Resilient-Seated Gate Valves with Vertical or Cross Wall Post Indicator

IMPORTANT
Refer to Technical Data Sheet TFP2300 for warnings pertaining to regulatory and health information.

Scan the QR code or enter the URL in a web browser to access the most up-to-date electronic version of this document. Data rates may apply.

docs.jci.com/tycofire/tfp1546

General Description

TYCO Resilient-Seated Gate Valves with Vertical and Cross Wall Indicators are used in fire protection systems for on/off operation. The following end connection configurations are available:

- Flange x Flange
- Groove x Groove

The ductile iron body weighs approximately 50% less than conventional cast iron valves, which allows easier handling on site and reduced shipping costs.

The fully encapsulated EPDM ductile iron wedge ensures drop-tight sealing.

Valve components are either inherently corrosion-resistant or protected with fusion-bonded epoxy resin coating for a long, reliable service life.

This valve is one of the lightest, most durable gate valves on the market today. Its design features and material selection criteria fulfill the need for a reliable, long life and easy to operate gate valve.

These valves are available with either vertical indicators for underground water supplies or cross wall indicators for interior water systems. Both indicators provide external visual indication of the open or shut valve condition as well as a locking mechanism to secure a particular wedge position.

NOTICE

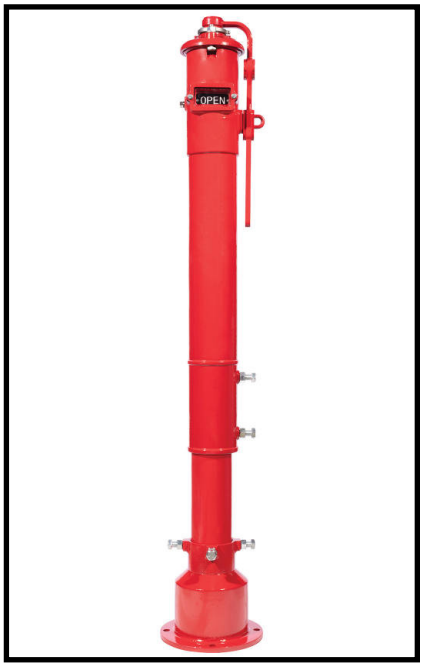
Never remove any piping component nor correct or modify any piping deficiencies without first de-pressurizing and draining the system. Failure to do so may result in serious personal injury, property damage, and/or impaired device performance.

It is the designer's responsibility to select products suitable for the intended service and to ensure that pressure ratings and performance data are not exceeded. Material and gasket selection should be verified for compatibility with the specific application. Always read and understand the installation instructions.

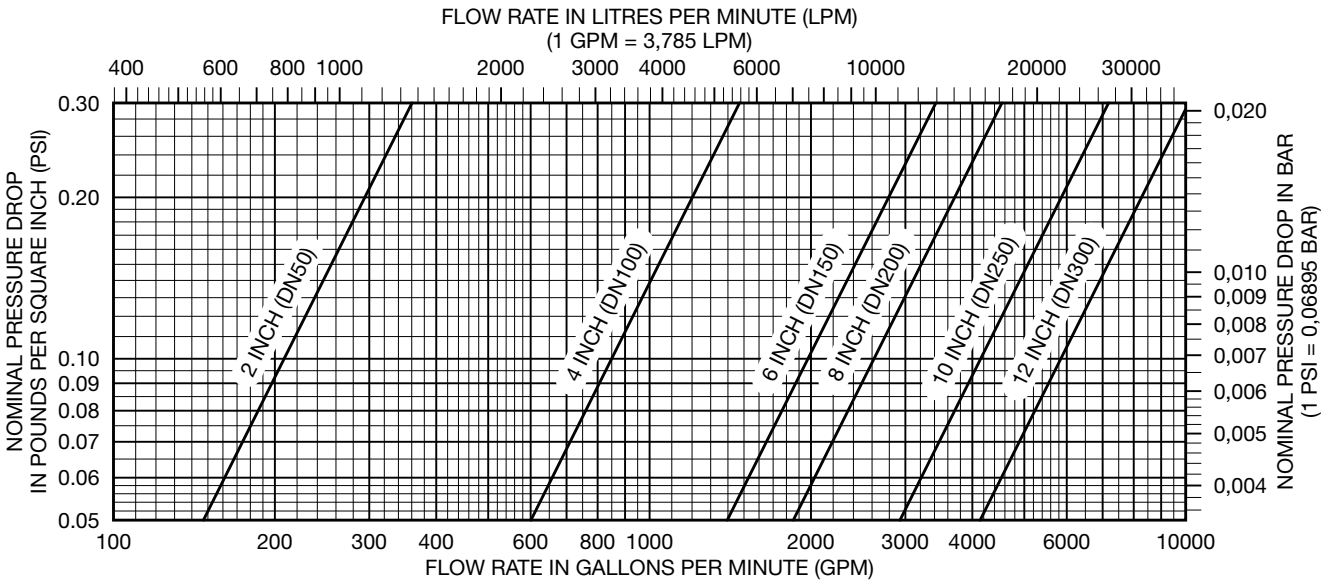
TYCO Gate Valves described herein must be installed and maintained in compliance with this document, in addition to the standards of any other authorities having jurisdiction. Failure to do so may result in serious personal injury or impair the performance of these devices.

The owner is responsible for maintaining their mechanical system and devices in proper operating condition. The installing contractor or device manufacturer should be contacted with any questions.









GRAPH A
GATE VALVE FRICTION LOSS

Technical Data

Sizes
2 in. to 24 in. (DN50 to DN600)

Approvals
UL and ULC Listed
FM Approved
CE Certified

Note: *For valve and indicator post laboratory listings and approvals details, see Table A and B.*

UL and ULC Maximum Working Pressure
- 2 in. to 12 in. (DN200 to DN300): 300 psi (20,7 bar)
- 14 in. to 18 in. (DN350 to DN450): 250 psi (17,2 bar)
- 20 in. to 24 in. (DN500 to DN600): 200 psi (13,8 bar)

FM Maximum Working Pressure
- 2 in. to 12 in. (DN200 to DN300): 300 psi (20,7 bar)
- 14 in. to 18 in. (DN350 to DN450): 250 psi (17,2 bar)
- 20 in. to 24 in. (DN500 to DN600): 250 psi (17,2 bar)

Flanges
ASME B16.1/ASME B16.42
EN 1092-2/ISO 7005-2/
Drilled to ANSI Class 150, PN16, or AS2129 (Table E)

Note: *For flange details, see Table C.*

Materials of Construction

See individual valve and indicator parts lists in Figures 1, 4, and 6.

Nominal Valve Size ANSI in. DN	Laboratory			
	UL	ULC	FM	CE
2 DN50	•	•	•	•
4 DN100	•	•	•	•
6 DN150	•	•	•	•
8 DN200	•	•	•	•
10 DN250	•	•	•	•
12 DN300	•	•	•	•

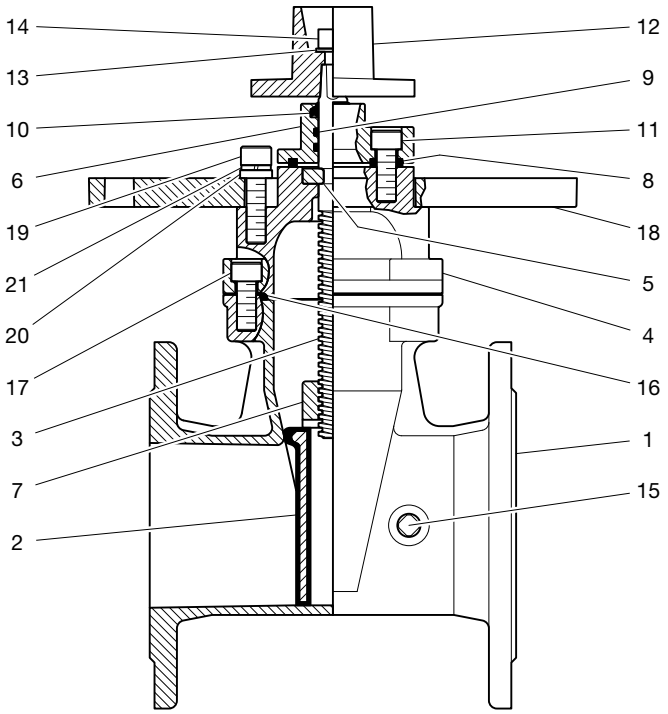
Nominal Valve Size ANSI in. DN	Laboratory			
	UL	ULC	FM	CE
14 DN350	•	•	•	•
16 DN400	•	•	•	•
18 DN450	•	•	•	•
20 DN500	•	•	•	•
24 DN600	•	•	•	•

TABLE A
GATE VALVE
LABORATORY LISTINGS AND APPROVALS

Model	Description	Nominal Valve Size Compatibility ANSI in. DN	Laboratory			
			UL	ULC	FM[1]	CE
TJUP	Vertical Type A	2 in. DN50	•	•		•
		4 in. to 12 in. DN100 to DN300	•	•	•	•
TJAP	Vertical Type B	14 in. to 24 in. DN350 to DN600	•	•	•	•
TJWP	Cross Wall	2 in. to 12 in. DN50 to DN300	•	•		•

Notes:
1. 4 in. (DN100) and larger valve sizes; FM Global does not approve Indicators for use with valve sizes 2 in. (DN50) and smaller produced by any manufacturer.

