

# Series 300 Valves





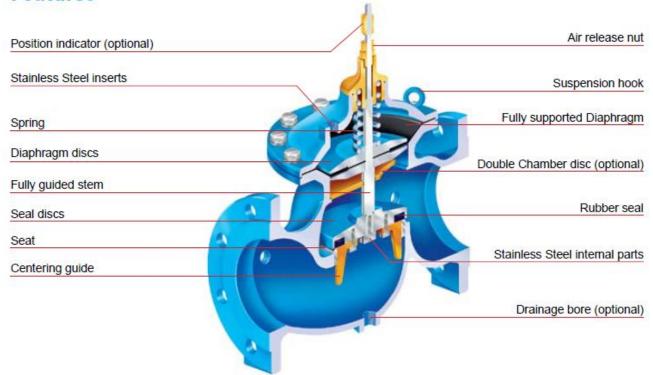
### **General Information**

### Overview

DOROT'S 300 Series, the latest line of state-of-the-art globe type automatic control valves, is designed to withstand even the most demanding requirements of water system control. The experts at DOROT developed this technically-advanced line with capabilities, far beyond any other valve on the market.

This Engineering Data guide will asist the reader in the selection of the optimal DOROT Series 300 valve.

#### **Features**



### Features of the 300 Series

- The capability to regulate near zero flow, as standard on all sizes, completely eliminating the need for a special low flow device (throttling plug) or a low flow bypass valve, while ensuring very low head loss in "fully open" position.
- A standard valve model, fit for all control operations.
  A specific pilot(s) provides the required application.
- The flange (face-to-face) dimensions suit ISO Standards. This allows for quick and easy replacement of old equipment, without the need for additional pipeline modifications.
- The valve has an internal floating shaft, allowing for no friction or leakage, eliminating the need for shaft sealing. The unique design of the shaft provides for easy field maintenance.
- The valve has a resilient seal disc, guided by an almost frictionless centering device.
- · The valve's body is made of Ductile Iron, withstanding

- both high hydraulic and mechanical stresses.
- A standard single-chamber valve, enabling jam-free operation in sensitive regulation conditions. When required, conversion from a single to a double chambered valve is easily accomplished through the insertion of Dorot's innovative separation disc, without the need to remove the valve from the pipeline during the conversion.
- The valve is supplied with a replaceable seat, made of SST, which maintains excellent durability against erosion and ensuring a drip-tight seal.
- During the closing procedure, the pace slows down, preventing any damage that may occur from water slam/surge.
- The series includes, as an optional feature, a valve position indicator, attached by a floating connection (ball & socket), resulting in smooth movement, with no wear or tear on the indicator seal.



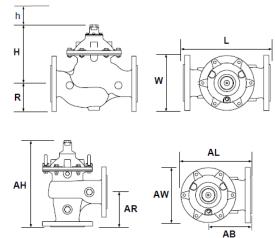
## **Engineering Data**

### **Dimensions & Weights**

Models 30 (16 bar rated valves) / 31 (25 bar rated valves)

#### Globe Flanged Type

| Valve Size                     | 40 (11/2") |                               | 50 ( 2") |            | 65                             | 65 (2 <sup>1</sup> / <sub>2</sub> ") |            | 80 (3")        |            | 100 (4")                       |            | 150 (6")                        |  |
|--------------------------------|------------|-------------------------------|----------|------------|--------------------------------|--------------------------------------|------------|----------------|------------|--------------------------------|------------|---------------------------------|--|
|                                | mm         | inch                          | mm       | inch       | n mm                           | inch                                 | mm         | inch           | mm         | inch                           | mm         | inch                            |  |
| L                              | 230        | 91/16                         | 230      | 91/1       | 292                            | 121/2                                | 310        | 123/16         | 350        | 13 <sup>3</sup> / <sub>4</sub> | 480        | 18 <sup>7</sup> / <sub>8</sub>  |  |
| Н                              | 185        | 75/16                         | 185      | 75/1       | 185                            | 75/16                                | 230        | $9^{1}/_{16}$  | 240        | 97/16                          | 330        | 13                              |  |
| h**                            | 140        | $5^{1}/_{2}$                  | 140      | 51/2       | 140                            | 51/2                                 | 170        | 611/16         | 180        | 7                              | 230        | 9                               |  |
| W                              | 153        | 6                             | 170      | 611/1      | 6 185                          | 73/16                                | 200        | $7^{7}/_{8}$   | 235        | 91/4                           | 330        | 13                              |  |
| R                              | 82.5       | 31/4                          | 82.5     | 31/4       | 92.5                           | 35/8                                 | 100        | $3^{15}/_{16}$ | 110        | 45/16                          | 142.5      | 55/8                            |  |
| Weight Kg/lbs*                 | 12 /       | 26                            | 12       | / 26       | 13                             | 1/29                                 | 22 / 49    |                | 37 / 82    |                                | 80 / 176   |                                 |  |
| Vol.control<br>chamber lit/gal | 0.1 / 0.02 |                               | 0.1/     | 0.1 / 0.02 |                                | / 0.02                               | 0.3 / 0.08 |                | 0.7 / 0.2  |                                | 1.5 / 0.4  |                                 |  |
| Valve Size                     | 200 (8")   |                               | 1        | 250 (10")  |                                | 300                                  | 300 (12")  |                | 350 (14")  |                                | 400 (16")  |                                 |  |
|                                | mm         | inch                          | n m      | m          | inch                           | mm                                   | inch       | mn             | n in       | ch                             | mm         | inch                            |  |
| L                              | 600        | 235/                          | 8 73     | 30         | 283/4                          | 850                                  | 337/16     | 980            | 38         | 9/16                           | 1100       | 435/16                          |  |
| Н                              | 390        | 15 <sup>3</sup> /             | 8 5      | 20         | $20^{1}/_{2}$                  | 635                                  | 25         | 635            | 5 2        | 5                              | 855        | $33^{5}/_{8}$                   |  |
| h**                            | 300        | 11 <sup>13</sup> /            | 16 39    | 90         | 15 <sup>1</sup> / <sub>4</sub> | 450                                  | 1711/16    | 450            | ) 17       | 11/16                          | 590        | 231/4                           |  |
| W                              | 415        | 16 <sup>5</sup> /-            | 16 52    | 25         | 2011/16                        | 610                                  | 24         | 610            | ) 2        | 4                              | 850        | 337/16                          |  |
| R                              | 172.5      | 6 <sup>3</sup> / <sub>4</sub> | 20       | 05         | 81/16                          | 230                                  | 9          | 272            | 2 10       | 11/16                          | 290        | 11 <sup>7</sup> / <sub>16</sub> |  |
| Weight Kg/lbs*                 | 157        | / 346                         |          | 245 / 540  |                                | 405 / 893                            |            | 510 / 1124     |            | 4                              | 822 / 1812 |                                 |  |
| Vol.control<br>chamber lit/gal | 4.3 / 1.1  |                               |          | 9.7 / 2.6  |                                | 18.6 / 4.9                           |            | 18             | 18.6 / 4.9 |                                | 50 / 13.2  |                                 |  |



