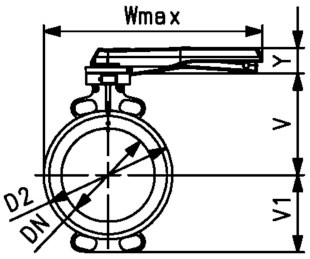
Datablad

Giltig från: 2024-03-18

Vridspjällventil 565 PVDF/PA-GF
Med handspak
Flänsstandard metrisk/ANSI/BS/JIS
Passar till ABS, PVC-U, PVC-C, ecoFIT, COOL-FIT och PROGEF system

Utförande:

- Bygglängd: EN558 rad 20, ISO 5752 rad 20, API 609 tabell 2
- Fläns standards: ISO 7005 PN10/16, EN 1092 PN10/16, DIN 2501 PN10/16, ANSI/ASME B 16.5 Class 150, BS 1560: 1989 Class 125/150; BS 4504 PN10/16, JIS B 2220 10K, JIS B 2239 10K
- Lätt montage och demontage
- Låsbar ergonomisk handspak
- Lämplig för vatten och vattenbehandlings-applikationer (t.ex. havsvatten, dricksvatten och industrivatten)

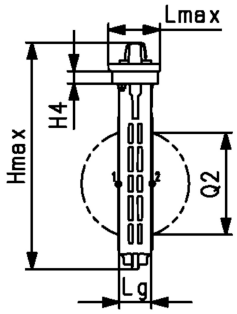


Option:

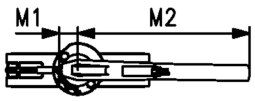
- Individuell konfiguration av ventilen möjlig
- Pneumatiskt eller elektriskt manöverdon från GF
- Dubbelsensor för elektrisk läges-feedback inkl. LED feedback

Hänvisning:

För vissa materialkombinationer (t.ex. DN300-ventiler med PE/PP-rör) behövs speciella kraghylsor. Kontrollera "Perfect flange connection tool" på www.gfps.com



d (mm)	DN (mm)	D2 (mm)	PN (bar)	EPDM Artikelnr.	RSK	FKM Artikelnr.	RSK	Vikt (kg)	RSK
63	50	100,0	16	**199 565 000**	**456 50 76**	**199 565 020**	**456 50 83**	1,4	
75	65	121,0	16	**199 565 001**	**456 50 77**	**199 565 021**	**456 50 84**	1,6	
90	80	138,0	16	**199 565 002**	**456 50 78**	**199 565 022**	**456 50 85**	1,8	
110	100	158,5	16	**199 565 003**	**456 50 79**	**199 565 023**	**456 50 86**	2,7	
140	125	187,0	16	**199 565 004**	**456 50 80**	**199 565 024**	**456 50 87**	3,3	
160	150	213,0	16	**199 565 005**	**456 50 81**	**199 565 025**	**456 50 88**	4,3	
225	200	267,0	10	**199 565 006**	**456 50 82**	**199 565 026**	**456 50 89**	5,7	



d (mm)	Wmax (mm)	Y (mm)	V (mm)	V1 (mm)	Hmax (mm)	Lmax (mm)	H4 (mm)	Q2 (mm)	Lg (mm)	M1 (mm)	M2 (mm)
63	264,0	53,0	133,5	63,0	249,5	96,0	23,0	28,5	43,0	35,5	204,5
75	271,0	53,0	140,0	82,0	275,5	96,0	23,0	44,0	46,0	35,5	204,5
90	273,5	53,0	146,0	89,0	288,0	96,0	23,0	63,5	46,0	35,5	204,5
110	334,0	53,0	166,5	104,0	324,0	96,0	23,0	84,0	52,0	35,5	254,5
140	348,0	53,0	180,0	118,0	351,0	96,0	23,0	110,5	56,0	35,5	254,5
160	426,0	53,0	189,0	130,5	372,5	96,0	23,0	137,5	56,0	35,5	319,5
225	453,0	53,0	209,5	159,0	422,0	96,0	23,0	190,5	60,0	35,5	319,5

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Butterfly Valve type 565W/L

Type 565W
Wafer-style installation

Type 565L
Lug-style installation

Type 565W
with reduction gear

Type 565W
with pneumatic actuator

Type 565L
with electric actuator

Product description

The plastic Butterfly Valve type 565 is the best choice for optimizing piping systems built for water applications and a wide range of other applications.

With the option as an end of line installation (lug-style) and an intermediate installation (wafer-style) a modular assembly is possible. The wafer-style type 565W needs two sides flange support. A disassembly without support flanges is not possible. The lug-style type 565L can be used as isolation valve and the pipe can be disassmbled on one side.

This new generation of Valves comes at a significantly lower initial cost, and will save even more thanks to its lower static weight, requiring less energy for both operation and transportation. Installing the Butterfly Valve type 565 is quick and easy, but thanks to its extremely high durability, it will be almost maintenance-free during its long service life.

Direct replacement: The Butterfly Valve type 565 comes in the same installation length as metal solutions and can replace them without any additional rework on the pipes.

60 % lighter than metal valves: Can be installed by a single person in just a few minutes. Facilitates planning and reduces the need for costly transportation and personnel.

Highly reliable: High-performance thermoplastics protect from abrasion and corrosion. A longer system lifetime, reduction of maintenance costs and production stops are the results.

Automated and digitized: Prepared for being actuated by wide range of electric and pneumatic actuators. Future-ready through compatibility with wireless controlled Smart Actuators. Prepared mounting option for end position detection sensors.

Sustainable: The Butterfly Valve type 565 have 25% less carbon emissions than metal valves. This is verfified with an EPD (Enviormental Product Declaration) and LCA (Life Cycle Assessment).

Information via DataMatrix code: The DataMatrix code simplifies the storage of all technical information for each individual valve and thus enables individual traceability. The perfect identification of each individual type 565 butterfly valve allows easy installation, maintenance and repair.

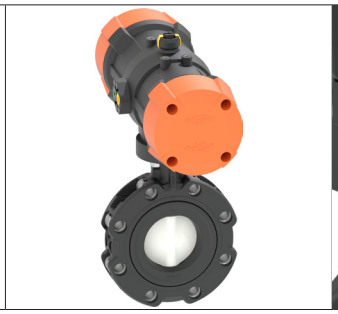
Type 565L: Use as Lug-style valve with threaded bushes integrated into the housing.

Process automation with Butterfly Valve

Thanks to a wide range of accessories, butterfly valves can be equipped with the appropriate pneumatic or electric actuators. In combination with a pneumatic positioner the valve can be used as process and control valves. Double sensors enable hereby the end position detection (open/closed disc).

Type 565W Butterfly Valve with electric actuator

Type 565W Butterfly Valve with smart actuator



Type 565L Butterfly Valve with pneumatic actuator

Type 565W & Typ 565L Double sensor for end position detection

Applications

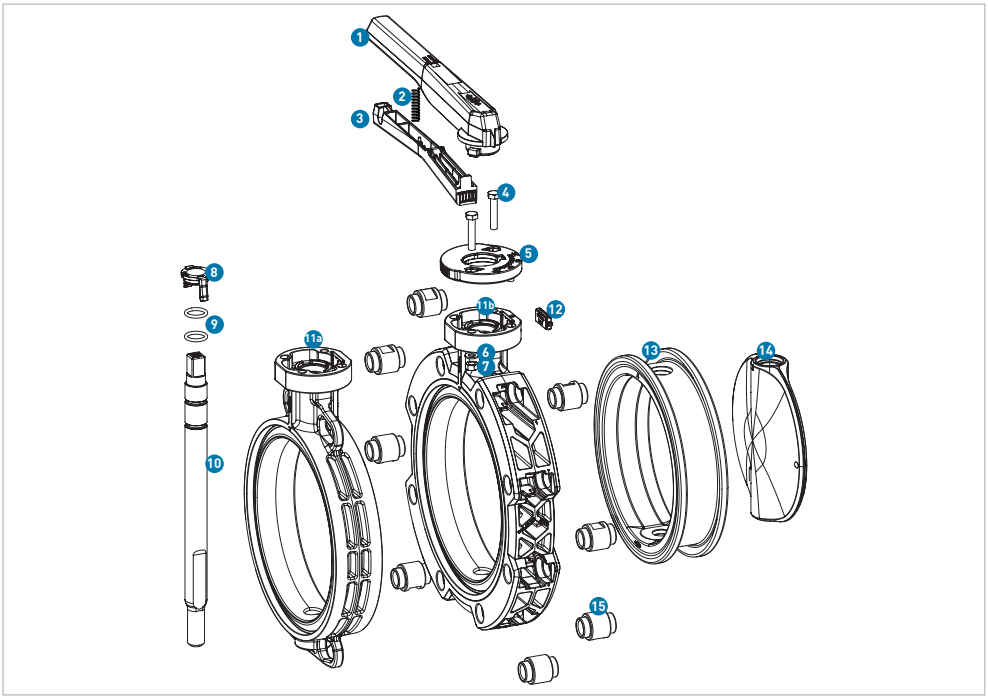
Suitable for water and water treatment applications (e.g. sea water, drinking water and industrial water):

- Drinking water process
- Industrial process water
- Industrial waste water
- Municipal waste water
- Desalination plant
- Aquarium/ Oceania
- Swimming pools
- Cruise ships
- Offshore
- Vessels and merchant fleet
- Cooling

⚠ For our online tool ChemRes PLUS, go to https://www.gfps.com/com/en/downloads-tools/online-tools/chemical-resistance.html

Technical data

Specifications



1 Lever
2 Spring
3 Grid lever
4 Screw
5 Index plate
6 Washer
7 Nut
8 Shaft lock
9 O-Ring
10 Shaft
11a Wafer-style housing
11b Lug-style housing
12 Cap
13 Seat liner
14 Disc
15 Threaded inserts

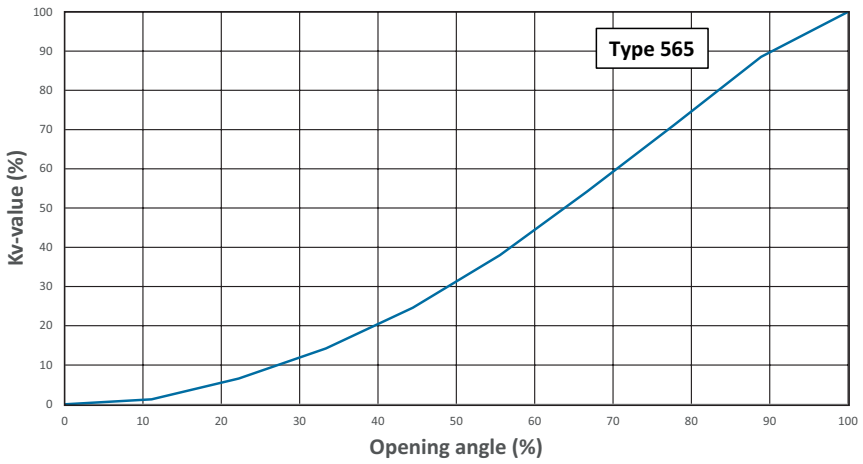
Specifications						
Body type	565W - Wafer-style housing					
	565L - Lug-style housing					
Dimensions	d63/DN50 – d315/DN300, 2“ – 12“					
Materials	Lever, grid lever, index plate, shaft lock, housing	**1 3 5 8 11**	Polyamide PA6-GF			
	Disc (outside)	**14**	PVDF			
	Disc (inside)	**14**	Polyamide PA6-GF			
	O-Ring, seat liner	**9 13**	EPDM or FKM			
	Screw, spring, washer, nut, shaft, threaded inserts	**2 4 6 7 10 15**	Stainless steel			
	Cap	**12**	EPDM			
Pressure ratings	**Manual actuated**		**Electric actuated**		**Pneumatic actuated**	
	DN50-150	PN16	DN50-200	PN10	DN50-250	PN10
	DN200-250	PN10	DN250	PN6	DN300	PN6
	DN300	PN6	DN300	PN4		
Actuation variants	Manually operated (lockable hand lever or manual reduction gear)					
	Pneumatic actuated: FC, FO, DA					
	Electric actuated: EA45-250 AC: 100 – 230 V, AC/DC: 24 V, Smart actuator dEA					
Actuator interface	EN ISO 5211					
Flange standards	ISO 7005 PN10/16, EN 1092 PN10/16, DIN 2501 PN10/16, ANSI/ASME B 16.5 Class 150, BS 1560: 1989 Class 125/150; BS 4504 PN10/16, JIS B 2220 10K, JIS B 2239 10K					
Markings	CE, UKCA					
Product Standard	EN ISO 16136					
Test Standard	ISO 9393-2, EN 12266-1 (leackage rate A)					
Approvals	ACS, ABS, BV, DNV, EAC, EPD, FDA, KTW-BWGL, LR, NSF; PZH, RINA, WRAS, SIL					

