



VALVE SERIES

Electric Actuated Wafer Butterfly Valve

D971X

Compact electric actuated wafer butterfly valve for water supply, HVAC, sewage treatment, municipal networks and compatible industrial pipeline applications.

01 Key Specifications

Product Type	Electric actuated wafer centerline butterfly valve
Size Range	DN50-DN600
Pressure Class	PN10 / PN16
Body Materials	Ductile iron / WCB / SS304 / SS316
Disc Materials	Ductile iron / Carbon steel / SS304 / SS316 / Aluminum bronze
Seat Materials	EPDM / NBR / PTFE
Actuator	Electric, on/off or modulating
Protection	IP67 standard; IP68 optional

02 Design Features & Configuration

Wafer Body Compact installation between pipeline flanges.	Centerline Design Concentric soft-seated structure for reliable shut-off.
Electric Actuation Quarter-turn remote and automated operation.	Control Options On/off and modulating configurations.
Explosion-Proof Option Exd II BT4 / Exd II CT6 options.	Manual Override Available on selected actuator models.

03 Electric Actuator Configuration

Actuator Type	Quarter-turn electric actuator, 90° rotation
Control Mode	On/off / Modulating
Power Supply	AC 220V / AC 380V / AC 110V / DC 24V
Control Signal	4-20mA / 1-5V / 0-10V DC
Explosion-Proof	Exd II BT4 / Exd II CT6
Protection Class	IP67 / IP68
Ambient Temperature	-20°C to +60°C
Manual Override	Handwheel / Declutchable override
Position Feedback	Open/close limit switches / 4-20mA
Mounting	ISO 5211

04 Materials of Construction

Component	Material Options
Body	Ductile iron (QT450-10); WCB; SS304; SS316
Disc	Ductile iron with nylon coating; carbon steel; SS304; SS316; aluminum bronze
Stem	SS416 / SS304 / SS316 / 2Cr13
Seat	EPDM / NBR / PTFE
O-ring / Stem Seal	NBR / EPDM / FKM
Bushing	Bronze / PTFE-lined bronze / self-lubricating bearing

05 Operating Temperature

Item	Temperature Range
Actuator Ambient Temperature	-20°C to +60°C
EPDM Seat	-40°C to +135°C (commonly -29°C to +120°C)
NBR Seat	-23°C to +82°C (commonly -20°C to +80°C)
PTFE Seat	Higher-temperature option

Note: Temperature ranges are reference values and may vary depending on material grade, medium, and pressure.

06 Pressure Ratings & Size Coverage

Pressure Class	Body Materials	Size Range
PN10	Ductile iron / WCB / SS304 / SS316	DN50-DN600
PN16	Ductile iron / WCB / SS304 / SS316	DN50-DN600

07 Dimensions & Weight

DN	NPS	L (mm)	H (mm)	Weight (kg)
50	2 in	43	215	10.5
65	2-1/2 in	46	230	12.5
80	3 in	46	245	15.0
100	4 in	52	265	19.0
125	5 in	56	285	24.0
150	6 in	56	310	30.0
200	8 in	60	355	46.0
250	10 in	68	405	65.0
300	12 in	78	460	88.0
350	14 in	78	515	115.0
400	16 in	102	575	150.0
450	18 in	114	635	190.0
500	20 in	127	705	250.0
600	24 in	154	795	350.0

08 Standards & Certifications

Design / Manufacturing	GB/T 12238 / API 609 / BS EN 593 / ISO 10631
Face-to-Face	ISO 5752 Series 20 / EN 558-1 Series 20 / API 609 / GB/T 12221
Pressure Testing	GB/T 13927 / API 598 / ISO 5208
Actuator Mounting	ISO 5211
Flange Compatibility	EN 1092-1 / ASME B16.5 / GB/T 9113
Protection Class	IP67 / IP68
Explosion-Proof	Exd II BT4 / Exd II CT6

09 Quality & Documentation

Pressure Test Report Shell and seat pressure test documentation.	Material Certificate EN 10204 2.2 / 3.1.
Actuator Documentation Datasheet and wiring diagram.	Explosion-Proof Certificate For explosion-proof actuator configurations.
Third-Party Inspection SGS / BV / TUV.	Export Documentation Packing and shipment documentation.

10 Applications

- Water supply and distribution pipelines
- Sewage and wastewater treatment systems
- HVAC chilled-water and heating-water systems
- Municipal pipe networks and pump stations
- Power plant cooling-water systems
- Compatible industrial process pipelines

11 Product Views



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12 Frequently Asked Questions

01 What is the difference between D971X, D671X and D371X?

D971X uses an electric actuator, D671X uses a pneumatic actuator, and D371X uses a manual worm gear.

02 Can D971X be used for natural gas?

D971X is mainly used for water, air, oil and compatible industrial media. Gas-service configurations depend on the selected valve and seat materials.

03 When should I choose an electric actuator?

Electric actuation is suitable for remote control, BMS/SCADA integration and modulating control where compressed air is not available.

04 Which seat material should I choose - EPDM or NBR?

EPDM is commonly used for water and general service. NBR is commonly used for oil and air service.