

# KNIFE GATE VALVE WITH DOUBLE ACTING PNEUMATIC ACTUATOR

## VG 3400-03



### APPLICATION

General use : Pulp production, water, water treatment, waste water, chemical industry (powdery or crystallizing products), wine-producing, pulverized products (cement work, pneumatic transport, stocking).

### GENERAL CHARACTERISTICS

Function ON/OFF or regulation.  
Wafer threaded mounting ISO PN10.  
Unidirectional tightness, direction indication thanks to the arrow on the body.  
Small retention zone: the gate is guided in the body and has little clearance.  
Gland assembly: packing and O-ring (same material as seat joint) to assure the elasticity and decrease the operating force.  
Small head loss.  
Possibility to regulate thick fluids the adaptation of a diaphragm ring .

### CONSTRUCTION

|      |      |                    |  |  |
|------|------|--------------------|--|--|
| 11   | 2    | Protection plate   | Stainless steel 304                    | DIN : X5CrNi 18-10<br>ASTM : AISI 304<br>BS : 304 S15        |
| 10   | 1    | O-ring             | Nitril                                 |  |
| 9**  | 1    | Support ring       | Stainless steel 316                    | DIN : X5CrNiMo18 10<br>ASTM : A 182 AIS 3 16<br>BS : 316 S16 |
| 8**  | 1    | Gasket             | Nitril                                 |  |
| 7    | 1    | Packing gland      | Aluminium DN50-450<br>Steel DN500-1200 |  |
| 6    | 1    | Pneumatic actuator | Aluminium                              |  |
| 5*   | 2    | Support plate      | Steel + epoxy                          |  |
| 4    | 1    | Stem               | Stainless steel 13%Cr                  |  |
| 3    | 1    | Knife gate         | X5CrNi 18-10                           | DIN : X5CrNi 18-10<br>ASTM : AISI 304<br>BS : 304 S15        |
| 2    | 2    | Packing            | Acrylic fiber                          |  |
| 1    | 1    | Body               | EN-GJL-250                             | DIN : GG 25<br>ASTM : A48 class 40B<br>BS : 1452 Grade 250   |
| Pos. | Qty. | Description        | Material                               |  |

\* Pre-shaped parts up to DN 300.  
\*\* Missing parts on metal / metal tightness.