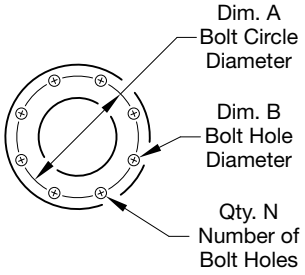
TABLE B
INDICATOR POST
LABORATORY LISTINGS AND APPROVALS



No.	Description	Qty.	Material
1	Body	1	ASTM A536 65-45-12
2	Wedge	1	EPDM
3	Stem	1	AISI SS240
4	Bonnet	1	ASTM A536 65-45-12
5	Half-Ring	1	ASTM C1100
6	Seal Seat	1	ASTM A536 65-45-12
7	Disc Nut	1	ASTM B62 C83600
8	Seal Ring	1	EPDM
9	O-Ring	2	EPDM
10	Dust Cap	1	EPDM
11	Hex Socket Cap Screw	2	ASTM SS304
12	Wench Nut	1	ASTM A536 65-45-12
13	Washer	1	ASTM SS304
14	Hex Socket Cap Screw	1	ASTM SS304
15	Plug	2	ASTM SS304
16	Gasket	1	EPDM
17	Hex Socket Cap Screw	4-10	ASTM SS304
18	Post Flange	1	ASTM A536 65-45-12
19	Hex Socket Cap Screw	2	ASTM SS304
20	Washer	2	Carbon Steel Galvanized
21	Spring Washer	2	Carbon Steel Galvanized

FIGURE 1
POST INDICATOR GATE VALVE ASSEMBLY

Nominal Valve Size	Nominal Dimensions in Inches (mm)								
ANSI in. DN	ANSI Class 150			ISO 7005-2 PN16			AS 2129 (Table E)		
	Dim. A	Dim. B	Qty. N	Dim. A	Dim. B	Qty. N	Dim. A	Dim. B	Qty. N
2 DN50	4.75 (120.7)	0.75 (19.0)	4	4.92 (125.0)	0.75 (19.0)	4	4.49 (114.0)	0.71 (18.0)	4
4 DN100	7.50 (190.5)	0.75 (19)	8	7.09 (180.0)	0.75 (19)	8	7.00 (178.0)	.071 (18.0)	8
6 DN150	9.50 (241.5)	0.88 (22)	8	9.45 (240.0)	0.88 (23)	8	9.25 (235.0)	0.87 (22.0)	8
8 DN200	11.75 (298.5)	0.88 (22)	8	11.61 (295.0)	0.88 (23)	12	111.49 (292.0)	0.87 (22.0)	8
10 DN250	14.25 (362.0)	1.00 (25)	12	13.98 (355.0)	1.13 (28)	12	14.02 (356.0)	0.87 (22.0)	12
12 DN300	17.00 (432.0)	1.00 (25)	12	16.14 (410.0)	1.13 (28)	12	15.98 (406.0)	1.02 (26.0)	12
14 DN350	18.75 (476.3)	1.13 (28.6)	12	18.5 (470.0)	1.102 (28)	16	18.50 (470.0)	1.02 (26.0)	12
16 DN400	21.25 (539.8)	1.13 (28.6)	16	20.67 (525.0)	1.22 (31)	12	20.51 (521.0)	1.02 (26.0)	12
18 DN450	22.75 (577.9)	1.26 (32.0)	16	23.03 (585.0)	1.22 (31)	20	19.84 (504.0)	1.02 (26.0)	12
20 DN500	25.00 (635.0)	1.26 (32.0)	20	25.59 (650.0)	1.34 (34)	20	25.24 (641.0)	1.02 (26.0)	16
24 DN600	29.51 (749.5)	1.378 (35.0)	20	30.31 (770.0)	1.46 (37)	20	29.76 (756.0)	1.30 (33.0)	16



NOTES
- ANSI 150 and BS10 Table E flanges feature raised faces
- ANSI 125 and PN16 flanges feature flat faces
  (ANSI 125 listed only for differentiation from ANSI 150, Gate Valves featuring ANSI 125 flanges are not available)

TABLE C
GATE VALVE SELECTION FLANGE DRILLING SPECIFICATIONS

Nominal Valve Size	Nominal Pipe Size	Nominal Dimensions in. (mm)		P Tapping Boss Size ANSI in. NPT	Approx. Weight F x F lb (kg)	Approx. Weight G x G lb (kg)
ANSI in. DN	O.D. in. (mm)	L	CL			
2 DN50	2.375 (60.3)	7.00 (178)	10.98 (279)	1/2	25.0 (11.34)	23.11 (10.49)
4 DN100	4.500 (114.3)	9.00 (229)	13.07 (332)		77.0 (35)	50.8 (23.1)
– DN150	6.500 (165.1)	10.50 (267)	17.17 (436)		110.0 (50)	101.4 (46.1)
6 DN150	6.625 (168.3)	10.50 (267)	17.17 (436)		110.0 (50)	101.4 (46.1)
8 DN200	8.625 (219.1)	11.50 (292)	20.47 (520)	3/4	196.2 (89)	200.6 (91)
10 DN250	10.750 (273.1)	13.00 (330)	24.41 (620)	1	271.7 (123.5)	260.7 (118.5)
12 DN300	12.750 (323.9)	14.00 (356)	26.38 (670)		408.9 (185.5)	393.5 (178.5)
14 DN350	14.000 (355.6)	15.00 (381.0)	33.94 (862)		506.0 (230)	—
16 DN400	16.000 (406.4)	15.98 (406.0)	36.93 (938)		712.8 (324)	—
18 DN450	18.000 (457.2)	17.00 (432.0)	41.61 (1057)		968 (440)	—
20 DN500	20.000 (508.0)	17.99 (457.0)	44.96 (1142)		1403.6 (638)	—
24 DN600	24.000 (609.6)	20.0 (508.0)	50.98 (1295)		1804 (820)	—

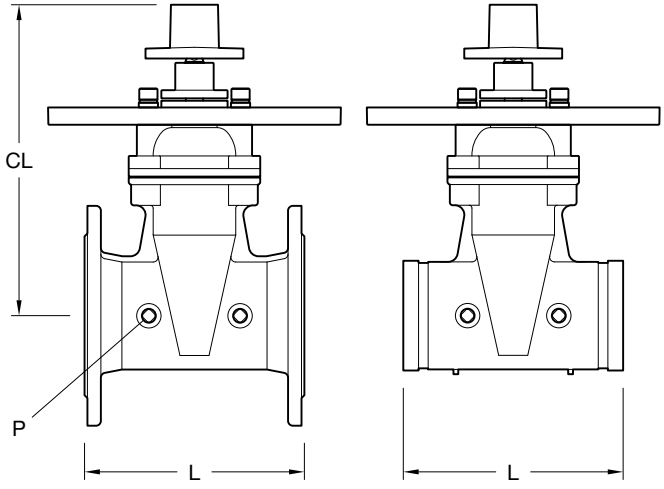
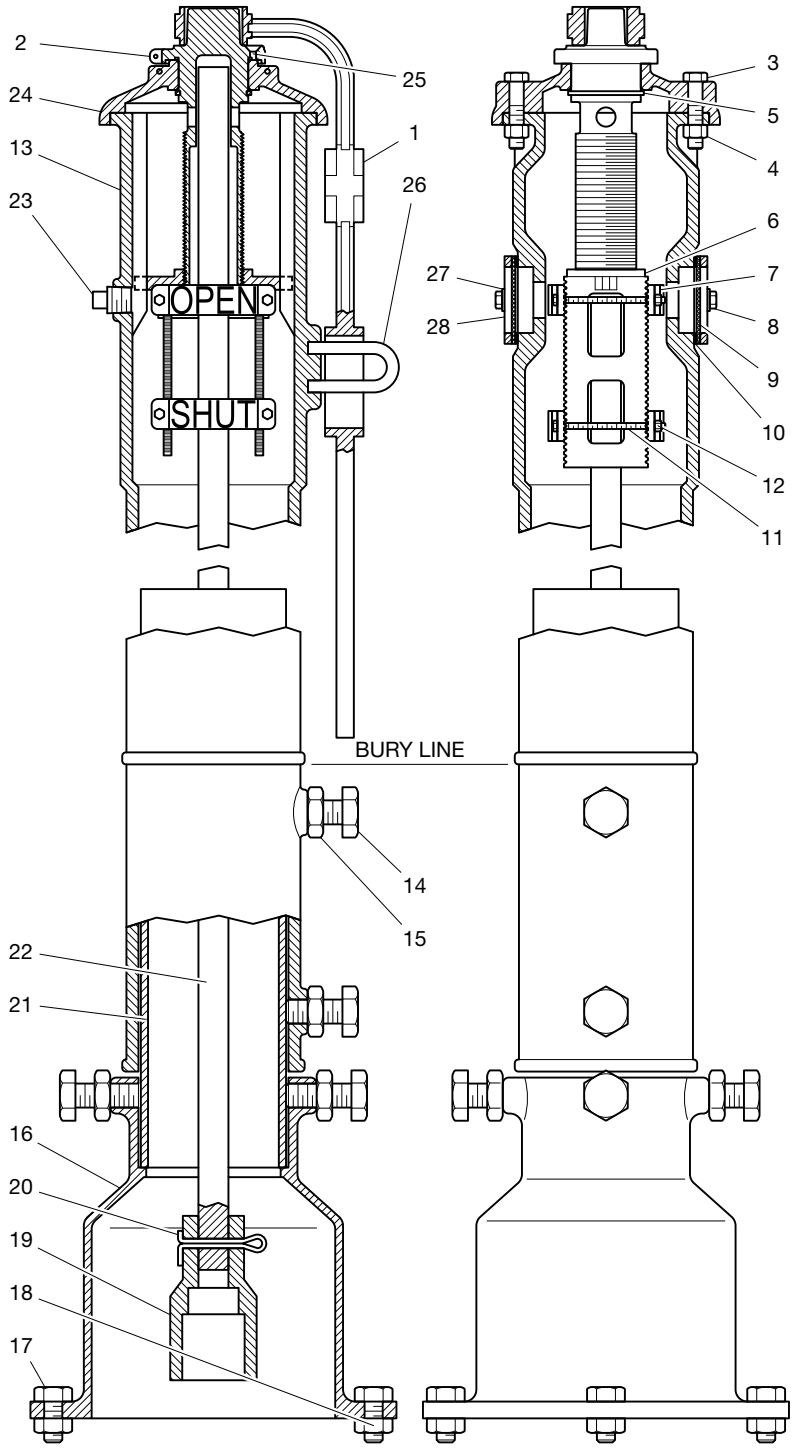


