HERZ Isolating Butterfly Valves

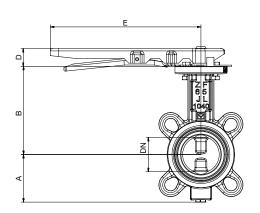
Wafer and lug types, with or without gearbox

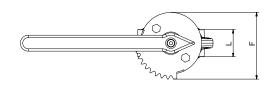


Datasheet for 4219, Issue 0717

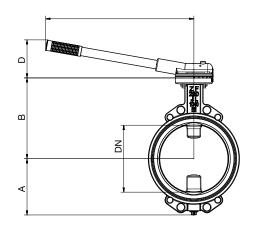
◯ Wafer type ZF Dimensions in mm

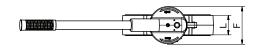
Handle for DN50-DN150





Handle for DN200-DN300





| Article number | DN | PN10 | PN16 | Α | В | L | D | Е | F | Weight (kg) | Torque (Nm) |
|------------------|-----|------|------|-----|-----|----|-----|-----|-----|----------------|----------------|
| 1 4219 01 | 50 | + | + | 68 | 125 | 43 | 30 | 255 | 112 | 3.8 | 20 |
| 1 4219 02 | 65 | + | + | 80 | 150 | 46 | 30 | 255 | 112 | 4 | 20 |
| 1 4219 03 | 80 | + | + | 87 | 157 | 46 | 30 | 255 | 112 | 4.7 | 25 |
| 1 4219 04 | 100 | + | + | 102 | 182 | 52 | 30 | 255 | 112 | 6.3 | 50 |
| 1 4219 05 | 125 | + | + | 120 | 201 | 56 | 30 | 255 | 112 | 8.3 | 50 |
| 1 4219 06 | 150 | + | + | 132 | 214 | 56 | 30 | 255 | 112 | 10.1 | 90 |
| 1 4219 07 | 200 | - | + | 167 | 245 | 60 | 95 | 365 | 88 | 16.6 | 150 |
| 1 4219 08 | 250 | - | + | 197 | 283 | 68 | 133 | 519 | 130 | 24.5 | 250 |
| 1 4219 09 | 300 | - | + | 222 | 308 | 78 | 133 | 519 | 130 | 37.6 | 350 |

Materials

Housing GG, GJL-250/JL1040, according to EN1561

Disc stainless steel 1.4408

Spindle stainless steel ASTM-A276 / Type 316

Lever DN50-150 steel, ST14.03

Lever DN200-300 steel, S235 DIN2458/1626
Houising sealing EPDM according to ISO 1691
O-Ring EPDM according to ISO 1691
Flange according to EN1092-2

The housing is painted blue (RAL 5000).

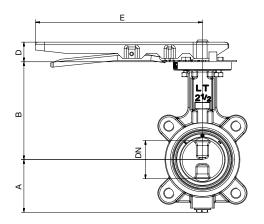
Market Application field

Suitable for fluids in building services, cold water systems, hot water saystems, etc. Ethylene and propylene glycol, in a mixing ratio of 25 - 50 % with water is permitted for usage

