV2080C-16Z	Two-way	DN80	102	
W-ECBV2100D-16Z	Two-way	DN100	163	Series W-A12D
W-ECBV2125D-16Z	Two-way	DN125	260	
W-ECBV2150D-16Z	Two-way	DN150	416	



Coding Rule:

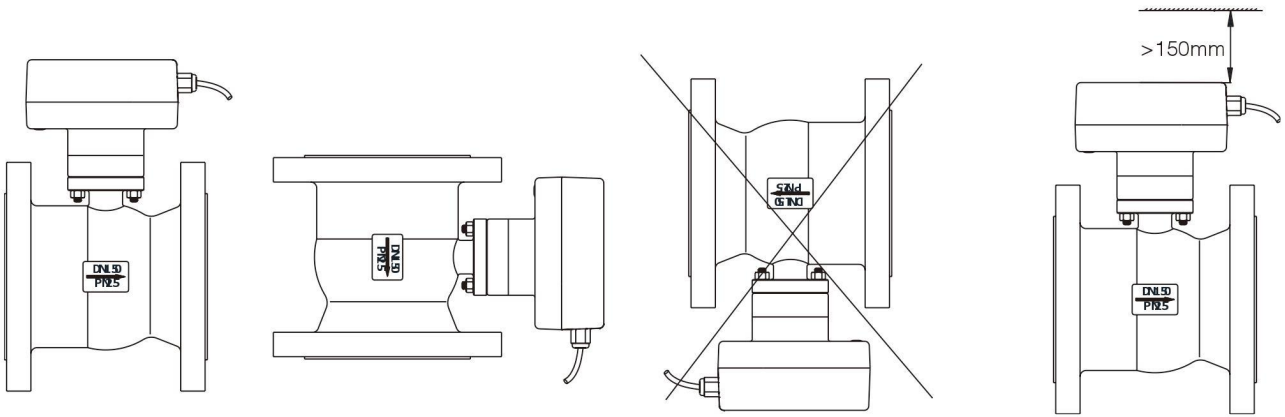
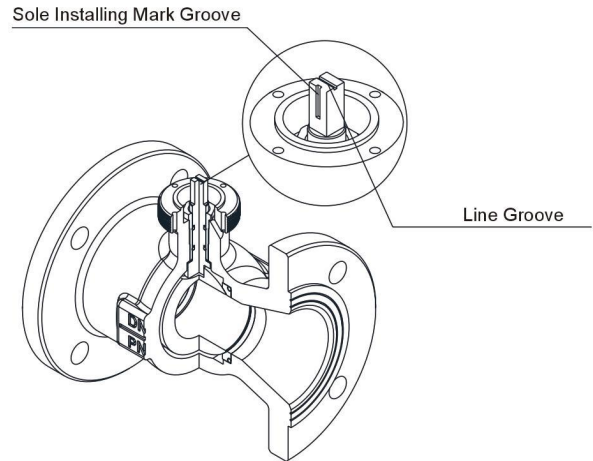
W	WATTS	W- E C B V 2 0 6 5 C- 1 6 Z
ECBV	Electronic Control Ball Valve	
2	Two-way	
Size		
065-DN65	080-DN80	
100-DN100	125-DN125	
150-DN150		
Actuator Torque		
C:25Nm	D:65Nm	
Pressure Class	PN16	
Body Material	Casting Iron	

Kv- Opening Characteristic Curve:

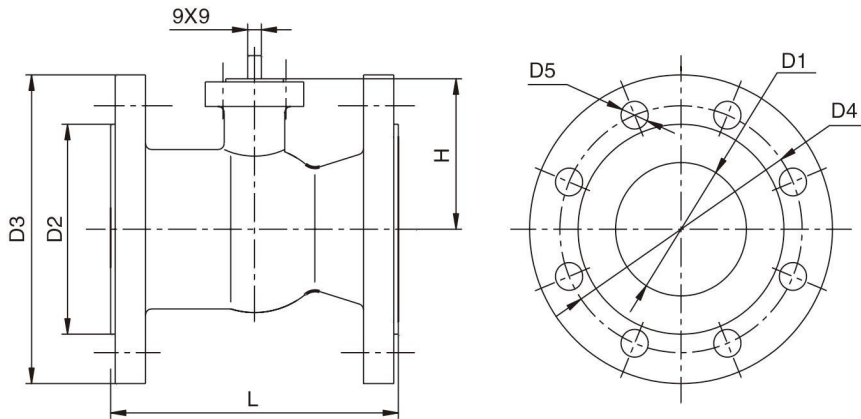


◆ Installation

The actuator can be installed after the valve has been installed in the pipe. The line groove on the top of the valve stem stands for the direction of the valve ball's through hole. It allows users to know the opening degree of the inside valve ball conveniently. Moreover, when installing the actuator, the direction of the shaft pin in the actuator's square hole should be in the line with the direction of the sole installing mark groove on the valve stem, as illustrated in the following figure.



Installation Direction:



Size	L(mm)	H(mm)	D1(mm)	D2(mm)	D3(mm)	D4(mm)	D5(mm)	S×S(mm)	No. of D5	Bolt Thread
DN65	190	98	82	120	185	145	18	9×9	4 / 8	M16
DN80	190	98	82	136	200	160	18	9×9	8	M16
DN100	230	108	102	156	220	180	18	9×9	8	M16
DN125	254	115	125	188	250	210	18	12×12	8	M16
DN150	267	133	154	210	285	240	22	12×12	8	M20