

Butterfly Valve VZAV

FESTO



Butterfly Valve VZAV

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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.

Technically superb, numerous variants

The manufacturer's expertise and many years of experience can be seen. Their primary features are high quality and a wide range variant 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

For standard applications with neutral or mildly aggressive liquids and gases: VZAV

The basic model of the balanced butterfly valve for shut-off and control comes in a wide variety of materials, so it can be used in most industrial applications, as well as in building services engineering and water treatment.

Typical areas of application are neutral or mildly aggressive liquids and gases, water treatment and water supply.

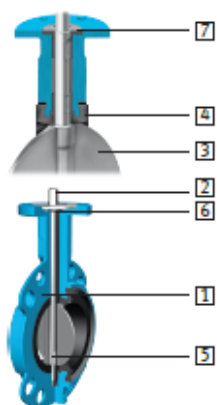


- Mining
- Paper and pulp industry
- Variants free of PWIS substances, e.g. for the automotive industry
- Free of grease, e.g. for oxygen or ultrapure water applications
- Shipbuilding
- Pneumatic transport of powders and granulates

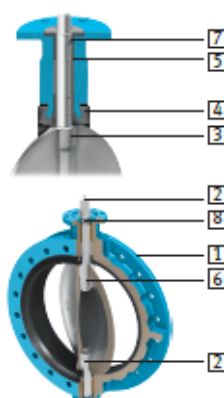
Advantages at a glance

- Suitable for most shut-off applications
- Large variety of materials and coatings for disc and liner
- Highly resistant to corrosion due to excellent body coating
- One-piece shaft (\leq DN400): corrosion-proof because there is no pinned
- shaft-disc connection
- Reliable blowout protection
- Ultralene CoatingTM for outstanding resistance to wear, shock resistance, high chemical resistance, and non-stick properties
- Replaceable liner for long life
- Modular actuation system

Design



- 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)



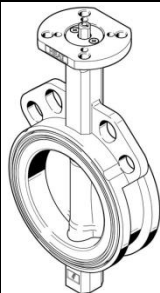
- 1 Body
- 2 Two-piece shaft with Visual position indication
- 3 Disc
- 4 Liner
- 5 Shaft bearing
- 6 Square disc drive
- 7 External shaft sealing with O-ring
- 8 Retaining washer (blow-out protection)

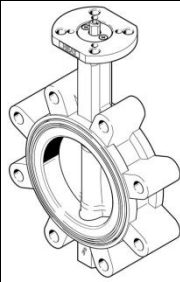
Features

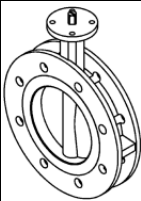
Body types	Wafer DN 25-1000 Lug DN 25-600 U shape DN 150-1600
Installation length	ISO 5752/20, EN 558-1/20
Mounting flange	EN ISO 5211
Max. operating pressure	16 bar with selected materials
Ratings	PN6, 10 and 16 / ANSI class 150 / additional ratings on request
Temperature range	-60°C ... 210°C, depending on material
Materials	EN-GJL-400-15 Disc: ductile cast iron, stainless steel, and special materials

	Liner: EPDM, NBR, FPM and further available on request
Leakage rate	EN 12266-1/P12 rate A, test medium water
Safety features	The butterfly valves VZAV meet the safety requirements of the Pressure Equipment Directive 2014/68/EC (PED) Annex 1 for fluids of groups 1 and 2.
SIL	The butterfly valves VZAV are suitable for use in safety systems according to IEC 61508/61511, safety integrity level SIL 2.

Connection types


Wafer Type			
	Type	Nominal diameter [mm]	Rating standard
	VZAV-C	DN32 ... DN300	PN6 covered by PN16
		DN350 ... DN1000	PN6
		DN25 ... DN400	PN10 covered by PN16
		DN450 ... DN1000	PN10
		DN25 ... DN1000	PN16
		DN32 ... DN400	ANSI cl. 150 covered by PN16
		DN450 ... DN1000	ANSI cl. 150
		DN25 ... DN600	JIS B2220 und AS2129 covered by multiple standards and pressure rates
		DN100 ... DN400	AWWA C207 Class D covered by PN16
		DN450 ... DN600	AWWA C207 Class D covered by ANSI cl. 150

Lug Type			
	Type	Nominal diameter [mm]	Rating standard
	VZAV-L	DN32 ... DN600	PN6 covered by PN16
		DN400 ... DN600	PN6
		DN25 ... DN150	PN10 covered by PN16
		DN200 ... DN600	PN10
		DN25 ... DN600	PN16
		DN32 ... DN600	ANSI cl. 150
		DN50 ... DN600	JIS B2220 5K, 10K 16K
		DN50 ... DN600	AS2129 Table D und Table E
		DN100 ... DN600	AWWA C207 Class D covered by ANSI cl. 150

U Shape Type			
	Type	Nominal diameter [mm]	Rating standard
	VZAV-U	DN150 ... DN1400	PN6
		DN150	PN10 covered by PN16
		DN200 ... DN1600	PN10
		DN200 ... DN1600	PN16

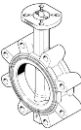
Butterfly Valve VZAV

Possible Flange connection

Wafer (C)	EN 1092-1 / -2				ASME B16.5/B16.47	JIS B 2220			AS 2129			
	PN6	PN10	PN16	PN25	Series A cl. 150 Series A	5K	10K	16K	Table D	Table E		
	DN 25	S8PN6	S8PN16	S8PN16	S8PN16	S9	S8PN6	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16
	DN 32	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16
	DN 40	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16
	DN 50	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S165K	S8PN16	S1616K	S8PN16	S8PN16	S8PN16
	DN 65 ¹⁾	S8PN6	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S1616K	S17TE	S17TE	S17TE
	DN 80	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S1610K	S1616K	S17TE	S17TE	S17TE
	DN 100	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S165K	S1610K	S8PN16	S8PN16	S8PN16	S8PN16
	DN 125	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16
	DN 150	S8PN6	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S1616K	S8PN16	S8PN16	S8PN16
	DN 200	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S165K	S1610K	S8PN16	S8PN16	S8PN16	S8PN16
	DN 250	S8PN6	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S1616K	S17TD	S8PN16	S8PN16
	DN 300	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S1610K	S8PN16	S8PN16	S8PN16	S8PN16
	DN 350	S8PN16	S8PN16	S8PN16	S8PN16	S8PN16	S165K	S1610K	S8PN16	S8PN16	S8PN16	S8PN16
	DN 400	S8PN6	S8PN16	S8PN16	S8PN16	S8PN16	S165K	S8PN16	S8PN16	S17TE	S17TE	S17TE
	DN 450	S8PN6	S8PN10	S8PN16		S9	S165K	S8PN10	S1616K	S17TD	S17TE	S17TE
DN 500	S8PN6	S8PN10	S8PN16		S9	S165K	S8PN10	S1616K	S17TE	S17TE	S17TE	
DN 600	S8PN6	S8PN10	S8PN16		S9	S165K			S17TD	S17TE	S17TE	
DN 700	S8PN6	S8PN10	S8PN16		S9	S165K	S1610K		S17TD	S17TE	S17TE	
DN 800	S8PN6	S8PN10	S8PN16		S9	S165K	S1610K		S17TE	S17TE	S17TE	
DN 900	S8PN6	S8PN10	S8PN16		S9	S165K	S8PN10		S17TE	S17TE	S17TE	
DN 1000	S8PN6	S8PN10	S8PN16		S9	S165K	S1610K		S17TD	S17TE	S17TE	


¹⁾ DN65 PN10/16 with 4 screws according EN 1092-2

* For 2A bodies please consult the technical document "Possible_flange_connections_Desponia_Plus_Index"

LUG (L)	EN 1092-1 / -2				ASME B16.5/B16.47	JIS B 2220			AS 2129		
	Metric threads				Series A UNC Threads	Metric threads			Metric threads		
	PN6	PN10	PN16	PN25	cl. 150 Series A	5K	10K	16K	Table D	Table E	
	DN 25	S8PN6	S8PN16	S8PN16	S8PN16	S9	S165K	S1616K	S1616K	S17TE	S17TE
	DN 32	S8PN6	S8PN16	S8PN16	S8PN16	S9	S8PN6	S8PN16	S8PN16	S17TE	S17TE
	DN 40	S8PN6	S8PN16	S8PN16	S8PN16	S9	S165K	S1616K	S1616K	S17TE	S17TE
	DN 50	S8PN6	S8PN16	S8PN16	S8PN16	S9	S165K	S1610K		S17TE	S17TE
	DN 65 ¹⁾	S8PN6	S8PN16	S8PN16		S9	S8PN6	S1610K	S1616K	S17TE	S17TE
	DN 80	S8PN6	S8PN16	S8PN16	S8PN16	S9	S165K	S1610K	S1616K	S17TE	S17TE
	DN 100		S8PN16	S8PN16		S9	S165K	S1610K	S1616K	S17TD	S17TE
	DN 125	S8PN6	S8PN16	S8PN16		S9	S165K	S1610K	S1616K	S17TE	S17TE
	DN 150	S8PN6	S8PN16	S8PN16		S9	S165K	S1610K		S17TD	S17TE
	DN 200	S8PN6	S8PN10	S8PN16		S9	S165K	S1610K	S1616K	S17TD	S17TE
	DN 250	S8PN6	S8PN10	S8PN16		S9	S165K	S1610K		S17TD	S17TE
	DN 300	S8PN6	S8PN10	S8PN16		S9	S165K			S17TD	S17TE
	DN 350	S8PN6	S8PN10	S8PN16		S9	S165K	S1610K	S1616K	S17TE	S17TE
	DN 400	S8PN6	S8PN10	S8PN16		S9	S165K	S1610K	S1616K	S17TE	S17TE
	DN 450	S8PN6	S8PN10	S8PN16		S9	S165K	S8PN10	S1616K	S17TD	S17TE
DN 500	S8PN6	S8PN10	S8PN16		S9	S165K	S8PN10	S1616K	S17TE	S17TE	
DN 600	S8PN6	S8PN10	S8PN16		S9	S165K			S17TD	S17TE	