Flow characteristics

Kv 100-values

DN (mm)	d (mm)	Inch (")	Kv 100 (l/min)	Cv 100 (US gal./min)	Kv 100 (m^3/h)
50	63	2	1'445	101	87
65	75	2 ½	2'530	177	152
80	90	3	4'020	281	241
100	110	4	5'850	400	351
125	140	5	11'900	832	714
150	160	6	18'050	1'262	1'083
200	225	8	43'667	3'052	2'620
250	280	10	62'333	4'357	3'740
300	315	12	94'500	6'606	5'670

Flow characteristics according to opening angle



Operating torques

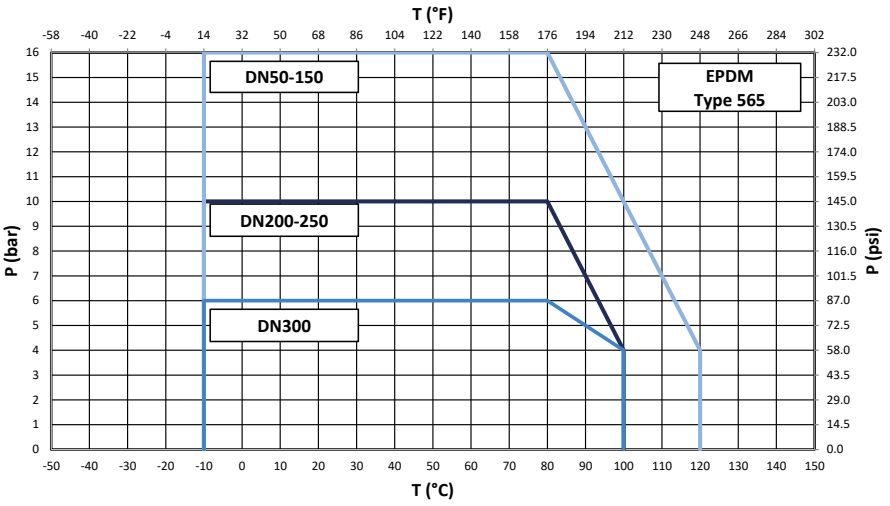
DN (mm)	d (mm)	Inch (")	Operating torque @ maximum operating pressure (Nm)
50	63	2	15
65	75	2 ½	20
80	90	3	25
100	110	4	40
125	140	5	50
150	160	6	60
200	225	8	160
250	280	10	250
300	315	12	300

Pressure-temperature diagrams

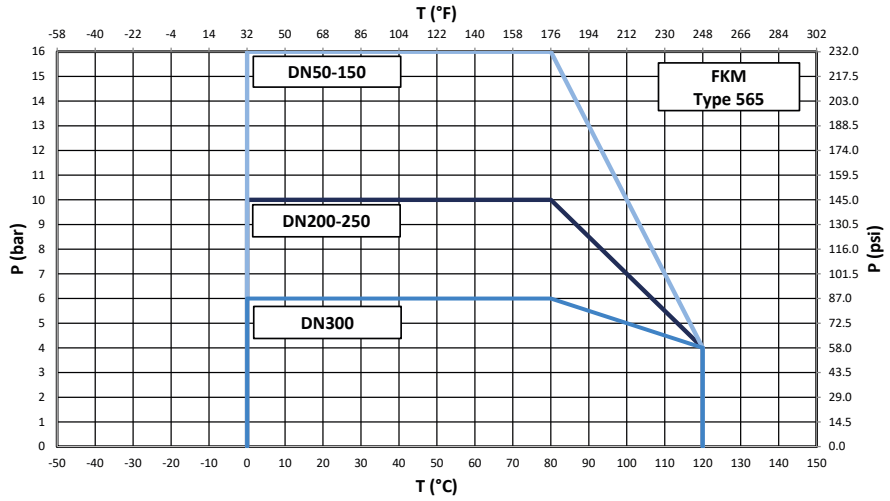
The following pressure-temperature diagrams are based on a lifetime of 25 years and water or similar media.

T Temperature (°C, °F)
P Permissible pressure (bar, psi)

EPDM (DN50 – DN300)

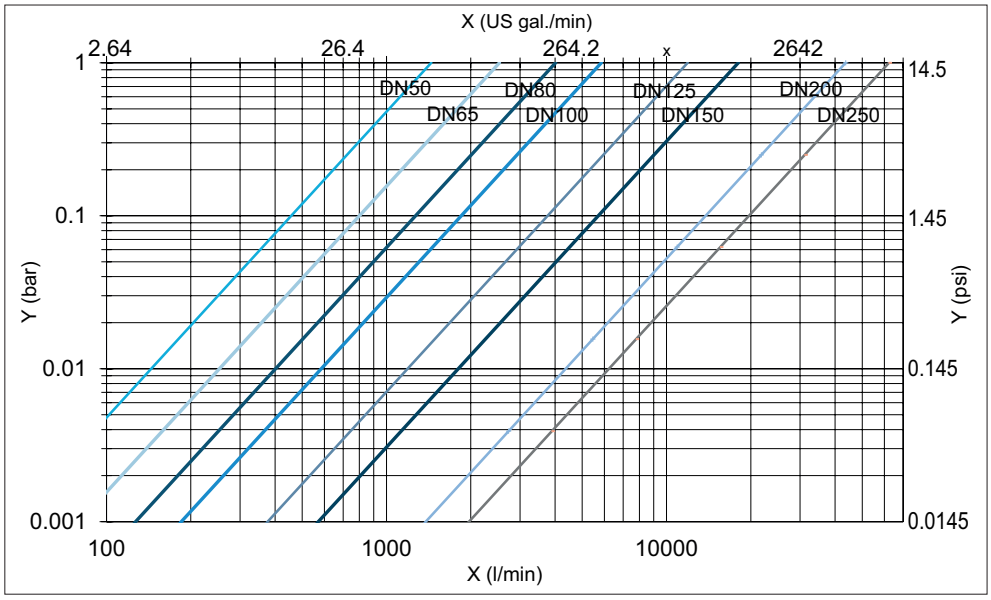


FKM (DN50 – DN300)



Pressure losses

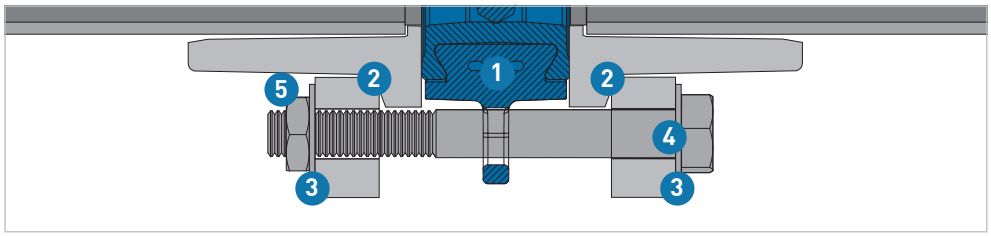
DN50 – DN250



X Flow rate (l/min, US gal/min)
Y Pressure loss Δp (bar, psi)

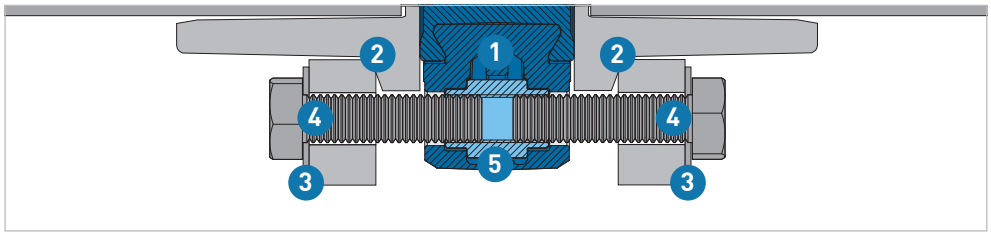
Flange connections

565W wafer-style flange connection



1 Wafer body
2 Flange
3 Washer
4 Screw
5 Nut

565L lug-style flange connection



1 Lug body
2 Flange
3 Washer
4 Hexagon head screw
5 Threaded insert

Reference values for tightening torque of screws in flange connections

Type 565W wafer-style reference values

Dimension			Screws		Max. tightening torque	
DN (mm)	d (mm)	Inch (")	Metric (mm)	UNC (Inch)	(Nm)	(ft-lb)
50	63	2	4 x M16 x 140mm	4 x ⅝" x 5 ½"	25	18
65	75	2 ½	4 x M16 x 140mm	4 x ⅝" x 5 ½"	25	18
80	90	3	8 x M16 x 150mm	4 x ⅝" x 6"	25	18
100	110	4	8 x M16 x 160mm	8 x ⅝" x 6 ½"	30	22
125	140	5	8 x M16 x 170mm	8 x ¾" x 6 ¾"	35	26
150	160	6	8 x M20 x 180mm	8 x ¾" x 7"	40	30
200	225	8	8 x M20 x 200mm	8 x ¾" x 8"	60	44
250	280	10	12 x M20 x 220mm	12 x ⅞" x 8 ½"	80	59
300	315	12	12 x M20 x 250mm	12 x ⅞" x 10"	80	59

*for PVC-U socket flange adaptors and PP-V flange

Type 565L lug-style reference values

Dimension			Screws		Max. tightening torque	
DN (mm)	d (mm)	Inch (")	Metric (mm)	UNC (Inch)	(Nm)	(ft-lb)
50	63	2	8x M16 x 55mm	8x ⅝" x 2"	20	15
65	75	2 ½	8x M16 x 60mm	8x ⅝" x 2 ¼"	20	15
80	90	3	16x M16 x 60mm	8x ⅝" x 2 ¼"	20	15
100	110	4	16x M16 x 65mm	16x ⅝" x 2 ½"	25	18
125	140	5	16x M16 x 70mm	16x ¾" x 2 ¾"	30	22
150	160	6	16x M20 x 75mm	16x ¾" x 2 ¾"	35	26
200	225	8	16x M20 x 85mm	16x ⅞" x 3 ½"	45	33
250	280	10	24x M20 x 90mm	24x ⅞" x 3 ½"	50	37
300	315	12	24x M20 x 100mm	24x ⅞" x 4 ¼"	50	37

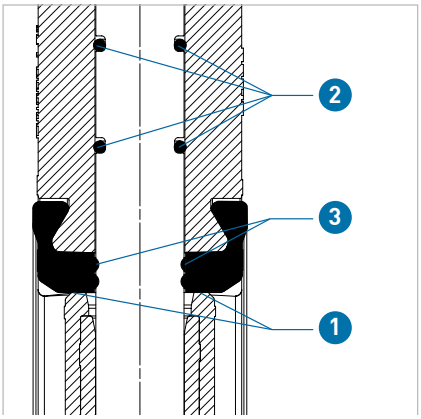
*for PVC-U socket flange adaptors and PP-V flange

Components, screw lengths and tightening torques can be determined using the online tool "Perfect Flange Connection Tool" under the following link:
https://www.gfps.com/perfectflangeconnection

Technical basics

Sealings

The tightness (EN 12266-1 / leackage rate) of the valve is ensured by different components.



1 Disc to seat liner
2 Shaft to housing (O-Ring)
3 Seat liner to shaft

The flanged joints are sealed by the beads of the seat liner, eliminating the need for additional flat gaskets.

Installation notes

As a connecting element, GF Piping Systems recommends valve ends or flange adapters with smooth jointing faces, together with flanges made of PVC-U or PP-V. In the case of flanges with a unsmooth jointing face, a flat gasket may also be used in individual cases.

Ensure that the following requirements are met before installation: Only butterfly valves whose pressure class, connection type, connection dimensions and materials correspond to the operating conditions may be installed.

