

#### Potable water valve, 2-way, Flange

- For potable water applications
- NSF/ANSI 372 Lead Free
- NSF/ANSI 61 CLD 23 Water Quality
- CRN: OC/2102CL
- MSS SP67-2002a





2-year warranty



### **Technical data**

### **Functional data**

Valve size [mm]	4" [100]
Fluid	Potable water
Fluid Temp Range (water)	-30120°C [-22250°F]
Body Pressure Rating	ANSI Class Consistent with 125, 200 psi CWP
Close-off pressure Δps	150 psi
Flow characteristic	modified equal percentage
Leakage rate	0%
Pipe connection	Flange
	for use with ASME/ANSI class 125/150
Installation orientation	upright to horizontal (in relation to the stem)
Servicing	maintenance-free
Rangeability Sv	30:1 (for 3070° range)
Flow Pattern	2-way
Controllable flow range	90° rotation
Cv	600
Maximum Velocity	12 FPS
Lug threads	5/8-11 UNC
Valve body	Ductile cast iron ASTM A536
Body finish	Epoxy powder coating (black RAL 9005)

### Materials

Lug threads	eads 5/8-11 UNC	
Valve body	Ductile cast iron ASTM A536	
Body finish	Epoxy powder coating (black RAL 9005)	
Stem	416 stainless steel	
Stem seal	Buna-N	
Seat	EPDM	
Bearing	RPTFE	
Disc	Aluminum Bronze	
Non Fail-Safe	DRB(X)	

# Suitable actuators

Non Fail-Safe	DRB(X) DRCB(X) N4
Electrical fail-safe	DKRB(X)

# Safety notes

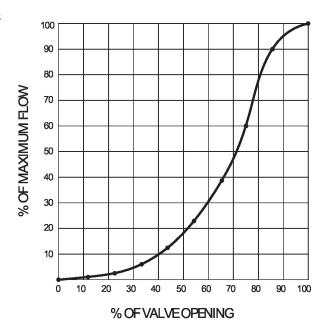


• The valve has to be exercised at least once a week, so that the quality of potable water as well as the functionality are not affected.



### **Product features**

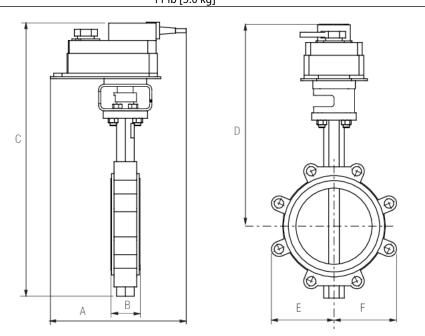
# Flow/Mounting details



**Operating mode** The valve is adjusted by a rotary actuator. The rotary actuator is connected by an on/off signal. Open the ball valve counterclockwise and close it clockwise.

# **Dimensions**

DN	Weight
100	11 lb [5.0 kg]

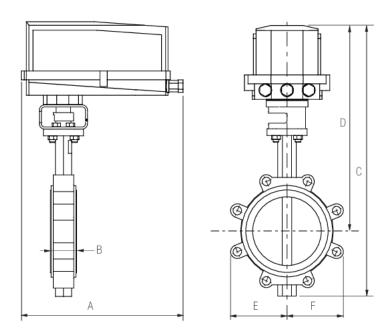


Valve with DR/DK Actuator

Α	В	С	D	E	F	Number of Bolt Holes
11.3" [286]	2.1" [54]	21.0" [533]	17.0" [431]	4.3" [110]	4.3" [110]	8



# **Dimensions**



Valve with DR N4/DK N4 Actuator

Α	В	С	D	E	F	Number of Bolt Holes
14.1" [358]	2.1" [54]	23.0" [584]	19.0" [483]	4.3" [110]	4.3" [110]	8

# Technical data sheet

**DRCX24-3-T N4** 







Tac	hnical	data

Electrical data	Nominal voltage	AC/DC 24 V		
	Nominal voltage frequency	50/60 Hz		
	Nominal voltage range	AC 19.228.8 V / DC 21.628.8 V		
	Power consumption in operation	12 W		
	Power consumption in rest position	3 W		
	Transformer sizing	36 VA		
	Electrical Connection	Screw terminal (for 22 to 12 AWG wire)		
	Overload Protection	electronic thoughout 090° rotation		
Functional data	Direction of motion motor	selectable with switch 0/1		
	Manual override	under cover		
	Running Time (Motor)	35 s / 90°		
	Running time motor note	constant, independent of load		
	Noise level, motor	45 dB(A)		
	Position indication	Mechanical, 520 mm stroke		
Safety data	Power source UL	Class 2 Supply		
	Degree of protection IEC/EN	IP66/67		
	Degree of protection NEMA/UL	NEMA 4X		
	Enclosure	UL Enclosure Type 4X		
	Quality Standard	ISO 9001		
	Ambient humidity	Max. 100% RH		
	Ambient temperature	-22122°F [-3050°C]		
	Ambient temperature note	-4050°C for actuator with integrated heating		
	Storage temperature	-40176°F [-4080°C]		
	Servicing	maintenance-free		
Weight	Weight	10 lb [4.6 kg]		
Materials	Housing material	Die cast aluminium and plastic casing		

**Footnotes** Control Signal must be specified at time of order. Control cannot be changed via field wiring.



#### **Accessories**

Electrical accessories	Description	Туре	
	Battery backup system, for non-spring return models	NSV24 US	
	Battery, 12 V, 1.2 Ah (two required)	NSV-BAT	
	Auxiliary switch 1x SPDT add-on	S1A	
	Auxiliary switch 2x SPDT add-on	S2A	
	Feedback potentiometer 140 Ω add-on, grey	P140A GR	
	Feedback potentiometer 5 kΩ add-on, grey	P5000A GR	
	Feedback potentiometer 1 kΩ add-on, grey	P1000A GR	
	Feedback potentiometer 2.8 kΩ add-on, grey	P2800A GR	
	Feedback potentiometer 500 Ω add-on, grey	P500A GR	
	Feedback potentiometer 10 kΩ add-on, grey	P10000A GR	
Factory add-on option only	Description	Туре	
	Heater, with adjustable thermostat	ACT_PACK_H	

### **Electrical installation**

# **X** INSTALLATION NOTES

Provide overload protection and disconnect as required.

Actuators may also be powered by DC 24 V.

For triac sink the Common connection from the actuator must be connected to the Hot connection of the controller. Position feedback cannot be used with a triac sink controller; the actuator internal common reference is not compatible.

🛕 IN4004 or IN4007 diode. (IN4007 supplied, Belimo part number 40155).

Actuators are provided with a numbered screw terminal strip instead of a cable.
Meets cULus requirements without the need of an electrical ground connection.

Marning! Live electrical components!

During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.

#### Wiring diagrams

