

**WALWORTH**®  
Since 1842



# CATALOG INDUSTRIAL BRONZE VALVES

Note: The drawings and information shown here are illustrative of the different Walworth® designs. Valve physical configurations may change in accordance with Walworth® standards.

 GRUPO  
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YARMOUTH RESEARCH AND TECHNOLOGY



## WALWORTH<sup>®</sup>

WALWORTH<sup>®</sup> is regarded as a leading manufacturer of industrial valves worldwide. Since its foundation in the 19th century by James WALWORTH<sup>®</sup>, the company has focused its efforts on innovating and producing different product lines for fluid control.

The accumulated experience throughout this long and successful journey, coupled with a spirit of constant innovation, allows WALWORTH<sup>®</sup> to provide satisfactory solutions to a wide range of industries, and end-users, meeting and exceeding the most stringent quality standards. Among these industries are petrochemical, gas, oil, power generation, pulp, and paper converters, as well as companies related to geothermal and cryogenic technologies, among others.

During its history, it has produced more than 40,000 different products, positioning itself as a globalized corporation serving different industries with the experience of more than 500 employees.

WALWORTH<sup>®</sup> has facilities for manufacturing valve series in a fully integrated operation workflow: Raw material warehouses, various types of machining, welding processes such as SMAW, GMAW, SAW, PAW, assembly, testing for low and high pressure for high temperature or cryogenic service, painting process, packaging, and shipping.

All this infrastructure allows us to serve the markets of North America, Central America, South America, Europe and Africa; additionally, with our master distributors we reach countries as far away as Indonesia, Singapore or Australia, as well as the Middle, and Far East.



## WALWORTH<sup>®</sup> VALUES



### MISSION

To contribute to the development of our clients and partners through sustainable growth.



### VISION

To be a robust and innovative company, offering our clients comprehensive outstanding solutions.



### QUALITY POLICY

WALWORTH<sup>®</sup> is a global company focused on the design, manufacturing, and marketing of flow control valves, complying with applicable national and international legal requirements and standards.

We are committed to attaining stakeholder satisfaction, meeting quality objectives and promoting continual improvement of our quality management system.



### SAFETY, HEALTH AND ENVIRONMENT POLICY

WALWORTH<sup>®</sup> is a global company focused on the design, manufacturing, and marketing of flow control valves, complying with applicable national and international legal requirements and standards. We are committed to responsibly conducting business, ensuring the prevention of employee, customer, visitor, and community injuries and illnesses, as well as environmental care, pollution prevention, and sustainable use of resources, promoting employee consultation, participation, and continuous improvement of the safety, health and environmental system.

## WALWORTH® DESIGN CONTROL

WALWORTH® products are manufactured according to strict compliance with the world's leading standards such as API, ASME, ASTM, MSS, NACE, AWWA, BSI, CSA, among others. Our engineering team constantly reviews the latest updates to these standards to incorporate any changes that affect the design, regulations, or performance of our products, always taking the lead in the new developments obtained.

The engineering department uses state-of-the-art technology and equipment, as well as the use of finite elements and design programs to ensure the proper assembly and performance of our products from their inception, calculations, and creation of detailed drawings for manufacturing, placing WALWORTH® as a leader in product development for today's needs within the valve market



## WALWORTH® QUALITY SYSTEM

Over time, WALWORTH® developed its Quality Management System, used not as a separate information system, but as the main Administrative System focused on Quality. In this regard, WALWORTH® is an ISO-9001 certified company and upholds the leading worldwide certifications.

This system requires rigorous quality control and selection of raw materials from approved suppliers, as well as control of the manufacturing process. With the serial number, WALWORTH® can monitor the product throughout the manufacturing process and provides traceability information for the materials used in each valve. The following are some of the main certifications:

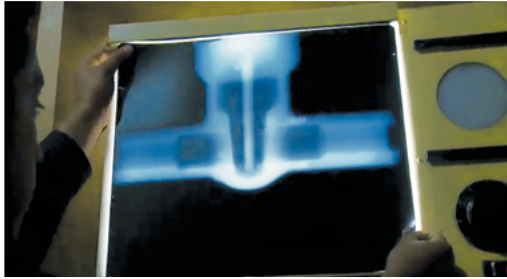
### WALWORTH® CERTIFICATIONS

STANDARD	STANDARD NAME	CERTIFICATE No.
API-6D	SPECIFICATION FOR PIPELINE AND PIPING VALVES	API-0097
API-600	STEEL GATE VALVES - FLANGED AND BUTT-WELDING ENDS, BOLTED BONNETS	API-0109
API-602	GATE, GLOBE, AND CHECK VALVES FOR SIZES DN 100 (NPS 4) AND SMALLER FOR THE PETROLEUM AND NATURAL GAS INDUSTRIES	API-0024
API-594	CHECK VALVES: FLANGED, LUG, WAFER, AND BUTT-WELDING	API-007
API-6A	SPECIFICATION FOR WELLHEAD AND CHRISTMAS TREE EQUIPMENT	API-0234
API-6FA	SPECIFICATION FOR FIRE TEST FOR VALVES	TÜV
API-607	FIRE TEST FOR QUARTER-TURN VALVES AND VALVES EQUIPPED WITH NONMETALLIC SEATS	
API-624	TYPE TESTING OF RISING STEM VALVES EQUIPPED WITH GRAPHITE PACKING FOR FUGITIVE EMISSIONS	Certificate Number 216162A    216106C 216106A    216106B
ISO-15848-1	INDUSTRIAL VALVES-MEASUREMENT, TEST AND QUALIFICATION PROCEDURES FOR FUGITIVE EMISSIONS	
ISO-10497	TESTING OF VALVES - FIRE-TYPE TESTING REQUIREMENTS	
ISO-9001	QUALITY MANAGEMENT SYSTEMS - REQUIREMENTS	API-0038
PED	PRESSURE EQUIPMENT DIRECTIVE MODULE H FOR EUROPEAN COMMUNITY	343/PED/ROT/HSN1620126/1
SIL-3	SAFETY INTEGRAL LEVEL CERTIFICATION FOR TRUNNION BALL VALVES (SIL3)	No. 968/V 1135.00/19
API	SPECIFICATION FOR QUALITY MANAGEMENT SYSTEMS	Q1-1479



## QUALITY CONTROL EQUIPMENT

To ensure that WALWORTH products comply with International Standards, we employ professional-quality monitoring equipment, several of which are described below:



**Radiographic Examination Equipment.** - WALWORTH<sup>®</sup> has in its facilities its own source of Iridium Ir-92, for radiographic testing of castings from 0.100" to 2 1/2" wall thickness, ascertaining the healthiness of the raw materials.

**Positive Material Identification (PMI)** - We have the latest generation equipment for positive material identification. These are used to conduct qualitative chemical analysis starting at the incoming inspection stage and/or on components to be assembled to verify that proper materials are being used for the specific valve service according to the customer's requirements.



**Magnetic Particle Testing** - WALWORTH<sup>®</sup> has the equipment for magnetic particle testing applied to ferrous materials susceptible to magnetism. This test is performed by sampling or when the customer requests Magnetic Particle Certification.

**Liquid Penetrant Testing** - WALWORTH<sup>®</sup> has the personnel and materials to perform this test, using water or solvent removable liquid penetrant techniques. The personnel are certified according to the American Society for Non-Destructive Testing (ASNT).



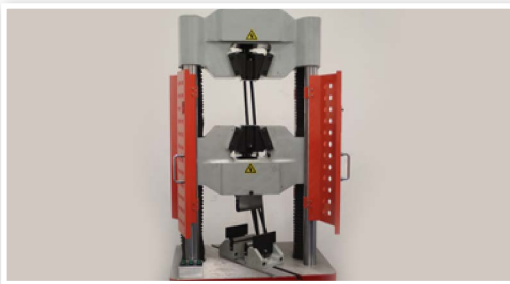
**Metrology Laboratory** - WALWORTH<sup>®</sup> developed a verification and calibration system for all equipment used in our facilities to ensure traceability of measurements against internationally recognized standards. In this way, control is maintained over the measurements taken during manufacturing, ensuring compliance with the major international standards.

**Fire Test** - Appropriate facilities are available to perform the fire test according to API requirements. This test exposes the valve to fire from 1,400 to 1,800°F (761 to 980°C) to verify the tightness and proper sealing of the valve after a certain exposure time.



**Low Leakage Emission Testing Equipment** - Applies when a customer requires a Low Leakage Emission certificate. The laboratory is equipped with its LFE equipment capable of measuring under 20 ppm in static or dynamic conditions at room temperature or under thermal cycling operating conditions.

**Wall Thickness Measuring Equipment** - Using ultrasound techniques, the wall thickness of various metallic materials including ferrous and stainless steel can be measured.



**Stress Testing Equipment** - To ensure the mechanical properties of the materials used in manufacturing. WALWORTH® performs sample testing of specimens of raw materials from our suppliers, even when receiving quality certifications from them.

**Hardness Equipment** - For both laboratory and in-plant testing, WALWORTH® has Rockwell B, C, Brinell, and Vickers testing equipment to verify compliance with the standard's hardness requirements.



# INDUSTRIAL BRONZE GATE, GLOBE & SWING CHECK VALVES

## STRUCTURAL FEATURES

WALWORTH Bronze Valves are used for many services in different kind of industries; applications include general uses, industrial installation, commercial building and construction industry, chemical and petrochemical process, and in maritime services.

WALWORTH Bronze Vales are manufactured in accordance with MSS-SP-80. Pressure Classes 125 (200 WOG), 150 (300 WOG) & 200 (400 WOG), 300 (600 WOG) and sizes from ½” up to 2” nominal diameter.

WALWORTH offers this product line in the following base materials:

- A. Bronze as per ASTM B62 grade C83600.
- B. Bronze as per ASTM B61 grade C92200.

WALWORTH offers this product line in the following standard trim:

- A. Bronze trim in accordance with ASTM B62 grade C83600.
- B. Bronze trim in accordance ASTM B584 Grade 875.
- C. Brass trim in accordance ASTM B16 Grade C36000.

## DESIGN FEATURES

- Design in accordance with MSS-SP-80
- WALWORTH offer; Gate, Globe, Strainer “Y Pattern”, Swing Check & Swing Check “Y Pattern”
- Rising (gate and globe valves) and Non Rising Stem (only gate valves)
- Screwed or Union Bonnet design
- Metal and Non-Metal seated
- Threaded ends as per ANSI B1.20.1
- Test in accordance with MSS-SP-80



## PRODUCT RANGE

TYPE	BONNET	SIZE	TRIM	PRESSURE CLASS	ENDS	FIGURE
Bronze NRS Gate Valve	Screwed	½” to 2”	BRONZE	125#	S	W4
Bronze NRS Gate Valve	Screwed	½” to 2”	BRONZE	150#	S	W14
Bronze RS Gate Valve	Screwed	½” to 2”	BRONZE	125#	S	W55
Bronze RS Gate Valve	Screwed	½” to 2”	BRONZE	150#	S	W56
Bronze RS Gate Valve	Union	½” to 2”	BRONZE	150#	S	W11
Bronze RS Gate Valve	Union	½” to 2”	BRONZE	200#	S	W36
Bronze Globe Valve	Screwed	½” to 2”	BRONZE	125#	S	W58
Bronze Globe Valve	Union	½” to 2”	BRONZE + PTFE	150#	S	W95
Bronze Globe Valve	Union	½” to 2”	BRONZE + PTFE	200#	S	W160
Bronze Swing Check Valve “Y” Pattern	-	½” to 2”	BRONZE	150#	S	W420
Bronze Swing Check Valve	-	½” to 2”	BRONZE	125#	S	W506
Bronze Swing Check Valve	-	½” to 2”	BRONZE	150#	S	W512
Bronze Strainer Valve “Y” Pattern	-	½” to 2”	SS304	300#	S	W600



# WALWORTH INDUSTRIAL BRONZE NRS GATE VALVE CLASS 125 (200 WOG)

## INDUSTRIAL BRONZE NON-RISING STEM GATE VALVES

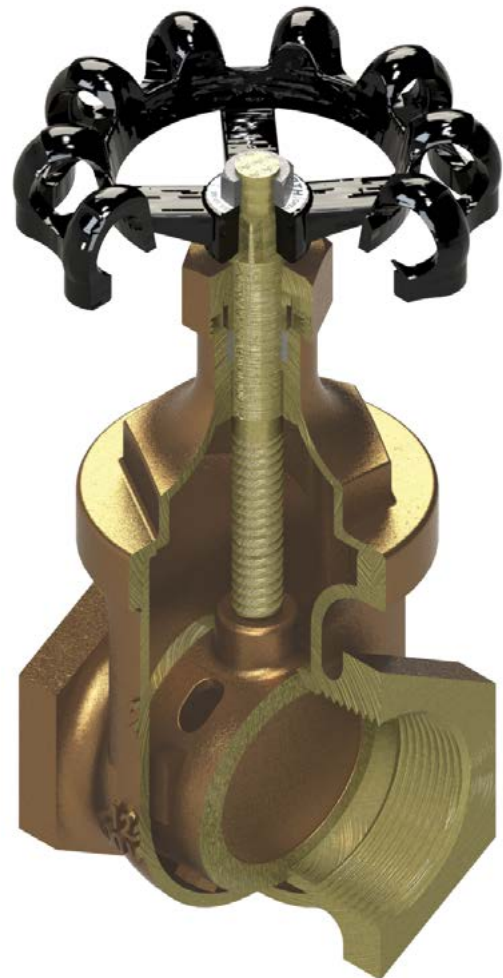
WALWORTH Bronze Gate Valves are used when there is a need to interrupt or cut some fluid. Gate valves are primarily used to permit or prevent flow of a fluid, so they should only be used as fully open or fully closed. The main characteristic of Non-Rising Stem is that design and performance are compact; it not takes more space to open or close the valve. When the valve needs to be open or closed, only the disc goes up or down. Non-Rising Stem is commonly used in underground or where the vertical spaced is limited.

### DESIGN FEATURES

- Design in accordance with MSS SP-80
- Body and bonnet of bronze
- Non-Rising Stem
- Screwed bonnet design
- Solid wedge design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Test in accordance with MSS-SP-80
- Handwheel operated

### TRIM MATERIALS

- Bronze gate valves are provided with disc and stem of bronze
- PTFE stem packing
- Integral seat rings
- Bronze trim valves are recommended for steam, water, air and non-corrosive oil or gas



# WALWORTH INDUSTRIAL BRONZE NRS GATE VALVE CLASS 125 (200 WOG)

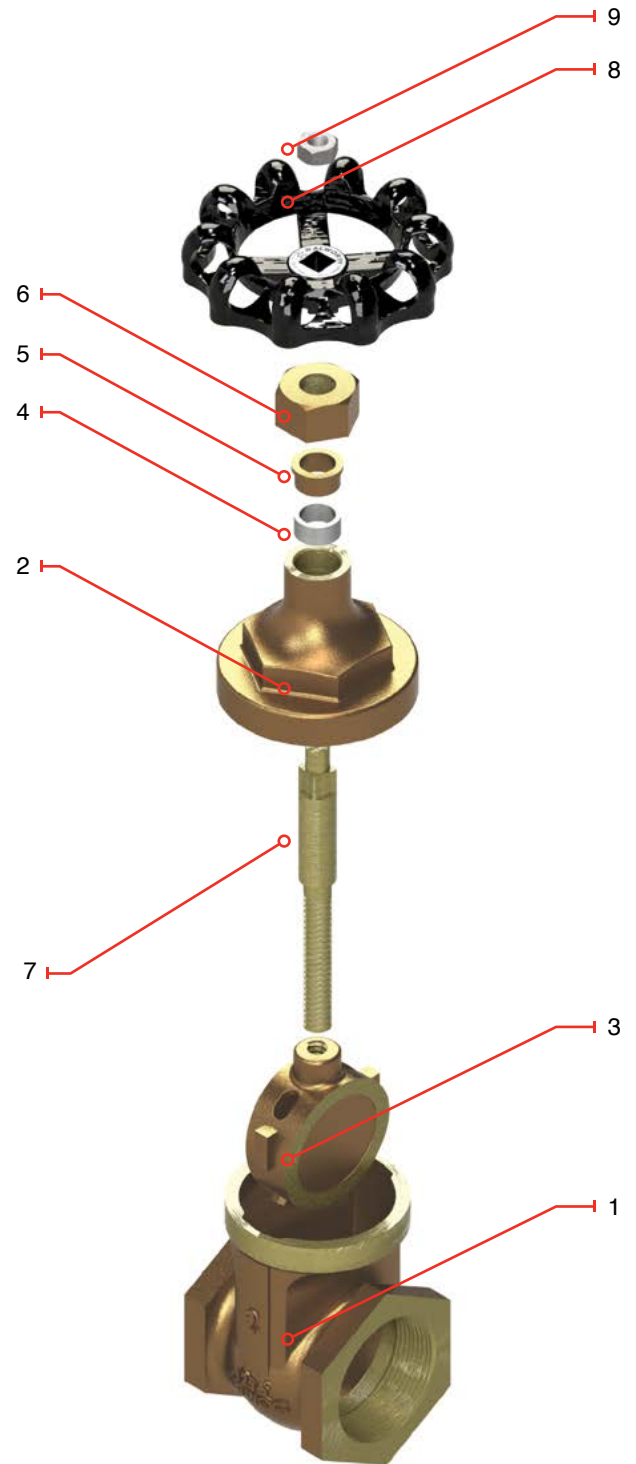
## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Non-Rising Stem
- Bronze construction
- Integral seat rings
- Screwed bonnet design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W4	Threaded Ends

