HERZ Isolating Butterfly Valves

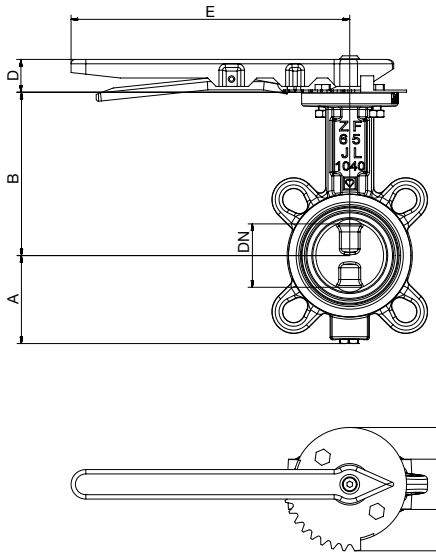
Wafer and lug types, with or without gearbox

Datasheet for 4219, Issue 0126

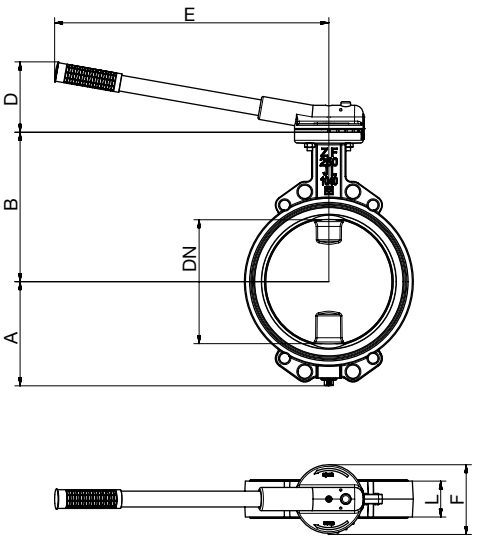
☑ Wafer type ZF

Dimensions in mm

Handle for DN50-DN150



Handle for DN200-DN300



Article number	DN	PN6	PN10	PN16	A	B	L	D	E	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

Body	GG, GJL-250/JL1040, according to EN1561
Disc	stainless steel 1.4408
Spindle	stainless steel ASTM-A276 / Type 316
Lever DN 50-150	steel, ST14.03
Lever DN 200-300	steel, S235 DIN2458/1626
Body sealing	EPDM according to ISO 3601
O-Ring	EPDM according to ISO 3601
Flange	according to EN1092-2

The body 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.

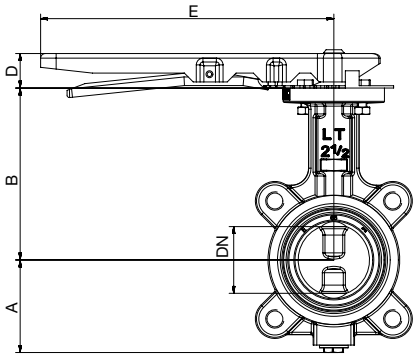
☑ Spare parts

1 4219 90	DN50 - DN80	hand lever for the butterfly valves 1 4219 01 - 1 4219 03
1 4219 91	DN100 - DN150	hand lever for the butterfly valves 1 4219 04 - 1 4219 06
1 4219 92	DN200	hand lever for the butterfly valve 1 4219 07
1 4219 93	DN250 - DN300	hand lever for the butterfly valves 1 4219 08 - 1 4219 09

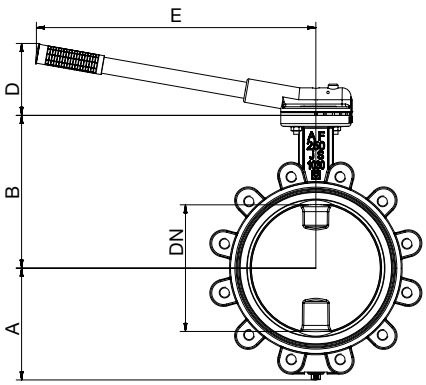
Lug type AF

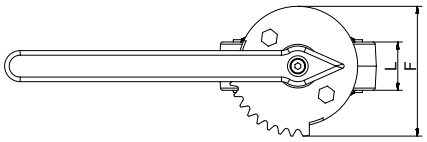
Dimensions in mm

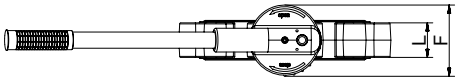
Handle for DN50-DN150



Handle for DN200-DN300







Article number	DN	PN10	PN16	A	B	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	112	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** 88	250	-	+	207	283	68	133	519	130	33,5	250
1 **4219** 89	300	-	+	221	310	78	133	519	130	44,6	350

Materials

Body	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
Body sealing	EPDM according to ISO 3601
O-Ring	EPDM according to ISO 3601
Flange	according to EN1092-2

The body is painted blue (RAL 5000).