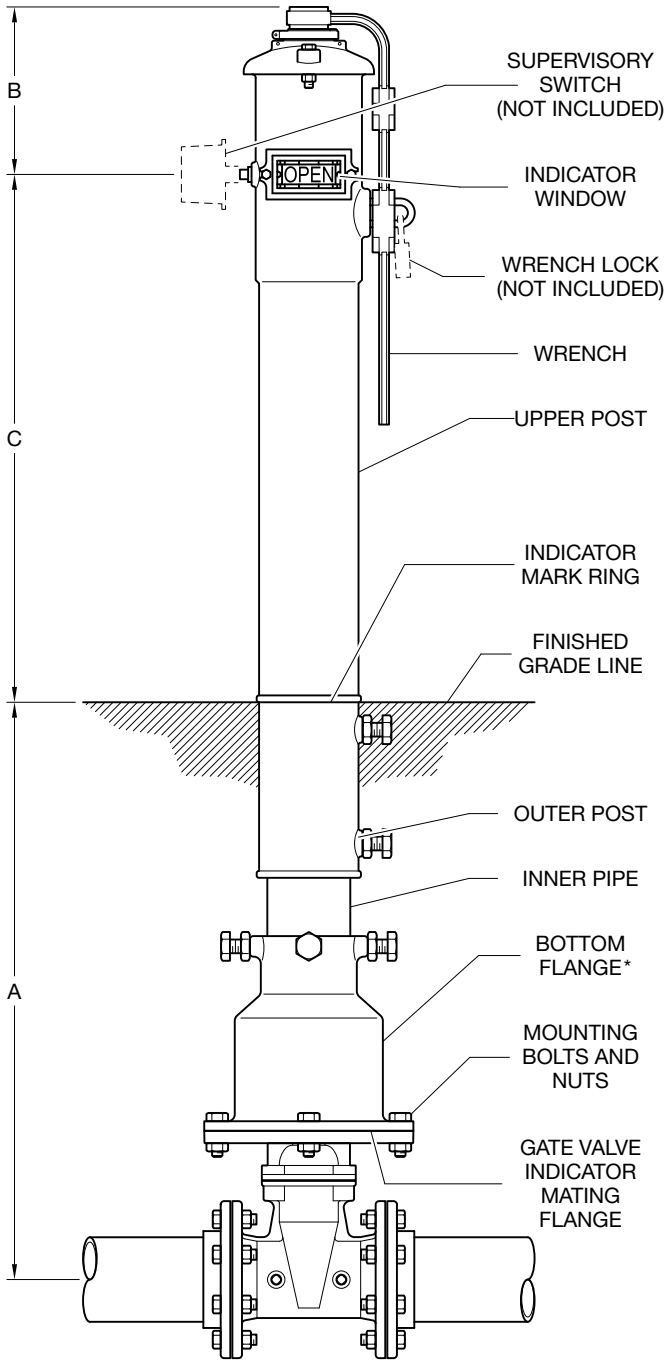
FIGURE 2
POST INDICATOR GATE VALVE
NOMINAL DIMENSIONS



No.	Description	Qty.	Material
1	Locking Wrench	1	ASTM A126B
2	Operating Nut	1	SUS304
3	Hex Cap Screw	2	ASTM A105
4	Hex Nut	2	ASTM A105
5	Snap Ring	1	AISI 066
6	Target Carrier Yoke	1	SUS304
7	Target	4	ASTM B108
8	Hex Cap Screw	4	ASTM A105
9	Window Glass	2	Lexan-UN
10	Window Glass Gasket	2	PTFE
11	Hex Cap Screw	4	ASTM A105
12	Hex Nut	4	ASTM A105
13	Upper Post	1	ASTM A536
14	Hex Cap Screw	6	ASTM A105
15	Hex Nut	6	ASTM A105
16	Mounting Flange	1	ASTM A126B
17	Hex Cap Screw	4	ASTM A105
18	Hex Nut	4	ASTM A105
19	Connection Tube Coupling	1	ASTM A536
20	Cotter Pin	1	AISI 304
21	Inner Pipe	1	ASTM A53
22	Connection Tube	1	AISI 1045
23	Plug	1	AISI 304
24	Cap	1	ASTM A126B
25	Phillips Head Screw	1	AISI 304
26	Lock Hasp	1	ASTM 307B
27	Flat Washer	4	AISI 304
28	Window Cover	2	ASTM A307B

Notes:
1. Replacement Indicator Window Glass Kit includes Items 8, 9, 10, 27, and 28

FIGURE 3
VERTICAL INDICATOR POST ASSEMBLY

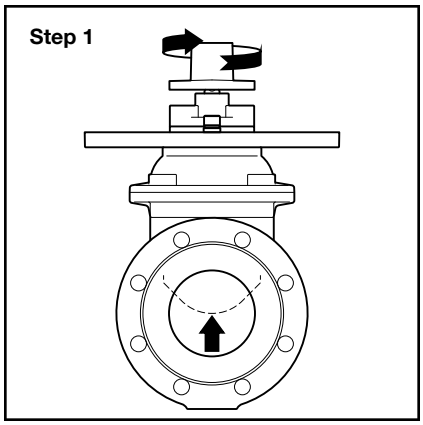


Post Type	Nominal Valve Size in. DN	A Valve CL to Finished Grade in. (mm)		B in. (mm)	C in. (mm)
		Minimum	Maximum		
Type A	2 DN50	29.25 (744)	63.50 (1614)	9.50 (240)	30.00 (760)
	4 DN100	31.13 (791)	65.38 (1661)		
	6 DN150	35.06 (892)	69.38 (1762)		
	8 DN200	38.38 (975)	72.63 (1845)		
	10 DN250	42.31 (1075)	76.56 (1945)		
	12 DN300	45.50 (1156)	79.75 (2026)		
Type B	14 DN350	50.87 (1292)	158.35 (4022)	11.30 (287)	
	16 DN400	53.82 (1367)	161.30 (4097)		
	18 DN450	58.54 (1487)	166.02 (4217)		
	20 DN500	61.89 (1572)	169.37 (4302)		
	24 DN600	67.87 (1724)	175.35 (4454)		

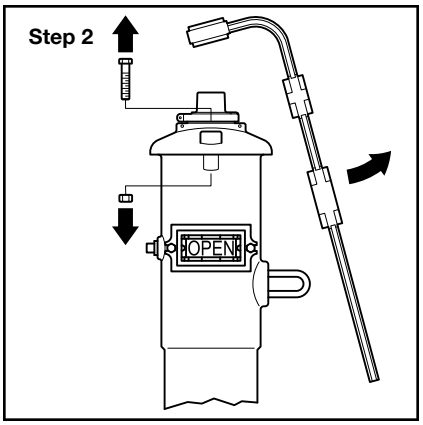
NOTE:
* Type B Post bottom flange features reducing gear for compatibility with 14 in. (DN350) and larger valve sizes.

FIGURE 4
VERTICAL INDICATOR POST FEATURES AND NOMINAL INSTALLATION DIMENSIONS

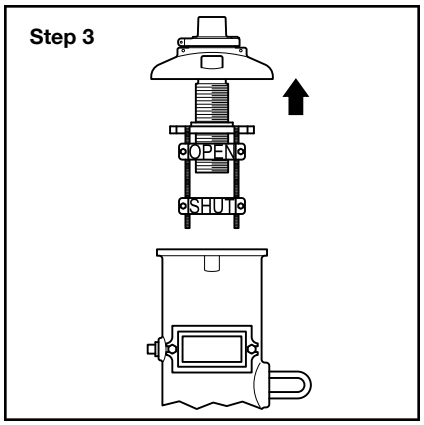
Installation Vertical Indicator Post, 4 in. to 12 in. (DN100 to DN300) Valves



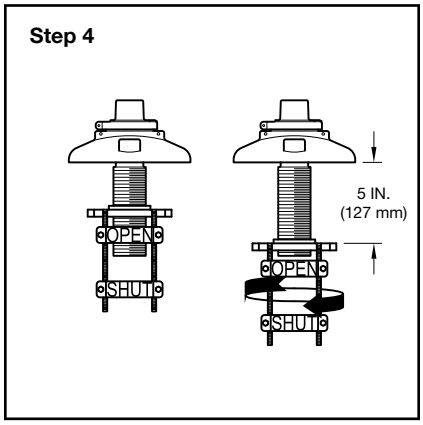
Step 1. Rotate the gate valve top cap counter-clockwise to fully open the gate valve.



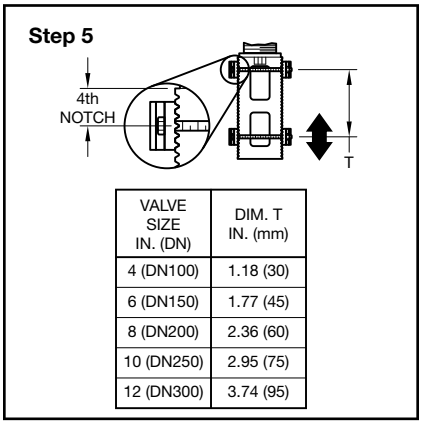
Step 2. Remove the indicator wrench and cap bolts and nuts.