### DIMENSIONS

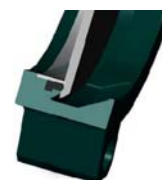
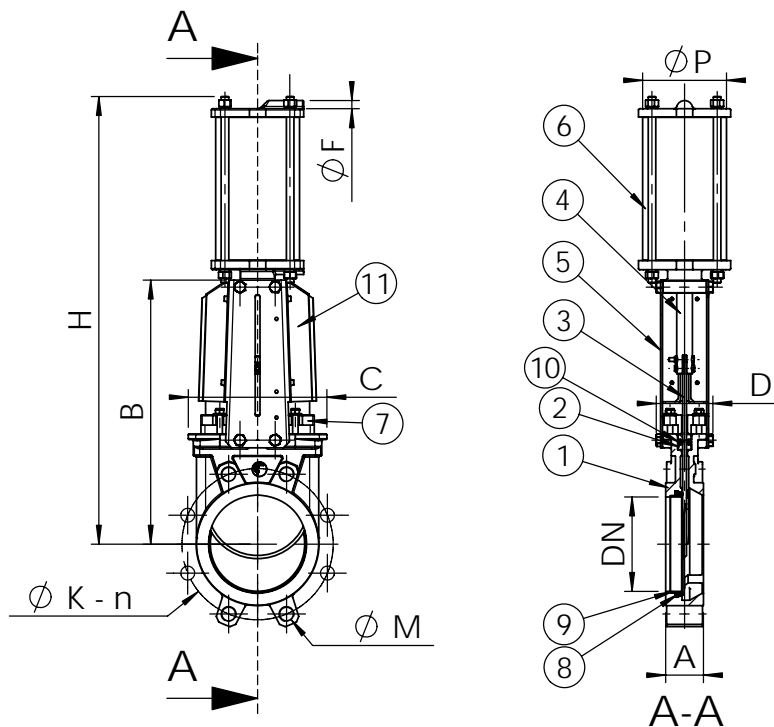
| DN   |        | A   | B    | C    | D   | Ø F  | Ø P | H    | Ø K  | n  | Ø M    | Weight (kg) |
|------|--------|-----|------|------|-----|------|-----|------|------|----|--------|-------------|
| mm   | inch   |     |      |      |     |      |     |      |      |    |        |             |
| 50   | 2"     | 40  | 240  | 124  | 83  | 1/4" | 80  | 412  | 125  | 4  | 4-M16  | 7,5         |
| 65   | 2 1/2" | 40  | 265  | 139  | 83  | 1/4" | 80  | 458  | 145  | 4  | 4-M16  | 7,8         |
| 80   | 3"     | 50  | 290  | 154  | 83  | 1/4" | 80  | 502  | 160  | 8  | 4-M16  | 8,4         |
| 100  | 4"     | 50  | 335  | 174  | 83  | 1/4" | 100 | 562  | 180  | 8  | 4-M16  | 12,5        |
| 125  | 5"     | 50  | 373  | 189  | 93  | 1/4" | 125 | 642  | 210  | 8  | 4-M16  | 16,4        |
| 150  | 6"     | 60  | 424  | 220  | 93  | 1/4" | 125 | 718  | 240  | 8  | 4-M20  | 20,5        |
| 200  | 8"     | 60  | 533  | 275  | 108 | 1/2" | 160 | 882  | 295  | 8  | 4-M20  | 35,8        |
| 250  | 10"    | 70  | 625  | 326  | 108 | 1/2" | 200 | 1044 | 350  | 12 | 8-M20  | 52          |
| 300  | 12"    | 70  | 732  | 380  | 108 | 1/2" | 200 | 1164 | 400  | 12 | 8-M20  | 72          |
| 350  | 14"    | 96  | 835  | 438  | 290 | 3/8" | 250 | 1362 | 460  | 16 | 10-M20 | 129         |
| 400  | 16"    | 100 | 945  | 494  | 290 | 3/8" | 250 | 1542 | 515  | 16 | 10-M24 | 144         |
| 450  | 18"    | 106 | 1040 | 547  | 290 | 3/8" | 250 | 1677 | 565  | 20 | 14-M24 | 177         |
| 500  | 20"    | 110 | 1150 | 613  | 290 | 1/2" | 320 | 1815 | 620  | 20 | 14-M24 | 268         |
| 600  | 24"    | 110 | 1354 | 716  | 290 | 1/2" | 320 | 2130 | 725  | 20 | 14-M27 | 351         |
| 700  | 28"    | 110 | 1540 | 835  | 320 | 1/2" | 426 | 2488 | 840  | 24 | 16-M27 | 556         |
| 800  | 32"    | 110 | 1750 | 972  | 320 | 1/2" | 426 | 2798 | 950  | 24 | 16-M30 | 679         |
| 900  | 36"    | 110 | 1990 | 1041 | 320 | 1/2" | 538 | 3162 | 1050 | 28 | 20-M30 | 840         |
| 1000 | 40"    | 110 | 2195 | 1152 | 320 | 1/2" | 538 | 3452 | 1160 | 28 | 20-M33 | 1053        |
| 1200 | 48"    | 150 | 2390 | 1255 | 400 | 1/2" | 538 | 4048 | 1380 | 32 | 22-M36 | -           |

### WORKING CONDITIONS

Maximum working pressure : DN 50-250 : 10 bar  
 DN 300-450 : 7 bar  
 DN 500-600 : 4 bar  
 DN 700-1200 : 2 bar

Maximum temperature : -10°C / +80°C

| Others materials on request (If marked) | Maximum temperature     |                          |
|---|-------------------------|--------------------------|
| Metal / metal                           | T max : -10°C / +80°C.  | <input type="checkbox"/> |
| White NBR                               | T max : -10°C / +80°C.  | <input type="checkbox"/> |
| EPDM                                    | T max : -10°C / +130°C. | <input type="checkbox"/> |
| Silicone                                | T max : -10°C / +170°C. | <input type="checkbox"/> |
| FPM (Type Viton®)                       | T max : -10°C / +170°C. | <input type="checkbox"/> |
| PTFE                                    | T max : +4°C / +170°C.  | <input type="checkbox"/> |
| CSM (Type Hypalon®)                     | T max : +4°C / +80°C.   | <input type="checkbox"/> |



Standard tightness



Tightness metal/metal

### STANDARDS

Manufacture according to the requirements of the European directive 97/23/CE «Equipments under pressure» : category III modulate H. (DN50 - 600)  
 On request : Product in accordance to european directive "Potentially explosive atmospheres" N° 94/9/EC : ATEX II 2 GD c and ATEX II 3 GD c.  
 Test procedures are established according to standard EN 12266-1, DIN 3230, BS 5154 and ISO 5208.  
 Connections according to standard EN 1092-2 and DIN 2501 : ISO PN10.