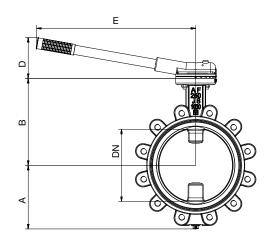


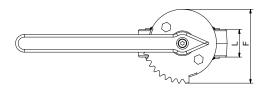
Lug type AF Dimensions in mm

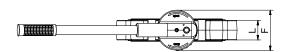
Handle for DN50-DN150



Handle for DN200-DN300







| Article number | DN | PN10 | PN16 | Α | В | L | D | E | F | Weight (kg) | Torque (Nm) |
|------------------|-----|------|------|-----|-----|----|-----|-----|------|-------------|----------------|
| 1 4219 11 | 50 | + | + | 68 | 125 | 43 | 30 | 255 | 112 | 3.8 | 20 |
| 1 4219 12 | 65 | + | + | 80 | 150 | 46 | 30 | 255 | 112 | 4.9 | 20 |
| 1 4219 13 | 80 | + | + | 87 | 157 | 50 | 30 | 255 | 1123 | 6.3 | 25 |
| 1 4219 14 | 100 | + | + | 102 | 182 | 52 | 30 | 255 | 112 | 8 | 50 |
| 1 4219 15 | 125 | + | + | 120 | 201 | 61 | 30 | 255 | 112 | 10.2 | 50 |
| 1 4219 16 | 150 | + | + | 132 | 214 | 61 | 30 | 255 | 112 | 13 | 90 |
| 1 4219 17 | 200 | - | + | 167 | 245 | 65 | 95 | 365 | 88 | 16.6 | 150 |
| 1 4219 18 | 250 | - | + | 207 | 283 | 68 | 133 | 519 | 130 | 24.5 | 250 |
| 1 4219 19 | 300 | - | + | 222 | 308 | 78 | 133 | 519 | 130 | 37.6 | 350 |

Materials

Housing GGG, GJS-400-15/JS1030, according to EN1563

Disc stainless steel 1.4408

Spindle stainless steel ASTM-A276 / Type 316

Lever DN50-150 steel, ST14.03

Lever DN200-300 steel, S235 DIN2458/1626

Houisng sealing EPDM according to ISO 1691
O-Ring EPDM according to ISO 1691
Flange according to EN1092-2

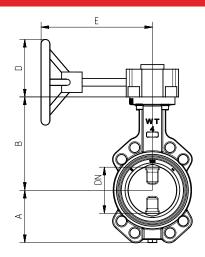
The housing is painted blue (RAL 5000).

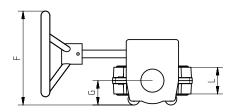
Application field

Suitable for fluids in building services, cold water systems, hot water systems, etc. Ethylene and propylene glycol, in a mixing ratio of 25 - 50 % with water is permitted for usage



☑ Wafer type ZF with gearbox Dimensions in mm





| Article number | DN | PN10 | PN16 | Α | В | L | D | E | F | G | Weight (kg) | Torque (Nm) |
|------------------|-----|------|------|-----|-----|----|----|-----|-----|------|-------------|----------------|
| 1 4219 61 | 50 | + | + | 68 | 125 | 43 | 63 | 217 | 183 | 47.5 | 8.3 | 20 |
| 1 4219 62 | 65 | + | + | 80 | 150 | 46 | 63 | 217 | 183 | 47.5 | 8.5 | 20 |
| 1 4219 63 | 80 | + | + | 87 | 157 | 46 | 63 | 217 | 183 | 47.5 | 9.2 | 25 |
| 1 4219 64 | 100 | + | + | 102 | 182 | 52 | 63 | 217 | 183 | 47.5 | 10.8 | 50 |
| 1 4219 65 | 125 | + | + | 120 | 201 | 56 | 63 | 217 | 183 | 47.5 | 12.8 | 50 |
| 1 4219 66 | 150 | + | + | 132 | 214 | 56 | 63 | 217 | 183 | 47.5 | 14.6 | 90 |
| 1 4219 67 | 200 | - | + | 167 | 245 | 60 | 63 | 217 | 183 | 47.5 | 19.7 | 150 |
| 1 4219 68 | 250 | - | + | 197 | 283 | 68 | 63 | 217 | 226 | 65 | 29.1 | 250 |
| 1 4219 69 | 300 | - | + | 222 | 308 | 78 | 63 | 217 | 226 | 65 | 39.4 | 350 |

Materials

Housing GG, GJL-250/JL1040, according to EN1561

Disc stainless steel 1.4408

Spindle stainless steel ASTM-A276 / Type 316

Lever DN50-150 steel, ST14.03

Lever DN200-300 steel, S235 DIN2458/1626 Housing sealing EPDM according to ISO 1691

O-Ring EPDM according to ISO 1691 Flange according to EN1092-2

The housing is painted blue (RAL 5000).

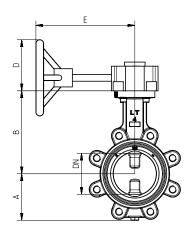
The handwheel is supplied in the delivery and must be fixed by means of a packed bolts.

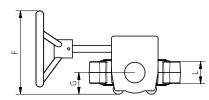
Market Application field

Suitable for fluids in building services, cold water systems, hot water saystems, etc. Ethylene and propylene glycol, in a mixing ratio of 25 - 50 % with water is permitted for usage.



