

# Butterfly valves with electric actuator DN40 up to DN200

## Series BUW6



|                     |                                                                                                                                                                                                                                                                             |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Design type         | Wafer butterfly valve with two-piece shaft, floating disc, torque transmission via spline, shaft secured against blow-out by circlip, Electric geared motor with additional manual override, Actuator heater and Torque monitoring                                          |
| Connection          | Flanges according to EN1092                                                                                                                                                                                                                                                 |
| Flange type         | PN10/PN16/ANSI150                                                                                                                                                                                                                                                           |
| Overall length      | according to EN558-1 series 20 (DIN3202-K1)                                                                                                                                                                                                                                 |
| Materials           | Actuator: Polymer housing PA6 or rather PA66<br>Butterfly valve Housing EN-GJS400-15 epoxy-coated, Disc Galvanized steel (DN50 up to 100), EN-GJS400-15 zinc-plated (DN125 up to 200) or rather Stainless steel 1.4408, Shaft Stainless steel 1.4016 (non-media-contacting) |
| Seal ring           | EPDM interchangeable, additional seals see table "Cup seal materials"                                                                                                                                                                                                       |
| Spindle seal        | Via the housing lining, so that contact with the housing is avoided. Additionally, an O-ring below the head flange protects the shaft against dust ingress from outside and medium leakage from inside.                                                                     |
| Mounting type       | Installation in rigid piping system between two flanges according to EN1092, form 01, 11, 32, 34                                                                                                                                                                            |
| Mounting position   | any, except hanging downward                                                                                                                                                                                                                                                |
| Application range   | lubricating or non-degreasing gaseous and liquid media that do not attack the materials used, other media on request                                                                                                                                                        |
| Medium temperature  | see table "Seal materials"                                                                                                                                                                                                                                                  |
| Ambient temperature | -20°C...+55°C                                                                                                                                                                                                                                                               |
| Operating pressure  | 0...10bar, also suitable for vacuum                                                                                                                                                                                                                                         |

### Electrical data:

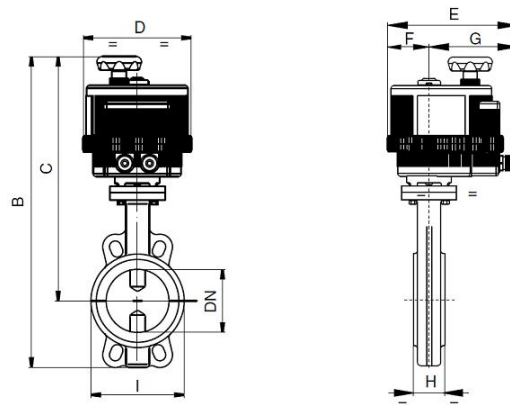
|                                 |                                                                                                                                                                   |
|---------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Voltage type                    | AC and DC voltage                                                                                                                                                 |
| Standard voltage                | see table "Electrical data"                                                                                                                                       |
| Permissible voltage fluctuation | ± 10%                                                                                                                                                             |
| Electrical Connection           | above Cable entry gland PG11                                                                                                                                      |
| End position shut-off           | above built-in Limit switch                                                                                                                                       |
| Duty cycle                      | 75% ED (S3), however max. 100 switching cycles per day                                                                                                            |
| Degree of protection            | IP67 according to EN 60529 with properly installed cable entry (protection against dust ingress and immersion in water)                                           |
| Special version                 | Battery pack for safety position, Positioner, other Seal materials according to table                                                                             |
| Ordering note                   | When ordering, please also specify the operating medium, operating pressure and operating temperature. When ordering, please specify voltage and type of current. |



## Seal materials

| Material                                                             | Medium temperature | Application examples                                         |
|----------------------------------------------------------------------|--------------------|--------------------------------------------------------------|
| EPDM                                                                 | -30...+130°C       | Hot water, Cold water, neutral gases and liquids             |
| EPDM-lebensmittelecht                                                | -30...+130°C       | Hot water, Cold water, neutral gases and liquids, Food-grade |
| EPDM HT                                                              | -30...+135°C       | Steam, Hot water, Cold water, neutral gases and liquids      |
| FKM                                                                  | -20...+200°C       | Gasoline, Diesel, Oils                                       |
| NBR (Perbunan)                                                       | -20...+100°C       | Cold water, Air, neutral gases and liquids                   |
| Neoprene, Silicone, Hypalon and Natural rubber available on request. |                    |                                                              |

