



# KV-4

## BUTTERFLY VALVE /LUG TYPE

### GENERAL FEATURES

The closing element in the butterfly valves is a rotating shaft that is placed on a vertical axis. The sealing is provided between the metal flap and the elastic or plastic sealing elements covering the inside of the body. The sealing element also serves as a flange seal between the valve and the pipe.

Advantages of such valves are; low pressure loss, easy opening and closing, good sealing, light weight and small footprint.

The Ayvaz KV-4 Lug Type Butterfly Valves should be checked to see if they are moving freely during the installation. The valve stem may be horizontal or vertical. However, horizontal installation on DN300 should be preferred.

#### Product Features

**Body:** GG25 Cast Iron

**Disc:** AISI316 Stainless Steel

**Stem:** AISI 416 Stainless Steel

**Max. Working Temp.:** 110°C

**Connection:** Lug Type

#### Application Areas

- Heating, ventilating and air conditioning systems
- Water treatment and distributing systems
- Mining industry
- Shipbuilding and drilling plant
- Chemical and petrochemical plants
- Sugar industry, food and chemistry industries
- Fire extinguisher systems

#### Notes:

It is recommended to use reducer type for all diameters in butterfly valves. There are only reducer type production on DN350 and above Butterfly valves.

#### Actuator Types

- Hand operated
- Geared
- Single Action Pneumatic Actuator
- Double Action Pneumatic Actuator
- With Electric Actuator / On-Off (Manual Arm)

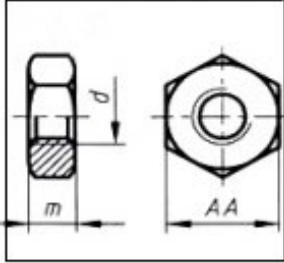
| Pressure Class | Diameter (mm) |
|----------------|---------------|
| PN16           | DN (25-300)   |
| PN10           | DN (350-600)  |

| Gasket Material | Min. Temp. (°C) | Max. Temp. (°C) |
|-----------------|-----------------|-----------------|
| EPDM            | -10             | 110             |



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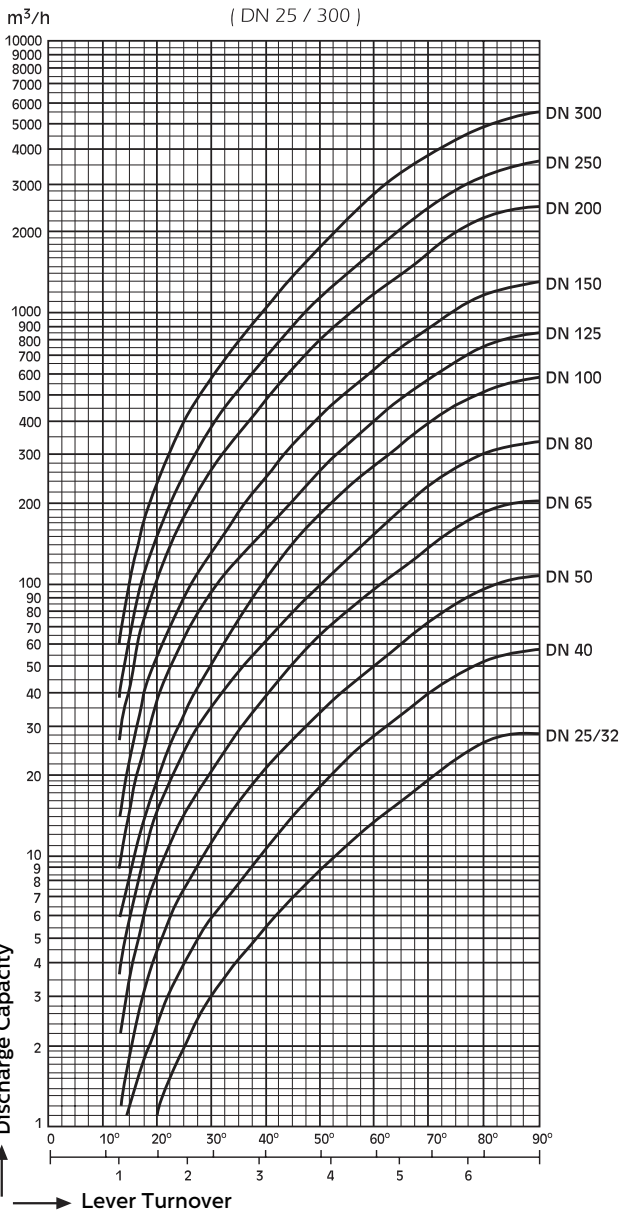
## Screw Connection Dimensions