Chamfering of valve end / flange adapter

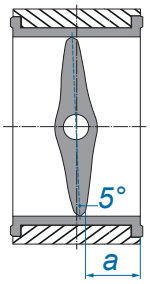
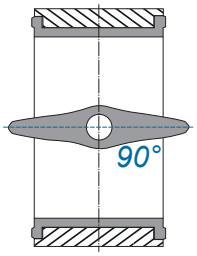
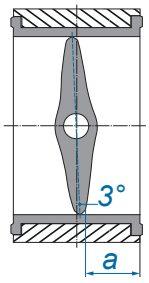
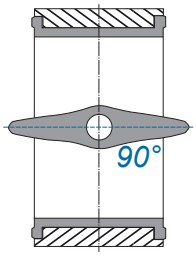
When using the specified valve ends / flange adapters from GF Piping Systems, chamfering is not necessary. If you install valve ends/flange adapters of a different brand, make sure that the inside diameter of the valve end / flange adapter is greater than the outer diameter of the disc. If necessary, chamfer the flange adapter.

Disc positions

Dimension a = distance at closed position. Disc positions in new condition according to table.

Adhere to a standard value for the closed position in order to apply the minimum required torque and to ensure readjustment possibilities.

Actuator and valve must be in closed position at the beginning of the fine adjustment. The indexing of actuator and valve must match during assembly.

		Butterfly valve type 565 manually actuated			Butterfly valve type 565 actuated		
DN (mm)	Inch (")	a (5°) (mm)	Closed position Angle 0° - 5°	Open position Angle 90°	a (3°) (mm)	Closed position Angle 0° - 3°	Open position Angle 90°
50	2	16.8			18.3		
65	2 ½	17.3			18.9		
80	3	16.7			18.1		
100	4	17.3			18.9		
125	5	17.8			20.0		
150	6	16.1			18.6		
200	8	15.0			18.6		
250	10	15.7			19.7		
300	12	18.2			23.0		

Maintenance notes

In normal operation, butterfly valves do not require maintenance. It is nonetheless recommended to perform maintenance on butterfly valves after 5,000 actuation cycles at most. The following steps must be taken when doing so:

- Regularly check that no medium escapes to the outside. If medium exits from the flange connections, tighten them.
- We recommend operating the butterfly valves that are kept permanently in the same position 1 or 2 times a year to check their functionality.
- Depending on the operating conditions, the collars should be lubricated periodically with (silicon-based) grease.
- It is recommended that you check and, if necessary, replace the O-rings when removing the shaft.

⚠ Installation and maintenance must be performed according to the corresponding installation instructions. To be found at www.gfps.com

Type 565 actuator assignment

Dimension				Pneumatic actuator				Electric actuator	
				Plastic Actuator		Metal Actuator			
DN (mm)	d (mm)	Inch (")	Interface	FC/FO	DA	FC/FO	DA	Type	Voltage
50	63	2	F07	PPA40	PPA40	PA30	PA35	EA45 / dEA45 EA120/dEA120	100–230 V~or 24 V 100–230 V~or 24 V
65	75	2 ½	F07	PPA80	PPA40	PA35	PA40	EA120/dEA120	100–230 V~or 24 V
80	90	3	F07	PPA80	PPA40	PA35	PA40	EA120/dEA120	100–230 V~or 24 V
100	110	4	F07			PA40	PA45	EA120/dEA120	100–230 V~or 24 V
125	140	5	F07			PA45	PA45	EA120/dEA120	100–230 V~or 24 V
150	160	6	F07			PA50	PA55	EA250/dEA250	100–230 V~or 24 V
200	225	8	F07			PA60	PA60	EA250/dEA250	100–230 V~or 24 V
250	280	10	F10			PA65	PA65	EA250/dEA250	100–230 V~or 24 V
300	315	12	F10			PA70	PA70	EA250/dEA250	100–230 V~or 24 V

Design with pneumatic actuator

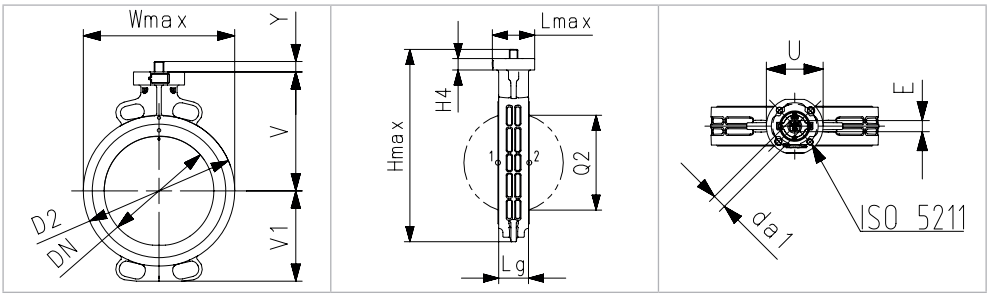
1 Pneumatic actuator
2 Butterfly valve Type 565W

Design with electric actuator

1 Electric actuator
2 Manual override (optional)
3 Butterfly valve Type 565W

Dimensions type 565W wafer-style

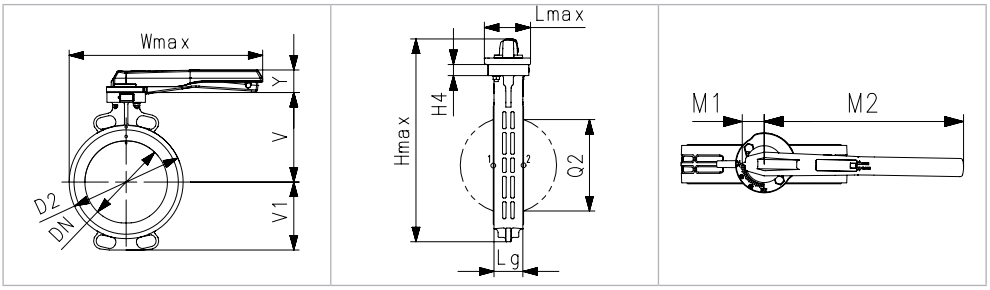
Butterfly Valve type 565W wafer-style DN50 – DN300 with free shaft end



Dimensions			Housing dimensions							
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Lmax (mm)	Hmax (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)
50	63	2	100.0	118.5	85.5	222.5	23.0	133.5	63.0	43.0
65	75	2 ½	121.0	132.5	85.5	248.5	23.0	140.0	82.0	46.0
80	90	3	138.0	138.0	85.5	261.0	23.0	146.0	89.0	46.0
100	110	4	158.5	158.5	85.5	286.0	23.0	166.5	104.0	52.0
125	140	5	187.0	187.0	85.5	313.5	23.0	180.0	118.0	56.0
150	160	6	213.0	213.0	85.5	337.5	23.0	189.0	130.5	56.0
200	225	8	267.0	267.0	85.5	387.0	23.0	209.5	159.0	60.0
250	280	10	325.5	325.5	125.0	498.5	23.0	262.5	195.5	68.0
300	315	12	380.0	380.0	125.0	555.0	23.0	284.5	230.5	78.0

Dimensions			Housing dimensions					Q	Weight
DN (mm)	d (mm)	Inch (")	Acc. to ISO 5211	da1 (mm)	E (mm)	U (mm)	Y (mm)	Q2 (mm)	(kg)
50	63	2	F07	14.1	11.0	90.0	27.0	28.5	1.0
65	75	2 ½	F07	14.1	11.0	90.0	27.0	44.0	1.2
80	90	3	F07	14.1	11.0	90.0	27.0	63.5	1.4
100	110	4	F07	18.1	14.0	90.0	16.0	84.0	2.2
125	140	5	F07	18.1	14.0	90.0	16.0	110.5	2.9
150	160	6	F07	22.2	17.0	90.0	19.0	137.5	3.8
200	225	8	F07	22.2	17.0	90.0	18.0	190.5	5.2
250	280	10	F10	28.2	22.0	125.0	40.5	239.0	9.5
300	315	12	F10	28.2	22.0	125.0	40.5	285.5	13.7

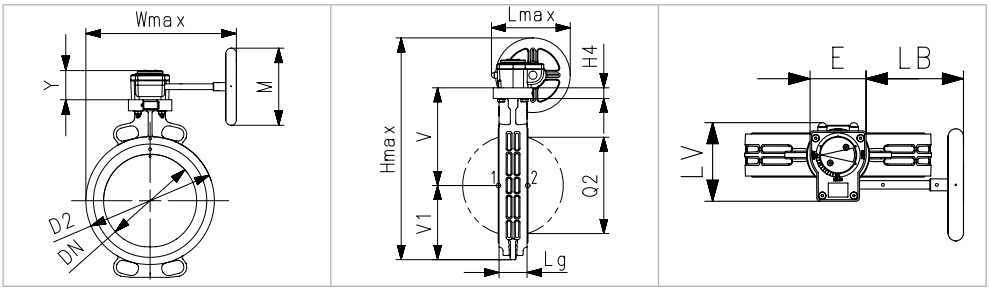
Butterfly Valve type 565W wafer-style DN50 – DN200 with hand lever



Dimensions			Housing dimensions							
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Hmax (mm)	Lmax (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)
50	63	2	100.0	264.0	249.5	96.0	23.0	133.5	63.0	43.0
65	75	2 ½	121.0	271.0	275.5	96.0	23.0	140.0	82.0	46.0
80	90	3	138.0	273.5	288.0	96.0	23.0	146.0	89.0	46.0
100	110	4	158.5	334.0	324.0	96.0	23.0	166.5	104.0	52.0
125	140	5	187.0	348.0	351.0	96.0	23.0	180.0	118.0	56.0
150	160	6	213.0	426.0	372.5	96.0	23.0	189.0	130.5	56.0
200	225	8	267.0	453.0	422.0	96.0	23.0	209.5	159.0	60.0

Dimensions			Actuator			Q	Weight
DN (mm)	d (mm)	Inch (")	M1 (mm)	M2 (mm)	Y (mm)	Q2 (mm)	(kg)
50	63	2	35.5	204.5	53.0	28.5	1.4
65	75	2 ½	35.5	204.5	53.0	44.0	1.6
80	90	3	35.5	204.5	53.0	63.5	1.8
100	110	4	35.5	254.5	53.0	84.0	2.7
125	140	5	35.5	254.5	53.0	110.5	3.3
150	160	6	35.5	319.5	53.0	137.5	4.3
200	225	8	35.5	319.5	53.0	190.5	5.7

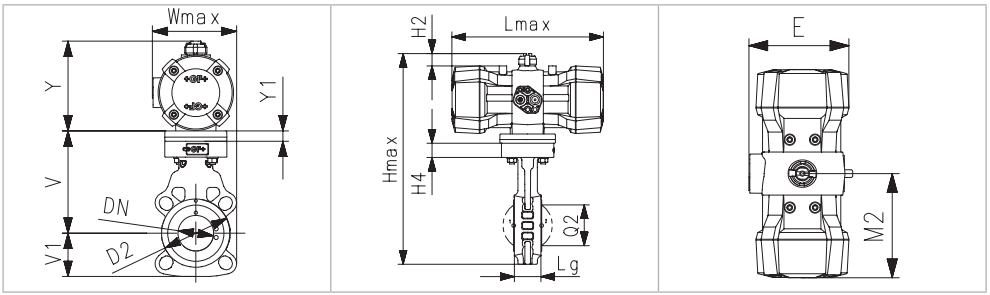
Butterfly Valve type 565W wafer-style DN50 – DN300 with manual reduction gear



Dimensions			Housing dimensions							
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Hmax (mm)	Lmax (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)
50	63	2	100.0	238.5	303.0	169.0	23.0	133.5	63.0	43.0
65	75	2 ½	121.0	246.0	329.0	169.0	23.0	140.0	82.0	46.0
80	90	3	138.0	248.5	341.5	169.0	23.0	146.0	89.0	46.0
100	110	4	158.5	258.5	377.5	169.0	23.0	166.5	104.0	52.0
125	140	5	187.0	272.0	405.0	169.0	23.0	180.0	118.0	56.0
150	160	6	213.0	285.5	426.5	169.0	23.0	189.0	130.5	56.0
200	225	8	267.0	312.5	475.5	169.0	23.0	209.5	159.0	60.0
250	280	10	325.5	360.5	603.0	212.5	23.0	262.5	195.5	68.0
300	315	12	380.0	387.5	659.5	212.5	23.0	284.5	230.5	78.0

