

# Piston Valves

## DN 15 - 50

### Type: YVN Flanged

| Material Type  | Cast Iron                          | Ductile Iron                       | Cast Steel                         | Stainless Steel                    |
|----------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Size           | DN15-50                            | DN15-50                            | DN15-50                            | DN15-50                            |
| Pressure Class | PN16                               | PN25                               | PN40                               | PN40                               |
| Dimensions     | DIN EN 558/1.serie                 | DIN EN 558/1.serie                 | DIN EN 558/1.serie                 | DIN EN 558/1.serie                 |
| Assembly       | Flanged according to DIN EN 1092-2 | Flanged according to DIN EN 1092-2 | Flanged according to DIN EN 1092-1 | Flanged according to DIN EN 1092-1 |
| Temperature    | -10°C +300 °C                      | -10°C +350 °C                      | -10°C * +400°C                     | -10°C * +400°C                     |
| Material Code  | 2                                  | 8                                  | 7                                  | 9                                  |
| Order Code     | YPG.2F__00                         | YPG.8F__00                         | YPG.7F__00                         | YPG.9F__00                         |

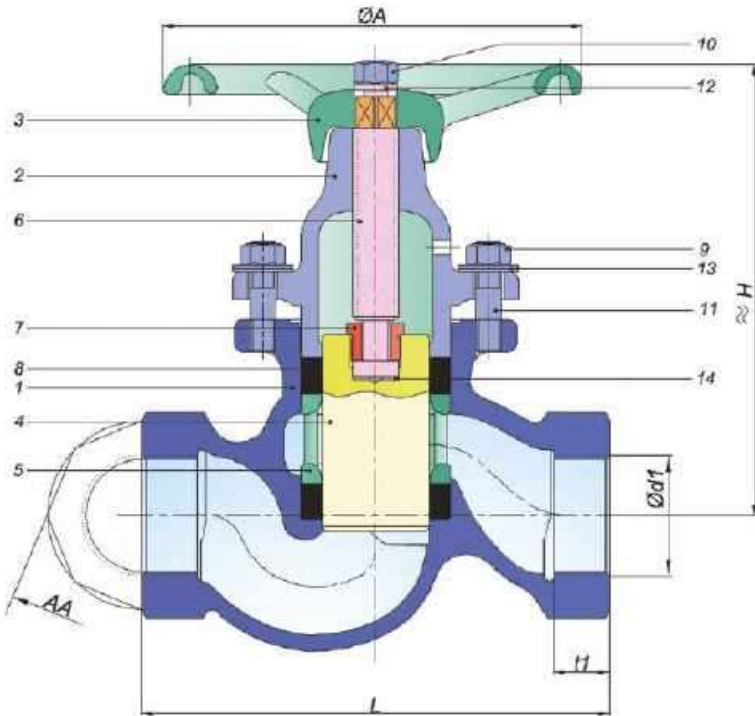
### Fluid Types

All kinds of fluids such as water, hot water, high temperature hot water, steam, thermal oil, LPG, fuel oil, pressurized air, etc.

| P.No | Part Name         | Cast Iron           | Ductile Iron        | Cast Steel          | St. Steel | St. Steel |
|------|-------------------|---------------------|---------------------|---------------------|-----------|-----------|
| 1    | Body              | GJL 250             | 0.7040              | 1.0619              | 1.4308    | 1.4408    |
| 2    | Upper Bonnet      | GJL 250 ****        | 0.7040 ****         | 1.0619 ****         | 1.4308    | 1.4408    |
| 3    | Hand Wheel        | GJL 200             | GJL 200             | GJL 200             | GJL 200   | GJL 200   |
| 4    | Piston            | 1.4021              | 1.4021              | 1.4021              | 1.4301    | 1.4401    |
| 5    | Lantern Bush      | GJL 200 + Phosphate | GJL 200 + Phosphate | GJL 200 + Phosphate | 1.4308*** | 1.4408*** |
| 6    | Valve Spindle     | 1.4021/St-42        | 1.4021/St-42        | 1.4021/St-42        | 1.4301    | 1.4401    |
| 7    | Double Piece Nut  | Ms-58               | Ms-58               | Ms-58               | 1.4301    | 1.4401    |
| 8    | Valve Ring        | Graphite            | Graphite            | Graphite            | Graphite  | Graphite  |
| 9    | Nut               | 8.8+Gal.            | 8.8+Gal.            | 8.8+Gal.            | A2-70     | A2-70     |
| 10   | Nut               | 8.8+Gal.            | 8.8+Gal.            | 8.8+Gal.            | A2-70     | A2-70     |
| 11   | Stud              | 8.8+Gal.            | 8.8+Gal.            | 8.8+Gal.            | A2-70     | A2-70     |
| 12   | Lock Washer       | 8.8+Gal.            | 8.8+Gal.            | 8.8+Gal.            | A2-70     | A2-70     |
| 13   | Belleville Washer | 50CrV4              | 50CrV4              | 50CrV4              | A2-70     | A2-70     |
| 14   | Piston Washer     | Ms-58               | Ms-58               | Ms-58               | 1.4301    | 1.4301    |

