

Engineering Specification

Job Name _____

Contractor _____

Job Location _____

Approval _____

Engineer _____

Contractor's P.O. No. _____

Approval _____

Representative _____

LEAD FREE*

Series Gate Valve TS-OSY

2½" – 12"

Series Gate Valve TS-OSY resilient wedge gate valve, available in sizes 2½" to 12", is recommended for fire main shutoff and distribution service. The ductile iron body, bonnet, and stuffing plate are coated with fusion bonded epoxy, applied in accordance with AWWA C550. Gate Valve TS-OSY features Lead Free* construction to comply with Lead Free* installation requirements. Certified to ANSI/NSF61 and 372.

The gate valve is operated by handwheel, contains a wedge fully encapsulated with EPDM rubber permanently bonded to the wedge, and meets ASTM D249. A supervisory switch is mounted to the gate valve to provide alert when the water supply to the sprinkler system is tampered with or being shut off.

Features

- Meets or exceeds AWWA C509 and C515 standards
- Bubble tight at 250 psi
- High flow characteristics
- 100% smooth passage without turbulent flow
- Anti-friction thrust bearing
- Solid, bronze stem nut and high-strength bronze stem
- Two O-ring seals above stem thrust collar
- High-strength iron wedge fully encapsulated with rubber permanently bonded to metal
- High-strength ductile iron body, bonnet, and stuffing box
- Corrosion-resistant coating on interior and exterior surfaces of valve body

NOTICE

The information contained herein is not intended to replace the full product installation and safety information available or the experience of a trained product installer. You are required to thoroughly read all installation instructions and product safety information before beginning the installation of this product.

Inquire with governing authorities for local installation requirements.

*The wetted surface of this product contacted by consumable water contains less than 0.25% of lead by weight.

Ames Fire & Waterworks product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact Ames Fire & Waterworks Technical Service. Ames Fire & Waterworks reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligation to make such changes and modifications on Ames Fire & Waterworks products previously or subsequently sold.



Gate Valve TS-OSY with Supervisory Switch

Specification

Series TS-OSY shall be a resilient wedge gate valve manufactured to ASTM A536 ductile iron, rated for 250 psig working pressure, and hydrostatically proficient for shell leakage at pressures up to 500 psig. The gate valve shall comply with ANSI/AWWA C515 Standard for reduced-wall, resilient seated gate valves for water supply service. The valve shall have approvals from UL (UL262 – Gate Valves for Fire Protection Service) and FM (FM1120/1130 – Standard for Fire Service Water Control Valves). The bond of the rubber wedge closure member shall comply for adhesion per the ASTM D429 Standard. The end flanges of all flanged valves shall conform to the dimensions and drillings of the ANSI/ASME Standard B16.1, Class 125. Mechanical joint bell dimensions shall conform to ANSI/AWWA C111/A21.11. The end flange of tapping valves shall conform to MSS Standard Practice SP-60. All non-machined, interior, and exterior surfaces of the valve shall be coated with an inert, thermosetting epoxy resin to provide a corrosion-resistant coating that complies with the performance requirements of ANSI/AWWA C550 Standard. The valve shall have NSF International certification and comply with NSF61 and NSF372 standards. The valve shall be supplied with EPDM wedges. The temperature rating for valve shall be 33 to 125 degrees Fahrenheit, as required in the AWWA C509 standard.



Standards

Water supply service	ANSI/AWWA C515
End flanges	ANSI/ASME Standard B16.1, Class 125
Mechanical joint bell dimensions	ANSI/AWWA C111/A21.11
Interior coating	ANSI/AWWA C550
Temperature	AWWA C509