Application field

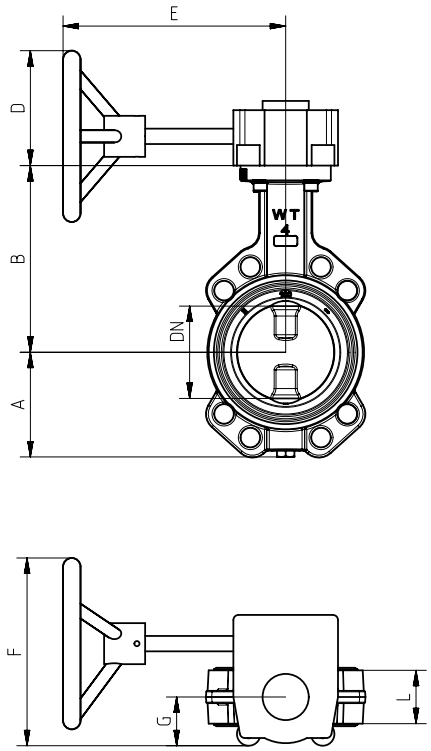
Suitable for fluids in building services, cold water systems, hot water systems, etc. Ethylene and propylene glycol, in a mixing ratio of 25 - 50 % with water is permitted for usage.

Spare parts

1 4219 90	DN50 - DN80	hand lever for the butterfly valves 1 4219 11 - 1 4219 13
1 4219 91	DN100 - DN150	hand lever for the butterfly valves 1 4219 14 - 1 4219 16
1 4219 92	DN200	hand lever for the butterfly valve 1 4219 17
1 4219 93	DN250 - DN300	hand lever for the butterfly valves 1 4219 88 - 1 4219 89

Wafer type ZF with gearbox

Dimensions in mm



Article number	DN	PN6	PN10	PN16	A	B	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

Body	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
Body sealing	EPDM according to ISO 3601
O-Ring	EPDM according to ISO 3601
Flange	according to EN1092-2

The body is painted blue (RAL 5000).

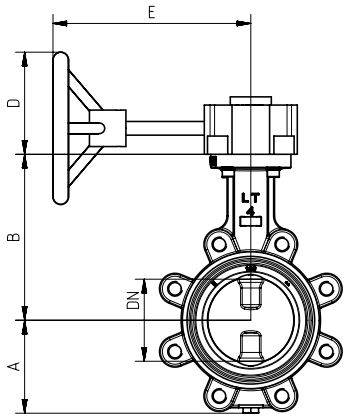
The handwheel is supplied in the delivery and must be fixed by means of a packed bolts.

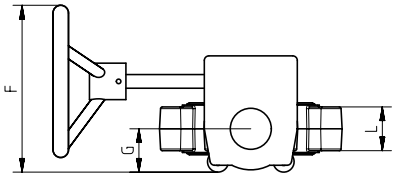
Application field

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.

Lug type AF with gearbox

Dimensions in mm





Article number	DN	PN10	PN16	A	B	L	D	E	F	G	Weight [kg]	Torque [Nm]
1 4219 71	50	+	+	68	125	43	63	217	183	47,5	8,8	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

Body	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
Body sealing	EPDM according to ISO 3601
O-Ring	EPDM according to ISO 3601
Flange	according to EN1092-2

The body is painted blue (RAL 5000).

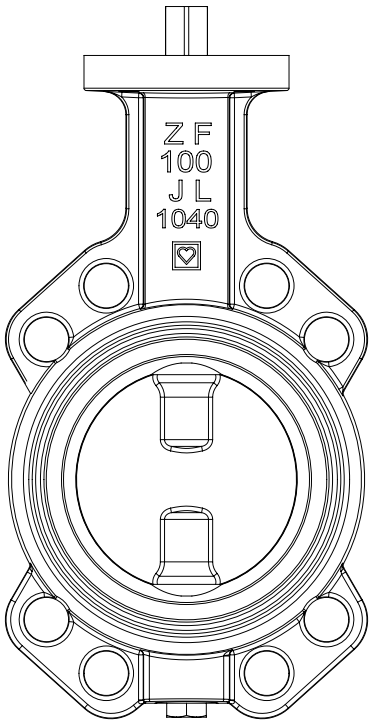
The handwheel is supplied in the delivery and must be fixed by means of a packed bolts.

