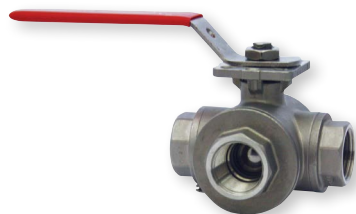


# 3-WAY NPT BRASS BALL VALVES

## Full Port, Electric or Pneumatic Actuators



WE35-DHD00-T1



WE35-DDA02-L1



WE35-DDA02-T1-AA01



WE35-DTD01-T3-A



The **Series WE35 3-Way NPT Brass Ball Valves** incorporate a full port 3-way brass ball valve for great flow rates with minimal pressure drop. The valve features a blowout proof stem for added safety, reinforced PTFE seats and seals for longer life, and a brass ball for better performance. Actuators are direct mounted creating a compact assembly for tight spaces.

The Series WE35 can be configured with either an electric or pneumatic actuator. Electric actuators are available in weatherproof or explosion-proof, a variety of supply voltages, and two-position or modulating control. Two-position actuators use the supply voltage to drive the valve open or closed, while the modulating actuator accepts a 4-20 mA input for valve positioning. Actuators feature thermal overload protection and permanently lubricated gear train.

The pneumatic double acting actuator uses an air supply to drive the valve open and closed. The actuator has two supply ports, with one driving the valve open and the other driving the valve closed. Spring return pneumatic actuators use the air supply to open the valve and internally loaded springs return the valve to the closed position. Also available is the SN solenoid valve to electrically switch the air supply pressure between the air supply ports for opening and closing the valve. Actuators are constructed of anodized and epoxy coated aluminum for years of corrosion free service.

### BENEFITS/FEATURES

- Capable of being configured to fit most applications
- Limit switches can be mounted to manual valves for remote monitoring
- Weatherproof or explosion-proof electric actuators
- Double acting or spring return anodized aluminum pneumatic actuators
- Full port design reduces the pressure drop across the valve

### APPLICATIONS

- Gas or liquid flow control
- Ideal for quick bubble tight shut-off
- Mixing or diverting liquids and gases

### SPECIFICATIONS

#### VALVE

**Service:** Compatible liquids and gases.

**Body:** 3-way.

**Line Sizes:** 1/2 to 2".

**End Connections:** Female NPT.

**Pressure Limits:** 600 psi (41 bar) WOG.

**Wetted Materials:** Body, ball, and stem: Brass; Seat, seal, and packing: PTFE.

**Temperature Limits:** -20 to 425°F (-30 to 220°C).

**Other Materials:** O-ring: NBR; Handle, stem nut, ferrule: SS; Handle sleeve: Vinyl; Body and cap: Nickel plated.

**Compliance:** Meets the technical requirements of EU Directive 2011/65/EU (RoHS II).

#### ACTUATORS

##### Pneumatic "DA" and "SR" Series

**Type:** DA series is a double acting and SR series is a spring return (rack and pinion).

**Normal Supply Pressure:** DA: 40 to 115 psi (2.7 to 7.9 bar); SR: 80 psi (5.5 bar).

**Maximum Supply Pressure:** 120 psi (8.6 bar).

**Air Connections:** DA02 to DA03: 1/4" female NPT; SR02 to SR04: 1/4" female NPT.

**Housing Material:** Anodized aluminum body and epoxy coated aluminum end caps.

**Temperature Limits:** -40 to 176°F (-40 to 80°C).

**Accessory Mounting:** NAMUR standard.

##### Electric "TD" and "MD" Series

**Power Requirements:** 110 VAC, 220 VAC, 24 VAC, or 24 VDC (MD models not available in 24 VDC).

**Power Consumption:** See instruction manual.

**Cycle Time (per 90°):** TD01: 4 s; MD01: 10 s; TD02: 20 s).

**Duty Rating:** 85%.

**Enclosure Rating:** NEMA 4X (IP67).

**Housing Material:** Powder coated aluminum.

**Temperature Limits:** -22 to 140°F (-30 to 60°C).

**Electrical Connection:** 1/2" female NPT.

**Modulating Input:** 4-20 mA.

**Standard Features:** Manual override, position indicator, and TD models come with two limit switches.

##### Electric "TI" and "MI" Series

**Power Requirements:** 110 VAC, 220 VAC, 24 VAC, 24 VDC.

**Power Consumption:** See instruction manual.

**Cycle Time (per 90°):** See instruction manual.

**Duty Rating:** See instruction manual.

**Enclosure Rating:** NEMA 7, designed to meet hazardous locations: Class I, group C and D; Class II, group E, F and G; division I and II.