## REGULAR BILL OF MATERIALS

NO.	DESCRIPTION	MATERIALS
1	Body	Bronze B62
2	Bonnet	Bronze B62
3	Disc	Bronze B62
4	Stem Packing	Non Asbestos
5	Gland	Brass B16
6	Packing Nut	Bronze B62
7	Stem	Bronze B62
8	Handwheel	Ductile Iron A536
9	Handwheel nut	Galvanized Steel

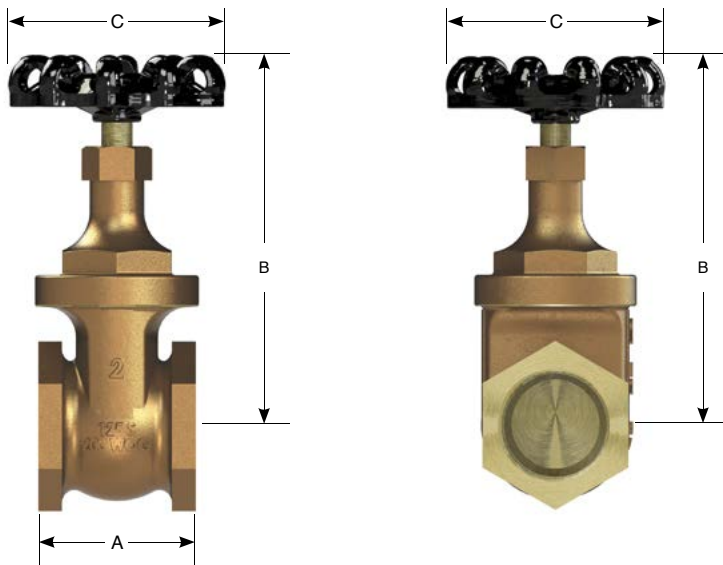


# WALWORTH INDUSTRIAL BRONZE NRS GATE VALVE CLASS 125 (200 WOG)

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Non-Rising Stem
- Bronze construction
- Integral seat rings
- Screwed bonnet design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W4	Threaded Ends



## DIMENSIONS AND WEIGHTS

D NOMINAL DIAMETER	mm	13	19	25	30	40	50
	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	mm	45.97	51.81	58.92	62.48	66.04	72.39
	in	1.81	2.04	2.32	2.46	2.6	2.85
B	mm	86.36	95.75	112.64	130.3	144.78	201.29
	in	3.4	3.77	4.43	5.13	5.7	7.92
C	mm	50.8	63.5	66.54	76.2	82.55	91.94
	in	2	2.5	2.62	3	3.25	3.62
Weight W4	kg	0.35	0.51	0.68	0.98	1.32	2.06
	lb	0.77	1.122	1.5	2.15	2.9	4.53
Cv	Flow coefficient	16.08	37.6	69.7	111.36	164.13	306.76

## **WALWORTH INDUSTRIAL BRONZE NRS GATE VALVE CLASS 150 (300 WOG)**

### **INDUSTRIAL BRONZE NON-RISING STEM GATE VALVES**

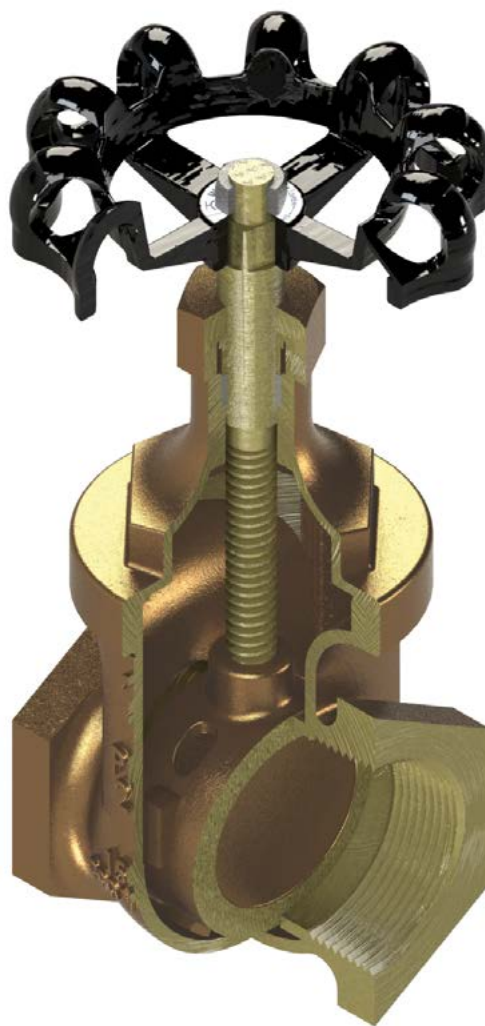
WALWORTH Bronze Gate Valves are used when there is a need to interrupt or cut some fluid. Gate valves are primarily used to permit or prevent flow of a fluid, so they should only be used as fully open or fully closed. The main characteristic of Non-Rising Stem is that design and performance are compact; it not takes more space to open or close the valve. When the valve needs to be open or closed, only the disc goes up or down. Non-Rising Stem is commonly used in underground or where the vertical spaced is limited.

### **DESIGN FEATURES**

- Design in accordance with MSS SP-80
- Body and bonnet of bronze
- Non-Rising Stem
- Screwed bonnet design
- Solid wedge design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Test in accordance with MSS-SP-80
- Handwheel operated

### **TRIM MATERIALS**

- Bronze gate valves are provided with disc and stem of bronze
- PTFE stem packing
- Integral seat rings
- Bronze trim valves are recommended for steam, water, air and non-corrosive oil or gas





# WALWORTH INDUSTRIAL BRONZE NRS GATE VALVE CLASS 150 (300 WOG)

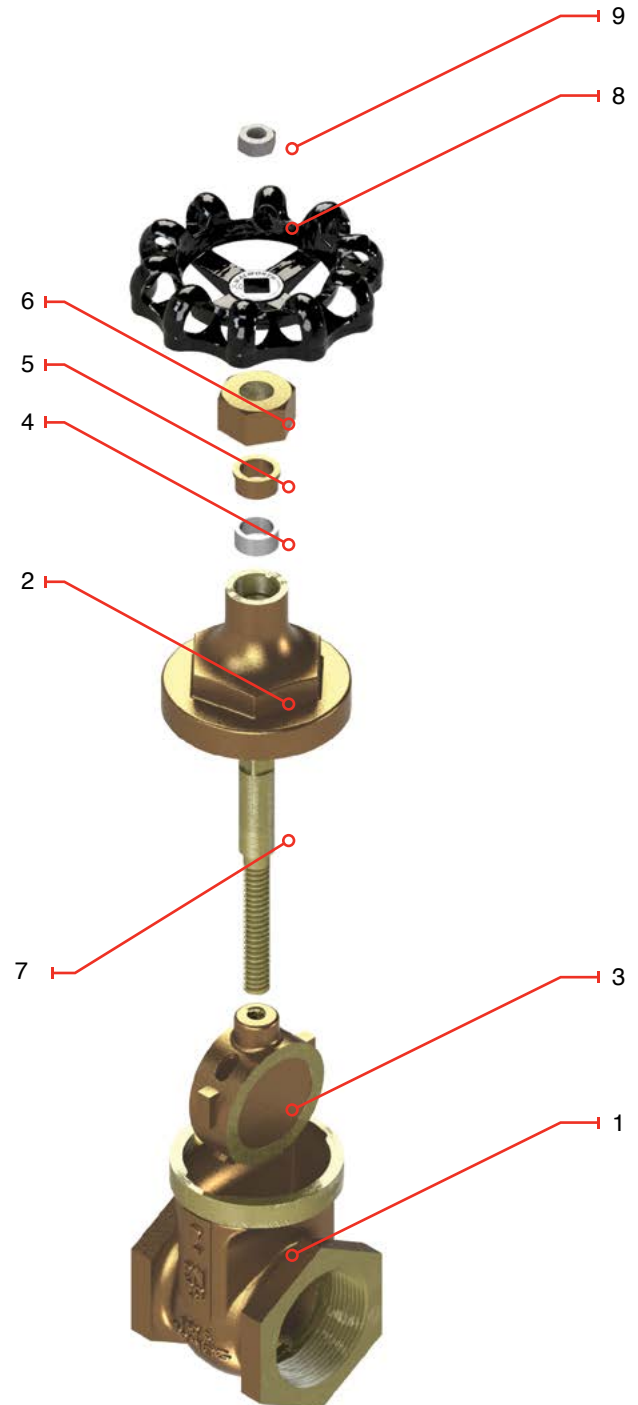
## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Non-Rising Stem
- Bronze construction
- Integral seat rings
- Screwed bonnet design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W14	Threaded Ends

## REGULAR BILL OF MATERIALS

NO.	DESCRIPTION	MATERIALS
1	Body	Bronze B62
2	Bonnet	Bronze B62
3	Disc	Bronze B62
4	Stem Packing	Non Asbestos
5	Gland	Brass B16
6	Packing Nut	Bronze B62
7	Stem	Bronze B62
8	Handwheel	Ductile Iron A536
9	Handwheel nut	Galvanized Steel

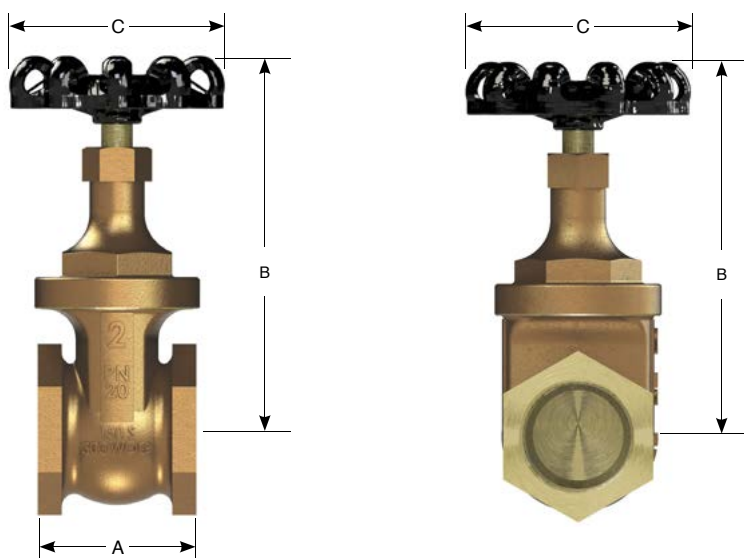


# WALWORTH INDUSTRIAL BRONZE NRS GATE VALVE CLASS 150 (300 WOG)

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Non-Rising Stem
- Bronze construction
- Integral seat rings
- Screwed bonnet design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W14	Threaded Ends



## DIMENSIONS AND WEIGHTS

D NOMINAL DIAMETER	mm	13	19	25	30	40	50
	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	mm	45.97	51.81	58.92	62.48	66.04	72.39
	in	1.81	2.04	2.32	2.46	2.6	2.85
B	mm	86.36	95.75	112.64	130.3	144.78	201.29
	in	3.4	3.77	4.43	5.13	5.7	7.92
C	mm	50.8	63.5	66.54	76.2	82.55	91.94
	in	2	2.5	2.62	3	3.25	3.62
Weight W14	kg	0.35	0.51	0.68	0.98	1.32	2.06
	lb	0.77	1.122	1.5	2.15	2.9	4.53
Cv	Flow coefficient	16.08	37.6	69.7	111.36	164.13	306.76

# WALWORTH INDUSTRIAL BRONZE RS GATE VALVE CLASS 125 (200 WOG)

## INDUSTRIAL BRONZE RISING STEM GATE VALVES

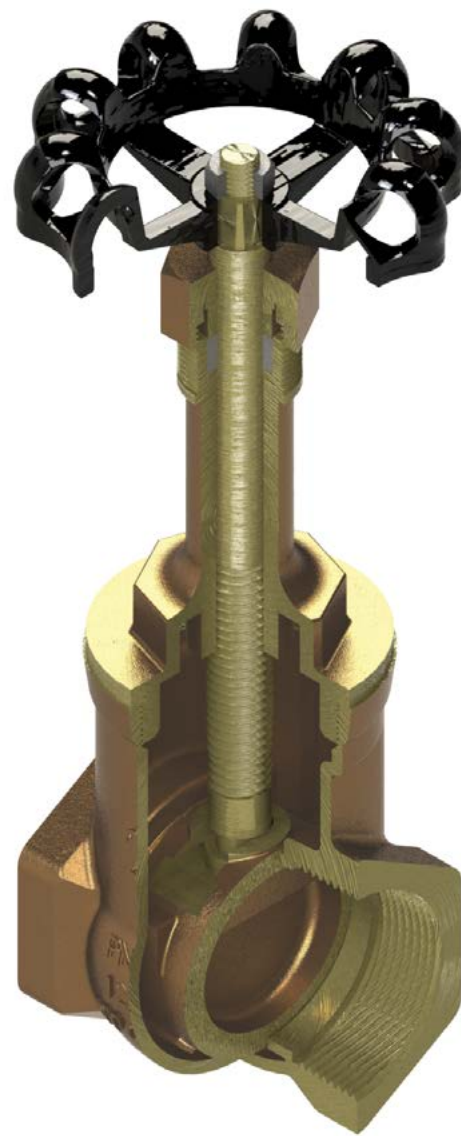
WALWORTH Bronze Gate valves are used when there is a need to interrupt or cut some flow fluid. Gate valves are primarily used to permit or prevent the flow of a fluid, so they should only be used as fully open or fully closed. Gate valves shouldn't be used to regulate the flow, because the high velocities through a partially open valve may result in erosive damage to the wedge and seats. Installation of Gate Valve doesn't depend on the flow direction because it is a Bidirectional valve.

### DESIGN FEATURES

- Design in accordance with MSS SP-80
- Body and bonnet of bronze
- Rising Stem
- Screwed bonnet design
- Solid wedge design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Test in accordance with MSS-SP-80
- Handwheel operated

### TRIM MATERIALS

- Bronze gate valves are provided with disc and stem of bronze
- PTFE stem packing
- Integral seat rings
- Bronze trim valves are recommended for steam, water, air and non-corrosive oil or gas



# WALWORTH INDUSTRIAL BRONZE RS GATE VALVE CLASS 125 (200 WOG)

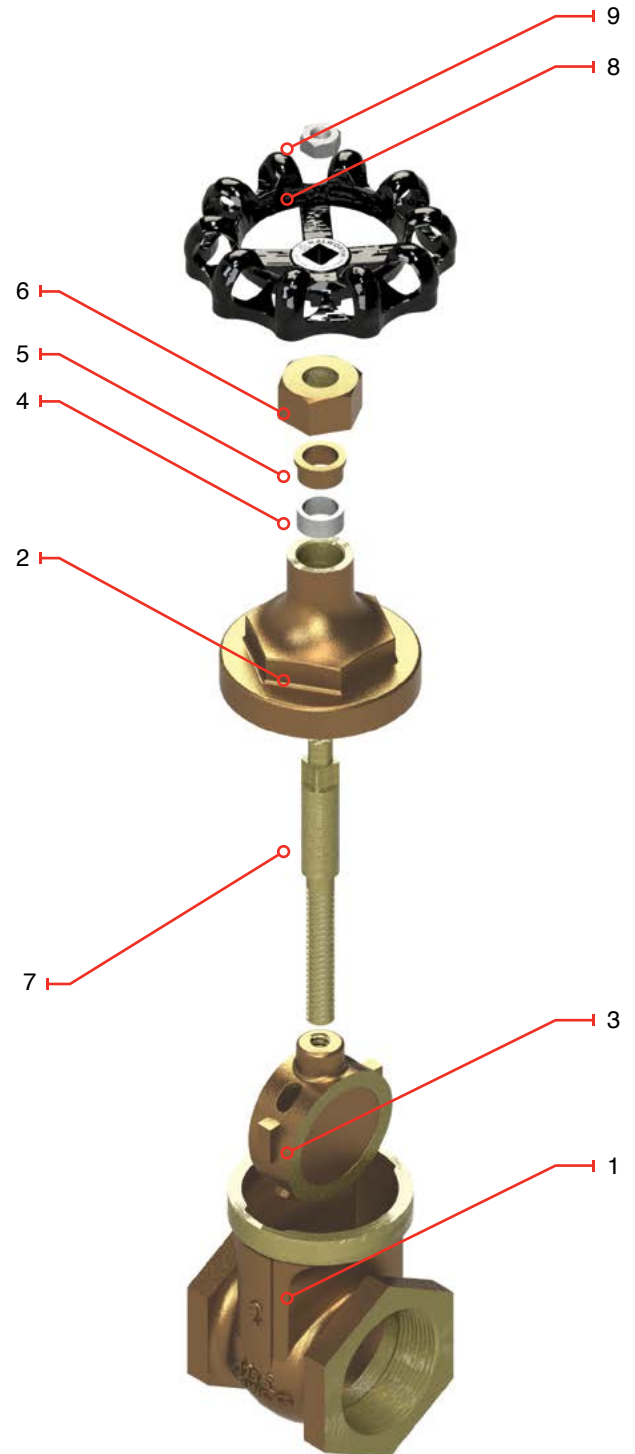
## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Rising Stem
- Bronze construction
- Integral seat rings
- Screwed bonnet design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W55	Threaded Ends