| DN |        | Dimensions |     |     | Assembly size |     |     |          |     |      |   |    |      |   |    |      |   |    |
|----|--------|------------|-----|-----|---------------|-----|-----|----------|-----|------|---|----|------|---|----|------|---|----|
| mm | inch   | Type       | L   | H   | A             | D   | g   | Hole Nr. | k   | PN16 |   |    | PN25 |   |    | PN40 |   |    |
|    |        |            |     |     |               |     |     |          |     | b    | f | l  | b    | f | l  | b    | f | l  |
| 15 | 1/2"   | YVN 15     | 130 | 105 | 100           | 95  | 45  | 4        | 65  | 14   | 2 | 14 | 16   | 2 | 14 | 16   | 2 | 14 |
| 20 | 3/4"   | YVN 20     | 150 | 120 | 120           | 105 | 58  | 4        | 75  | 16   | 2 | 14 | 18   | 2 | 14 | 18   | 2 | 14 |
| 25 | 1"     | YVN 25     | 160 | 138 | 140           | 115 | 68  | 4        | 85  | 16   | 2 | 14 | 18   | 3 | 14 | 18   | 2 | 14 |
| 32 | 1 1/4" | YVN 32     | 180 | 154 | 160           | 140 | 78  | 4        | 100 | 18   | 2 | 19 | 18   | 3 | 19 | 18   | 2 | 18 |
| 40 | 1 1/2" | YVN 40     | 200 | 186 | 180           | 150 | 88  | 4        | 110 | 18   | 3 | 19 | 18   | 3 | 19 | 18   | 2 | 18 |
| 50 | 2"     | YVN 50     | 230 | 211 | 200           | 165 | 102 | 4        | 125 | 20   | 3 | 19 | 20   | 3 | 19 | 20   | 2 | 18 |

\* For temperatures below -10°C, stud and nut material should be stainless steel  
 \*\*\*\*1.4401 for DN15 and DN20  
 \*\*\*\* Ck22 for DN15 and DN20

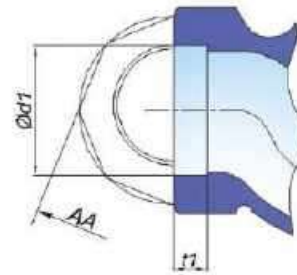


Screwed Type-YVMN

## Piston Valves

DN 1/2"-2"

Type: YVMN Screwed  
YVSN Socket Weld



Socket type – YVSN  
(For steel and stainless steel)

| Material Type        | Cast Iron                                | Cast Steel                                 | Stainless Steel                            |
|----------------------|------------------------------------------|--------------------------------------------|--------------------------------------------|
| Size                 | DN1/4"-2"                                | DN1/4"-2"                                  | DN1/4"-2"                                  |
| Pressure Class       | PN16                                     | PN40 DN 1/4"-2"<br>PN63 DN 1/4"-1"         | PN40 DN 1/4"-2"<br>PN63 DN 1/4"-1"         |
| Dimensions           | DIN EN 3202-4/M9<br>(Except DN 1/4")     | DIN EN 3202-4/M9<br>(Except DN 1/4")       | DIN EN 3202-4/M9<br>(Except DN 1/4")       |
| Assembly (Screwed)   | Screwed according to<br>DIN EN ISO 228-1 | Screwed according to<br>DIN EN ISO 228-1   | Screwed according to<br>DIN EN ISO 228-1   |
| Assembly (Socket)    | —                                        | Socketed according to<br>DIN EN 12760***** | Socketed according to<br>DIN EN 12760***** |
| Temperature          | -10°C +300 °C                            | -10°C * +400 °C                            | -10°C * +400 °C                            |
| Material Code        | 2                                        | 7                                          | 9                                          |
| Order Code (Screwed) | YPG.2M.__.00                             | YPG.7M.__.00                               | YPG.9M.__.00                               |
| Order Code (Socket)  | —                                        | YPG.7S.__.00                               | YPG.9S.__.00                               |