Dimensions			Actuator					Q	Weight
DN (mm)	d (mm)	Inch (")	E (mm)	LB (mm)	LV (mm)	M (mm)	Y (mm)	Q2 (mm)	(kg)
50	63	2	80.0	128.0	112.5	160.0	61.5	28.5	3.1
65	75	2 ½	80.0	128.0	112.5	160.0	61.5	44.0	3.3
80	90	3	80.0	128.0	112.5	160.0	61.5	63.5	3.5
100	110	4	80.0	128.0	112.5	160.0	61.5	84.0	4.3
125	140	5	80.0	128.0	112.5	160.0	61.5	110.5	5.0
150	160	6	80.0	128.0	112.5	160.0	61.5	137.5	5.8
200	225	8	80.0	128.0	112.5	160.0	61.5	190.5	7.2
250	280	10	100.0	135.5	130.0	200.0	68.5	239.0	13.4
300	315	12	100.0	135.5	130.0	200.0	68.5	285.5	17.6

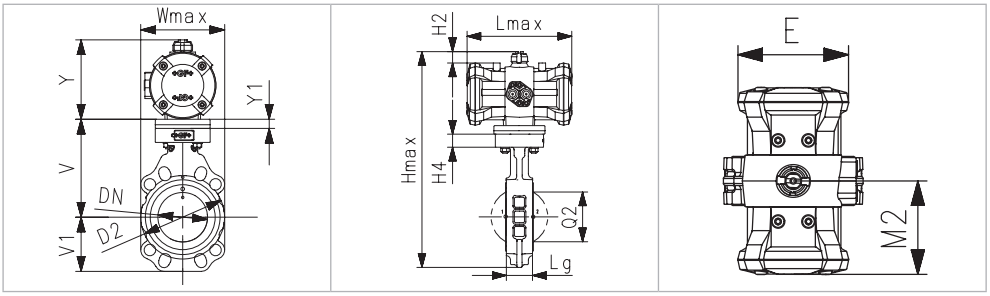
Butterfly Valve type 565W wafer-style DN50 – DN300 with pneumatic actuator PPA and FC/FO



Dimensionen			Gehäuse-Abmessungen								
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Hmax (mm)	Lmax (mm)	H2 (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)
50	63	2	100.0	121.2	341.2	245.5	20.0	23.0	133.5	63.0	43.0
65	75	2 ½	121.0	140.0	372.2	343.0	20.0	23.0	140.0	82.0	46.0
80	90	3	138.0	142.4	384.9	343.0	20.0	23.0	146.0	89.0	46.0

Dimensions			Actuator				Q	Weight
DN (mm)	d (mm)	Inch (")	E (mm)	M2 (mm)	Y (mm)	Y1 (mm)	Q2 (mm)	(kg)
50	63	2	119.5	122.8	111.0	15.0	28.5	2.9
65	75	2 ½	141.5	171.5	131.0	0.0	44.0	4.9
80	90	3	141.5	171.5	131.0	0.0	63.5	5.1

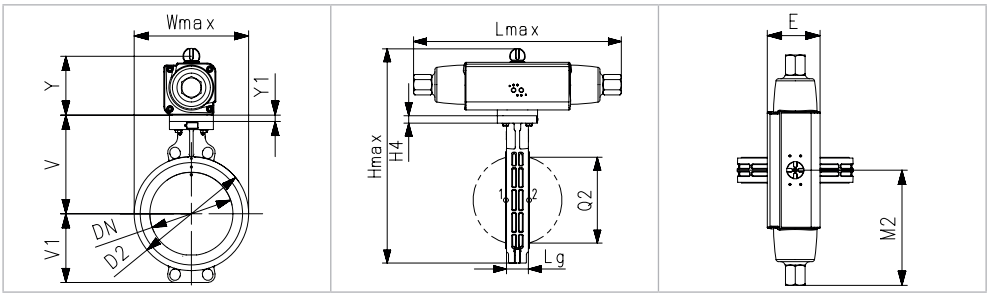
Butterfly Valve type 565W wafer-style DN50 – DN300 with pneumatic actuator PPA and DA



Dimensionen			Gehäuse-Abmessungen								
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Hmax (mm)	Lmax (mm)	H2 (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)
50	63	2	100.0	121.2	341.2	183.5	20.0	23.0	133.5	63.0	43.0
65	75	2 ½	121.0	132.5	367.1	183.5	20.0	23.0	140.0	82.0	46.0
80	90	3	138.0	138.0	379.8	183.5	20.0	23.0	146.0	89.0	46.0

Dimensions			Actuator				Q	Weight
DN (mm)	d (mm)	Inch (")	E (mm)	M2 (mm)	Y (mm)	Y1 (mm)	Q2 (mm)	(kg)
50	63	2	119.5	91.8	111.0	15.0	28.5	2.4
65	75	2 ½	119.5	91.8	111.0	15.0	44.0	2.7
80	90	3	119.5	91.8	111.0	15.0	63.5	2.9

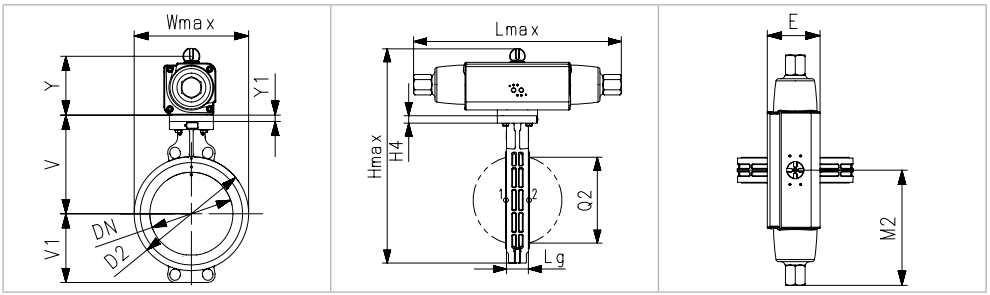
Butterfly Valve type 565W wafer-style DN50 – DN300 with pneumatic actuator PA30-70 and FC/FO



Dimensions			Housing dimensions							
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Hmax (mm)	Lmax (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)
50	63	2	100.0	118.5	309.5	274.5	23.0	133.5	63.0	43.0
65	75	2 ½	121.0	132.5	335.5	275.5	23.0	140.0	82.0	46.0
80	90	3	138.0	138.0	361.0	325.5	23.0	146.0	89.0	46.0
100	110	4	158.5	158.5	385.5	359.5	23.0	166.5	104.0	52.0
125	140	5	187.0	187.0	447.5	418.0	23.0	180.0	118.0	56.0
150	160	6	213.0	213.0	472.5	434.0	23.0	189.0	130.5	56.0
200	225	8	267.0	267.0	545.5	547.5	23.0	209.5	159.0	60.0
250	280	10	325.5	325.5	666.0	681.0	23.0	262.5	195.5	68.0
300	315	12	380.0	380.0	743.0	681.0	23.0	284.5	230.5	78.0

Dimensions			Actuator				Q	Weight
DN (mm)	d (mm)	Inch (")	E (mm)	M2 (mm)	Y (mm)	Y1 (mm)	Q2 (mm)	(kg)
50	63	2	70.5	137.2	98.5	15.0	28.5	3.3
65	75	2 ½	70.5	137.2	98.5	15.0	44.0	3.6
80	90	3	83.5	162.6	111.5	15.0	63.5	4.4
100	110	4	87.0	179.8	115.0		84.0	6.1
125	140	5	107.5	209.0	149.5		110.5	8.2
150	160	6	111.5	217.0	153.5		137.5	11.0
200	225	8	135.0	273.6	177.0		190.5	16.9
250	280	10	148.0	323.0	190.0	18.0	239.0	26.2
300	315	12	168.0	340.5	210.5	18.0	285.5	33.3

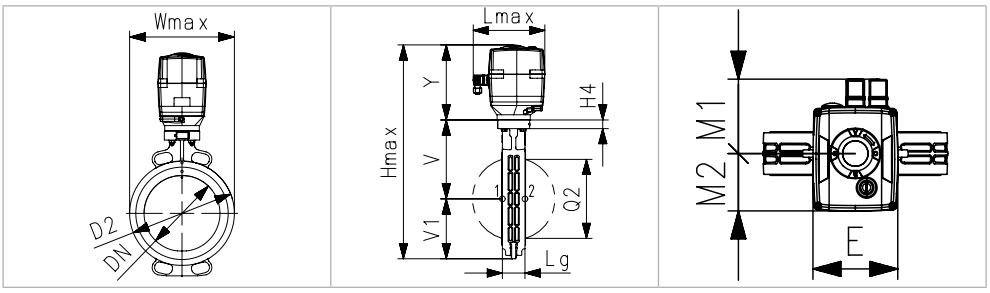
Butterfly Valve type 565W wafer-style DN50 – DN300 with pneumatic actuator PA30-70 and DA



Dimensions			Housing dimensions							
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Hmax (mm)	Lmax (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)
50	63	2	100.0	118.5	303.5	196.5	23.0	133.5	63.0	43.0
65	75	2 ½	121.0	132.5	329.5	196.5	23.0	140.0	82.0	46.0
80	90	3	138.0	138.0	348.0	206.0	23.0	146.0	89.0	46.0
100	110	4	158.5	158.5	381.5	242.0	23.0	166.5	104.0	52.0
125	140	5	187.0	187.0	409.0	242.0	23.0	180.0	118.0	56.0
150	160	6	213.0	213.0	468.5	290.5	23.0	189.0	130.5	56.0
200	225	8	267.0	267.0	522.0	314.0	23.0	209.5	159.0	60.0
250	280	10	325.5	325.5	636.0	340.0	23.0	262.5	195.5	68.0
300	315	12	380.0	380.0	709.5	382.5	23.0	284.5	230.5	78.0

Dimensions			Actuator				Q	Weight
DN (mm)	d (mm)	Inch (")	E (mm)	M2 (mm)	Y (mm)	Y1 (mm)	Q2 (mm)	(kg)
50	63	2	64.5	98.5	92.5	15.0	28.5	2.7
65	75	2 ½	64.5	98.5	92.5	15.0	44.0	3.0
80	90	3	70.5	103.0	98.5	15.0	63.5	3.5
100	110	4	83.5	121.0	111.5		84.0	4.7
125	140	5	83.5	121.0	111.5		110.5	5.4
150	160	6	107.5	145.5	149.5		137.5	8.0
200	225	8	111.5	157.0	153.5		190.5	11.2
250	280	10	118.0	170.0	160.0	18.0	239.0	17.6
300	315	12	135.0	191.5	177.0	18.0	285.5	23.6

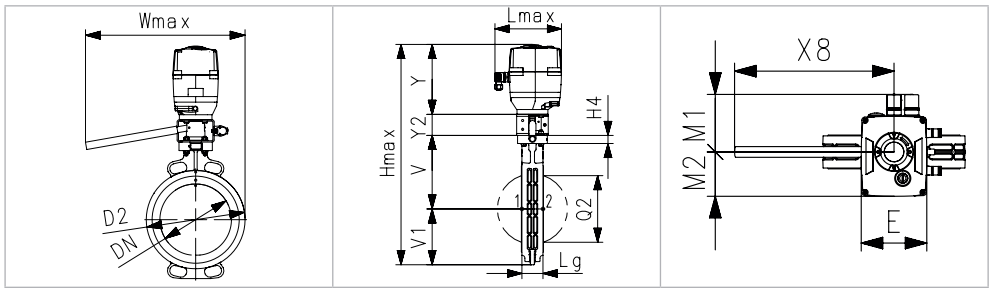
Butterfly Valve type 565W wafer-style DN50 – DN300 with electric actuator EA45-250



Dimensions			Housing dimensions							
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Hmax (mm)	Lmax (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)
50	63	2	100.0	122.5	377.5	190.0	23.0	133.5	63.0	43.0
65	75	2 ½	121.0	132.5	411.5	190.0	23.0	140.0	82.0	46.0
80	90	3	138.0	137.5	424.0	190.0	23.0	146.0	89.0	46.0
100	110	4	158.5	158.5	459.5	190.0	23.0	166.5	104.0	52.0
125	140	5	187.0	187.0	487.5	190.0	23.0	180.0	118.0	56.0
150	160	6	213.0	213.0	518.5	190.0	23.0	189.0	130.5	56.0
200	225	8	267.0	267.0	568.0	190.0	23.0	209.5	159.0	60.0
250	280	10	325.5	325.5	674.5	190.0	23.0	262.5	195.5	68.0
300	315	12	380.0	380.0	731.0	190.0	23.0	284.5	230.5	78.0