## REGULAR BILL OF MATERIALS

NO.	DESCRIPTION	MATERIALS
1	Body	Bronze B62
2	Bonnet	Bronze B62
3	Disc	Bronze B62
4	Stem Packing	Non Asbestos
5	Gland	Brass B16
6	Packing Nut	Bronze B62
7	Stem	Bronze B62
8	Handwheel	Ductile Iron A536
9	Handwheel nut	Galvanized Steel



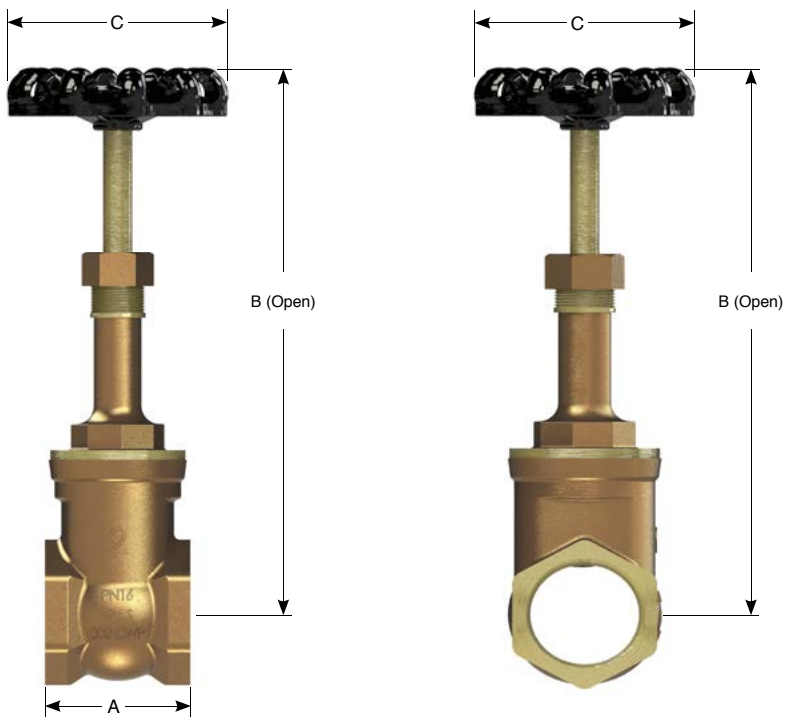


# WALWORTH INDUSTRIAL BRONZE RS GATE VALVE CLASS 125 (200 WOG)

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Rising Stem
- Bronze construction
- Integral seat rings
- Screwed bonnet design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W55	Threaded Ends



## DIMENSIONS AND WEIGHTS

D NOMINAL DIAMETER	mm	13	19	25	30	40	50
	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	mm	48	51.81	59.18	64	68.07	73.66
	in	1.89	2.04	2.33	2.52	2.68	2.9
B	mm	118.11	140.97	169.67	200.02	226.06	276.86
	in	4.65	5.55	6.68	7.87	8.9	10.9
C	mm	47.75	57.15	66.54	76.2	82.55	91.94
	in	1.88	2.25	2.62	3	3.25	3.62
Weight W55	kg	0.38	0.60	0.82	1.14	1.46	2.50
	lb	0.83	1.32	1.80	2.5	3.21	5.5
Cv	Flow coefficient	16.08	37.6	69.7	111.36	164.13	306.76

## **WALWORTH INDUSTRIAL BRONZE RS GATE VALVE CLASS 150 (300 WOG)**

### **INDUSTRIAL BRONZE RISING STEM GATE VALVES**

WALWORTH Bronze Gate valves are used when there is a need to interrupt or cut some flow fluid. Gate valves are primarily used to permit or prevent the flow of a fluid, so they should only be used as fully open or fully closed. Gate valves shouldn't be used to regulate the flow, because the high velocities through a partially open valve may result in erosive damage to the wedge and seats. Installation of Gate Valve doesn't depend on the flow direction because it is a Bidirectional valve.

### **DESIGN FEATURES**

- Design in accordance with MSS SP-80
- Body and bonnet of bronze
- Rising Stem
- Screwed bonnet design
- Solid wedge design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Test in accordance with MSS-SP-80
- Handwheel operated

### **TRIM MATERIALS**

- Bronze gate valves are provided with disc and stem of bronze
- PTFE stem packing
- Integral seat rings
- Bronze trim valves are recommended for steam, water, air and non-corrosive oil or gas



# WALWORTH INDUSTRIAL BRONZE RS GATE VALVE CLASS 150 (300 WOG)

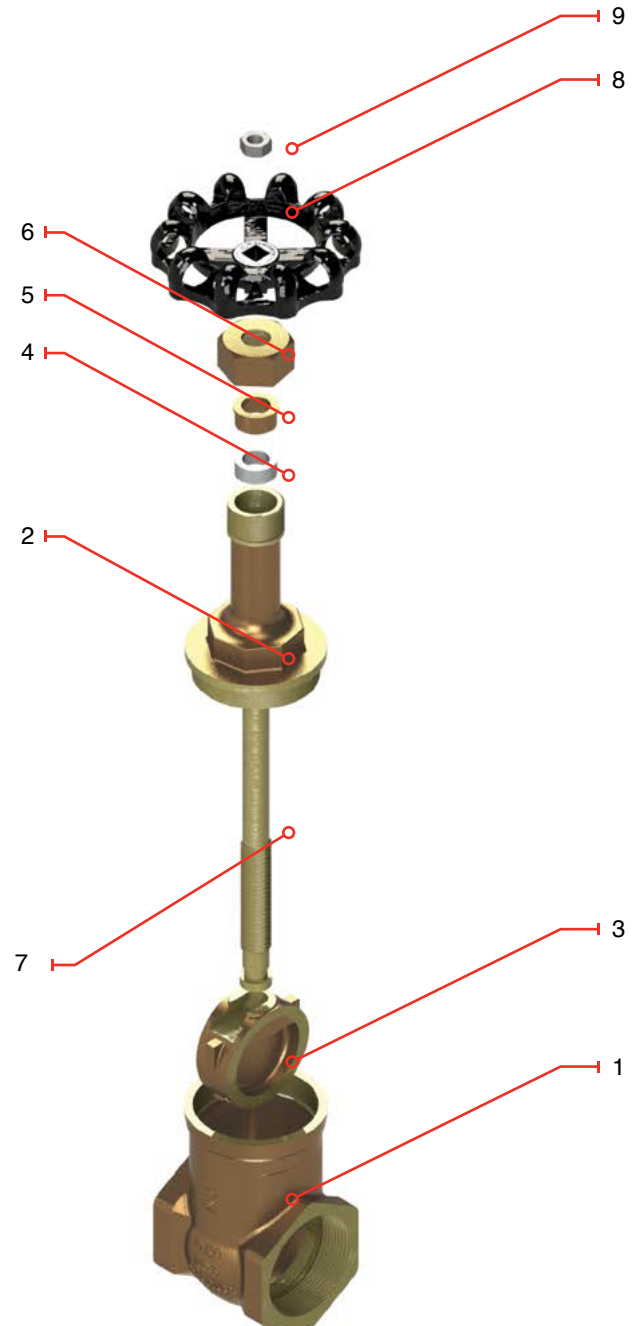
## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Rising Stem
- Bronze construction
- Integral seat rings
- Screwed bonnet design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W56	Threaded Ends

## REGULAR BILL OF MATERIALS

NO.	DESCRIPTION	MATERIALS
1	Body	Bronze B62
2	Bonnet	Bronze B62
3	Disc	Bronze B62
4	Stem Packing	Non Asbestos
5	Gland	Brass B16
6	Packing Nut	Bronze B62
7	Stem	Bronze B62
8	Handwheel	Ductile Iron A536
9	Handwheel nut	Galvanized Steel

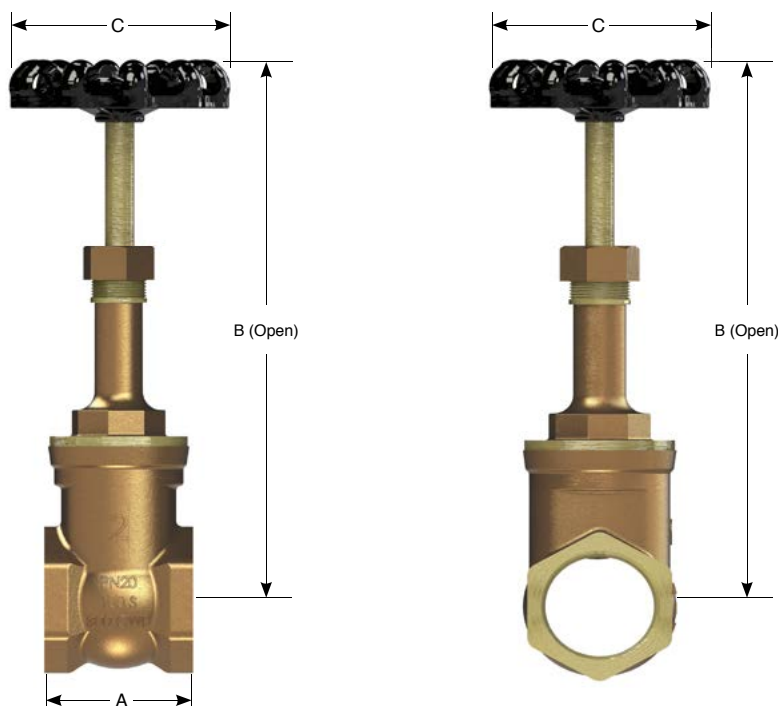


# WALWORTH INDUSTRIAL BRONZE RS GATE VALVE CLASS 150 (300 WOG)

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Rising Stem
- Bronze construction
- Integral seat rings
- Screwed bonnet design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W56	Threaded Ends



## DIMENSIONS AND WEIGHTS

D NOMINAL DIAMETER	mm	13	19	25	30	40	50
	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	mm	48	51.81	59.18	64	68.32	73.66
	in	1.89	2.04	2.33	2.52	2.69	2.9
B	mm	118.11	140.97	169.67	200.02	225.93	276.86
	in	4.65	5.55	6.68	7.87	8.89	10.9
C	mm	50.8	63.5	66.54	76.2	82.55	91.94
	in	2	2.5	2.62	3	3.25	3.62
Weight W56	kg	0.38	0.60	0.82	1.14	1.46	2.50
	in	0.83	1.32	1.80	2.5	3.21	5.5
Cv	Flow coefficient	16.08	37.6	69.7	111.36	164.13	306.76



# WALWORTH INDUSTRIAL BRONZE RS GATE VALVE UNION BONNET CLASS 150 (300 WOG)

## INDUSTRIAL BRONZE RISING STEM GATE VALVES (UNION BONNET)

WALWORTH Bronze Gate valves are used when there is a need to interrupt or cut some flow fluid. Gate valves are primarily used to permit or prevent the flow of a fluid, so they should only be used as fully open or fully closed. Gate valves shouldn't be used to regulate the flow, because the high velocities through a partially open valve may result in erosive damage to the wedge and seats. Installation of Gate Valve doesn't depend on the flow direction because it is a Bidirectional valve. Gate Valves with union bonnet are used for applications that require frequent inspection or cleaning. This type of bonnet gives the body added strength.

### DESIGN FEATURES

- Design in accordance with MSS SP-80
- Body and bonnet of bronze
- Rising Stem
- Union Bonnet Design
- Solid wedge design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Test in accordance with MSS-SP-80
- Handwheel operated

### TRIM MATERIALS

- Bronze gate valves are provided with disc and stem of bronze
- PTFE stem packing
- Integral seat rings
- Bronze trim valves are recommended for steam, water, air and non-corrosive oil or gas



# WALWORTH INDUSTRIAL BRONZE RS GATE VALVE UNION BONNET CLASS 150 (300 WOG)

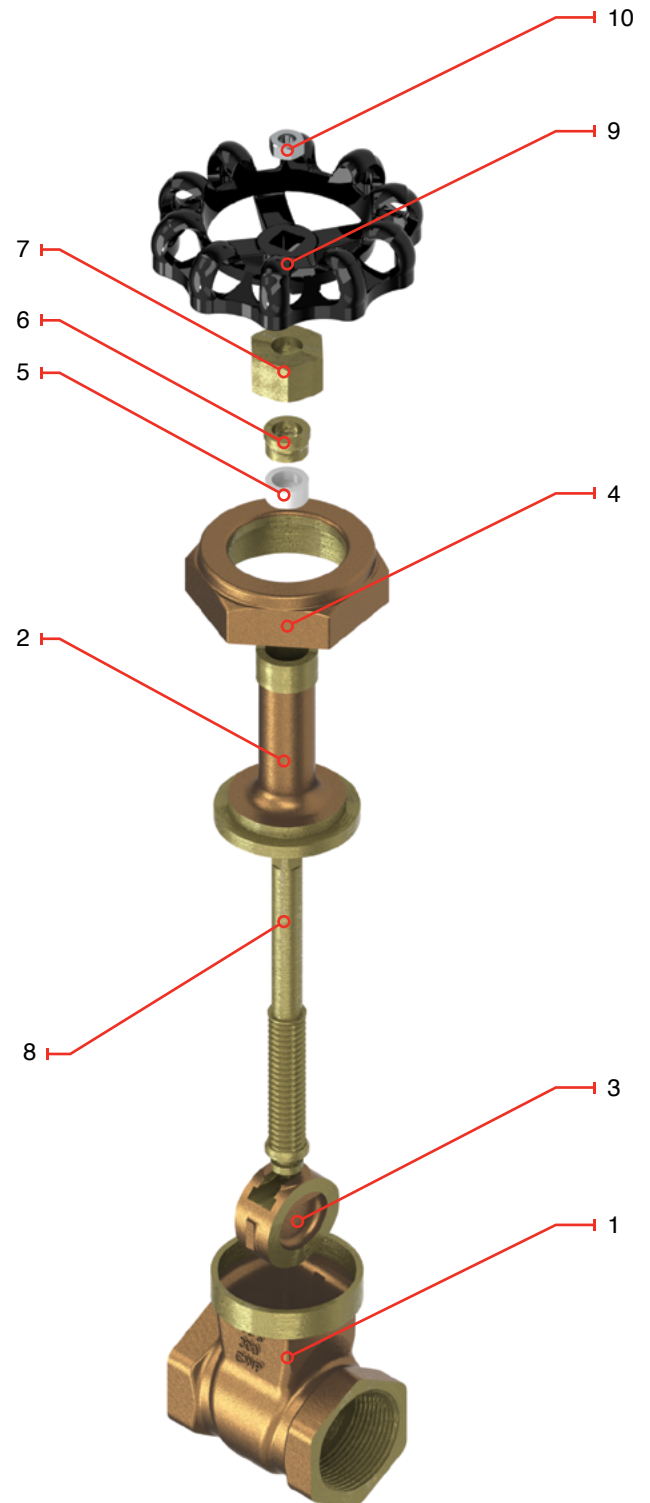
## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Rising Stem
- Bronze construction
- Integral seat rings
- Union Bonnet Design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W11	Threaded Ends

## REGULAR BILL OF MATERIALS

NO.	DESCRIPTION	MATERIALS
1	Body	Bronze B62
2	Bonnet	Bronze B62
3	Disc	Bronze B62
4	Union Ring	Bronze B62
5	Stem Packing	Non Asbestos
6	Gland	Brass B16
7	Packing Nut	Bronze B62
8	Stem	Bronze B62
9	Handwheel	Ductile Iron A536
10	Handwheel nut	Galvanized Steel

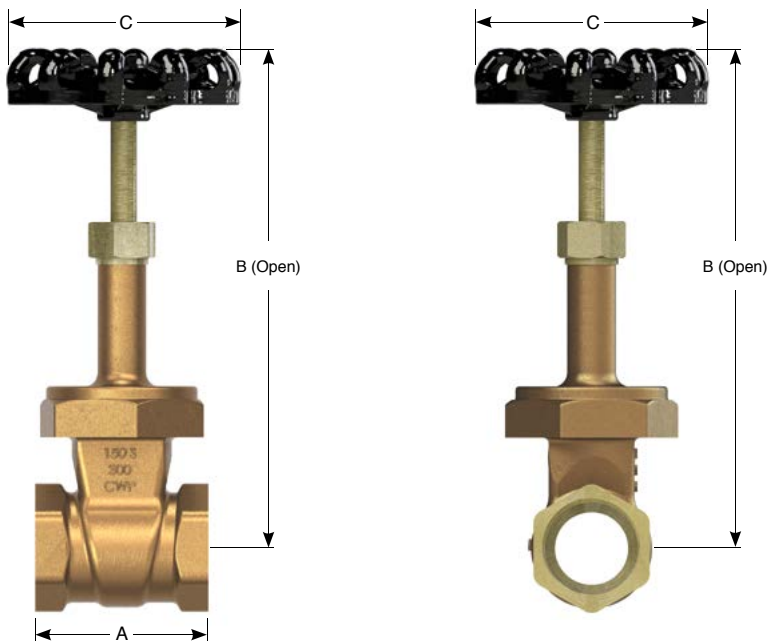


# WALWORTH INDUSTRIAL BRONZE RS GATE VALVE UNION BONNET CLASS 150 (300 WOG)

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Rising Stem
- Bronze construction
- Integral seat rings
- Union Bonnet Design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W11	Threaded Ends