### **Dimensions & Weights**

Model 32 (25 bar rated valves)

#### **Globe Flanged Type**

| Valve Size                     | 80 (3")    |                                 | 100 (4")   |                                 | 150 (6")   |                                | 200 (8")   |                                 | 250 (10") |                                |
|--------------------------------|------------|---------------------------------|------------|---------------------------------|------------|--------------------------------|------------|---------------------------------|-----------|--------------------------------|
|                                | mm         | inch                            | mm         | inch                            | mm         | inch                           | mm         | inch                            | mm        | inch                           |
| L                              | 310        | 12 <sup>3</sup> / <sub>16</sub> | 350        | 13 <sup>3</sup> / <sub>4</sub>  | 480        | 18 <sup>7</sup> / <sub>8</sub> | 600        | 235/8                           | 730       | 283/4                          |
| Н                              | 185        | 71/4                            | 232        | 93/16                           | 250        | 10                             | 334        | 131/8                           | 395       | 15 <sup>1</sup> / <sub>2</sub> |
| h**                            | 107        | 41/4                            | 156        | 61/8                            | 170        | $6^{3}/_{4}$                   | 220        | 811/16                          | 275       | 1013/16                        |
| W                              | 200        | 77/8                            | 235        | 91/4                            | 300        | 11 <sup>3</sup> / <sub>4</sub> | 360        | 14 <sup>3</sup> / <sub>16</sub> | 425       | 16 <sup>3</sup> / <sub>4</sub> |
| R                              | 100        | 315/16                          | 120        | 411/16                          | 150        | $5^{7}/_{8}$                   | 182        | 63/16                           | 215       | 87/16                          |
| Weight Kg/lbs*                 | 15 / 33    |                                 | 27 / 60    |                                 | 51 / 112   |                                | 92 / 202   |                                 | 171 / 377 |                                |
| Vol.control<br>chamber lit/gal | 0.1 / 0.02 |                                 | 0.3 / 0.08 |                                 | 0.7 / 0.2  |                                | 1.5 / 0.37 |                                 | 4.3 / 1.1 |                                |
| Valve Size                     | 300 (12")  |                                 | 350 (14")  |                                 | 400 (16")  |                                |            |                                 |           |                                |
|                                | mm         | inch                            | mm         | inch                            | mm         | inch                           |            |                                 |           |                                |
| L                              | 850        | 337/16                          | 980        | 389/16                          | 1100       | 435/16                         |            |                                 |           |                                |
| Н                              | 545        | 211/2                           | 635        | 25                              | 635        | 25                             |            |                                 |           |                                |
| h**                            | 400        | 15 <sup>3</sup> / <sub>4</sub>  | 480        | $18^{7}/_{8}$                   | 480        | $18^{7}/_{8}$                  |            |                                 |           |                                |
| W                              | 489        | 191/4                           | 610        | 24                              | 628        | 243/4                          |            |                                 |           |                                |
| R                              | 245        | 93/8                            | 260        | 10 <sup>3</sup> / <sub>16</sub> | 314        | 12 <sup>3</sup> / <sub>8</sub> |            |                                 |           |                                |
| Weight Kg/lbs*                 | 330 / 726  |                                 | 510 / 1124 |                                 | 544 / 1197 |                                |            |                                 |           |                                |
| Vol.control<br>chamber lit/gal | 9.7 / 2.6  |                                 | 18.6 / 4.9 |                                 | 18.6 / 4.9 |                                |            |                                 |           |                                |