Dimensions			Actuator				Q	Weight
DN (mm)	d (mm)	Inch (")	E (mm)	M1 (mm)	M2 (mm)	Y (mm)	Q2 (mm)	(kg)
50	63	2	122.5	107.5	83.0	166.5	28.5	3.4
65	75	2 ½	122.5	107.5	83.0	189.5	44.0	4.7
80	90	3	122.5	107.5	83.0	189.5	63.5	4.8
100	110	4	122.5	107.5	83.0	189.5	84.0	5.8
125	140	5	122.5	107.5	83.0	189.5	110.5	6.4
150	160	6	122.5	107.5	83.0	199.5	137.5	9.0
200	225	8	122.5	107.5	83.0	199.5	190.5	10.5
250	280	10	122.5	107.5	83.0	216.5	239.0	15.2
300	315	12	122.5	107.5	83.0	216.5	285.5	19.4

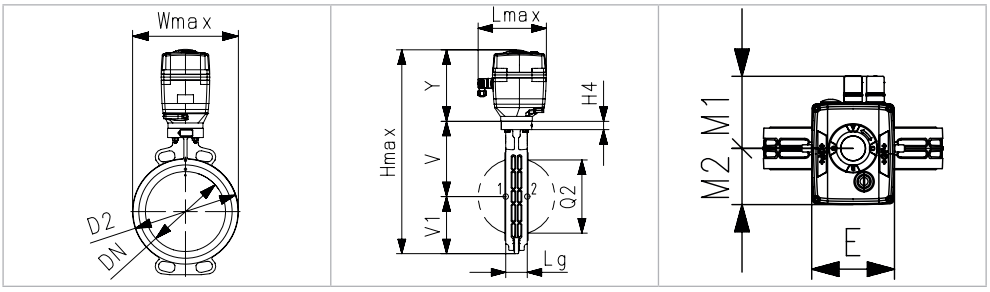
Butterfly Valve type 565W wafer-style DN50 – DN200 with electric actuator EA45-250 and manual override



Dimensions			Housing dimensions							
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Hmax (mm)	Lmax (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)
50	63	2	100.0	385.5	96.0	190.0	23.0	133.5	63.0	43.0
65	75	2 ½	121.0	385.5	96.0	190.0	23.0	140.0	82.0	46.0
80	90	3	138.0	385.5	96.0	190.0	23.0	146.0	89.0	46.0
100	110	4	158.5	385.5	96.0	190.0	23.0	166.5	104.0	52.0
125	140	5	187.0	385.5	189.5	190.0	23.0	180.0	118.0	56.0
150	160	6	213.0	385.5	106.0	190.0	23.0	189.0	130.5	56.0
200	225	8	267.0	385.5	106.0	190.0	23.0	209.5	159.0	60.0

Dimensions			Actuator						Q	Weight
DN (mm)	d (mm)	Inch (")	E (mm)	M1 (mm)	M2 (mm)	X8 (mm)	Y (mm)	Y2 (mm)	Q2 (mm)	(kg)
50	63	2	122.5	107.5	83.0	297.5	189.5	60.0	28.5	5.6
65	75	2 ½	122.5	107.5	83.0	297.5	189.5	60.0	44.0	5.9
80	90	3	122.5	107.5	83.0	297.5	189.5	60.0	63.5	6.0
100	110	4	122.5	107.5	83.0	297.5	189.5	60.0	84.0	6.8
125	140	5	122.5	107.5	83.0	297.5	189.5	60.0	110.5	7.4
150	160	6	122.5	107.5	83.0	297.5	199.5	60.0	137.5	10.0
200	225	8	122.5	107.5	83.0	297.5	199.5	60.0	190.5	11.5

Butterfly Valve type 565W wafer-style DN50 – DN300 with smart electric actuator dEA45-250

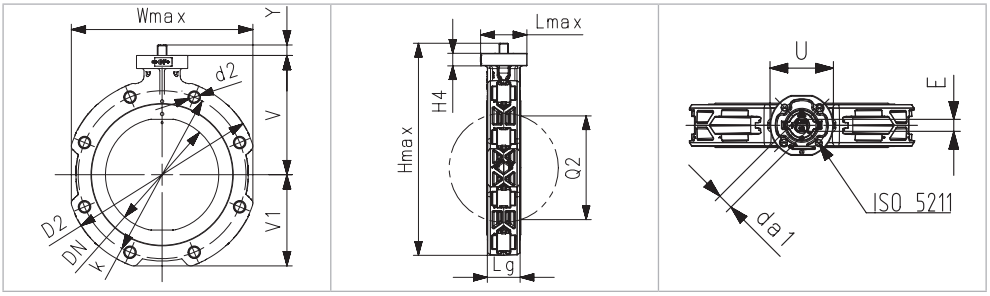


Dimensions			Housing dimensions							
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Hmax (mm)	Lmax (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)
50	63	2	100.0	122.5	377.5	190.0	23.0	133.5	63.0	43.0
65	75	2 ½	121.0	132.5	411.5	190.0	23.0	140.0	82.0	46.0
80	90	3	138.0	137.5	424.0	190.0	23.0	146.0	89.0	46.0
100	110	4	158.5	158.5	459.5	190.0	23.0	166.5	104.0	52.0
125	140	5	187.0	187.0	487.5	190.0	23.0	180.0	118.0	56.0
150	160	6	213.0	213.0	518.5	190.0	23.0	189.0	130.5	56.0
200	225	8	267.0	267.0	568.0	190.0	23.0	209.5	159.0	60.0
250	280	10	325.5	325.5	674.5	190.0	23.0	262.5	195.5	68.0
300	315	12	380.0	380.0	731.0	190.0	23.0	284.5	230.5	78.0

Dimensions			Actuator				Q	Weight
DN (mm)	d (mm)	Inch (")	E (mm)	M1 (mm)	M2 (mm)	Y (mm)	Q2 (mm)	(kg)
50	63	2	122.5	107.5	83.0	166.5	28.5	3.4
65	75	2 ½	122.5	107.5	83.0	189.5	44.0	4.7
80	90	3	122.5	107.5	83.0	189.5	63.5	4.8
100	110	4	122.5	107.5	83.0	189.5	84.0	5.8
125	140	5	122.5	107.5	83.0	189.5	110.5	6.4
150	160	6	122.5	107.5	83.0	199.5	137.5	9.0
200	225	8	122.5	107.5	83.0	199.5	190.5	10.5
250	280	10	122.5	107.5	83.0	216.5	239.0	15.2
300	315	12	122.5	107.5	83.0	216.5	285.5	19.4

Dimensions type 565L lug-style PRELIMINARY

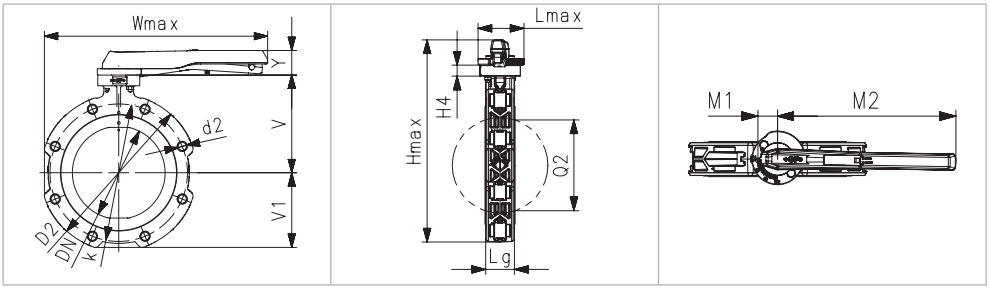
Butterfly Valve type 565L lug-style DN50 – DN300 with free shaft end



Dimensions			Housing dimensions											
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Lmax (mm)	Hmax (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)	k_{ISO} (mm)	k_{ANSI} (mm)	$d2_{ISO}$ (mm)	$d2_{ANSI}$ (")
50	63	2	155	140	84.8	230.4	23	133.3	70.1	43	125	120.6	M16	UNC 5/8
65	75	2 ½	175	161	84.8	247.7	23	139.9	80.8	46	145	139.7	M16	UNC 5/8
80	90	3	190	180	84.8	263.9	23	145.6	91.3	46	160	152.4	M16	UNC 5/8
100	110	4	221	211	84.8	288.6	23	166.4	106.2	52	180	190.5	M16	UNC 5/8
125	140	5	250	239	84.8	316.3	23	180.0	120.3	56	210	215.9	M16	UNC ¾
150	160	6	277	263	84.8	340.4	23	189.0	132.4	56	240	241.3	M20	UNC ¾
200	225	8	337	319	84.8	388.8	23	209.5	160.3	60	295	298.4	M20	UNC ¾
250	280	10	403	403	125.0	501.6	23	262.5	199.1	68	350	362.0	M20	UNC ⅞
300	315	12	479	482	125.0	559.8	23	284.3	235.5	78	400	431.8	M20	UNC ⅞

Dimensions			Housing dimensions					Q
DN (mm)	d (mm)	Inch (")	Acc. to ISO 5211	da1 (mm)	E (mm)	U (mm)	Y (mm)	Q2 (mm)
50	63	2	F07	14.1	11.0	90.0	27.0	28.5
65	75	2 ½	F07	14.1	11.0	90.0	27.0	44.0
80	90	3	F07	14.1	11.0	90.0	27.0	63.5
100	110	4	F07	18.1	14.0	90.0	16.0	84.0
125	140	5	F07	18.1	14.0	90.0	16.0	110.5
150	160	6	F07	22.2	17.0	90.0	19.0	137.5
200	225	8	F07	22.2	17.0	90.0	18.5	190.5
250	280	10	F10	28.2	22.0	125.0	40.5	239.0
300	315	12	F10	28.2	22.0	125.0	40.5	285.5

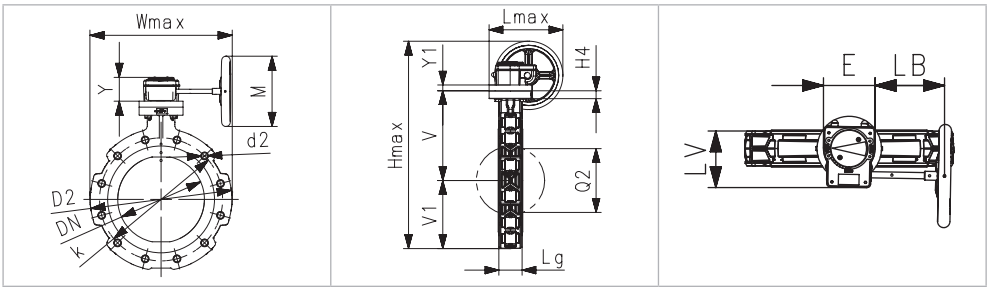
Butterfly Valve type 565L lug-style DN50 – DN200 with hand lever



Dimensions			Housing dimensions										
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Lmax (mm)	Hmax (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)	k_{ISO} (mm)	k_{ANSI} (mm)	$d2_{ISO}$ (mm)	$d2_{ANSI}$ (")
50	63	2	155.0	274.5	96.0	256.4	23.0	133.3	70.1	43.0	125	120.6	M16	UNC ⅝
65	75	2 ½	175.0	285.0	96.0	273.7	23.0	139.9	80.8	46.0	145	139.7	M16	UNC ⅝
80	90	3	190.0	294.5	96.0	289.9	23.0	145.6	91.3	46.0	160	152.4	M16	UNC ⅝
100	110	4	221.0	360.0	96.0	325.6	23.0	166.4	106.2	52.0	180	190.5	M16	UNC ⅝
125	140	5	250.0	374.0	96.0	353.3	23.0	180.0	120.3	56.0	210	215.9	M16	UNC ¾
150	160	6	277.0	454.5	96.0	374.4	23.0	189.0	132.4	56.0	240	241.3	M20	UNC ¾
200	225	8	337.0	482.5	96.0	422.8	23.0	209.5	160.3	60.0	295	298.4	M20	UNC ¾

Dimensions			Lever			Q
DN (mm)	d (mm)	Inch (")	M1 (mm)	M2 (mm)	Y (mm)	Q2 (mm)
50	63	2	35.5	204.5	53.0	28.5
65	75	2 ½	35.5	204.5	53.0	44.0
80	90	3	35.5	204.5	53.0	63.5
100	110	4	35.5	254.5	53.0	84.0
125	140	5	35.5	254.5	53.0	110.5
150	160	6	32.0	323.0	53.0	137.5
200	225	8	32.0	323.0	53.0	190.5

