

## Butterfly Valves VZAF

**FESTO**



## Butterfly Valves VZAF

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## Reliable shut-off!

**Butterfly valves the way you want them to be:**

**highly functional, sturdy, wear resistant, reliable and non-corroding.**

**Making our solutions for you even more impressive. Together with the top-quality drives from Festo, the result is excellent shut-off solutions for all industrial applications with an extremely wide range of media.**

### Ready for selection

The correct shut-off cap for each application, e.g. when safety relevant applications are involved. For neutral or slightly aggressive liquids and gases in industrial applications, in building systems or for water treatment: VZAV.

When more aggressive media is used, VZAF is the shut-off cap of choice.

### Technically superb, numerous variants

In den KT he manufacturer's expertise and many years of experience can be seen.

Their primary features are high quality and a wide range variants

for all possible applications.

### Sales and service worldwide

Wherever in the world you use solutions with butterfly valves, we are close at hand.

Our vast sales and service network can support you in over 190 countries and is fast, knowledgeable and reliable.



### Highlights

- Modular, versatile range
- Highly functional, sturdy, wear resistant, reliable, non-corroding
- Optimized system solutions through effective joint venture
- Everything from a single source
- Vast global sales and service network
- Many approvals, e.g. for drinking water, FDA EC 1935/2004

### Note:

Festo is only a retailer of this product, not the manufacturer

# When safety is of the essence: butterfly valve VZAF

Ideal for liquid and gas applications which are very corrosive or aggressive. Also for clean rooms, such as in the semiconductor industry or for life sciences applications. The superior design and the Ultraflon® liner ensure maximum operational reliability.

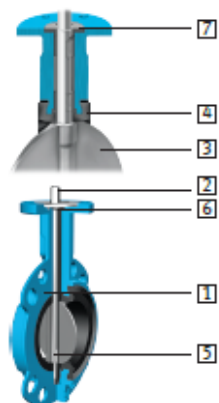


### Typical applications include:

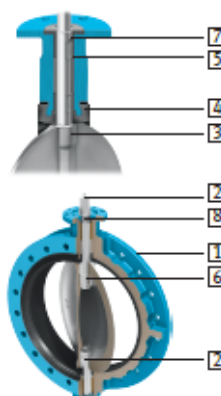
- Corrosive chemical applications
- Food and beverage industry
- Petrochemical industry
- Biotech/pharmaceutical industry
- Semiconductor industry/ultrapure water
- Mining

### Advantages at a glance:

- Gas-tight, high diffusion resistance
- Pipeline insulation maintained by long shaft collar
- Long service life due to low wear of PFA on PTFE
- Lasting sealing due to self-adjusting shaft seal
- Good flow rates due to profiled disc
- Chambered liner to prevent cold flow
- Bonded PFA on the disc



- 1 Body
- 2 One-piece shaft with visual position indication
- 3 Disc
- 4 Liner
- 5 Square disc drive
- 6 External shaft sealing with O-ring
- 7 Retaining washer (blowout protection)

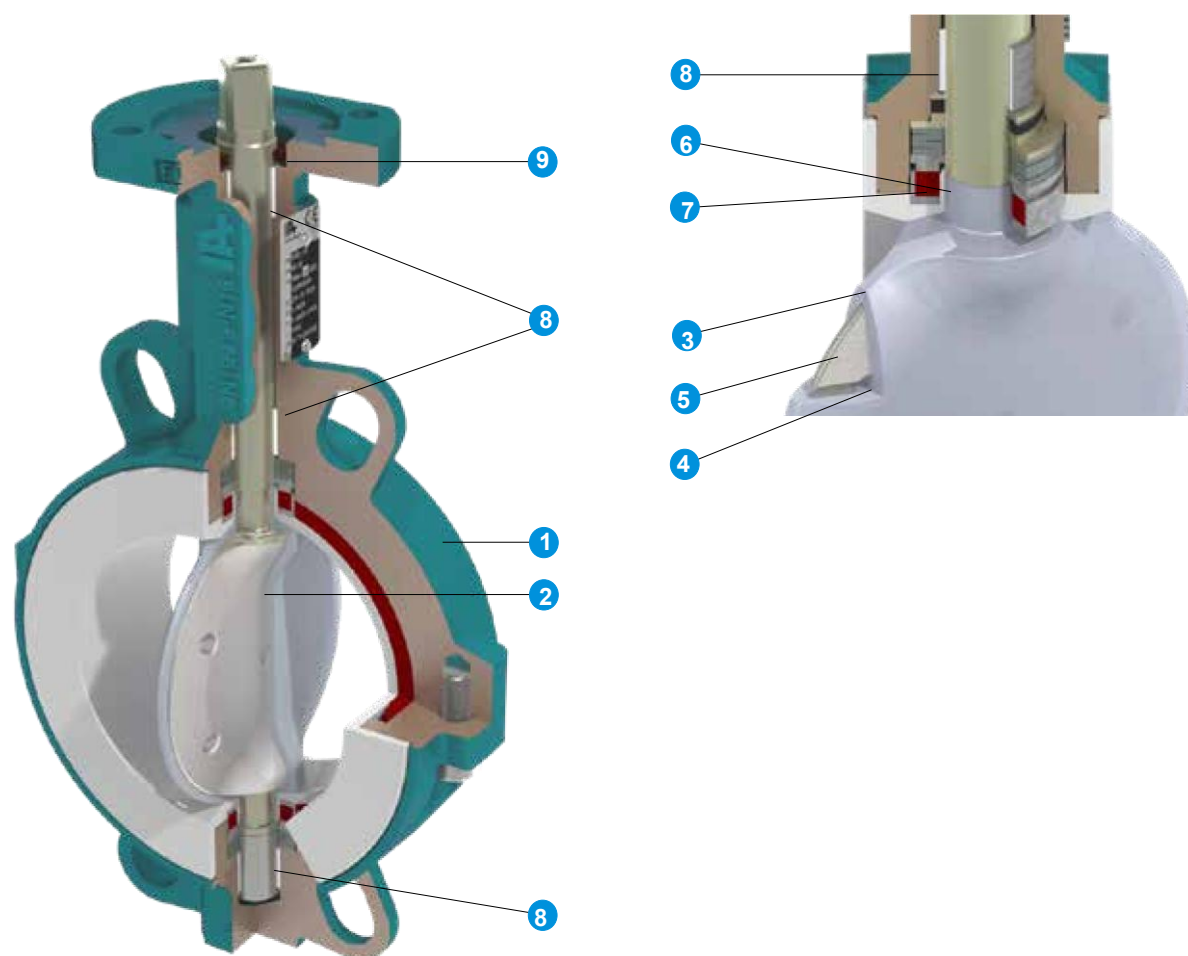


- 1 Body
- 2 Two-piece shaft with visual position indication
- 3 Disc
- 4 Liner
- 5 Shaft bearing
- 6 Square disc drive
- 7 External shaft sealing with O-ring
- 8 Retaining washer
- 9 (blow-out protection)

