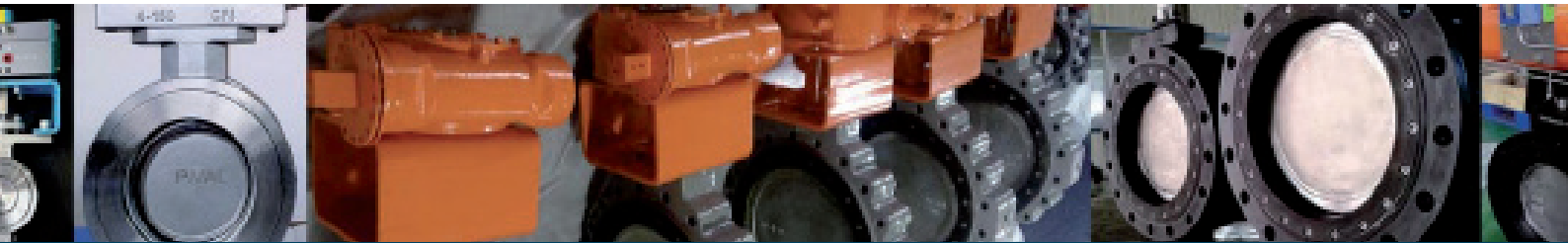
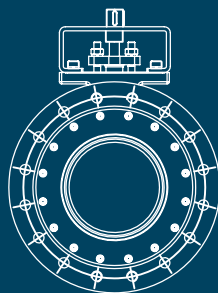
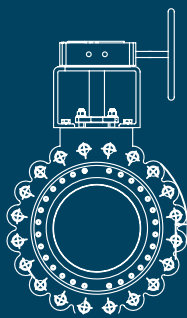


FLOW
MANAGEMENT INDUSTRIES

DOUBLE ECCENTRIC BUTTERFLY VALVE



Series a Lip-Seat Design / DA1712-02



COMPANY PROFILE

Who professionally specializes in designing and manufacturing butterfly valve, ball valve, gate valve, check valve, globe valve, plug valve etc. As one of Chinese leading valve player, more than 8% of annual avenue invested into research & development for new products and technology, with effort of several SinoPival generations, now its product range covers more than hundreds kinds of valves, overwhelming superiority in general valves (gate, check, globe valves) and the leader role in technology valves (butterfly valve, ball valve). For improving the brand awareness, the SinoPival brand registered in 2015 as a trademark for international marketing, basing on its valve manufacturing facilities initially invested and established in 1990s and tightly work together with its sister companies & production facilities FD plant, TTWS plant, NS plant and payment & shipment company Xiamen Import & Export Co., Ltd. to serve customers from all over the world. The valves widely applied in oil & gas, power plant, paper-making, metallurgy, food, civil engineerings and so on. The manufacturing facilities covering total area of more than 50,000 m² and having about 300 workers (including 15 R&D engineers). Equipped with ERP, CAD & CAM designing & manufacturing capabilities, 120 set of CNC machining center, numerical controlled machine tools, lathes, drillings, millings, borings, physical and chemical inspection-testing equipment, three-dimensional measuring instrument, spectrum analyzer etc.



- Products: butterfly valve, ball valve, gate valve, check valve, globe valve, plug valve, actuators etc.
- Size: 1/2 inch to 80 inch
- Pressure : 150LB to 2500B
- Connection: flange, wafer, lug, BW, SW, threaded etc.
- Material: Cl, DI, WCB, WCC, WC6, WC9, LCB, LCC, CF8, CF8M, CF3, CF3M, CF8C, A105, LF2, F304, F316, duplex stainless steel, al-bronze, brass, hastelloy, monel, titanium, ceramics etc.
- Operator: bare stem, lever, handwheel, pneumatic actuator, electric actuator, hydraulic-pneumatic actuator etc.

We are export-oriented and most of products are delivered to overseas market, such as North America, Europe, Australia, South-East Asia, Latin America and South Africa. Sinopival is always ready to embrace global customers to build the international valve values by endless service and perfect products.

QUALITY ASSURANCE

SinoPival regards quality as the source of its surviving footstone, reliable products and considerable service take top priority at Sinopival. To maintain the high level of excellence, every operation procedure strictly complies with rules of QMS (Quality Management System) and globally applicable guidelines.

The quality management system is made of five parts:

- Internal quality system
- HSE system
- Non-confirming management system
- Sub-contractor product quality control
- Customer complain disposition

International standards compliance: ANSI, DIN, EN, BS, JIS, GOST, AS etc.

They work together to make sure every step of production is well controlled and supervised; apart from documental quality control, we also have complete physical facilities and equipments to make the quality control fully carried out by the experienced engineers; the inspection and testing programs includes but not limited dimension inspection, 3D coordinate measurement, pressure test, magnetic power detector, supersonic flaw detector, radiographic inspection, heat-treatment furnace, cryogenic test, spectrum analyzer, impact test, penetration test and final inspection before shipment. Due to the integral quality management system and well production arrangement, enable us to ship each batch of valves to our customers timely but also safely.

SOCIAL RESPONSIBILITY

As the positive initiator and practitioner of HSE (health, safety, environment) management in company operation for the past many years, Sinopival also remains an active advocate, being a sincere follower and active supporter for the United Nations Global Compact, we are committed to endorsing and executing the ten principles of the international community in the areas of human right, labour, environment and anti-corruption. The human beings only have one earth, each of us have the duty to take all measures available to protect the plant and environment for a long-term also sustainable development. Necessary protection policies should be made for all employees, make sure they get equal payment and work in physical-mental-satisfied conditions. Sinopival devotes itself to deliver these to its partners when ship products and service to global market



LEGAL INFORMATION/COPYRIGHT

Technical data published in this catalogue have been developed from our design calculation, in-house testing, fields reports provided by customers and published official standard or specifications. They are good only to cover typical applications as a general guideline to users of Sinopival products introduced in this catalogue. Neither Sinopival, nor any of its affiliated entities assumes responsibility for the selection, use or maintenance of any products. Responsibility for proper selection, use and maintenance of any product remains solely with the purchaser and end user.

The contents of this publication are presented for informational purpose only, and while every effort has been made to ensure their accuracy, they are not to be construed as warranties or guarantees, express or implied, regarding the products or service described herein or their use or applicability. All sales are governed by our terms and conditions,

which are available upon request. We reserve the right to modify or improve the product designs, construction, materials or specifications of such products at any time and subject to the change without prior notice and without incurring any obligation to make such changes and modifications Sinopival products previously or subsequently sold.

All rights reserved. The contents provided herein must neither be distributed, copied, reproduced, edited or processed for any other purpose, nor otherwise transmitted, published or made available to a third party without the manufacturer's express written consent.

CONTENTS

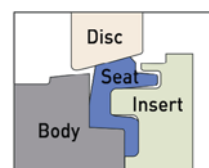
| | | |
|----|--|----|
| 1 | Product brief introduction and design features | 4 |
| 2 | Butterfly valve specifications | 6 |
| 3 | Butterfly valve structures | 7 |
| 4 | Valve parts material | 8 |
| 5 | Flow parameters | 9 |
| 6 | Valve torque | 10 |
| 7 | Wafer butterfly valve dimension and weight | 11 |
| 8 | Lug butterfly valve dimension and weight | 15 |
| 9 | Flange butterfly valve dimension and weight | 19 |
| 10 | Valve figure number chart-how to order | 23 |

A Series- Lip Type Seat High Performance Butterfly Valve



DESIGN FEATURES

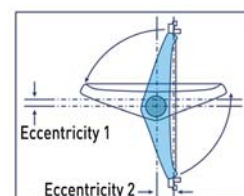
• Lip type seat structure can automatically compensate the seat deformation caused by pressure and temperature changes, and also compensate the seat deformation caused by abrasion after long-term usage.



Lip Type Seat

• Double eccentricities design:
Eccentricity 1 is between stem centerline and disc centerline, eccentricity 2 locates between stem centerline and seat centerline. When open the valve, the disc leaves seat rapidly, until 5° the disc and seat totally independent, thus greatly reduce the extrusion between disc and seat, lower open-resistance force, reduce wearing and prolong the valve service life. So such design advantages are:

1. the seat and disc don't touch with each other when disc in open position or middle position.
2. There is no wearing points in both top and bottom of seat.
3. Low torque required and lower requests for operator.



2 Eccentricity Design

• Unique dynamic-loading sealing teflon seat design, excellent elasticity and high reliability. Available seats are PTFE, RPTFE, PPL, PEEK etc.

• No need to use extra o-ring or metal part to maintain sealing. The insert can be easily disassembly to replace seat and repair sealing surface.

• Super long service life, 300,000 cycles, greatly reduce maintenance work.

• Tightly shutoff zero leakage, in accordance with ANSI/FCI 70-2 VI class.

• Both uni-directional and bi-directional sealing are available.

• Easiness in maintenance, no need to disassembly all valve parts, just remove the insert to replace the seat.

• Excellent flow characteristics, proportional change of the flow curve, can be used to realize modulating and on-off purpose.

• Blowout proof stem design, avoid the possible damage caused by the stem possible break.

BRIEF INTRODUCTION

PIVAL® High performance butterfly valve designed researched and developed at beginning of 21st century, until now there are 2 series different seat designs of high performance butterfly valves: series A (lip type seat) and series B (combined type seat), the different seat designs bring varied excellent characteristics and features to valves for better meet the different needs of different applications. Both series A and series B are double eccentric design, their available seat materials are teflon seat (PTFE, RPTFE), PPL and PEEK, fireproof sets like SS316+RPTFE and full metal seat like SS316 and inconel etc. The advantage of double-eccentric structure can make the valve close or open rapidly compared with concentric butterfly valve, the seat material can enable the valve to have characteristics like anti-corrosive, anti-abrasive, small friction and long service life.

In this catalog, it will mainly introduce the series A high performance butterfly valve.

The lip-type seat is a patented design with the unique sealing system, it has reliable sealing performance, enduring tight shutoff ability, small operating torque, super long service life, good flow characteristics and fire safe design optional. There is a broad range of materials available for valve construction parts, to make the valve suitable for many different kinds of applications, including anti-corrosive required ones, anti-abrasive required, NACE requested, chlorine, oxygen and vacuum service etc.

PRODUCT RANGE

Series A high performance butterfly max size is 60" and minimum one is 2", available connection ends are wafer, lug, flange and butt welded. The highest available pressure is 600LB for this kind of valve, which is only suitable for small valves. The common pressure range from 150LB to 300LB.

| Model ⁽¹⁾ | Size ⁽²⁾ |
|------------------------|-----------------------|
| DA8150(wafer, 150LB) | 2"~60"(DN50~DN1500) |
| DA8300(wafer, 300LB) | 2"~60"(DN50~DN1500) |
| DFA8150(wafer, 150LB) | 3"~60"(DN80~DN1500) |
| DFA8300(wafer, 300LB) | 3"~60"(DN80~DN1500) |
| DA5150(lug, 150LB) | 2.5"~60"(DN65~DN1500) |
| DA5300(lug, 300LB) | 2.5"~60"(DN65~DN1500) |
| DFA5150(lug, 150LB) | 3"~60"(DN80~DN1500) |
| DFA5300(lug, 300LB) | 3"~60"(DN80~DN1500) |
| DA4150(flange, 150LB) | 3"~60"(DN80~DN1500) |
| DA4300(flange, 300LB) | 3"~60"(DN80~DN1500) |
| DFA4150(flange, 150LB) | 4"~60"(DN100~DN1500) |
| DFA4300(flange, 300LB) | 4"~60"(DN100~DN1500) |

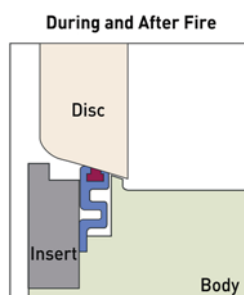
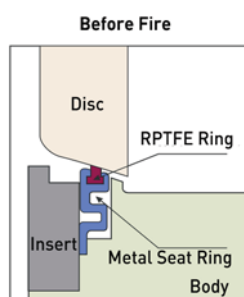
Note:

(1) The letter 'A' here listed stands for the valve connection end standard code, for example, if ASME B16.5 flange. The letter 'F' means the valve fire safe design. More details please refer to the 'How to order' page.

(2) The datasheet here listed just common sizes and customized size available upon confirmation of Sinopival technical team.

A Series- Lip Type Seat High Performance Butterfly Valve

- For size bigger than 8", bolted bottom cover design.
- Good valve appearance.
- Renewable seat.
- Fire safe design optional, complying with rules of API 607. The material of series A high performance butterfly valve is metal+RPTFE, eg SS316+RPTFE. When the RPTFE ring broken by the fire, the metal ring still keep the sealing function by inner chamber pressure to avoid medium leakage.



- Excellent follow regulating performance, both in on-off control and proportional control, size 2"-6" there are lever with position indicator, lock device available. For size 8" and above, there are gear, pneumatic actuator, electric actuators options upon customers' request.

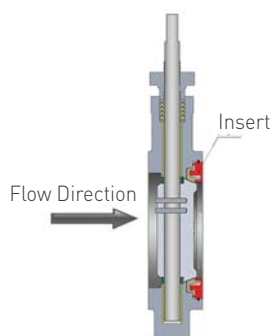


SEALING PRINCIPLE

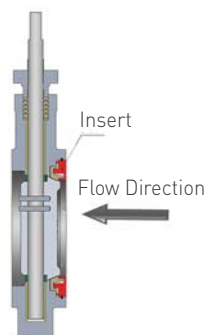
- Definition:

Stem upstream: the flow first touch with the backside of disc (stem side), then pass through the valve port to the insert side (disc upfront side).