Step 3. Remove the cap assembly from the body cavity.

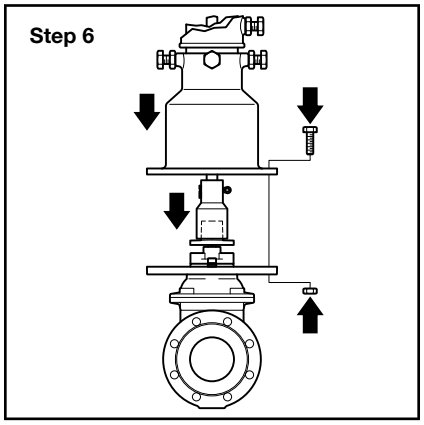


Step 4. Rotate the target carrier assembly around the operating nut stem to adjust the distance between the top surface of the carrier yoke and the bottom flange of the cap to 5 in. (127 mm).

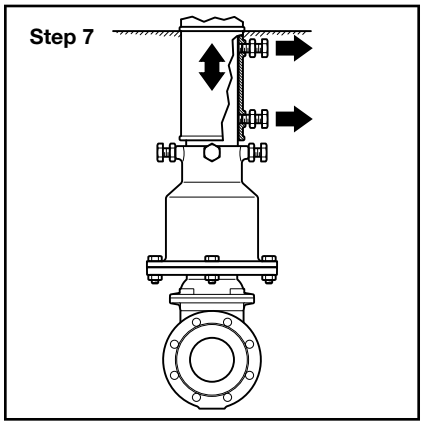


VALVE SIZE IN. (DN)	DIM. T IN. (mm)
4 (DN100)	1.18 (30)
6 (DN150)	1.77 (45)
8 (DN200)	2.36 (60)
10 (DN250)	2.95 (75)
12 (DN300)	3.74 (95)

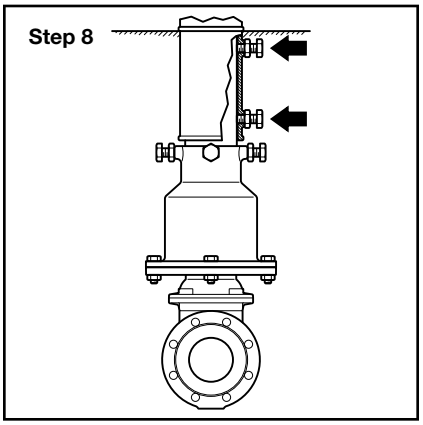
Step 5. Engage the middle tooth (centerline) of the OPEN target in the fourth notch in the serrated edge from the top surface of the carrier yoke. Locate the SHUT target per Dimension T in the table.



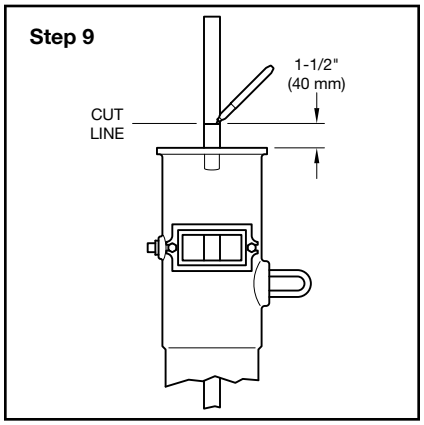
Step 6. Temporarily engage the connection tube coupling onto the gate valve top cap and attach the indicator to the gate valve mounting flange with bolts and nuts.



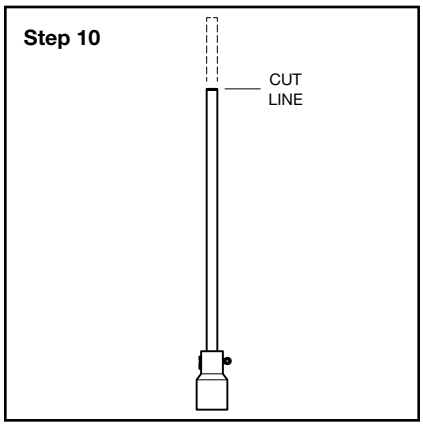
Step 7. Loosen the jam nuts and bolts to the free indicator outer pipe from the inner pipe. Adjust the outer pipe bury line even with finished grade.



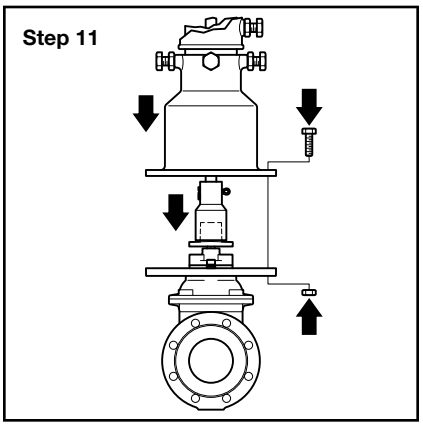
Step 8. Tighten the bolts and jam nuts to secure the outer pipe onto the inner pipe.



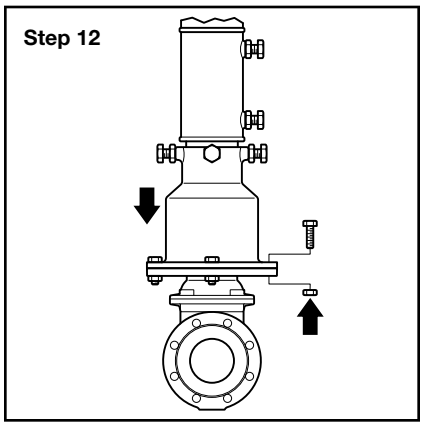
Step 9. Mark a cut line on the connection tube 1 1/2 in. (40 mm) above the top flange of the body.



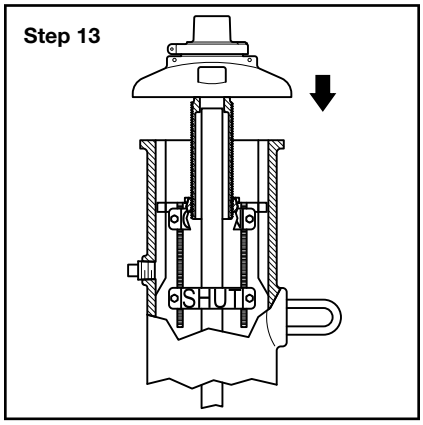
Step 10. Remove the connection tube from the body and cut at the cut line.



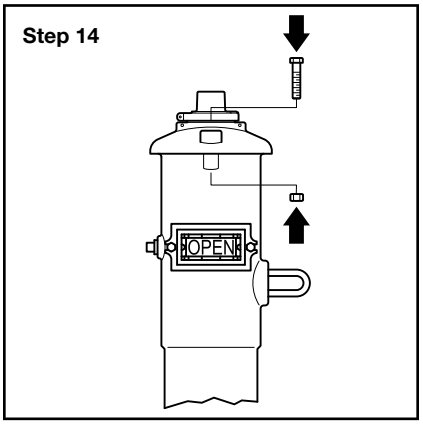
Step 11. Temporarily detach the indicator from the gate valve and raise to gain access to the gate valve top cap. Engage the connection tube coupling onto the gate valve top cap.



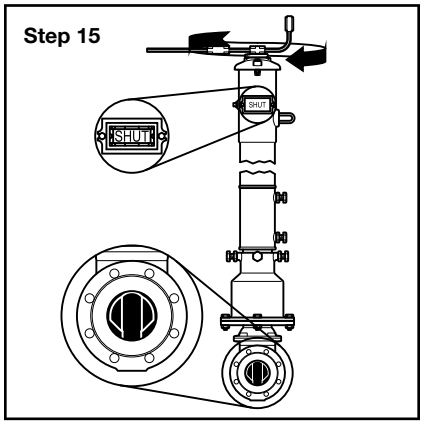
Step 12. Secure the indicator to the gate valve with bolts and nuts.



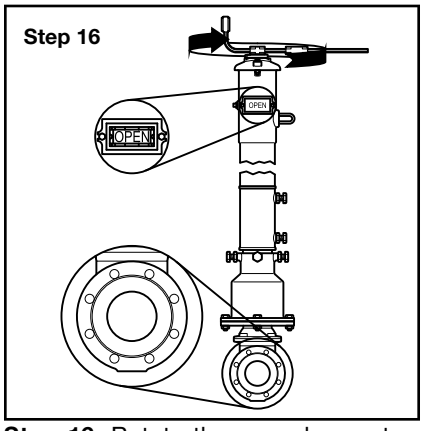
Step 13. Insert the cap assembly into the body cavity, aligning the carrier yoke keyway slots with the body keys, and square the hole in the operating nut stem with the connection tube.



Step 14. Secure the cap to the body with bolts and nuts.



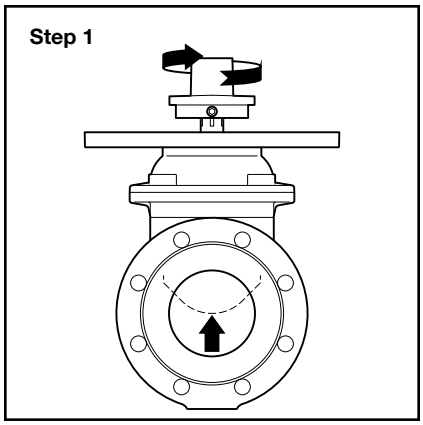
Step 15. Attach the wrench to the operating nut and rotate clockwise. Observe the gate valve waterway to verify the wedge is in the fully SHUT position. Observe the indicator to verify the SHUT targets are centered in the windows.