### Features

Body types	Wafer DN 32-600 Lug DN 32-400 U-shape DN 450-900
Installation length	To ISO 5752/20, EN 558-1/20
Max. operating pressure	DN32-DN150            16 bar DN200-DN300        10 bar DN350-DN600        6 bar >DN600 on request
Ratings	PN6, 10 und 16 / ANSI class 150 / additional ratings on request
Temperature range	-20 °C ... 200 °C according to operating conditions, other temperatures on request
Materials	Housing: EN-GJS-400-18-LT and 1.4409 Discs: stainless steel, PFA-encapsulated and special materials Liner: PTFE, Ultraflon®, standard and conductive versions
Werksprüfung	Porosity test of the disc encapsulation and liner according to DIN EN 60243-1. Test certificates on request. Leak test according to EN 12266-1/P12, leakage rate A. The torque of each valve is recorded.
Sicherheitsmerkmale	The butterfly valves VZAF meet the safety requirements of the Pressure Equipment Directive 2014/68/EG (DGRL) Annex 1 for fluids of groups 1 and 2
SIL	The butterfly valves VZAF are suitable for use in safety systems according to IEC 61508/61511, safety integrity level SIL 2
ATEX	Special designs of the butterfly valve VZAF may be used in potentially explosive atmospheres.
TA-Luft	VDI 2440 as an option


## Design of the Butterfly Valve

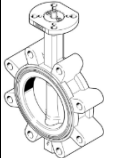


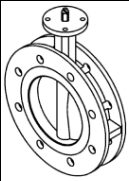
Number	description
1	Two-piece body
2	One-piece, blow out proof disc/shaft
3	Overmoulding with a min. thickness of 3 mm
4	Overmoulding is mechanically locked on the disc
5	Thin core, allows high kV flow rate
6	Shaft overmoulded in the shaft sealing area
7	Life loaded safety shaft sealing
8	Self-lubricating shaft bushing
9	External shaft seal

## Butterfly Valves VZAF


## General information VZAF

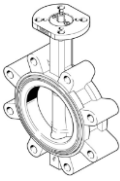
<b>Wafer</b>			
	Type	Nominal Diameter [mm]	Rating standards
	VZAF-C	DN32 ... DN400	PN10 covered by PN16
		DN450 ... DN600	PN10
		DN32 ... DN600	PN16
		DN40 ... DN400	ANSI class 150 covered by PN16
		DN450 ... DN600	ANSI class 150

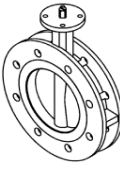
<b>Lug</b>			
	Type	Nominal Diameter [mm]	Rating standards
	VZAF-L	DN32 ... DN150	PN10 covered by PN16
		DN200... DN400	PN10
		DN32 ... DN400	PN16
		DN40 ... DN400	ANSI class 150



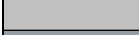


<b>U Shape</b>			
	Type	Nominal Diameter [mm]	Rating standards
	VZAF-U	DN450 ... DN700	PN10
		DN800 ... DN900	PN10
		DN450 ... DN700	PN16
		DN800 ... DN900	PN16
		DN450 ... DN900	ANSI cl. 150

### Possible Flange Connections

Wafer (C)		EN 1092-1 / -2 Metric threads		ASME B16.5/B16.47 Series A
		PN10	PN16	cl. 150 Series A
	DN 32	S8PN16	S8PN16	
	DN 40	S8PN16	S8PN16	S8PN16
	DN 50	S8PN16	S8PN16	S8PN16
	DN 65	S8PN16	S8PN16	S8PN16
	DN 80	S8PN16	S8PN16	S8PN16
	DN 100	S8PN16	S8PN16	S8PN16
	DN 125	S8PN16	S8PN16	S8PN16
	DN 150	S8PN16	S8PN16	S8PN16
	DN 200	S8PN16	S8PN16	S8PN16
	DN 250	S8PN16	S8PN16	S8PN16
	DN 300	S8PN16	S8PN16	S8PN16
	DN 350	S8PN16	S8PN16	S8PN16
	DN 400	S8PN16	S8PN16	S8PN16
	DN 450	S8PN10	S8PN16	S9
	DN 500	S8PN10	S8PN16	S9
DN 600	S8PN10	S8PN16	S9	

LUG (L)		EN 1092-1 / -2 Metric threads		ASME B16.5/B16.47 Series A
		PN10	PN16	cl. 150 Series A
	DN 32	S8PN16	S8PN16	
	DN 40	S8PN16	S8PN16	S9
	DN 50	S8PN16	S8PN16	S9
	DN 65	S8PN16	S8PN16	S9
	DN 80	S8PN16	S8PN16	S9
	DN 100	S8PN16	S8PN16	S9
	DN 125	S8PN16	S8PN16	S9
	DN 150	S8PN16	S8PN16	S9
	DN 200	S8PN10	S8PN16	S9
	DN 250	S8PN10	S8PN16	S9
	DN 300	S8PN10	S8PN16	S9
	DN 350	S8PN10	S8PN16	S9
	DN 400	S8PN10	S8PN16	S9

U Shape (D4)		EN 1092-1 / -2 Metric threads		ASME B16.5/B16.47 Series A
		PN10	PN16	cl. 150 Series A
	DN 450	S8PN10	S8PN16	S9
	DN 500	S8PN10	S8PN16	S9
	DN 600	S8PN10	S8PN16	S9
	DN 700	S8PN10	S8PN16	S9
	DN 750			S9
	DN 800	S8PN10	S8PN16	S9
	DN 900		S8PN16	S9

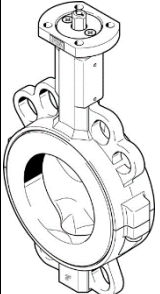
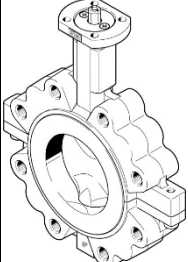
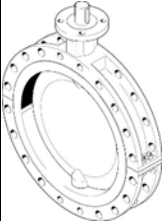
	Direct connection possible
	Connection possible, special machining, longer delivery time and extra-charge
	Connection possible by removing centering ears, longer delivery time and extra-charge
	Connection not possible
	No standard available

Butterfly Valves VZAF

## Order information for VZAF

Individual selection by modular system, tailored for specific customer needs scale of over 250.000 varieties.