¹⁾ DN65 PN10/16 with 4 screws according EN 1092-2

* For 2A bodies please consult the technical document "Possible_flange_connections_Desponia_Plus_Index"

U Shape (D4)	EN 1092-1 / -2				ASME B16.5/B16.47	JIS B 2220			AS 2129	
	PN6	PN10	PN16		Series A cl. 150 Series A	5K	10K	16K	Table D	Table E
	DN 150	S8PN6	S8PN16	S8PN16	S9	S165K	S1610K		S17TD	S17TE
	DN 200	S8PN6	S8PN10	S8PN16	S9	S165K	S1610K	S1616K	S17TD	S17TE
	DN 250	S8PN6	S8PN10	S8PN16	S9	S165K	S1610K		S17TD	S17TE
	DN 300	S8PN6	S8PN10	S8PN16	S9	S165K	S1610K	S1616K	S17TD	S17TE
	DN 350	S8PN6	S8PN10	S8PN16	S9	S165K	S1610K	S1616K	S17TE	S17TE
	DN 400	S8PN6	S8PN10	S8PN16	S9	S165K	S1610K	S1616K	S17TE	S17TE
	DN 450	S8PN6	S8PN10	S8PN16	S9	S165K	S1610K		S17TD	S17TE
	DN 500	S8PN6	S8PN10	S8PN16	S9	S165K	S8PN10	S1616K	S17TE	S17TE
	DN 600	S8PN6	S8PN10	S8PN16	S9	S165K	S1610K	S1616K	S17TD	S17TE
	DN 700	S8PN6	S8PN10	S8PN16	S9	S165K	S1610K		S17TD	S17TE
	DN 750				S9	S165K	S1610K		S17TD	S17TE
	DN 800	S8PN6	S8PN10	S8PN16	S9	S165K	S1610K		S17TE	S17TE
	DN 900	S8PN6	S8PN10	S8PN16	S9	S165K	S8PN10		S17TE	S17TE
	DN 1000	S8PN6	S8PN10	S8PN16	S9	S165K	S1610K		S17TD	S17TE
	DN 1100		S8PN10	S8PN16	S9	S165K	S1610K			
DN 1200	S8PN6	S8PN10	S8PN16	S9	S165K	S8PN10		S17TD	S17TE	
DN 1400	S8PN6	S8PN10	S8PN16	S9				S17TD		
DN 1600		S8PN10	S8PN16					S17TD		

Standard ASME B16.1 cl. 125 meets ASME B16.5 cl. 150 for drillings

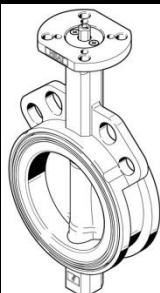
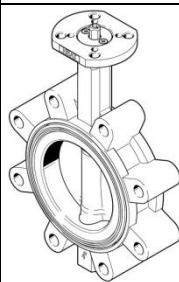
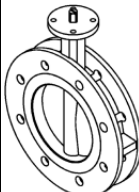
	Direct connection possible
	Connection possible, special machining, longer delivery time and extra-charge
	Connection possible by removing centering ears, longer delivery time and extra-charge
	Connection not possible
	No standard available

Ordercode: VZAV-x-xx-xx-SXXX-...

S8PN6 =	PN6	S17TD/TE =	AS 2129 table
S8PN10 =	PN10	S165K =	JIS B2220 5K
S8PN16 =	PN16	S1610K =	JIS B2220 10K
S9 =	ANSI 150	S1616K =	JIS B2220 16K
		S18 =	AWWA C.207 C

Order information for VZAV

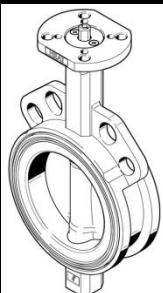
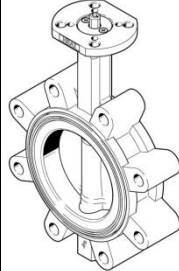
Individual selection by modular system, tailored for specific customer needs scale of over 750.000 varieties.
The configuration will occur by part number.

	Type	Part Number Modular system	Nominal diameter [mm]	Varieties
	Wafer type VZAV-C	8062128	DN25 ... DN1000	All available <ul style="list-style-type: none"> • Liner • Pressure rates • Surfaces Detailed information: → page 9
	Lug type VZAV-L		DN25 ... DN600	
	U shape type VZAV-U		DN150 ... DN1600	

Butterfly Valve VZAV

Order information for Wafer and Lug

We have listed about 230 Top Seller of VZAV with distinguished part number – ready to order.
For more information consider the corresponding pages.

	Type	Nominal diameter [mm]	Varieties
	Wafer type VZAV-C	DN25 ... DN300 (EPDM HT ...DN600)	<ul style="list-style-type: none"> • ISO • Ductile cast iron / epoxy coated • Working pressure: 10bar / 16bar • Liner: EPDM / EPDM KTW / EPDM HT / SBRA /NBR <p>Detailed information: → page 20</p>
	Lug type VZAV-L	DN25 ... DN300	<ul style="list-style-type: none"> • ISO • Ductile cast iron / epoxy coated • Working pressure: 10bar / 16bar • Liner: EPDM / NBR <p>Detailed information: → page 25</p>

Order Code VZAV

001	002	003	004	005	006	007	008	009	010	011	012	013	014	015
VZAV	-	-	-	-	-	-	-	-	-	-	-	-	-	-

001	Type
VZAV	Butterfly Valve

002	Feature
ML	Manual lever

003	Design
C	Ring housing with centring holes (Wafer)
L	Ring housing with threaded flange (Lug)
U	U shape housing

004	Nominal Diameter DN
25	25 mm
...	...
1600	1600 mm

005	Nominal pressure
2,5	2.5 bar
6	6 bar
10	10 bar
16	16 bar

006	Connection standard
S8	DIN EN 1092-1
S9	ANSI Class 150
S16	JIS B2220
S17	AS 2129
S18	AWWAC207

007	Nominal pressure connection standard
PN6	PN6
PN10	PN10
PN16	PN16
5K	5K
10K	10K
16K	16K
Tabelle D	TD
Tabelle E	TE
Class D	CD
	Standard and only with [S9] ANSI Class 150

008	Housing material
H1	Ductile cast iron; EN-GJS-400-15

009	Suface finish housing
PU70	Polyurethan coated 70 µ
EP200	Epoxy coated 200 µ
PU250	Polyurethan coated 250 µ

010	Shaft material
V5	Stainless Steel 1.4021
V7	Stainless Steel 1.4542

011	Shut-off element material
H1	Ductile cast iron, EN-GJS-400-15
H5	Cast steel, GS-C25 1.6019
H6	Cast steel, GS-52 1.0552
H7	Cast steel, ASTM A494 CW-12MW
H8	Aluminium bronze ASTM B14
V3	Stainless steel 1.4408
V9	Stainless steel 1.4588

012	Surface finish shut-off element
-	none
CR	Chrome coated
PL	Polished
PE3	Polyethelene coated 3mm
PU70	Polyurethane coated 70 µ
HL600	Halar coated 600 µ
PA250	Polyamide coated 250 µ

013	Liner
E	EPDM
E3	EPDM KTW
E4	EPDM HT
E5	EPDM for abrasive media
E6	EPDM white (EC 1935/2004 & FDA)
E7	Epiclorhydrin rubber (ECO)
E8	EPDM, blue (EC 1935/2004 & FDA)
E9	EPDM for high temperature
FC	Flucast FX
N	NBR
N1	NBR-hydrogenated (Biogas)
N2	NBR Gas (EN 682)
N5	NBR for abrasive media
NR	NBR, white (EC 1935/2004 & FDA)
S	Silicone
S1	Silicone, transparent (FDA)
SBRA	SBR for abrasive media
V	FPM
V1	FPM GF for oxygen-rich fuel

014	PWIS-content
-	None
C	PWIS-free

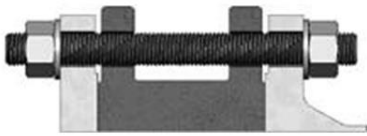
015	Usage in potentially explosive areas
-	None
135	Zone 1 (o) IIB / T6...T3 Zone 21 (o) IIIC / 85...200°C
112	Zone 1 (o) IIC / T6...T3 Zone 21 (o) IIIC / 85...200°C
278	Zone 0 (i), 1 (o) IIB / T6...T3 Zone 20 (i), 21 (o) IIIC / 85...200°C
246	Zone 0 (i), 1 (o) IIC / T6...T3 Zone 20 (i), 21 (o) IIIC / 85...200°C

Butterfly Valve VZAV

Technical Data

Process valve function	
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
Mounting position	... < DN400 any direction / > DN400 horizontal
Based on connection standard	EN 1092-1 / ANSI cl. 150 / AS 2129 / AWWAC207 / SANS 1123

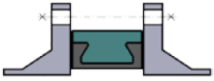

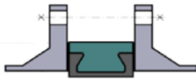
Mounting instructions at the end of a pipe

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	DN25-DN200 Wafer DN250-DN600 Lug DN700-DN1400 U-Shape	
	No water hammer!	

