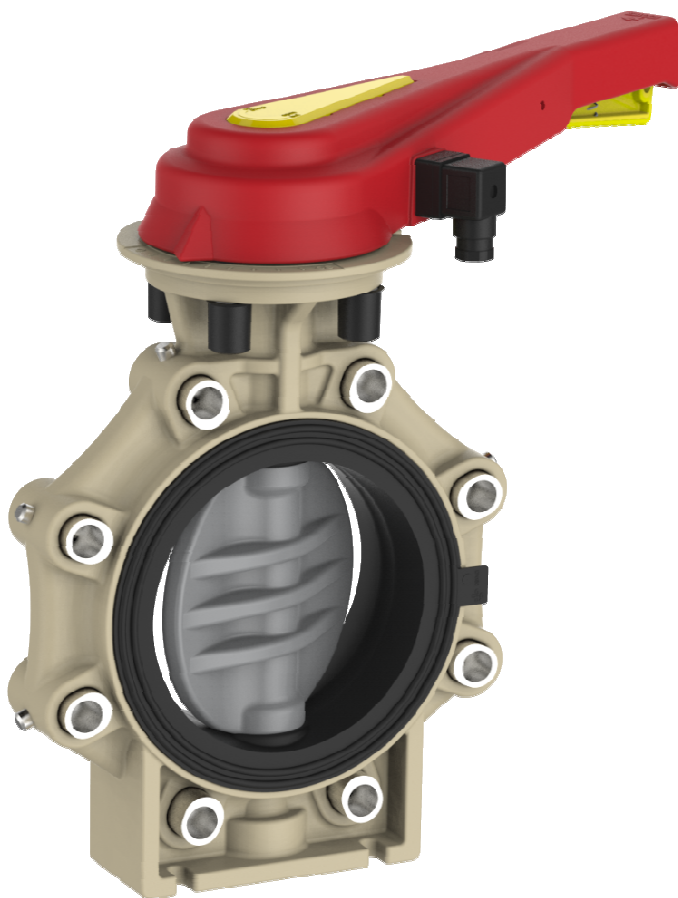


## Butterfly valve K4 Lug-Type with hand lever and position feedback



### **General:**

- Sealing material: EPDM, FPM
- Body material: PP-GF
- Flap material: PVC-U, PP-H, PVDF
- Dimensions: DN65 – DN200  
d75 – d225  
2 ½" – 8"
- Flange connections: DIN 2501 PN 10  
ANSI B 16,5 Class150
- Additional dimensions: DN65/d63  
DIN 2501 PN 10
- Material insert: INOX A4
- Material pin: INOX A2

### **Operating pressure:**

PVC-U, PP-H, PVDF

Used as intermediate butterfly valve: PN10

### **Technical characteristics**

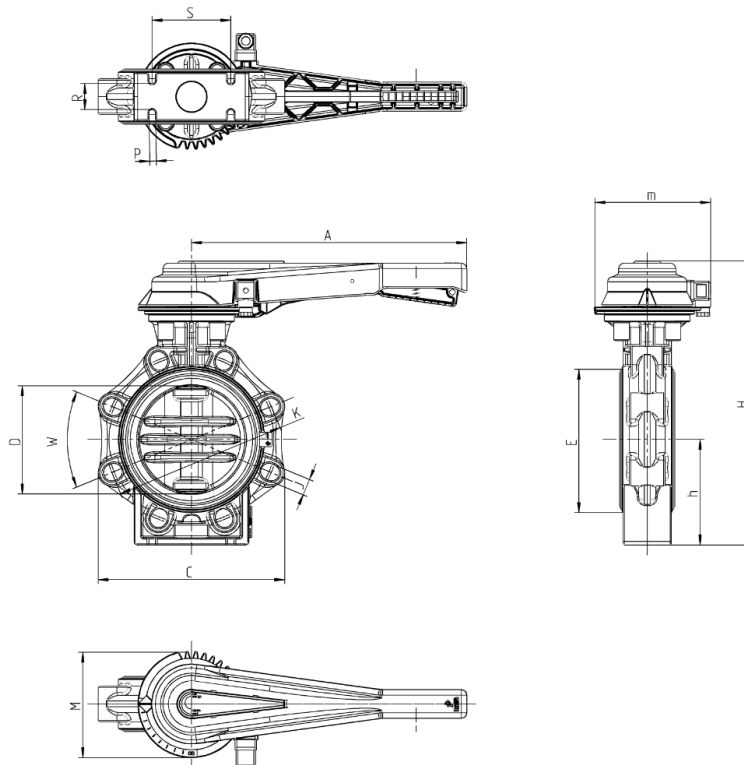
- only sleeve gasket and disc in touch with medium
- double sealed shaft
- integrated bracket for fix point mounting
- simple and quick assembling of the actuator without any extra parts
- 10 different disc locking position
- Reliable „locking-handle-system“
- Hand lever with marking plate (different colours available)
- Metal adapter between handle and shaft avoids abrasion of the handle
- If used as End-of-line valve a blind flange has to be mounted on the free connection side.
- Pressure has to be reduced if a flange is disassembled on one side
  - DN65 to DN125 → max. 6bar
  - DN150 to DN200 → max. 4bar
- Only temporary usage
- integration position feedback in hand lever
  - Limit switch IP67
    - mechanical
      - AG-NI NO
      - AG-NI NC (on request)
      - AU NO (on request)
      - AU NC (on request)
    - inductive (on request)
      - NPN/PNP
    - Namur (on request)
  - adjustable
  - incl. stainless steel bolts
  - incl. device plug

