

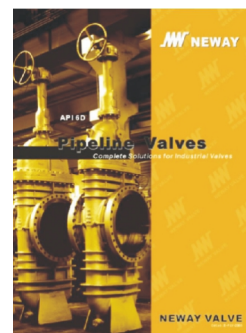
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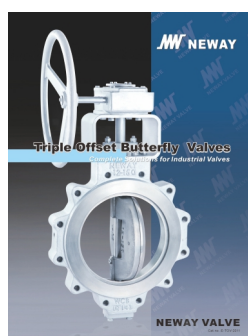
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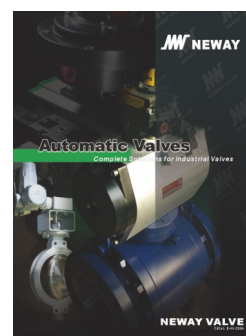
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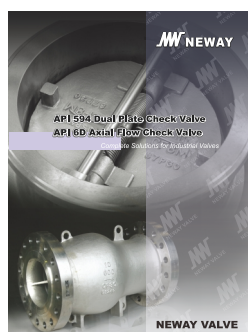
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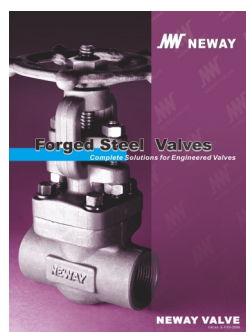
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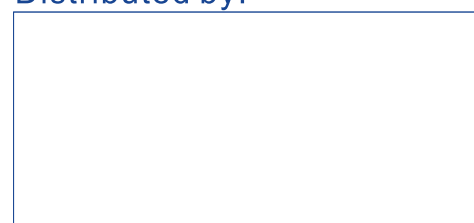


Cat.no.:E-CSC

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NW NEWAY

Actuated Valve

Complete Solutions for Industrial Valves



NEWAY VALVE

Cat.no.:E-AV-2016

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Complete Solutions for Industrial Valves

As a global leader of valve manufacturing, Neway (SSE:603699) is dedicated to the production, research, and development of industrial valves. Neway is committed to providing complete valve solutions to all industries through advanced engineering and innovation.

Neway’s product line includes Ball, Gate, Globe, Check, Butterfly, Nuclear, Control, Subsea, Safety valves. Our high quality standards and innovative ability are recognized by many global end users and EPCs. Neway valves are utilized in a wide variety of industries and working conditions such as Gas, Oil, Refining, Chemical, Coal Chemical, Offshore, FPSO, Air Separation, LNG, Nuclear Power, Power Generation, and Pipeline Transmission applications.

Facilities & Service

Neway has developed a sophisticated multi-plant management system operating one valve assembly plant, one API6A valve plant, three foundries, and one R&D center. Our newest assembly plant was expanded in 2013, and it now covers 35,000 square meters.

Advanced software (ANSYS, FE-Safe, CF-Design, Siemens PLM and NX) is applied here at Neway for the Research & Development of products. We use SAP to control the traceability and status of all products during the manufacturing process. In order to ensure the safety, eco-friendliness, and reliability of our products, we use the most advanced fire-safe, cryogenic, high pressure, and fugitive emission test equipment.

As part of Neway’s global strategy, to provide better service to our customers, we have established our overseas subsidiaries in North America, Brazil, Netherlands, Italy, Singapore, and Dubai along with over 80 agents and distributors worldwide.

High Quality, High Value

Neway is dedicated to continuous improvement. We maintain a quality management system that encompasses our entire operation from order entry to final inspection. Through continuous efforts, Neway’s products have successfully obtained industry certifications, including ASME UV & NB, NBBI, KGS, CE, CCS, and BV approvals.

Quality Commitment

Neway recognizes the importance of valve quality for the safety and protection of personnel heath and property. It is our quality commitment to focus our resources to provide our customers with first class products at a competitive price,that are designed, manufactured, inspected and tested in accordance with our customer's specifications and that comply with all international standards.