Stem downstream: opposite with the upstream, the flow first reach the insert side (disc upfront side), then pass through valve port to the back side of disc (stem side).

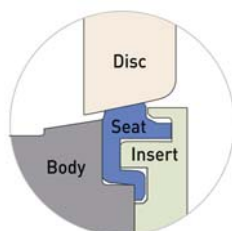


Stem Upstream (Recommended)



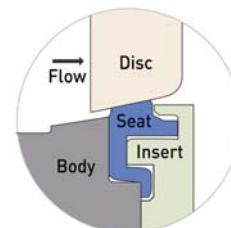
Stem Downstream

1. When close the valve, the disc slightly pressurized the seat. After the seat is pressed and instantly is energized to push the sealing surface of disc, thus the disc and seat tightly touch with each other to realize the sealing purpose.

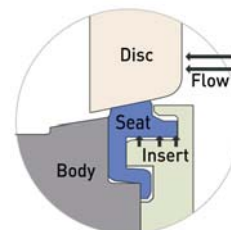


2. When in stem upstream case, that in the non-insert side, the disc is driven by flow pressure to move up for seat side, because of spherical profile of disc, the more distance the disc move to seat,

the more tight the shut-off. Because the seat is supported by the **flexible lip** which contacts with the bottom groove in insert, it gives the counterforce to seat to pressurized disc, thus the disc and seat tightly touch with each other to realize sealing purpose.



3. When in stem downstream case, that it is the pressure on the insert side, the insert is pressurized by the flow pressure, then the **insert lip** gives a up force to the seat to make it move to disc side, thus the disc and seat tightly touch with each other to realize the sealing purpose.






SUITABLE FOR SPECIAL APPLICATION

- Vacuum service:
Series A high performance butterfly are tared for tight shut-off of vacuum of 2×10^{-2} torr; professional customized can used for 1×10^{-5} torr.
- Steam service
The teflon seated butterfly valve can be suitable for steam applications.
- Oxygen service
The series A high performance butterfly valve can be used for oxygen related projects after special technology-treatment, there is strict procedure for guarantee the valve in clean condition, no reaction with grease, oil and other subjects when in parts-preparing, assembly, pressure test and packing process. Such valves and been widely used in air treatment projects eg. air separation application, air filter application.
- Long-term life service
Series A butterfly valve had been tested in empty-loading condition (no pipeline pressure) in house and the results turn out the service life of this

A Series- Lip Type Seat High Performance Butterfly Valve

VALVE SPECIFICATIONS

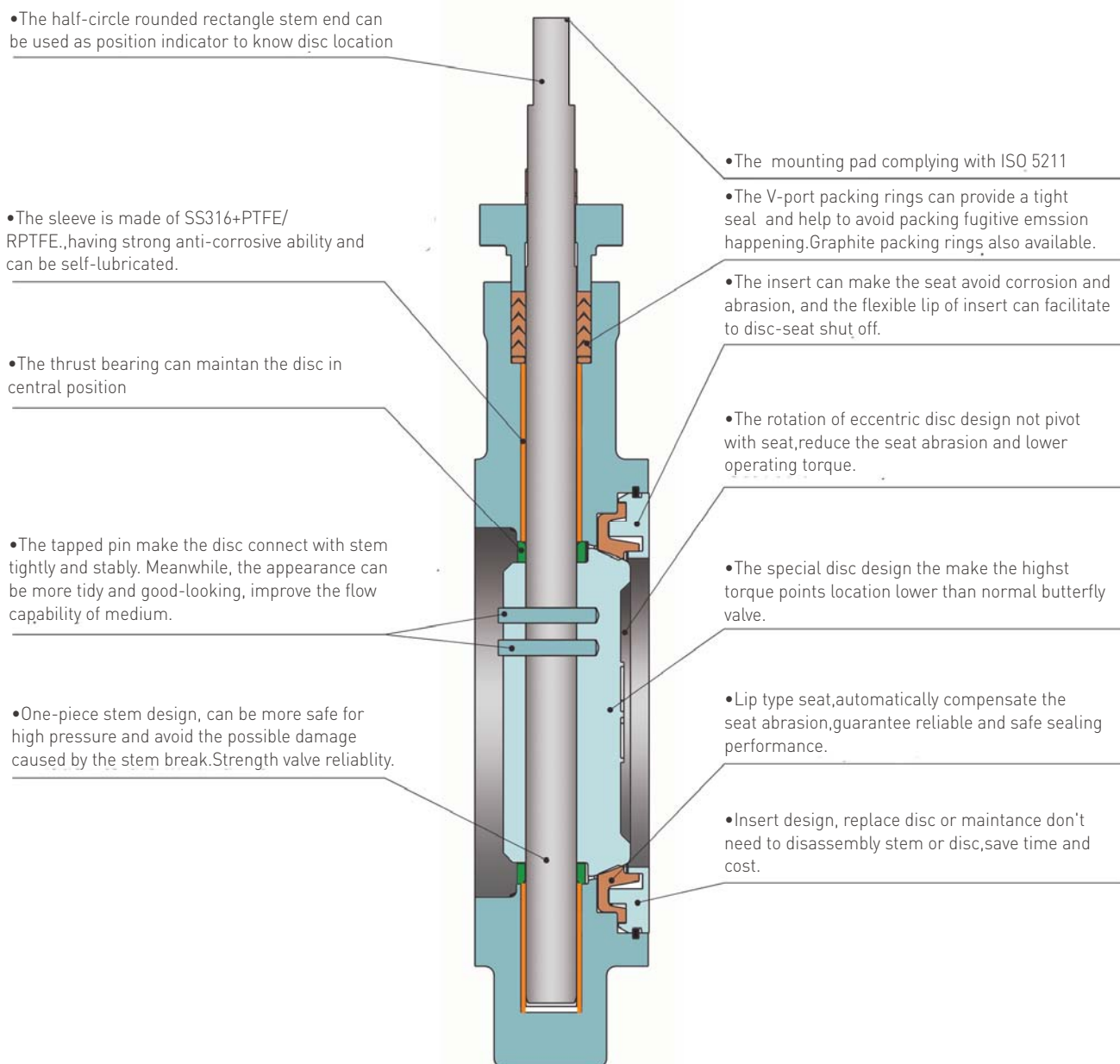
| Product | High performance butterfly valve/Double eccentric butterfly valve | | |
|----------------------|---|---|---|
| |  Wafer |  Lug |  Flange |
| Connection End | Wafer,lug,flange,butt-welded (avaialable) | | |
| Size | 2"-60" (DN50~DN1500), bigger size customized available | | |
| Pressure | ANSI:150LB,300LB,600LB (Small size) | DIN:PN10,PN16,PN20,PN25,PN40 | JIS:10K,16K,20K,30K,40K |
| Operator | Bare stem,lever,gear,electric actuator,pneumatic actuator etc. | | |
| Main Parts Material: | WCB,CF8,CF8M,CF3,CF3M,17-4PH,F304,F316,,hastelloy,monel,inconel,titannium,al-br and other special alloys. | | |
| Seat Type | Standard:soft seat(PTFE,RPTFE,PEEK,PPL) | | Fire safe:soft+metal seat(RPTFE+SS316/Inconel) |
| Fire Safe | Optional | | |
| Leakage Rate: | Bubble tight uni-directional or bi-directional class V,class VI,zero leakage | | |
| Service Life | More than 300,000 cycles | | |
| Strict Application | Avialble for oxygen,steam,corrosive,abrasive,vacuum and longer-term service life required applications. | | |

STANDARD CODE

| Connection End | Wafer | Lug | Flange | Butt Weld |
|----------------------|--|-----|---|---|
| Design & Manufacture | API 609 Cat.B; ASME/ANSI B16.34; BS 5155 | | | ASME/ANSI B16.34; ASME/ANSI B16.25 |
| Face To Face | API 609 Cat.B;ASME/ANSI B16.10 Table B; ISO 5752 Table 1 &BS 5155; MSS-SP-68 Table 1; DIN 3202; ISO 5752; BS 5155 | | ASME/ANSI B16.10; ISO 5752 Table 6; BS 5155 Table 6 | ISO 5752 Table4; BS 5155 Table 6 |
| Flange Connection | ASME/ANSI B16.5 ; ASME/ANSI B16.47 Series A; EN 1092; JIS B2210; DIN2635;API 605; MSS-SP-44; DIN 02501; ISO 7005-1 | | | BW:ASME/ANSI B16.25 |
| Inspection& Test | API 598; ASME/ANSI B16.34; BS 5155; BS 1560; JIS B2203/B2201; DIN 3230; ISO 7005; FCI 70-2; MSS-SP 61; ASME/ANSI B16.104 | | | API 598; ASME/ANSI B16.34; FCI 70-2; MSS-SP 61; ASME/ANSI B16.104 |
| Pressure-Temperature | ASME/ANSI B16.34 | | | |
| Marking System | MSS-SP-25 | | | |
| Mounting Pad | ISO 5211 | | | |
| Fire Safe | API 607 | | | |

A Series- Lip Type Seat High Performance Butterfly Valve

VALVE STRUCTURE FEATURE



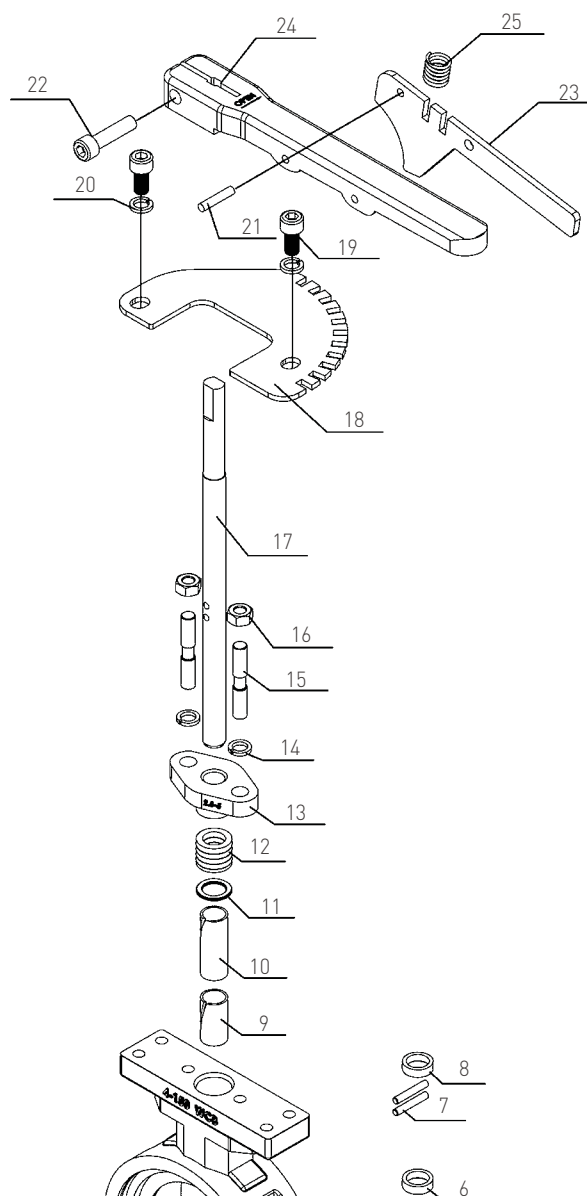
Note:

- 1.For size bigger than 10", there will be bolted bottom cover design which is not indicated in above drawing, for easy maintenance purpose.
- 2.The yoke (bracket) that dimension and material can be customized on request, for size range 2"~6", valve with no yoke (bracket) as lever operator, for size 8" and above, gear,electric actuator and pneumatic actuator will be mounted on yoke (bracket).
- 3.For the insert fixing method, size smaller than 8", will use clamp spring; for 8" and above, by locking bolt.