Operating and environmental conditions

Nominal pressure	DIN EN 1333	PN6; PN 10; PN16
	ASME B16.5	ANSI class 150
	JIS B2220	5K; 10K; 16K
	AS2129	Table D; Table E
	AWWAC207	Class D
Temperature of media	-60°C ... 210°C / -76F ... 410F	Depending on: sealing material, disc material and working conditions
Vacuum [mbarA]	200 (higher vacuum on request)	
Conditions:	Max. nominal diameter	DN300 (bigger sizes on request)
	Liner	EPDM / NBR
	Media	neutral media, max. 80°C
	Installation	please consider table for mounting flanges

Flange diameter – assembly notes

Nominal diameter [mm]	Inner diameter [mm]		
	D min ¹	D opt ²	D max ³
			
32	19	34	47
40	32	42	57
50	35	53	68
65	53	68	87
80	74	83	104
100	93	103	126
125	119	128	154
150	147	153	174
200	198	202	226
250	247	253	277
300	297	303	328
350	340	345	370
400	384	395	421
450	325	453	462
500	490	505	514
600	585	605	617
700	680	696	715
800	790	810	817
900	880	900	918
1000	980	997	1019
1200	1175	1195	1225
1400	1348	1387	1430
1600	1560	1602	1640

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

3) Maximum diameter of the flange

Butterfly Valve VZAV

Liner Material

Code	Name DIN	Material	Field of application	Temperature range
E	EPDM	Ethylene-Propylene Terpolymer	Weak mineral acids and basis, air, water, ketones, and ester	-20°C ... 95°C
E3	EPDM KTW	Ethylene-Propylene Terpolymer	With drinking water approval ACS, DVGW, WRAS, NSF-61 and EN681-1 With NSF-61 approval when used in combination with H1PA250 disc (Up to DN700 size) or with V3 disc (for all sizes available)	-20°C 95°C
E4	EPDM-HT	Ethylene-Propylene Terpolymer	Weak mineral acids and basis, air, water, ketones, and ester	-20°C ... 130°C
E5	EPDM (HT)	Ethylene-Propylene Terpolymer/EPDM based	Specially designed for the resistance to water solutions with suspensions solids. Is adequate to support weak mineral acids, weak mineral bases, alcohols, ketones, and esters.	-5°C ... 130°C
E6	EPDM white	Ethylene-Propylene Terpolymer	Weak minerals acids and basis, air, water, ketones, and esters, especially for food applications	-20°C ... 95°C
E7	ECO	Epichloridrine ethylene oxide copolymer	Resistance to brine and moderate to oil, fuel	-40°C ... 90°C
E8	EPDM blue	Ethylene-Propylene Terpolymer	Weak mineral acids and basis, air, water, ketones, and esters, especially for food applications, EC 1935/2004 and FDA	0°C ... 95°C
E9	EPDM high temperature	Ethylene-Propylene Terpolymer/EPDM based	For general industrial applications, heating and low pressure steam applications up to 150°C	0°C ... 150°C
FC	Flucast FX	FPM based	Abrasive applications such as acids and concentrated bases at high temperatures, a good behavior with water steam (up to 160 °C) and an excellent resistance to abrasion at high temperatures (> 130 °C). It presents twice the abrasion resistance of standard FPM	0°C ... 200°C
N	NBR	Acrylonitrile – butadiene copolymer	Oils, greases, fuel, gas oil, CO2, CO, H2	-10°C ... 100°C
NR	NBR white		Special for food applications	-10°C ... 100°C
N1	NBR-H		Raw biogas, CO2, CO, H2S	-10°C ... 100°C
N2	NBR		natural gas with DVGW gas approval DIN EN 682	-10°C ... 100°C
N5	NBR	NBR based	Especially designed to resist to the highest abrasive products, still providing an excellent resistance to oils and greases. This material is the alternative where Carboxylic Nitrile was used or Flucast® AB/P, it is recommended for the most aggressive products	-10°C ... 100°C
S	MVQ	Poly (methyl vinyl) siloxane	Highest and lowest temperature resistance	-55°C ... 200°C
SBRA	SBR	SBR based	Especially designed for the resistance to chemically inert powdered products, such as: flours, cements, plasters, concrete mortars, powdered sugar, etc. This material is the alternative where natural rubber was used	-10°C ... 70°C
S1	MVQ transparent	Poly (methyl vinyl) siloxane	Especially for food applications	-55°C ... 200°C
V	FPM	Hexafluoropropylene vinylidene fluoride copolymer	Very good resistance to high temperature, light, weathering, hydraulic liquids, hydrocarbons, benzene solvent, acids, bases, oxygen	-15°C ... 210°C
V1	FPM	HFP-VDF-TFE-CSM Tetra polymer	Specially designed for oxygenated gasolines	-15°C ... 210°C

Actuating Torques

Standard conditions

Liquids between 20°C ... 80°C. For other media the actuating torque could change. Please see below safety factor or contact your responsible sales partner.

Safety factor

The specification of a safety factor is recommended when configuring a quarter turn actuator because this increases the available torque reserve.

- Pipeline medium liquid 1.35
- Pipeline medium sticky/viscous 1.75
- Pipeline medium gaseous 1.5

These values are reference values and must be reviewed according to the application.

Nominal Diameter [mm]	Torque [Nm] with disc for max. nominal pressure of:			
	2,5 bar	6 bar	10 bar	16 bar
DN25				17
DN32				17
DN40				17
DN50				30
DN65				33
DN80			39	51
DN100			56	65
DN125			68	113
DN150			90	122
DN200			150	218
DN250	126 (extended delivery time)		197	263
DN300	204 (extended delivery time)		332	392
DN350	273	375	593	720
DN400	582	794	882	1103
DN450	878	1229	1470	1818
DN500	1053	1370	1478	2024
DN600	1944	2306	2770	4050
DN700	2106	2970	3861	4590
DN750	2430	3494	4320	5400
DN800	2633	3510	4533	5893
DN900	3443	4388	5603	7020
DN1000	4388	5535	7020	8505
DN1100	5670	7088	8775	10395
DN1200	7425	8910	10530	12690
DN1400	9315	13500	20536	
DN1600	12420	17955	33210	

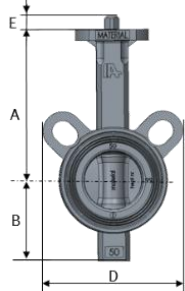
Butterfly Valve VZAV

KV-Values

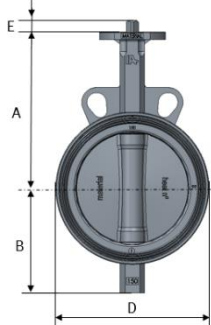
Nominal diameter [mm]	KV-Values [m ³ /h] depending on the opening angle of the valve							
	20°	30°	40°	50°	60°	70°	80°	90°
DN25 / DN32		1,5	5	10	15	26	34	40
DN40		2,7	8,5	16	25	37	46	50
DN50	2	7	15	28	45	68	88	100
DN65	3	11	24	48	85	138	180	210
DN80	8	22	50	83	134	230	312	360
DN100	15	35	70	130	225	410	585	650
DN125	28	70	135	230	360	600	920	1050
DN150	33	95	205	320	580	980	1410	1620
DN200	60	175	355	580	910	1600	2450	2800
DN250	132	340	590	940	1480	2550	3950	4480
DN300	200	505	890	1450	2100	3800	5960	6800
DN350	280	680	1200	2050	3150	5050	8100	9200
DN400	365	860	1500	2490	3980	6600	10200	11700
DN450	465	1080	1900	3150	5050	8700	13300	15200
DN500	580	1200	2300	3740	6150	11000	16800	18900
DN600	820	1600	2780	5200	8940	14500	23500	26800
DN700	890	2050	3450	6050	11050	18800	31500	37100
DN750	1150	2250	4350	7700	12500	20700	34800	42750
DN800	1300	2550	4950	8750	14200	23500	39500	48500
DN900	1650	3300	6400	11800	19400	31500	52500	61300
DN1000	2150	4250	8200	15100	23500	39400	65500	80500
DN1100	2950	5950	10100	16400	28200	46100	81500	98500
DN1200	4000	7500	12500	19800	34000	55400	98300	119200
DN1400	5200	10120	18200	32500	51500	89500	142000	162000
DN1600	7100	14210	26050	45000	71200	118500	196200	228500