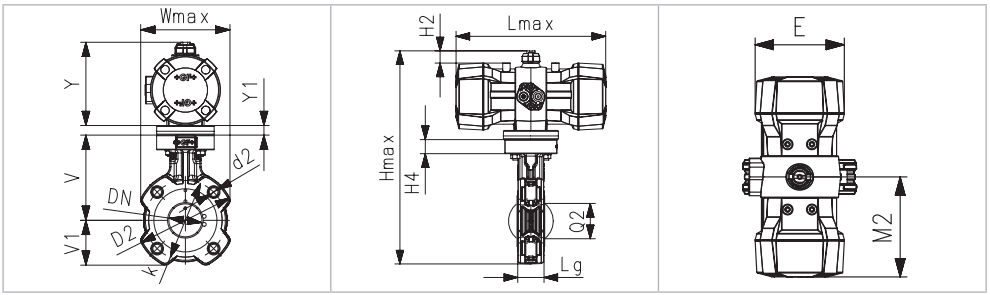
Butterfly Valve type 565L lug-style DN50 – DN300 with manual reduction gear



Dimensions			Housing dimensions											
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Lmax (mm)	Hmax (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)	k_{ISO} (mm)	k_{ANSI} (mm)	$d2_{ISO}$ (mm)	$d2_{ANSI}$ (")
50	63	2	155	251.0	190.8	344.6	23	133.3	70.1	43	125	120.6	M16	UNC 5⁄8
65	75	2 ½	175	261.5	190.8	361.9	23	139.9	80.8	46	145	139.7	M16	UNC 5⁄8
80	90	3	190	271.0	190.8	378.1	23	145.6	91.3	46	160	152.4	M16	UNC 5⁄8
100	110	4	221	286.5	190.8	413.8	23	166.4	106.2	52	180	190.5	M16	UNC 5⁄8
125	140	5	250	300.5	190.8	441.5	23	180.0	120.3	56	210	215.9	M16	UNC ¾
150	160	6	277	312.5	190.8	462.6	23	189.0	132.4	56	240	241.3	M20	UNC ¾
200	225	8	337	319.0	190.8	511.0	23	209.5	160.3	60	295	298.4	M20	UNC ¾
250	280	10	403	403.0	207.4	647.0	23	262.5	199.1	68	350	362.0	M20	UNC ⅞
300	315	12	479	482.0	207.4	705.2	23	284.3	235.5	78	400	431.8	M20	UNC ⅞

Dimensions			Actuator					Q
DN (mm)	d (mm)	Inch (")	E (mm)	LB (mm)	LV (mm)	M (mm)	Y (mm)	Q2 (mm)
50	63	2	80.0	129.5	112.3	160.0	61.2	28.5
65	75	2 ½	80.0	129.5	112.3	160.0	61.2	44.0
80	90	3	80.0	129.5	112.3	160.0	61.2	63.5
100	110	4	80.0	129.5	112.3	160.0	61.2	84.0
125	140	5	80.0	129.5	112.3	160.0	61.2	110.5
150	160	6	80.0	129.5	112.3	160.0	61.2	137.5
200	225	8	80.0	129.5	112.3	160.0	61.2	190.5
250	280	10	100.0	134.0	130.0	200.0	68.4	239.0
300	315	12	100.0	134.0	130.0	200.0	68.4	285.5

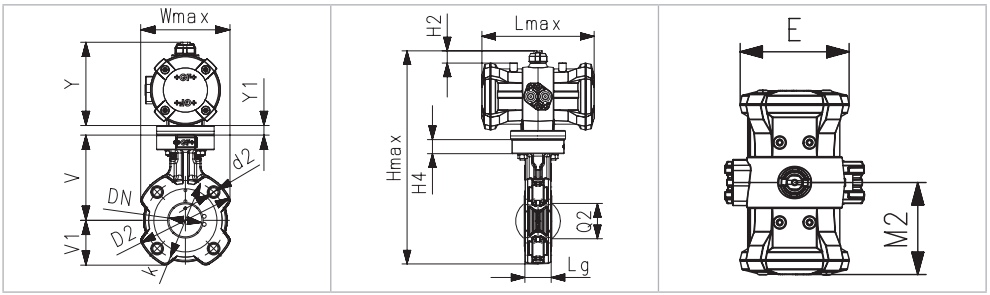
Butterfly Valve type 565L lug-style DN50 – DN300 with pneumatic actuator PPA and FC/FO



Dimensions			Housing dimensions												
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Lmax (mm)	Hmax (mm)	H2 (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)	k_{ISO} (mm)	k_{ANSI} (mm)	$d2_{ISO}$ (mm)	$d2_{ANSI}$ (")
50	63	2	155	211.0	245.5	398.6	20	23	133.3	70.1	43	125	120.6	M16	UNC 5/8
65	75	2 ½	175	239.0	343.0	446.3	20	23	139.9	80.8	46	145	139.7	M16	UNC 5/8
80	90	3	190	263.0	343.0	467.4	20	23	145.6	91.3	46	160	152.4	M16	UNC 5/8

Dimensions			Actuator				Q
DN (mm)	d (mm)	Inch (")	E (mm)	M2 (mm)	Y (mm)	Y1 (mm)	Q2 (mm)
50	63	2	119.5	122.8	111.0	15.0	28.5
65	75	2 ½	141.5	171.5	131.0	0.0	44.0
80	90	3	141.5	171.5	131.0	0.0	63.5

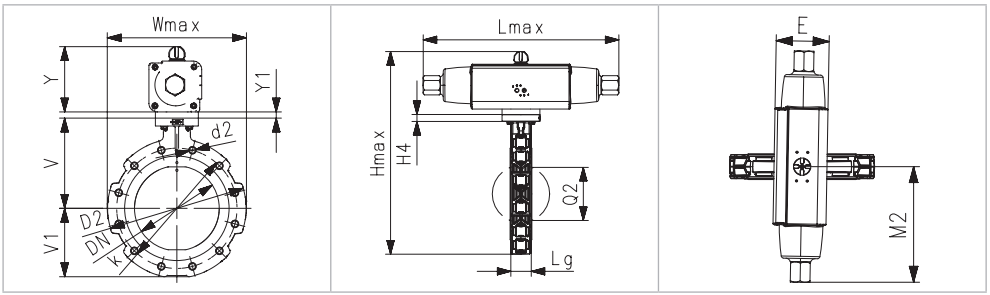
Butterfly Valve type 565L lug-style DN50 – DN300 with pneumatic actuator PPA and DA



Dimensions			Housing dimensions												
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Lmax (mm)	Hmax (mm)	H2 (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)	k_{ISO} (mm)	k_{ANSI} (mm)	$d2_{ISO}$ (mm)	$d2_{ANSI}$ (")
50	63	2	155	140.0	183.5	314.4	20	23	133.3	70.1	43	125	120.6	M16	UNC 5/8
65	75	2 ½	175	161.0	183.5	331.7	20	23	139.9	80.8	46	145	139.7	M16	UNC 5/8
80	90	3	190	180.0	183.5	347.9	20	23	145.6	91.3	46	160	152.4	M16	UNC 5/8

Dimensions			Actuator				Q
DN (mm)	d (mm)	Inch (")	E (mm)	M2 (mm)	Y (mm)	Y1 (mm)	Q2 (mm)
50	63	2	119.5	91.8	111.0	15.0	28.5
65	75	2 ½	119.5	91.8	111.0	15.0	44.0
80	90	3	119.5	91.8	111.0	15.0	63.5

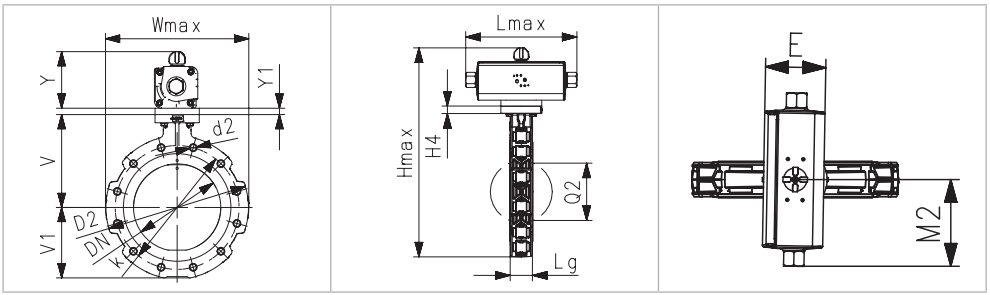
Butterfly Valve type 565L lug-style DN50 – DN300 with pneumatic actuator PA30-70 and FC/FO



Dimensions			Housing dimensions										
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Lmax (mm)	Hmax (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)	k_{ISO} (mm)	k_{ANSI} (mm)	$d2_{ISO}$ (mm)	$d2_{ANSI}$ (")
50	63	2	155	140.0	274.4	316.6	23	133.3	70.1	43	125	120.6	M16	UNC 5/8
65	75	2 ½	175	161.0	274.4	333.9	23	139.9	80.8	46	145	139.7	M16	UNC 5/8
80	90	3	190	180.0	325.2	363.0	23	145.6	91.3	46	160	152.4	M16	UNC 5/8
100	110	4	221	211.0	359.6	387.4	23	166.4	106.2	52	180	190.5	M16	UNC 5/8
125	140	5	250	239.0	418.0	449.8	23	180.0	120.3	56	210	215.9	M16	UNC 3/4
150	160	6	277	263.0	434.0	474.5	23	189.0	132.4	56	240	241.3	M20	UNC 3/4
200	225	8	337	319.0	547.3	546.8	23	209.5	160.3	60	295	298.4	M20	UNC 3/4
250	280	10	403	403.0	646.0	668.6	23	262.5	199.1	68	350	362.0	M20	UNC 7/8
300	315	12	479	482.0	681.0	746.9	23	284.3	235.5	78	400	431.8	M20	UNC 7/8

Dimensions			Actuator				Q
DN (mm)	d (mm)	Inch (")	E (mm)	M2 (mm)	Y (mm)	Y1 (mm)	Q2 (mm)
50	63	2	70.4	137.2	98.2	15.0	28.5
65	75	2 ½	70.4	137.2	98.2	15.0	44.0
80	90	3	83.3	162.6	111.1	15.0	63.5
100	110	4	87.0	179.8	114.8		84.0
125	140	5	107.5	209.0	149.5		110.5
150	160	6	111.1	217.0	153.1		137.5
200	225	8	135.0	274.0	177.0		190.5
250	280	10	148.0	323.0	190.0	18.0	239.0
300	315	12	168.0	340.5	210.1	18.0	285.5

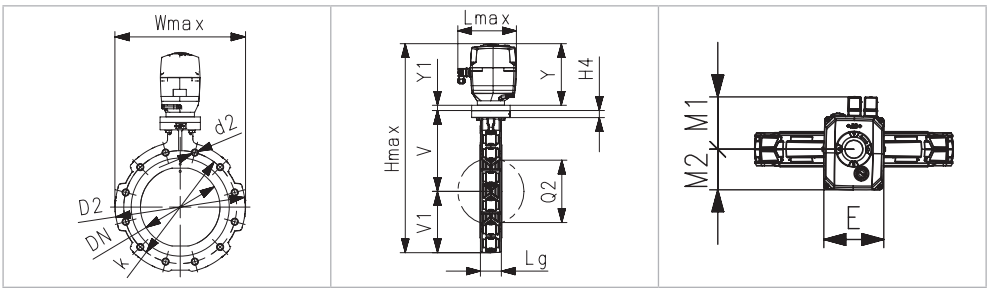
Butterfly Valve type 565L lug-style DN50 – DN300 with pneumatic actuator PA30-70 and DA



