

# A506 Pressure sustaining / relief + Solenoid Control Valve

The A506 is a pressure sustaining / relief valve. Two different functions based on the installation place. Solenoid valve can control the valve to turn on or off.

## Features:

- Top and seat ring guided stem and diaphragm assembly for long life and reliability.
- All iron components are fusion epoxy bonded for corrosion resistance.
- Easy maintenance without removal from the main line.
- Nylon reinforced diaphragm for long term service.
- Drip tight shut off.
- Globe design for superior control characteristics.
- Ductile iron bodies for higher strength and durability.
- Corrosion resistant stainless steel seat and disc retainer ring.
- Various pilots and accessories available for configuration into many different applications.
- Special V-Port and double chamber are options, please consult factory.
- Meet standards BS EN 1074-5, ISO 5208, BS EN 12266-1, BS EN 558-1,

## General Application:

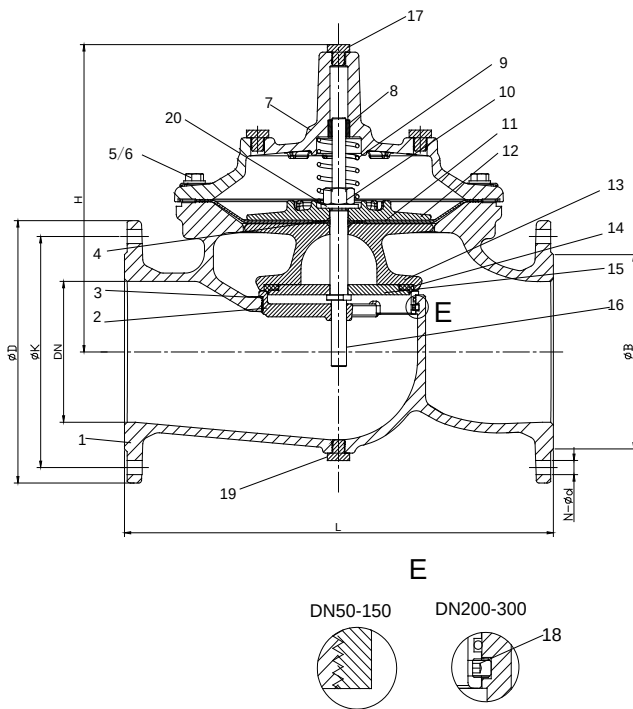
For pressure, flow and level control in water applications.

## Technical Data:

Size Range: DN50~DN800mm  
Pressure Ratings: 1.0Mpa; 1.6Mpa; 2.5Mpa  
Working Temperature: -10°C- 80°C  
Suitable Media: Water  
End connection: PN 10/ PN 16/ PN 25  
Consult Factory for other applications



## A900-Main Valve DN50-DN350



### Parts List

| No. | Description   | Material                | Standard           |
|-----|---------------|-------------------------|--------------------|
| 1   | Body          | Ductile Iron            | GJS 500-7          |
| 2   | Seat          | Stainless Steel         | AISI 304/316       |
| 3   | O-ring        | Rubber                  | NBR                |
| 4   | O-ring        | Rubber                  | NBR                |
| 5   | Bolt          | Stainless Steel         | A2/A4              |
| 6   | Washer        | Stainless Steel         | A2/A4              |
| 7   | Bonnet        | Ductile Iron            | GJS 500-7          |
| 8   | Bush          | Bronze                  | C61900             |
| 9   | Spring        | Stainless Steel         | AISI 304/316       |
| 10  | Caulking Nut  | Stainless Steel         | A4                 |
| 11  | Diaphragm     | Nylon Reinforced Rubber | EPDM +Nylon Fabric |
| 12  | Fixing holder | Ductile Iron            | GJS 500-7          |
| 13  | Disc Holder   | Ductile Iron            | GJS 500-7          |
| 14  | Seal          | Rubber                  | EPDM               |
| 15  | Seat Retainer | Stainless Steel         | AISI 304/316       |
| 16  | Stem          | Stainless Steel         | AISI 304/316       |
| 17  | Plug          | Stainless Steel         | AISI 304/316       |
| 18  | Screw         | Stainless Steel         | A2/A4              |
| 19  | Plug          | Stainless Steel         | A2/A4              |
| 20  | Washer        | Stainless Steel         | A2/A4              |