Dimension Wafer Type

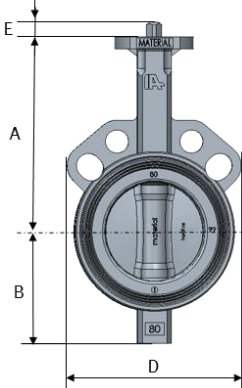
DN25 ... DN50



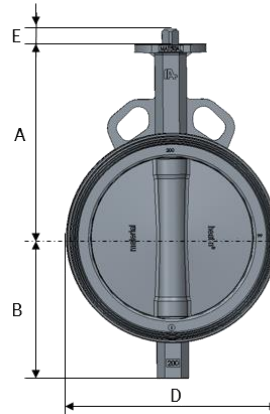
DN65 ... DN100



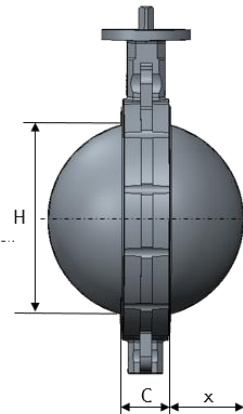
DN125 ... DN150



DN200 ... DN400



DN25 ... DN1000

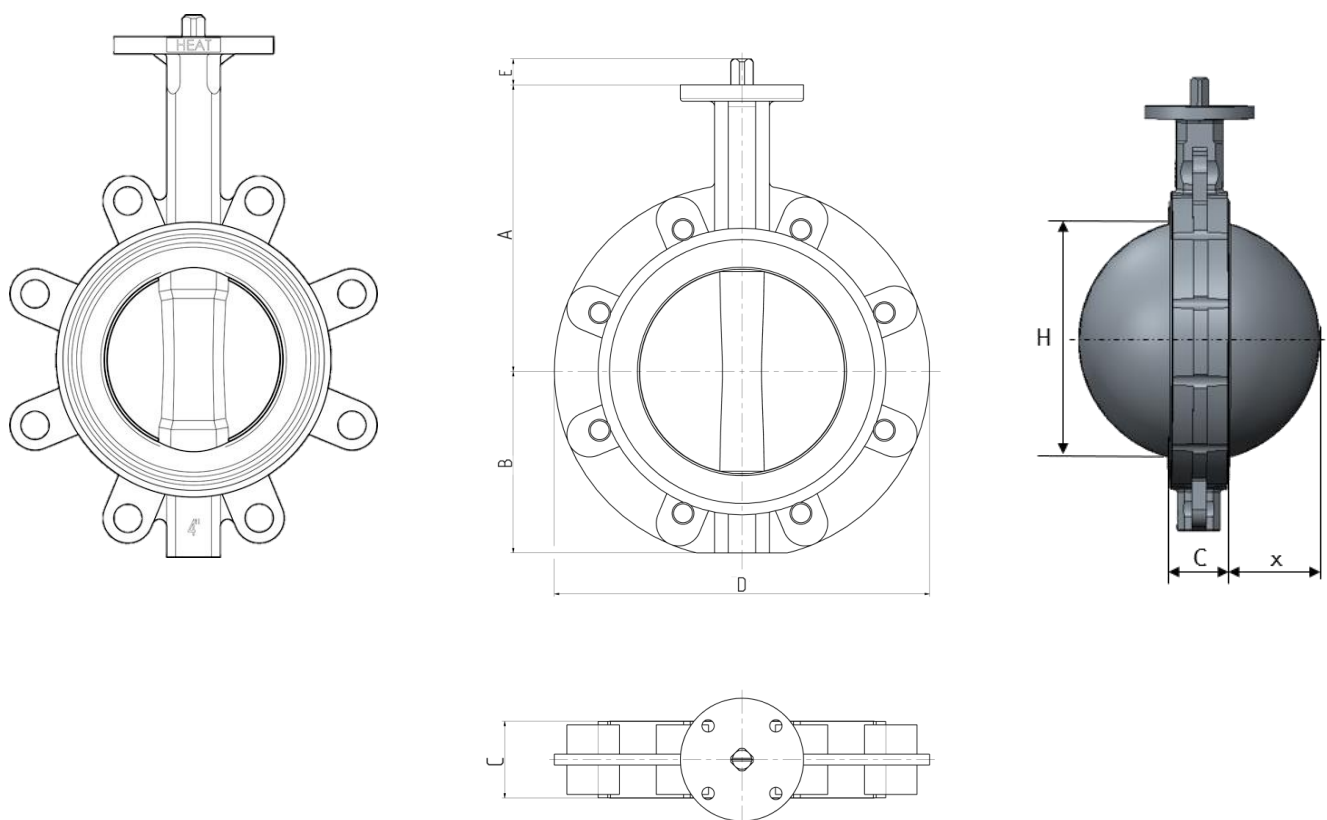


Nominal diameter [DN]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm] ±0,5	H ¹ [mm]	X ¹ [mm]	weight [kg]
25	110	51	30	101	12	19	3	1,0
32	110	51	30	101	12	19	3	1,0
40	130	55	33	108	12	28	6	1,3
50	135	72	43	123	12	32	6	1,8
65	150	82	46	138	12	50	11	2,3
80	160	92	46	143	12	69	19	2,3
100	180	110	52	161	12	88	26	3,9
125	195	128	56	181	16	115	36	5,0
150	210	141	56	205	16	141	48	5,9
200	240	174	60	260	19	194	72	9,3
250	279	201	68	310	24	240	91	17,0
300	315	234	78	362	24	290	112	23,7
350	330	268	80	425	22	330	130	41,5
400	365	299	102	475	27	377	145	57,2
450	397	355	113	538	36	425	164	95
500	437	393	126	595	36	474	182	125
600	522	464	153	695	46	569	218	180
700	565	503	168	800	80	660	257	280
800	627	577	190	908	80	774	304	387
900	696	643	204	1015	100	855	337	502
1000	745	693	218	1133	100	960	383	710

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

Butterfly Valve VZAV

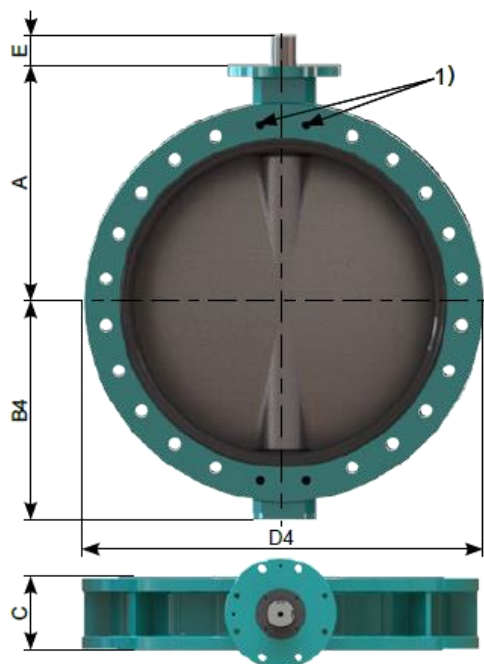
Dimension Lug Type



Nominal diameter [DN]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm] ±0,5	H ¹ [mm]	x ¹ [mm]	weight [kg]
25	110	51	30	101	12	19	3	1,4
32	110	51	30	101	12	19	3	1,4
40	130	54	33	108	12	28	6	2
50	135	72	43	116	12	32	6	3,2
65	150	82	46	131	12	50	11	4
80	160	88	46	188	12	69	19	6,1
100	180	102	52	219	12	88	26	8,5
125	195	116	56	248	16	115	36	10
150	210	128	56	274	16	141	48	11
200	240	161	60	332	19	194	72	19,6
250	279	199	68	402	24	240	91	28,7
300	315	234	78	472	24	290	112	41,2
350	330	258	80	520	27	330	130	55
400	365	290	102	584	27	377	145	75
450	397	355	113	655	36	425	164	150
500	437	393	126	712	36	474	182	170
600	522	464	153	829	46	569	218	240

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

Dimension U Shape



Nominal diameter [DN]	A [mm]	B [mm]	C [mm]	D [mm]	E [mm] ±0,5	H ¹ [mm]	x ¹ [mm]	weight [kg]
150	210	143	56	285	141	48	16	15
200	240	170	60	340	194	72	19	19,5
250	279	200	68	406	240	91	24	30,5
300	315	239	78	482	290	112	24	44
350	330	265	80	533	330	130	22	59
400	365	296	102	597	377	145	27	82
450 ²	397	355	113	640	425	164	36	118
500 ²	437	393	126	715	474	182	36	175
600 ²	522	464	153	840	569	218	46	260
700 ²	565	503	168	927	660	257	80	345
750 ²	590	541	170	985	709	272	80	435
800 ²	627	577	190	1060	774	304	80	510
900 ²	696	643	204	1170	855	337	100	660
1000 ²	745	693	218	1255	960	383	100	790
1100 ²	820	738	218	1395	1054	429	100	850
1200 ²	881	806	254	1485	1149	462	120	1180
1400 ²	990	908	280	1746	1336	543	120	1700
1600 ²	1117	1048	318	1924	1553	634	155	2600

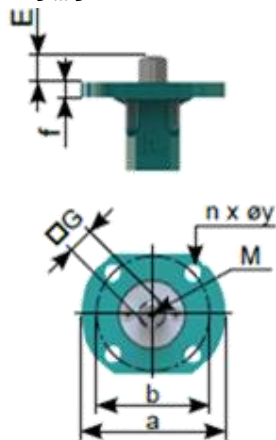
1) When using plastic stubs please check dimension H / x to avoid damaging of disc