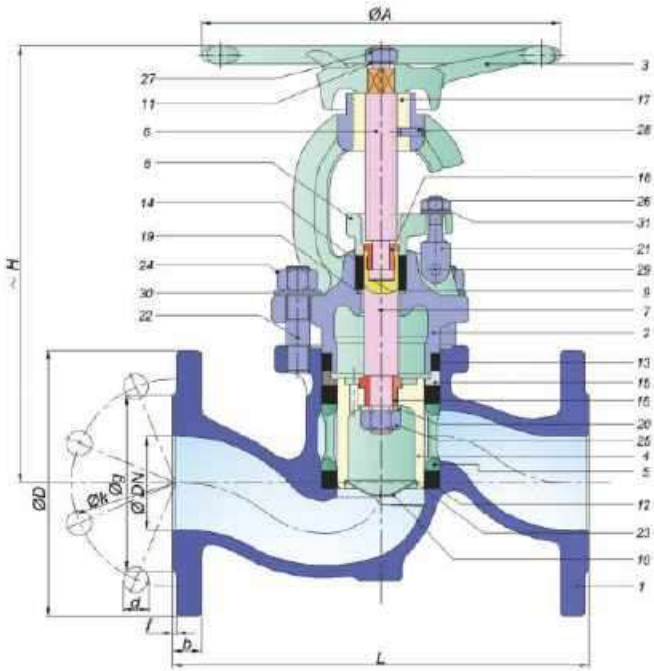
## Fluid Types

All kinds of fluids such as water, hot water, high temperature hot water, steam, thermal oil, LPG, fuel oil, pressurized air, etc.

| P.No | Part Name         | Cast Iron           | Cast Steel          | St. Steel | St. Steel |
|------|-------------------|---------------------|---------------------|-----------|-----------|
| 1    | Body              | GJL 250             | 1.0619              | 1.4308    | 1.4408    |
| 2    | Upper Bonnet      | GJL 250 ****        | 1.0619 ****         | 1.4308    | 1.4408    |
| 3    | Hand Wheel        | GJL 200             | GJL 200             | GJL 200   | GJL 200   |
| 4    | Piston            | 1.4021              | 1.4021              | 1.4301    | 1.4401    |
| 5    | Lantern Bush      | GJL 200 + Phosphate | GJL 200 + Phosphate | 1.4308*** | 1.4408*** |
| 6    | Valve Spindle     | 1.4021/St-42        | 1.4021/St-42        | 1.4301    | 1.4401    |
| 7    | Double Piece Nut  | Ms-58               | Ms-58               | 1.4301    | 1.4401    |
| 8    | Valve Ring        | Graphite            | Graphite            | Graphite  | Graphite  |
| 9    | Nut               | 8.8+Gal.            | 8.8+Gal.            | A2-70     | A2-70     |
| 10   | Nut               | 8.8+Gal.            | 8.8+Gal.            | A2-70     | A2-70     |
| 11   | Stud              | 8.8+Gal.            | 8.8+Gal.            | A2-70     | A2-70     |
| 12   | Lock Washer       | 8.8+Gal.            | 8.8+Gal.            | A2-70     | A2-70     |
| 13   | Belleville Washer | 50CrV4              | 50CrV4              | A2-70     | A2-70     |
| 14   | Piston Washer     | Ms-58               | Ms-58               | 1.4301    | 1.4301    |

| DN |        | Dimensions                 |     |     | Assembly |          |        |         |        |    |
|----|--------|----------------------------|-----|-----|----------|----------|--------|---------|--------|----|
| mm | inch   | Type                       | L   | H   | A        | d1       |        | t1      | AA     |    |
|    |        |                            |     |     |          | Screwed  | Socket | Screwed | Socket |    |
| 6  | 1/4"   | YVMN 1/4"<br>YVSN 1/4"     | 85  | 105 | 100      | R 1/4"   | 14.2   | 10.5    | 10     | 32 |
| 10 | 3/8"   | YVMN 3/8"<br>YVSN 3/8"     | 85  | 105 | 100      | R 3/8"   | 17.6   | 12.5    | 10     | 32 |
| 15 | 1/2"   | YVMN 1/2"<br>YVSN 1/2"     | 100 | 105 | 100      | R 1/2"   | 22     | 15.5    | 10     | 36 |
| 20 | 3/4"   | YVMN 3/4"<br>YVSN 3/4"     | 120 | 120 | 120      | R 3/4"   | 27.5   | 16      | 13     | 41 |
| 25 | 1"     | YVMN 1"<br>YVSN 1"         | 135 | 138 | 140      | R 1"     | 34.5   | 19      | 13     | 50 |
| 32 | 1 1/4" | YVMN 1 1/4"<br>YVSN 1 1/4" | 160 | 154 | 160      | R 1 1/4" | 43     | 21      | 13     | 65 |
| 40 | 1 1/2" | YVMN 1 1/2"<br>YVSN 1 1/2" | 185 | 186 | 180      | R 1 1/2" | 49     | 21      | 13     | 75 |
| 50 | 2"     | YVMN 2"<br>YVSN 2"         | 220 | 211 | 200      | R 2"     | 61.5   | 26      | 16     | 90 |