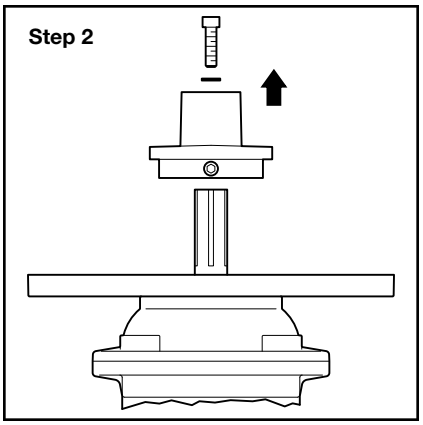
Step 16. Rotate the wrench counterclockwise. Observe the gate valve waterway to verify the wedge is in a fully OPEN position. Observe the indicator to verify the OPEN targets are centered in the windows.

Note: *Adjust the position of the targets on the carrier yoke as necessary if the conditions in steps 15 and 16 are not achieved. The gate valve must prevent flow when the indicator displays the SHUT condition. Similarly, the gate valve must allow full flow when the indicator displays the OPEN condition.*

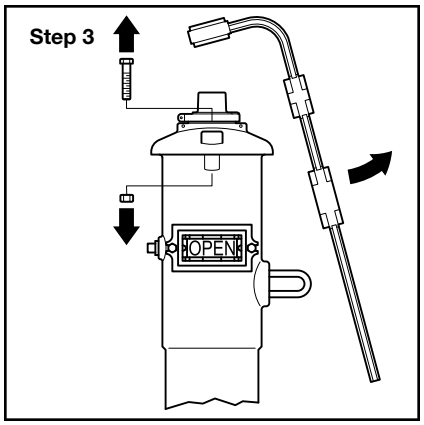
Installation Vertical Indicator Post, 14 in. to 24 in. (DN350 to DN600) Valves



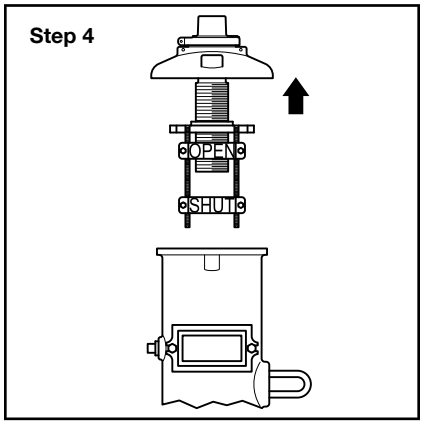
Step 1. Rotate the gate valve top cap counter-clockwise to fully the open gate valve.



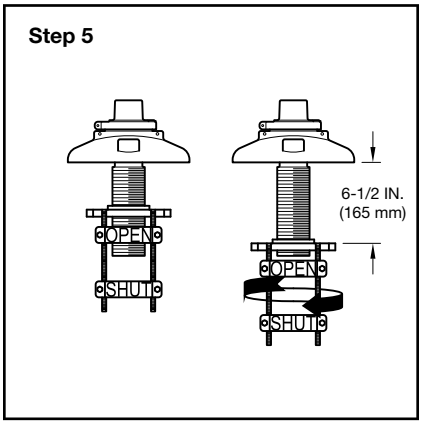
Step 2. Remove the top cap from the gate valve.



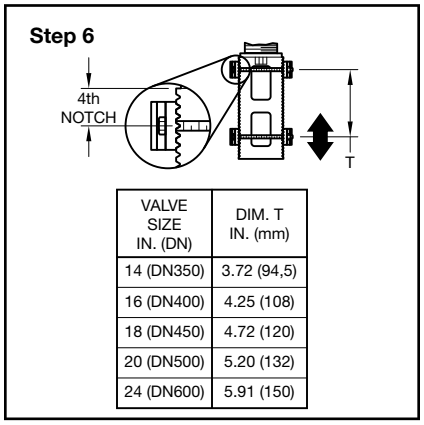
Step 3. Remove the indicator wrench and the cap bolts and nuts.



Step 4. Remove the cap assembly from the body cavity.

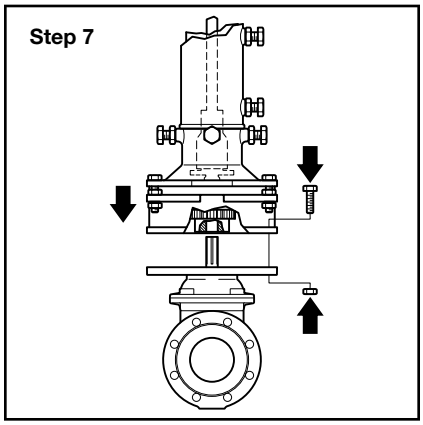


Step 5. Rotate the target carrier assembly around the operating nut stem to adjust the distance between the top surface of the carrier yoke and the bottom flange of the cap to 6 1/2 in. (165 mm).

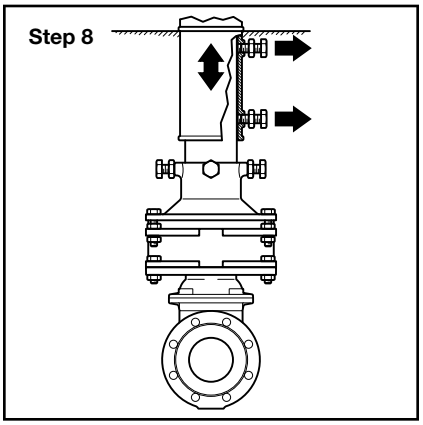


VALVE SIZE IN. (DN)	DIM. T IN. (mm)
14 (DN350)	3.72 (94,5)
16 (DN400)	4.25 (108)
18 (DN450)	4.72 (120)
20 (DN500)	5.20 (132)
24 (DN600)	5.91 (150)

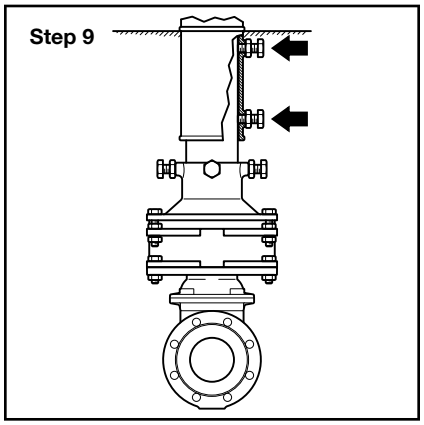
Step 6. Engage the middle tooth (centerline) of the OPEN target in the fourth notch in the serrated edge from the top surface of the carrier yoke. Locate the SHUT target per Dimension T in the table.



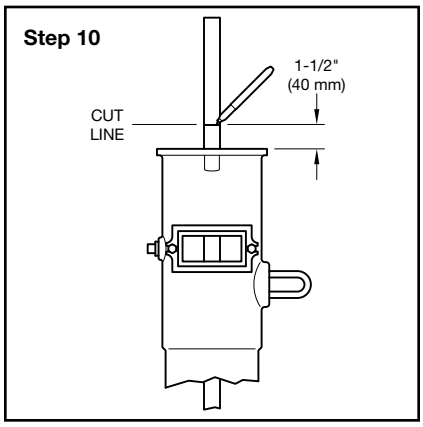
Step 7. Temporarily attach the indicator to the the gate valve mounting flange with bolts and nuts. Ensure the connection tube coupling remains engaged onto the reducing gear top cap.



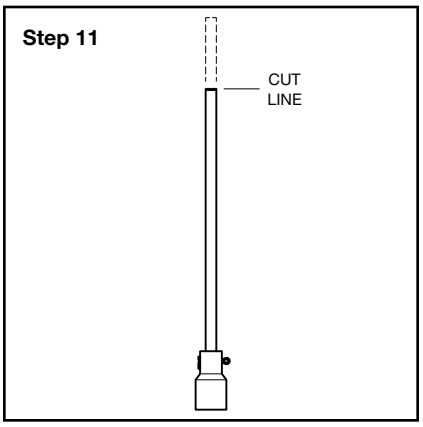
Step 8. Loosen the am nuts and bolts to free the indicator outer pipe from the inner pipe. Adjust the outer pipe bury line even with finished grade.



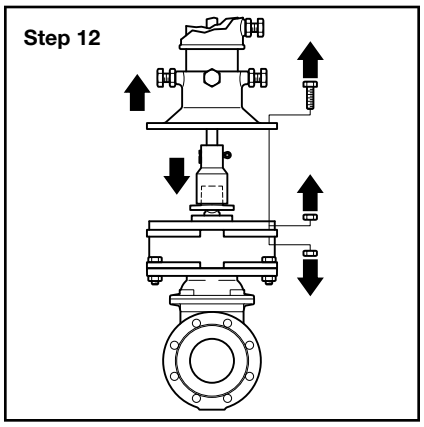
Step 9. Tighten the bolts and jam nuts to secure the outer pipe onto the inner pipe.



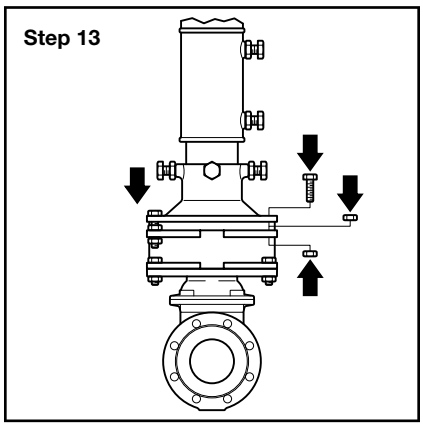
Step 10. Mark a cut line on the connection tube 1 1/2 in. (40 mm) above the top flange of the body.