2) DN 450- 1600, 2 x threads on neck and bottom

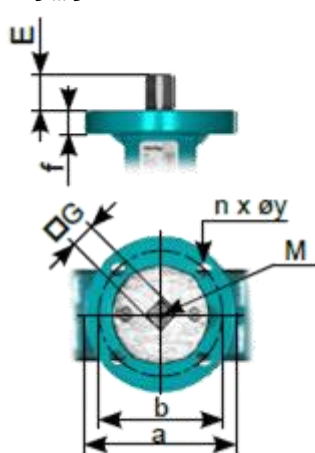
Butterfly Valve VZAV

Dimension ISO 5211 Flange

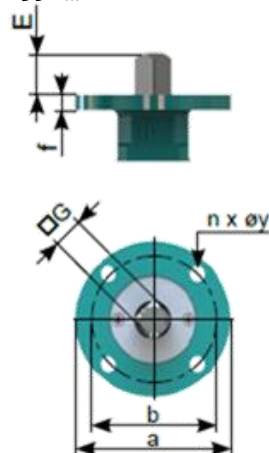
Wafer und Lug
DN25 ... 300



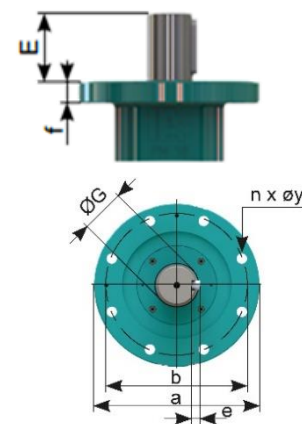
U Shape
DN25 ... 300



Wafer, Lug and U shape
DN350 ... 600



DN700 ... 1600



Nominal diameter [DN]	E [mm]	G ø [mm]	M [mm]	f [mm]	ISO	a [mm]	b [mm]	n x ø y	e [mm]
Wafer und Lug									
25-40	12	□8	M4	10	F05 ¹	65	50	4 x 7	-
50-80	12	□11	M6	10	F05	65	50	4 x 7	-
100	12	□11	M6	10/10	F05/F07	65/89	50/70	4x7/4x9,5	-
125	16	□14	M6	10/10	F05/F07	65/89	50/70	4x7/4x9,5	-
150	16	□14	M6	10	F07	89	70	4 x 9,5	-
200	19	□17	M6	10	F07	89	70	4 x 9,5	-
250-300	24	□22	²	18	F10/F12	150	102/125	4x11/4x13	-
U Shape									
150	16	□14	M6	12	F07	90	70	4x9	-
200	19	□17	M6	12	F07	90	70	4x9	-
250-300	24	□22	²	18	F10/F12	150	102/125	4x11/4x13	-
Wafer, LUG und U Shape									
350	27	□22	²	18	F12	155	125	4 x 13	-
400	27	□27	²	18	F12	155	125	4 x 13	-
450-500	36	□36	²	25	F14	175	140	4 x 18	-
600	46	□46	²	25	F16	220	165	4 x 22	-
700	80	Ø70	M16	25	F25	300	254	8 x 18	12
(750)	80	Ø70	M16	30	F25	300	254	8 x 18	12
800	80	Ø70	M16	30	F25	300	254	8 x 18	12
900	100	Ø80	M16	30	F30	350	298	8 x 22	14
1000	100	Ø80	M16	30	F30	350	298	8 x 22	14
(1100)	100	Ø80	M16	30	F30	350	298	8 x 22	14
1200	120	Ø100	M16	30	F30	350	298	8 x 22	16
1400	120	Ø120	M16	35	F30	350	298	8 x 22	18
1600	165	Ø130	M18	40	F35	418	356	8 x 33,5	18

1) F04 on request 2) no thread in the shaft

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) IIB / T6...T3 Zone 21 (o) IIIC / 85...200°C	135	All			EP200 PU250 ¹
Zone 1 (o) IIC / T6...T3 Zone 21 (o) IIIC / 85...200°C	112				PU70 ²
Zone 0 (i), 1 (o) IIB / T6...T3 Zone 20 (i), 21 (o) IIIC / 85...200°C	278	E E4 E6	H8 V3 V9	CR PL	EP200 PU250 ¹
Zone 0 (i), 1 (o) IIC / T6...T3 Zone 20 (i), 21 (o) IIIC / 85...200°C	246	N N1 N2 NR SBRA V V1			PU70 ²

1) The surface coating EP200 is available up to size DN 400. For sizes bigger than DN450 please select PU250

2) The PU70 surface coating is available from size DN450

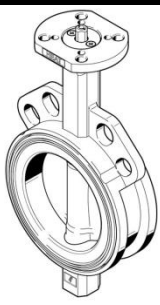
The classification of butterfly valve's temperature class is between T3 and T6 and the maximum surface temperature between T85 °C and T200 °C. Both are dependent on the temperature of the medium flowing through the pipe.

Butterfly Valve VZAV

Order information - Wafer Type – Liner EPDM (E)

Housing material: Ductile cast iron epoxy coated

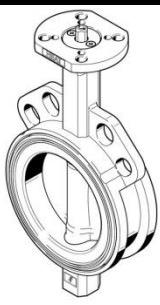
Liner Type EPDM

Design	Nominal pressure	Surface finish shut-off element	Nominal Diameter DN	Part number	Order Code
	16	Ductile iron polyamide coated	25	8061965	VZAV-C-25-16-S8PN16-H1EP200-V5-H1PA250-E
			32	8061966	VZAV-C-32-16-S8PN16-H1EP200-V5-H1PA250-E
			40	8061967	VZAV-C-40-16-S8PN16-H1EP200-V5-H1PA250-E
			50	8061968	VZAV-C-50-16-S8PN16-H1EP200-V5-H1PA250-E
			65	8061969	VZAV-C-65-16-S8PN16-H1EP200-V5-H1PA250-E
			80	8061970	VZAV-C-80-16-S8PN16-H1EP200-V5-H1PA250-E
			100	8061971	VZAV-C-100-16-S8PN16-H1EP200-V5-H1PA250-E
			125	8061972	VZAV-C-125-16-S8PN16-H1EP200-V5-H1PA250-E
			150	8061973	VZAV-C-150-16-S8PN16-H1EP200-V5-H1PA250-E
			200	8061974	VZAV-C-200-16-S8PN16-H1EP200-V5-H1PA250-E
			250	8061975	VZAV-C-250-16-S8PN16-H1EP200-V5-H1PA250-E
			300	8061976	VZAV-C-300-16-S8PN16-H1EP200-V5-H1PA250-E
	10	Ductile iron polyamide coated	80	8061951	VZAV-C-80-10-S8PN16-H1EP200-V5-H1PA250-E
			100	8061952	VZAV-C-100-10-S8PN16-H1EP200-V5-H1PA250-E
			125	8061953	VZAV-C-125-10-S8PN16-H1EP200-V5-H1PA250-E
			150	8061954	VZAV-C-150-10-S8PN16-H1EP200-V5-H1PA250-E
			200	8061955	VZAV-C-200-10-S8PN16-H1EP200-V5-H1PA250-E
			250	8061956	VZAV-C-250-10-S8PN16-H1EP200-V5-H1PA250-E
	16	Stainless steel 1.4408	25	8062003	VZAV-C-25-16-S8PN16-H1EP200-V5-V3-E
			32	8062004	VZAV-C-32-16-S8PN16-H1EP200-V5-V3-E
			40	8062005	VZAV-C-40-16-S8PN16-H1EP200-V5-V3-E
			50	8062006	VZAV-C-50-16-S8PN16-H1EP200-V5-V3-E
			65	8062007	VZAV-C-65-16-S8PN16-H1EP200-V5-V3-E
			80	8062008	VZAV-C-80-16-S8PN16-H1EP200-V5-V3-E
			100	8062009	VZAV-C-100-16-S8PN16-H1EP200-V5-V3-E
			125	8062010	VZAV-C-125-16-S8PN16-H1EP200-V5-V3-E
			150	8062011	VZAV-C-150-16-S8PN16-H1EP200-V5-V3-E
			200	8062012	VZAV-C-200-16-S8PN16-H1EP200-V5-V3-E
			250	8062013	VZAV-C-250-16-S8PN16-H1EP200-V5-V3-E
			300	8062014	VZAV-C-300-16-S8PN16-H1EP200-V5-V3-E
	10	Stainless steel 1.4408	80	8061989	VZAV-C-80-10-S8PN16-H1EP200-V5-V3-E
			100	8061990	VZAV-C-100-10-S8PN16-H1EP200-V5-V3-E
			125	8061991	VZAV-C-125-10-S8PN16-H1EP200-V5-V3-E
150			8061992	VZAV-C-150-10-S8PN16-H1EP200-V5-V3-E	
200			8061993	VZAV-C-200-10-S8PN16-H1EP200-V5-V3-E	
250			8061994	VZAV-C-250-10-S8PN16-H1EP200-V5-V3-E	
300	8061995	VZAV-C-300-10-S8PN16-H1EP200-V5-V3-E			

Order information – Wafer Type – Liner EPDM KTW (E3)