A Series- Lip Type Seat High Performance Butterfly Valve

VALVE PARTS MATERIAL ^[3]

| NO. | Part Name | Material |
|-----|---------------------------------------|--|
| 1 | Insert | A105,F304,F316 |
| 2 | Seat | PTFE,RPTFE,PPL,PEEK |
| 3 | Clamp Spring/Lock Bolt ^[1] | SS304/Carbon Steel,Stainless Steel |
| 4 | Disc | WCB,CF8,CF8M,Hastelloy,Monel,Titanium etc. |
| 5 | Body | WCB,CF8,CF8M,Hastelloy,Monel,Titanium etc. |
| 6 | Lower Retainer Ring | SS316L |
| 7 | Pin | 17-4PH |
| 8 | Up Retainer Ring | SS316L |
| 9 | Lower Bushing | RPTFE+SS316L |
| 10 | Upper Bushing | RPTFE+SS316L |
| 11 | Packing Gasket | SS316L |
| 12 | Packing | PTFE,RPTFE,Graphite |
| 13 | Gland | WCB,CF8,CF8M,Hastelloy,Monel,Titanium etc. |
| 14 | Washer | Carbon Steel,Stainless Steel |
| 15 | Gland Bolt | Carbon Steel,Stainless Steel |
| 16 | Gland Nut | Carbon Steel,Stainless Steel |
| 17 | Stem | 17-4PH,F304,F316 |
| 18 | Lever ^[2] | Indicator Plate |
| 19 | | Lock Bolt |
| 20 | | Lock Washer |
| 21 | | Pin |
| 22 | | Lateral Pin |
| 23 | | Clamp Plate |
| 24 | | Handle |
| 25 | | Spring |
| | | Stainless Steel |

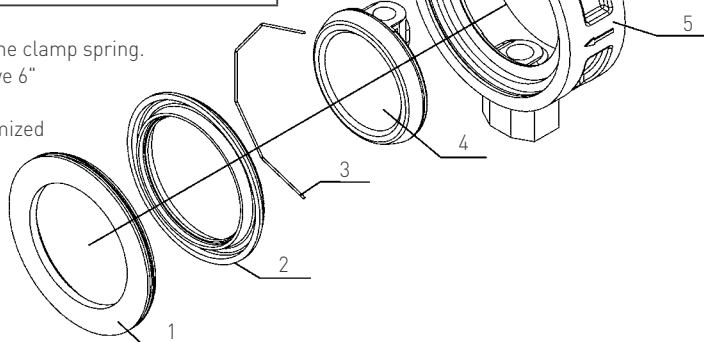


Note:

1. Valve size is 8" and above, use lock bolt to replace the clamp spring.

2. For valve size 6" and smaller, operator is lever; above 6" it's gear operator with yoke.

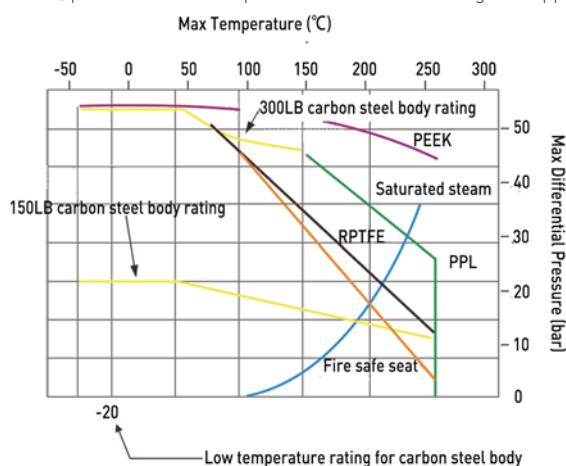
3. The materials are not limited as listed above, customized available, please contact Sinopival team to confirm.



A Series- Lip Type Seat High Performance Butterfly Valve

SEAT RATED VALUE

The seat rated value indicated on following curve are basing on the differential pressure between two ends of butterfly valve when it's in fully close position. The values here can be usage reference for general condition. According to past experience, the values can be more higher if use reinforced seat material or other kinds of seat materials. For more information or special case, please contact Sinopival technical team asking for support.



Note:

1. The maximum differential pressure of SS316 (or 20# alloy) stem is about 150 psi for 150LB 14"-60" (DN350-DN1500) valves.
2. The maximum differential pressure of SS316 (or 20# alloy) stem is about 300 psi for 300LB 3"-36" (DN80-DN900) valves.

BODY RATED VALUE

The maximum working pressure for different materials body are as indicated in below table. The actual application pressure should be in accordance with the seat rated values.

| 150LB Body Rated Values (bar) | | | | |
|-------------------------------|--------------|---------------------|-----------|-------|
| Temperature [°C] | Carbon Steel | Stainless Steel 316 | 20# Alloy | Monel |
| -20 ~ 38 | 19.7 | 19.0 | 15.8 | 15.8 |
| 93 | 17.9 | 16.5 | 13.8 | 13.8 |
| 149 | 15.8 | 14.8 | 12.4 | 13.1 |
| 204 | 13.8 | 13.4 | 11.0 | 12.8 |
| 260 | 11.7 | 11.7 | 10.3 | 11.7 |
| Test Pressure | 31 | 29.3 | 24.1 | 24.1 |

| 300LB Body Rated Values (bar) | | | | |
|-------------------------------|--------------|---------------------|-----------|-------|
| Temperature [°C] | Carbon Steel | Stainless Steel 316 | 20# Alloy | Monel |
| -20 ~ 38 | 51.0 | 49.6 | 41.4 | 41.1 |
| 93 | 46.5 | 42.7 | 35.9 | 36.5 |
| 149 | 45.2 | 38.6 | 32.1 | 34.1 |
| 204 | 43.8 | 35.5 | 29.0 | 33.1 |
| 260 | 41.4 | 33.1 | 26.9 | 32.8 |
| Test Pressure | 77.6 | 75.8 | 62 | 62 |

FLOW PARAMETER

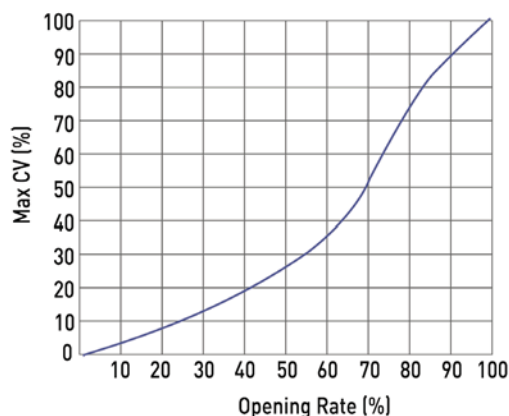
The tables below indicate 150LB and 300LB series A high performance butterfly valve flow parameters when partially open. CV is the number of gallons per minute +60 °F (15.6 °C) water that pass through a fully open valve at a pressure drop of 1 psi (0.07 bar). The metric equivalent KV, is the flow of water at 16 °C passing through the valve in cubic meters per hour at a pressure drop of 1 kg/cm². $KV = CV \times 0.8569$.

| 150LB | | | 300LB | | |
|------------|------|---------|------------|-----|--------|
| Valve Size | | CV | Valve Size | | CV |
| Inch | DN | | Inch | DN | |
| 2 1/2 | 65 | 78 | 3 | 80 | 165 |
| 3 | 80 | 165 | 4 | 100 | 400 |
| 4 | 100 | 400 | 6 | 150 | 1,050 |
| 5 | 125 | 650 | 8 | 200 | 1,800 |
| 6 | 150 | 1,050 | 10 | 250 | 3,150 |
| 8 | 200 | 2,200 | 12 | 300 | 4,750 |
| 10 | 250 | 3,300 | 14 | 350 | 5,200 |
| 12 | 300 | 5,100 | 16 | 400 | 6,900 |
| 14 | 350 | 5,800 | 18 | 450 | 9,300 |
| 16 | 400 | 8,000 | 20 | 500 | 11,300 |
| 18 | 450 | 10,500 | 24 | 600 | 18,500 |
| 20 | 500 | 14,000 | 30 | 750 | 29,100 |
| 24 | 600 | 21,600 | 36 | 900 | 47,500 |
| 30 | 750 | 34,000 | | | |
| 36 | 900 | 55,500 | | | |
| 42 | 1050 | 82,650 | | | |
| 48 | 1200 | 108,300 | | | |
| 54 | 1350 | 133,500 | | | |
| 60 | 1500 | 159,000 | | | |

How to confirm Valve CV value when disc in a position between fully open and fully close:

1. Check the max CV rate from below curve according to the disc open rate.
2. Get the valve's CV value from the table above.
3. The valve max CV value = max CV rate X CV value.

For example, 10" (DN250), butterfly valve opening rate is 90%: from curve to know the max CV rate is 90% and from table to know CV value is 3,300; so the valve CV value = 90% X 3,300 = 2970.



A Series- Lip Type Seat High Performance Butterfly Valve

VALVE TORQUE

| Valve Size | | 150LB - Stem Downstream - Standard Seat | | | | | |
|------------|-------|--|-----------------|-------------------|------------------|-------------------|------------------|
| | | Closing Differential Pressure | | | | | |
| Inch | DN | lb-ft@ 100 psi | N-m@ 6.9 bar | lb-ft@ 200 psi | N-m@ 13.8 bar | lb-ft@ 285 psi | N-m@ 19.7 bar |
| 2 1/2 | 65 | 21 | 29 | 23 | 31 | 24 | 33 |
| 3 | 80 | 25 | 34 | 27 | 37 | 29 | 39 |
| 4 | 100 | 35 | 47 | 39 | 53 | 43 | 58 |
| 5 | 125 | 48 | 65 | 56 | 76 | 63 | 86 |
| 6 | 150 | 72 | 97 | 83 | 113 | 93 | 126 |
| 8 | 200 | 121 | 164 | 142 | 193 | 160 | 217 |
| 10 | 250 | 163 | 222 | 202 | 274 | 234 | 318 |
| 12 | 300 | 214 | 290 | 287 | 390 | 350 | 475 |
| 14 | 350 | 362 | 491 | 505 | 684 | 626 | 849 |
| 16 | 400 | 463 | 628 | 646 | 876 | 802 | 1,087 |
| 18 | 450 | 602 | 816 | 844 | 1,144 | 1,050 | 1,423 |
| 20 | 500 | 810 | 1,098 | 1,140 | 1,546 | 1,421 | 1,926 |
| 24 | 600 | 1,234 | 1,673 | 1,758 | 2,384 | 2,200 | 2,983 |
| 30 | 750 | 2,170 | 2,942 | 2,940 | 3,986 | 3,595 | 4,873 |
| 36 | 900 | 3,530 | 4,786 | 4,860 | 6,589 | 5,990 | 8,121 |
| 42 | 1,050 | 5,780 | 7,837 | 8,060 | 10,928 | 10,000 | 13,558 |
| 48 | 1,200 | 9,170 | 12,433 | 12,840 | 17,409 | 15,960 | 21,638 |
| 54 | 1,350 | 12,950 | 17,558 | 17,900 | 24,269 | 22,110 | 29,977 |
| 60 | 1,500 | 19,020 | 25,790 | 26,040 | 35,310 | 32,000 | 43,397 |

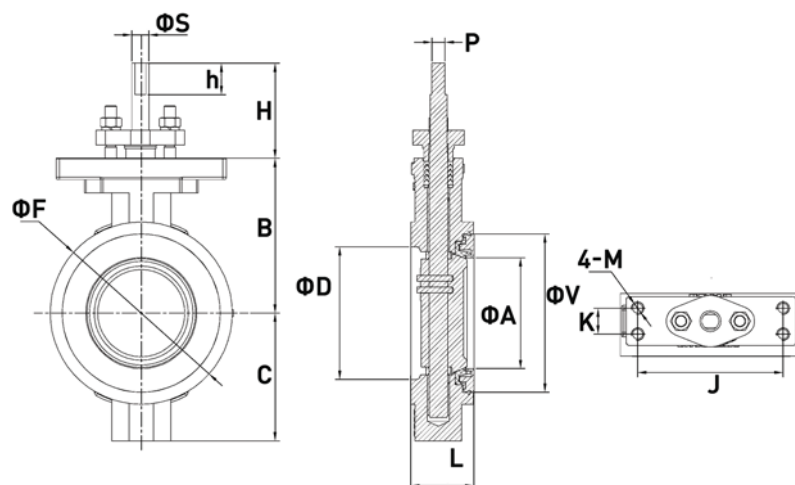
| Valve Size | | 150LB - Stem Downstream - Fire Safe Seat | | | | | |
|------------|-------|---|-----------------|-------------------|------------------|-------------------|------------------|
| | | Closing Differential Pressure | | | | | |
| Inch | DN | lb-ft@ 100 psi | N-m@ 6.9 bar | lb-ft@ 200 psi | N-m@ 13.8 bar | lb-ft@ 285 psi | N-m@ 19.7 bar |
| 2 1/2 | 65 | 42 | 57 | 45 | 61 | 47 | 64 |
| 3 | 80 | 53 | 72 | 57 | 77 | 59 | 81 |
| 4 | 100 | 67 | 91 | 74 | 100 | 80 | 108 |
| 5 | 125 | 97 | 132 | 114 | 155 | 128 | 174 |
| 6 | 150 | 131 | 178 | 152 | 206 | 170 | 230 |
| 8 | 200 | 218 | 296 | 256 | 347 | 288 | 391 |
| 10 | 250 | 333 | 452 | 406 | 550 | 468 | 635 |
| 12 | 300 | 508 | 589 | 636 | 862 | 745 | 1,010 |
| 14 | 350 | 604 | 819 | 758 | 1,028 | 889 | 1,205 |
| 16 | 400 | 710 | 963 | 920 | 1,247 | 1,099 | 1,489 |
| 18 | 450 | 970 | 1,315 | 1,370 | 1,857 | 1,710 | 2,318 |
| 20 | 500 | 1,390 | 1,885 | 1,980 | 2,685 | 2,482 | 3,364 |
| 24 | 600 | 2,050 | 2,779 | 2,700 | 3,661 | 2,200 | 2,983 |
| 30 | 750 | 2,920 | 3,959 | 3,940 | 5,342 | 4,807 | 6,517 |
| 36 | 900 | 3,530 | 4,786 | 4,960 | 6,725 | 5,990 | 8,121 |
| 42 | 1,050 | 5,620 | 7,620 | 7,440 | 10,087 | 10,000 | 13,558 |
| 48 | 1,200 | 8,800 | 11,931 | 12,100 | 16,405 | 14,905 | 20,208 |