Lug type AF with gearbox Dimensions in mm





| Article number | DN | PN10 | PN16 | Α | В | L | D | E | F | G | Weight (kg) | Torque (Nm) |
|------------------|-----|------|------|-----|-----|----|----|-----|-----|------|-------------|----------------|
| 1 4219 71 | 50 | + | + | 68 | 125 | 43 | 63 | 217 | 183 | 47.5 | 8.3 | 20 |
| 1 4219 72 | 65 | + | + | 80 | 150 | 46 | 63 | 217 | 183 | 47.5 | 9.4 | 20 |
| 1 4219 73 | 80 | + | + | 87 | 157 | 46 | 63 | 217 | 183 | 47.5 | 10.8 | 25 |
| 1 4219 74 | 100 | + | + | 102 | 182 | 52 | 63 | 217 | 183 | 47.5 | 12.4 | 50 |
| 1 4219 75 | 125 | + | + | 120 | 201 | 56 | 63 | 217 | 183 | 47.5 | 14.6 | 50 |
| 1 4219 76 | 150 | + | + | 132 | 214 | 56 | 63 | 217 | 183 | 47.5 | 17.1 | 90 |
| 1 4219 77 | 200 | - | + | 167 | 245 | 60 | 63 | 217 | 183 | 47.5 | 19.7 | 150 |
| 1 4219 78 | 250 | - | + | 207 | 283 | 68 | 63 | 217 | 226 | 65 | 29.1 | 250 |
| 1 4219 79 | 300 | - | + | 222 | 308 | 78 | 63 | 217 | 226 | 65 | 39.4 | 350 |

Materials

Housing GGG, GJS-400-15/JS1030, according to EN1563

Disc stainless steel 1.4408

Spindle stainless steel ASTM-A276 / Type 316

Lever DN50-150 steel, ST14.03

Lever DN200-300 steel, S235 DIN2458/1626

Housing sealing EPDM according to ISO 1691
O-Ring EPDM according to ISO 1691
Flange according to EN1092-2

The housing is painted blue (RAL 5000).

The hand wheel is supplied in the delivery and must be fixed by means of a packed bolt.

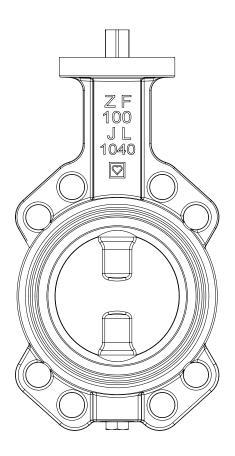
Market Application field

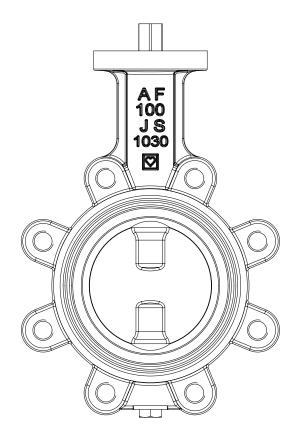
Suitable for fluids in building services, cold water systems, hot water systems, etc. Ethylene and propylene glycol, in a mixing ratio of 25 - 50 % with water is permitted for usage.



☑ Valves without handle

| Article Nr. : wafer type ZF | Article Nr. : lug type AF | DN |
|-----------------------------|---------------------------|-----|
| 1 4219 21 | 1 4219 31 | 50 |
| 1 4219 22 | 1 4219 32 | 65 |
| 1 4219 23 | 1 4219 33 | 80 |
| 1 4219 24 | 1 4219 34 | 100 |
| 1 4219 25 | 1 4219 35 | 125 |
| 1 4219 26 | 1 4219 36 | 150 |
| 1 4219 27 | 1 4219 37 | 200 |
| 1 4219 28 | 1 4219 38 | 250 |
| 1 4219 29 | 1 4219 39 | 300 |







Technical specifications

Maximum operating temperature Minimal operating temperature

110°C

-20°C with appropriate water-glycol mixture.