**Housing Material:** Powder coated aluminum.

**Temperature Limits:** -40 to 140°F (-40 to 60°C).

**Electrical Connection:** 1/2" female NPT.

**Modulating Input:** 4-20 mA.

**Standard Features:** Position indicator and two limit switches.

USA: California Proposition 65  
**WARNING:** This product can expose you to chemicals including Lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).

# 3-WAY NPT BRASS BALL VALVES

Full Port, Electric or Pneumatic Actuators

MODEL CHART						
Size	Cv (gal/min)	Popular Hand Operated Model	Popular Double Acting Pneumatic Model	Popular Spring Return Pneumatic Model	Popular NEMA 4X Two Position Electric (110 VAC) Model	Popular NEMA 4X Modulating Electric (110 VAC) Model
1/2"	13	WE35-CHD00-T1	WE35-CDA02-T2	WE35-CSR02-T2	WE35-CTD01-T2-A	WE35-CMD01-T2-A
3/4"	37	WE35-DHD00-T1	WE35-DDA02-T2	WE35-DSR02-T2	WE35-DTD01-T2-A	WE35-DMD01-T2-A
1"	49	WE35-EHD00-T1	WE35-EDA02-T2	WE35-ESR03-T2	WE35-ETD01-T2-A	WE35-EMD01-T2-A
1-1/4"	59	WE35-FHD00-T1	WE35-FDA03-T2	WE35-FSR03-T2	WE35-FTD01-T2-A	WE35-FMD01-T2-A
1-1/2"	100	WE35-GHD00-T1	WE35-GDA03-T2	WE35-GSR03-T2	WE35-GTD01-T2-A	WE35-GMD01-T2-A
2"	115	WE35-HHD00-T1	WE35-HDA03-T2	WE35-HSR04-T2	WE35-HTD02-T2-A	WE35-HMD02-T2-A

MODEL CHART - HAND OPERATED AND PNEUMATIC ACTUATOR						
Example	WE35	-CSR02	-T1	-A	A	00 WE35-CSR02-AA00
Series	WE35					Brass 2-piece NPT
Size and Range		CHD00 DHD00 EHD00 FHD00 GHD00 HHD00 CDA02 DDA02 EDA02 FDA03 GDA03 HDA03 CSR02 DSR02 ESR03 FSR03 GSR03 HSR04				1/2" hand operated 3/4" hand operated 1" hand operated 1-1/4" hand operated 1-1/2" hand operated 2" hand operated 1/2" double acting 3/4" double acting 1" double acting 1-1/4" double acting 1-1/2" double acting 2" double acting 1/2" spring return 3/4" spring return 1" spring return 1-1/4" spring return 1-1/2" spring return 2" spring return
Valve Position			T1 T2 T3 T4 L1			Flow path A Flow path B Flow path C Flow path D Flow path E
Solenoid				N A		No solenoid NEMA 4X NAMUR solenoid
Solenoid Voltage				N A B C D E		No solenoid 110 VAC 220 VAC 24 VAC 24 VDC 12 VDC
Positioner and Switches					00 01 02 03 04 06 07 08 09	None 42AD0 exp limit switch 45VD0 exp position transmitter 42AD0-B ATEX limit switch 42AD0-IE IECEX limit switch QV-210101 poly limit switch VPS and P1 prox switch 265ER-D5 positioner 285ER-D5 smart positioner

MODEL CHART - ELECTRIC ACTUATOR				
Example	WE35	-GMD01	-T2	-A WE35-GMD01-A
Series	WE35			Brass 2-piece NPT
Size and Range		CTD01 DTD01 ETD01 FTD01 GTD01 HTD02 CMD01 DMD01 EMD01 FMD01 GMD01 HMD02 CTI01 DTI01 ETI02 FTI02 GTI02 HTI03 CMI01 DMI01 EMI02 FMI02 GMI02 HMI03		1/2" electric two-position 3/4" electric two-position 1" electric two-position 1-1/4" electric two-position 1-1/2" electric two-position 2" electric two-position 1/2" electric modulating 3/4" electric modulating 1" electric modulating 1-1/4" electric modulating 1-1/2" electric modulating 2" electric modulating 1/2" exp electric two-position 3/4" exp electric two-position 1" exp electric two-position 1-1/4" exp electric two-position 1-1/2" exp electric two-position 2" exp electric two-position 1/2" exp electric two-position 3/4" exp electric two-position 1" exp electric two-position 1-1/4" exp electric two-position 1-1/2" exp electric two-position 2" exp electric two-position
Valve Position			T1 T2 T3 T4 L1	Flow path A Flow path B Flow path C Flow path D Flow path E
Actuator Voltage				A 110 VAC B 220 VAC C 24 VAC D 24 VDC