With respect to the facts that the current industrial standards do not always take into consideration the likelihood and consequences of possible deterioration in service, related to specific service fluids or the external environment in which they operate. Our customers are requested to keep an open line of communication with our engineering department to identify and implement standards, that will provide valves with the possibility of deterioration in service, so as to ensure safety over the valves expected lifetime.



Neway automation consist of Quarter Turn Valves (ball & butterfly valves) and Multi-turn Valves (gate & globe valves) with pneumatic, electric, electro-hydraulic, gas hydraulic and gas over oil actuators for both on-off and modulating duties. The Neway automation solution includes, besides conventional Remote Operated Valves (ROV), typical products such as:

- Shut Down Valves
- Emergency Shut Down Valves (ESDV)
- Motor Operated Valves (MOV)
- Hydraulically Operated Valves
- Gas Over Oil Operated Valves



Typical 28" #300 SDV for oil & gas service

Shut Down Valves

Local & Remote on / off service

Options:

- Manual over ride (Handwheel, gear box or hydraulic type)
- Pneumatic actuation
- Air tank for actuator operation in case of air supply failure
- Positioner for modulating duty
- Fireproof configuration

Emergency Shut Down Valves (ESDV)

Local & Remote on / off service

Quick closing type

Options:

- Manual over ride (Hand wheel, gear box or hydraulic type)
- Partial Stroking System
- Air tank for actuator operation in case of air supply failure
- Gas or Nitrogen as actuating medium
- Line Break (Mechanical or Electronic type) Systems
- High Pilot Closing
- Low Pilot Closing
- Fireproof configuration



10" #150 Ball Valve with Pneumatic Spring Return Actuator for ESD service with Partial Stroking System

Motor Operated Valves (MOV)

Local & Remote on / off service

Options:

- Modulating duty
- Manual override
- Compatibility to bus systems like Foundation Field Bus, Profibus, Model bus etc
- Fireproof configuration



12" #150 Trunnion Mounted Ball Valve with Electric Actuator



20" #300 Trunnion Mounted Ball Valve with Hydraulic Actuator

Hydraulically Operated Valves

Local & Remote on / off service

Options:

- Hydraulic Power Packs (Individual or central units)
- Emergency operation by hand pump
- Nitrogen Accumulator for emergency operation
- Solar powered electro-hydraulic actuation systems
- Fireproof configuration

Gas Over Oil Operated Valves

Local & Remote on / off service

Line gas is used as the actuating medium

Emergency manual operation by means of hand pump

Options:

- Direct Gas Actuator
- Remote operation by momentary signals from satellite
- Hydraulic actuation by means of Gas Over Oil Systems
- Torque limiting device
- Remote opening prevention against differential pressure
- Gas storage tank for remote emergency operation in case of gas supply failure
- Line Break Systems
- High Pilot Closing
- Low Pilot Closing
- Fail close configuration



30" #150 Full Welded Trunnion Mounted Ball Valve with Direct Gas Actuator with Local & Remote Operation and line break system

Product Range

Neway Automated Valve

[illegible]

Note:

1. Face to face and end to end dimension conform to BS 2080, ANSI B16.10 or ISO 5752, or manufacture's standard,
2. End flange dimension conform to ANSI B16.5 or ANSI B16.47,
3. BW end dimension conform to ANSI B16.25,
4. Inseption and test in accordance with API 598 or BS EN 12266,
5. Top flange dimensions are in accordance with ISO 5210 or ISO 5211,.