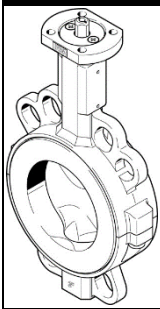
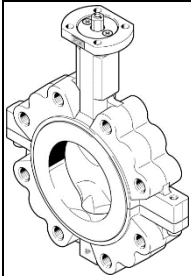
The configuration will occur by part number.

	Type	Part Number Modular system	Nominal diameter [mm]	Varieties
	<b>Wafer type</b> VZAF-C	8041879	DN32 ... DN600	All available <ul style="list-style-type: none"> <li>• Sizes</li> <li>• Liner</li> <li>• Pressure rates</li> <li>• Surfaces</li> </ul> Detailed information: <ul style="list-style-type: none"> <li>• → <b>page 12</b></li> </ul>
	<b>Lug type</b> VZAF-L		DN32 ... DN400	
	<b>U shape type</b> VZAF-U		DN450 ... DN900	

## Orderinformation for Wafer und Lug

From a variety of possible product configurations, we have listed around 75 items for VZAF as Top seller for you.

For more information on detailed part numbers, refer to the appropriate pages.

	Type	Nominal Diameter [mm]	Specification
	<b>Wafer</b> VZAF-C	DN50 ... DN300	<ul style="list-style-type: none"> <li>• Housing material: Ductile cast iron epoxy coated</li> <li>• Shaft and disc: Stainless Steel</li> <li>• Liner/Backliner: PTFE/Silicone</li> </ul> <p>Detailed order information: → Seite 22</p>
	<b>Lug</b> VZAF-L	DN50 ... DN300	<ul style="list-style-type: none"> <li>• Housing material: Ductile cast iron epoxy coated</li> <li>• Shaft and disc: Stainless Steel</li> <li>• Liner/Backliner: PTFE/Silicone</li> </ul> <p>Detailed order information: → Seite 23</p>

## Butterfly Valves VZAF

### Order Code VZAF

<b>001</b>	<b>002</b>	<b>003</b>	<b>004</b>	<b>005</b>	<b>006</b>	<b>007</b>	<b>008</b>	<b>009</b>	<b>010</b>	<b>011</b>	<b>012</b>	<b>013</b>	<b>014</b>	<b>015/016</b>
VZAF	-	-	-	-	-	-	-	-	-	-	-	-	-	-

<b>001</b>	Type
VZAF	Butterfly Valve

<b>002</b>	Design
C	Wafer
L	Lug
U	U Shape

<b>003</b>	Nominal Diameter DN
25	32 mm
...	...
600	600 mm (range up to 900mm on request)

<b>004</b>	Nominal pressure
2,5	2.5 bar (ab DN750)
6	6 bar (DN350...DN900)
10	10 bar (DN200...DN300)
16	16 bar (DN32...DN150)

<b>005</b>	Connection Standard
S8	DIN EN 1092-1
S9	ANSI Class 150

<b>006</b>	Nominal pressure Connection Standard
PN10	PN10
PN16	PN16
	ANSI class 150 (only in combination with S9)

<b>007</b>	Housing material
H1	Ductil cast iron, EN-GJS-400-15
V13	Stainless Steel 1.4409

<b>008</b>	Surface finish housing
-	None
EP80	Epoxy coated 80 µ

<b>009</b>	Shaft material
V1	Stainless Steel 1.4404
V3	Stainless Steel 1.4408
V7	Stainless Steel 1.4542
V10	Stainless Steel 1.4435
V17	Stainless Steel 1.4469
ST1	Structural Steel 1.0577 (ST52-3N)

<b>010</b>	Shut-off element material
V1	Stainless Steel 1.4404
V3	Stainless Steel 1.4408
V10	Stainless Steel 1.4435
V17	Stainless Steel 1.4469
V18	Stainless Steel 2.4819
ST1	Stainless Steel 1.0577 (ST52-3N)

<b>011</b>	Surface finish shut-off element
-	None
PL	Polished (0,4µ)
PFA	Perfluoralkoxy
PFA1	Perfluoralkoxy, conductive

<b>012</b>	Liner
T1	PTFE / Silicone
T3	PTFE / FPM
U1	PTFE Ultraflon / Silicone
U3	PTFE Ultraflon / FPM
T1A	PTFE / Silicone, conductive
T3A	PTFE / FPM, conductive
U1A	PTFE Ultraflon / Silicone, conductive
U3A	PTFE Ultraflon / FPM, conductive

<b>013</b>	PWIS-content
-	None
C	PWIS-free

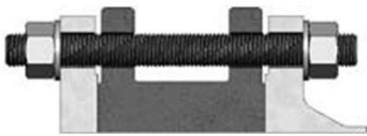
<b>014</b>	Cleanroom
-	None
E4	Cleanroom to ISO164644-1 class4

<b>015</b>	TA Luft
-	None
TA	TA Luft Package to VDI2440

<b>016</b>	Usage in potentially explosive areas
-	None
112	Zone 1 (o) IIC / T6...T3 Zone 21 (o) IIIC / 85...200°C
246	Zone 0 (i), 1 (o) IIC / T6...T3 Zone 20 (i), 21 (o) IIIC / 85...200°C

## Technical Data

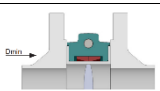
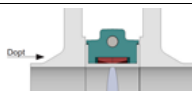
Processvalvefunction	
Valve function	2/2 way
Design	Butterfly valve in Wafer, Lug type and U shape
Sealing principle	Soft
Actuation type	Mechanical / automated via ISO5211 interface
Manual override	None
Approved for use in food industry	Yes
Switching position display	Slot direction = disc direction
Direction of flow	Reversible
Bare shaft position	45°
Type of mounting	In line installation
Einbauposition	< DN400 any direction/ > DN400 horizontal
Based on connection standard	DIN EN 1092-1 / ANSI cl. 150

Mounting instructions at the end of a pipe	
Body type	Wafer type (C) not possible
	Lug type (L) possible without counter flange
	U shape (U) only with counter flange Example of the counter flange:
	
Body material	H1 - EN - GJS - 400 - 15
Media	Only for liquid media, 10°C ... +30°C
Max. working pressure	DN32-DN150            8 bar DN200-DN300        6 bar DN350-DN600        4 bar >DN600                on request
	No water hammer!