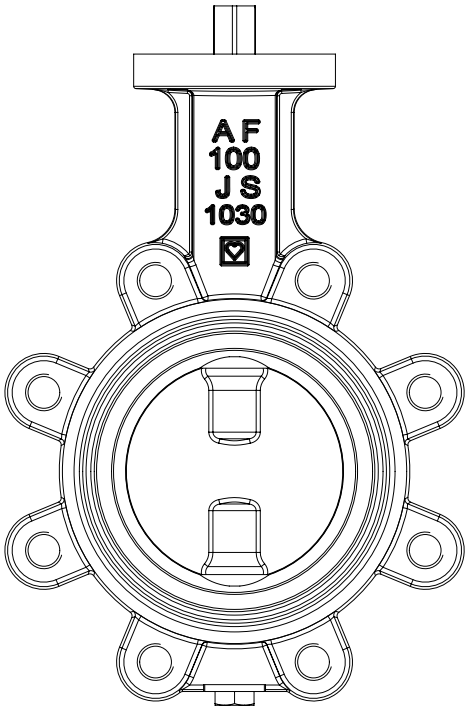
Application field

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**

Order number WAFER	PN6	PN10	PN16	Order number LUG	PN10	PN16	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 110°C

Minimal operating temperature -20°C with appropriate water-glycol mixture

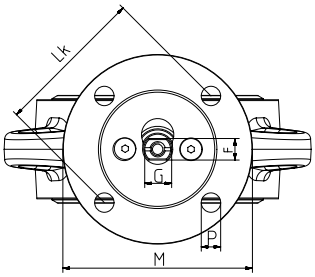
Article Nr.: wafer type ZF	Article Nr.: lug type AF	DN	Dim.	kv [m³/h]	Zeta
1 4219 01/21/61	1 4219 11/31/71	50	2"	91	1,18
1 4219 02/22/62	1 4219 12/32/72	65	2 1/2"	206	0,66
1 4219 03/23/63	1 4219 13/33/73	80	3"	436	0,34
1 4219 04/24/64	1 4219 14/34/74	100	4"	660	0,36
1 4219 05/25/65	1 4219 15/35/75	125	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 88/38/78	250	10"	6090	0,17
1 4219 09/29/69	1 4219 89/39/79	300	12"	9570	0,14

Special design features

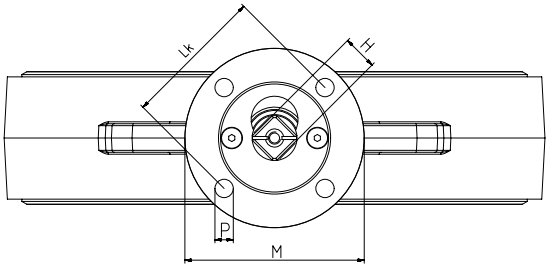
The valves are used as shut-off or control fitting. The mounting flange is according to ISO 5211, where transmission or electric drives can be mounted. The rubber sleeve protects the valve against internal corrosion. Additional seals are not needed. All valves are factory checked by pressure and function testing according to EN 12266.

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

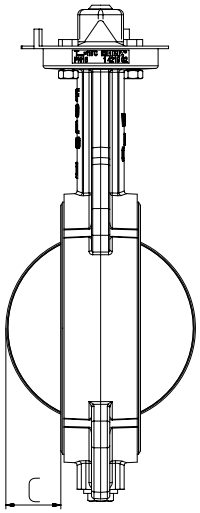
Top view DN50 – DN80



Top view DN100 – DN300



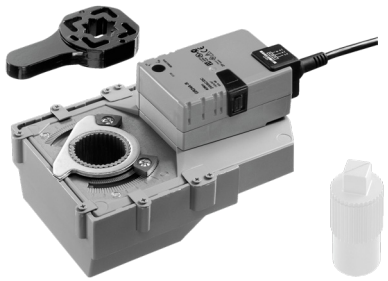
Side view



Article number wafer type **ZF**	**Article number** lug type **AF**	**DN**	Flansch	**Lk**	**M**	**P**	**G**	**F**	**H**	**C**	**Bore quantity**
1 4219 21/01/61	1 4219 31/11/71	50	F07	70	88	9	12	9	9	3,7	4
1 4219 22/02/62	1 4219 32/12/72	65	F07	70	88	9	12	9	9	11,3	4
1 4219 23/03/63	1 4219 33/13/73	80	F07	70	88	9	12	9	9	16,3	4
1 4219 24/04/64	1 4219 34/14/74	100	F07	70	88	9	-	-	14	22,6	4
1 4219 25/05/65	1 4219 35/15/75	125	F07	70	88	9	-	-	14	32,5	4
1 4219 26/06/66	1 4219 36/16/76	150	F07	70	88	9	-	-	14	44,6	4
1 4219 27/07/67	1 4219 37/17/77	200	F07	70	88	9	-	-	17	65,8	4
1 4219 28/08/68	1 4219 88/38/78	250	F10	102	130	11	-	-	22	89	4
1 4219 29/09/69	1 4219 89/39/79	300	F10	102	130	11	-	-	22	107,5	4

