

# Class 250 Iron Body Automatic Stop Check Valves

Bolted Bonnet • Angle Pattern • Renewable Seat and Disc\* • Bronze Mounted

500 PSI/34.5 bar non-shock cold working pressure from -20°F to 150°F/-29°C to 66°C†

Maximum working temperature 450°F/232°C at 250 PSI/17.2 bar

250 PSI/17.2 bar saturated steam to 406°F/208°C

CONFORMS TO MSS SP-85

## MATERIAL LIST

| PART                                      | SPECIFICATION                                                |
|-------------------------------------------|--------------------------------------------------------------|
| 1. Handwheel Nut                          | Steel ASTM A307                                              |
| 2. Identification Plate                   | Aluminum                                                     |
| 3. Handwheel                              | Cast Iron ASTM A126 Class B                                  |
| 4. Stem                                   | Brass ASTM B 16 Alloy C36000                                 |
| 5. Yoke Bushing                           | Copper Alloy ASTM B584 Alloy C84400                          |
| 6. Bonnet                                 | Cast Iron ASTM A126 Class B                                  |
| 7. Gland Follower Stud                    | Steel ASTM A307 (not shown)                                  |
| 8. Gland Follower Nut                     | Copper Alloy ASTM F467 Alloy C27000 (not shown)              |
| 9. Gland Follower                         | Ductile Iron ASTM A536                                       |
| 10. Packing Gland                         | Zinc Plated Powdered Iron ASTM B783 or Copper Alloy ASTM B16 |
| 11. Packing                               | Aramid Fibers / Graphite                                     |
| 12. <sup>1</sup> Butterfly Handle Nut     | Steel ASTM A307/SAE J429                                     |
| 13. <sup>1</sup> Butterfly Handle         | Copper Alloy ASTM B584 Alloy C84400                          |
| 14. <sup>1</sup> Control Valve Stem       | Copper Alloy ASTM B371 Alloy C69400                          |
| 15. <sup>1</sup> Control Valve Pack Nut   | Copper Alloy ASTM B584 Alloy C84400                          |
| 16. <sup>1</sup> Control Valve Pack Gland | Copper Alloy ASTM B16 Alloy C36000                           |
| 17. <sup>1</sup> Control Valve Packing    | Aramid Fibers with Graphite                                  |
| 18. <sup>1</sup> Control Valve Body       | Copper Alloy ASTM B584 Alloy C84400                          |
| 19. Hex Head Cap Screw                    | Steel ASTM A307/SAE J429                                     |
| 20. Body Gasket                           | Reinforced Graphite                                          |
| 21. <sup>1</sup> Dashpot Gasket           | Reinforced Graphite                                          |
| 22. <sup>1</sup> Dashpot                  | Copper Alloy ASTM B584 Alloy C84400                          |
| 23. <sup>1</sup> Piston-Disc              | Cast Iron ASTM A126 Class B                                  |
| 24. <sup>1</sup> Piston Ring (2)          | PTFE Composite Material                                      |
| 25. <sup>1</sup> Disc Face Ring           | Copper Alloy ASTM B584 Alloy C84400                          |
| 26. <sup>1</sup> Seat Ring                | Copper Alloy ASTM B584 Alloy C84400                          |
| 27. Body                                  | Cast Iron ASTM A126 Class B                                  |
| 28. <sup>2</sup> Piston Ring Collar       | Copper Alloy ASTM B16 Alloy C36000                           |
| 29. <sup>2</sup> Disc Cage                | Copper Alloy ASTM B584 Alloy C84400                          |
| 30. <sup>2</sup> PTFE Disc                | PTFE                                                         |
| 31. <sup>2</sup> Disc Plate and Nut       | Copper Alloy ASTM B584 C84400                                |
| 32. <sup>2</sup> Piston Rod Plug          | Copper Alloy ASTM B16 Alloy C36000                           |
| 33. <sup>2</sup> Piston Rod Plug Pin      | Copper Alloy ASTM B 140 Alloy C31400                         |

<sup>1</sup> 4" thru 8" size only. (4" thru 8" have Cast Iron Disc with Bronze Disc Face Ring)

<sup>2</sup> TFE Seat Disc in 2½" and 3" only. Maximum 150 psi saturated steam working pressure

<sup>3</sup> 2" thru 6" have Aramid Fibers/Graphite packings. 8" has wire reinforced carbon yarn with resilient core with Graphite & Zinc finish.