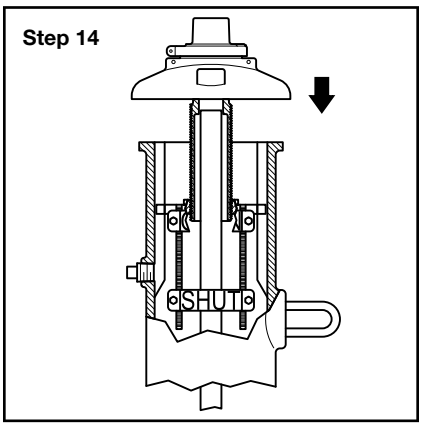
Step 11. Remove the connection tube from the body and cut at the cut line.



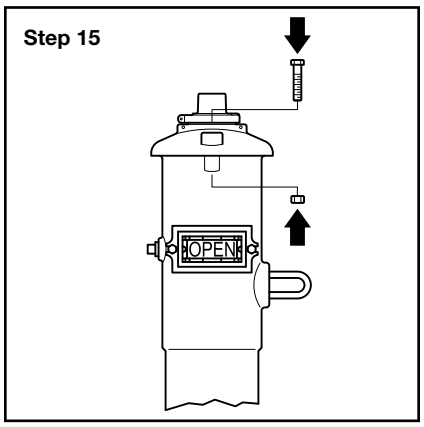
Step 12. Temporarily detach the indicator from the reducing gear, and raise the indicator to gain access to the reducing gear top cap. Engage the connection tube coupling onto the reducing gear top cap.



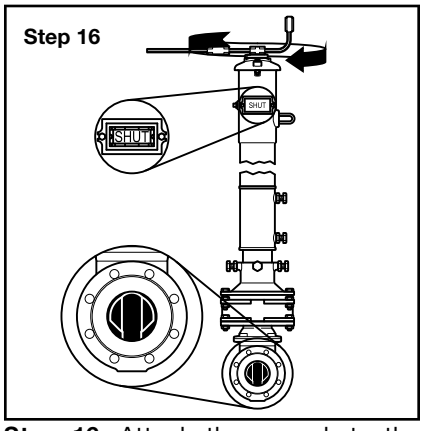
Step 13. Secure the indicator to the reducing gear with bolts and nuts.



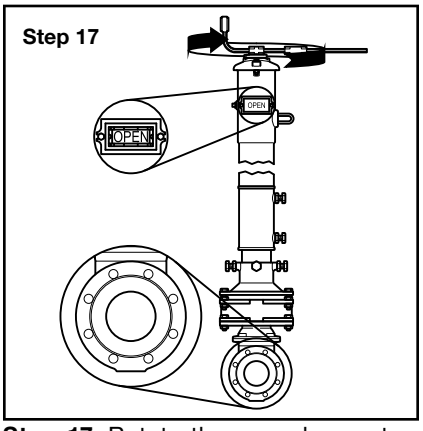
Step 14. Insert the cap assembly into the body cavity, aligning the carrier yoke keyway slots with the body keys and the square hole in the operating nut stem with the connection tube.



Step 15. Secure the cap to the body with bolts and nuts.



Step 16. Attach the wrench to the operating nut and rotate clockwise. Observe the gate valve waterway to verify the wedge is in fully SHUT position. Observe indicator to verify SHUT targets are centered in the windows.



Step 17. Rotate the wrench counterclockwise. Observe the gate valve waterway to verify wedge is in a fully OPEN position. Observe the indicator to verify OPEN targets are centered in the windows.

Note: *Adjust the position of the targets on the carrier yoke as necessary if the conditions in Steps 16 and 17 are not achieved. The gate valve must prevent flow when the indicator displays the SHUT condition. Similarly, the gate valve must allow full flow when the indicator displays the OPEN condition.*

No.	Description	Qty.	Material
1	Lifting Eye Bolt	1	ASTM A307B
2	Hex Nut	1	ASTM A307B
3	Washer	1	ASTM A307B
4	Handwheel	1	ASTM A536
5	Operating Nut	1	SUS304
6	Hex Cap Screw	2	ASTM A307B
7	Hex Nut	2	ASTM A307B
8	Snap Ring	1	AISI 066
9	Target Carrier Yoke	1	SUS304
10	Target	4	ASTM B108
11	Hex Cap Screw	4	ASTM A307B

No.	Description	Qty.	Material
12	Window Glass	2	Lexan-UN
13	Window Glass Gasket	2	PTFE
14	Hex Cap Screw	4	ASTM A307B
15	Hex Nut	4	ASTM A307B
16	Body	1	ASTM A536
17	Stand Pipe	1	ASTM A53
18	Connection Tube	1	AISI 1045
19	Cotter Pin	1	AISI 304
20	Connection Tube Coupling	1	ASTM A536

No.	Description	Qty.	Material
21	Plug	1	Malleable Iron
22	Cap	1	ASTM A126B
23	Phillips Head Screw	1	AISI 304
24	Lock Hasp	1	ASTM 307B
25	Flat Washer	4	AISI 304
26	Window Cover	2	ASTM A307B

Notes:
1. Replacement Indicator Window Glass Kit includes Items 11, 12, 13, 25, and 26

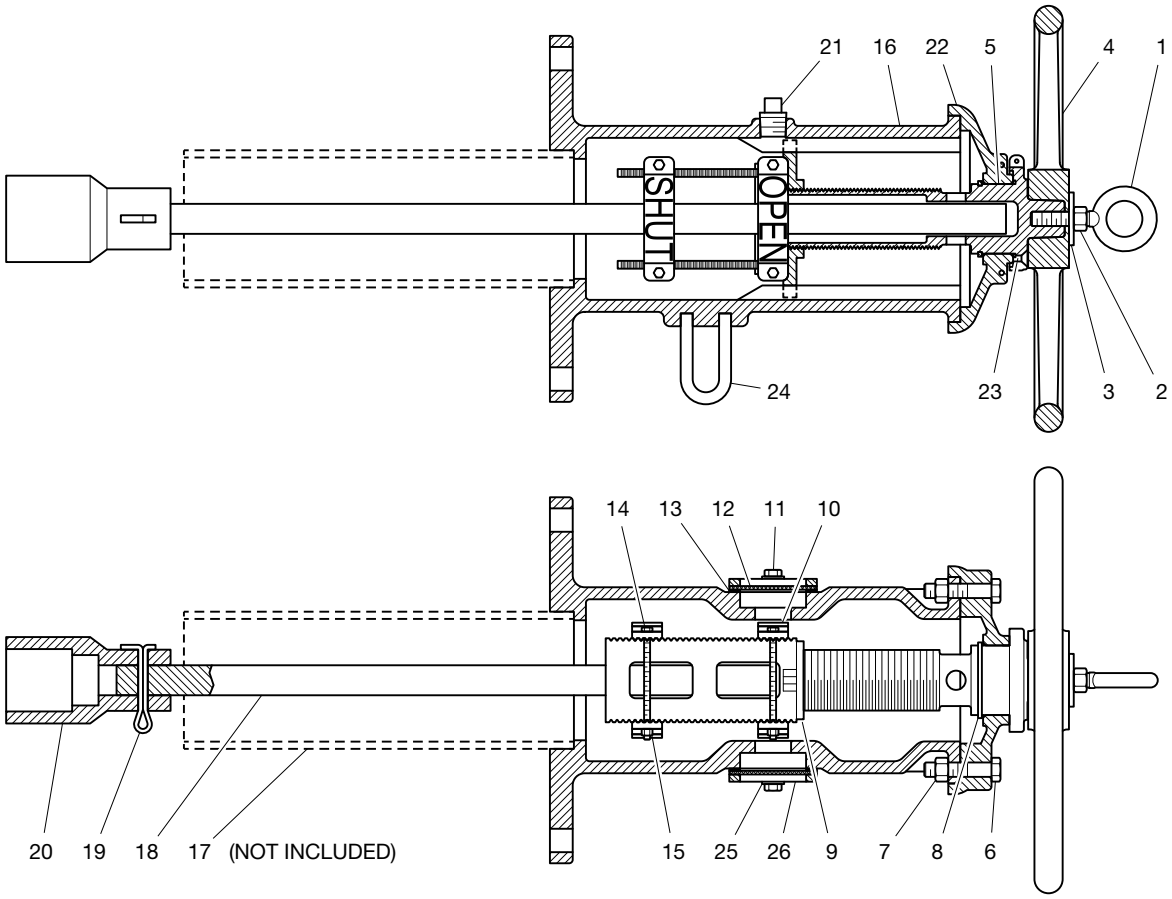


FIGURE 5
CROSS WALL INDICATOR POST ASSEMBLY

Nominal Valve Size in. DN	A Valve CL to Exterior Wall in. (mm)	
	Minimum	Maximum
2 DN50	10.75 (273)	98.36 (2500)
4 DN100	12.75 (325)	100.36 (2550)
6 DN150	16.63 (422)	104.25 (2647)

Nominal Valve Size in. DN	A Valve CL to Exterior Wall in. (mm)	
	Minimum	Maximum
8 DN200	20.19 (513)	107.81 (2738)
10 DN250	24.25 (615)	111.81 (2840)
12 DN300	27.56 (700)	115.13 (2925)