Operating and environmental conditions		
Nominal pressure	DIN EN 1333	PN6; PN 10; PN16
	ASME B16.5	ANSI class 150
Temperature of media	-60°C ... 210°C / -76F ... 410F	<b>Depending on:</b> Liner, Shut off element material/surface finish and working conditions
Vacuum [mbarA]	200 – higher Vacuum on request	
Conditions:	Max. nominal diameter	DN300 – bigger sizes on request
	Liner	Ultraflon
	Media	neutral media, max. 80°C
	Installation	please consider table for mounting flanges

## Butterfly Valves VZAF

## Flange diameter – assembly notes

Nominal Diameter [mm]	Inner Diameter [mm]	
	D min <sup>1</sup>	D opt <sup>2</sup>
		
32	31	40
40	31	40
50	50	50
65	47	65
80	74	80
100	94	100
125	120	125
150	148	200
200	199	200
250	249	250
300	298	300
350	338	339
400	395	400
450	444	450
500	492	500
600	588	600
700	692	703
750	734	750
800	789	803
900	885	900

1) Minimum diameter of the flange enabling to move the disc (in case of a perfectly centred valve)

2) Diameter of the flange for optimal mounting

## Liner

Code	Name DIN	Material	Description	Temperaturrange
T1	PTFE / Silicone	Polytetrafluorethylen	PTFE has excellent chemical resistance, electrical properties, high temperature performance, low temperature toughness, plus unique adhesion and flame resistance / with silicone back-liner for standard applications	-40°C ... 200°C
T1A	PTFE – conductive / Silicone	Polytetrafluorethylen – leitfähig	Conductive PTFE for usage in potentially explosive areas	-40°C ... 200°C
T3	PTFE / FPM	Polytetrafluorethylen	PTFE has excellent chemical resistance, electrical properties, high temperature performance, low temperature toughness, plus unique adhesion and flame resistance / with FPM back-liner for high corrosive applications	-10°C ... 160°C
T3A	PTFE – conductive / FPM	Polytetrafluorethylen – leitfähig	Conductive PTFE for usage in potentially explosive areas	-10°C ... 160°C
U1	PTFE / Silicone	Polytetrafluorethylen	Ultraflon® is the material choice where high purity, low friction, high durability, excellent thermal resistance and chemical inertness characteristics are required / with silicone back-liner, for low and high temperature applications..	-10°C ... 160°C
U1A	PTFE – conductive / Silicone	Polytetrafluorethylen – leitfähig	Conductive PTFE for usage in potentially explosive areas	40°C ... 200°C
U3	PTFE / FPM	Polytetrafluorethylen – leitfähig	Ultraflon® is the material choice where high purity, low friction, high durability, excellent thermal resistance and chemical inertness characteristics are required / with FPM back-liner, it is the most corrosion resistant valve	-10°C ... 160°C
U3A	PTFE – conductive / FPM	Polytetrafluorethylen – leitfähig	Conductive PTFE for usage in potentially explosive areas	-10°C ... 160°C

## Butterfly Valves VZAF

## Breakaway torques

**Standard Conditions**

(liquids between 20°C ... 80°C)

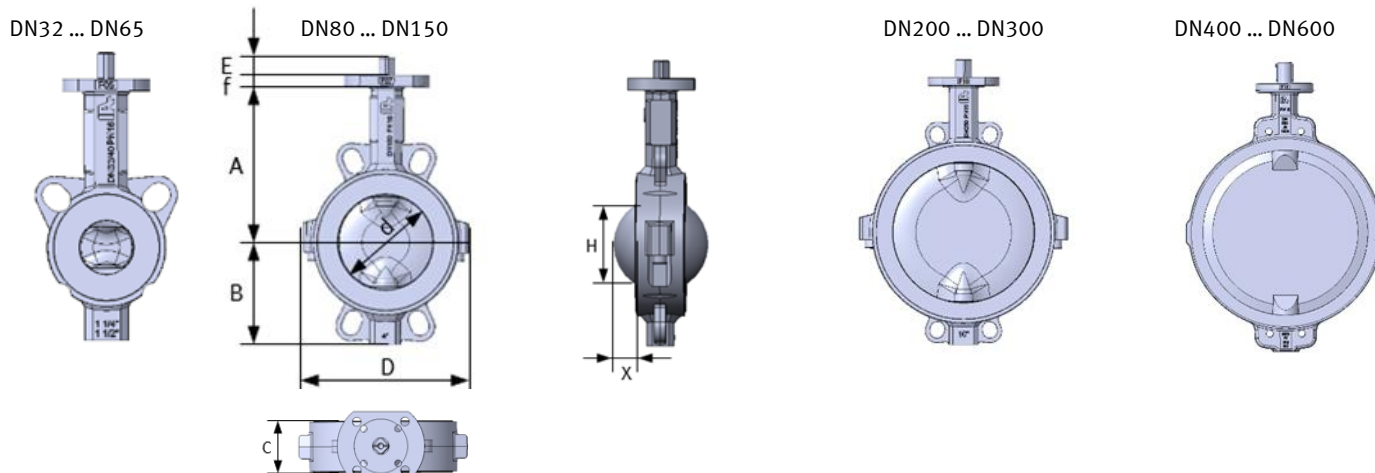
Nominal diameter [mm]	Torque [Nm] with disc for max. nominal pressure of:			
	2,5 bar	6 bar	10 bar	16 bar
DN32				21
DN40				21
DN50				25
DN65				39
DN80				43
DN100				73
DN125				87
DN150				164
DN200			189	227
DN250			330	396
DN300			476	571
DN350		675		
DN400		900		
DN450		1100		
DN500		1300		
DN600		1750		
DN700		2100		
DN750	2500	2800		
DN800		3100		
DN900		4000		