## DIMENSIONS AND WEIGHTS

D NOMINAL DIAMETER	mm	13	19	25	30	40	50
	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	mm	60.96	57.78	65.40	100.96	83.82	86.86
	in	2.4	2.27	2.57	3.97	3.3	3.42
B	mm	134.62	159.06	183.51	219.07	244.47	298.45
	in	5.3	6.26	7.22	8.62	9.62	11.75
C	mm	50.8	63.5	66.54	76.2	82.55	91.94
	in	2	2.5	2.62	3	3.25	3.62
Weight W11	kg	1,10	1,40	2,20	3,70	4,90	7,00
	lb	2.42	3.08	4.84	8.14	10.78	15.4
Cv	Flow coefficient	16.08	37.6	69.7	111.36	164.13	306.76

# WALWORTH INDUSTRIAL BRONZE RS GATE VALVE UNION BONNET CLASS 200 (400 WOG)

## INDUSTRIAL BRONZE RISING STEM GATE VALVES (UNION BONNET)

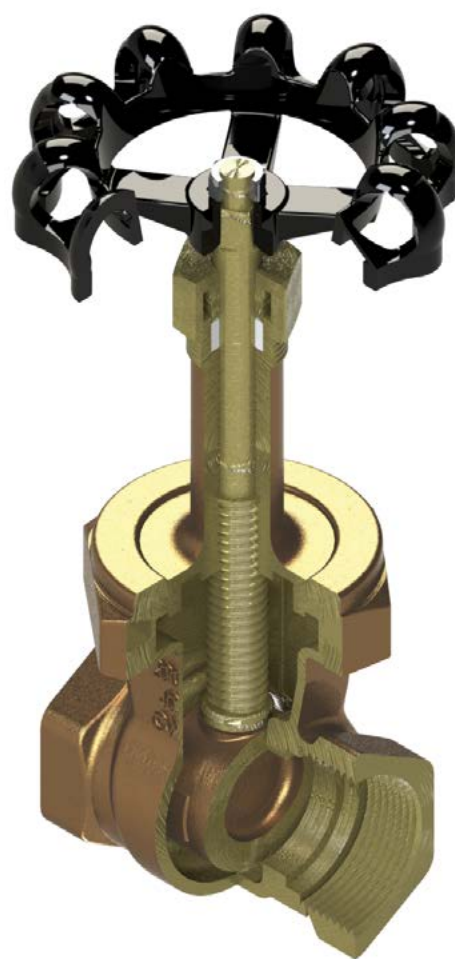
WALWORTH Bronze Gate valves are used when there is a need to interrupt or cut some flow fluid. Gate valves are primarily used to permit or prevent the flow of a fluid, so they should only be used as fully open or fully closed. Gate valves shouldn't be used to regulate the flow, because the high velocities through a partially open valve may result in erosive damage to the wedge and seats. Installation of Gate Valve doesn't depend on the flow direction because it is a Bidirectional valve. Gate Valves with union bonnet are used for applications that require frequent inspection or cleaning. This type of bonnet gives the body added strength.

### DESIGN FEATURES

- Design in accordance with MSS SP-80
- Body and bonnet of bronze
- Rising Stem
- Union Bonnet Design
- Solid wedge design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Test in accordance with MSS-SP-80
- Handwheel operated

### TRIM MATERIALS

- Bronze gate valves are provided with disc and stem of bronze
- PTFE stem packing
- Integral seat rings
- Bronze trim valves are recommended for steam, water, air and non-corrosive oil or gas



# WALWORTH INDUSTRIAL BRONZE RS GATE VALVE UNION BONNET CLASS 200 (400 WOG)

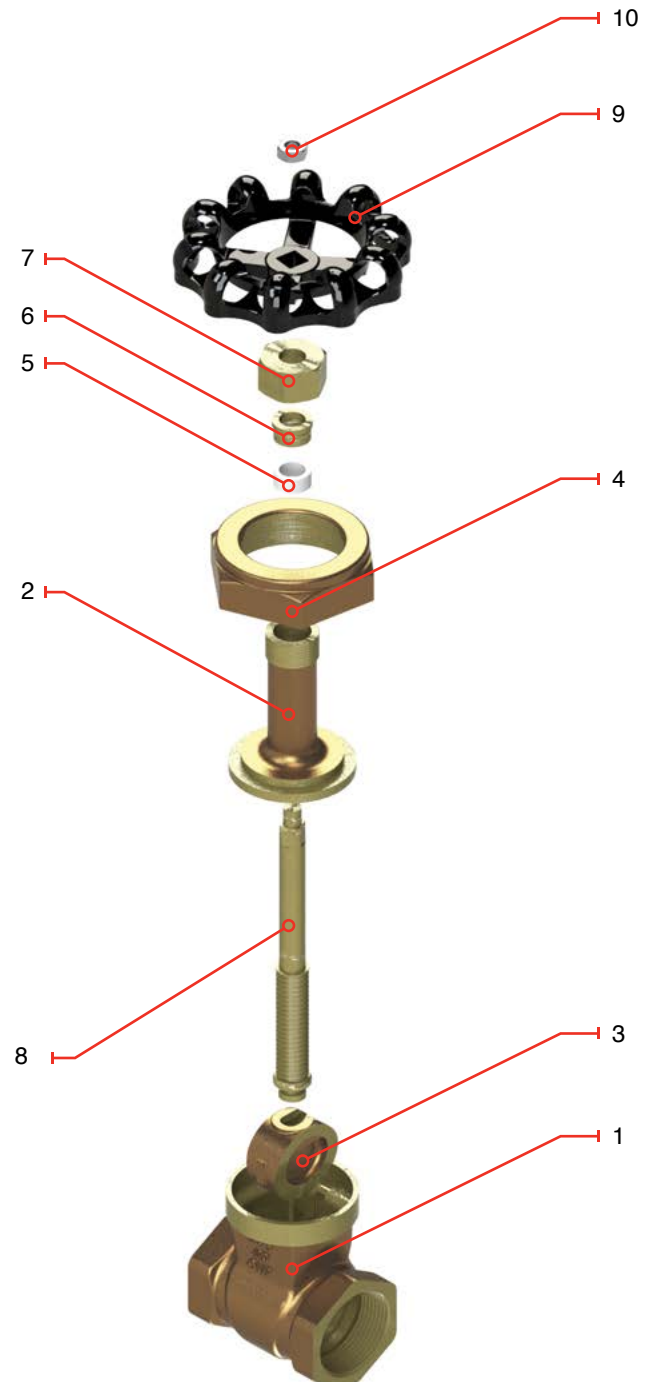
## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Rising Stem
- Bronze construction
- Integral seat rings
- Union Bonnet Design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W36	Threaded Ends

## REGULAR BILL OF MATERIALS

NO.	DESCRIPTION	MATERIALS
1	Body	Bronze B61
2	Bonnet	Bronze B61
3	Disc	Bronze B61
4	Union Ring	Bronze B62
5	Stem Packing	Non Asbestos
6	Gland	Brass B16
7	Packing Nut	Bronze B61
8	Stem	Bronze B584
9	Handwheel	Ductile Iron A536
10	Handwheel nut	Galvanized Steel



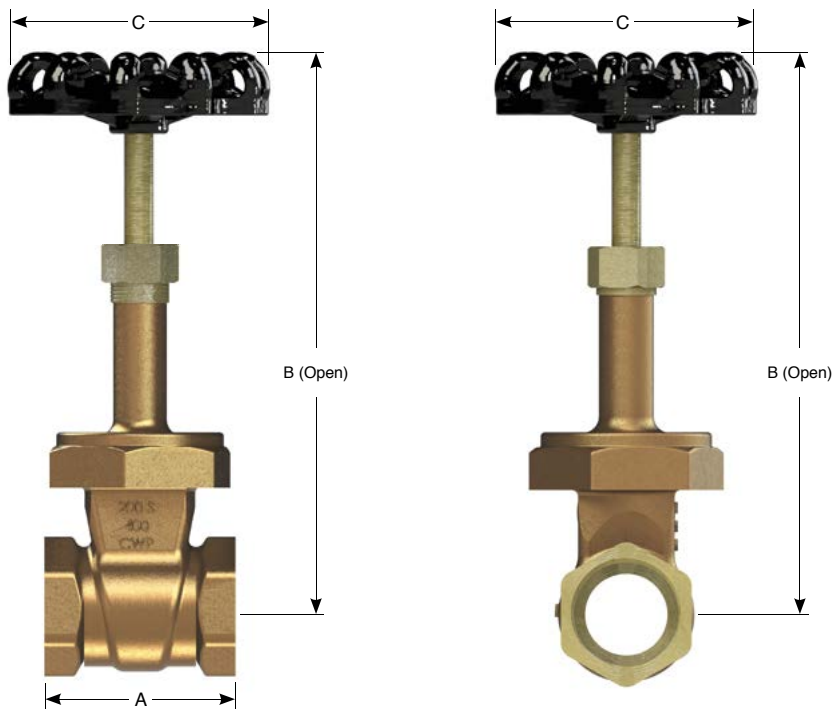


# WALWORTH INDUSTRIAL BRONZE RS GATE VALVE UNION BONNET CLASS 200 (400 WOG)

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Rising Stem
- Bronze construction
- Integral seat rings
- Union Bonnet Design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W36	Threaded Ends



## DIMENSIONS AND WEIGHTS

D NOMINAL DIAMETER	mm	13	19	25	30	40	50
	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	mm	60.9	57.78	65.40	76.2	83.82	86.86
	in	2.4	2.27	2.57	3	3.3	3.42
B	mm	134.62	159.06	183.51	219.07	244.47	298.45
	in	5.3	6.26	7.22	8.62	9.62	11.75
C	mm	50.8	63.5	66.54	76.2	82.55	91.94
	in	2.25	2.5	2.75	3.25	3.62	4
Weight W36	kg	1,40	2,10	2,60	4,00	6,20	9,60
	lb	3.08	4.62	5.72	8.8	13.64	21.12
Cv	Flow coefficient	16.08	37.6	69.7	111.36	164.13	306.76

# WALWORTH INDUSTRIAL BRONZE GLOBE VALVE CLASS 125 (200 WOG)

## INDUSTRIAL BRONZE GLOBE VALVES

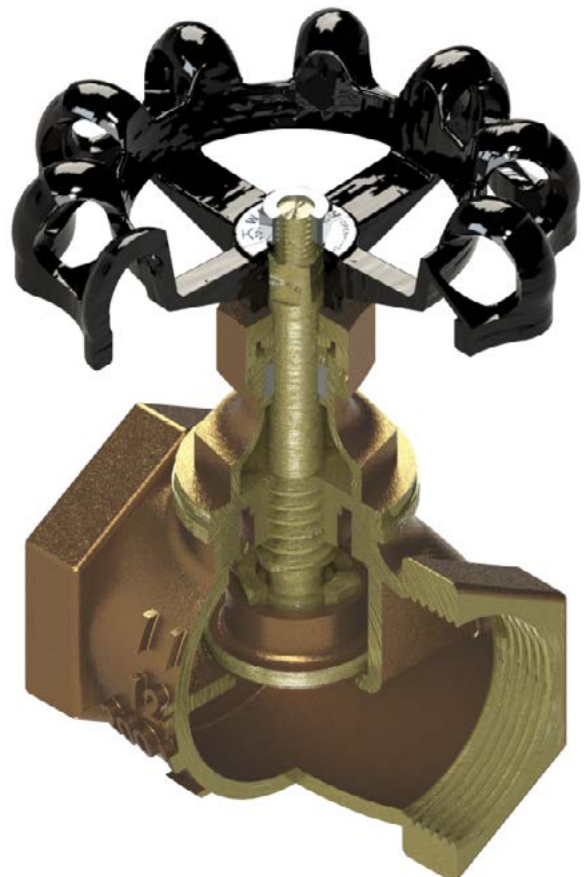
WALWORTH Bronze Globe valves are used when there is a need to regulate the volume of the flow. Globe valves are not recommended when a continuous full flow of fluid is required due to the high pressure drop inherent to the design. Globe valves are unidirectional and, always, they should be installed so the flow intake enters through the base of the valve seat, an arrow stamped on the body indicates direction of flow. Globe valves may be used with fluids containing particles in suspension.

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Body and bonnet of bronze
- Rising Stem
- Screwed bonnet design
- Conical Plug type disc
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Test in accordance with MSS-SP-80
- Handwheel operated

## TRIM MATERIALS

- Bronze globe valves are provided with plug and stem of bronze
- PTFE stem packing
- Integral seat rings
- Bronze trim valves are recommended for steam, water, air and non-corrosive oil or gas



# WALWORTH INDUSTRIAL BRONZE GLOBE VALVE CLASS 125 (200 WOG)

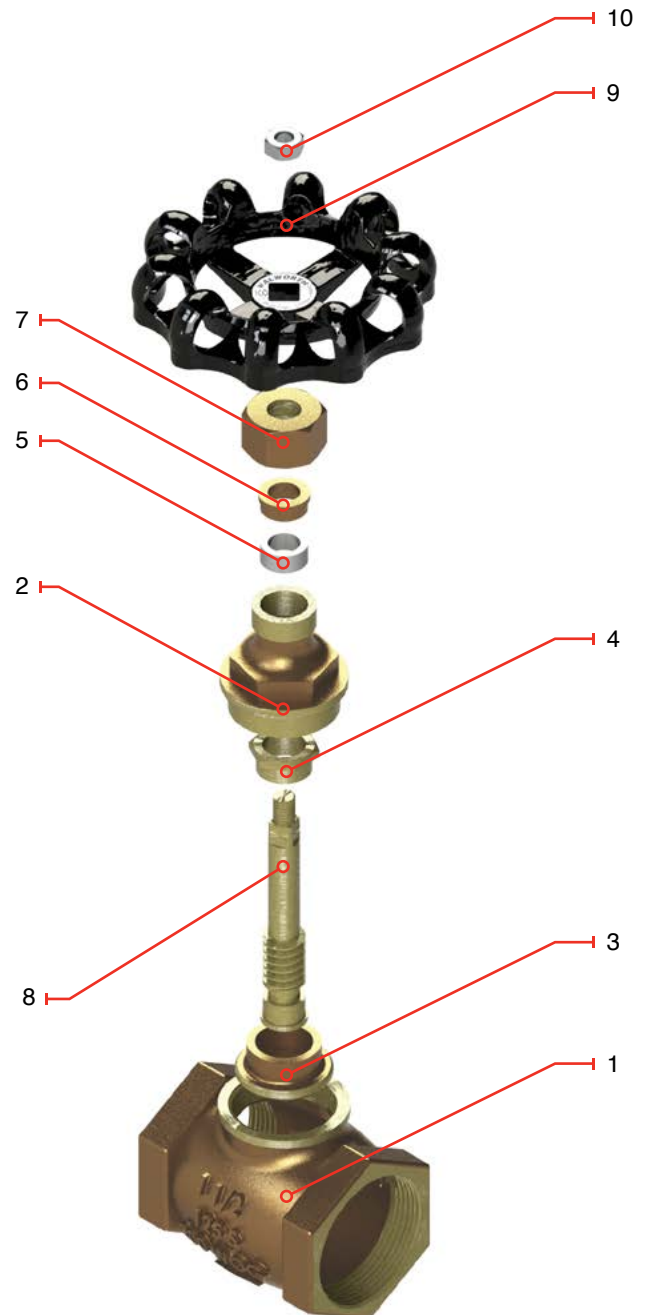
## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Rising Stem
- Bronze construction
- Integral seat rings
- Screwed bonnet design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W58	Threaded Ends

## REGULAR BILL OF MATERIALS

NO.	DESCRIPTION	MATERIALS
1	Body	Bronze B62
2	Bonnet	Bronze B62
3	Disc	Bronze B62
4	Disc Holder	Bronze B62
5	Stem Packing	Non Asbestos
6	Gland	Brass B16
7	Packing Nut	Bronze B62
8	Stem	Bronze B62
9	Handwheel	Ductile Iron A536
10	Handwheel nut	Galvanized Steel

