



# KGV-16

## KNIFE GATE VALVE / WAFER TYPE

### GENERAL FEATURES

#### Working Principle:

Gate valves; they perform their duties by opening and closing the fluid passage between the two sealing rings with a knife (slider) perpendicular to the transition direction. It is preferable to work fully open or fully closed. They are not suitable for precise flow control.

#### Application Areas and Sealing

It is a type of valve suitable for use in more fibrous fluids, eg paper industry and wastewater lines. It is fully sealed with one piece body and elastomer (EPDM, NBR, NR). It can also be produced according to its fluid properties.

It can be flywheel, gear box, chain wheel, pneumatic actuator and electric actuator. There is rising and non-rising alternatives.

#### On - Off Mechanism

Handle or Pneumatic Act.(opt.)

#### Advantages

- Full open valve provides a very low and smooth transition for flow.
- Flow can be in both direction.
- The valve can be installed in any position. However, it is preferable that the stem is perpendicular to the ground and the flywheel on top.
- Shorter valve length, even at large nominal diameters.
- Economically and conveniently available.
- There are types suitable for high pressures.
- Easy to maintain.

#### Flow Type

It is preferred to use in all fluids which can be called semi-solids.

#### Dimensions

From DN 50 to DN 600

#### Working Temperature

Between -10 °C to +110 °C

#### Body Material

GGG-40 Ductile Cast Iron

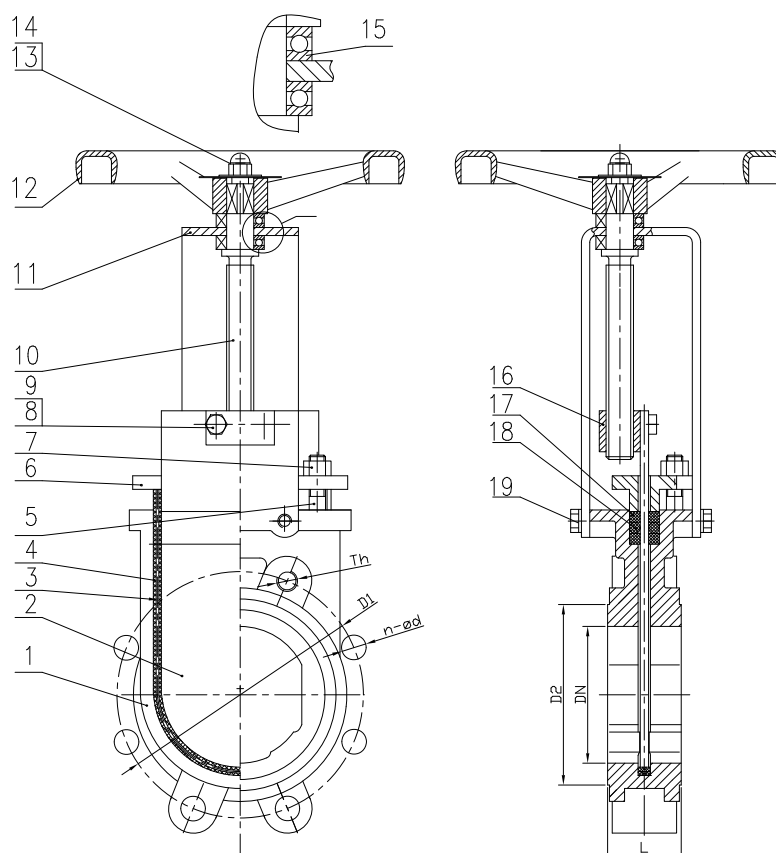
#### Pressure Class

PN16

#### Application Areas

- Paper Industry
- Petrochemical Industry-Treatment Plants
- Mining Sector
- Chemical Production Plants
- Food Industry