Electric actuators 230V

DN50 – DN80 2-point control



1 **7711** 42

DN100 – DN300 3-point control



1 **7711** 41

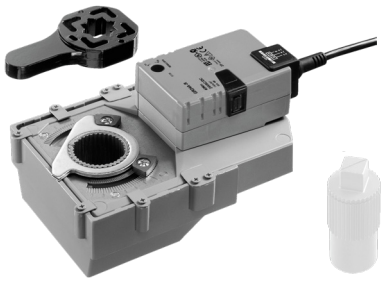


1 **7711** 43

Order number wafer type ZF	Order number lug type AF	DN	Actuating torque	Flange	Order number actuator	Order number adapter
1 4219 21	1 4219 31	50	40	F05/F07	1 7711 42	1 **7711** 47
1 4219 22	1 4219 32	65	40	F05/F07	1 7711 42	1 **7711** 47
1 4219 23	1 4219 33	80	40	F05/F07	1 7711 42	1 **7711** 47
1 4219 24	1 4219 34	100	160	F07	1 7711 41	1 **7711** 48
1 4219 25	1 4219 35	125	160	F07	1 7711 41	1 **7711** 48
1 4219 26	1 4219 36	150	160	F07	1 7711 41	1 **7711** 48
1 4219 27	1 4219 37	200	160	F07	1 7711 41	1 **7711** 49
1 4219 28/48	1 4219 38/58	250	650	F10	1 7711 43	direct installation
1 4219 29/49	1 4219 39/59	300	650	F10	1 7711 43	direct installation

Electric actuators 24V

DN50 – DN80 2-point control



1 **7711** 40

DN100 – DN200 3-point control



1 **7711** 41

Order number wafer type ZF	Order number lug type AF	DN	Actuating torque	Flange	Order number actuator	Order number adapter
1 4219 21	1 4219 31	50	40	F05/F07	1 7711 40	1 **7711** 47
1 4219 22	1 4219 32	65	40	F05/F07	1 7711 40	1 **7711** 47
1 4219 23	1 4219 33	80	40	F05/F07	1 7711 40	1 **7711** 47
1 4219 24	1 4219 34	100	160	F07	1 7711 41	1 **7711** 48
1 4219 25	1 4219 35	125	160	F07	1 7711 41	1 **7711** 48
1 4219 26	1 4219 36	150	160	F07	1 7711 41	1 **7711** 48
1 4219 27	1 4219 37	200	160	F07	1 7711 41	1 **7711** 49

Electric actuators 24V continuous control



1 **7711** 44



1 **7711** 45

Order number wafer type ZF	Order number lug type AF	DN	Actuating torque	Flange	Order number actuator	Order number adapter
1 4219 21	1 4219 31	50	40	F05/F07	1 7711 44	1 **7711** 47
1 4219 22	1 4219 32	65	40	F05/F07	1 7711 44	1 **7711** 47
1 4219 23	1 4219 33	80	40	F05/F07	1 7711 44	1 **7711** 47
1 4219 24	1 4219 34	100	160	F07	1 7711 45	1 **7711** 48
1 4219 25	1 4219 35	125	160	F07	1 7711 45	1 **7711** 48
1 4219 26	1 4219 36	150	160	F07	1 7711 45	1 **7711** 48
1 4219 27	1 4219 37	200	160	F07	1 7711 45	1 **7711** 49

Mechanical gearbox with hand wheel

Article number wafer type **ZF**	**Article number** lug type **AF**	DN	Actuating torque	**Gearbox material**	Order number
1 4219 61	1 4219 71	50	F05/F07	Body of grey cast iron, painted black, gear wheels made of steel, handwheel made of sheet steel	1 **4219** 94
1 4219 62	1 4219 72	65	F05/F07		1 **4219** 94
1 4219 63	1 4219 73	80	F05/F07		1 **4219** 94
1 4219 64	1 4219 74	100	F07		1 **4219** 95
1 4219 65	1 4219 75	125	F07		1 **4219** 95
1 4219 66	1 4219 76	150	F07		1 **4219** 95
1 4219 67	1 4219 77	200	F07		1 **4219** 96
1 4219 68	1 4219 78	250	F10		1 **4219** 97
1 4219 69	1 4219 79	300	F10		1 **4219** 97