[illegible]

Automated Trunnion Ball Valve



Overview

- Design standard: BS5351, API6D
- Full port, reduced port
- One, two, three piece or fully welded body
- Fire safety test certified (API607, API6FA)
- Anti-static, blowout-proof stem
- Double block and bleed
- Sealant injection on stem & seats
- Optional low emission design
- Top flanged to ISO 5211
- Optional double piston effect sealing

Product range and configuration

Size:	2"~60"
Rating:	150#~2500#
Body:	Carbon steel, stainless steel, alloy
Trim:	A105N+ENP, 13Cr, F304, F316
Seal type:	Soft or metal seat
Temp:	-196~500 °C

Operation

- Lever / Gearbox
- Pneumatic Actuator
- Electric Actuator
- Hydraulic Actuator
- Gas – hydraulic Actuator
- Electric – hydraulic Actuator

Available automation solution

- Remote Operated Valves
- Emergency Shut Down Valves (ESDV)
- Motor Operated Valves (MOV)
- Hydraulically Operated Valves
- Gas Operated Valves

Applicable industry

- Oil & natural gas transmission lines
- Process control in oil, gas, chemical & petrochemical application
- Easier maintenance
- Shut off media
- Unsuitable for throttling
- Water, oil & gas
- Unsuitable for dry powder media

Automated Floating Ball Valve



Overview

- Design standard: BS5351, API6D
- Full port, reduced port
- One, two, three piece bodies
- Fire safety test certified (API607)
- Anti-static, blowout-proof stem
- Optional low emission design
- Top flanged to ISO 5211
- Optional locking device

Product range and configuration

Size:	1/2"~10"
Rating:	150#~2500#
Body:	Carbon steel, stainless steel, alloy
Trim:	A105N+ENP, 13Cr, F304, F316
Seal type:	Soft or metal seat
Temp:	-196~500 °C

Operation

- Lever / Gearbox
- Pneumatic Actuator
- Electric Actuator
- Hydraulic Actuator
- Gas – hydraulic Actuator
- Electric – hydraulic Actuator

Available automation solution

- Remote Operated Valves
- Emergency Shut Down Valves (ESDV)
- Motor Operated Valves (MOV)
- Hydraulically Operated Valves
- Gas Operated Valves

Applicable industry

- LNG
- Industrial gas manufacturing
- Gas storage
- Process control in oil, gas, chemical & petrochemical application
- Shut off media
- Unsuitable for throttling
- Water, oil & gas
- Unsuitable for dry powder media

Automated Cast Gate Valve



Overview

- Design standard: API600 & ASME B16.34
- Bolted bonnet
- Optional pressure seal bonnet
- Outside screw & yoke
- Top flange to ISO5210
- Flexible wedge
- Optional bellows seal
- API598 certified
- Low emission test certified

Product range and configuration

Size:	2"~66"
Rating:	150#~2500#
Body:	Carbon steel, stainless steel, alloy, Duplex SS
Connection:	RF, RTJ, BW
Temp:	-196~650 °C

Operation

- Lever / Gearbox
- Pneumatic Actuator
- Electric Actuator
- Hydraulic Actuator
- Gas – hydraulic Actuator
- Electric – hydraulic Actuator

Available automation solution

- Remote Operated Valves
- Motor Operated Valves (MOV)
- Hydraulically Operated Valves
- Gas Operated Valves

Applicable industry

- Petrochemical & refinery plants
- LNG
- Marine, paper mill & minerals processing
- Power plant
- Cryogenic or high-temperature process modified design
- Chemical industries

Automated Cast Globe Valve



Overview

- Design standard: BS1873 & API 623 & ASME B16.34
- Bolted bonnet
- Optional pressure seal bonnet
- Top flange to ISO5210
- Plug disc with optional needle disc
- Optional bellows seal
- Optional low emission design

Product range and configuration

Size:	2"~24"
Rating:	150#~2500#
Body:	Carbon steel, stainless steel, alloy, Duplex SS
Connection:	RF, RTJ, BW
Temp:	-196~650 °C

Operation

- Lever / Gearbox
- Pneumatic Actuator
- Electric Actuator
- Hydraulic Actuator
- Gas – hydraulic Actuator
- Electric – hydraulic Actuator