This print contains no warranty promise, but it should give you some first information. The product range is extended continuously, therefore the versions and types correspond to the actual status of printing.  
Subject to technical modifications!

# Butterfly valve K4 Lug-Type with hand lever and position feedback



**Dimensions:**



| DN     | 65        | 80        | 100         | 125         | 150           | 200          |
|--------|-----------|-----------|-------------|-------------|---------------|--------------|
| d      | 75        | 90        | 110         | 140         | 160           | 225          |
| G      | 2 1/2"    | 3"        | 4"          | 5"          | 6"            | 8"           |
| A      | 230       | 230       | 300         | 300         | 386           | 386          |
| D      | 65        | 80        | 100         | 125         | 150           | 200          |
| C      | 133       | 176       | 206         | 234,5       | 261           | 314          |
| W      | 90°       | 45°       | 45°         | 45°         | 45°           | 45°          |
| J      | 19        | 19        | 19          | 23          | 23            | 23           |
| K      | 127 – 145 | 146 – 160 | 175 – 190,5 | 209,5 – 216 | 234,5 – 241,3 | 290 – 298,45 |
| K-DIN  | 145       | 160       | 180         | 210         | 240           | 295          |
| K-ANSI | 139,7     | 152,4     | 190,5       | 215,9       | 241,3         | 298,45       |
| H      | 285       | 292       | 322         | 358         | 396           | 458          |
| h      | 100       | 100       | 115         | 130         | 147,5         | 175          |
| E      | 98        | 116       | 146         | 170         | 196           | 251          |
| M      | 114       | 114       | 114         | 114         | 150           | 150          |
| Z      | 46        | 49        | 56          | 64          | 70            | 71           |
| S      | 55        | 70        | 85          | 100         | 110           | 145          |
| R      | 25        | 30        | 35          | 45          | 45            | 40           |
| P      | 7         | 9         | 9           | 9           | 9             | 9            |