| Valve Size | | 300LB - Stem Downstream - Standard Seat | | | | | | | | | | | |
|------------|-----|--|------------------|-------------------|-------------------|-------------------|------------------|-------------------|------------------|-------------------|-----------------|-------------------|---------------|
| | | Closing Differential Pressure | | | | | | | | | | | |
| Inch | DN | lb-ft@ 300 psi | N-m@ 20.7 bar | lb-ft@ 400 psi | N-m@ 27.68 bar | lb-ft@ 500 psi | N-m@ 34.5 bar | lb-ft@ 600 psi | N-m@ 41.4 bar | lb-ft@ 700 psi | N-m@ 48.3bar | lb-ft@ 740 psi | N-m@ 51bar |
| 3 | 80 | 31 | 42 | 34 | 46 | 38 | 51 | 41 | 55 | 44 | 60 | 45 | 62 |
| 4 | 100 | 52 | 70 | 58 | 79 | 65 | 88 | 72 | 97 | 78 | 106 | 81 | 110 |
| 6 | 150 | 119 | 161 | 138 | 188 | 158 | 214 | 178 | 241 | 197 | 267 | 205 | 278 |
| 8 | 200 | 231 | 313 | 271 | 368 | 312 | 422 | 352 | 477 | 392 | 532 | 408 | 554 |
| 10 | 250 | 354 | 480 | 422 | 572 | 490 | 664 | 557 | 756 | 625 | 848 | 652 | 885 |
| 12 | 300 | 492 | 667 | 582 | 790 | 673 | 913 | 764 | 1035 | 854 | 1158 | 890 | 1207 |
| 14 | 350 | 824 | 1117 | 1012 | 1372 | 1200 | 1627 | 1388 | 1882 | 1576 | 2137 | 1651 | 2239 |
| 16 | 400 | 989 | 1340 | 1212 | 1643 | 1435 | 1946 | 1658 | 2248 | 1881 | 2550 | 1970 | 2671 |
| 18 | 450 | 1279 | 1734 | 1562 | 2118 | 1845 | 2520 | 2128 | 2885 | 2411 | 3269 | 2524 | 3422 |
| 20 | 500 | 1707 | 2314 | 2096 | 2842 | 2485 | 3369 | 2874 | 3897 | 3263 | 4424 | 3419 | 4635 |
| 24 | 600 | 2309 | 3131 | 2832 | 3840 | 3355 | 4549 | 3878 | 5258 | 4401 | 5967 | 4610 | 6251 |
| 30 | 750 | 4210 | 5708 | 5080 | 6888 | 5950 | 8067 | 6820 | 9247 | 7690 | 10426 | 8038 | 10898 |
| 36 | 900 | 7220 | 9789 | 8760 | 11877 | 10300 | 13965 | 11840 | 16053 | 13380 | 18141 | 13996 | 18976 |

| Valve Size | | 300LB - Stem Downstream - Fire Safe Seat | | | | | | | | | | | |
|------------|-----|---|------------------|-------------------|-------------------|-------------------|------------------|-------------------|------------------|-------------------|-----------------|-------------------|---------------|
| | | Closing Differential Pressure | | | | | | | | | | | |
| Inch | DN | lb-ft@ 300 psi | N-m@ 20.7 bar | lb-ft@ 400 psi | N-m@ 27.68 bar | lb-ft@ 500 psi | N-m@ 34.5 bar | lb-ft@ 600 psi | N-m@ 41.4 bar | lb-ft@ 700 psi | N-m@ 48.3bar | lb-ft@ 740 psi | N-m@ 51bar |
| 3 | 80 | 57 | 77 | 58 | 79 | 60 | 81 | 61 | 83 | 63 | 85 | 63 | 86 |
| 4 | 100 | 86 | 117 | 94 | 127 | 102 | 138 | 110 | 149 | 118 | 160 | 121 | 164 |
| 6 | 150 | 189 | 256 | 212 | 287 | 235 | 319 | 258 | 350 | 281 | 381 | 290 | 394 |
| 8 | 200 | 313 | 424 | 354 | 480 | 395 | 536 | 436 | 591 | 477 | 647 | 493 | 669 |
| 10 | 250 | 464 | 629 | 522 | 708 | 580 | 786 | 638 | 865 | 696 | 944 | 719 | 975 |
| 12 | 300 | 825 | 1119 | 960 | 1302 | 1095 | 1485 | 1230 | 1668 | 1365 | 1851 | 1419 | 1924 |
| 14 | 350 | 922 | 1250 | 1076 | 1459 | 1230 | 1668 | 1384 | 1877 | 1538 | 2085 | 1600 | 2169 |
| 16 | 400 | 1170 | 1586 | 1396 | 1885 | 1610 | 2183 | 1830 | 2481 | 2050 | 2779 | 2138 | 2899 |
| 18 | 450 | 1980 | 2685 | 2440 | 3308 | 2900 | 3932 | 3360 | 4556 | 3820 | 5179 | 4004 | 5429 |
| 20 | 500 | 2800 | 3796 | 3460 | 4691 | 4120 | 5586 | 4780 | 6481 | 5400 | 7376 | 5704 | 7734 |
| 24 | 600 | 4400 | 5966 | 5400 | 7321 | 6400 | 8677 | 7400 | 10033 | 8400 | 11389 | 8800 | 11931 |

DA8150⁽¹⁾ 2"~ 32"[DN50~DN800]⁽²⁾ - WAFER - 150LB

DIMENSION & WEIGHT 2"~14' [DN50~DN350]



| Size | | Dimension (mm) | | | | | | | |
|------|-----|----------------|-----|-----|-------|-------|-----|------|------|
| Inch | DN | ΦA | ΦD | ΦV | B | C | ΦF | L | H |
| 2" | 50 | 50 | 63 | 85 | 81.8 | 70 | 102 | 43.8 | 42.5 |
| 2.5" | 65 | 59 | 74 | 96 | 111.1 | 82.5 | 118 | 48.5 | 82 |
| 3" | 80 | 73 | 88 | 110 | 120.5 | 93 | 132 | 49.8 | 82 |
| 4" | 100 | 96 | 114 | 136 | 133.3 | 110 | 157 | 54.4 | 82 |
| 5" | 125 | 111 | 141 | 165 | 135 | 120 | 186 | 56.8 | 82 |
| 6" | 150 | 142 | 158 | 206 | 152.4 | 135 | 217 | 58.1 | 82.3 |
| 8" | 200 | 188 | 210 | 258 | 187.3 | 172 | 273 | 64.1 | 81.7 |
| 10" | 250 | 236 | 254 | 314 | 231.8 | 202 | 330 | 71.9 | 96.9 |
| 12" | 300 | 282 | 305 | 364 | 260.3 | 241.3 | 385 | 81.7 | 97 |
| 14" | 350 | 314 | 342 | 408 | 315 | 295 | 413 | 93 | 105 |

| Size | | Dimension (mm) | | | | | | Weight |
|------|-----|----------------|------|------|-------|------|-----|--------|
| Inch | DN | h | P | ΦS | J | K | M | KG |
| 2" | 50 | 14 | 7 | 10 | 125.4 | 22.4 | M10 | 3.2 |
| 2.5" | 65 | 27 | 11.2 | 14.8 | 125.4 | 22.4 | M10 | 5 |
| 3" | 80 | 27 | 11.2 | 14.8 | 125.4 | 22.4 | M10 | 6 |
| 4" | 100 | 27 | 11.2 | 14.8 | 125.4 | 22.4 | M10 | 8 |
| 5" | 125 | 27 | 11.2 | 14.8 | 125.4 | 22.4 | M10 | 12 |
| 6" | 150 | 27 | 14 | 18 | 125.4 | 22.4 | M10 | 13 |
| 8" | 200 | 27 | 15.9 | 21.9 | 125.4 | 22.4 | M10 | 20 |
| 10" | 250 | 28 | 20.6 | 28 | 142.7 | 37.3 | M12 | 35 |
| 12" | 300 | 33 | 23.8 | 33.3 | 142.7 | 37.3 | M12 | 51 |
| 14" | 350 | 41 | 28.7 | 37 | 142.7 | 37.3 | M12 | 82 |

Note:

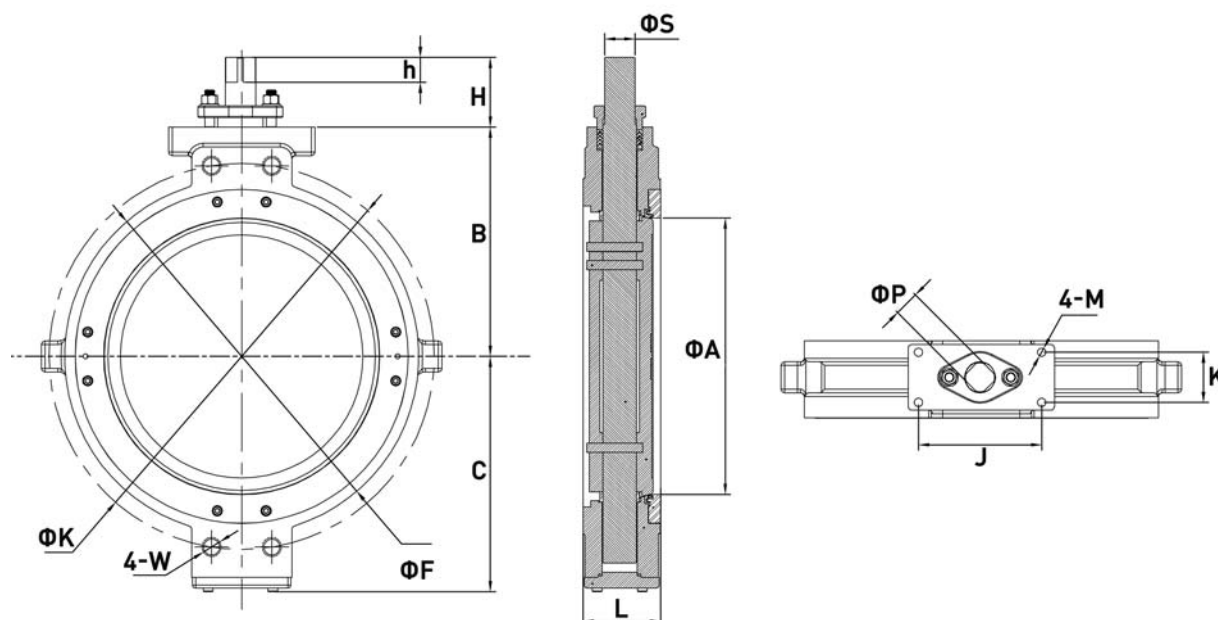
1. Letter 'A' here stands for valve connection standard, replaced by the relevant letter which is short of standard ,for example, ANSI(X=A),DIN(X=D),JIS(X=J).

2. Here just list the dimension and weight of valve that size up to 32", for bigger size datasheet please contact Sinopival sales team.

3. All datasheets listed above just for client reference, any deviations of them without notice, the ordered valves' datas subject to the drawings before production.

DA8150⁽¹⁾ 16"~ 32"(DN50~DN800)⁽²⁾ - WAFER - 150LB

DIMENSION & WEIGHT 16"~32' (DN400~DN800)



| Size | | Dimension (mm) | | | | | | | |
|------|-----|----------------|-----|-----|----------|-------|-----|------|------|
| Inch | DN | ΦA | B | C | ΦF | L | H | h | P |
| 16" | 400 | 362 | 355 | 329 | 470 | 103 | 111 | 41 | 33.5 |
| 18" | 450 | 413 | 356 | 340 | 533 | 115 | 111 | 41 | 35 |
| 20" | 500 | 455 | 377 | 387 | 584 | 128 | 115 | 41 | 41.4 |
| 24" | 600 | 548 | 490 | 467 | 692 | 155 | 130 | 51 | 51 |
| 28" | 700 | 682 | 570 | 552 | 799 | 165.5 | 157 | 50.8 | 50.8 |
| 30" | 750 | 702 | 570 | 557 | 863 | 167.7 | 157 | 50.8 | 50.8 |
| 32" | 800 | 702 | 570 | 557 | 905 | 191.3 | 157 | 50.8 | 50.8 |

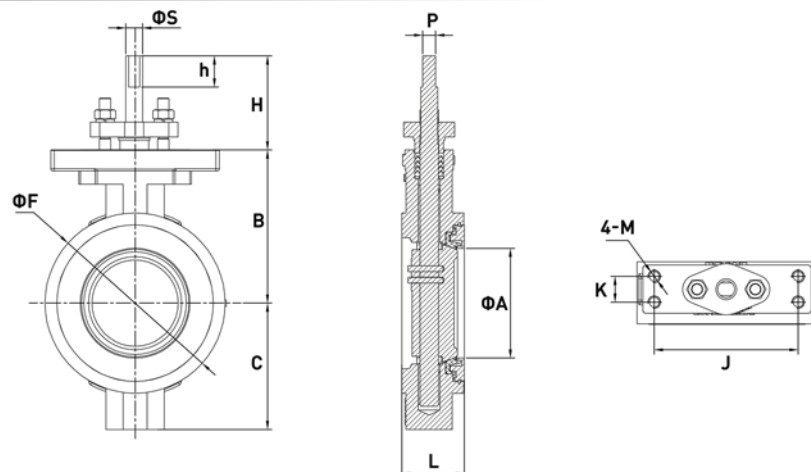
| Size | | Dimension (mm) | | | | | | Weight |
|------|-----|----------------|-------|-------|-----|----------|------------|--------|
| Inch | DN | ΦS | J | K | M | ΦK | W | KG |
| 16" | 400 | 42 | 203.2 | 539.8 | M16 | 539.8 | $\Phi 30$ | 115 |
| 18" | 450 | 47 | 203.2 | 577.9 | M16 | 577.9 | 1 1/8"-8UN | 156 |
| 20" | 500 | 50 | 203.2 | 635 | M16 | 635 | 1 1/8"-8UN | 199 |
| 24" | 600 | 64 | 254 | 749.3 | M20 | 749.3 | 1 1/4"-8UN | 333 |
| 28" | 700 | 66 | 254 | 863.6 | M20 | 863.6 | 1 1/4"-8UN | 594 |
| 30" | 750 | 66 | 254 | 914.4 | M20 | 914.4 | 1 1/4"-8UN | 638 |
| 32" | 800 | 66 | 254 | 997.9 | M20 | 977.9 | 1 1/2"-8UN | 751 |