## KV-Values

Nominal diameter [mm]	KV-Values [m <sup>3</sup> /h] depending on the opening angle of the valve							
	20°	30°	40°	50°	60°	70°	80°	90°
DN32/40	4	8	117	30	45	65	85	95
DN50	5	11	24	42	65	92	118	134
DN65	8	19	41	70	108	155	200	227
DN80	15	33	72	125	190	270	335	392
DN100	20	48	95	162	255	385	485	585
DN125	38	82	165	255	455	645	815	1015
DN150	60	130	235	395	645	955	1220	1500
DN200	95	230	465	795	1180	1815	2410	3050
DN250	175	350	710	1160	1610	2420	3650	4510
DN300	265	522	995	1720	2665	3965	5960	7210
DN350	350	660	1180	1800	2880	4550	7180	8760
DN400	410	985	1480	2450	4230	6550	9250	11350
DN450	665	1255	2230	3850	6250	9200	12250	14900
DN500	890	1620	2980	5350	8150	11800	15560	18000
DN600	970	2150	4180	7420	11350	16450	21200	24500
DN700	1060	2560	4868	8412	14359	23901	37638	48633
DN750	1217	2939	5588	9675	16484	27437	43207	55829
DN800	1402	3328	6351	11169	19073	32074	51820	64905
DN900	1915	4259	7897	13849	23887	41112	66771	81016
DN900	1915	4259	7897	13849	23887	41112	66771	81016

Butterfly Valves VZAF

Dimension Wafer Type

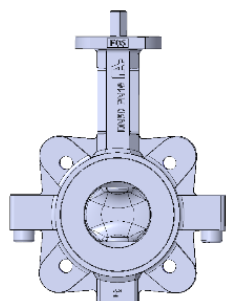


Nominal Diameter [DN]	d [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm] ±0,5	H <sup>1</sup> [mm]	X <sup>1</sup> [mm]	F [mm]	Weight [kg]
32	40	125	69	33	105,8	12	23	4	9	1,7
40	40	125	69	33	105,8	12	23	4	9	1,7
50	50	134	68	43	118,4	12	26	9	9	2,3
65	65	145	78	46	132,5	12	39	7	9	2,9
80	80	160	92	46	144	12	66	17	9	3,4
100	100	175	107	52	173	16	86	24	12	5,1
125	125	194	120	56	219	16	112	35	12	6,9
150	150	210	134	56	247	19	140	47	12	10
200	200	239	162	60	295	19	191	70	15	14,1
250	250	275	199	68	367	24	241	91	15	22,9
300	300	310	230	78	419	24	290	111	15	32,9
350	339	349	254	78	428	40	330	131	16	50
400	400	379	287	402	473	42	387	149	16	68
450	450	426	320	114	528	65	436	168	21	100
500	500	451	360	127	588	65	484	187	21	122
600	600	555	415	154	686	90	580	223	26	180

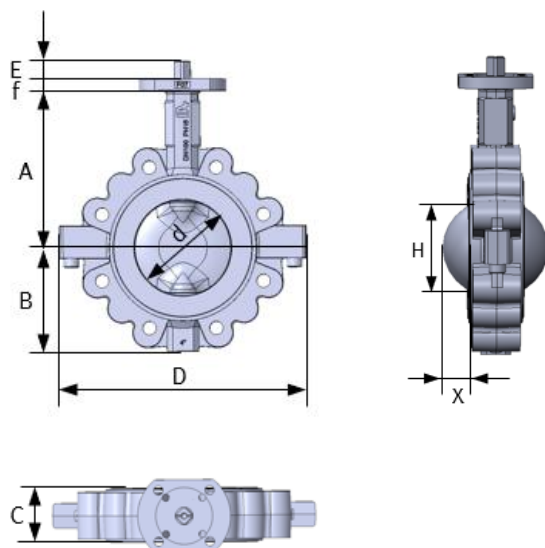
1) When using plastic stubs please check dimension H / x to avoid damaging of disc