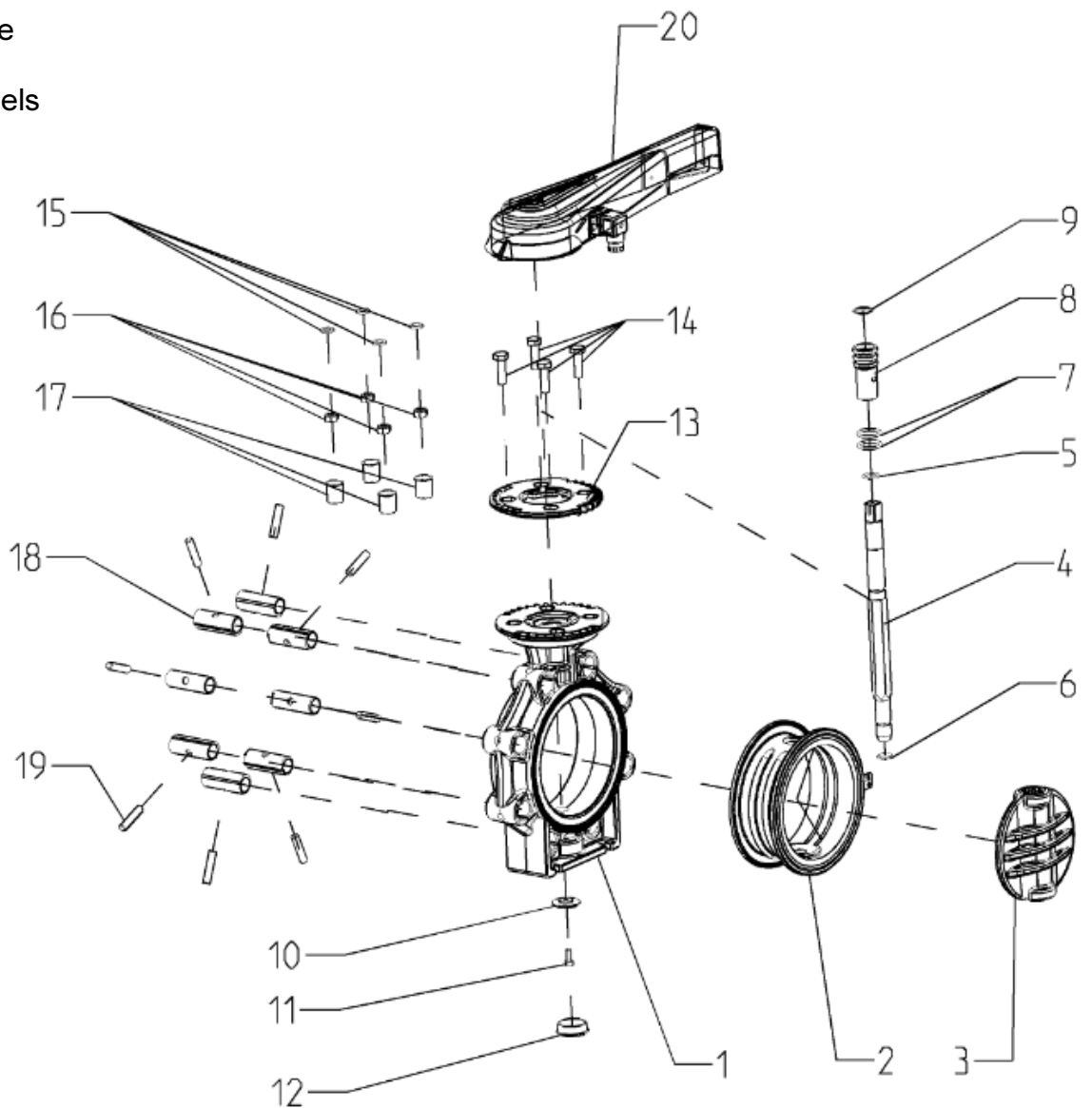
Dimensions in mm

# Butterfly valve K4 Lug-Type with hand lever and position feedback



**Exploded drawing:**

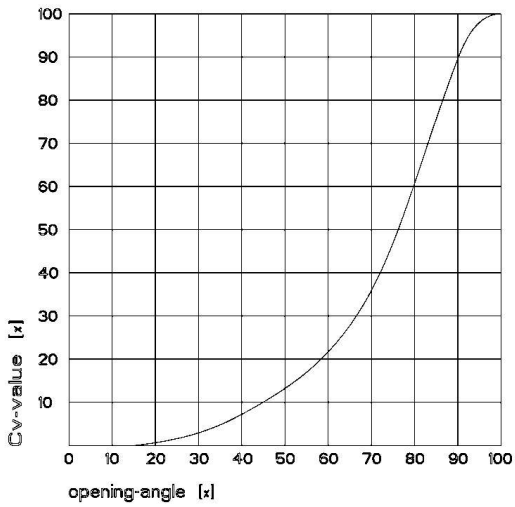
- 01. Body
- 02. Sleeve
- 03. Flap
- 04. Shaft
- 05. Sealing shaft above
- 06. Sealing shaft below
- 07. Sealing pilot bushing
- 08. Pilot bushing
- 09. Retaining ring
- 10. Holding disc
- 11. Screw
- 12. Cap
- 13. Cover plate
- 14. Screws
- 15. Tooth wheels
- 16. Nuts
- 17. Caps
- 18. Inserts
- 19. Pins
- 20. Handle