Note:

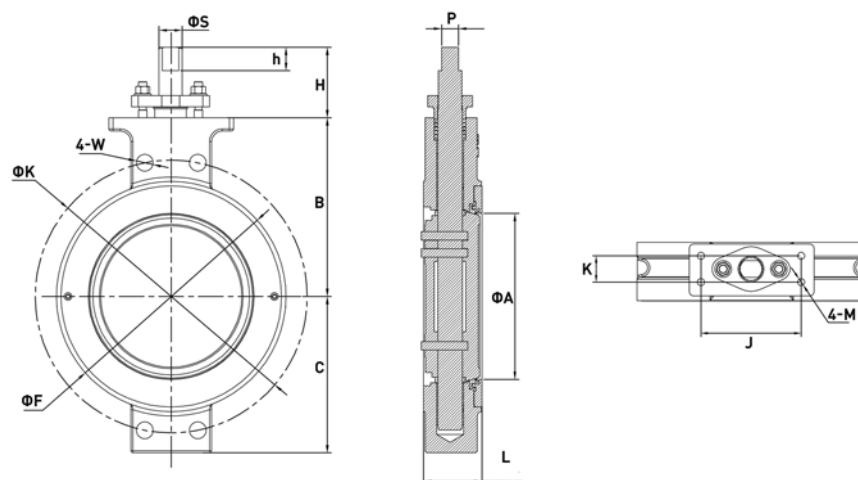
- Letter 'A' here stands for valve connection standard, replaced by the relevant letter which is short of standard ,for example, ANSI(X=A),DIN(X=D),JIS(X=J).
- Here just list the dimension and weight of valve that size up to 32", for bigger size datasheet please contact Sinopival sales team.
- All datasheets listed above just for client reference,any deviations of them without notice,the ordered valves' datas subject to the drawings beofe production.

DA8300⁽¹⁾ 2"~ 24"(DN50~DN600)⁽²⁾ - WAFER - 300LB

DIMENSION & WEIGHT 2"~12' (DN50~DN300)



| Size | | Dimension (mm) | | | | | | | | | | | Weight | |
|------|-----|----------------|-------|------|-----|----|------|----|------|------|-------|------|--------|-----|
| Inch | DN | ΦA | B | C | ΦF | L | H | h | P | ΦS | J | K | M | KG |
| 2" | 50 | 38 | 81.8 | 70 | 102 | 44 | 42.5 | 14 | 7 | 10 | 125.4 | 22.4 | M10 | 3.2 |
| 2.5" | 65 | 59 | 111.1 | 82.5 | 118 | 48 | 82 | 27 | 11.2 | 14.8 | 125.4 | 22.4 | M10 | 5 |
| 3" | 80 | 73 | 120.5 | 93 | 132 | 48 | 82 | 27 | 11.2 | 14.8 | 125.4 | 22.4 | M10 | 6 |
| 4" | 100 | 96 | 133.3 | 110 | 157 | 54 | 82 | 27 | 11.2 | 14.8 | 125.4 | 22.4 | M10 | 8 |
| 5" | 125 | 111 | 135 | 120 | 186 | 57 | 82 | 27 | 11.2 | 14.8 | 125.4 | 22.4 | M10 | 12 |
| 6" | 150 | 142 | 174 | 153 | 217 | 59 | 82 | 27 | 15.9 | 21.9 | 125.4 | 22.4 | M10 | 15 |
| 8" | 200 | 188 | 212 | 180 | 273 | 73 | 95 | 28 | 20.6 | 28 | 142.7 | 37.3 | M12 | 27 |

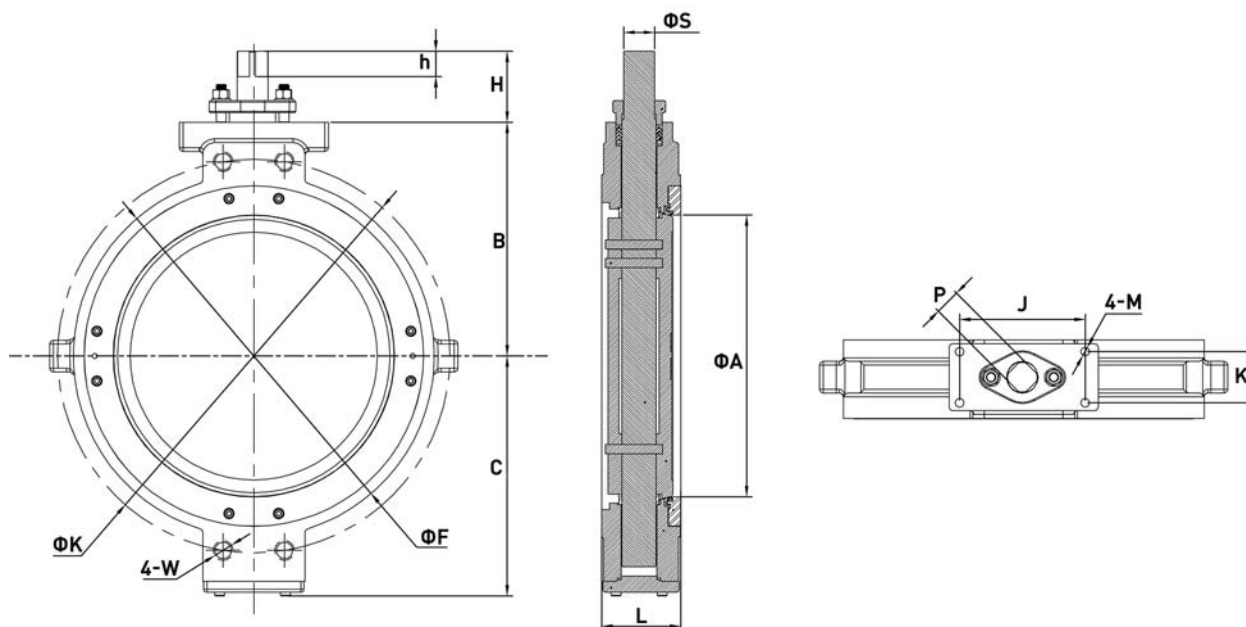


| Size | | Dimension (mm) | | | | | | | | | | | | | Weight | |
|------|-----|----------------|-----|-----|-----|----|-----|----|------|------|-------|------|-----|-------|------------|----|
| Inch | DN | ΦA | B | C | ΦF | L | H | h | P | ΦS | J | K | M | ΦK | W | KG |
| 10" | 250 | 236 | 254 | 222 | 327 | 83 | 100 | 33 | 23.8 | 33.3 | 142.7 | 37.3 | M12 | 387.4 | 1"-8UN | 48 |
| 12" | 300 | 282 | 282 | 284 | 385 | 92 | 105 | 41 | 28.7 | 37 | 142.7 | 37.3 | M12 | 450.8 | 1 1/8"-8UN | 66 |

- Note:**
- Letter 'A' here stands for valve connection standard, replaced by the relevant letter which is short of standard ,for example, ANSI(X=A),DIN(X=D),JIS(X=J).
 - Here just list the dimension and weight of valve that size up to 24", for bigger size datasheet please contact Sinopival sales team.
 - All datasheets listed above just for client reference,any deviations of them without notice,the ordered valves' datas subject to the drawings beofe production.

DA8300⁽¹⁾ 2"~ 24"(DN50~DN600)⁽²⁾ - WAFER - 300LB

DIMENSION & WEIGHT 14"~24" (DN350~DN600)



| Size | | Dimension [mm] | | | | | | | |
|------|-----|----------------|-----|-----|-----|-----|-----|------|------|
| Inch | DN | ΦA | B | C | ΦF | L | H | h | P |
| 14" | 350 | 314 | 325 | 310 | 416 | 117 | 102 | 34.5 | 41.4 |
| 16" | 400 | 362 | 350 | 338 | 472 | 133 | 102 | 34.5 | 41.4 |
| 18" | 450 | 413 | 424 | 412 | 537 | 149 | 118 | 40 | 51 |
| 20" | 500 | 454 | 446 | 44 | 588 | 159 | 130 | 43 | 51 |
| 24" | 600 | 548 | 500 | 505 | 692 | 181 | 145 | 60 | 51 |

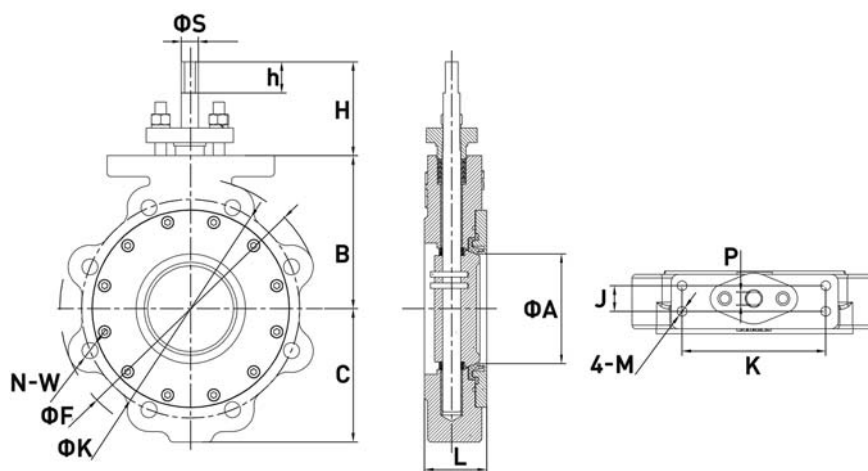
| Size | | Dimension [mm] | | | | | | Weight |
|------|-----|----------------|-------|-------|-----|--------|------------|--------|
| Inch | DN | ΦS | J | K | M | ΦK | W | KG |
| 14" | 350 | 50 | 203.2 | 82.6 | M16 | 514.4 | 1 1/8"-8UN | 167 |
| 16" | 400 | 50 | 203.2 | 82.6 | M16 | 571.5 | 1 1/4"-8UN | 195 |
| 18" | 450 | 64 | 254 | 107.7 | M20 | 628.6 | 1 1/4"-8UN | 324 |
| 20" | 500 | 64 | 254 | 107.7 | M20 | 658.8 | 1 1/4"-8UN | 406 |
| 24" | 600 | 64 | 254 | 107.7 | M20 | 8612.8 | 1 1/2"-8UN | 631 |

Note:

- 1.Letter 'A' here stands for valve connection standard, replaced by the relevant letter which is short of standard ,for example, ANSI(X=A),DIN(X=D),JIS(X=J).
- 2.Here just list the dimension and weight of valve that size up to 24", for bigger size datasheet please contact Sinopival sales team.
- 3.All datasheets listed above just for client reference,any deviations of them without notice,the ordered valves' datas subject to the drawings beofe production.