## Dimension Lug Type

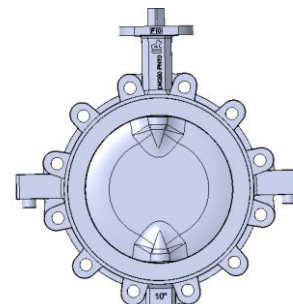
DN32 – DN65



DN80 – DN150



DN200 – DN400

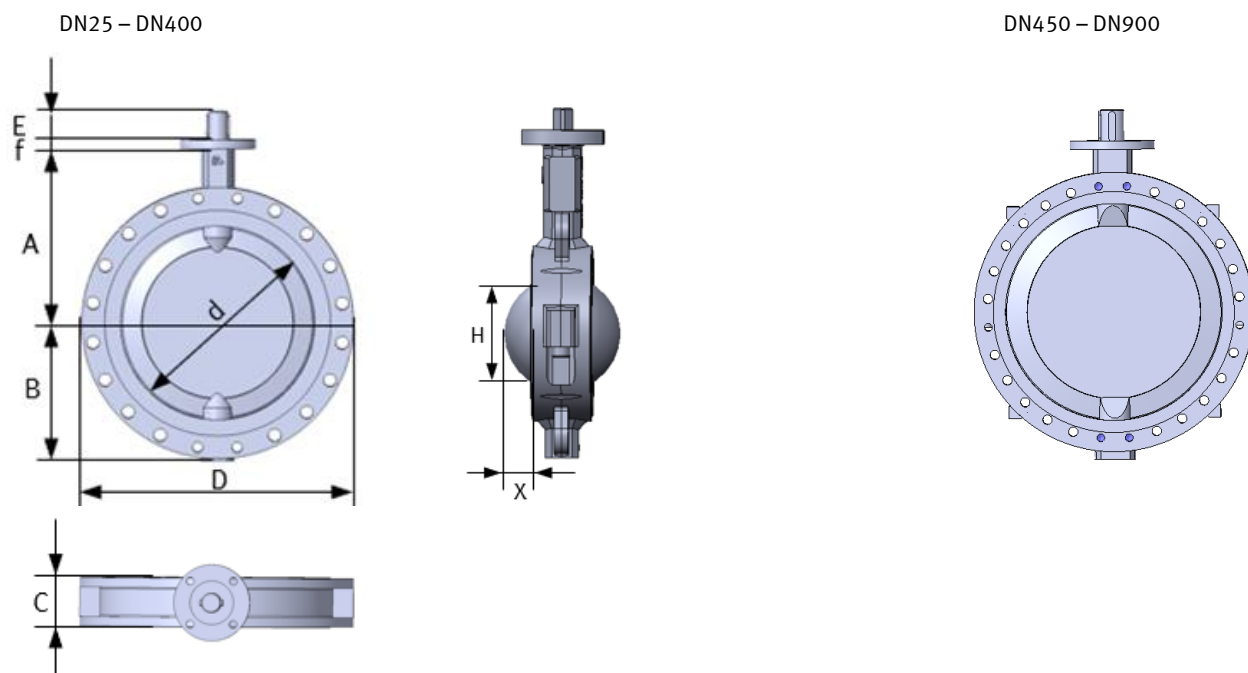


Nominal Diameter [DN]	d [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm] ±0,5	H <sup>1</sup> [mm]	x <sup>1</sup> [mm]	F [mm]	Weight [kg]
32	40	125	69	33	105,8	12	23	4	9	2,4
40	40	125	69	33	105,8	12	23	4	9	2,4
50	50	134	68	43	118,4	12	26	9	9	3,2
65	65	145	78	46	132,5	12	39	7	9	4,1
80	80	160	92	46	144	12	66	17	9	6,2
100	100	175	107	52	173	16	86	24	12	9,3
125	125	194	120	56	219	16	112	35	12	10,7
150	150	210	134	56	247	19	140	47	12	12,9
200	200	239	162	60	295	19	191	70	15	22,3
250	250	275	199	68	367	24	241	91	15	32,4
300	300	310	230	78	419	24	290	111	15	46,9
350	339	349	254	78	428	40	330	131	16	87
400	400	379	287	402	473	42	387	149	16	98

1) When using plastic stubs please check dimension H / x to avoid damaging of disc

Butterfly Valves VZAF

Dimension U Shape



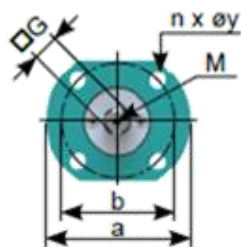
Nominal Diameter [DN]	d [mm]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm] ±0,5	H <sup>1</sup> [mm]	x <sup>1</sup> [mm]	F [mm]	Weight [kg]
450 <sup>2</sup>	450	426	320	114	630	65	436	168	21	140
500 <sup>2</sup>	500	451	360	127	700	65	484	187	21	175
600 <sup>2</sup>	600	555	415	154	820	90	580	223	26	275
700 <sup>2</sup>	703	605	482	165	930	80	684	269	26	367
750 <sup>2</sup>	750	629	489	190	970	91	726	280	26	383
800 <sup>2</sup>	803	658	550	190	1060	108	781	307	29	670
900 <sup>2</sup>	900	710	602	203	1160	128	877	349	36	880

- 1) When using plastic stubs please check dimension H / x to avoid damaging of disc
- 2) DN450-900, 2x threads on neck and bottom,  
DN 600- 900, 2 x threads on both sides of the 2piece body

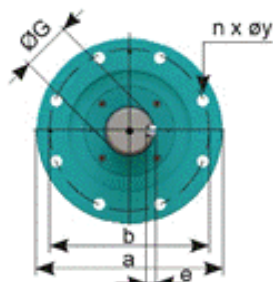
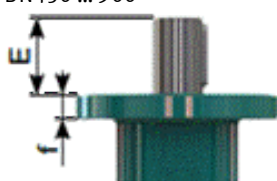
## Dimension ISO 5211 Flange

Wafer, Lug und U-Shape

DN25 ... 400



DN450 ... 900



Nominal Diameter [DN]	E [mm]	G [mm]	M [mm]	f [mm]	ISO	a [mm]	b [mm]	n x Ø y	e [mm]
<b>Wafer, Lug und U-Shape<sup>1</sup></b>									
32-80	12	□11	M6 x 12	9	F05	65	50	4 x 7	-
100-125	16	□14	M6 x 12	12	F05/F07	90	50/70	4 x 7/4 x 9	-
150	19	□17	M6 x 12	12	F07	90	70	4 x 9	-
200	19	□17	M6 x 12	15	F07/F10	125	70/102	4 x 9/4 x 11	-
250-300	24	□22	M6 x 12	15	F10	125	102	4 x 11	-
350-400	40	□27	M10 x 20	16	F12	155	125	4 x 13,5	-
450-500	65	Ø45	M12 x 20	21	F14	175	140	4 x 18	9
600	90	Ø60	M12 x 20	26	F16	210	165	4 x 22	11
700	80	Ø72	M20 x 40	26	F16	210	165	4 x 22	12
750	91	Ø60	M12 x 20	26	F16	210	165	4 x 22	11
800	108	Ø80	M20 x 40	29	F25	300	254	8 x 18	14
900	128	Ø98	M24 x 48	36	F30	350	298	8 x 22	16

1) DN450-900, 2x threads on neck and bottom,  
 DN 600- 900, 2 x threads on both sides of the 2piece body

## Butterfly Valves VZAF

## Usage in potentially explosive areas

Usage in potentially explosive areas	Festo Code	Liner	Disc	Surface finish shut-off element	Surface finish housing
Zone 1 (o) IIC / T6...T3 Zone 21 (o) IIIC / 85...200°C	112	all			EP80
Zone 0 (i), 1 (o) IIC / T6...T3 Zone 20 (i), 21 (o) IIIC / 85...200°C	246	T*A and U*A	Only with conductive disc coating or uncoated Disc like V3 V7 V10	CR PL	EP80

The classification of butterfly valve's temperature class is between T3 and T6 and the maximum surface temperature between T85 °C and T200 °C. Both are dependent on the temperature of the medium flowing through the pipe.

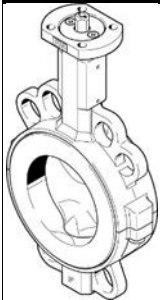
## Order Code - Wafer Type – VZAF-C-xxx-S8PN16-xxx

This type fits into all standard connection standards like mentioned in the flange connection table on page 7 with WAFER „S8PN16“.