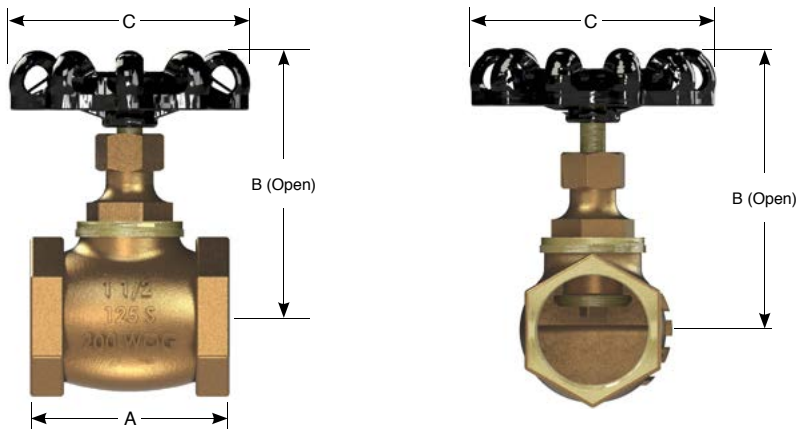


# WALWORTH INDUSTRIAL BRONZE GLOBE VALVE CLASS 125 (200 WOG)

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Rising Stem
- Bronze construction
- Integral seat rings
- Screwed bonnet design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W58	Threaded Ends



## DIMENSIONS AND WEIGHTS

D NOMINAL DIAMETER	mm	13	19	25	30	40	50
	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	mm	49.02	55.11	64	73.66	83.56	96.52
	in	1.93	2.17	2.52	2.9	3.29	3.8
B	mm	87.12	89.40	103.88	120.14	134.87	152.01
	in	3.43	3.52	4.09	4.73	5.31	5.98
C	mm	50.8	63.5	69.85	76.2	88.9	101.6
	in	2	2.5	2.75	3	3.5	4
Weight W58	kg	0.46	0.65	1.00	1.46	2.19	3.33
	lb	1.01	1.43	2.2	3.21	4.81	7.32
Cv	Flow coefficient	2.46	5.76	10.69	17.08	25.17	47.05

## **WALWORTH INDUSTRIAL BRONZE GLOBE VALVE CLASS 150 (300 WOG)**

### **INDUSTRIAL BRONZE GLOBE VALVES HANDWHEEL OPERATED WITH RISING STEM**

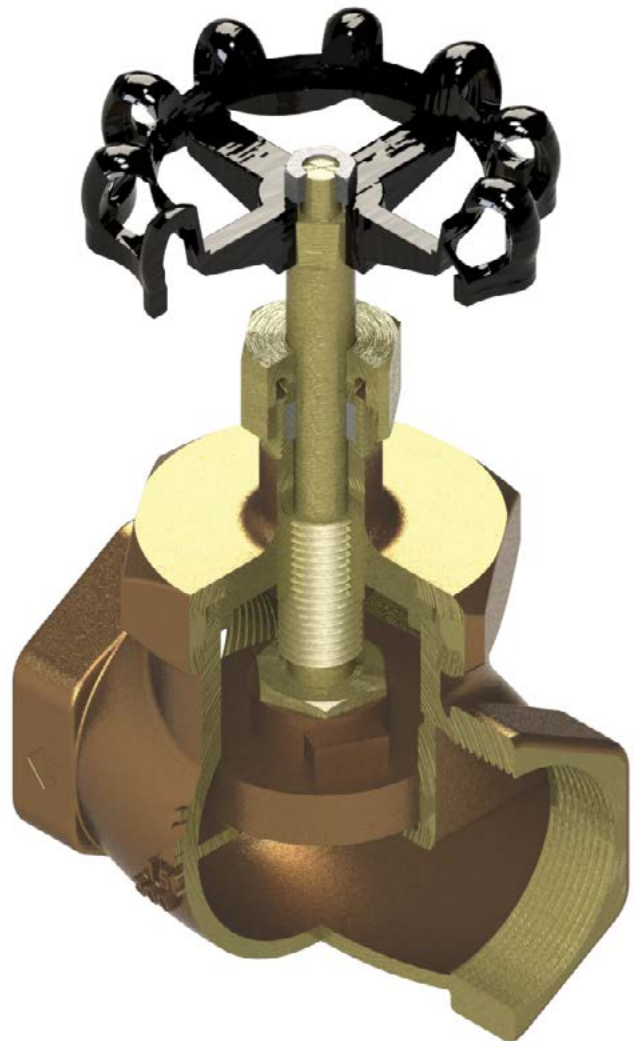
WALWORTH Bronze Globe valves are used when there is a need to regulate the volume of the flow. Globe valves are not recommended when a continuous full flow of fluid is required due to the high pressure drop inherent to the design. Globe valves are unidirectional and, always, they should be installed so the flow intake enters through the base of the valve seat, an arrow stamped on body indicates direction of flow. Globe valves may be used with fluids containing particles in suspension.

### **DESIGN FEATURES**

- Design in accordance with MSS SP-80
- Body and bonnet of bronze
- Rising Stem
- Screwed bonnet design
- Soft Seat
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Test in accordance with MSS-SP-80
- Handwheel operated

### **TRIM MATERIALS**

- Bronze globe valves are provided with plug and stem of bronze
- PTFE Insert on plug
- PTFE stem packing
- Integral seat rings
- Bronze trim valves are recommended for steam, water, air and non-corrosive oil or gas





# WALWORTH INDUSTRIAL BRONZE GLOBE VALVE CLASS 150 (300 WOG)

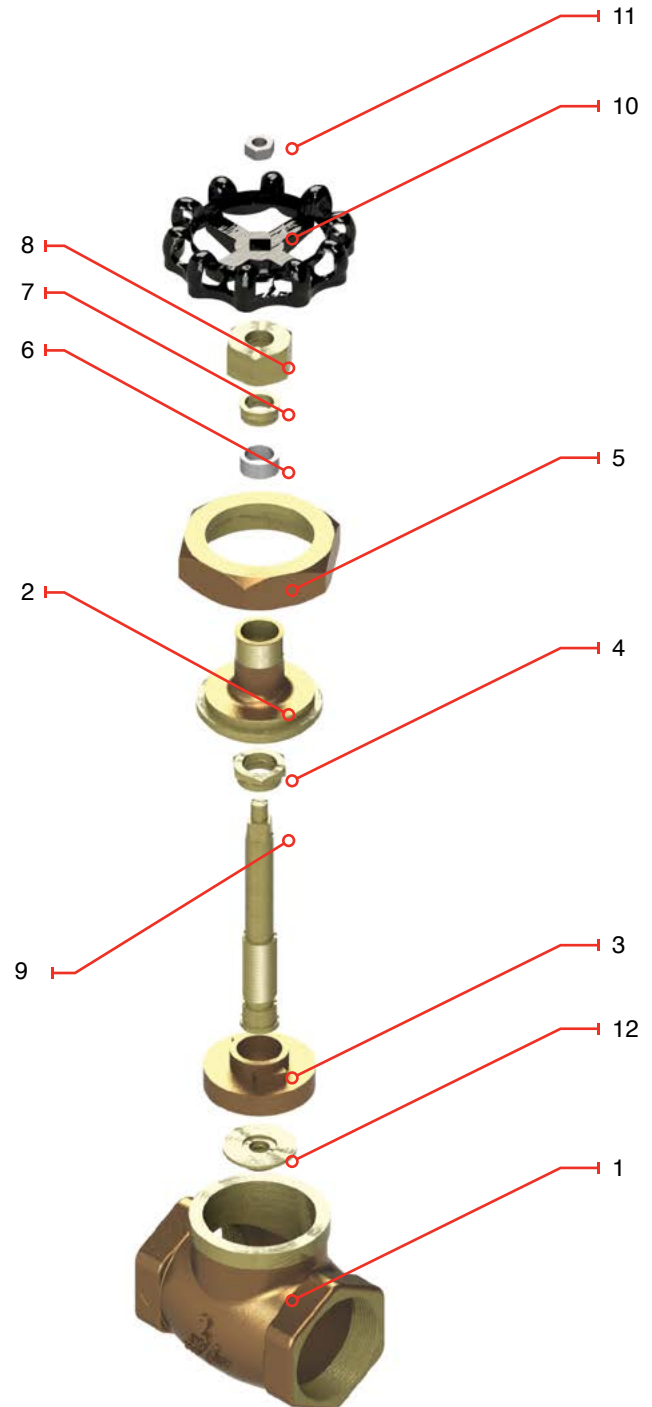
## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Rising Stem
- Bronze construction
- Integral seat rings
- Union Bonnet Design
- Soft Seat
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W95	Threaded Ends

## REGULAR BILL OF MATERIALS

NO.	DESCRIPTION	MATERIALS
1	Body	Bronze B62
2	Bonnet	Bronze B62
3	Disc	Bronze B62
4	Disc Holder	Bronze B62
5	Union Nut	Bronze B62
6	Stem Packing	Non Asbestos
7	Gland	Brass B16
8	Packing Nut	Bronze B62
9	Stem	Bronze B62
10	Handwheel	Ductile Iron A536
11	Handwheel nut	Galvanized Steel
12	Disc Nut	Bronze B62

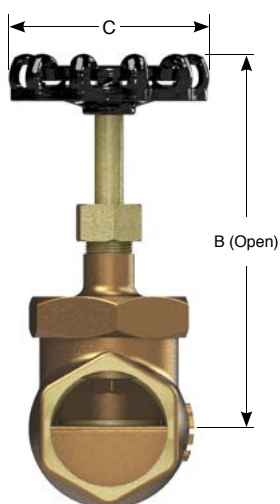
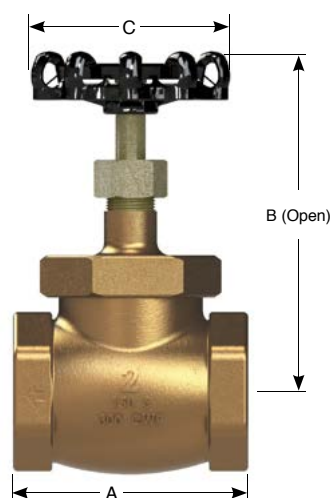


# WALWORTH INDUSTRIAL BRONZE GLOBE VALVE CLASS 150 (300 WOG)

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Rising Stem
- Bronze construction
- Integral seat rings
- Union Bonnet Design
- Soft Seat
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W95	Threaded Ends



## DIMENSIONS AND WEIGHTS

D NOMINAL DIAMETER	mm	13	19	25	30	40	50
	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	mm	57.15	67.31	76.7	89.66	101.6	122.42
	in	2.25	2.65	3.02	3.53	4	4.82
B	mm	104.9	125.47	140.84	155.19	172.84	200.66
	in	4.13	4.94	5.54	6.11	6.8	7.9
C	mm	50.8	63.5	69.85	76.2	88.9	101.6
	in	2	2.5	2.75	3	3.5	4
Weight W95	kg	0.46	0.65	1.00	1.46	2.19	3.33
	lb	1.01	1.43	2.2	3.21	4.81	7.32
Cv	Flow coefficient	2.46	5.76	10.69	17.08	25.17	47.05

# WALWORTH INDUSTRIAL BRONZE GLOBE VALVE CLASS 200 (400 WOG)

## INDUSTRIAL BRONZE GLOBE VALVES HANDWHEEL OPERATED WITH RISING STEM

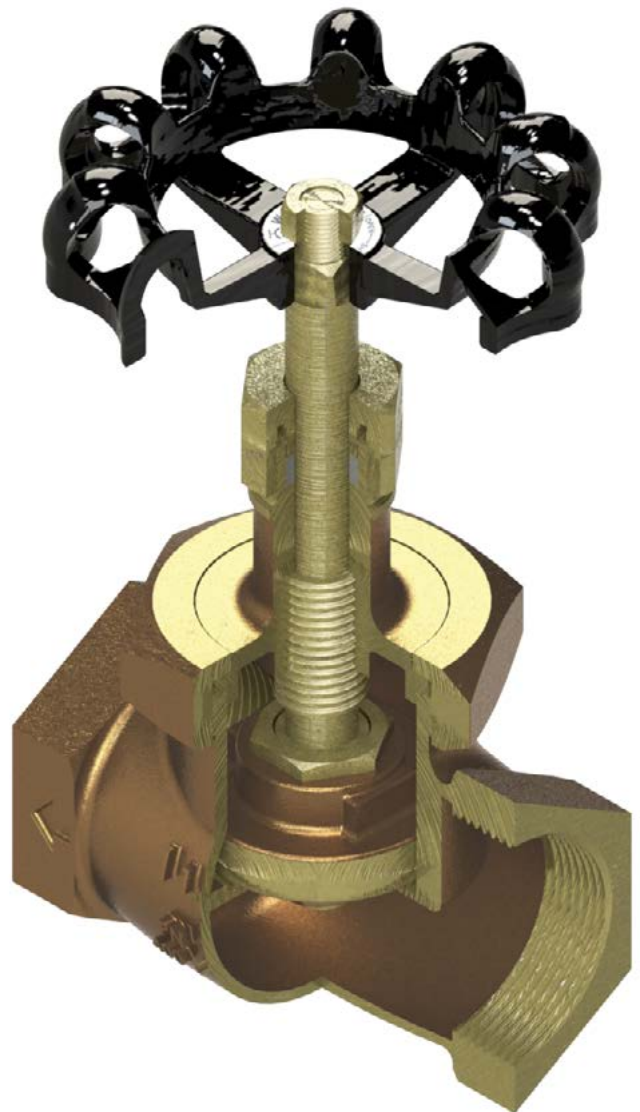
WALWORTH Bronze Globe valves are used when there is a need to regulate the volume of the flow. Globe valves are not recommended when a continuous full flow of fluid is required due to the high pressure drop inherent to the design. Globe valves are unidirectional and, always, they should be installed so the flow intake enters through the base of the valve seat, an arrow stamped on body indicates direction of flow. Globe valves may be used with fluids containing particles in suspension.

### DESIGN FEATURES

- Design in accordance with MSS SP-80
- Body and bonnet of bronze
- Rising Stem
- Union Bonnet Design
- Conical Plug type disc
- Soft Seat
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Test in accordance with MSS-SP-80
- Handwheel operated

### TRIM MATERIALS

- Bronze globe valves are provided with plug and stem of bronze
- PTFE Insert on plug
- PTFE stem packing
- Integral seat rings
- Bronze trim valves are recommended for steam, water, air and non-corrosive oil or gas



# WALWORTH INDUSTRIAL BRONZE GLOBE VALVE CLASS 200 (400 WOG)

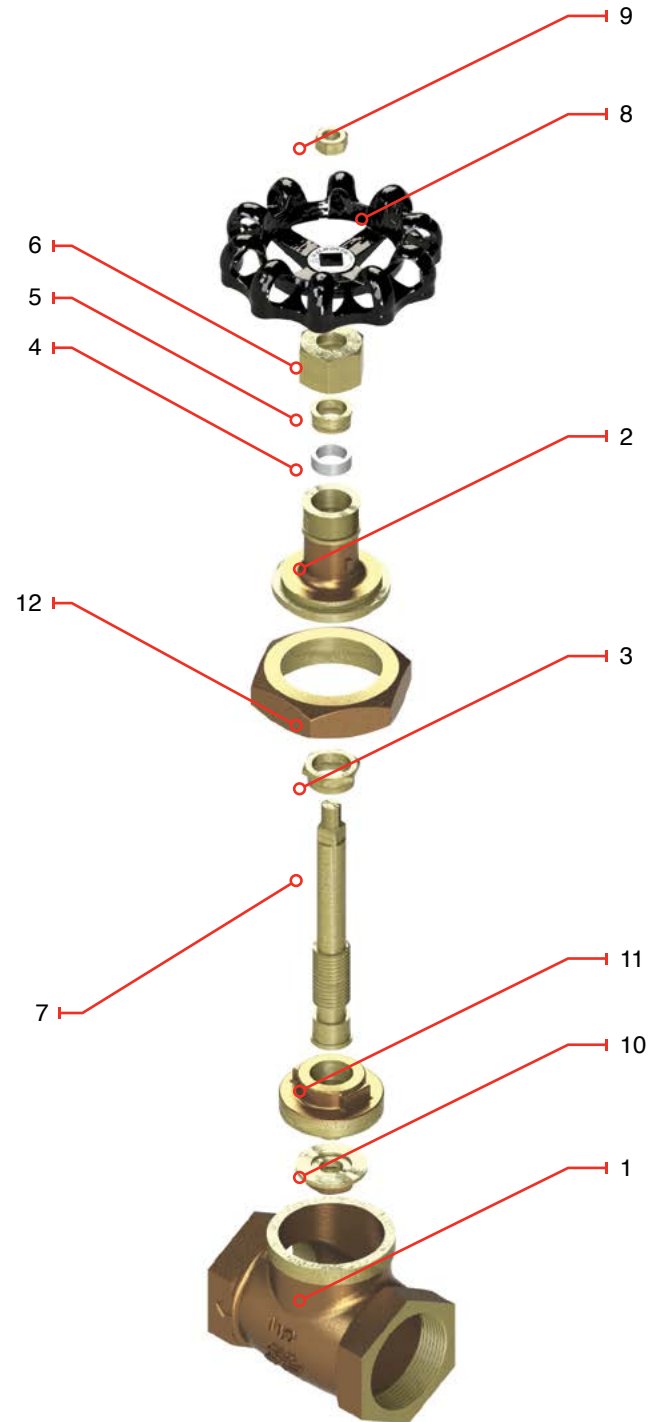
## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Rising Stem
- Bronze construction
- Integral seat rings
- Union Bonnet Design
- Soft Seat
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W160	Threaded Ends