Available automation solution

- Remote Operated Valves
- Motor Operated Valves (MOV)
- Hydraulically Operated Valves
- Gas Operated Valves

Applicable industry

- Petrochemical & refinery plants
- LNG
- Marine, paper mill & minerals processing
- Power plant
- Cryogenic or high-temperature process modified design
- Chemical industries

Automated Valve Overview

Automated Forged Gate & Globe Valve



● Overview

- ▶ Design standard: API602 & B16.34
- ▶ Bolted or welded bonnet
- ▶ standard and full-bore body seat openings
- ▶ Top flange to ISO5210
- ▶ Solid wedge (gate)
- ▶ Optional bellows seal
- ▶ Optional needle disc (globe)

● Product range and configuration

▶ Size:	1/2"~3"
▶ Rating:	150#~2500#
▶ Body:	A105, F11, F22, F5, F316
▶ Connection:	NPT, SW, RF, RTJ, BW
▶ Temp:	-196~650 °C

● Operation

- ▶ Lever / Gearbox
- ▶ Pneumatic Actuator
- ▶ Electric Actuator
- ▶ Hydraulic Actuator
- ▶ Gas – hydraulic Actuator
- ▶ Electric – hydraulic Actuator

● Available automation solution

- ▶ Remote Operated Valves
- ▶ Motor Operated Valves (MOV)
- ▶ Hydraulically Operated Valves
- ▶ Gas Operated Valves

● Applicable industry

- ▶ Petrochemical & refinery plants
- ▶ LNG
- ▶ Marine, paper mills minerals processing
- ▶ Power plant
- ▶ Cryogenic or high-temperature modified design
- ▶ Chemical industries

Automated Concentric Butterfly Valve



● Overview

- ▶ Design standard: API609
- ▶ Concentric disc
- ▶ Double directional sealing
- ▶ Self-cleaning seat
- ▶ Blow-out proof stem
- ▶ Top flange to ISO5211

● Product range and configuration

▶ Size:	2"~24"
▶ Rating:	200psi(PN10) 232psi(PN16)
▶ Body:	Ductile iron, CS, SS
▶ Seal Mat:	EPDM, NBR, Viton
▶ Connection:	Wafer, Lug, Double flange
▶ Temp:	-40~120 °C

● Operation

- ▶ Lever / Gearbox
- ▶ Pneumatic Actuator
- ▶ Electric Actuator
- ▶ Hydraulic Actuator
- ▶ Gas – hydraulic Actuator
- ▶ Electric – hydraulic Actuator

● Available automation solution

- ▶ Remote Operated Valves
- ▶ Emergency Shut Down Valves (ESDV)
- ▶ Motor Operated Valves (MOV)
- ▶ Hydraulically Operated Valves
- ▶ Gas Operated Valves

● Applicable industry

- ▶ Potable & waste water
- ▶ Power plant
- ▶ Ship building paper mills & general industry
- ▶ Throttling flow
- ▶ Water, oil & gas

Automated Double Off-set Butterfly Valve



● Overview

- ▶ Design standard: API609
- ▶ Offset disc
- ▶ Zero leakage
- ▶ Soft seat, low torque
- ▶ Blow-out proof stem
- ▶ Top flange to ISO5211

● Product range and configuration

▶ Size:	3"~120"
▶ Rating:	150#, 300#, 600#
▶ Body:	CS, SS, Alloy, Duplex SS
▶ Seal Mat:	EPDM, NBR, PTFE, Viton
▶ Connection:	Wafer, Lug, Double flange
▶ Temp:	-40~120 °C

● Operation

- ▶ Lever / Gearbox
- ▶ Pneumatic Actuator
- ▶ Electric Actuator
- ▶ Hydraulic Actuator
- ▶ Gas – hydraulic Actuator
- ▶ Electric – hydraulic Actuator