| d (mm) | M10 | M12 | M16 | M20 | M24 |
|--------|-----|-----|-----|-----|-----|
| AA     | 17  | 19  | 24  | 30  | 36  |
| m      | 8   | 10  | 13  | 16  | 19  |

| Çap<br>mm | Tork (Nm) |        |
|-----------|-----------|--------|
|           | 10 Bar    | 16 Bar |
| 25        | 9         | 10     |
| 32        | 9         | 10     |
| 40        | 11        | 12     |
| 50        | 15        | 16     |
| 65        | 24        | 26     |
| 80        | 31        | 33     |
| 100       | 48        | 53     |
| 125       | 73        | 81     |
| 150       | 106       | 119    |
| 200       | 177       | 194    |
| 250       | 281       | 308    |
| 300       | 410       | 595    |
| 350       | 475       | 969    |
| 400       | 746       | 1307   |
| 450       | 1112      | 1787   |
| 500       | 1356      | 2288   |
| 600       | 2468      | 3711   |

## Discharge Amount

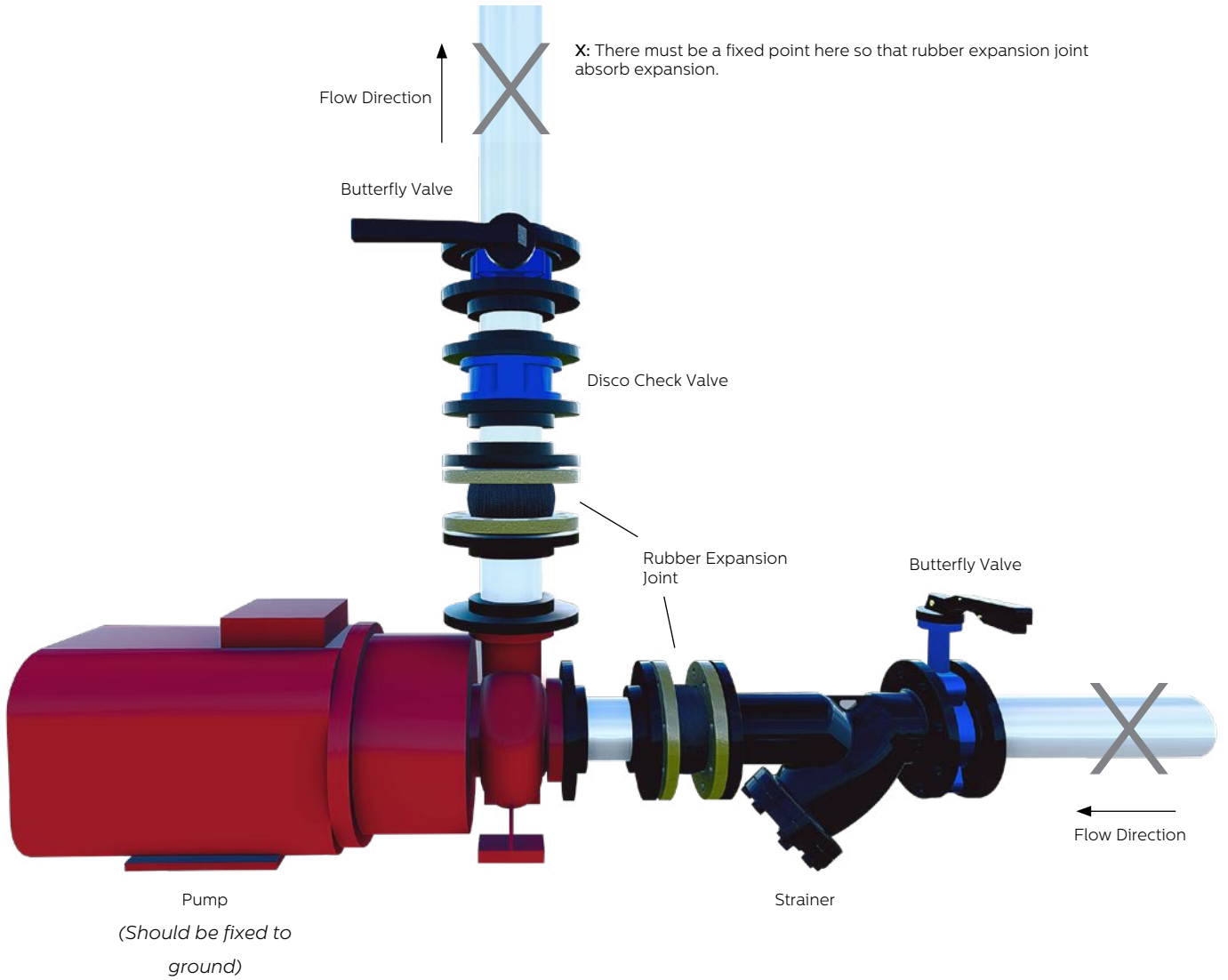


| Pipe Diameter |     | DISC OPENING ANGLE(DEGREE) |     |     |      |      |      |      |      |      |  |
|---------------|-----|----------------------------|-----|-----|------|------|------|------|------|------|--|
| MM            | INS | 10                         | 20  | 30  | 40   | 50   | 60   | 70   | 80   | 90   |  |
| 40            | 1½  | 0,048                      | 2,4 | 5,6 | 12   | 21,6 | 35,2 | 56   | 84   | 92   |  |
| 50            | 2   | 0,06                       | 3   | 7   | 15   | 27   | 44   | 70   | 105  | 115  |  |
| 65            | 2½  | 0,10                       | 6   | 12  | 25   | 45   | 75   | 119  | 178  | 196  |  |
| 80            | 3   | 0,20                       | 9   | 18  | 39   | 70   | 116  | 183  | 275  | 302  |  |
| 100           | 4   | 0,30                       | 17  | 36  | 78   | 139  | 230  | 364  | 546  | 600  |  |
| 125           | 5   | 0,50                       | 29  | 61  | 133  | 237  | 392  | 620  | 930  | 1022 |  |