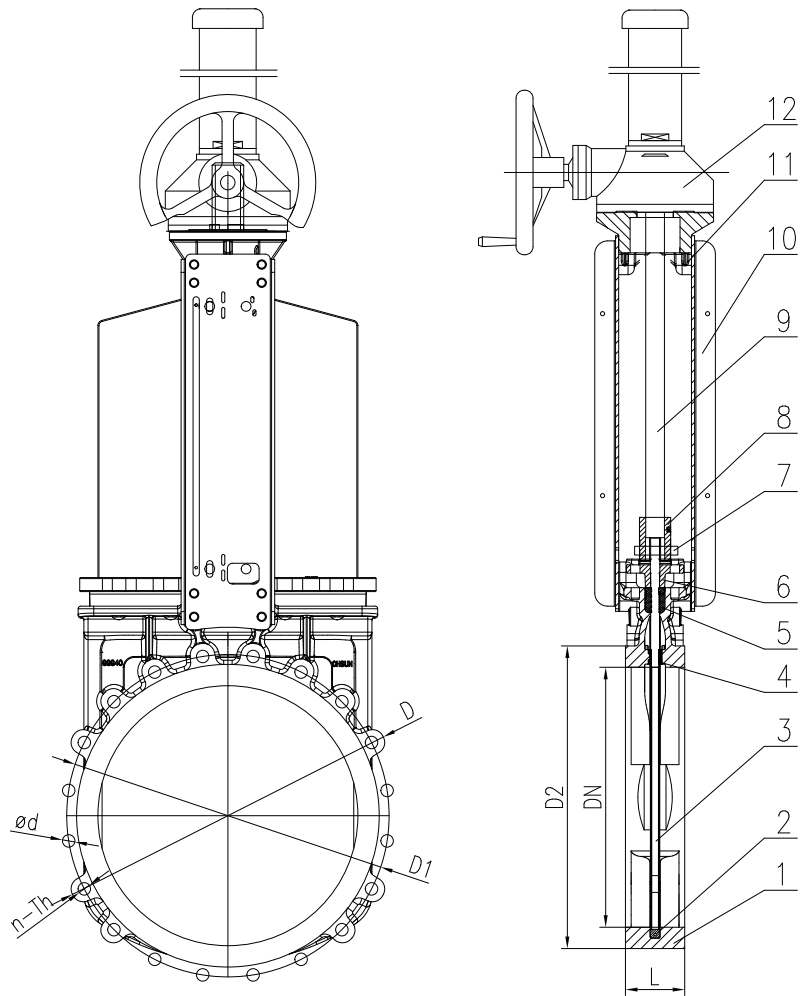
# BV-16 KNIFE GATE VALVE / WAFER TYPE



| Part List |           |                   |
|-----------|-----------|-------------------|
| No        | Part      | Material          |
| 1         | Body      | GGG40             |
| 2         | Knife     | SS304             |
| 3         | Seat Ring | EPDM              |
| 4         | Wire      | SS201             |
| 5         | Bolt      | Carbon Steel + Zn |
| 6         | Gland     | A216 WCB          |
| 7         | Bolt Nut  | Carbon Steel + Zn |
| 8         | Bolt      | Carbon Steel + Zn |
| 9         | Bolt Nut  | Carbon Steel + Zn |
| 10        | Stem      | A276 304          |
| 11        | Yoke      | Q235A             |
| 12        | Handwheel | A47 32510         |
| 13        | Bolt      | Carbon Steel + Zn |
| 14        | Lock Nut  | Carbon Steel + Zn |
| 15        | Bearing   | Threaded          |
| 16        | Stem Nut  | Brass             |
| 17        | Packing   | PTFE              |
| 18        | O-ring    | EPDM              |
| 19        | Bolt      | Carbon Steel+ Zn  |

| DIAMETERS (mm) |     |     |        |     |    |
|----------------|-----|-----|--------|-----|----|
| DN             | D1  | D2  | n-Ød   | Th  | L  |
| 50             | 125 | 99  | 4-Ø19  | M16 | 48 |
| 65             | 145 | 118 | 4-Ø19  | M16 | 48 |
| 80             | 160 | 132 | 8-Ø19  | M16 | 51 |
| 100            | 180 | 156 | 8-Ø19  | M16 | 51 |
| 125            | 210 | 184 | 8-Ø19  | M16 | 57 |
| 150            | 240 | 211 | 8-Ø23  | M20 | 57 |
| 200            | 295 | 266 | 12-Ø23 | M20 | 70 |
| 250            | 355 | 319 | 12-Ø28 | M24 | 70 |
| 300            | 410 | 370 | 12-Ø28 | M24 | 76 |
| 350            | 470 | 429 | 16-Ø28 | M24 | 76 |
| 400            | 525 | 480 | 16-Ø31 | M27 | 89 |

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| Part List |            |                   |
|-----------|------------|-------------------|
| No        | Part       | Material          |
| 1         | Body       | GGG40             |
| 2         | Seal       | EPDM              |
| 3         | Knife      | SS304             |
| 4         | Guide Pad  | PTFE              |
| 5         | Packing    | PTFE              |
| 6         | Gland      | A216 WCB          |
| 7         | Cotter Pin | Carbon Steel      |
| 8         | Chuck      | A216 WCB          |
| 9         | Stem       | A276 WCB          |
| 10        | Yoke       | Q235A             |
| 11        | Bolt-Nut   | Carbon Steel + Zn |
| 12        | Gear Box   | Assembly          |

| DIAMETERS (mm) |     |     |        |     |     |
|----------------|-----|-----|--------|-----|-----|
| DN             | D1  | D2  | n-Ød   | Th  | L   |
| 500            | 650 | 609 | 20-M30 | Ø34 | 114 |
| 600            | 770 | 720 | 20-M33 | Ø37 | 114 |