## Dimensions



| Nominal size<br>DN[mm] | B   | C   | D   | E   | F  | G   | H  | Weight<br>[approx.<br>kg] | Actuator<br>type | max. operating<br>pressure<br>[bar] | Type<br>Disc zinc-plated<br>Seal ring EPDM | Type<br>Disc stainless steel<br>1.4408<br>Seal ring EPDM |
|------------------------|-----|-----|-----|-----|----|-----|----|---------------------------|------------------|-------------------------------------|--------------------------------------------|----------------------------------------------------------|
| 40                     | 440 | 365 | 185 | 190 | 68 | 147 | 33 | 5,6                       | VB060            | 10                                  | -                                          | BUW6-040-DSE-0.2                                         |
| 50                     | 454 | 373 | 185 | 190 | 68 | 147 | 43 | 6,2                       | VB060            | 10                                  | BUW6-050-DUE-0.2                           | BUW6-050-DSE-0.2                                         |
| 65                     | 477 | 379 | 185 | 190 | 68 | 147 | 46 | 7,1                       | VB060            | 10                                  | BUW6-065-DUE-0.2                           | BUW6-065-DSE-0.2                                         |
| 80                     | 503 | 393 | 185 | 190 | 68 | 147 | 46 | 7,4                       | VB060            | 10                                  | BUW6-080-DUE-0.2                           | BUW6-080-DSE-0.2                                         |
| 100                    | 554 | 426 | 211 | 237 | 84 | 153 | 52 | 11                        | VB110            | 10                                  | BUW6-100-DUE-0.2                           | BUW6-100-DSE-0.2                                         |
| 125                    | 579 | 439 | 211 | 237 | 84 | 153 | 56 | 12,2                      | VB110            | 10                                  | BUW6-125-DUE-0.2                           | BUW6-125-DSE-0.2                                         |
| 150                    | 610 | 455 | 211 | 237 | 84 | 153 | 56 | 14,1                      | VB190            | 10                                  | BUW6-150-DUE-0.2                           | BUW6-150-DSE-0.2                                         |
| 200                    | 684 | 494 | 222 | 247 | 77 | 170 | 60 | 20,1                      | VB350            | 10                                  | BUW6-200-DUE-0.2                           | BUW6-200-DSE-0.2                                         |



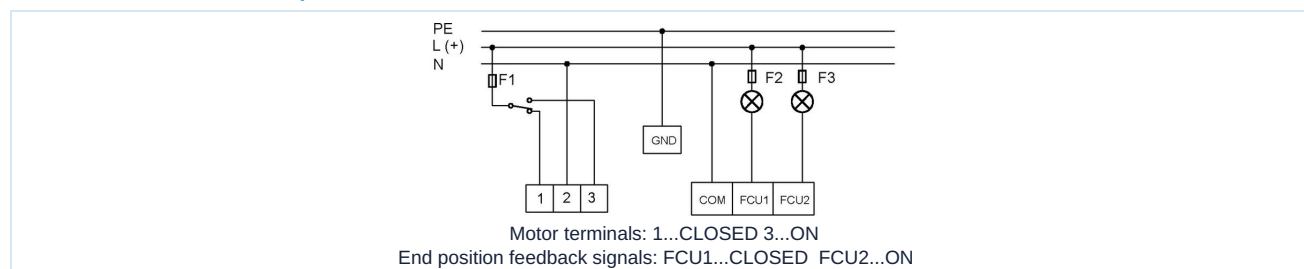
## Kv values [m³/h]

| Nominal size<br>DN [mm] | Opening angle of the disc |     |     |     |     |      |      |      |      |
|-------------------------|---------------------------|-----|-----|-----|-----|------|------|------|------|
|                         | 10°                       | 20° | 30° | 40° | 50° | 60°  | 70°  | 80°  | 90°  |
| 40/50                   | -                         | 0,9 | 6,1 | 15  | 29  | 53   | 92   | 115  | 116  |
| 65                      | -                         | 2,5 | 11  | 27  | 51  | 90   | 161  | 240  | 257  |
| 80                      | -                         | 5,2 | 21  | 49  | 91  | 156  | 283  | 457  | 508  |
| 100                     | -                         | 9,5 | 39  | 88  | 159 | 269  | 487  | 815  | 925  |
| 125                     | -                         | 15  | 69  | 148 | 262 | 434  | 768  | 1303 | 1492 |
| 150                     | -                         | 23  | 112 | 228 | 394 | 641  | 1097 | 1861 | 2168 |
| 200                     | -                         | 110 | 211 | 405 | 679 | 1085 | 1788 | 3043 | 3838 |

## Electrical data

| Actuator type | Actuation time [Sek.] | Current consumption [A] |          |            |
|---------------|-----------------------|-------------------------|----------|------------|
|               |                       | 12VDC                   | 24VAC/DC | 100-240VAC |
| VB060         | 9                     | 3,6                     | 1,8      | 0,6-0,3    |
| VB110         | 27                    | 2                       | 1        | 0,6-0,3    |
| VB190         | 27                    | 3,6                     | 1,8      | 0,6-0,3    |
| VB350         | 50                    | 3,6                     | 1,8      | 0,6-0,3    |

## Electrical connection example VB030-VB190



Illustrations non-binding

Design, dimensional and material changes reserved

Armatures / Valves, butterfly valves and gate valves - automatically operated / Butterfly valves - electrically operated / Butterfly valve with electrical actuator Series BUW6-DE-02