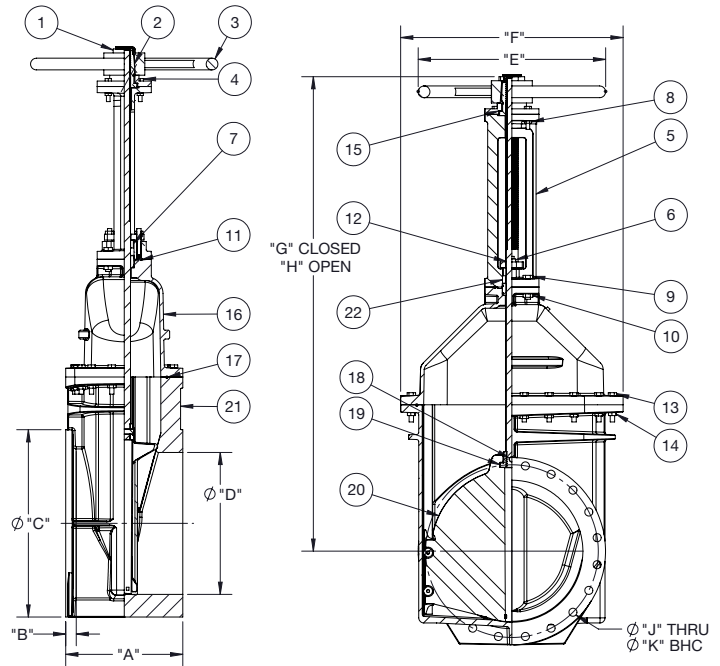
Approvals



Parts

Call customer service if you need assistance with technical details.

SIZE	DESCRIPTION	MATERIAL
1	Hold Down Nut	Bronze ASTM B584 C87850/C57610
2	Yoke Nut	Bronze ASTM B584 C86700
3	Handwheel	Ductile Iron ASTM A536 70-50-05
4	Hex Cap Screw	ZN A307 Grade B/ASTM F593 S30400/S31600
5	Yoke	Ductile Iron ASTM A536 70-50-05
6	Hex Nut	ZN A307 Grade B/ASTM F593 S30400/S31600
7	Packing Gland	Ductile Iron ASTM A536 70-50-05
8	Hex Nut	ZN A307 Grade B/ASTM F593 S30400/S31600
9	Hex Cap Screw	GR 2 ZN SAE J429/304SS ASTM 18-8SS
10	Hex Nut	ZN A307 Grade B/ASTM F593 S30400/S31600
11	Yoke O-ring	Buna-N ASTM D2000
12	Stem	304SS ASTM A276 S30400/316SS ASTM A276 S31600/ECO Brass ASTM B371 C69300/Silicon Bronze "A" (Everdur) ASTM B98 C65500
13	Hex Cap Screw	ZN A307 Grade B/ASTM F593 S30400/S31600
14	Hex Nut	ZN A307 Grade B/ASTM F593 S30400/S31600
15	Flat Washer	ZN A307 Grade B/ASTM F593 S30400/S31600
16	Cover	Ductile Iron ASTM A536 70-50-05
17	Cover O-ring	Buna-N ASTM D2000
18	Stem O-ring	Buna-N ASTM D2000
19	Stem Nut	Bronze ASTM B584 CDA 844
20	Wedge	Ductile Iron ASTM A584 70-50-05 & EPDM
21	Body-flanged Type	Ductile Iron ASTM A584 70-50-05
22	Packing	Braided, Lubricated (Non-asbestos)



Dimensions - Weights

DIMENSION												
Size	A	B	C	D	E	F	G	H	J	K	No. Turns to Open	Weight (lb)
2½	7½"	1½"	7"	2½"	7¼"	7"	13⅞"	16⅞"	⅝" x 4	5½"	8	52.00
3	8"	¾"	7½"	3"	10"	7½"	15⅝"	18⅞"	⅝" x 4	6"	10	67.14
4	9"	1⅝"	9"	4¼"	10"	9"	18¼"	22¾"	⅝" x 4	7½"	13½	91.85
6	10½"	1"	11"	6¼"	12"	11⅝"	23¾"	30⅞"	¾" x 8	9½"	19½	140.67
8	11½"	1⅝"	13½"	8¼"	14"	13½"	29¼"	37¾"	¾" x 8	11¾"	25½	212.60
10	13"	1⅝"	16"	10¼"	18"	16"	35⅝"	45¾"	7⁄8" x 12	14¼"	31½	368.48
12	14"	1¼"	19"	12¼"	18"	19"	40⅝"	53⅞"	7⁄8" x 12	17"	37¾"	479.41



A WATTS Brand

Material

Coating Inert, thermosetting epoxy resin

Pressure - Temperature

Working pressure 250 psig
Temperature range 33°F to 125°F