Housing material: Ductile cast iron epoxy coated

Liner Type EPDM KTW


Design	Nominal pressure	Surface finish shut-off element	Nominal Diameter DN	Part number	Order Code
	16	Ductile iron polyamide coated	25	8104430	VZAV-C-25-16-S8PN16-H1EP200-V5-H1PA250-E3
			32	8104431	VZAV-C-32-16-S8PN16-H1EP200-V5-H1PA250-E3
			40	8104432	VZAV-C-40-16-S8PN16-H1EP200-V5-H1PA250-E3
			50	8104433	VZAV-C-50-16-S8PN16-H1EP200-V5-H1PA250-E3
			65	8104434	VZAV-C-65-16-S8PN16-H1EP200-V5-H1PA250-E3
			80	8104435	VZAV-C-80-16-S8PN16-H1EP200-V5-H1PA250-E3
			100	8104436	VZAV-C-100-16-S8PN16-H1EP200-V5-H1PA250-E3
			125	8104437	VZAV-C-125-16-S8PN16-H1EP200-V5-H1PA250-E3
			150	8104438	VZAV-C-150-16-S8PN16-H1EP200-V5-H1PA250-E3
			200	8104439	VZAV-C-200-16-S8PN16-H1EP200-V5-H1PA250-E3
			250	8104440	VZAV-C-250-16-S8PN16-H1EP200-V5-H1PA250-E3
			300	8104441	VZAV-C-300-16-S8PN16-H1EP200-V5-H1PA250-E3
	10	Ductile iron polyamide coated	80	8104449	VZAV-C-80-10-S8PN16-H1EP200-V5-H1PA250-E3
			100	8104450	VZAV-C-100-10-S8PN16-H1EP200-V5-H1PA250-E3
			125	8104451	VZAV-C-125-10-S8PN16-H1EP200-V5-H1PA250-E3
			150	8104452	VZAV-C-150-10-S8PN16-H1EP200-V5-H1PA250-E3
			200	8104453	VZAV-C-200-10-S8PN16-H1EP200-V5-H1PA250-E3
			250	8104454	VZAV-C-250-10-S8PN16-H1EP200-V5-H1PA250-E3
	16	Stainless steel 1.4408	25	8104456	VZAV-C-25-16-S8PN16-H1EP200-V5-V3-E3
			32	8104457	VZAV-C-32-16-S8PN16-H1EP200-V5-V3-E3
			40	8104458	VZAV-C-40-16-S8PN16-H1EP200-V5-V3-E3
			50	8104459	VZAV-C-50-16-S8PN16-H1EP200-V5-V3-E3
			65	8104460	VZAV-C-65-16-S8PN16-H1EP200-V5-V3-E3
			80	8104461	VZAV-C-80-16-S8PN16-H1EP200-V5-V3-E3
			100	8104462	VZAV-C-100-16-S8PN16-H1EP200-V5-V3-E3
			125	8104463	VZAV-C-125-16-S8PN16-H1EP200-V5-V3-E3
			150	8104464	VZAV-C-150-16-S8PN16-H1EP200-V5-V3-E3
			200	8104465	VZAV-C-200-16-S8PN16-H1EP200-V5-V3-E3
			250	8104466	VZAV-C-250-16-S8PN16-H1EP200-V5-V3-E3
			300	8104467	VZAV-C-300-16-S8PN16-H1EP200-V5-V3-E3
	10	Stainless steel 1.4408	80	8104442	VZAV-C-80-10-S8PN16-H1EP200-V5-V3-E3
			100	8104443	VZAV-C-100-10-S8PN16-H1EP200-V5-V3-E3
			125	8104444	VZAV-C-125-10-S8PN16-H1EP200-V5-V3-E3
			150	8104445	VZAV-C-150-10-S8PN16-H1EP200-V5-V3-E3
			200	8104446	VZAV-C-200-10-S8PN16-H1EP200-V5-V3-E3
			250	8104447	VZAV-C-250-10-S8PN16-H1EP200-V5-V3-E3
			300	8104448	VZAV-C-300-10-S8PN16-H1EP200-V5-V3-E3

Butterfly Valve VZAV

Order information – Wafer Type – Liner EPDM HT (E4)

Housing material: Ductile cast iron epoxy coated

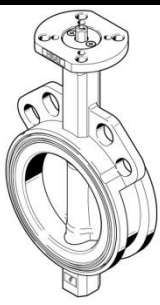
Liner Type EPDM HT

Design	Nominal pressure	Surface finish shut-off element	Nominal Diameter DN	Part number	Order Code
	16	Stainless steel 1.4408	32	8066877	VZAV-C-32-16-S8PN16-H1EP200-V5-V3-E4
			40	8066878	VZAV-C-40-16-S8PN16-H1EP200-V5-V3-E4
			50	8066879	VZAV-C-50-16-S8PN16-H1EP200-V5-V3-E4
			65	8066880	VZAV-C-65-16-S8PN16-H1EP200-V5-V3-E4
			80	8066881	VZAV-C-80-16-S8PN16-H1EP200-V5-V3-E4
			100	8066882	VZAV-C-100-16-S8PN16-H1EP200-V5-V3-E4
			125	8066883	VZAV-C-125-16-S8PN16-H1EP200-V5-V3-E4
			150	8066884	VZAV-C-150-16-S8PN16-H1EP200-V5-V3-E4
			200	8066885	VZAV-C-200-16-S8PN16-H1EP200-V5-V3-E4
			250	8066886	VZAV-C-250-16-S8PN16-H1EP200-V5-V3-E4
	300	8066887	VZAV-C-300-16-S8PN16-H1EP200-V5-V3-E4		
	10	Stainless steel 1.4408	80	610184	VZAV-C-80-10-S8PN16-H1EP200-V5-V3-E4
			100	610185	VZAV-C-100-10-S8PN16-H1EP200-V5-V3-E4
			125	610895	VZAV-C-125-10-S8PN16-H1EP200-V5-V3-E4
			150	610896	VZAV-C-150-10-S8PN16-H1EP200-V5-V3-E4
			200	610897	VZAV-C-200-10-S8PN16-H1EP200-V5-V3-E4
			250	610898	VZAV-C-250-10-S8PN16-H1EP200-V5-V3-E4
			300	610899	VZAV-C-300-10-S8PN16-H1EP200-V5-V3-E4
			350	610900	VZAV-C-350-10-S8PN16-H1EP200-V5-V3-E4
			400	610901	VZAV-C-400-10-S8PN16-H1EP200-V5-V3-E4
			450	610902	VZAV-C-450-10-S8PN16-H1PU70-V5-V3-E4
			500	610903	VZAV-C-500-10-S8PN16-H1PU70-V5-V3-E4
600			610904	VZAV-C-600-10-S8PN16-H1PU70-V5-V3-E4	

Order information – Wafer Type – Liner NBR (N)

Housing material: Ductile cast iron epoxy coated

Liner Type NBR

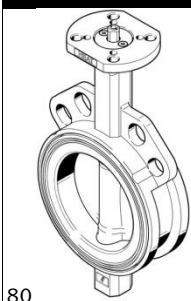
Design	Nominal pressure	Surface finish shut-off element	Nominal Diameter DN	Part number	Order Code
	16	Ductile iron polyamide coated	25	8061977	VZAV-C-25-16-S8PN16-H1EP200-V5-H1PA250-N
			32	8061978	VZAV-C-32-16-S8PN16-H1EP200-V5-H1PA250-N
			40	8061979	VZAV-C-40-16-S8PN16-H1EP200-V5-H1PA250-N
			50	8061980	VZAV-C-50-16-S8PN16-H1EP200-V5-H1PA250-N
			65	8061981	VZAV-C-65-16-S8PN16-H1EP200-V5-H1PA250-N
			80	8061982	VZAV-V-80-16-S8PN16-H1EP200-V5-H1PA250-N
			100	8061983	VZAV-C-100-16-S8PN16-H1EP200-V5-H1PA250-N
			125	8061984	VZAV-C-125-16-S8PN16-H1EP200-V5-H1PA250-N
			150	8061985	VZAV-C-150-16-S8PN16-H1EP200-V5-H1PA250-N
			200	8061986	VZAV-C-200-16-S8PN16-H1EP200-V5-H1PA250-N
			250	8061987	VZAV-C-250-16-S8PN16-H1EP200-V5-H1PA250-N
			300	8061988	VZAV-C-300-16-S8PN16-H1EP200-V5-H1PA250-N
	10	Ductile iron polyamide coated	80	8061958	VZAV-C-80-10-S8PN16-H1EP200-V5-H1PA250-N
			100	8061959	VZAV-C-100-10-S8PN16-H1EP200-V5-H1PA250-N
			125	8061960	VZAV-C-125-10-S8PN16-H1EP200-V5-H1PA250-N
			150	8061961	VZAV-C-150-10-S8PN16-H1EP200-V5-H1PA250-N
			200	8061962	VZAV-C-200-10-S8PN16-H1EP200-V5-H1PA250-N
			250	8061963	VZAV-C-250-10-S8PN16-H1EP200-V5-H1PA250-N
	16	Stainless steel 1.4408	25	8062015	VZAV-C-25-16-S8PN16-H1EP200-V5-V3-N
			32	8062016	VZAV-C-32-16-S8PN16-H1EP200-V5-V3-N
			40	8062017	VZAV-C-40-16-S8PN16-H1EP200-V5-V3-N
			50	8062018	VZAV-C-50-16-S8PN16-H1EP200-V5-V3-N
			65	8062019	VZAV-C-65-16-S8PN16-H1EP200-V5-V3-N
			80	8062020	VZAV-C-80-16-S8PN16-H1EP200-V5-V3-N
			100	8062021	VZAV-C-100-16-S8PN16-H1EP200-V5-V3-N
			125	8062022	VZAV-C-125-16-S8PN16-H1EP200-V5-V3-N
			150	8062023	VZAV-C-150-16-S8PN16-H1EP200-V5-V3-N
			200	8062024	VZAV-C-200-16-S8PN16-H1EP200-V5-V3-N
			250	8062025	VZAV-C-250-16-S8PN16-H1EP200-V5-V3-N
			300	8062026	VZAV-C-300-16-S8PN16-H1EP200-V5-V3-N
	10	Stainless steel 1.4408	80	8061996	VZAV-C-80-10-S8PN16-H1EP200-V5-V3-N
			100	8061997	VZAV-C-100-10-S8PN16-H1EP200-V5-V3-N
			125	8061998	VZAV-C-125-10-S8PN16-H1EP200-V5-V3-N
150			8061999	VZAV-C-150-10-S8PN16-H1EP200-V5-V3-N	
200			8062000	VZAV-C-200-10-S8PN16-H1EP200-V5-V3-N	
250			8062001	VZAV-C-250-10-S8PN16-H1EP200-V5-V3-N	
		300	8062002	VZAV-C-300-10-S8PN16-H1EP200-V5-V3-N	

Butterfly Valve VZAV

Order information – Wafer Type – Liner SBR (SBRA)