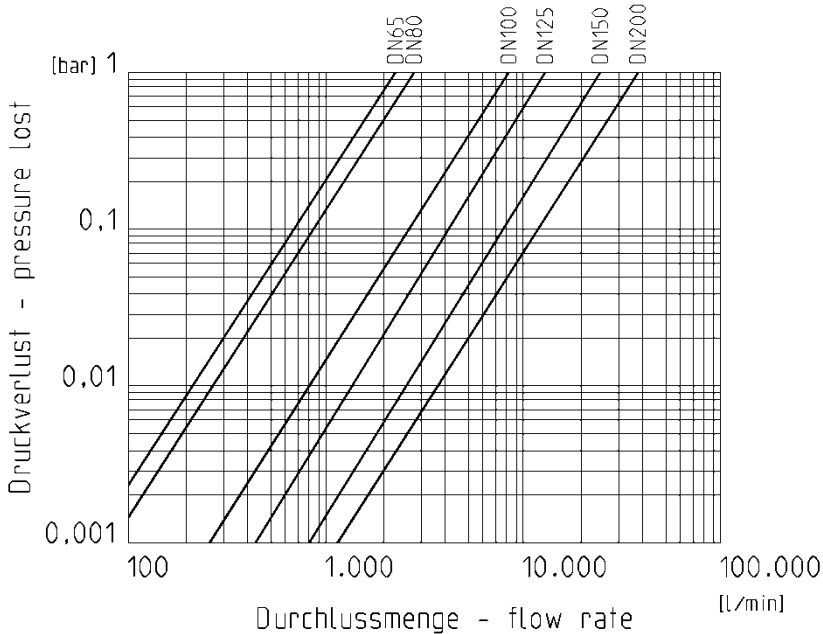
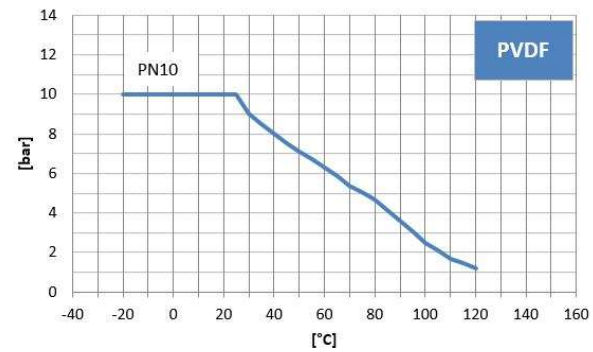
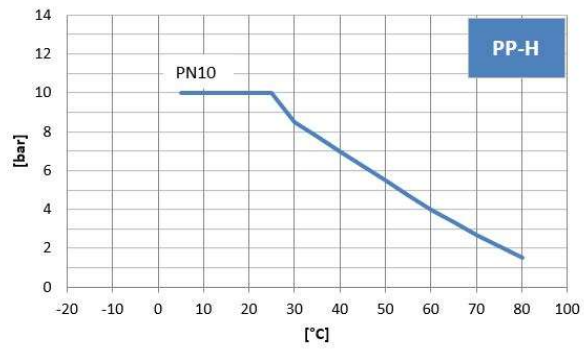
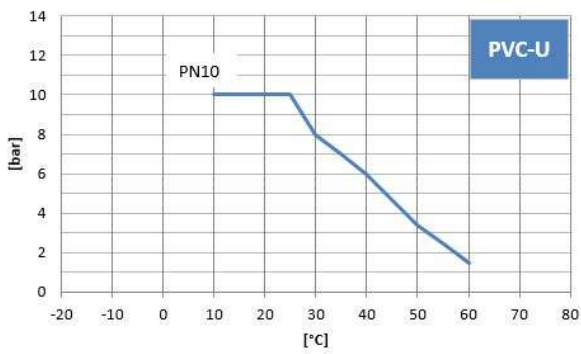
**Diagrams:**

Flow - characteristics

# Butterfly valve K4 Lug-Type with hand lever and position feedback



## Pressure – Temperature – Diagrams



Pressure loss - diagram

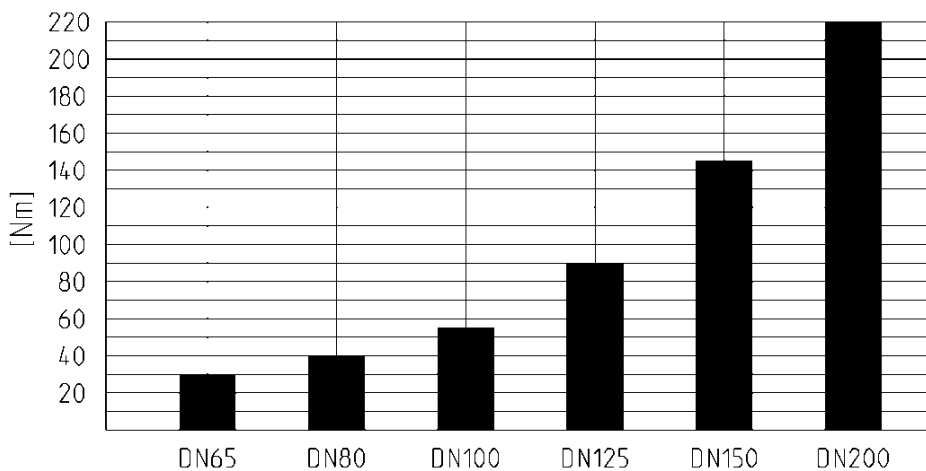
**Butterfly valve K4 Lug-Type**  
with hand lever and position feedback