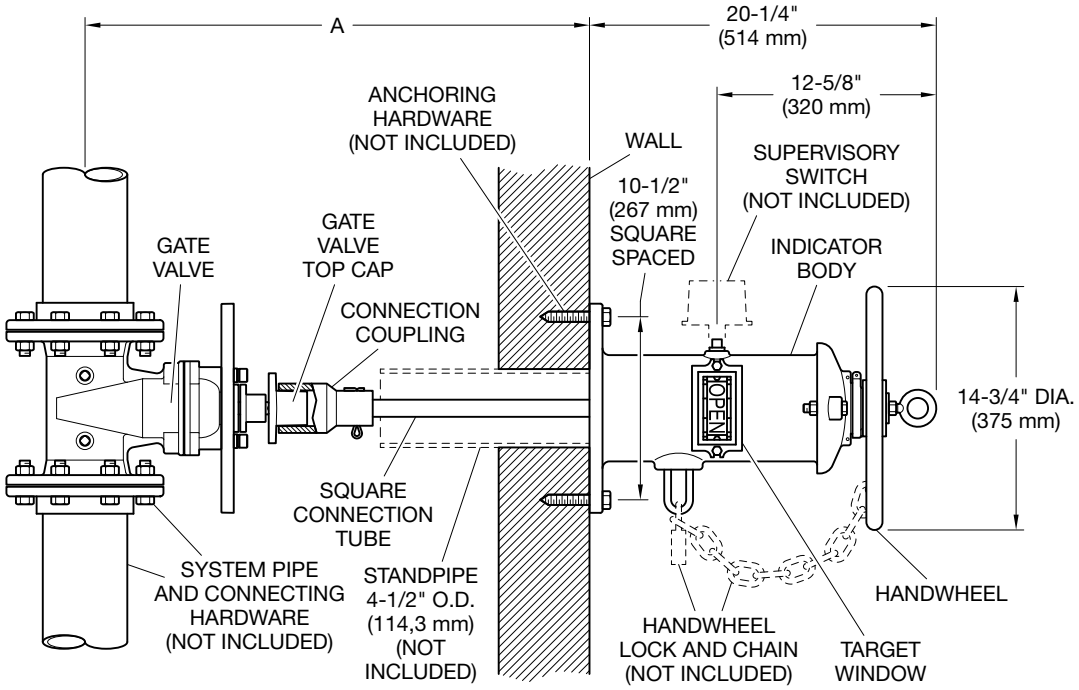
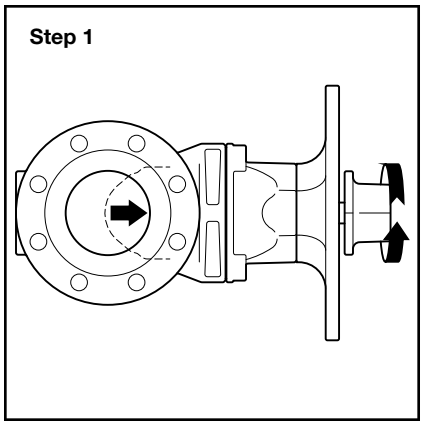
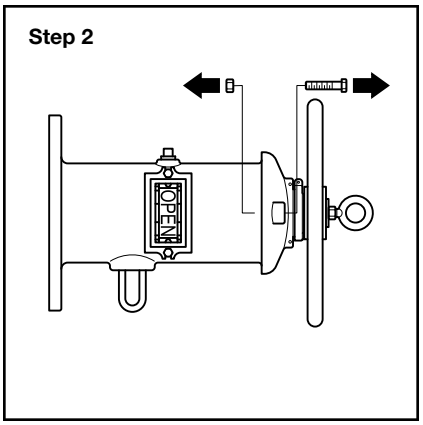


FIGURE 6
CROSS WALL INDICATOR POST
FEATURES AND NOMINAL
INSTALLATION DIMENSIONS

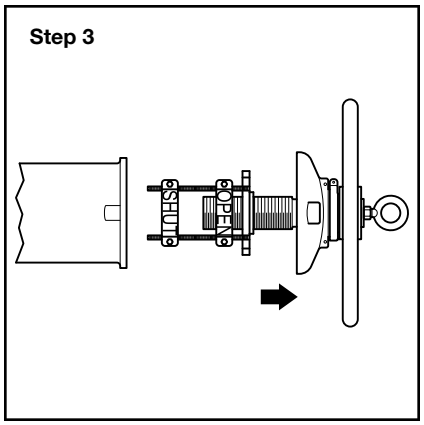
Installation Wall Indicator Post, 2 in. to 12 in. (DN100 to DN300) Valves



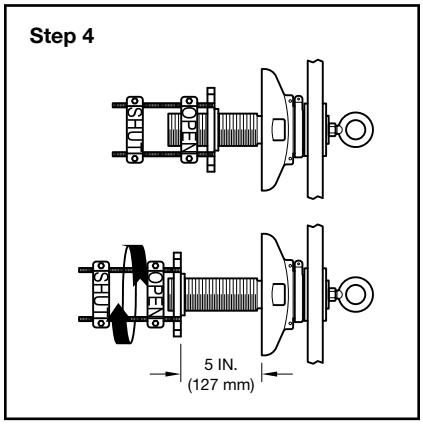
Step 1. Rotate the gate valve top cap counter-clockwise to fully open the gate valve.



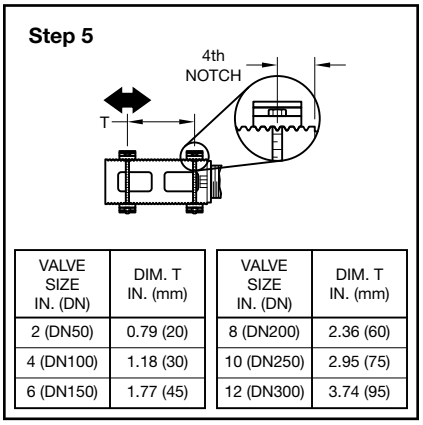
Step 2. Remove the indicator cap bolts and nuts.



Step 3. Remove the cap assembly from the body cavity.

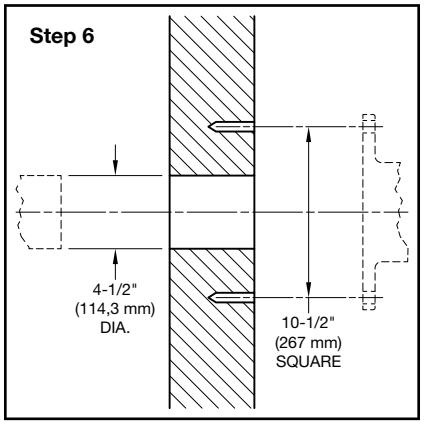


Step 4. Rotate the target carrier assembly around the operating nut stem to adjust the distance between the top surface of the carrier yoke, and the bottom flange of the cap to 5 in. (127 mm).

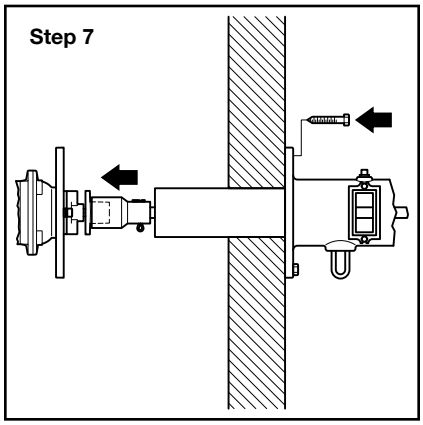


VALVE SIZE IN. (DN)	DIM. T IN. (mm)	VALVE SIZE IN. (DN)	DIM. T IN. (mm)
2 (DN50)	0.79 (20)	8 (DN200)	2.36 (60)
4 (DN100)	1.18 (30)	10 (DN250)	2.95 (75)
6 (DN150)	1.77 (45)	12 (DN300)	3.74 (95)

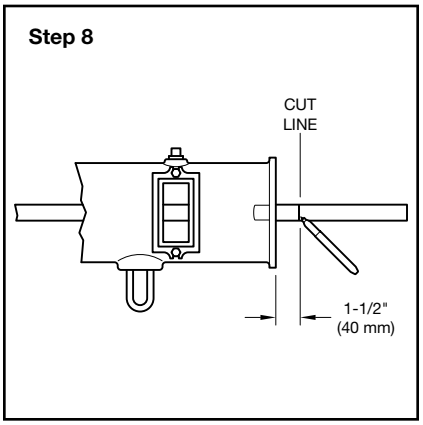
Step 5. Engage the middle tooth (centerline) of the OPEN target in the fourth notch in the serrated edge from the top surface of the carrier yoke. Locate the SHUT target per Dimension T in table.



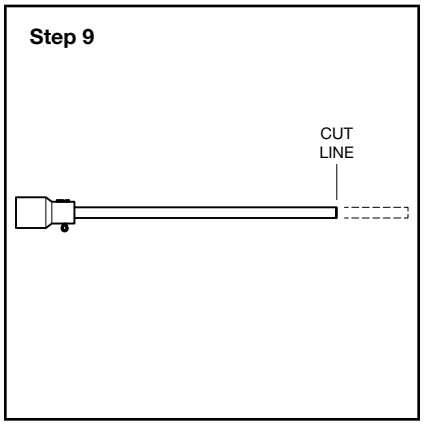
Step 6. Prepare the wall for standpipe penetration and indicator mounting.



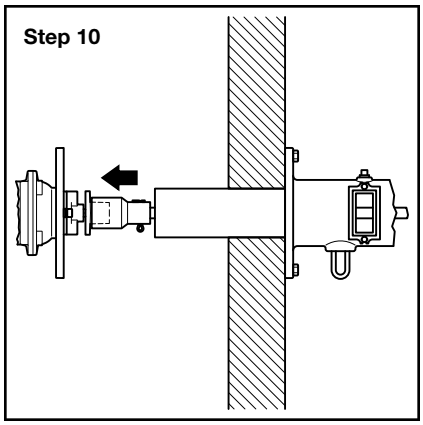
Step 6. Insert the standpipe through the bored hole, mount the indicator body, and temporarily engage the connection tube coupling onto the gate valve top cap.