Housing material: Ductile cast iron epoxy coated

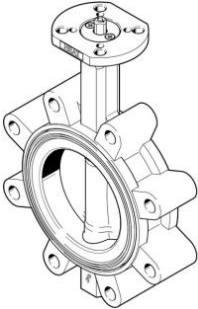
Liner Type SBR

Design	Nominal pressure	Surface finish shut-off element	Nominal Diameter DN	Part number	Order Code
 <p>80</p>	16	Stainless steel 1.4408	50	610884	VZAV-C-50-16-S8PN16-H1EP200-V5-V3-SBRA
			65	610885	VZAV-C-65-16-S8PN16-H1EP200-V5-V3-SBRA
			80	610886	VZAV-C-80-16-S8PN16-H1EP200-V5-V3-SBRA
			100	610887	VZAV-C-100-16-S8PN16-H1EP200-V5-V3-SBRA
			125	610888	VZAV-C-125-16-S8PN16-H1EP200-V5-V3-SBRA
			150	610889	VZAV-C-150-16-S8PN16-H1EP200-V5-V3-SBRA
			200	610890	VZAV-C-200-16-S8PN16-H1EP200-V5-V3-SBRA
			250	610891	VZAV-C-250-16-S8PN16-H1EP200-V5-V3-SBRA
			300	610892	VZAV-C-300-16-S8PN16-H1EP200-V5-V3-SBRA
	10	Stainless steel 1.4408	80	8167432	VZAV-C-80-10-S8PN16-H1EP200-V5-V3-SBRA
			100	8167433	VZAV-C-100-10-S8PN16-H1EP200-V5-V3-SBRA
			125	8167434	VZAV-C-125-10-S8PN16-H1EP200-V5-V3-SBRA
			150	8167435	VZAV-C-150-10-S8PN16-H1EP200-V5-V3-SBRA
			200	604060	VZAV-C-200-10-S8PN16-H1EP200-V5-V3-SBRA
			250	8167437	VZAV-C-250-10-S8PN16-H1EP200-V5-V3-SBRA
			300	8167438	VZAV-C-300-10-S8PN16-H1EP200-V5-V3-SBRA

Order information - Lug Type DIN EN 1092/1 – Liner EPDM (E)

Housing material: Ductile cast iron epoxy coated

Liner Type EPDM

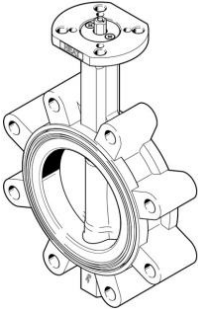
Design	Nominal pressure	Surface finish shut-off element	Nominal Diameter DN	Part number	Order Code
	16	Ductile iron polyamide coated	25	8062041	VZAV-L-25-16-S8PN16-H1EP200-V5-H1PA250-E
			32	8062042	VZAV-L-32-16-S8PN16-H1EP200-V5-H1PA250-E
			40	8062043	VZAV-L-40-16-S8PN16-H1EP200-V5-H1PA250-E
			50	8062044	VZAV-L-50-16-S8PN16-H1EP200-V5-H1PA250-E
			65	8062045	VZAV-L-65-16-S8PN16-H1EP200-V5-H1PA250-E
			80	8062046	VZAV-L-80-16-S8PN16-H1EP200-V5-H1PA250-E
			100	8062047	VZAV-L-100-16-S8PN16-H1EP200-V5-H1PA250-E
			125	8062048	VZAV-L-125-16-S8PN16-H1EP200-V5-H1PA250-E
			150	8062049	VZAV-L-150-16-S8PN16-H1EP200-V5-H1PA250-E
			200	8062050	VZAV-L-200-16-S8PN16-H1EP200-V5-H1PA250-E
			250	8062051	VZAV-L-250-16-S8PN16-H1EP200-V5-H1PA250-E
			300	8062052	VZAV-L-300-16-S8PN16-H1EP200-V5-H1PA250-E
	10	Ductile iron polyamide coated	80	8062027	VZAV-L-80-10-S8PN16-H1EP200-V5-H1PA250-E
			100	8062028	VZAV-L-100-10-S8PN16-H1EP200-V5-H1PA250-E
			125	8062029	VZAV-L-125-10-S8PN16-H1EP200-V5-H1PA250-E
			150	8062030	VZAV-L-150-10-S8PN16-H1EP200-V5-H1PA250-E
			200	8062031	VZAV-L-200-10-S8PN10-H1EP200-V5-H1PA250-E
			250	8062032	VZAV-L-250-10-S8PN10-H1EP200-V5-H1PA250-E
	16	Stainless steel 1.4408	25	8062079	VZAV-L-25-16-S8PN16-H1EP200-V5-V3-E
			32	8062080	VZAV-L-32-16-S8PN16-H1EP200-V5-V3-E
			40	8062081	VZAV-L-40-16-S8PN16-H1EP200-V5-V3-E
			50	8062082	VZAV-L-50-16-S8PN16-H1EP200-V5-V3-E
			65	8062083	VZAV-L-65-16-S8PN16-H1EP200-V5-V3-E
			80	8062084	VZAV-L-80-16-S8PN16-H1EP200-V5-V3-E
			100	8062085	VZAV-L-100-16-S8PN16-H1EP200-V5-V3-E
			125	8062086	VZAV-L-125-16-S8PN16-H1EP200-V5-V3-E
			150	8062087	VZAV-L-150-16-S8PN16-H1EP200-V5-V3-E
			200	8062088	VZAV-L-200-16-S8PN16-H1EP200-V5-V3-E
			250	8062089	VZAV-L-250-16-S8PN16-H1EP200-V5-V3-E
			300	8062090	VZAV-L-300-16-S8PN16-H1EP200-V5-V3-E
	10	Stainless steel 1.4408	80	8062065	VZAV-L-80-10-S8PN16-H1EP200-V5-V3-E
			100	8062066	VZAV-L-100-10-S8PN16-H1EP200-V5-V3-E
			125	8062067	VZAV-L-125-10-S8PN16-H1EP200-V5-V3-E
150			8062068	VZAV-L-150-10-S8PN16-H1EP200-V5-V3-E	
200			8062069	VZAV-L-200-10-S8PN10-H1EP200-V5-V3-E	
250			8062070	VZAV-L-250-10-S8PN10-H1EP200-V5-V3-E	
300	8062071	VZAV-L-300-10-S8PN10-H1EP200-V5-V3-E			

Butterfly Valve VZAV


Order information - Lug Type DIN EN 1092/1 – Liner NBR (N)

Housing material: Ductile cast iron epoxy coated

Liner Type NBR

Design	Nominal pressure	Surface finish shut-off element	Nominal Diameter DN	Part number	Order Code
	16	Ductile iron polyamide coated	25	8062053	VZAV-L-25-16-S8PN16-H1EP200-V5-H1PA250-N
			32	8062054	VZAV-L-32-16-S8PN16-H1EP200-V5-H1PA250-N
			40	8062055	VZAV-L-40-16-S8PN16-H1EP200-V5-H1PA250-N
			50	8062056	VZAV-L-50-16-S8PN16-H1EP200-V5-H1PA250-N
			65	8062057	VZAV-L-65-16-S8PN16-H1EP200-V5-H1PA250-N
			80	8062058	VZAV-L-80-16-S8PN16-H1EP200-V5-H1PA250-N
			100	8062059	VZAV-L-100-16-S8PN16-H1EP200-V5-H1PA250-N
			125	8062060	VZAV-L-125-16-S8PN16-H1EP200-V5-H1PA250-N
			150	8062061	VZAV-L-150-16-S8PN16-H1EP200-V5-H1PA250-N
			200	8062062	VZAV-L-200-16-S8PN16-H1EP200-V5-H1PA250-N
			250	8062063	VZAV-L-250-16-S8PN16-H1EP200-V5-H1PA250-N
			300	8062064	VZAV-L-300-16-S8PN16-H1EP200-V5-H1PA250-N
	10	Ductile iron polyamide coated	80	8062034	VZAV-L-80-10-S8PN16-H1EP200-V5-H1PA250-N
			100	8062035	VZAV-L-100-10-S8PN16-H1EP200-V5-H1PA250-N
			125	8062036	VZAV-L-125-10-S8PN16-H1EP200-V5-H1PA250-N
			150	8062037	VZAV-L-150-10-S8PN16-H1EP200-V5-H1PA250-N
			200	8062038	VZAV-L-200-10-S8PN10-H1EP200-V5-H1PA250-N
			250	8062039	VZAV-L-250-10-S8PN10-H1EP200-V5-H1PA250-N
	16	Stainless steel 1.4408	25	8062091	VZAV-L-25-16-S8PN16-H1EP200-V5-V3-N
			32	8062092	VZAV-L-32-16-S8PN16-H1EP200-V5-V3-N
			40	8062093	VZAV-L-40-16-S8PN16-H1EP200-V5-V3-N
			50	8062094	VZAV-L-50-16-S8PN16-H1EP200-V5-V3-N
			65	8062095	VZAV-L-65-16-S8PN16-H1EP200-V5-V3-N
			80	8062096	VZAV-L-80-16-S8PN16-H1EP200-V5-V3-N
			100	8062097	VZAV-L-100-16-S8PN16-H1EP200-V5-V3-N
			125	8062098	VZAV-L-125-16-S8PN16-H1EP200-V5-V3-N
			150	8062099	VZAV-L-150-16-S8PN16-H1EP200-V5-V3-N
			200	8062100	VZAV-L-200-16-S8PN16-H1EP200-V5-V3-N
			250	8062101	VZAV-L-250-16-S8PN16-H1EP200-V5-V3-N
			300	8062102	VZAV-L-300-16-S8PN16-H1EP200-V5-V3-N
	10	Stainless steel 1.4408	80	8062072	VZAV-L-80-10-S8PN16-H1EP200-V5-V3-N
			100	8062073	VZAV-L-100-10-S8PN16-H1EP200-V5-V3-N
			125	8062074	VZAV-L-125-10-S8PN16-H1EP200-V5-V3-N
150			8062075	VZAV-L-150-10-S8PN16-H1EP200-V5-V3-N	
200			8062076	VZAV-L-200-10-S8PN10-H1EP200-V5-V3-N	
250			8062077	VZAV-L-250-10-S8PN10-H1EP200-V5-V3-N	
300	8062078	VZAV-L-300-10-S8PN10-H1EP200-V5-V3-N			