Housing material: Ductile cast iron epoxy coated

Shaft and disc: Stainless Steel

Liner/Backliner: PTFE/Silicone

Design	Nominal pressure	Surface finish shut-off element	Nominal Diameter DN	Part number	Order Code
	16	none	50	8065604	VZAF-C-50-16-S8PN16-H1EP80-V3-V3-T1
			65	8065605	VZAF-C-65-16-S8PN16-H1EP80-V3-V3-T1
			80	8065606	VZAF-C-80-16-S8PN16-H1EP80-V3-V3-T1
			100	8065607	VZAF-C-100-16-S8PN16-H1EP80-V3-V3-T1
			125	8065608	VZAF-C-125-16-S8PN16-H1EP80-V3-V3-T1
			150	8065609	VZAF-C-150-16-S8PN16-H1EP80-V3-V3-T1
	10	none	200	8065610	VZAF-C-200-10-S8PN16-H1EP80-V3-V3-T1
			250	8065611	VZAF-C-250-10-S8PN16-H1EP80-V3-V3-T1
			300	8065612	VZAF-C-300-10-S8PN16-H1EP80-V3-V3-T1
	16	PFA	50	8065631	VZAF-C-50-16-S8PN16-H1EP80-V3-V3PFA-T1
			65	8065632	VZAF-C-65-16-S8PN16-H1EP80-V3-V3PFA-T1
			80	8065633	VZAF-C-80-16-S8PN16-H1EP80-V3-V3PFA-T1
			100	8065634	VZAF-C-100-16-S8PN16-H1EP80-V3-V3PFA-T1
			125	8065635	VZAF-C-125-16-S8PN16-H1EP80-V3-V3PFA-T1
			150	8065636	VZAF-C-150-16-S8PN16-H1EP80-V3-V3PFA-T1
	10	PFA	200	8065637	VZAF-C-200-10-S8PN16-H1EP80-V3-V3PFA-T1
			250	8065638	VZAF-C-250-10-S8PN16-H1EP80-V3-V3PFA-T1
			300	8065639	VZAF-C-300-10-S8PN16-H1EP80-V3-V3PFA-T1

Butterfly Valves VZAF

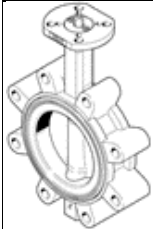
Order Code - Lug Typ ISO – VZAF-L-xxx-S8PN16-xxx

This type fits into all standard connection standards like mentioned in the flange connection table on page 7 with Lug „S8PN16“..

Housing material: Ductile cast iron epoxy coated

Shaft and disc: Stainless Steel

Liner/Backliner: PTFE/Silicone

Design	Nominal pressure	Surface finish shut-off element	Nominal Diameter DN	Part number	Order Code
	16	none	50	8065613	VZAF-L-50-16-S8PN16-H1EP80-V3-V3-T1
			65	8065614	VZAF-L-65-16-S8PN16-H1EP80-V3-V3-T1
			80	8065615	VZAF-L-80-16-S8PN16-H1EP80-V3-V3-T1
			100	8065616	VZAF-L-100-16-S8PN16-H1EP80-V3-V3-T1
			125	8065617	VZAF-L-125-16-S8PN16-H1EP80-V3-V3-T1
			150	8065618	VZAF-L-150-16-S8PN16-H1EP80-V3-V3-T1
	10	none	200	8065619	VZAF-L-200-10-S8PN16-H1EP80-V3-V3-T1
			250	8065620	VZAF-L-250-10-S8PN16-H1EP80-V3-V3-T1
			300	8065621	VZAF-L-300-10-S8PN16-H1EP80-V3-V3-T1
	16	PFA	50	8065640	VZAF-L-50-16-S8PN16-H1EP80-V3-V3PFA-T1
			65	8065641	VZAF-L-65-16-S8PN16-H1EP80-V3-V3PFA-T1
			80	8065642	VZAF-L-80-16-S8PN16-H1EP80-V3-V3PFA-T1
			100	8065643	VZAF-L-100-16-S8PN16-H1EP80-V3-V3PFA-T1
			125	8065644	VZAF-L-125-16-S8PN16-H1EP80-V3-V3PFA-T1
			150	8065645	VZAF-L-150-16-S8PN16-H1EP80-V3-V3PFA-T1
	10	PFA	200	8065646	VZAF-L-200-10-S8PN16-H1EP80-V3-V3PFA-T1
			250	8065647	VZAF-L-250-10-S8PN16-H1EP80-V3-V3PFA-T1
			300	8065648	VZAF-L-300-10-S8PN16-H1EP80-V3-V3PFA-T1

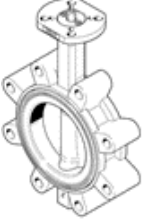
## Order Code - Lug Typ ANSI – VZAF-L-xxx-S9-xxx

This type fits into all standard connection standards like mentioned in the flange connection table on page 7 with Lug „S9“.

Housing material: Ductile cast iron epoxy coated

Shaft and disc: Stainless Steel

Liner/Backliner: PTFE/Silicone

Design	Nominal pressure	Surface finish shut-off element	Nominal Diameter DN/Inch	Part number	Order Code
	ANSI class 150	none	50/2"	8065622	VZAF-L-50-16-S9-H1EP80-V3-V3-T1
			65/2 1/2"	8065623	VZAF-L-65-16-S9-H1EP80-V3-V3-T1
			80/3"	8065624	VZAF-L-80-16-S9-H1EP80-V3-V3-T1
			100/4"	8065625	VZAF-L-100-16-S9-H1EP80-V3-V3-T1
			125/5"	8065626	VZAF-L-125-16-S9-H1EP80-V3-V3-T1
			150/6"	8065627	VZAF-L-150-16-S9-H1EP80-V3-V3-T1
			200/8"	8065628	VZAF-L-200-10-S9-H1EP80-V3-V3-T1
			250/10"	8065629	VZAF-L-250-10-S9-H1EP80-V3-V3-T1
	300/12"	8065630	VZAF-L-300-10-S9-H1EP80-V3-V3-T1		
	PFA	50/2"	8065649	VZAF-L-50-16-S9-H1EP80-V3-V3PFA-T1	
		65/2 1/2"	8065650	VZAF-L-65-16-S9-H1EP80-V3-V3PFA-T1	
		80/3"	8065651	VZAF-L-80-16-S9-H1EP80-V3-V3PFA-T1	
		100/4"	8065652	VZAF-L-100-16-S9-H1EP80-V3-V3PFA-T1	
		125/5"	8065653	VZAF-L-125-16-S9-H1EP80-V3-V3PFA-T1	
		150/6"	8065654	VZAF-L-150-16-S9-H1EP80-V3-V3PFA-T1	
		200/8"	8065655	VZAF-L-200-10-S9-H1EP80-V3-V3PFA-T1	
250/10"		8065656	VZAF-L-250-10-S9-H1EP80-V3-V3PFA-T1		
300/12"	8065657	VZAF-L-300-10-S9-H1EP80-V3-V3PFA-T1			

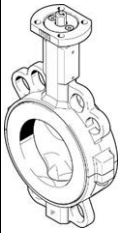
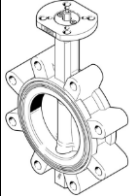
Butterfly Valves VZAF