| Article Nr. : wafer type ZF | Article Nr. : lug type AF | DN | Dim. | kv[m3/h] | Zeta |
|-----------------------------|---------------------------|-----|--------|----------|------|
| 1 4219 01/21/61 | 1 4219 11/31/71 | 50 | 2" | 91 | 1.18 |
| 1 4219 02/22/62 | 1 4219 12/32/72 | 65 | 2 1/2" | 206 | 0.66 |
| 1 4219 03/23/63 | 1 4219 13/33/73 | 80 | 3" | 436 | 0.34 |
| 1 4219 04/24/64 | 1 4219 14/34/74 | 100 | 4" | 660 | 0.36 |
| 1 4219 05/25/65 | 1 4219 15/35/75 | 125 | 5" | 1300 | 0.22 |
| 1 4219 06/26/66 | 1 4219 16/36/76 | 150 | 6" | 2100 | 0.18 |
| 1 4219 07/27/67 | 1 4219 17/37/77 | 200 | 8" | 4100 | 0.15 |
| 1 4219 08/28/68 | 1 4219 18/38/78 | 250 | 10" | 6090 | 0.17 |
| 1 4219 09/29/69 | 1 4219 19/39/79 | 300 | 12" | 9570 | 0.14 |

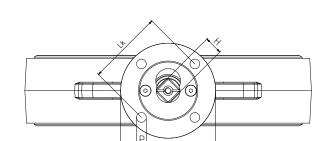


Special design features

The valves are used as shut-off or control fitting. The mounting flange is according to ISO 5211, where transmission or electric drives can be mounted. The rubber sleeve protects the valve against internal corrosion. Additional seals are not needed. All valves are factory checked by pressure and function testing according to ISO 5208.

The valves can also be supplied with gearboxes or electric actuators. The recommended actuators and dimensions of the flange connecting are described below.

Top view DN50 - DN80



Top view DN100 - DN300





| Article Number wafer type ZF | Article Number lug type AF | DN | Flansch | Lk | М | Р | G | F | н | С | Bore quantity |
|------------------------------|-------------------------------|-----|---------|-----|-----|----|----|---|----|-------|---------------|
| 1 4219 01/21/61 | 1 4219 11/31/71 | 50 | F07 | 70 | 88 | 9 | 12 | 9 | 9 | 3.7 | 4 |
| 1 4219 02/22/62 | 1 4219 12/32/72 | 65 | F07 | 70 | 88 | 9 | 12 | 9 | 9 | 11.3 | 4 |
| 1 4219 03/23/63 | 1 4219 13/33/73 | 80 | F07 | 70 | 88 | 9 | 12 | 9 | 9 | 16.3 | 4 |
| 1 4219 04/24/64 | 1 4219 14/34/74 | 100 | F07 | 70 | 88 | 9 | - | - | 14 | 22.6 | 4 |
| 1 4219 05/25/65 | 1 4219 15/35/75 | 125 | F07 | 70 | 88 | 9 | - | - | 14 | 32.5 | 4 |
| 1 4219 06/26/66 | 1 4219 16/36/76 | 150 | F07 | 70 | 88 | 9 | - | - | 14 | 44.6 | 4 |
| 1 4219 07/27/67 | 1 4219 17/37/77 | 200 | F07 | 70 | 88 | 9 | - | - | 17 | 65.8 | 4 |
| 1 4219 08/28/68 | 1 4219 18/38/78 | 250 | F10 | 102 | 130 | 11 | - | - | 22 | 89 | 4 |
| 1 4219 09/29/69 | 1 4219 19/39/79 | 300 | F10 | 102 | 130 | 11 | - | - | 22 | 107.5 | 4 |



Installation

The butterfly valves wafer type is installed between flanges. The flange connection is done with SKT screws or bolts without using seals.