● Available automation solution

- ▶ Remote Operated Valves
- ▶ Emergency Shut Down Valves (ESDV)
- ▶ Motor Operated Valves (MOV)
- ▶ Hydraulically Operated Valves
- ▶ Gas Operated Valves

● Applicable industry

- ▶ Potable & waste water
- ▶ Power plant
- ▶ Ship building paper mills & general industry
- ▶ Throttling flow
- ▶ Water, oil & gas

Automated Triple Off-set Butterfly Valve



● Overview

- ▶ Design standard: API609
- ▶ Offset disc
- ▶ Zero leakage
- ▶ Low friction closing
- ▶ Blow-out proof stem
- ▶ Top flange to ISO5211

● Product range and configuration

▶ Size:	3"~80"
▶ Rating:	150#~2500#
▶ Body:	CS, SS, Alloy, Duplex SS
▶ Seal Mat:	METAL,LAMINATED
▶ Connection:	Wafer, Lug, Double flange,Butt-Welding
▶ Temp:	-196~650 °C

● Operation

- ▶ Lever / Gearbox
- ▶ Pneumatic Actuator
- ▶ Electric Actuator
- ▶ Hydraulic Actuator
- ▶ Gas – hydraulic Actuator
- ▶ Electric – hydraulic Actuator

● Available automation solution

- ▶ Remote Operated Valves
- ▶ Emergency Shut Down Valves (ESDV)
- ▶ Motor Operated Valves (MOV)
- ▶ Hydraulically Operated Valves
- ▶ Gas Operated Valves

● Applicable industry

- ▶ Petrochemical & refining plants
- ▶ Marine, paper mills & minerals processing
- ▶ LNG
- ▶ Throttling flow
- ▶ Water, oil & gas
- ▶ Unsuitable for dry powder media
- ▶ Cryogenic or high-temperature modified design

Torque Test

Torque test is an integral step for every automated valve, Neway has professional torque tools, like torque wrench, torque transducer, to measure the torque value accurately, thus optimal and safe actuator is selected accordingly.

What's more, in usual Neway asses and calculate the measured torque value, then optimize design structure, improve process level, to reduce the torque value.



NEWAY workshop possesses advanced apparatus and follows stringent quality control procedures in order to ensure the quality of each produced valves.

Function Test

Functional test is the most important procedure before automated valves leave the factory, which further guarantees the integrity and quality of the automated valves.

Neway has advanced test-bed and rigorous steps to process pressure test and switch test in according to API598, to ensure automated valve running normally.



Design Review

Except for cooperation with well-known actuator partner, Neway has own professional technical team to make and submit accurate automated valve solution to our client. Our technical team has ability to select appropriate actuator's type and model, even includes designing diagram schedule, selecting pneumatic accessories like solenoid valve, filter regulator and limit switch.

Neway 's technical team utilizes the most advanced computer technology to perfect our automated valve, AutoCAD is widely used to design and review. Additional, Neway take the lead in using 3D modeling in automated valve.



Neway has complete technical team that includes professional designers and skillful workers to make automated valve solution and improve automated valve.



Assembly and Commissioning

Neway carries out professional actuator mounting and commissioning. In plant, skillful workers assemble the actuator on the valve and take commissioning by every automated valve.

Meanwhile, comparing to our valve competitor, Neway can purchase pneumatic actuator and accessories separately, and assemble them on a pneumatic automated valve, like adjusting layout, bending pipe. Thus better cost and delivery Neway have.