Cv value table

| Pressure loss | DN65       | DN80       | DN100      | DN125       | DN150       | DN200       |
|---------------|------------|------------|------------|-------------|-------------|-------------|
| 0,001 bar     | 73 l/min   | 88 l/min   | 260 l/min  | 433 l/min   | 805 l/min   | 1200 l/min  |
| 1 bar         | 2300 l/min | 2800 l/min | 8200 l/min | 13700 l/min | 25500 l/min | 38000 l/min |

Torque



screws for flange connection

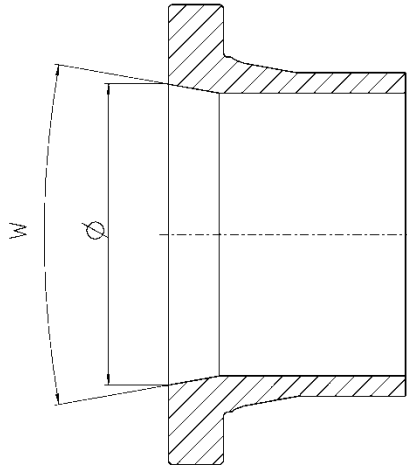
| DN | 65 | 80 | 100 | 125 | 150 | 200 |
|----|----|----|-----|-----|-----|-----|
| Nm | 15 | 18 | 20  | 30  | 40  | 55  |

Tightening torque of

**Installation in piping:**

For a correct and complete opening of the flap, it is necessary that the used sockets and stub flanges have at least an inner diameter according to the table.

**Butterfly valve K4 Lug-Type**  
with hand lever and position feedback



| DN    | d    | Ø<br>(mm) | w<br>(°) |
|-------|------|-----------|----------|
| DN50* | d63* | 60        | 40       |
| DN65  | d75  | 60        | 40       |
| DN80  | d90  | 77        | 40       |
| DN100 | d110 | 96,5      | 40       |
| DN125 | d140 | 121,5     | 40       |
| DN150 | d160 | 146,5     | 40       |
| DN200 | d225 | 203       | 40       |

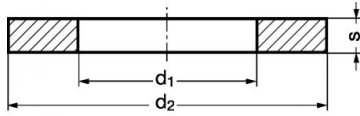
\* Suitable only for **DIN** DN50 d63 sockets and stub flanges.

**Butterfly valve K4 Lug-Type**  
with hand lever and position feedback



General installation instructions:

- Use suitable washers in accordance with DIN125A.



| DN     | 65  | 80  | 100 | 125 | 150 | 200 |
|--------|-----|-----|-----|-----|-----|-----|
| Thread | M16 | M16 | M16 | M16 | M20 | M20 |
| d1     | 17  | 17  | 17  | 17  | 21  | 21  |
| d2     | 30  | 30  | 30  | 30  | 37  | 37  |
| s      | 3   | 3   | 3   | 3   | 3   | 3   |

Dimensions in mm

- Adapt screw length to flange or stub flange.
- Check torque of screws on the opposite side, when one-side is removed (see torque of screws at flange connections).

# Butterfly valve K4 Lug-Type

with hand lever and position feedback



### Technical data position feedback:

| Limit switch mechanical             |                              |                           |
|-------------------------------------|------------------------------|---------------------------|
| Type                                | Silver nickel (Ag-Ni) NO/NC* | Gold contact (Au) NO*/NC* |
| Voltage max.                        | 15-250V AC (15-30V DC)       | 5-250V AC (5-30V DC)      |
| Current max.                        | 100mA-5A                     | 1mA-3A                    |
| Protection class limit switch       | IP67                         |                           |
| Protection class DIN connector plug | IP65                         |                           |
| Ambient temperature                 | -10°C to +50°C               |                           |
| Connection diagram                  | NO                           | NC                        |
|                                     |                              |                           |

\* on request

| Limit switch inductive*             |                |   |
|-------------------------------------|----------------|---|
| Typ                                 | NPN*/PNP*      | NAMUR*<br>EMV as per IEC / EN 60947-5-2:2004; NE 21<br>DIN EN 60947-5-6 |
| Voltage max.                        | 10-30V DC      | 8V DC   |
| Current max.                        | 0-100mA        | NAMUR intrinsically safe  |
| Protection class limit switch       | IP67           |   |
| Protection class DIN connector plug | IP65           |   |
| Ambient temperature                 | -10°C to +50°C |   |
| Connection diagram                  |                |   |

\* on request