## REGULAR BILL OF MATERIALS

NO.	DESCRIPTION	MATERIALS
1	Body	Bronze B62
2	Bonnet	Bronze B62
3	Disc Holder	Bronze B62
4	Stem Packing	Non Asbestos
5	Gland	Brass B16
6	Packing Nut	Bronze B62
7	Stem	Bronze B62
8	Handwheel	Ductile Iron A536
9	Handwheel nut	Galvanized Steel
10	Disc Nut	Bronze B62
11	Disc	Bronze B62
12	Union Nut	Bronze 61

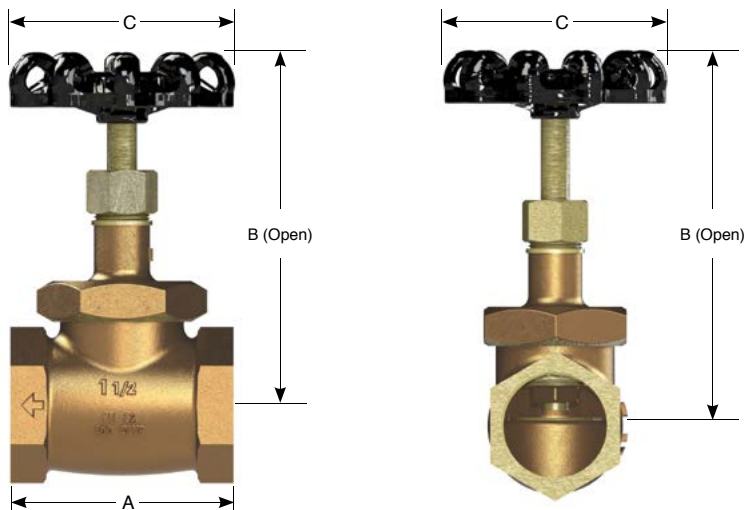


# WALWORTH INDUSTRIAL BRONZE GLOBE VALVE CLASS 200 (400 WOG)

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Rising Stem
- Bronze construction
- Integral seat rings
- Union Bonnet Design
- Soft Seat
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Handwheel operated

CATALOG FIGURE NO.	TYPE OF ENDS
W160	Threaded Ends



## DIMENSIONS AND WEIGHTS

D NOMINAL DIAMETER	mm	13	19	25	30	40	50
	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	mm	57.15	66.8	76.2	88.9	101.6	121.41
	in	2.25	2.63	3	3.5	4	4.78
B	mm	109.85	125.73	142.87	154.94	176.21	212.09
	in	4.32	4.95	5.62	6.1	6.93	8.35
C	mm	50.8	63.5	69.85	76.2	88.9	101.6
	in	2	2.5	2.75	3	3.5	4
Weight W160	kg	0.46	0.65	1.00	1.46	2.19	3.33
	lb	1.01	1.43	2.2	3.21	4.81	7.32
Cv	Flow coefficient	2.46	5.76	10.69	17.08	25.17	47.05



# WALWORTH INDUSTRIAL BRONZE SWING CHECK VALVE CLASS 125 (200 WOG)

## INDUSTRIAL BRONZE SWING CHECK VALVES

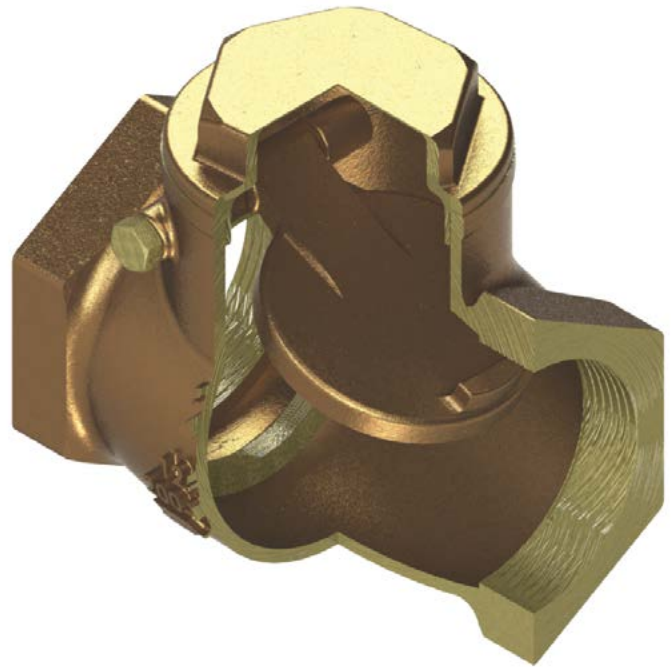
WALWORTH Bronze Swing Check Valves are generally used to protect pumps or similar equipment, allowing the flow only in one direction and preventing flow reversal due to back pressure. Swing Check valves are unidirectional; an arrow stamped on body always indicates direction of flow.

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- “T” Pattern
- Body Bronze
- Threaded cover design
- Swing type disc
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Test in accordance with MSS-SP-80

## TRIM MATERIALS

- Trim of Bronze
- Integral seat ring
- Bronze trim valves are recommended for steam, water, air and non-corrosive oil or gas



# WALWORTH INDUSTRIAL BRONZE SWING CHECK VALVE CLASS 125 (200 WOG)

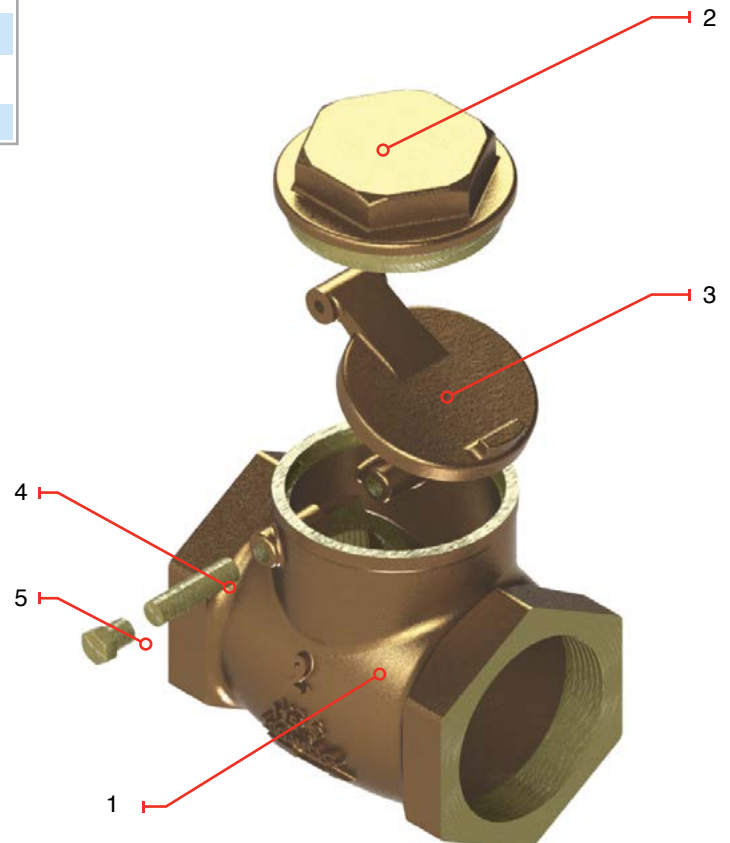
## DESIGN FEATURES

- Design in accordance with MSS SP-80
- "T" Pattern
- Bronze construction
- Integral seat ring
- Threaded cover design
- Swing type disc
- Threaded ends as per ANSI B1.20.1
- Face to Face dimensions as per WALWORTH design

CATALOG FIGURE NO.	TYPE OF ENDS
W506	Threaded Ends

## REGULAR BILL OF MATERIALS

NO.	DESCRIPTION	MATERIALS
1	Body	Bronze B62
2	Cap	Bronze B62
3	Disc	Bronze B62
4	Hanger Pin	Brass B16
5	Plug	Bronze B16



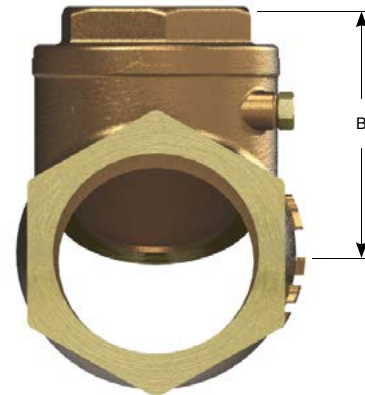
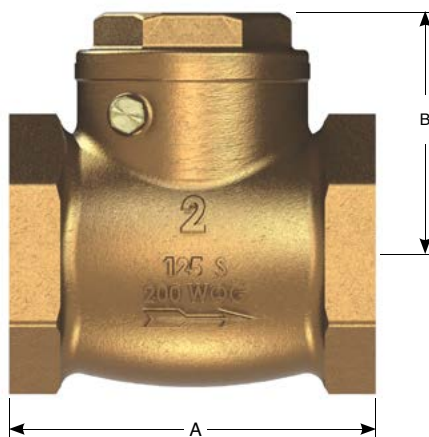
# WALWORTH INDUSTRIAL BRONZE SWING CHECK VALVE CLASS 125 (200 WOG)

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- “T” Pattern
- Bronze construction
- Integral seat ring
- Threaded cover design
- Swing type disc
- Threaded ends as per ANSI B1.20.1
- Face to Face dimensions as per WALWORTH design



CATALOG FIGURE NO.	TYPE OF ENDS
W506	Threaded Ends



## DIMENSIONS AND WEIGHTS

D NOMINAL DIAMETER	mm	13	19	25	30	40	50
	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	mm	57.15	60.96	69.85	82.55	91.44	109.85
	in	2.25	2.4	2.75	3.25	3.6	4.32
B	mm	46.99	49.21	56.19	63.5	70.48	46.99
	in	1.85	1.93	2.21	2.5	2.775	3.3
Weight W506	kg	0.29	0.29	0.44	0.65	0.89	1.33
	lb	0.638	0.638	0.968	1.43	1.95	2.92
Cv	Flow coefficient	6.43	15.04	27.88	44.54	65.65	122.7

# WALWORTH INDUSTRIAL BRONZE SWING CHECK VALVE CLASS 150 (300 WOG)

## INDUSTRIAL BRONZE SWING CHECK VALVES

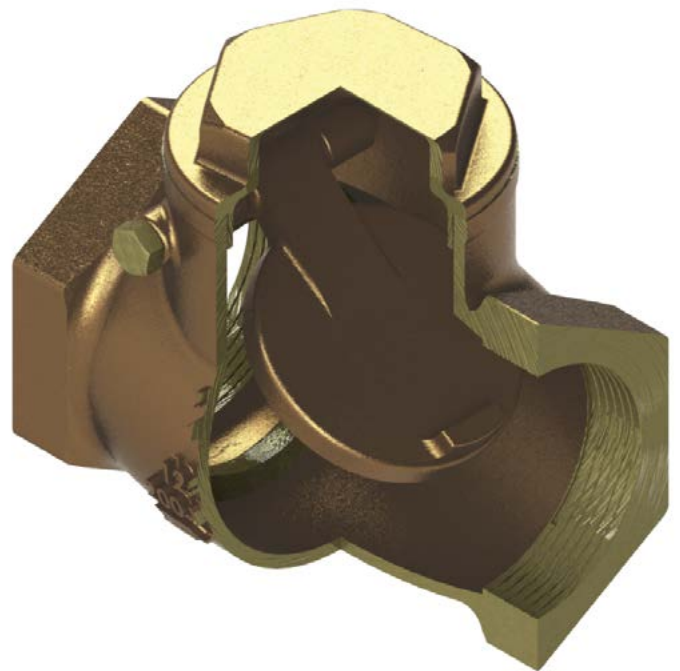
WALWORTH Bronze Swing Check Valves are generally used to protect pumps or similar equipment, allowing the flow only in one direction and preventing flow reversal due to back pressure. Swing Check valves are unidirectional; an arrow stamped on body always indicates direction of flow.

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- “T” Pattern
- Bronze construction
- Threaded cover design
- Swing type disc
- Threaded Ends as per ANSI B1.20. 1
- Face to face dimensions as per WALWORTH design
- Test in accordance with MSS-SP-80

## TRIM MATERIALS

- Trim of Bronze
- Integral seat rings
- Bronze trim valves are recommended for steam, water, air and non-corrosive oil or gas



# WALWORTH INDUSTRIAL BRONZE SWING CHECK VALVE CLASS 150 (300 WOG)

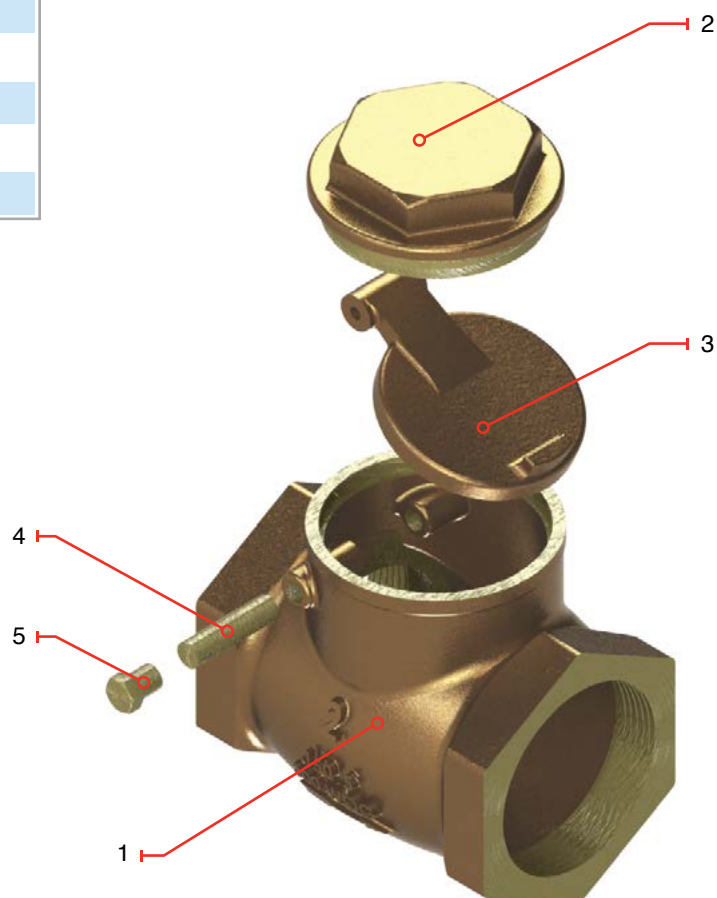
## DESIGN FEATURES

- Design in accordance with MSS SP-80
- “T” Pattern
- Bronze construction
- Integral seat ring
- Threaded cover design
- Swing type disc
- Threaded ends as per ANSI B1.20.1
- Face to Face dimensions as per WALWORTH design

CATALOG FIGURE NO.	TYPE OF ENDS
W512	Threaded Ends

## REGULAR BILL OF MATERIALS

NO.	DESCRIPTION	MATERIALS
1	Body	Bronze B62
2	Cap	Bronze B62
3	Disc	Bronze B62
4	Hanger Pin	Brass B16
5	Plug	Bronze B16





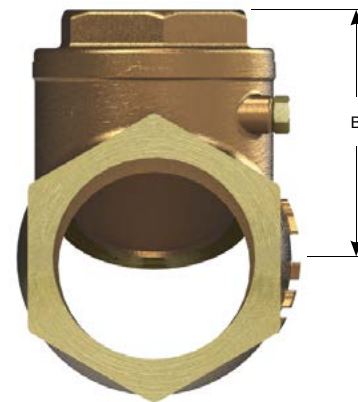
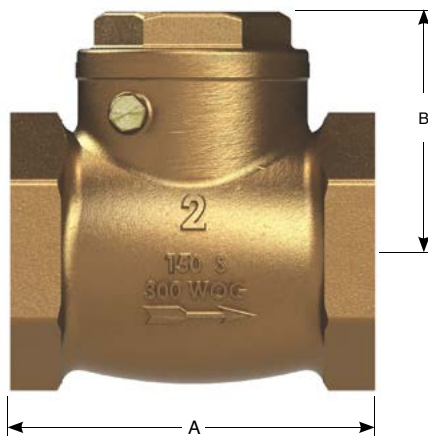
# WALWORTH INDUSTRIAL BRONZE SWING CHECK VALVE CLASS 150 (300 WOG)

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- “T” Pattern
- Bronze construction
- Integral seat ring
- Threaded cover design
- Swing type disc
- Threaded ends as per ANSI B1.20.1
- Face to Face dimensions as per WALWORTH design



CATALOG FIGURE NO.	TYPE OF ENDS
W512	Threaded Ends



## DIMENSIONS AND WEIGHTS

D NOMINAL DIAMETER	mm	13	19	25	30	40	50
	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	mm	57.15	60.96	69.85	81.28	91.44	109.22
	in	2.25	2.4	2.75	3.2	3.6	4.3
B	mm	54.29	51.43	56.51	62.86	68.89	86.36
	in	2.13	2.02	2.22	2.47	2.71	3.4
Weight W512	kg	0,29	0,29	0,44	0,65	0,89	1,33
	lb	0.638	0.638	0.968	1.43	1.95	2.92
Cv	Flow coefficient	6.43	15.04	27.88	44.54	65.65	122.7

# WALWORTH INDUSTRIAL BRONZE SWING CHECK VALVE “Y” PATTERN CLASS 150 (300 WOG)

## INDUSTRIAL BRONZE SWING CHECK VALVES

WALWORTH Bronze Swing Check Valves are generally used to protect pumps or similar equipment, allowing the flow only in one direction and preventing flow reversal due to back pressure. Swing Check valves are unidirectional; an arrow stamped on body always indicates direction of flow. “Y” Pattern can be installed in horizontal or vertical position, allowing the disc goes down to close the valve when the fluid decreases.