■ Actuator Selection

- ▶ Site power supply: Pressure gas, Electricity
- ▶ Linear Motion, Rotary Motion & Quarter Turn, Multi-Turns
- ▶ Fail position
- ▶ Speed & Stroking time
- ▶ Hazardous area: Explosion range & IP level
- ▶ Cycle life
- ▶ Safety factor
- ▶ Ambient temperature & environment
- ▶ Other requirements
 - √ Air Volume Tank
 - √ Fireproofing
 - √ Partial Stroke Test
 - √ SOV Test

■ Neway Actuated Valve Character

- ▶ Competence in high frequency of on/off working condition
- ▶ Standard ISO5210 & 5211 top works
- ▶ Competitive torque - BTO RTO ETO BTC RTC ETC and MAST
- ▶ High strength stem material 17-4PH, XM-19, F51, INCONEL 718
- ▶ Single-threaded/double-threaded stem for gate and globe valve
- ▶ Compliance with TSO fugitive emission for ball and butterfly valve

■ Actuator Sizing

- ▶ Valve torque value
 - √ $F(T)_{total}=F_{process}+F_{seat}+F_{packing}+F_{miscellaneous}$
 - √ $F(T)_{total}$ = total force or torque required to open, close, or throttle valve
 - √ $F_{process}$ = force or torque to overcome unbalanced process pressure
 - √ $F_{packing}$ = force or torque to overcome packing friction
 - √ F_{seat} = force or torque to provide correct seat load
 - √ $F_{miscellaneous}$ = force or torque to overcome special design factors, weight, etc
- ▶ Safety factor
 - √ Safety factor that Neway recommended is 1.3
 - √ Safety factor exceeds 1.3 where the long-term medium temperature is below -29°C and above 100°C.

■ Selection table for reference

- ▶ Pneumatic & Hydraulic table
- ▶ Electric table

Neway enjoys a close and long-standing association with well-known international actuator manufacturers, including ROTORK, EMERSON and so on. All Neway valves can be easily mounted with various types of actuators, including pneumatic, Electric, Hydraulic, Gas-Hydraulic, Electric-Hydraulic. No matter which brand of actuator or which type of actuator, Neway can provide the right combination of valve and actuator.

Below is well-known brand of actuator that cooperate with Neway.

Electric actuator:	Pneumatic actuator:	Hydraulic actuator:	Electric-Hydraulic actuator:	Gas-Hydraulic actuator:
▶ ROTORK	▶ BETTIS	▶ ROTORK	▶ FAHLKE	▶ SHAFER
▶ AUMA	▶ ROTORK	▶ BETTIS	▶ ROTORK	▶ ROTORK
▶ BERNARD	▶ BIFFI	▶ FAHLKE	▶ BETTIS	▶ FAHLKE
▶ BIFFI	▶ LEDEEN	▶ LEDEEN	▶ LEDEEN	▶ LEDEEN
▶ EIM	▶ FLOWBUS	▶ BIFFI	▶ BIFFI	▶ ZHONGHUAN



NEWAY Head Office

Total area: 2,295sqm
Office area: 6,885sqm

Founded in 2014



Neway Manufacturing Base

Main products: Ball Valve, Gate Valve,
Globe Valve, Check Valve,
Forged Steel Valve, Butterfly Valve

Building area: 230,000 sqm
Work shop: 140,061 sqm

Established in 2006 and expanded in 2013



NEWAY Foundry (Suzhou)

Main products: Sand Casting
Building area: 112,500 sqm
Work shop: 98000 sqm

Founded in 2008 and expanded in 2015



NEWAY Foundry (Dafeng)

Main products: Lost wax investment casting
Building area: 46,000 sqm
Work shop: 12,000 sqm

Founded in 2004



NEWAY Foundry (Dafeng)

Main products: Lost wax investment casting
Building area: 40,000 sqm
Work shop: 20,000 sqm

Founded in 2008



Seller will replace without charge or refund the purchase price of products provided by Seller which prove to be defective in material or workmanship, provided in each case that the product is properly installed and is used in the service for which Seller recommends it and that written claim, specifying the alleged defect, is presented to the Seller within 18 months from the date of shipment or 12 months after installation, whichever occurs first. Seller shall in no event bear any labor, equipment, engineering or other costs incurred in connection with repair of replacement. The warranty stated in this paragraph is in lieu of all other warranties, either expressed or implied. With respect to warranties, this paragraph states Buyer's exclusive remedy and seller's exclusive liability.