\* For temperatures below -10°C, stud and nut material should be stainless steel  
\*\*\*\*1.4401 for DN15 and DN20  
\*\*\*\*\* Ck22 for DN15 and DN20  
\*\*\*\*\*NPT Screwed type is available according to ANSI 2.1 1960 on demand



# Balanced Piston Valves

## DN 65 - 200

### Type: YVNB Flanged

| Material Type  | Cast Iron                          | Ductile Iron                       | Cast Steel                         | Stainless Steel                    |
|----------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| Size           | DN65-200                           | DN65-200                           | DN65-200                           | DN65-200                           |
| Pressure Class | PN16                               | PN25                               | PN40                               | PN40                               |
| Dimensions     | DIN EN 558/1.serie                 | DIN EN 558/1.serie                 | DIN EN 558/1.serie                 | DIN EN 558/1.serie                 |
| Assembly       | Flanged according to DIN EN 1092-2 | Flanged according to DIN EN 1092-2 | Flanged according to DIN EN 1092-1 | Flanged according to DIN EN 1092-1 |
| Temperature    | -10°C +300 °C                      | -10°C +350 °C                      | -10°C* +400°C                      | -10°C* +400°C                      |
| Material Code  | 2                                  | 8                                  | 7                                  | 9                                  |
| Order Code     | YPG.2F__00                         | YPG.8F__00                         | YPG.7F__00                         | YPG.9F__00                         |

### Fluid Types

All kinds of fluids such as water, hot water, high temperature hot water, steam, thermal oil, LPG, fuel oil, pressurized air, etc.

| P.No | Part Name            | Cast Iron            | Ductile Iron         | Cast Steel           | St. Steel | St. Steel |
|------|----------------------|----------------------|----------------------|----------------------|-----------|-----------|
| 1    | Body                 | G.JL 250             | 0.7040               | 1.0619               | 1.4308    | 1.4408    |
| 2    | Upper Bonnet         | G.JL 250             | 0.7040               | 1.0619               | 1.4308    | 1.4408    |
| 3    | Hand Wheel           | G.JL 200             | G.JL 200             | G.JL 200             | G.JL 200  | G.JL 200  |
| 4    | Piston               | 1.4016               | 1.4016               | 1.4016               | 1.4308    | 1.4408    |
| 5    | Lantern Bush         | G.JL 200 + Phosphate | G.JL 200 + Phosphate | G.JL 200 + Phosphate | 1.4308    | 1.4408    |
| 6    | Valve Spindle        | St-42                | St-42                | St-42                | 1.4301    | 1.4401    |
| 7    | Piston Shaft         | 1.4021               | 1.4021               | 1.4021               | 1.4301    | 1.4401    |
| 8    | Gland Retainer       | 0.7040               | 0.7040               | 0.7040               | 1.4308    | 1.4408    |
| 9    | Piston Shaft Washer  | 1.4301               | 1.4301               | 1.4301               | 1.4301    | 1.4301    |
| 10   | Piston Box           | 1.4301               | 1.4301               | 1.4301               | 1.4301    | 1.4401    |
| 11   | Lock Washer          | 55Si7                | 55Si7                | 55Si7                | A2-70     | A2-70     |
| 12   | Valve Ring           | Graphite             | Graphite             | Graphite             | Graphite  | Graphite  |
| 13   | Bonnet Ring          | Graphite             | Graphite             | Graphite             | Graphite  | Graphite  |
| 14   | Stuffing Ring        | Graphite             | Graphite             | Graphite             | Graphite  | Graphite  |
| 15   | Thrust Piece         | G.JL 200 + Phosphate | G.JL 200 + Phosphate | G.JL 200 + Phosphate | 1.4308    | 1.4408    |
| 16   | Piston Shaft Bushing | 1.4021               | 1.4021               | 1.4021               | 1.4301    | 1.4401    |