Dimensions			Housing dimensions										
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Lmax (mm)	Hmax (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)	k_{ISO} (mm)	k_{ANSI} (mm)	$d2_{ISO}$ (mm)	$d2_{ANSI}$ (")
50	63	2	155	140.0	196.2	310.7	23	133.3	70.1	43	125	120.6	M16	UNC 5/8
65	75	2 ½	175	161.0	196.2	328.0	23	139.9	80.8	46	145	139.7	M16	UNC 5/8
80	90	3	190	180.0	205.6	350.1	23	145.6	91.3	46	160	152.4	M16	UNC 5/8
100	110	4	221	211.0	242.0	383.8	23	166.4	106.2	52	180	190.5	M16	UNC 5/8
125	140	5	250	239.0	242.0	411.5	23	180.0	120.3	56	210	215.9	M16	UNC ¾
150	160	6	277	263.0	290.0	470.9	23	189.0	132.4	56	240	241.3	M20	UNC ¾
200	225	8	337	319.0	313.9	523.3	23	209.5	160.3	60	295	298.4	M20	UNC ¾
250	280	10	403	403.0	339.6	638.6	23	262.5	199.1	68	350	362.0	M20	UNC ⅞
300	315	12	479	482.0	382.5	713.8	23	284.3	235.5	78	400	431.8	M20	UNC ⅞

Dimensions			Actuator				Q
DN (mm)	d (mm)	Inch (")	E (mm)	M2 (mm)	Y (mm)	Y1 (mm)	Q2 (mm)
50	63	2	64.5	98.5	98.1	15.0	28.5
65	75	2 ½	64.5	98.5	98.1	15.0	44.0
80	90	3	70.4	103.0	102.8	15.0	63.5
100	110	4	83.3	121.0	121.0		84.0
125	140	5	83.3	121.0	121.0		110.5
150	160	6	107.5	145.5	145.0		137.5
200	225	8	111.5	157.0	157.0		190.5
250	280	10	118.0	170.0	169.8	18.0	239.0
300	315	12	135.0	191.5	191.5	18.0	285.5

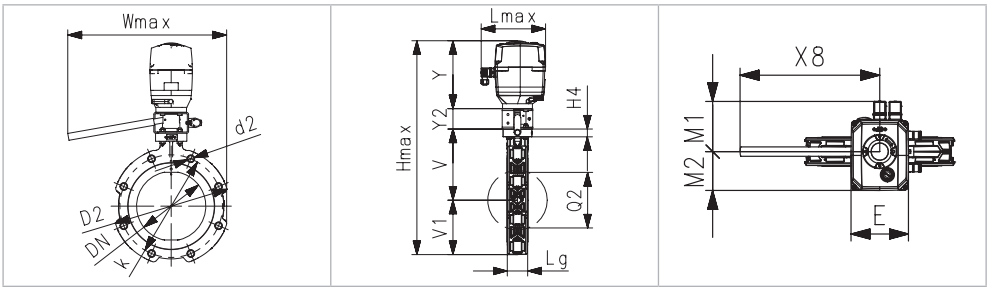
Butterfly Valve type 565L lug-style DN50 – DN300 with electric actuator EA45-250



Dimensions			Housing dimensions											
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Lmax (mm)	Hmax (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)	k_{ISO} (mm)	k_{ANSI} (mm)	$d2_{ISO}$ (mm)	$d2_{ANSI}$ (")
50	63	2	155	140.0	190.0	384.6	23	133.3	70.1	43	125	120.6	M16	UNC 5/8
65	75	2 ½	175	161.0	190.0	410.0	23	139.9	80.8	46	145	139.7	M16	UNC 5/8
80	90	3	190	180.0	190.0	426.2	23	145.6	91.3	46	160	152.4	M16	UNC 5/8
100	110	4	221	211.0	190.0	461.9	23	166.4	106.2	52	180	190.5	M16	UNC 5/8
125	140	5	250	239.0	190.0	489.6	23	180.0	120.3	56	210	215.9	M16	UNC ¾
150	160	6	277	263.0	190.0	520.7	23	189.0	132.4	56	240	241.3	M20	UNC ¾
200	225	8	337	319.0	190.0	569.1	23	209.5	160.3	60	295	298.4	M20	UNC ¾
250	280	10	403	403.0	190.0	677.9	23	262.5	199.1	68	350	362.0	M20	UNC ⅞
300	315	12	479	482.0	190.0	736.1	23	284.3	235.5	78	400	431.8	M20	UNC ⅞

Dimensions			Actuator				Q
DN (mm)	d (mm)	Inch (")	E (mm)	M1 (mm)	M2 (mm)	Y (mm)	Q2 (mm)
50	63	2	122.3	107.3	83.0	166.5	28.5
65	75	2 ½	122.3	107.3	83.0	189.5	44.0
80	90	3	122.3	107.3	83.0	189.5	63.5
100	110	4	122.3	107.3	83.0	189.5	84.0
125	140	5	122.3	107.3	83.0	189.5	110.5
150	160	6	122.3	107.3	83.0	199.5	137.5
200	225	8	122.3	107.3	83.0	199.5	190.5
250	280	10	122.3	107.3	83.0	216.5	239.0
300	315	12	122.3	107.3	83.0	216.5	285.5

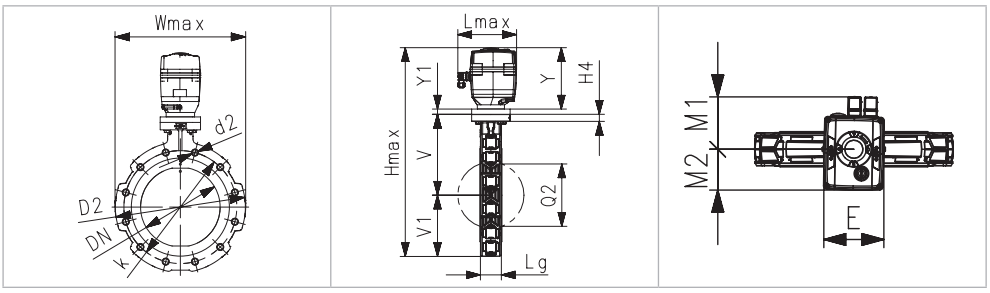
Butterfly Valve type 565L lug-style DN50 – DN200 with electric actuator EA45-250 and manual override



Dimensions			Housing dimensions											
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Lmax (mm)	Hmax (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)	k_{ISO} (mm)	k_{ANSI} (mm)	$d2_{ISO}$ (mm)	$d2_{ANSI}$ (")
50	63	2	155	274.5	96.0	256.4	23	133.3	70.1	43	125	120.6	M16	UNC ⅝
65	75	2 ½	175	285.0	96.0	273.7	23	139.9	80.8	46	145	139.7	M16	UNC ⅝
80	90	3	190	294.5	96.0	289.9	23	145.6	91.3	46	160	152.4	M16	UNC ⅝
100	110	4	221	360.0	96.0	325.6	23	166.4	106.2	52	180	190.5	M16	UNC ⅝
125	140	5	250	374.0	96.0	353.3	23	180.0	120.3	56	210	215.9	M16	UNC ¾
150	160	6	277	454.5	96.0	374.4	23	189.0	132.4	56	240	241.3	M20	UNC ¾
200	225	8	337	482.5	96.0	422.8	23	209.5	160.3	60	295	298.4	M20	UNC ¾

Dimensions			Actuator						Q
DN (mm)	d (mm)	Inch (")	E (mm)	M1 (mm)	M2 (mm)	X8 (mm)	Y (mm)	Y2 (mm)	Q2 (mm)
50	63	2	122.3	107.3	83.0	297.5	166.2	60.0	28.5
65	75	2 ½	122.3	107.3	83.0	297.5	189.3	60.0	44.0
80	90	3	122.3	107.3	83.0	297.5	189.3	60.0	63.5
100	110	4	122.3	107.3	83.0	297.5	189.3	60.0	84.0
125	140	5	122.3	107.3	83.0	297.5	189.3	60.0	110.5
150	160	6	122.3	107.3	83.0	297.5	199.3	60.0	137.5
200	225	8	122.3	107.3	83.0	297.5	199.3	60.0	190.5

Butterfly Valve type 565L lug-style DN50 – DN300 with smart electric actuator dEA45-250



Dimensions			Housing dimensions											
DN (mm)	d (mm)	Inch (")	D2 (mm)	Wmax (mm)	Lmax (mm)	Hmax (mm)	H4 (mm)	V (mm)	V1 (mm)	Lg (mm)	k_{ISO} (mm)	k_{ANSI} (mm)	$d2_{ISO}$ (mm)	$d2_{ANSI}$ (")
50	63	2	155	140.0	190.0	384.6	23	133.3	70.1	43	125	120.6	M16	UNC ⅝
65	75	2 ½	175	161.0	190.0	410.0	23	139.9	80.8	46	145	139.7	M16	UNC ⅝
80	90	3	190	180.0	190.0	426.2	23	145.6	91.3	46	160	152.4	M16	UNC ⅝
100	110	4	221	211.0	190.0	461.9	23	166.4	106.2	52	180	190.5	M16	UNC ⅝
125	140	5	250	239.0	190.0	489.6	23	180.0	120.3	56	210	215.9	M16	UNC ¾
150	160	6	277	263.0	190.0	520.7	23	189.0	132.4	56	240	241.3	M20	UNC ¾
200	225	8	337	319.0	190.0	569.1	23	209.5	160.3	60	295	298.4	M20	UNC ¾
250	280	10	403	403.0	190.0	677.9	23	262.5	199.1	68	350	362.0	M20	UNC ⅞
300	315	12	479	482.0	190.0	736.1	23	284.3	235.5	78	400	431.8	M20	UNC ⅞

Dimensions			Actuator				Q
DN (mm)	d (mm)	Inch (")	E (mm)	M1 (mm)	M2 (mm)	Y (mm)	Q2 (mm)
50	63	2	122.3	107.3	83.0	166.2	28.5
65	75	2 ½	122.3	107.3	83.0	189.3	44.0
80	90	3	122.3	107.3	83.0	189.3	63.5
100	110	4	122.3	107.3	83.0	189.3	84.0
125	140	5	122.3	107.3	83.0	189.3	110.5
150	160	6	122.3	107.3	83.0	199.3	137.5
200	225	8	122.3	107.3	83.0	199.3	190.5
250	280	10	122.3	107.3	83.0	199.3	239.0
300	315	12	122.3	107.3	83.0	199.3	285.5

Accessories

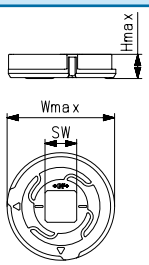
Double Sensor for electrical position feedback

After being mounted in the valve or in the interface module, the double sensor is used to signal the CLOSED or OPEN position of the valve via an electric signal to a controller, supplied by the customer. The switching states are also output optically via two integrated LEDs.

Code	Output circuit	Open Signal Color	Closed Signal Color	Product picture
198 546 001	PNP	LED red	LED green	
198 546 002	PNP	LED green	LED red	
198 546 005	NPN	LED red	LED green	
198 546 006	NPN	LED green	LED red	
198 546 003	NAMUR	LED red	LED green	
198 546 004	NAMUR	LED green	LED red	

Suitable connection cable code 198546150 available as an accessory.

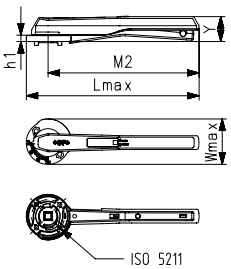
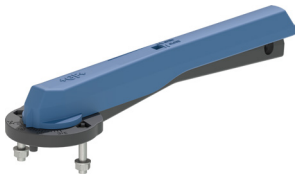
Switching ring for Double Sensor

DN (mm)	Code	Gemäss ISO 5211	SW (mm)	Wmax (mm)	Hmax (mm)	Dimensions	Product picture
50 - 80	199 565 900	F07	11	57.7	12.5		
100 - 125	199 565 901	F07	14	57.7	12.5		
150 - 200	199 565 902	F07	17	57.7	12.5		
250 - 300	199 565 903	F10	22.1	79.8	12.5		

For manually operated valves an additional switching ring is required. For electrically or pneumatically operated valves, the switching ring is already pre-assembled.

Hand lever

Hand lever incl. fastening screws.

DN (mm)	Code	Wmax (mm)	Lmax (mm)	Gemäss ISO 5211	h1 (mm)	M2 (mm)	Y (mm)	Dimensions	Product picture
50-80	199 565 906	96	251	F07	13.5	204.5	53		
100-125	199 565 907	96	301	F07	13.5	254.5	53		
150-200	199 565 908	96	366	F07	13.5	319.5	53		

Reduction gear

For valve operation via a manual gear with handwheel.

DN (mm)	Code	Product picture
50-200	161 483 471	
250-300	161 483 472	

Gear box with direct mount chain wheel

For valve operation via a manual gear with chainwheel.