Order information for part number with 3.1 Material test report (MTR)

The following part number include a material test report according to 3.1 (Cert 1400)

The scope of delivery includes the following reports:

- Material certificate to EN10204 3.1
- Leakage test to EN12266-1 P12
- Operability test to EN12266-2 F20

Design	Nominal Pressure	Liner/Backliner	Nominal Diameter DN	Part number	Order Code
	16	PTFE/Silicone	40	8097687	VZAF-C-40-16-S8PN16-H1EP80-V10-V10-T1
			50	8097688	VZAF-C-50-16-S8PN16-H1EP80-V10-V10-T1
			65	8097689	VZAF-C-65-16-S8PN16-H1EP80-V10-V10-T1
			80	8097690	VZAF-C-80-16-S8PN16-H1EP80-V10-V10-T1
			100	8097691	VZAF-C-100-16-S8PN16-H1EP80-V10-V10-T1
			125	8097692	VZAF-C-125-16-S8PN16-H1EP80-V10-V10-T1
			150	8097693	VZAF-C-150-16-S8PN16-H1EP80-V10-V10-T1
	10		200	8097694	VZAF-C-200-10-S8PN16-H1EP80-V10-V10-T1
			250	8097695	VZAF-C-250-10-S8PN16-H1EP80-V10-V10-T1
	16	PTFE/Silicone	40	8097697	VZAF-L-40-16-S8PN16-H1EP80-V10-V10-T1
			50	8097698	VZAF-L-50-16-S8PN16-H1EP80-V10-V10-T1
			65	8097699	VZAF-L-65-16-S8PN16-H1EP80-V10-V10-T1
			80	8097700	VZAF-L-80-16-S8PN16-H1EP80-V10-V10-T1
			100	8097701	VZAF-L-100-16-S8PN16-H1EP80-V10-V10-T1
			125	8097702	VZAF-L-125-16-S8PN16-H1EP80-V10-V10-T1
			150	8097703	VZAF-L-150-16-S8PN16-H1EP80-V10-V10-T1
	10		200	8097704	VZAF-L-200-10-S8PN16-H1EP80-V10-V10-T1
			250	8097705	VZAF-L-250-10-S8PN16-H1EP80-V10-V10-T1

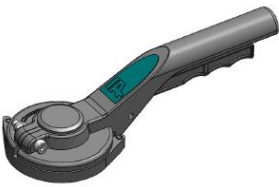
## Dual Use Regulation

Council Regulation (EC) No. 428/2009 (Dual-Use) of 5 May 2009 on a community regime for the control of exports of dual-use goods and technology is a European Community regulation on the export of goods and technology, that have a dual use. It is known colloquially as a dual-use regulation. The following part numbers correspond to the requirements of the dual use regulation and are therefore subject to export authorization.

Part Number	Type	Dual Use Check
8041879	VZAF - KMAT	X
8065631	VZAF-C-50-16-S8PN16-H1EP80-V3-V3PFA-T1	X
8065632	VZAF-C-65-16-S8PN16-H1EP80-V3-V3PFA-T1	X
8065633	VZAF-C-80-16-S8PN16-H1EP80-V3-V3PFA-T1	X
8065634	VZAF-C-100-16-S8PN16-H1EP80-V3-V3PFA-T1	X
8065635	VZAF-C-125-16-S8PN16-H1EP80-V3-V3PFA-T1	X
8065636	VZAF-C-150-16-S8PN16-H1EP80-V3-V3PFA-T1	X
8065637	VZAF-C-200-10-S8PN16-H1EP80-V3-V3PFA-T1	X
8065638	VZAF-C-250-10-S8PN16-H1EP80-V3-V3PFA-T1	X
8065639	VZAF-C-300-10-S8PN16-H1EP80-V3-V3PFA-T1	X
8065640	VZAF-L-50-16-S8PN16-H1EP80-V3-V3PFA-T1	X
8065641	VZAF-L-65-16-S8PN16-H1EP80-V3-V3PFA-T1	X
8065642	VZAF-L-80-16-S8PN16-H1EP80-V3-V3PFA-T1	X
8065643	VZAF-L-100-16-S8PN16-H1EP80-V3-V3PFA-T1	X
8065644	VZAF-L-125-16-S8PN16-H1EP80-V3-V3PFA-T1	X
8065645	VZAF-L-150-16-S8PN16-H1EP80-V3-V3PFA-T1	X
8065646	VZAF-L-200-10-S8PN16-H1EP80-V3-V3PFA-T1	X
8065647	VZAF-L-250-10-S8PN16-H1EP80-V3-V3PFA-T1	X
8065648	VZAF-L-300-10-S8PN16-H1EP80-V3-V3PFA-T1	X
8065649	VZAF-L-50-16-S9-H1EP80-V3-V3PFA-T1	X
8065650	VZAF-L-65-16-S9-H1EP80-V3-V3PFA-T1	X
8065651	VZAF-L-80-16-S9-H1EP80-V3-V3PFA-T1	X
8065652	VZAF-L-100-16-S9-H1EP80-V3-V3PFA-T1	X
8065653	VZAF-L-125-16-S9-H1EP80-V3-V3PFA-T1	X
8065654	VZAF-L-150-16-S9-H1EP80-V3-V3PFA-T1	X
8065655	VZAF-L-200-10-S9-H1EP80-V3-V3PFA-T1	X
8065656	VZAF-L-250-10-S9-H1EP80-V3-V3PFA-T1	X
8065657	VZAF-L-300-10-S9-H1EP80-V3-V3PFA-T1	X

## Butterfly Valves VZAF

## Accessories

Handlever			
	Nominal diameter [DN]	Part number	Type
	32 / 40 / 50 / 65 / 80	8222654	VAOH-F11-F05-11-210-H9- RA10-AL
	100 / 125	8222656	VAOH-F11-F07-14-340-H9- RA10-AL
	150	8222657	VAOH-F11-F07-17-340-H9- RA10-AL

Für dieses Produkt ist Festo Händler, nicht Hersteller

## Referencelist

	Festo Type Code	InterApp Type Code
Model	VZAF	Bianca
Connection Type	C, L, U,	B1, B3, B4,
Size	DN32 – DN900	DN32 – DN900
Liner	T*	T*
	U*	T*V
	T*A	T*A
	U*A	T*VA

→ Internet: <https://www.interapp.net/en-at/butterfly-valves/metal-butterfly-valves/bianca>