| P.No | Part Name                      | Cast Iron  | Ductile Iron | Cast Steel | St. Steel | St. Steel |
|------|--------------------------------|------------|--------------|------------|-----------|-----------|
| 17   | Screw Bushing                  | Ms-58      | Ms-58        | Ms-58      | Ms-58     | Ms-58     |
| 18   | Double Piece Nut               | Ms-58      | Ms-58        | Ms-58      | 1.4301    | 1.4301    |
| 19   | Stuffing Washer                | St-37+Gal. | St-37+Gal.   | St-37+Gal. | 1.4301    | 1.4401    |
| 20   | Piston Washer                  | Ms-58      | Ms-58        | Ms-58      | 1.4301    | 1.4401    |
| 21   | Fork Bolt                      | St-42      | St-42        | St-42      | 1.4301    | 1.4401    |
| 22   | Stud                           | 8.8+Gal.   | 8.8+Gal.     | 8.8+Gal.   | A2-70     | A2-70     |
| 23   | Piston Ring                    | 1.4301     | 1.4301       | 1.4301     | 1.4301    | 1.4301    |
| 24   | Nut                            | 8.8+Gal.   | 8.8+Gal.     | 8.8+Gal.   | A2-70     | A2-70     |
| 25   | Left Handed Nut                | A2-70      | A2-70        | A2-70      | A2-70     | A2-70     |
| 26   | Nut M10                        | 8.8+Gal.   | 8.8+Gal.     | 8.8+Gal.   | A2-70     | A2-70     |
| 27   | Nut                            | 8.8+Gal.   | 8.8+Gal.     | 8.8+Gal.   | A2-70     | A2-70     |
| 28   | Pin 6x15                       | St-42+Gal. | St-42+Gal.   | St-42+Gal. | A2-70     | A2-70     |
| 29   | Sloted pin 8x22                | 8.8        | 8.8          | 8.8        | 1.4301    | 1.4301    |
| 30   | Belleville Washer              | 50CrV4     | 50CrV4       | 50CrV4     | A2-70     | A2-70     |
| 31   | Belleville Washer (20/10.2x11) | 50CrV4     | 50CrV4       | 50CrV4     | A2-70     | A2-70     |

| DN  |        |          | Dimensions |     |     | Assembly size |    |     |    |    |     |          |     |    |     |    |    |          |   |     |    |     |    |    |     |   |
|-----|--------|----------|------------|-----|-----|---------------|----|-----|----|----|-----|----------|-----|----|-----|----|----|----------|---|-----|----|-----|----|----|-----|---|
| mm  | inch   | Type     | L          | H   | A   | PN16          |    |     |    |    |     | PN25     |     |    |     |    |    | PN40     |   |     |    |     |    |    |     |   |
|     |        |          |            |     |     | Hole Nr.      |    |     |    |    |     | Hole Nr. |     |    |     |    |    | Hole Nr. |   |     |    |     |    |    |     |   |
| 65  | 2 1/2" | YVNB 65  | 290        | 306 | 250 | 185           | 20 | 122 | 4  | 19 | 145 | 3        | 185 | 20 | 118 | 8  | 19 | 145      | 3 | 185 | 22 | 122 | 8  | 18 | 145 | 2 |
| 80  | 3"     | YVNB 80  | 310        | 327 | 250 | 200           | 22 | 138 | 8  | 19 | 160 | 3        | 200 | 22 | 132 | 8  | 19 | 160      | 3 | 200 | 24 | 138 | 8  | 18 | 160 | 2 |
| 100 | 4"     | YVNB 100 | 350        | 374 | 280 | 220           | 24 | 158 | 8  | 19 | 180 | 3        | 235 | 24 | 156 | 8  | 23 | 190      | 3 | 235 | 24 | 162 | 8  | 22 | 190 | 2 |
| 125 | 5"     | YVNB 125 | 400        | 447 | 320 | 250           | 26 | 188 | 8  | 19 | 210 | 3        | 270 | 26 | 184 | 8  | 28 | 220      | 3 | 270 | 26 | 188 | 8  | 26 | 220 | 2 |
| 150 | 6"     | YVNB 150 | 480        | 477 | 360 | 285           | 26 | 212 | 8  | 23 | 240 | 3        | 300 | 26 | 211 | 8  | 28 | 250      | 3 | 300 | 28 | 218 | 8  | 26 | 250 | 2 |
| 200 | 8"     | YVNB 200 | 600        | 561 | 400 | 340           | 30 | 268 | 12 | 23 | 295 | 3        | 360 | 30 | 274 | 12 | 28 | 310      | 3 | 375 | 34 | 285 | 12 | 30 | 320 | 2 |

\*For temperatures below -10°C, stud and nut material should be stainless steel