- Chains need to be ordered separately.
- A pre-assembly is possible. If needed - please contact your local sales team.

DN (mm)	Code	Product picture
50-80	199 565 984	
100-125	199 565 985	
150-200	199 565 986	
250-300	199 565 987	

Chain to chainwheel

- For 199565980-199565987
- Can be ordered in different lengthes. Mass unit is 1 meter.

DN (mm)	Code	Material	Product picture
50-300	199 565 989	Zink plated	
50-300	199 565 990	AISI316	

Electric Actuator EA45-250

The EA45/120/250 electric actuator is mounted on a valve (e.g. ball valve or butterfly valve) and connected to a control system provided by the customer. It actuates the valve with a rotary movement of up to 180°.

DN (mm)	Code	Type	Spannung	Torque max.	Acc. to ISO 5211	Product picture
50	198 153 184	EA45	AC 100-230V	45 Nm	F05* (WS 11/14)	
50	198 153 185	EA45	AC/DC 24V	45 Nm	F05* (WS 11/14)	
50 - 125	198 153 186	EA120	AC 100-230V	120 Nm	F07 (WS17)	
50 - 125	198 153 187	EA120	AC/DC 24V	120 Nm	F07 (WS17)	
150 - 300	198 153 188	EA250	AC 100-230V	250 Nm	F07 (WS17)	
150 - 300	198 153 189	EA250	AC/DC 24V	250 Nm	F07 (WS17)	

Smart Actuator dEA45-250

The Smart Actuator dEA45/120/250 is mounted on a valve (e.g. ball valve or butterfly valve) and connected to a control system provided by the customer. It actuates the valve with a rotary movement up to 180°. The Smart Actuator offers wireless connectivity via NFC and Wi-Fi Direct, as well as control and reading of process data via downloadable App.

DN (mm)	Code	Type	Spannung	Torque max.	Acc. to ISO 5211	Product picture
50	198 153 194	dEA45	AC 100-230V	45 Nm	F05* (WS 11/14)	
50	198 153 195	dEA45	AC/DC 24V	45 Nm	F05* (WS 11/14)	
50 - 125	198 153 196	dEA120	AC 100-230V	120 Nm	F07 (WS17)	
50 - 125	198 153 197	dEA120	AC/DC 24V	120 Nm	F07 (WS17)	
150 - 300	198 153 198	dEA250	AC 100-230V	250 Nm	F07 (WS17)	
150 - 300	198 153 199	dEA250	AC/DC 24V	250 Nm	F07 (WS17)	

Pneumatic Actuator PPA

The PPA pneumatic actuator can be mounted on any rotary valves with an interface according to ISO 5211.

Single-acting FC

DN (mm)	Code	Type	Torque max.	Acc. to ISO 5211	Product picture
50	198 155 401	PPA40	30 Nm	F05	
65 - 80	198 155 801	PPA80	53 Nm	F07	

Single-acting FO

DN (mm)	Code	Type	Torque max.	Acc. to ISO 5211	Product picture
50	198 155 402	PPA40	17 Nm	F05	
65 - 80	198 155 802	PPA80	40 Nm	F07	

Double-acting DA

DN (mm)	Code	Typ	Torque max.	Acc. to ISO 5211	Product picture
50 - 80	198 155 403	PPA40	31 Nm	F05	

Pneumatic Actuator PA30-70

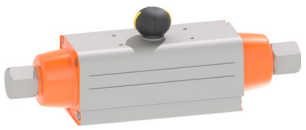
The PA30 - PA70 pneumatic actuator can be mounted on any rotary valves with an interface according to ISO 5211.

Single-acting FC

DN (mm)	Code	Type	Torque max.	Acc. to ISO 5211	Product picture
50 - 65	198 811 617	PA30	30 Nm	F05/07	
80	198 811 601	PA35	53 Nm	F05/07	
100	198 811 609	PA40	60 Nm	F05/07	
125	198 811 603	PA45	90 Nm	F07/10	
150	198 811 610	PA55	180 Nm	F07/10	
200	198 811 652	PA60	240 Nm	F07/10/12	
250	198 811 607	PA65	360 Nm	F10/12	
300	198 811 612	PA70	480 Nm	F10/12	

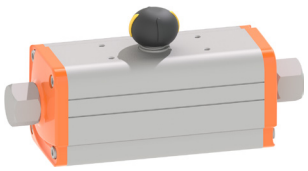
Single-acting FO

DN (mm)	Code	Typ	Torque max.	Acc. to ISO 5211	Product picture
50 - 65	198 811 627	PA30	30 Nm	F05/07	
80	198 811 628	PA35	53 Nm	F05/07	
100	198 811 629	PA40	60 Nm	F05/07	
125	198 811 630	PA45	90 Nm	F07/10	
150	198 811 631	PA55	180 Nm	F07/10	
200	198 811 653	PA60	240Nm	F07/10/12	
250	198 811 654	PA65	360 Nm	F10/12	
300	198 811 634	PA70	480 Nm	F10/12	



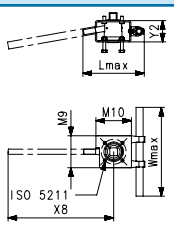
Double-acting DA

DN (mm)	Code	Typ	Torque max.	Acc. to ISO 5211	Product picture
50 - 65	198 811 618	PA35	46 Nm	F03/05	
80	198 811 619	PA40	60 Nm	F05/07	
100 - 125	198 811 604	PA45	106 Nm	F05/07	
150	198 811 606	PA55	180 Nm	F07/10	
200	198 811 614	PA60	240 Nm	F07/10	
250	198 811 608	PA65	360 Nm	F07/10	
300	198 811 615	PA70	480 Nm	F10/12	



Manual override

DN (mm)	Code	Acc. to ISO 5211	Lmax (mm)	Wmax (mm)	M9 (mm)	M10 (mm)	X8 (mm)	Y2 (mm)	Dimensions	Product picture
50 - 80	199 565 914	F07	172	250	90	100	298	60		
100 - 125	199 565 915	F07	172	250	90	100	298	60		
150 - 200	199 565 916	F07	172	250	90	100	298	60		

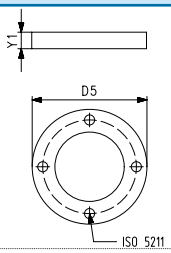
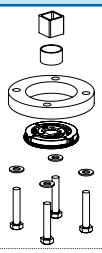


Intermediate elements

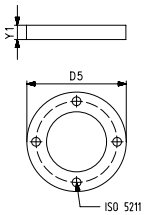
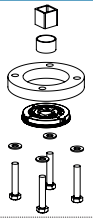
Intermediate elements are required as a connection between valve and Actuator. The intemediate elements include different screws, hexagon nuts, washer, switching rings, etc. (depends on actuator and dimension).

Note: The switching ring for the double sensor for electrical position feedback is supplied with each intermediate element.

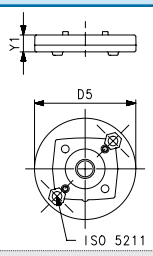
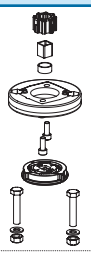
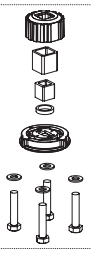
Intermediate elements for Reduction Gear

DN (mm)	Code	Reduction gear	Acc. to ISO 5211	D5 (mm)	Y1 (mm)	Dimensions	Product picture
50 - 80	199 565 917	161 483 471	F07				
100 - 125	199 565 918	161 483 471	F07				
150 - 200	199 565 919	161 483 471	F07				
250 - 300	199 565 913	161 483 472	F07/F10	125	17		

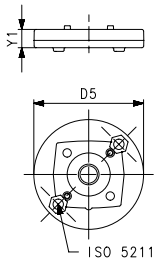
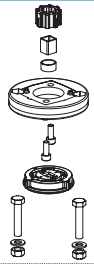
Intermediate elements for Electric Actuators EA45-250, dEA45-250

DN (mm)	Code	Type	Acc. to ISO 5211	D5 (mm)	Y1 (mm)	Dimensions	Product picture
50	199 565 909	EA45	F05/F07	90	15		
50 - 80	199 565 910	xEA120-250	F07				
100 - 125	199 565 911	xEA120-250	F07				
150 - 200	199 565 912	xEA250	F07				
250 - 300	199 565 913	xEA250	F07/F10	125	17		

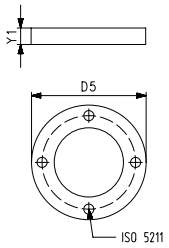
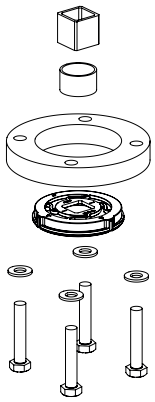
Intermediate elements for Pneumatic Actuators PPA, function FC/FO

DN (mm)	Code	Type	Acc. to ISO 5211	D5 (mm)	Y1 (mm)	Dimensions	Product picture
50	199 565 965	PPA40	F05/F07	90	15		
65 - 80	199 565 966	PPA80	F05/F07				

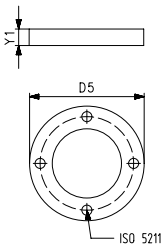
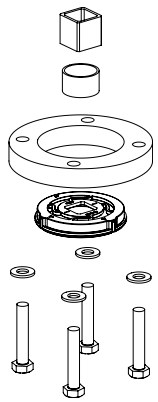
Intermediate elements for Pneumatic Actuators PPA, function DA

DN (mm)	Code	Type	Acc. to ISO 5211	D5 (mm)	Y1 (mm)	Dimensions	Product picture
50 - 80	199 565 965	PPA40	F05/F07	90	15		

Intermediate elements for Pneumatic Actuators PA30-70, function FC/FO

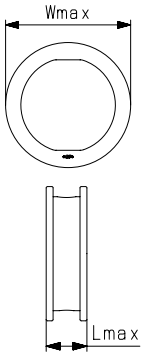
DN (mm)	Code	Type	Acc. to ISO 5211	D5 (mm)	Y1 (mm)	Dimensions	Product picture
50	199 565921	PA30	F05/F07	90	15		
65	199 565 921	PA30	F05/F07	90	15		
80	199 565 922	PA35	F05/F07	90	15		
100	199 565 923	PA40	F07				
125	199 565 924	PA45	F07				
150	199 565 925	PA50	F07				
200	199 565 929	PA60	F07/F10	125	18		
250	199 565 927	PA65	F10	125	18		
300	199 565 928	PA70	F10	125	18		

Intermediate elements for Pneumatic Actuators PA30-70, function DA

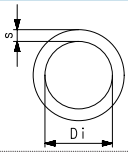
DN (mm)	Code	Type	Acc. to ISO 5211	D5 (mm)	Y1 (mm)	Dimensions	Product picture
50	199 565 920	PA35	F05/F07	90	15		
65	199 565 920	PA35	F05/F07	90	15		
80	199 565 921	PA40	F05/F07	90	15		
100	199 565 923	PA45	F07				
125	199 565 923	PA45	F07				
150	199 565 925	PA55	F07				
200	199 565 925	PA60	F07	125	18		
250	199 565 926	PA65	F10	125	18		
300	199 565 927	PA70	F10	125	18		

Replacement parts

Replacement seat liner

DN (mm)	EPDM	FKM	Lmax (mm)	Wmax (mm)	Dimensions	Product picture
50	199 565 930	199 565 940	45.2	85.5		
65	199 565 931	199 565 941	48.4	105.5		
80	199 565 932	199 565 942	48.4	122.5		
100	199 565 933	199 565 943	54.6	142.5		
125	199 565 934	199 565 944	59	169.5		
150	199 565 935	199 565 945	59	194.5		
200	199 565 936	199 565 946	63	248		
250	199 565 937	199 565 947	72	304		
300	199 565 938	199 565 948	82.8	358		

Replacement o-ring

DN (mm)	EPDM	FKM	Di	s	Dimensions	Product picture
50-80	199 565 951	199 565 961	13.95	2.62		
100-125	199 565 952	199 565 962	17.13	2.62		
150-200	199 565 953	199 565 963	20.22	3.53		
250-300	199 565 954	199 565 964	24.99	3.53		

For further information see www.gfps.com/565

Mobile apps and online tools to support configuration and calculation at www.gfps.com/tools

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