DA5150⁽¹⁾ 2 1/2"~ 24"(DN65~DN600)⁽²⁾ - LUG - 150LB

DIMENSION & WEIGHT 2.5"~14' (DN80~DN350)



| Size | | Dimension (mm) | | | | | | | |
|------|-----|----------------|-------|-------|------|------|----|------|----------|
| Inch | DN | ΦA | B | C | L | H | h | P | ΦS |
| 2.5" | 65 | 59 | 111.1 | 82.5 | 48.5 | 82 | 27 | 11.2 | 14.8 |
| 3" | 80 | 73 | 120.5 | 93 | 49.8 | 82 | 27 | 11.2 | 14.8 |
| 4" | 100 | 96 | 133.3 | 110 | 54.4 | 82 | 27 | 11.2 | 14.8 |
| 5" | 125 | 111 | 135 | 120 | 56.8 | 82 | 27 | 11.2 | 14.8 |
| 6" | 150 | 142 | 152.4 | 135 | 58.1 | 82.3 | 27 | 14 | 18 |
| 8" | 200 | 188 | 187.3 | 172 | 64.1 | 81.7 | 27 | 15.9 | 21.9 |
| 10" | 250 | 236 | 231.8 | 202 | 71.9 | 96.9 | 28 | 20.6 | 28 |
| 12" | 300 | 282 | 260.3 | 241.3 | 81.7 | 97 | 33 | 23.8 | 33.3 |
| 14" | 350 | 314 | 315 | 295 | 93 | 105 | 41 | 28.7 | 37 |

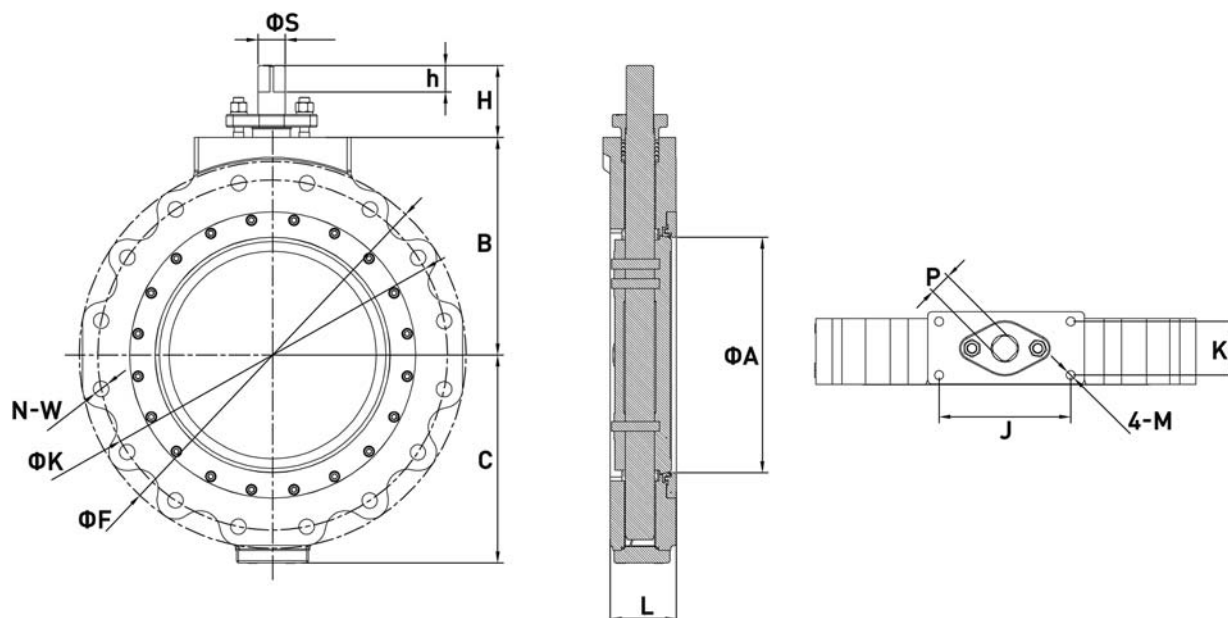
| Size | | Dimension (mm) | | | | | | Weight |
|------|-----|----------------|------|-----|----------|----------|-------------|--------|
| Inch | DN | J | K | M | ΦF | ΦK | N-W | KG |
| 2.5" | 65 | 125.4 | 22.4 | M10 | 180 | 139.7 | 4 5/8"-11UN | 6.4 |
| 3" | 80 | 125.4 | 22.4 | M10 | 190 | 152.4 | 4 5/8"-11UN | 8 |
| 4" | 100 | 125.4 | 22.4 | M10 | 230 | 190.5 | 8 5/8"-11UN | 11 |
| 5" | 125 | 125.4 | 22.4 | M10 | 255 | 215.9 | 8 3/4"-10UN | 18 |
| 6" | 150 | 125.4 | 22.4 | M10 | 280 | 241.3 | 8 3/4"-10UN | 16.2 |
| 8" | 200 | 125.4 | 22.4 | M10 | 345 | 298.5 | 8 3/4"-10UN | 31 |
| 10" | 250 | 142.7 | 37.3 | M12 | 405 | 362 | 12 7/8"-9UN | 42.2 |
| 12" | 300 | 142.7 | 37.3 | M12 | 485 | 431.8 | 12 7/8"-9UN | 64.8 |
| 14" | 350 | 142.7 | 37.3 | M16 | 535 | 476.3 | 12 1"-8UN | 105 |

Note:

- 1.Letter 'A' here stands for valve connection standard, replaced by the relevant letter which is short of standard ,for example, ANSI(X=A),DIN(X=D),JIS(X=J).
- 2.Here just list the dimension and weight of valve that size up to 24", for bigger size datasheet please contact Sinopival sales team.
- 3.All datasheets listed above just for client reference,any deviations of them without notice,the ordered valves' datas subject to the drawings beofe production.

DA5150⁽¹⁾ 2 1/2"~ 24"(DN65~DN600)⁽²⁾ - LUG - 150LB

DIMENSION & WEIGHT 16"~24" (DN400~DN600)



| Size | | Dimension (mm) | | | | | | | |
|------|-----|----------------|-----|-----|-----|-----|----|------|----------|
| Inch | DN | ΦA | B | C | L | H | h | P | ΦS |
| 16" | 400 | 362 | 355 | 329 | 103 | 111 | 41 | 33.5 | 42 |
| 18" | 450 | 413 | 356 | 340 | 115 | 111 | 41 | 35 | 47 |
| 20" | 500 | 455 | 377 | 387 | 128 | 115 | 51 | 41.4 | 50 |
| 24" | 600 | 548 | 490 | 467 | 155 | 130 | 51 | 51 | 64 |

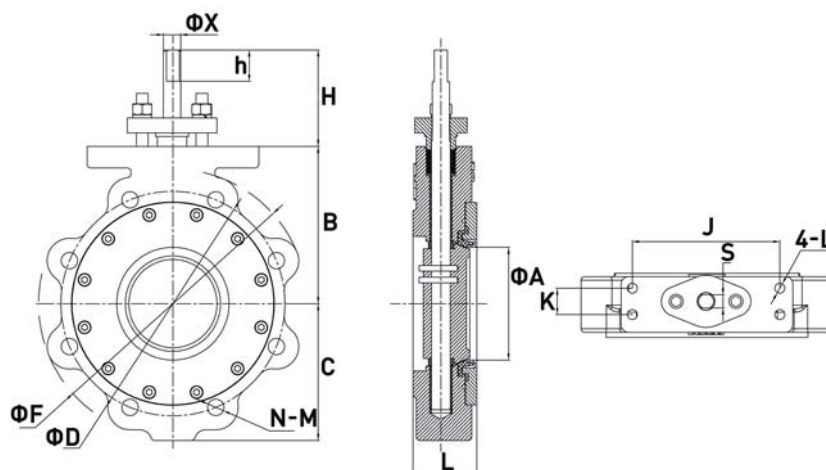
| Size | | Dimension (mm) | | | | | | Weight |
|------|-----|----------------|-------|-----|----------|----------|-------------|--------|
| Inch | DN | J | K | M | ΦF | ΦK | N-W | KG |
| 16" | 400 | 203.2 | 82.6 | M16 | 595 | 539.8 | 16 1"-8UN | 163 |
| 18" | 450 | 203.2 | 82.6 | M16 | 635 | 577.9 | 16 1/8"-8UN | 205 |
| 20" | 500 | 203.2 | 82.6 | M16 | 700 | 635 | 20 1/8"-8UN | 270 |
| 24" | 600 | 254 | 107.7 | M20 | 815 | 749.3 | 20 1/4"-8UN | 437 |

Note:

- 1.Letter 'A' here stands for valve connection standard, replaced by the relevant letter which is short of standard ,for example, ANSI(X=A),DIN(X=D),JIS(X=J).
- 2.Here just list the dimension and weight of valve that size up to 24", for bigger size datasheet please contact Sinopival sales team.
- 3.All datasheets listed above just for client reference,any deviations of them without notice,the ordered valves' datas subject to the drawings beofe production.

DA5300⁽¹⁾ 2 1/2"~ 24"(DN65~DN600)⁽²⁾ - LUG - 300LB

DIMENSION & WEIGHT 2.5"~12" (DN80~DN300)



| Size | | Dimension (mm) | | | | | | | |
|------|-----|----------------|-------|-------|------|----------|----|----------|-----|
| Inch | DN | ΦA | B | C | H | ΦF | L | ΦD | M |
| 2.5" | 65 | 59 | 111.1 | 82.6 | 82 | 190 | 50 | 149.2 | M20 |
| 3" | 80 | 73.1 | 120.7 | 93.7 | 82 | 210 | 50 | 168.3 | M20 |
| 4" | 100 | 95.6 | 133.4 | 110 | 81.8 | 255 | 54 | 200 | M20 |
| 5" | 125 | 111.4 | 134.9 | 126.5 | 82.2 | 280 | 57 | 235 | M20 |
| 6" | 150 | 141.7 | 174.6 | 153 | 82 | 320 | 59 | 269.9 | M20 |
| 8" | 200 | 188 | 212.7 | 180 | 94.8 | 380 | 73 | 330.2 | M24 |
| 10" | 250 | 235.9 | 254 | 222 | 99.7 | 445 | 83 | 387.4 | M27 |
| 12" | 300 | 281.5 | 282.6 | 284.4 | 105 | 520 | 92 | 450.8 | M30 |

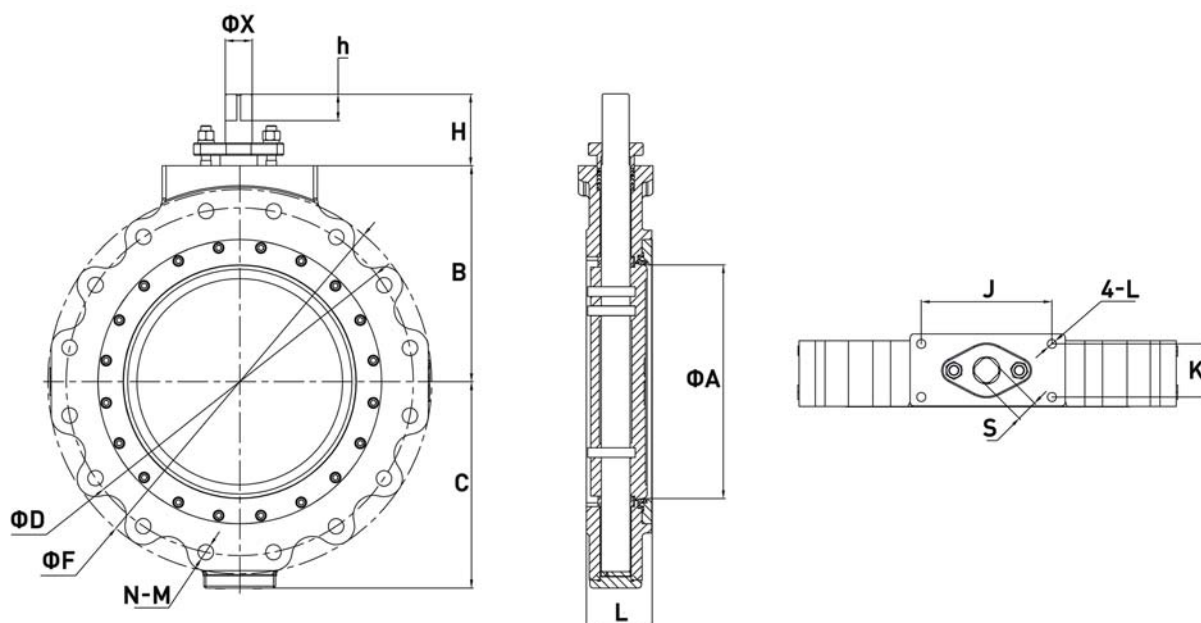
| Size | | Dimension (mm) | | | | | | | Weight |
|------|-----|----------------|----------|------|----|-------|------|-----|--------|
| Inch | DN | N | ΦX | S | h | J | K | L | KG |
| 2.5" | 65 | 8 | 14.8 | 11.2 | 27 | 125.4 | 22.4 | M10 | 7 |
| 3" | 80 | 8 | 14.8 | 11.2 | 27 | 125.4 | 22.4 | M10 | 9 |
| 4" | 100 | 8 | 14.8 | 11.2 | 27 | 125.4 | 22.4 | M10 | 13 |
| 5" | 125 | 8 | 14.8 | 11.2 | 27 | 125.4 | 22.4 | M10 | 19 |
| 6" | 150 | 12 | 21.9 | 15.9 | 27 | 125.4 | 22.4 | M10 | 24 |
| 8" | 200 | 12 | 28 | 20.6 | 27 | 142.7 | 37.3 | M12 | 42 |
| 10" | 250 | 16 | 33.3 | 23.8 | 33 | 142.7 | 37.3 | M12 | 73 |
| 12" | 300 | 16 | 37 | 28.7 | 41 | 142.7 | 37.3 | M12 | 100 |

Note:

- Letter 'A' here stands for valve connection standard, replaced by the relevant letter which is short of standard ,for example, ANSI(X=A),DIN(X=D),JIS(X=J).
- Here just list the dimension and weight of valve that size up to 24", for bigger size datasheet please contact Sinopival sales team.
- All datasheets listed above just for client reference,any deviations of them without notice,the ordered valves' datas subject to the drawings beofe production.