Spare parts and Accessories

Handlever			
	Nominal diameter [DN]	Part number	Type
	25 / 32 / 40	8222655	VAOH-F11-F05-8-210-H9-RA10-AL
	50 / 65/80	8222654	VAOH-F11-F05-11-210-H9-RA10-AL
	100	8222658	VAOH-F11-F07-11-340-H9-RA10-AL
	125 / 150	8222656	VAOH-F11-F07-14-340-H9-RA10-AL
	200	8222657	VAOH-F11-F07-17-340-H9-RA10-AL

Liner				
Nominal diameter [DN]	Part number	Order Code	Type	Feature
25/32	8188282	VZAS-32-E	EPDM (Ethylen-Propylene Terpolymer)	-20°C - 95°C For applications with weak mineral acids and basis, air, water, ketones, and ester
40	8044186	VZAS-40-E		
50	8044187	VZAS-50-E		
65	8044188	VZAS-65-E		
80	8044189	VZAS-80-E		
100	8044190	VZAS-100-E		
125	8044191	VZAS-125-E		
150	8044192	VZAS-150-E		
200	8044193	VZAS-200-E		
250	8044194	VZAS-250-E		
300	8044195	VZAS-300-E		

25/32	8116028	VZAS-32-E3	EPDM KTW (Ethylen-Propylene Terpolymer)	-20°C - 95°C With drinking water approval ACS, DVGW, WRAS, NSF-61 and EN681-1 With NSF-61 approval when used in combination with H1PA250 disc (Up to DN700 size) or with V3 disc (for all sizes available)
40	8116029	VZAS-40-E3		
50	8116030	VZAS-50-E3		
65	8116031	VZAS-65-E3		
80	8116032	VZAS-80-E3		
100	8116033	VZAS-100-E3		
125	8116034	VZAS-125-E3		
150	8116035	VZAS-150-E3		
200	8116036	VZAS-200-E3		
250	8116037	VZAS-250-E3		
300	8116038	VZAS-300-E3		
350	8116039	VZAS-350-E3		
400	8116040	VZAS-400-E3		
450	8116041	VZAS-450-E3		
500	8116042	VZAS-500-E3		
600	8116043	VZAS-600-E3		

Butterfly Valve VZAV

Spare parts and Accessories

Liner				
Nominal diameter [DN]	Part number	Order Code	Type	Feature
25/32	8116022	VZAS-32-E4	EPDM HT (Ethylen-Propylene Terpolymer)	-20°C - 130°C High Temperature For applications with weak mineral acids and basis, air, water, ketones, and ester
40	8044206	VZAS-40-E4		
50	8044207	VZAS-50-E4		
65	8044208	VZAS-65-E4		
80	8044209	VZAS-80-E4		
100	8044210	VZAS-100-E4		
125	8044211	VZAS-125-E4		
150	8044212	VZAS-150-E4		
200	8044213	VZAS-200-E4		
250	8044214	VZAS-250-E4		
300	8044215	VZAS-300-E4		
350	8116023	VZAS-350-E4		
400	8116024	VZAS-400-E4		
450	8116025	VZAS-450-E4		
500	8116026	VZAS-500-E4		
600	8116027	VZAS-600-E4		

25/32	8188283	VZAS-32-E5	EPDM HT Ethylene-Propylene Terpolymer/EPDM based	-5°C - 130°C Specially designed for the resistance to water solutions with suspensions solids. Is adequate to support weak mineral acids, weak mineral bases, alcohols, ketones, and esters. FDA and EC 1935/2004 approval
40	8188284	VZAS-40-E5		
50	8188285	VZAS-50-E5		
65	8188286	VZAS-65-E5		
80	8188287	VZAS-80-E5		
100	8188288	VZAS-100-E5		
125	8188289	VZAS-125-E5		
150	8188290	VZAS-150-E5		
200	8188291	VZAS-200-E5		
250	8188292	VZAS-250-E5		
300	8188293	VZAS-300-E5		

25/32	8188404	VZAS-32-E6	EPDM (Ethylen-Propylene Terpolymer)	-20°C - 95°C Especially for Food Applications and for applications with weak mineral acids and basis, air, water, ketones and ester
40	8044216	VZAS-40-E6		
50	8044217	VZAS-50-E6		
65	8044218	VZAS-65-E6		
80	8044219	VZAS-80-E6		
100	8044220	VZAS-100-E6		
125	8044221	VZAS-125-E6		
150	8044222	VZAS-150-E6		
200	8044223	VZAS-200-E6		
250	8044224	VZAS-250-E6		
300	8044225	VZAS-300-E6		
350	8044226	VZAS-350-E6		
400	8044227	VZAS-400-E6		

25/32	8188294	VZAS-32-E7	ECO Epichloridrine ethylene oxide copolymer	-40°C ... 90°C Resistance to brine and moderate to oil, fuel
40	8188295	VZAS-40-E7		
50	8188296	VZAS-50-E7		
65	8188297	VZAS-65-E7		
80	8188298	VZAS-80-E7		
100	8188299	VZAS-100-E7		
125	8188300	VZAS-125-E7		
150	8188301	VZAS-150-E7		
200	8188302	VZAS-200-E7		
250	8188303	VZAS-250-E7		
300	8188304	VZAS-300-E7		

25/32	8188328	VZAS-32-SBRA	SBRA SBR based	-10°C ... 70°C Especially designed for the resistance to chemically inert powdered products, such as: flours, cements, plasters, concrete mortars, powdered sugar, etc. This material is the alternative where natural rubber is used
40	8188329	VZAS-40-SBRA		
50	8188330	VZAS-50-SBRA		
65	8188331	VZAS-65-SBRA		
80	8188332	VZAS-80-SBRA		
100	8188333	VZAS-100-SBRA		
125	8188334	VZAS-125-SBRA		
150	8188335	VZAS-150-SBRA		
200	8188336	VZAS-200-SBRA		
250	8188337	VZAS-250-SBRA		
300	8188338	VZAS-300-SBRA		

25/32	8188339	VZAS-32-V	FPM Hexafluoropropylene vinylidene fluoride copolymer	-15°C ... 210°C Very good resistance to high temperature, light, weathering, hydraulic liquids, hydrocarbons, benzene solvent, acids, bases, oxygen
40	8188340	VZAS-40-V		
50	8188341	VZAS-50-V		
65	8188342	VZAS-65-V		
80	8188343	VZAS-80-V		
100	8188344	VZAS-100-V		
125	8188345	VZAS-125-V		
150	8188346	VZAS-150-V		
200	8188347	VZAS-200-V		
250	8188348	VZAS-250-V		
300	8188349	VZAS-300-V		

Butterfly Valve VZAV

25/32	8188305	VZAS-32-N	NBR Acrylonitrile- Butadiene Copolymer	-10°C - 100°C For applications with oils, greases, fuel, gas oil, CO ₂ , CO, H ₂
40	8044196	VZAS-40-N		
50	8044197	VZAS-50-N		
65	8044198	VZAS-65-N		
80	8044199	VZAS-80-N		
100	8044200	VZAS-100-N		
125	8044201	VZAS-125-N		
150	8044202	VZAS-150-N		
200	8044203	VZAS-200-N		
250	8044204	VZAS-250-N		
300	8044205	VZAS-300-N		

25/32	8188306	VZAS-32-NR	NBR white Acrylonitrile – butadiene copolymer	-10°C ... 100°C Oils, greases, fuel, gas oil, CO ₂ , CO, H ₂
40	8188307	VZAS-40-NR		
50	8188308	VZAS-50-NR		
65	8188309	VZAS-65-NR		
80	8188310	VZAS-80-NR		
100	8188311	VZAS-100-NR		
125	8188312	VZAS-125-NR		
150	8188313	VZAS-150-NR		
200	8188314	VZAS-200-NR		
250	8188315	VZAS-250-NR		
300	8188316	VZAS-300-NR		

25/32	8188317	VZAS-32-S1	MVQ transparent Poly (methyl vinyl) siloxane	-55°C ... 200°C Especially for food applications
40	8188318	VZAS-40-S1		
50	8188319	VZAS-50-S1		
65	8188320	VZAS-65-S1		
80	8188321	VZAS-80-S1		
100	8188322	VZAS-100-S1		
125	8188323	VZAS-125-S1		
150	8188324	VZAS-150-S1		
200	8188325	VZAS-200-S1		
250	8188326	VZAS-250-S1		
300	8188327	VZAS-300-S1		

Additional seals can be ordered as followed as a customer solution (GSS):

VZAS-**XXX-YY**

XXX = Nominal diameter of the butterfly valve

YY = Liner material code

Festo is a distributor, not the manufacturer, of this product.

Reference list

	Festo Type Code	InterApp Type Code
Model	VZAV	Desponia
Connection Type	C, L, U,	1, 3, 4,
Size	DN25 – DN1600	DN25 – DN1600
Liner	E; E3; E4; E5; E6, E7, E8	E, EE, EC, FE, EF, EP, EM
	N1, N2, N3, N5, NR	N, NH, NG, FN, NF
	V, V1	V, VA
	S, S1, SBRA	S, SA, FP

→ Internet: <https://www.interapp.net/en-de/products/butterfly-valves/metal-butterfly-valves/desponia>