Installation

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

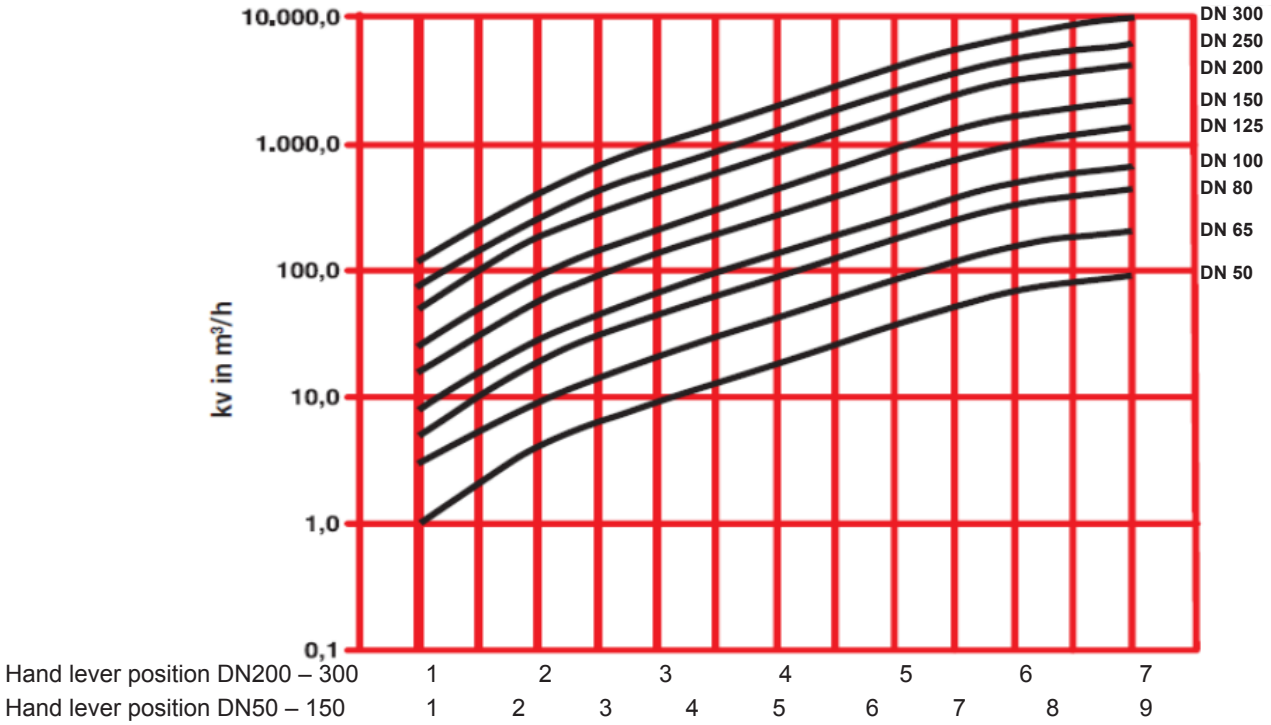
The butterfly valves lug type have threaded lugs on both sides. The flange connection is to be done with socket screws on both sides. The valve can be used for dead-end installations and be attached only on one side.

DN	**Type** wafer type ZF			**Type** lug type AF	
	PN 6	**PN 10**	**PN 16**	**PN 10**	**PN 16**
50	4x M12x100	4x M16x100	4x M16x100	4x M16x35	4x M16x35
65	4x M12x100	4x M16x100	4x M16x100	4x M16x35	4x M16x35
80	4x M16x100	8x M16x100	8x M16x100	8x M16x35	8x M16x35
100	4x M16x100	8x M16x110	8x M16x110	8x M16x40	8x M16x40
125	8x M16x110	8x M16x120	8x M16x120	8x M16x40	8x M16x40
150	8x M16x110	8x M20x120	8x M20x120	8x M20x40	8x M20x40
200	-	8x M20x130	12x M20x130	-	12x M20x45
250	12x M16x130	12x M20x130	12x M24x140	-	12x M24x65
300	12x M16x140	12x M20x150	12x M24x160	-	12x M24x75

Presetting

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

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