DA5300⁽¹⁾ 2 1/2"~ 24"(DN65~DN600)⁽²⁾ - LUG - 300LB

DIMENSION & WEIGHT 14"~24" (DN350~DN600)



| Size | | Dimension (mm) | | | | | | | |
|------|-----|----------------|-------|-------|-----|-----|-----|-------|-----|
| Inch | DN | ΦA | B | C | H | ΦF | L | ΦD | M |
| 14" | 350 | 314.3 | 325.1 | 310.7 | 102 | 585 | 117 | 514.4 | M30 |
| 16" | 400 | 362.8 | 350.5 | 338.4 | 102 | 650 | 133 | 571.5 | M33 |
| 18" | 450 | 413.3 | 424.4 | 412.8 | 118 | 710 | 149 | 628.6 | M33 |
| 20" | 500 | 454.9 | 446.7 | 440.8 | 130 | 775 | 162 | 685.8 | M33 |
| 24" | 600 | 548.8 | 500.8 | 504.8 | 145 | 915 | 184 | 812.8 | M39 |

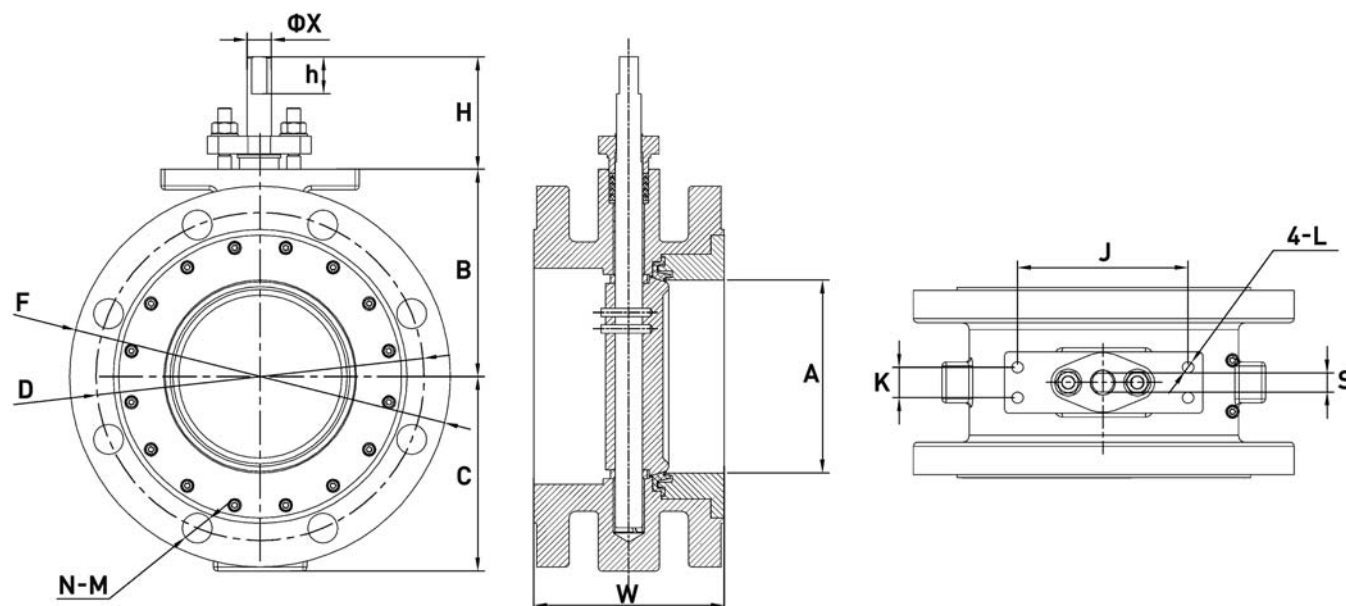
| Size | | Dimension (mm) | | | | | | | Weight |
|------|-----|----------------|----|------|------|-------|-------|-----|--------|
| Inch | DN | N | ΦX | S | h | J | K | L | KG |
| 14" | 350 | 20 | 50 | 41.4 | 34.5 | 203.2 | 82.6 | M16 | 253 |
| 16" | 400 | 20 | 55 | 41.4 | 34.5 | 203.2 | 82.6 | M16 | 328 |
| 18" | 450 | 24 | 64 | 51 | 40 | 254 | 107.7 | M20 | 503 |
| 20" | 500 | 24 | 80 | 51 | 43 | 254 | 107.7 | M20 | 648 |
| 24" | 600 | 24 | 95 | 51 | 60 | 254 | 107.7 | M20 | 984 |

Note:

- 1.Letter 'A' here stands for valve connection standard, replaced by the relevant letter which is short of standard ,for example, ANSI(X=A),DIN(X=D),JIS(X=J).
- 2.Here just list the dimension and weight of valve that size up to 24", for bigger size datasheet please contact Sinopival sales team.
- 3.All datasheets listed above just for client reference,any deviations of them without notice,the ordered valves' datas subject to the drawings beofe production.

DA4150⁽¹⁾ 3"~ 24"(DN80~DN600)⁽²⁾ - Flange - 150LB

DIMENSION & WEIGHT 3"~12" (DN80~DN300)



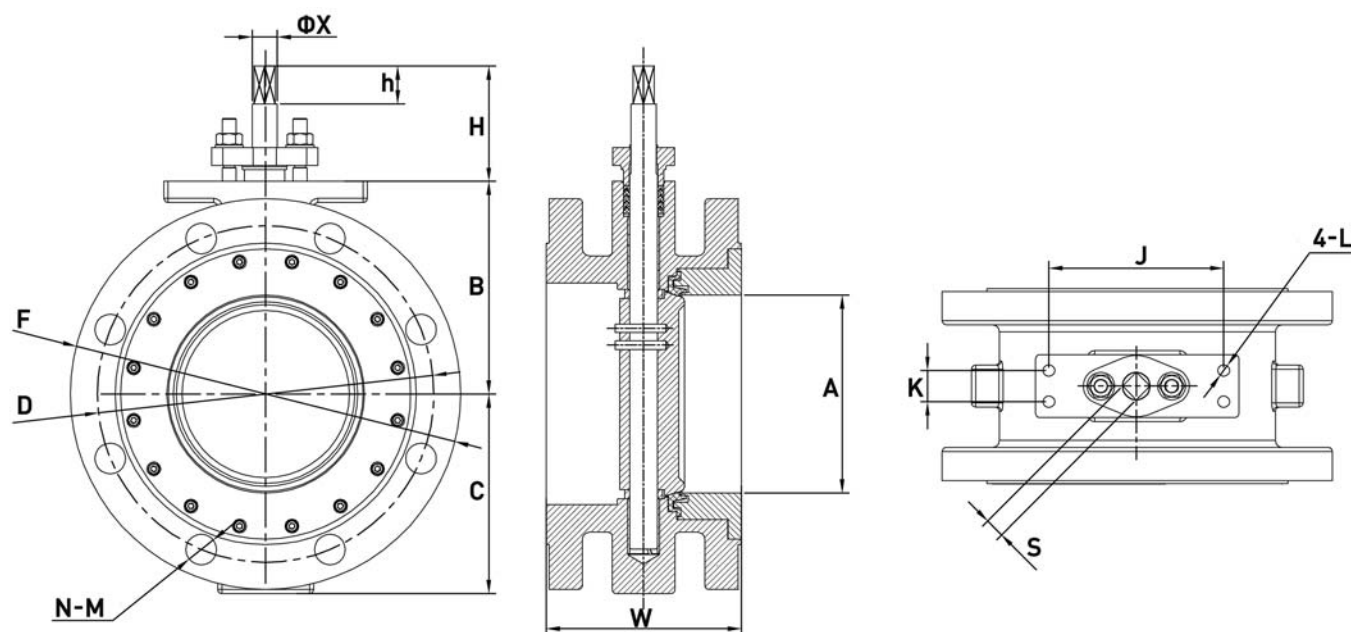
| Size | | Dimension (mm) | | | | | | |
|------|-----|----------------|-------|-------|------|--------|--------|-----|
| Inch | DN | A | B | C | H | D | N-M | F |
| 3" | 80 | 73 | 121 | 93 | 82 | Φ152.4 | 4-M19 | 190 |
| 4" | 100 | 96 | 133.3 | 110 | 82 | Φ190.5 | 8-M19 | 230 |
| 5" | 125 | 111 | 135 | 120 | 82 | Φ215.9 | 8-M22 | 255 |
| 6" | 150 | 142 | 152.4 | 143 | 82.3 | Φ241.3 | 8-M22 | 280 |
| 8" | 200 | 188 | 187.3 | 172 | 81.7 | Φ298.5 | 8-M22 | 345 |
| 10" | 250 | 236 | 231.8 | 202 | 96.9 | Φ362 | 12-M26 | 405 |
| 12" | 300 | 282 | 260.3 | 241.2 | 97 | Φ431.8 | 12-M26 | 485 |
| 14" | 350 | 314 | 315 | 295 | 105 | Φ476.3 | 12-M29 | 535 |

| Size | | Dimension (mm) | | | | | | | | Weight |
|------|-----|----------------|-----|------|------|----|-------|------|-----|--------|
| Inch | DN | F | W | X | S | h | J | K | L | KG |
| 3" | 80 | 190 | 114 | 14.8 | 11.2 | 27 | 125.4 | 22.4 | M10 | 18 |
| 4" | 100 | 230 | 127 | 14.8 | 11.2 | 27 | 125.4 | 22.4 | M10 | 23 |
| 5" | 125 | 255 | 140 | 14.8 | 11.2 | 27 | 125.4 | 22.4 | M10 | 32 |
| 6" | 150 | 280 | 140 | 28 | 14 | 27 | 125.4 | 22.4 | M10 | 53 |
| 8" | 200 | 345 | 152 | 21.9 | 15.9 | 27 | 125.4 | 22.4 | M10 | 67 |
| 10" | 250 | 405 | 168 | 28 | 20.6 | 28 | 142.7 | 37.3 | M12 | 107 |
| 12" | 300 | 485 | 178 | 33.3 | 23.8 | 33 | 142.7 | 37.3 | M12 | 160 |

Note:
 1. Letter 'A' here stands for valve connection standard, replaced by the relevant letter which is short of standard ,for example, ANSI(X=A),DIN(X=D),JIS(X=J).
 2. Here just list the dimension and weight of valve that size up to 24", for bigger size datasheet please contact Sinopival sales team.
 3. All datasheets listed above just for client reference,any deviations of them without notice,the ordered valves' datas subject to the drawings befoe production.

DA4150⁽¹⁾ 3"~ 24"(DN80~DN600)⁽²⁾ - Flange - 150LB

DIMENSION & WEIGHT 14"~24" (DN350~DN600)



| Size | | Dimension (mm) | | | | | | |
|------|-----|----------------|-----|-----|-----|-----|--------|--------|
| Inch | DN | A | B | C | H | F | D | N-M |
| 16" | 400 | 362 | 355 | 329 | 111 | 595 | Φ539.8 | 16-M29 |
| 18" | 450 | 413 | 356 | 340 | 111 | 635 | Φ577.9 | 16-M32 |
| 20" | 500 | 455 | 377 | 387 | 115 | 700 | Φ635 | 20-M32 |
| 24" | 600 | 548 | 490 | 467 | 130 | 815 | Φ749.3 | 20-M35 |

| Size | | Dimension (mm) | | | | | | | Weight |
|------|-----|----------------|----|------|----|-------|-------|-----|--------|
| Inch | DN | W | X | S | h | J | K | L | KG |
| 16" | 400 | 216 | 42 | 33.5 | 41 | 203.2 | 82.6 | M16 | 184 |
| 18" | 450 | 222 | 47 | 35 | 41 | 203.2 | 82.6 | M16 | 275 |
| 20" | 500 | 229 | 50 | 41.4 | 41 | 203.2 | 82.6 | M16 | 285 |
| 24" | 600 | 267 | 64 | 51 | 51 | 254 | 107.7 | M20 | 429 |

Note:

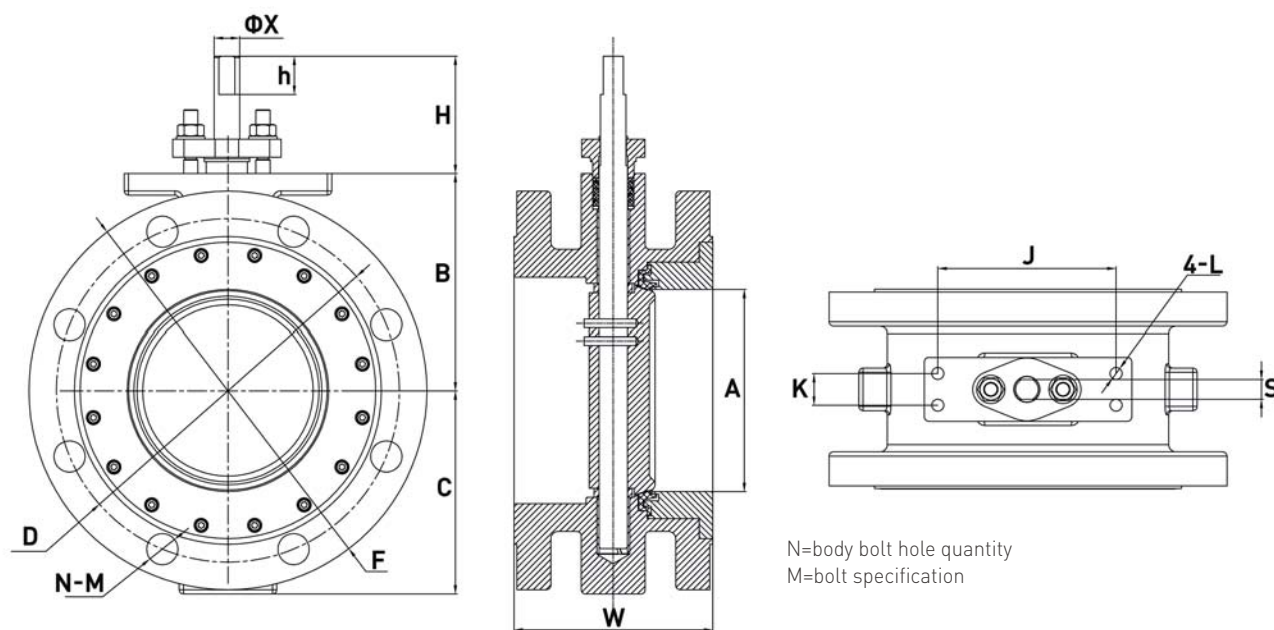
1.Letter 'A' here stands for valve connection standard, replaced by the relevant letter which is short of standard ,for example, ANSI(X=A),DIN(X=D),JIS(X=J).