## DIMENSIONS—WEIGHTS—QUANTITIES

| Size    | Dimensions |           |         |           |         |         |         |         |         |         | Weight |     |
|---------|------------|-----------|---------|-----------|---------|---------|---------|---------|---------|---------|--------|-----|
|         | A          |           | B       |           | C       |         | D       |         | E       |         | Lbs.   | Kg. |
| In. mm. | In. mm.    | In. mm.   | In. mm. | In. mm.   | In. mm. | In. mm. | In. mm. | In. mm. | In. mm. | In. mm. |        |     |
| 2½ 65   | 5.75 146   | 12.63 321 | 8 203   | 7.50 191  | 1.00 25 | 80      | 36      |         |         |         |        |     |
| 3 80    | 6.25 159   | 14.00 356 | 10 254  | 8.25 210  | 1.13 29 | 102     | 46      |         |         |         |        |     |
| 4 100   | 7.00 178   | 16.50 419 | 10 254  | 10.00 254 | 1.25 32 | 168     | 76      |         |         |         |        |     |
| 6 150   | 8.75 222   | 20.75 527 | 14 356  | 12.50 318 | 1.44 37 | 311     | 141     |         |         |         |        |     |
| 8 200   | 10.50 267  | 23.81 605 | 16 406  | 15.00 381 | 1.63 41 | 520     | 236     |         |         |         |        |     |

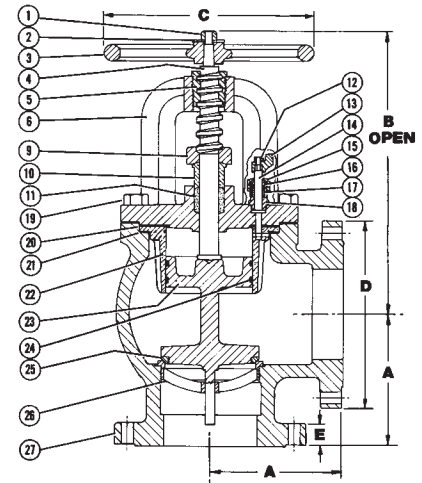
\*With proper machining facilities available.

Valve must be installed vertically.

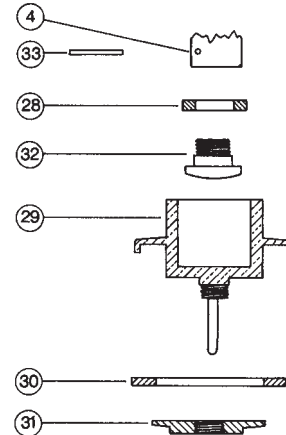
Visit [www.nibco.com](http://www.nibco.com) for current Chem-Guide and galvanic potential in piping systems information.



**F-869-B**  
Flanged  
Series D



**F-869-B**  
Flg x Flg



**NOTE:** NIBCO may substitute Ductile Iron ASTM A395 (60-40-18) for ASTM A126 Class B Cast Iron for the Body, Bonnet, Wedge, or Disc. NIBCO may substitute Ductile Iron ASTM A395 (60-40-18) or ASTM A536 (65-45-12) for all other ASTM A126 Class B Cast Iron components.

**FREEZING WEATHER PRECAUTION:** Subsequent to testing a piping system, valves should be left in an open position to allow complete drainage.

◆ For detailed Operating Pressure, refer to Pressure Temperature Chart on page 114.

**⚠ WARNING:** This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).