| 150           | 6   | 0,80                       | 45  | 95  | 205  | 366  | 605  | 958  | 1437 | 1579 |  |
| 200           | 8   | 2                          | 89  | 188 | 408  | 727  | 1202 | 1903 | 2854 | 3136 |  |
| 250           | 10  | 3                          | 151 | 320 | 694  | 1237 | 2047 | 3240 | 4859 | 5340 |  |
| 300           | 12  | 4                          | 234 | 495 | 1072 | 1911 | 3162 | 5005 | 7507 | 8250 |  |

| Nominal Pipe Diameter |       | Dimensions |           |
|-----------------------|-------|------------|-----------|
| mm                    | inch. | ΔP=150psi  | ΔP=200psi |
| 40                    | 1½    |            | 11        |
| 50                    | 2     |            | 16        |
| 65                    | 2½    |            | 26        |
| 80                    | 3     |            | 33        |
| 100                   | 4     |            | 53        |
| 125                   | 5     |            | 81        |
| 150                   | 6     |            | 119       |
| 200                   | 8     |            | 194       |
| 250                   | 10    |            | 308       |
| 300                   | 12    |            | 441       |
| 350                   | 14    | 475        |           |
| 400                   | 16    | 746        |           |
| 450                   | 18    | 1112       |           |
| 500                   | 20    | 1356       |           |
| 600                   | 24    | 2468       |           |
| 700                   | 28    | 4908       |           |
| 800                   | 32    | 6462       |           |
| 900                   | 36    | 7886       |           |
| 1000                  | 40    | 13389      |           |
| 1200                  | 48    | 18833      |           |

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## 3D APPLICATION SAMPLE



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