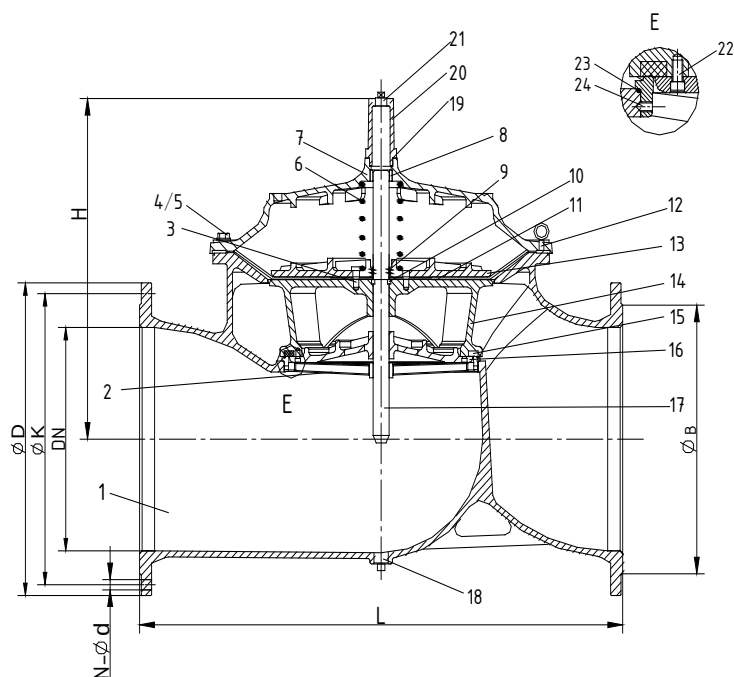
### Dimension:

|      |            |     |      |      |      |      |      |      |     | Unit: mm |        |        |      |      |      |
|------|------------|-----|------|------|------|------|------|------|-----|----------|--------|--------|------|------|------|
| DN   | Model Code | L   | ØD   |      |      | ØK   |      |      | H   | N-Ød     |        |        | ØB   |      |      |
|      |            |     | PN10 | PN16 | PN25 | PN10 | PN16 | PN25 |     | PN10     | PN16   | PN25   | PN10 | PN16 | PN25 |
| 50   | A900-0050  | 230 | 165  | 165  | 165  | 125  | 125  | 125  | 177 | 4-Ø19    | 4-Ø19  | 4-Ø19  | Ø99  | Ø99  | Ø99  |
| 65   | A900-0065  | 290 | 185  | 185  | 185  | 145  | 145  | 145  | 202 | 4-Ø19    | 4-Ø19  | 8-Ø19  | Ø118 | Ø118 | Ø118 |
| 80   | A900-0080  | 310 | 200  | 200  | 200  | 160  | 160  | 160  | 219 | 8-Ø19    | 8-Ø19  | 8-Ø19  | Ø132 | Ø132 | Ø132 |
| 100  | A900-0100  | 350 | 220  | 220  | 235  | 180  | 180  | 190  | 243 | 8-Ø19    | 8-Ø19  | 8-Ø23  | Ø156 | Ø156 | Ø156 |
| *125 | A900-0125  | 400 | 250  | 250  | 270  | 210  | 210  | 220  | 243 | 8-Ø19    | 8-Ø19  | 8-Ø28  | Ø156 | Ø156 | Ø156 |
| 150  | A900-0150  | 480 | 285  | 285  | 300  | 240  | 240  | 250  | 333 | 8-Ø23    | 8-Ø23  | 8-Ø28  | Ø211 | Ø211 | Ø211 |
| 200  | A900-0200  | 600 | 340  | 340  | 360  | 295  | 295  | 310  | 428 | 8-Ø23    | 12-Ø23 | 12-Ø28 | Ø266 | Ø266 | Ø274 |
| 250  | A900-0250  | 730 | 405  | 405  | 425  | 350  | 355  | 370  | 478 | 12-Ø23   | 12-Ø28 | 12-Ø31 | Ø319 | Ø319 | Ø330 |
| 300  | A900-0300  | 850 | 460  | 460  | 485  | 400  | 410  | 430  | 538 | 12-Ø23   | 12-Ø28 | 16-Ø31 | Ø370 | Ø370 | Ø389 |
| *350 | A900-0350  | 980 | 520  | 520  | 555  | 460  | 470  | 490  | 550 | 16-Ø23   | 16-Ø28 | 16-Ø34 | Ø429 | Ø429 | Ø448 |