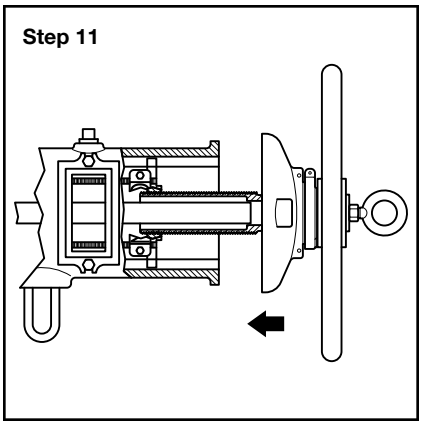
Step 8. Mark the cut line on the connection tube 1 1/2 in. (40 mm) beyond the end flange of body.



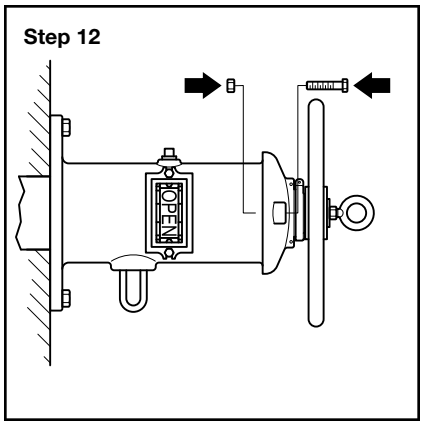
Step 9. Remove the connection tube from the body and cut at the cut line.



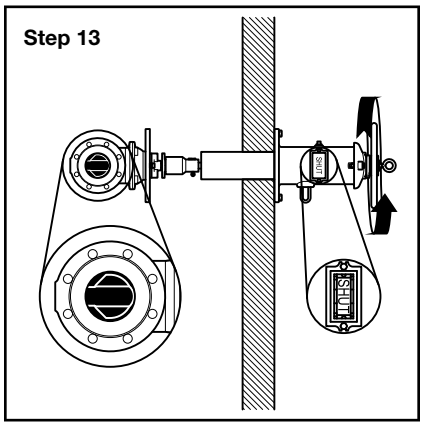
Step 10. Insert the connection tube through the body and standpipe and engage the coupling onto the gate valve top cap.



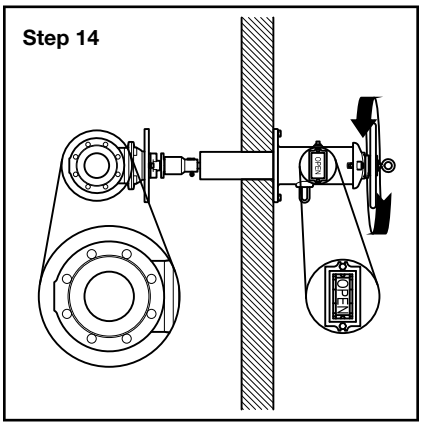
Step 11. Insert the cap assembly into the body cavity, aligning the carrier yoke keyway slots with the body keys, and the square hole in the operating nut stem with the connection tube.



Step 12. Secure the cap to the body with bolts and nuts.



Step 13. Rotate the handwheel clockwise. Observe the gate valve waterway to verify the wedge is in the fully SHUT position. Observe the indicator to verify the SHUT targets are centered in the windows.



Step 14. Rotate the handwheel counter-clockwise. Observe the gate valve waterway to verify the wedge is in the fully OPEN position. Observe the indicator to verify the OPEN targets are centered in the windows.

Note: *Adjust the position of the targets on the carrier yoke as necessary if the conditions in Steps 13 and 14 are not achieved. The gate valve must prevent flow when the indicator displays the SHUT condition. Similarly, the gate valve must allow full flow when the indicator displays the OPEN condition.*

Care and Maintenance

The TYCO Resilient-Seated Gate Valves with Vertical or Cross Wall Post Indicators must be maintained and serviced in accordance with this section.

Before closing a fire protection system main control valve for maintenance work on the fire protection system that it controls, permission to shut down the affected fire protection system must be obtained for the proper authorities and notify all personnel who may be affected by this action.

After placing a fire protection system in service, notify the proper authorities and advise those responsible for monitoring proprietary and/or central station alarms.

The owner is responsible for the inspection, testing, and maintenance of their fire protection system and devices in compliance with this document, as well as with the applicable standards of the NFPA such as NFPA 25, in addition to the standards of any authorities having jurisdiction. Contact the installing contractor or sprinkler manufacturer regarding any questions.

Automatic sprinkler systems are recommended to be inspected, tested, and maintained by a qualified inspection service in accordance with local requirements and/or national codes.

After installation and before pressurizing the valve, inspect all pressure-bearing bolts and parts for adequate tightness to prevent leakage and to ensure proper operation. Include the following parts:

- Bonnet (4)*
- Gland (6)*
- Plugs (15)*
- Upstream or downstream connections (15), and end connections*
- Indicator post handwheel (4)**

* = See Figure 1
** = See Figure 5

Gate Valve
Debris lodged in the sealing area of the wedge may cause the valve to close hard. Backing off the indicator wrench or handwheel and closing it again, several times if necessary, can correct this problem.

The valve should never be forced to seat by applying a wrench or extension to the lever, as it may distort the valve components or score the sealing surfaces. All replacement parts must be obtained from the manufacturer to assure proper operation of the valve.

Vertical Indicator Post
It is recommended that vertical indicator posts used to operate fire protection system water control valves be locked in the fully open position using the wrench. The locks must be sturdy and resistant to breakage except by heavy bolt cutters.

It is recommended that a visual inspection be carried out on a monthly basis to perform the following checks:

- Post cap, upper barrel, and windows are not damaged
- Targets indicate that the valve is open
- Wrench is in place on the post and is securely locked

It is further recommended that on a quarterly basis, the vertical indicator post should be closed two turns and then reopened to verify that the PIV is in the fully open position and properly engages with the post. Where a supervisory switch is installed, a check should be undertaken to ensure that the contacts are working properly.

Any missing or damaged parts should be immediately replaced.

Indicator Post	Part Number
Vertical Type A	TJUPA
Vertical Type B	TJUPB
Cross Wall	TJWP

TABLE D
VERTICAL AND CROSS WALL INDICATOR POST PART NUMBERS

Note: *If the target carrier yoke must be disassembled or cleaned for any reason, apply LOCTITE LB8150 or an equivalent grease as a lubricant to the stainless-steel threads of the operating nut prior to reassembly.*

Cross Wall Indicator Post
It is recommended that cross wall indicator posts used to operate fire protection system water control valves be locked in the fully open position using the handwheel. The locks must be sturdy and resistant to breakage except by heavy bolt cutters.

It is recommended that a visual inspection be carried out on a monthly basis to perform the follow checks:

- Post body, handwheel, and windows are not damaged
- Targets indicate that the valve is open
- Post is properly locked open

It is further recommended that on a quarterly basis, the cross wall indicator post should be closed two turns and then reopened to verify that the PIV is in the fully open position and properly engages with the post and that the supervisory switch contacts are working properly.

Any damaged parts should be immediately replaced.

Note: *If the target carrier yoke must be disassembled or cleaned for any reason, apply LOCTITE LB8150 or an equivalent grease as a lubricant to the stainless-steel threads of the operating nut prior to reassembly.*

Nominal Valve Size	Nominal Pipe Size	Part Number			
ANSI Inches DN	**O.D. Inches (mm)**	**Flange x Flange ANSI Class 150**	**Flange x Flange ISO 7005-2 PN16**	**Flange x Flange AS 2129 (Table E)**	**Groove x Groove**
2 DN50	2.375 (60.3)	TJPX0500003	TJPX0500001	TJPX0500005	TJPG0500604
4 DN100	4.500 (114.3)	TJPX1000003	TJPX1000001	TJPX1000005	TJPG1001144
6 DN150	6.625 (168.3)	TJPX1500003	TJPX1500001	TJPX1500005	TJPG1501684
8 DN200	8.625 (219.1)	TJPX2000003	TJPX2000001	TJPX2000005	TJPG2002194
10 DN250	10.750 (273.1)	TJPX2500003	TJPX2500001	TJPX2500005	TJPG2502734
12 DN300	12.750 (323.9)	TJPX3000003	TJPX3000001	TJPX3000005	TJPG3003244
14 DN350	14.0 (355.6)	TJPX3500003	TJPX3500001	TJPX3500005	—
16 DN400	16.0 (406.4)	TJPX4000003	TJPX4000001	TJPX4000005	—
18 DN450	18.0 (457.2)	TJPX4500003	TJPX4500001	TJPX4500005	—
20 DN500	20.0 (508.0)	TJPX5000003	TJPX5000001	TJPX5000005	—
24 DN600	24.0 (609.6)	TJPX6000003	TJPX6000001	TJPX6000005	—

TABLE E
POST INDICATOR GATE VALVE
PART NUMBERS

Limited Warranty

For warranty terms and conditions, visit www.tyco-fire.com.

Ordering Procedure

Contact your local distributor for availability. When placing an order, indicate the full product name and Part Number (P/N).

Refer to Table E for gate valve part numbers and Table D for vertical and cross wall indicator post part numbers.

Replacement Parts

Replacement Vertical Indicator Post Wrench
All vertical indicator post types feature a removable wrench for operating the PIV. Replace as necessary.

Specify: Vertical Indicator Post Wrench, P/N TJUPWRENCH

Replacement Indicator Window Glass Kit
Includes parts sufficient for replacing both indicator windows, For specific parts included in the kit, see Figures 3 and 5.

Specify: Replacement Indicator Window Glass Kit, vertical and cross wall indicator posts, P/N TJSG

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