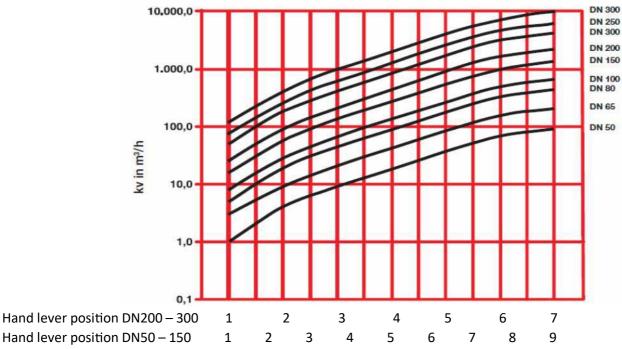
The butterfly valves lug type has threaded lugs on both sides. The flange connection is to be done with SKT screws on both sides. The valve can be used for dead-end installations and be attached only on one side

| DN | Type wafe | er type ZF | Type lug | type AF |
|-----|------------|-------------|-----------|-------------|
| DN | PN 10 | PN16 | PN 10 | PN16 |
| 50 | 4x M16x100 | 4x M16x100 | 4x M16x35 | 4x M16x100 |
| 65 | 4x M16x100 | 4x M16x100 | 4x M16x35 | 4x M16x100 |
| 80 | 8x M16x100 | 8x M16x100 | 8x M16x35 | 8x M16x100 |
| 100 | 8x M16x110 | 8x M16x110 | 8x M16x40 | 8x M16x110 |
| 125 | 8x M16x120 | 8x M16x120 | 8x M16x40 | 8x M16x120 |
| 150 | 8x M20x120 | 8x M20x120 | 8x M20x40 | 8x M20x120 |
| 200 | - | 12x M20x130 | - | 12x M20x130 |
| 250 | - | 12x M24x130 | - | 12x M24x130 |
| 300 | - | 12x M24x150 | - | 12x M24x150 |

Pre-setting

If the butterfly valve is used as a throttling valve, it can be adjusted with the stopper lever at desired position.

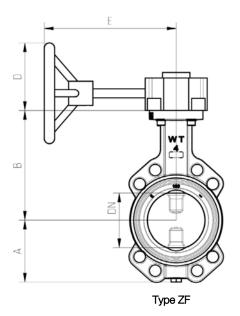
kv value depending on the hand lever position

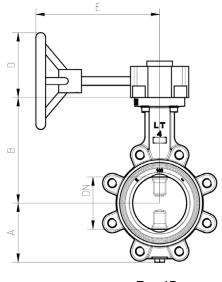


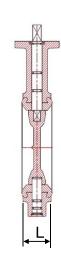
Other models

Models in larger sizes are available outside Europe. If needed, please contact your nearest HERZ office









| Order # Type ZF | Order # Type AF | DN mm | Α | В | L | E | Weight Type ZF[kg] | Weight Type AF[kg] | Torque [Nm] | Kv [m³/h] |
|--------------------|--------------------|----------|-----|-----|-----|-----|-----------------------|-----------------------|-------------|-----------|
| 4 4219 10 | 4 4219 30 | 350 | 282 | 370 | 78 | 217 | 59,2 | 80 | 510 | 10421 |
| 4 4219 11 | 4 4219 31 | 400 | 310 | 400 | 102 | 217 | 84,9 | 120 | 630 | 12146 |
| 4 4219 12 | 4 4219 32 | 450 | 329 | 420 | 114 | 217 | 103,6 | - | 690 | 16863 |
| 4 4219 13 | 4 4219 33 | 500 | 390 | 480 | 127 | 217 | 150 | - | 860 | 22795 |
| 4 4219 14 | 4 4219 34 | 600 | 455 | 565 | 154 | 217 | 193 | - | 1035 | 27502 |

Technical Data

max. pressure (DN350 - DN600) 16 bar (for water)

max. temperature 110°C

min. temperature - 20°C with water- glycol mixture up to 50%

Body Cast iron EN-GJL-250 (GG25)

Disc 1.4301, AISI 304, stainless steel 1.4021, AISI

Stem 420, stainless steel

Sealing EPDM

Coating Electro-static powder epoxy

Constructional characteristics

| Order # Type ZF | Order # Type AF | DN mm | D | Е | F | G |
|--------------------|--------------------|----------|-----|----|----|----|
| 4 4219 10 | 4 4219 30 | 350 | 125 | 22 | - | - |
| 4 4219 11 | 4 4219 31 | 400 | 140 | 27 | - | - |
| 4 4219 12 | 4 4219 32 | 450 | 140 | 27 | - | - |
| 4 4219 13 | 4 4219 33 | 500 | 165 | - | 14 | 48 |
| 4 4219 14 | 4 4219 34 | 600 | 165 | - | 14 | 48 |