NOTE: 1. \*DN125/350 use same internal as DN100/300

2. AISI 304 factory standard material. consult factory for AISI 316 material.

## A900-Main Valve DN400-DN800



## Parts List

| No. | Description   | Material                | Standard           |
|-----|---------------|-------------------------|--------------------|
| 1   | Body          | Ductile Iron            | GJS 500-7          |
| 2   | Seat          | Stainless Steel         | AISI 304/316       |
| 3   | Screw         | Stainless Steel         | A2/A4              |
| 4   | Screw         | Stainless Steel         | A2/A4              |
| 5   | Screw         | Stainless Steel         | A2/A4              |
| 6   | Spring        | Stainless Steel         | AISI 304/316       |
| 7   | Bonnet        | Ductile Iron            | GJS 500-7          |
| 8   | Bush          | Bronze                  | C61900             |
| 9   | O-ring        | Rubber                  | NBR                |
| 10  | Fix Washer    | Bronze                  | C61900             |
| 11  | Diaphragm     | Nylon Reinforced Rubber | EPDM +Nylon Fabric |
| 12  | Eye Bolts     | Carbon Steel            | 1040               |
| 13  | Fixing Holder | Ductile Iron            | GJS 500-7          |
| 14  | Disc Holder   | Ductile Iron            | GJS 500-7          |
| 15  | Seal          | Rubber                  | EPDM               |
| 16  | Seal Retainer | Ductile Iron            | GJS 500-7          |
| 17  | Stem          | Stainless Steel         | AISI 304/316       |
| 18  | Plug          | Stainless Steel         | AISI 304/316       |
| 19  | O-ring        | Rubber                  | NBR                |
| 20  | Cap           | Ductile Iron            | GJS 500-7          |
| 21  | Plug          | Stainless Steel         | AISI 304/316       |
| 22  | Screw         | Stainless Steel         | A2/A4              |
| 23  | O-ring        | Rubber                  | NBR                |
| 24  | Screw         | Stainless Steel         | A2/A4              |

## Dimension:

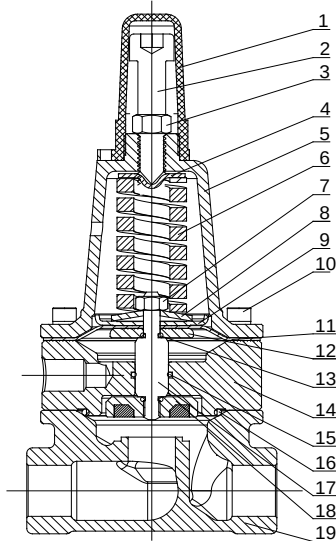
Unit: mm

| DN   | Model Code | L    | H    | ØD   |      |      | ØK   |      |      | N-Ød   |        |        | ØB   |      |      |
|------|------------|------|------|------|------|------|------|------|------|--------|--------|--------|------|------|------|
|      |            |      |      | PN10 | PN16 | PN25 | PN10 | PN16 | PN25 | PN10   | PN16   | PN25   | PN10 | PN16 | PN25 |
| 400  | A900-0400  | 1100 | 710  | 580  | 580  | 620  | 515  | 525  | 550  | 16-Ø28 | 16-Ø31 | 16-Ø37 | 480  | 480  | 503  |
| *450 | A900-0450  | 1200 | 720  | 640  | 640  | 670  | 565  | 585  | 600  | 20-Ø28 | 20-Ø31 | 20-Ø37 | 530  | 548  | 548  |
| 500  | A900-0500  | 1250 | 822  | 715  | 715  | 730  | 620  | 650  | 660  | 20-Ø28 | 20-Ø34 | 20-Ø37 | 582  | 609  | 609  |
| 600  | A900-0600  | 1450 | 885  | 840  | 840  | 845  | 725  | 770  | 770  | 20-Ø31 | 20-Ø37 | 20-Ø40 | 682  | 720  | 720  |
| *700 | A900-0700  | 1650 | 910  | 910  | 910  | 960  | 840  | 840  | 875  | 24-Ø31 | 24-Ø37 | 24-Ø43 | 682  | 720  | 720  |
| 800  | A900-0800  | 1850 | 1260 | 1025 | 1025 | 1085 | 950  | 950  | 990  | 24-Ø34 | 24-Ø40 | 24-Ø49 | 901  | 901  | 928  |

Note: 1. \*DN450/700 use same internal as DN400/600.