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- “Y” Pattern
- Bronze construction
- Threaded cover design
- Swing type disc
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Test in accordance with MSS-SP-80

## TRIM MATERIALS

- Trim of Bronze
- Integral seat ring
- Bronze trim valves are recommended for steam, water, air and non-corrosive oil or gas



# WALWORTH INDUSTRIAL BRONZE SWING CHECKVALVE “Y” PATTERN CLASS 150 (300 WOG)

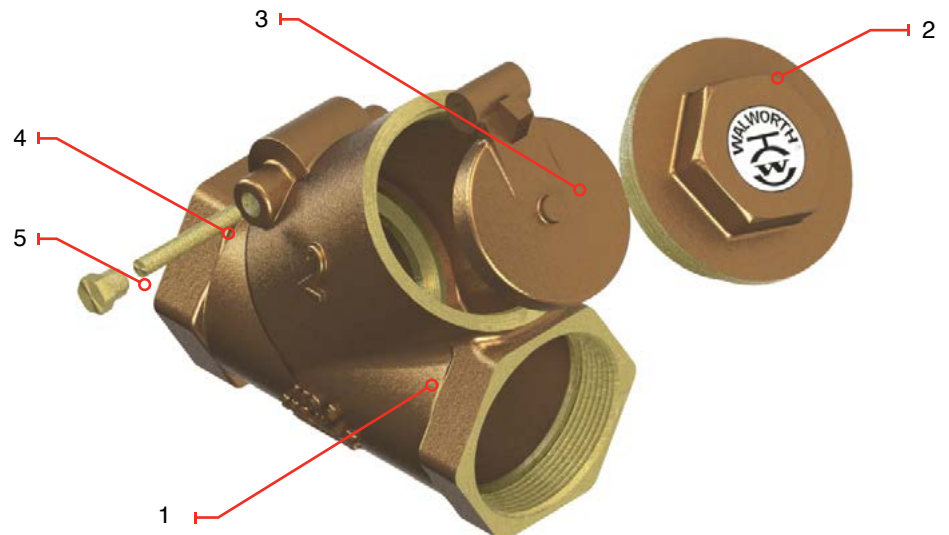
## DESIGN FEATURES

- Design in accordance with MSS SP-80
- “Y” Pattern
- Bronze construction
- Integral seat ring
- Screwed Cover Design
- Swing type disc
- Threaded ends as per ANSI B1.20.1
- Face to Face dimensions as per WALWORTH design

CATALOG FIGURE NO.	TYPE OF ENDS
W420	Threaded Ends

## REGULAR BILL OF MATERIALS

NO.	DESCRIPTION	MATERIALS
1	Body	Bronze B62
2	Cap	Bronze B62
3	Disc	Bronze B62
4	Hanger Pin	Brass B16
5	Plug	Bronze B16



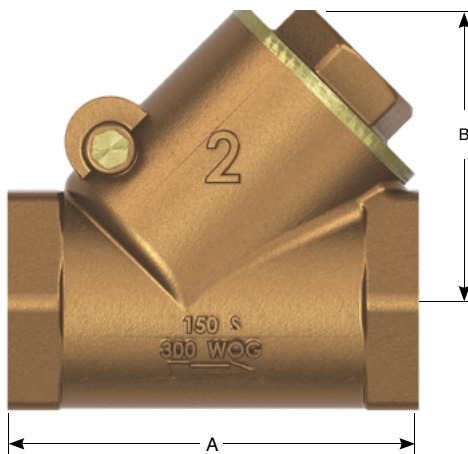
# WALWORTH INDUSTRIAL BRONZE SWING CHECK VALVE “Y” PATTERN CLASS 150 (300 WOG)

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- “Y” Pattern
- Bronze construction
- Integral seat ring
- Threaded cover design
- Swing type disc
- Threaded ends as per ANSI B1.20.1
- Face to Face dimensions as per WALWORTH design



CATALOG FIGURE NO.	TYPE OF ENDS
W420	Threaded Ends



## DIMENSIONS AND WEIGHTS

D NOMINAL DIAMETER	mm	13	19	25	30	40	50
	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	mm	56.89	70.35	80.01	96.52	109.47	139.7
	in	2.24	2.77	3.15	3.8	4.31	5.5
B	mm	46.99	56.38	62.99	74.16	84.96	76.2
	in	1.85	2.22	2.48	2.92	3.34	3
Weight W420	kg	0.28	0.43	0.59	0.97	1.33	2.14
	lb	0.616	0.94	1.29	2.13	2.92	4.7
Cv	Flow coefficient	4.54	10.63	19.71	31.49	46.42	86.76

# WALWORTH INDUSTRIAL BRONZE “Y” STRAINER CLASS 300 (600 WOG)

## INDUSTRIAL BRONZE “Y” STRAINER VALVES

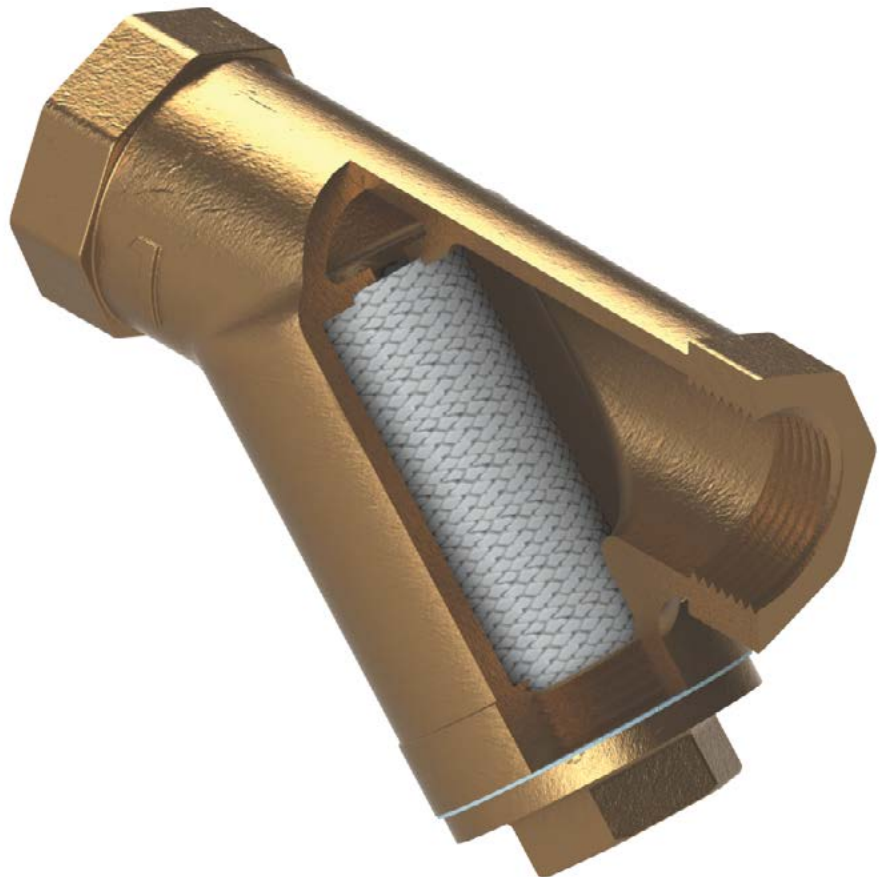
WALWORTH Strainer Valves are used to strain or filter out solid debris in a water system and can be designed for very high flow rates. Suspended particles are collected in the inside of the mesh, and then the flush valve opens to expel waste build-up. This eliminates the need for manual cleaning of the strainer element.

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Body and Cover Bronze
- Threaded Cover Design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Test in accordance with MSS-SP-80

## TRIM MATERIALS

- Trim of Stainless Steel 304



# WALWORTH INDUSTRIAL BRONZE “Y” STRAINER CLASS 300 (600 WOG)

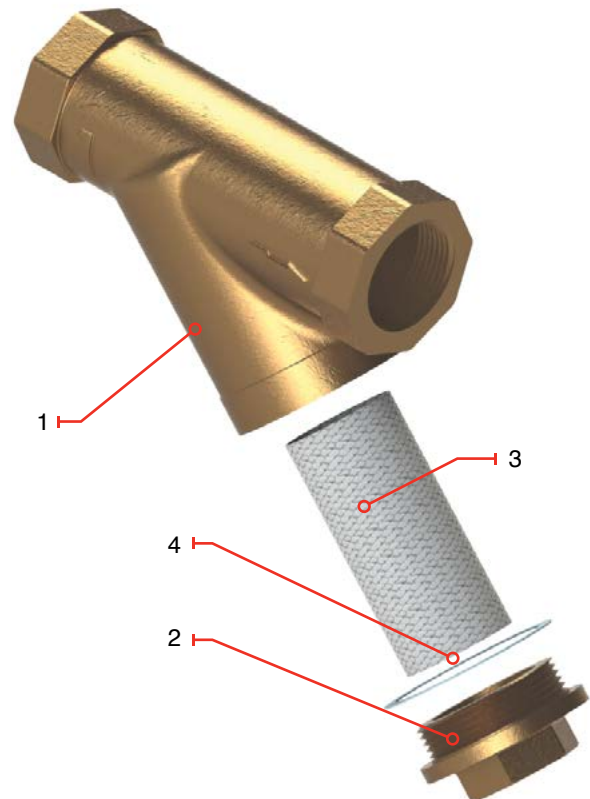
## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Body and Cover Bronze
- Threaded Cover Design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Test in accordance with MSS-SP-80

CATALOG FIGURE NO.	TYPE OF ENDS
W600	Threaded Ends

## REGULAR BILL OF MATERIALS

NO.	DESCRIPTION	MATERIALS
1	Body	Bronze B62
2	Cap	Bronze B62
3	Screen	Stainless Steel
4	Gasket	Teflon





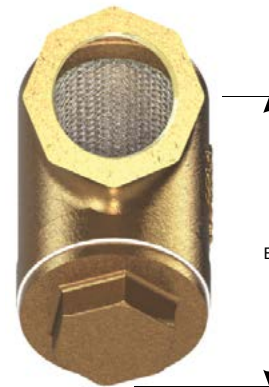
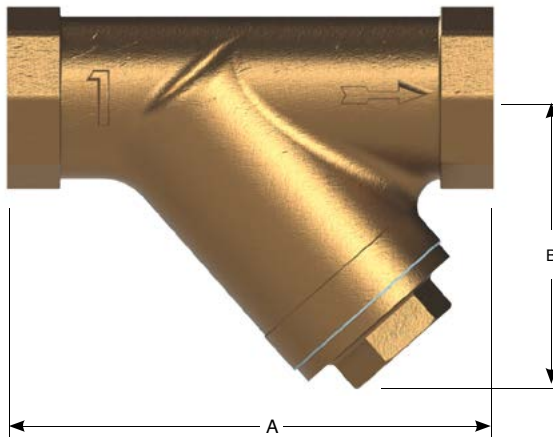
# WALWORTH INDUSTRIAL BRONZE “Y” STRAINER CLASS 300 (600 WOG)

## DESIGN FEATURES

- Design in accordance with MSS SP-80
- Body and Cover Bronze
- Threaded Cover Design
- Threaded ends as per ANSI B1.20.1
- Face to face dimensions as per WALWORTH design
- Test in accordance with MSS-SP-80



CATALOG FIGURE NO.	TYPE OF ENDS
W600	Threaded Ends



## DIMENSIONS AND WEIGHTS

D NOMINAL DIAMETER	mm	13	19	25	30	40	50
	in	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
A	mm	80.01	100.33	114.93	134.62	160.02	188.59
	in	3.15	3.95	4.52	5.3	6.3	7.42
B	mm	51.43	60	73.02	88.9	99.37	118.74
	in	2.02	2.36	2.87	3.5	3.91	4.67
Weight W600	kg	0,33	0,48	0,69	1,00	1,43	2,25
	lb	0.726	1.05	1.51	2.2	3.14	4.95

## TECHNICAL INFORMATION

### DIAMETER OF STEM

#### BRONZE GATE VALVES - Diameter of Stem

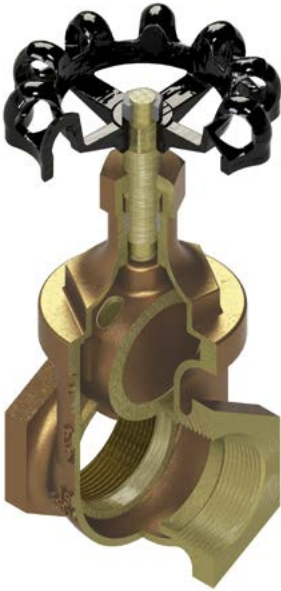
NOMINAL VALVE SIZE	DIAMETER OF STEM-MINIMUM			
	CLASS			
	125	150	200	300 & 350
	In	In	In	In
1/2	0.31	0.31	0.34	0.34
3/4	0.35	0.35	0.38	0.38
1	0.39	0.40	0.40	0.40
1-1/4	0.42	0.43	0.44	0.44
1-1/2	0.48	0.48	0.50	0.50
2	0.53	0.53	0.53	0.53

#### BRONZE GLOBE AND ANGLE VALVES - Diameter of Stem

NOMINAL VALVE SIZE	DIAMETER OF STEM-MINIMUM			
	CLASS			
	125	150	200	300 & 350
	In	In	In	In
1/2	0.31	0.35	0.35	0.35
3/4	0.35	0.39	0.40	0.40
1	0.39	0.42	0.44	0.44
1-1/4	0.42	0.49	0.50	0.50
1-1/2	0.49	0.53	0.53	0.53
2	0.53	0.59	0.62	0.62

# TECHNICAL INFORMATION

## DESIGN OF THE DISC

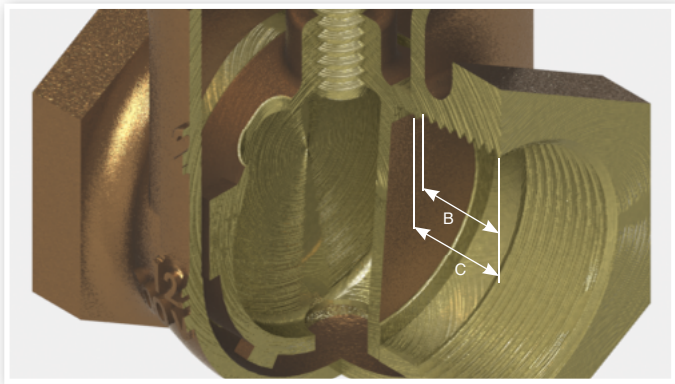


Solid Wedge Bronze as per ASTM B62 C83600 for non-rising stem (only for W4 and W14)



Solid Wedge Bronze as per ASTM B62 C83600 for rising stem

## MINIMUM LENGTH AND DEPTH OF THREAD.



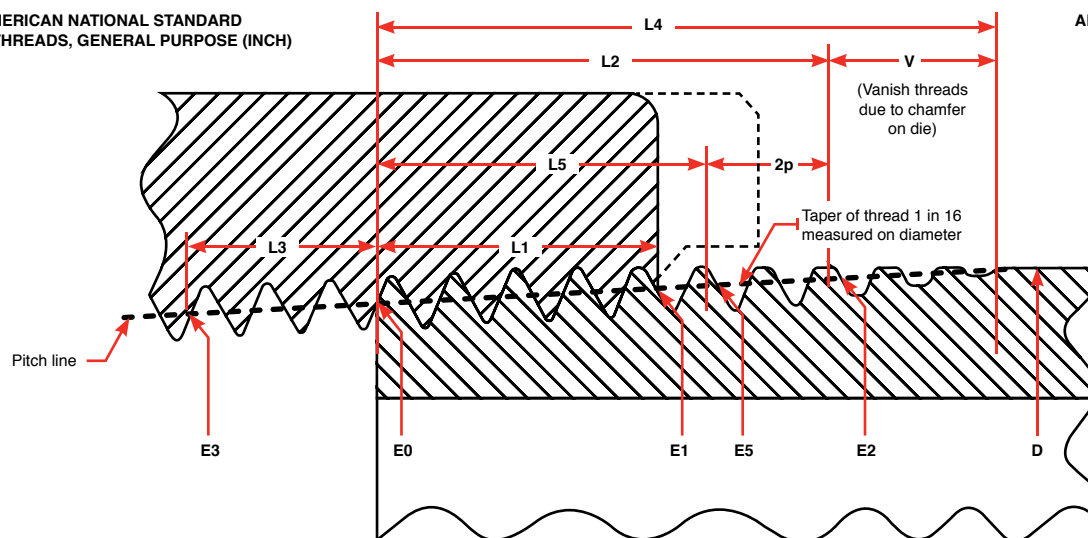
NOMINAL PIPE SIZE	B Length of the thread (minimum)	C Deep of thread chamber (minimum)
	inches	inches
1/2	0.37	0.54
3/4	0.44	0.57
1	0.51	0.70
1-1/4	0.60	0.71
1-1/2	0.62	0.75
2	0.67	0.79