2.Here just list the dimension and weight of valve that size up to 24", for bigger size datasheet please contact Sinopival sales team.

3.All datasheets listed above just for client reference,any deviations of them without notice,the ordered valves' datas subject to the drawings beofe production.

DA4300⁽¹⁾ 4"~ 24"(DN100~DN600)⁽²⁾ - Flange - 300LB

DIMENSION & WEIGHT 4"~12" (DN100~DN300)



| Size | | Dimension (mm) | | | | | | |
|------|-----|----------------|-----|-------|------|-----|--------|----------|
| Inch | DN | A | B | C | H | F | D | N-M |
| 4" | 100 | 95.6 | 27 | 133.4 | 81.8 | 255 | Φ200 | 8-M22.5 |
| 5" | 125 | 111.4 | 238 | 134.9 | 82.2 | 280 | Φ235 | 8-M22.5 |
| 6" | 150 | 141.7 | 308 | 174.6 | 82 | 320 | Φ269.9 | 12-M22.5 |
| 8" | 200 | 188 | 381 | 212.7 | 94.8 | 380 | Φ330.2 | 12-M25.5 |
| 10" | 250 | 235.9 | 445 | 254 | 99.7 | 445 | Φ387.4 | 16-M28.5 |
| 12" | 300 | 281.5 | 514 | 282.6 | 105 | 520 | Φ450.8 | 16-M32 |

| Size | | Dimension (mm) | | | | | | | Weight |
|------|-----|----------------|------|------|----|-------|------|-----|--------|
| Inch | DN | W | X | S | h | J | K | L | KG |
| 4" | 100 | 190 | 14.8 | 11.2 | 27 | 125.4 | 22.4 | M10 | 28 |
| 5" | 125 | 210 | 14.8 | 11.2 | 27 | 125.4 | 22.4 | M10 | 32 |
| 6" | 150 | 210 | 21.9 | 15.9 | 27 | 125.4 | 22.4 | M10 | 52 |
| 8" | 200 | 230 | 28 | 20.6 | 27 | 142.7 | 37.3 | M12 | 81 |
| 10" | 250 | 250 | 33.3 | 23.8 | 33 | 142.7 | 37.3 | M12 | 129 |
| 12" | 300 | 270 | 37 | 28.7 | 41 | 142.7 | 37.3 | M12 | 184 |

Note:

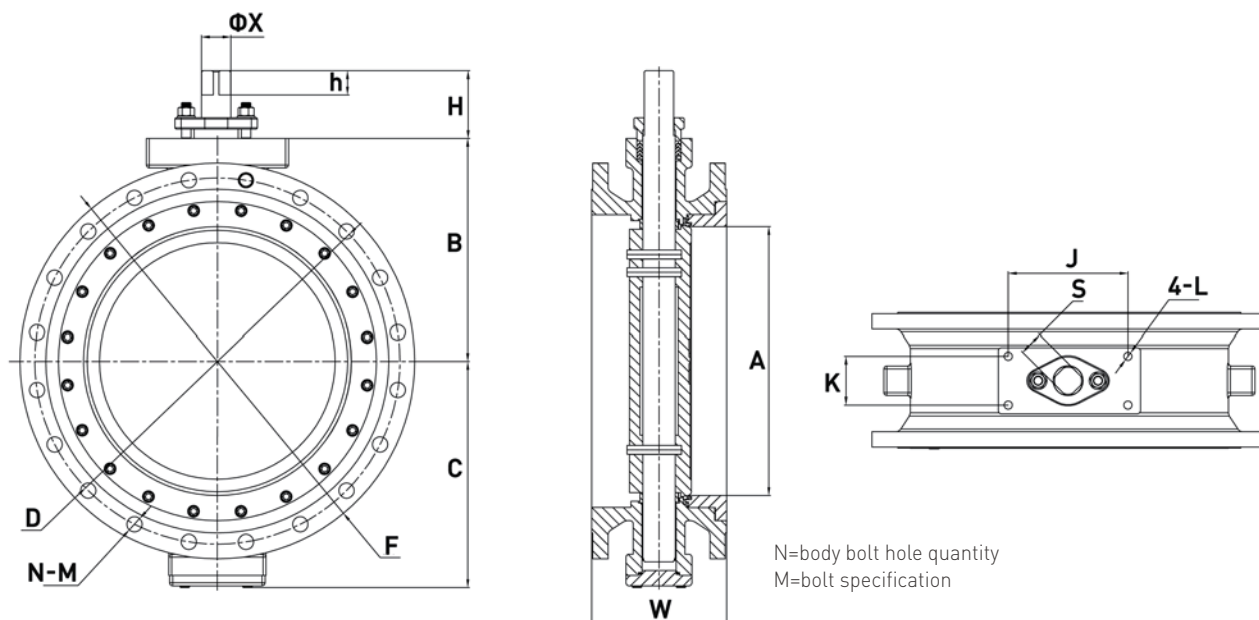
1.Letter 'A' here stands for valve connection standard, replaced by the relevant letter which is short of standard ,for example, ANSI(X=A),DIN(X=D),JIS(X=J).

2.Here just list the dimension and weight of valve that size up to 24", for bigger size datasheet please contact Sinopival sales team.

3.All datasheets listed above just for client reference,any deviations of them without notice,the ordered valves' datas subject to the drawings befoe production.

DA4300⁽¹⁾ 4"~ 24"(DN100~DN600)⁽²⁾ - Flange - 300LB

DIMENSION & WEIGHT 14"~24" (DN350~DN600)



| Size | | Dimension (mm) | | | | | | |
|------|-----|----------------|-------|-------|-----|-----|--------|--------|
| Inch | DN | A | B | C | H | F | D | N-M |
| 14" | 350 | 314.3 | 325.1 | 310.7 | 102 | 585 | Φ514.4 | 20-M32 |
| 16" | 400 | 362.8 | 350.5 | 338.4 | 102 | 650 | Φ571.5 | 20-M35 |
| 18" | 450 | 413.3 | 424.4 | 412.8 | 118 | 710 | Φ628.6 | 24-M35 |
| 20" | 500 | 454.9 | 446.7 | 440.8 | 130 | 775 | Φ685.8 | 24-M35 |
| 24" | 600 | 548.8 | 500.8 | 504.8 | 145 | 915 | Φ812.8 | 24-M41 |

| Size | | Dimension (mm) | | | | | | | Weight |
|------|-----|----------------|----|------|------|-------|-------|-----|--------|
| Inch | DN | W | X | S | h | J | K | L | KG |
| 14" | 350 | 290 | 50 | 41.4 | 34.5 | 203.2 | 82.6 | M16 | 257 |
| 16" | 400 | 310 | 55 | 41.4 | 34.5 | 203.2 | 82.6 | M16 | 326 |
| 18" | 450 | 330 | 64 | 51 | 40 | 254 | 107.7 | M20 | 425 |
| 20" | 500 | 350 | 80 | 51 | 43 | 254 | 107.7 | M20 | 531 |
| 24" | 600 | 390 | 95 | 51 | 60 | 254 | 107.7 | M20 | 808 |

Note:

- 1.Letter 'A' here stands for valve connection standard, replaced by the relevant letter which is short of standard ,for example, ANSI(X=A),DIN(X=D),JIS(X=J).
- 2.Here just list the dimension and weight of valve that size up to 24", for bigger size datasheet please contact Sinopival sales team.
- 3.All datasheets listed above just for client reference,any deviations of them without notice,the ordered valves' datas subject to the drawings befoe production.

A Series- Lip Type Seat High Performance Butterfly Valve

FIGURE NUMBER CHART-HOW TO ORDER

| 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
|------------|---------------------|----------|----------|---------------|---------------|---------------|---------------|---------------|------------|
| VALVE TYPE | CONNECTION STANDARD | END TYPE | PRESSURE | BODY MATERIAL | STEM MATERIAL | DISC MATERIAL | SEAT MATERIAL | OPERATOR TYPE | SIZE IN DN |
| D | A | 8 | 150 | 20 | 17 | 36 | TT | L | 150 |

For example, series A high performance butterfly valve, ANSI connection end, wafer, pressure 150LB, body WCB, stem 17-4PH, disc SS316 (CF8M), seat PTFE, lever operated and size is 6" (DN150), then the valve figure number is **DA8150-201736TT-L150**

| 1 | CODE | VALVE TYPE |
|---|------|----------------|
| | D | Standard type |
| | DF | Fire safe type |

| 2 | CODE | CONNECTION STANDARD |
|---|------|-----------------------------|
| | A | ANSI/ASME-American Standard |
| | D | DIN-Germany Standard |
| | B | BS-British Standard |
| | E | EU-European Union Standard |
| | J | JIS-Japanese Standard |
| | G | GOST-Russian |
| | C | GB-Chinese Standard |
| | O | Other Standards |

| 3 | CODE | END TYPE |
|---|------|-----------|
| | 8 | Wafer |
| | 5 | Lug |
| | 4 | Flanged |
| | 6 | Butt Weld |

| 4 | CODE | PRESSURE |
|---|------|------------|
| | 150 | ANSI 150LB |
| | 300 | ANSI 300LB |
| | 600 | ANSI 600LB |
| | 010 | DIN PN10 |
| | 016 | DIN PN16 |
| | 020 | DIN PN20 |
| | 025 | DIN PN25 |
| | 040 | DIN PN40 |
| | 050 | DIN PN50 |
| | 064 | DIN PN64 |
| | 100 | DIN PN100 |
| | 10K | JIS 10K |
| | 16K | JIS 16K |
| | 20K | JIS 20K |
| | 30K | JIS 30K |
| | 40K | JIS 40K |

| 5 | CODE | BODY MATERIAL |
|---|------|---------------|
| | 20 | WCB |
| | 23 | LCB |
| | 24 | LC2 |
| | 34 | CF8(SS304) |

| | | |
|--|----|------------------------|
| | 36 | CF8M(SS316) |
| | 41 | CF3(SS304L) |
| | 61 | CF3M(SS316L) |
| | 28 | 20# Alloy |
| | 88 | Hastelloy |
| | 66 | Monel |
| | 55 | Duplex Stainless Steel |
| | 65 | Inconel |
| | 48 | Aluminium Brozne Alloy |
| | 90 | Titanium |

| 6 | CODE | STEM MATERIAL |
|---|------|------------------------|
| | 17 | 17-4PH |
| | 34 | F304 |
| | 36 | F316 |
| | 29 | XM-19 |
| | 66 | K-Monel |
| | 88 | Hastelloy |
| | 66 | Monel |
| | 55 | Duplex Stainless Steel |
| | 65 | Inconel |
| | 48 | Aluminium Brozne Alloy |
| | 90 | Titanium |

| 7 | CODE | DISC MATERIAL |
|---|------|------------------------|
| | 20 | WCB |
| | 23 | LCB |
| | 24 | LC2 |
| | 34 | CF8(SS304) |
| | 36 | CF8M(SS316) |
| | 41 | CF3(SS304L) |
| | 61 | CF3M(SS316L) |
| | 28 | 20# Alloy |
| | 88 | Hastelloy |
| | 66 | Monel |
| | 55 | Duplex Stainless Steel |
| | 65 | Inconel |
| | 48 | Aluminium Brozne Alloy |
| | 90 | Titanium |

| 8 | CODE | SEAT MATERIAL |
|---|------|---------------|
| | TT | PTFE |
| | MT | RPTFE |
| | PL | PPL |
| | PK | PEEK |

| | | |
|--|----|--------------------|
| | YT | RPTFE+SS316/SS316L |
| | ZT | RPTFE+Inconel |
| | XT | PTFE+SS316/SS316L |
| | VT | PTFE+Inconel |

| 9 | CODE | OPERATOR TYPE |
|---|------|------------------------------|
| | B | Bare Stem |
| | L | Lever (Handle) |
| | G | Gear |
| | E | Electric Actuator |
| | P | Pneumatic Actuator |
| | Y | Hydraulic-Pneumatic Actuator |

| 10 | CODE | SIZE IN DN |
|----|------|------------------|
| | 50 | DN50(2") |
| | 65 | DN65(2 1/2") |
| | 80 | DN80(3") |
| | 100 | DN100(4") |
| | 125 | DN125(5") |
| | 150 | DN150(6") |
| | 250 | DN250(10") |
| | 300 | DN300(12") |
| | 350 | DN350(14") |
| | 400 | DN400(16") |
| | 450 | DN450(18") |
| | 500 | DN500(20") |
| | 600 | DN600(24") |
| | 700 | DN700(28") |
| | 750 | DN750(30") |
| | 800 | DN800(32") |
| | 850 | DN850(34") |
| | 900 | DN900(36") |
| | 1000 | DN1000(40") |
| | 1050 | DN1050(42") |
| | 1200 | DN1200(48") |
| | 1350 | DN1350(54") |
| | 1500 | DN1500(60") |
| | ... | By The Same Rule |

Note:

If the code not found in this figure number chart, please contact with Sinopival Team for asking the complete figure number table datasheet.

Hastelloy C* is registered trademark of Haynes International, Inc.

Monel* is a registered trademark of Special Metals Corporation.