2. AISI 304 factory standard material. consult factory for AISI 316 material.

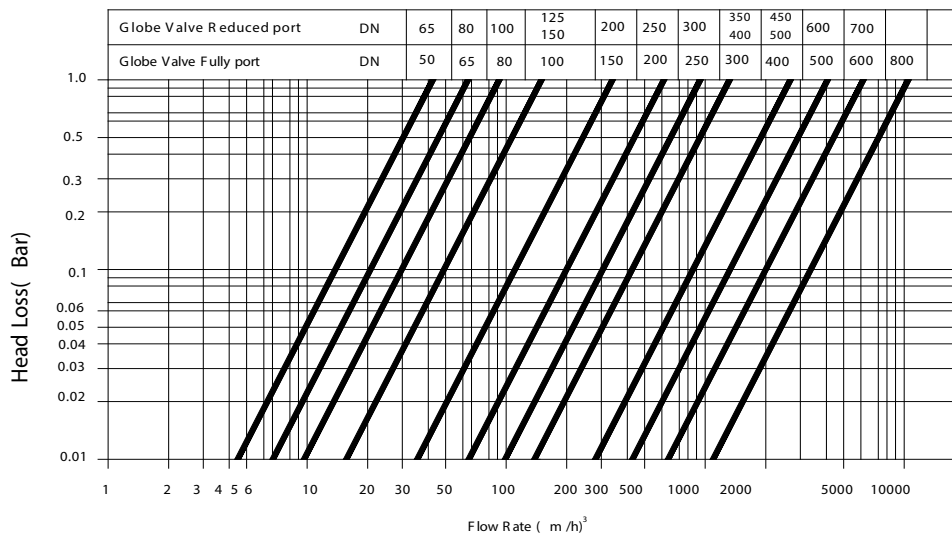
## P500-Relief/Sustaining Pilot



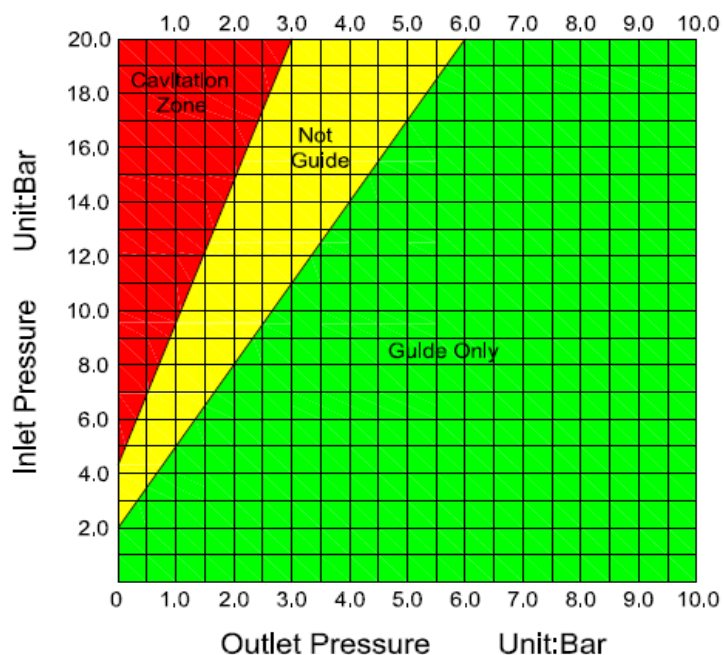
### Part list & Material

| No. | Description     | Material                | Standard           |
|-----|-----------------|-------------------------|--------------------|
| 1   | Cap             | Plastic                 | ABS                |
| 2   | Adjusting Screw | Stainless Steel         | AISI 304           |
| 3   | Jam Nut         | Stainless Steel         | AISI 304           |
| 4   | Spring table    | Stainless Steel         | AISI 304           |
| 5   | Bonnet          | Stainless Steel         | AISI 304           |
| 6   | Spring          | Spring Steel            | SiCrV              |
| 7   | Nut             | Stainless Steel         | A2                 |
| 8   | Spring table    | Spring Steel            | Mn-steel+Ni Plated |
| 9   | Fixing Holder   | Stainless Steel         | AISI 304           |
| 10  | Screw           | Stainless Steel         | A2                 |
| 11  | Diaphragm       | Nylon Reinforced Rubber | EPDM+Nylon         |
| 12  | Gasket          | Stainless Steel         | AISI 304           |
| 13  | O-Ring          | Rubber                  | NBR                |
| 14  | Internal Body   | Stainless Steel         | AISI 304           |
| 15  | O-Ring          | Rubber                  | NBR                |
| 16  | O-Ring          | Rubber                  | NBR                |
| 17  | Stem            | Stainless Steel         | AISI 304           |
| 18  | Disc            | Stainless Steel+Rubber  | AISI 304+EPDM      |
|     | Body            | Stainless Steel         | AISI 304           |

## Head Loss Curve



## Cavitation



## Ordering Code

A 506 - 0200 - 16 - YYY

### Model:

A506: Pressure Relief/Sustaining + Solenoid Control Valve

YYY: Special Code  
Please Consult Factory

### Pressure Rating:

10: PN10  
16: PN16  
25: PN25  
A1: ANSI 125 F/F  
A5: ANSI 150 R/F

### Size:

0080: 80 mm  
0200: 200 mm

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