# TECHNICAL INFORMATION

## BASIC DIMENSIONS OF AMERICAN NATIONAL STANDARD TAPER PIPE THREAD, NPT

AN AMERICAN NATIONAL STANDARD  
PIPE THREADS, GENERAL PURPOSE (INCH)

ANSI/ASME B1.20.1-1983



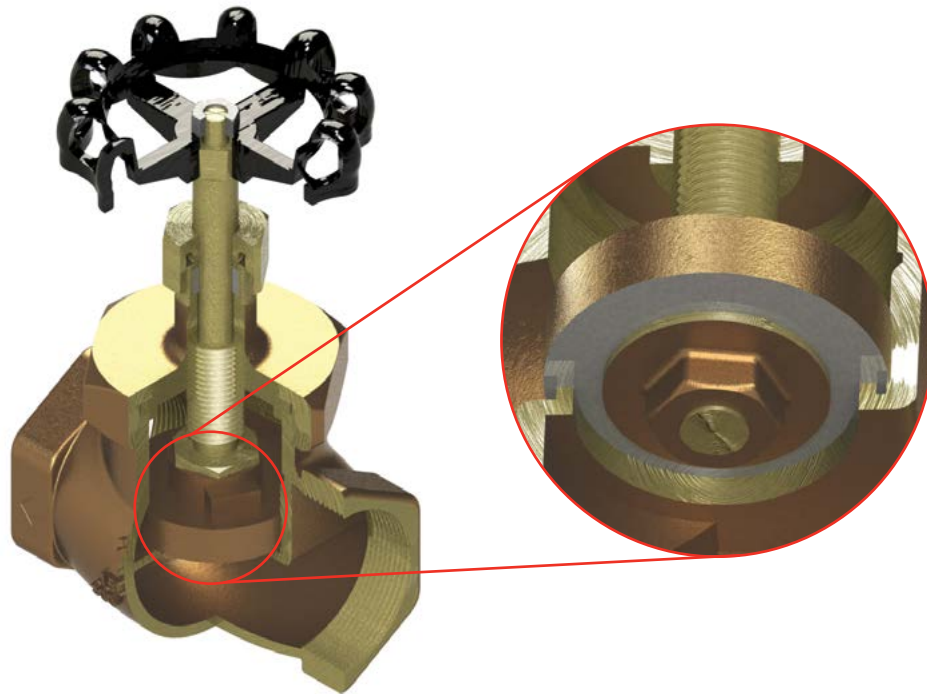
NOMINAL PIPE SIZE	O.D. OF PIPE (D)	THREADS/IN. (N)	PITCH OF THREAD (P)	PITCH DIAMETER AT BEGINNING OF EXTERNAL THREAD (E0)	HANDTIGHT ENGAGEMENT			EFFECTIVE THREAD, EXTERNAL		
					LENGTH2 (L1)		DIAM.3 (E1)	LENGTH4 (L2)		DIAM. (E2)
					INCH	THREADS		INCH	THREADS	
1/2	0.840	14	0.07143	0.75843	0.320	4.48	0.77843	0.5337	7.47	0.79179
3/4	1.050	14	0.07143	0.96768	0.339	4.75	0.98887	0.5457	7.64	1.00179
1	1.315	11.5	0.08696	1.21363	0.4000	4.60	1.23863	0.6828	7.85	1.25630
1-1/4	1.660	11.5	0.08686	1.55713	0.420	4.83	1.58338	0.7068	8.13	1.60130
1-1/2	1.900	11.5	0.08696	1.79609	0.420	4.83	1.82234	0.7235	8.32	1.84130
2	2.375	11.5	0.08696	2.26902	0.436	5.01	2.29627	0.7565	8.70	2.31630

## TECHNICAL INFORMATION

### SEATS ARRANGEMENT

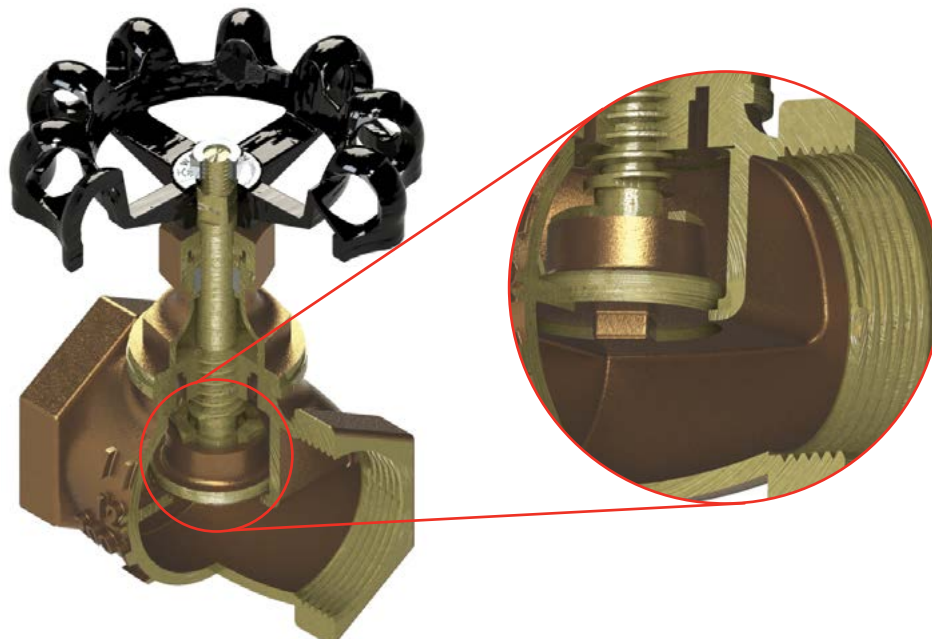
#### SOFT SEAT

Soft seats provide less wear during the operation of the valve. Only for Bronze Globe valves W95 and W160.



#### METAL-METAL SEAT

Metal-Metal seat provides high wear during the operation. Only for Bronze Globe valve W58.

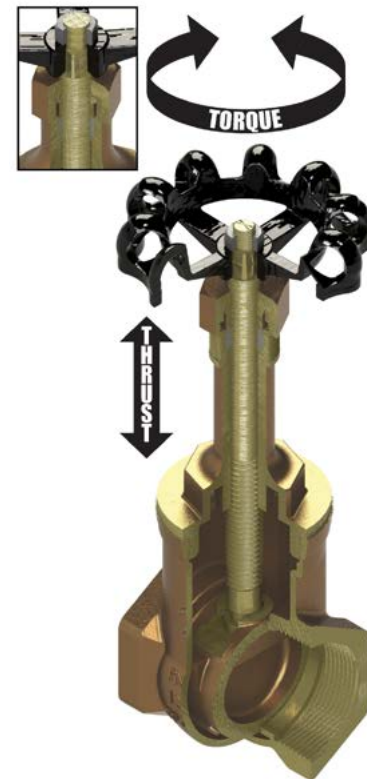
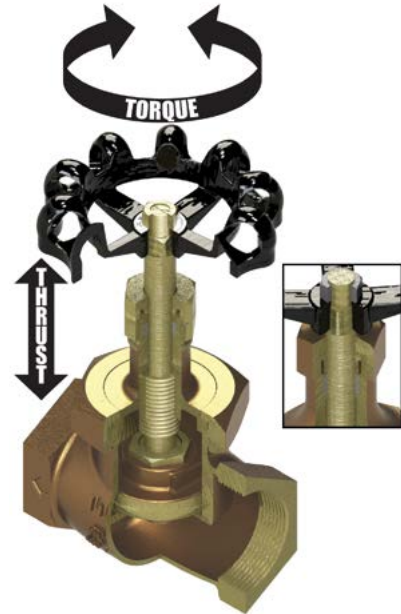


# TECHNICAL INFORMATION

## TORQUE FOR GATE & GLOBE BRONZE VALVES

The torques mentioned in the table below are for reference. The torque data already includes a safety factor of 30%.

TYPE	Ø NOMINAL (in)	CLASS	TORQUE T (lbf-ft)	FIGURE
GLOBE	2	125	5.46	W58
GLOBE	1 1/2	125	3.33	
GLOBE	1 1/4	125	2.05	
GLOBE	1	125	1.44	
GLOBE	0.75	125	0.76	
GLOBE	0.5	125	0.43	
GATE	2	125	1.80	W55 & W4
GATE	1 1/2	125	1.13	
GATE	1 1/4	125	0.71	
GATE	1	125	0.51	
GATE	0.75	125	0.28	
GATE	0.5	125	0.17	
GLOBE	2	150	8.15	W95
GLOBE	1 1/2	150	4.96	
GLOBE	1 1/4	150	3.05	
GLOBE	1	150	2.13	
GLOBE	0.75	150	1.12	
GLOBE	0.5	150	0.63	
GATE	2	150	7.07	W56 & W11& W14
GATE	1 1/2	150	4.14	
GATE	1 1/4	150	2.48	
GATE	1	150	1.66	
GATE	0.75	150	0.83	
GATE	0.5	150	0.43	
GLOBE	2	200	10.85	W160
GLOBE	1 1/2	200	6.60	
GLOBE	1 1/4	200	4.05	
GLOBE	1	200	2.82	
GLOBE	0.75	200	1.48	
GLOBE	0.5	200	0.82	
GATE	2	200	9.41	W36
GATE	1 1/2	200	5.51	
GATE	1 1/4	200	3.29	
GATE	1	200	2.21	
GATE	0.75	200	1.09	
GATE	0.5	200	0.56	





## DESIGN BASIS

All of WALWORTH's Valve Designs, when applicable, follow one or more of the following standards.

### ASME Standards ASME International (American Society of Mechanical Engineers)

<b>B1.20.1</b>	Threaded Ends.
<b>B16.10</b>	End to End Distance

### MSS Standars Manufactures Standardization Society of the Valve and Fittings

<b>SP-6</b>	Finishes of facing.
<b>SP-25</b>	Valves marks.
<b>SP-80</b>	Acquirements for bronze, gate, globe, angle and check valves in Classes 125, 150, 200, 300 and 350.



# HOW TO ORDER

WALWORTH valves are designed by a catalog figure number which describe their main characteristics. The valve identification system shown herein is intended to assist our customers in specifying the required valve(s) so that mistakes are avoided during manufacturing.

2"-W4-S-Bronze B62



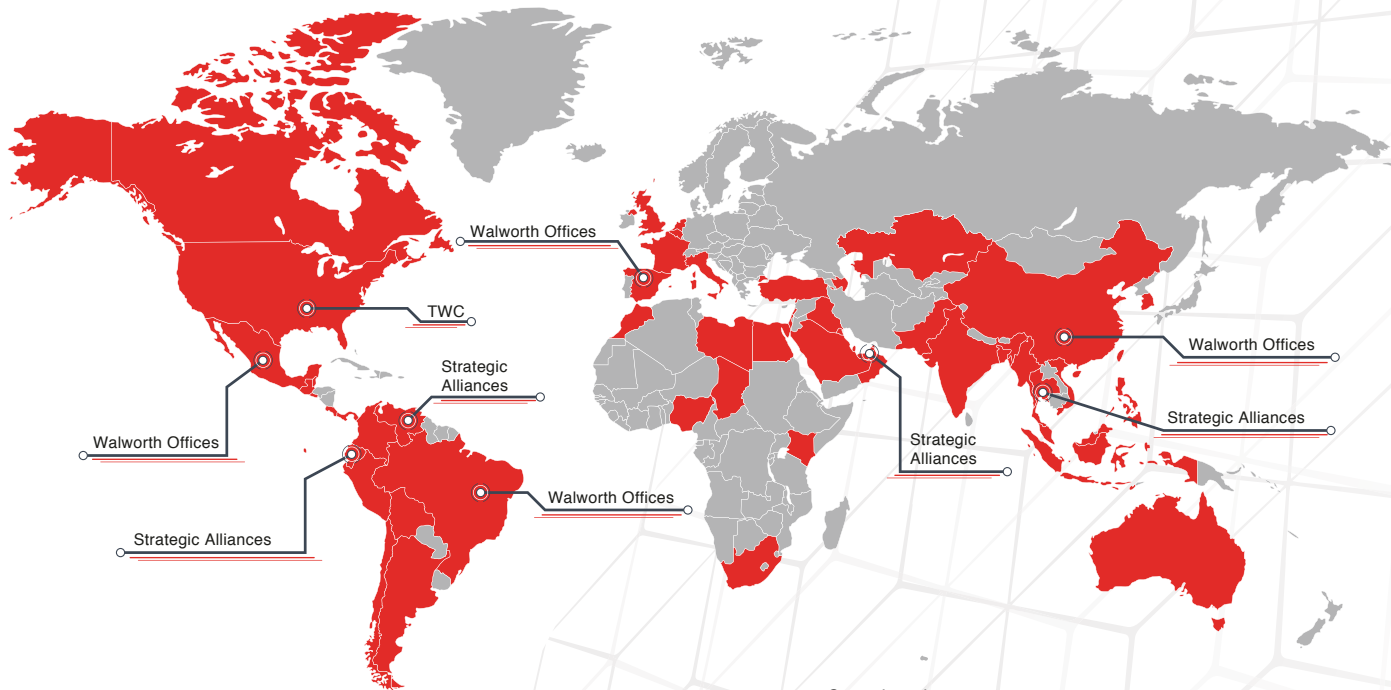
SIZE	WALWORTH FIGURE	TYPE	CLASS	ENDS	TRIM	BASE MATERIAL ASTM		
1/2"	W4	GATE	125 #	S	BRONZE TRIM IN ACCORDANCE WITH STANDARD ARRANGEMENT SHOWN ON EACH PAGE	BASE MATERIAL TO BE BRONZE AS SHOWN ON EACH PAGE		
3/4"	W14	GATE	150 #	S				
1"	W55	GATE	125 #	S				
1 1/4"	W56	GLOBE	150 #	S				
1 1/2"	W11	GLOBE	150 #	S				
2"	W36	GLOBE	200 #	S				
	W58	GLOBE	125 #	S				
	W95	GLOBE	150 #	S				
	W160	GLOBE	200 #	S				
	W420	"Y" SWING CHECK	150 #	S				
	W506	SWING CHECK	125 #	S				
	W512	SWING CHECK	150 #	S				
	W600	"Y" STAINER	300 #	S				

## WARRANTY POLICY

WALWORTH® will replace without charge or return funds at the purchase price of manufactured products shown to be defective in materials or workmanship, provided it is shown that the product was properly handled, installed and used in the service for which it was designed. The Customer must file a written claim, specifying the defect found, in which case WALWORTH® accepts no liability for claims for a) Labor, expense or other damages caused by the defective products or b) For consequential or incidental damages.

THE WARRANTY SET FORTH IN THIS PARAGRAPH IS ISSUED IN ACCORDANCE WITH WALWORTH® TERMS AND CONDITIONS SET FORTH IN THE PURCHASE ORDER AND APPLIES FOR A PERIOD OF 12 (TWELVE) MONTHS IN OPERATION OR 18 (EIGHTEEN) MONTHS IN STORAGE WHICHEVER OCCURS FIRST FROM THE DATE OF DELIVERY OF THE PRODUCT. IT SUPERSEDES ALL OTHER WARRANTIES, WHETHER EXPRESSED OR IMPLIED. WITH RESPECT TO WARRANTIES THIS PARAGRAPH SETS FORTH THE REMEDIES FOR BUYER AND SELLER'S LIABILITY, DESIGN, ETC.

WALWORTH® reserves the right to change design, materials and/or specifications without notice. There will be a charge for modifications to an order after it has been entered when such change or modification will result in additional engineering or clerical work for both WALWORTH® and its suppliers.



■ Countries where WALWORTH GROUP is present.

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- Canada

**Central America**

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- Belize
- El Salvador
- Panama

**South America**

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- Ecuador
- Peru
- Brazil
- Argentina
- Bolivia
- Chile

**Africa**

- Morocco
- Nigeria
- Egypt

**Asia**

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- Malaysia
- Thailand
- South Korea
- Indonesia
- Vietnam
- Singapore
- Philippines

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- Qatar
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- Lebanon
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- Bahrain
- Sultanate of Oman
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