

Butterfly Valve Type 565

Preliminary data for DN200-300

				
Type 565 Butterfly Valve with bare shaft	Type 565 Butterfly Valve with hand lever	Type 565 Butterfly Valve with reduction gear	Type 565 Butterfly Valve with pneumatic actuator	Type 565 Butterfly Valve 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. This new generation 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: Can be lifted 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-proof through compatibility with wirelessly controlled Smart Actuators. Prepared mounting option for end position detection sensors.

Sustainable: Long service life as well as corrosion-resistant due to the use of high-quality plastic materials. Significant energy and resource reduction during transport and installation due to low weight.

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.

Automation through use as a process and control valve

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



Type 565 Butterfly Valve with electric actuator

Type 565 Butterfly Valve with smart actuator

Type 565 Butterfly Valve with pneumatic actuator

Double sensor for end position detection

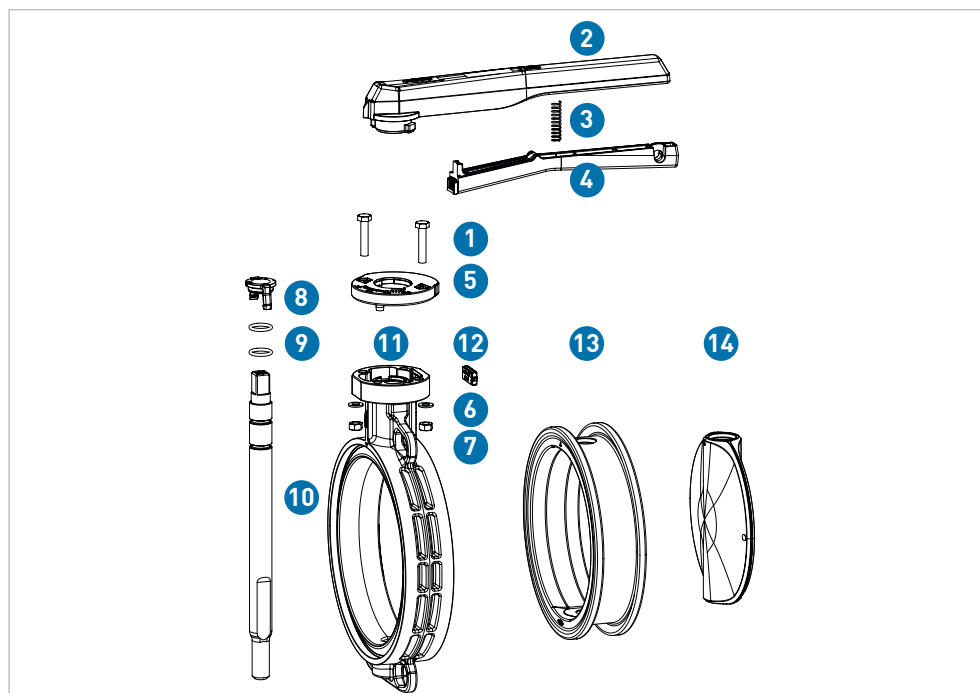
Applications

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

Technical data

Specifications



- ① Screw
- ② Lever
- ③ Spring
- ④ Grid lever
- ⑤ Index plate
- ⑥ Washer
- ⑦ Nut
- ⑧ Shaft lock
- ⑨ O-Ring
- ⑩ Shaft
- ⑪ Housing
- ⑫ Cap
- ⑬ Seat liner
- ⑭ Disc

Specifications					
Dimensions	d63/DN50 – d315/DN300, 2" – 12"				
Materials	Lever, grid lever, index plate, shaft lock, housing	② ④ ⑤ ⑧ ⑪	Polyamide PA6-60		
	Disc (outside)	⑭	PVDF		
	Disc (inside)	⑭	Polyamide PA6-60		
	O-Ring, seat liner	⑨ ⑬	EPDM or FKM		
	Screw, washer, nut, shaft	① ⑥ ⑦ ⑩	Stainless steel		
	Spring	③	Stainless spring 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	
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				
Actuator interface	EN ISO 5211				
Actuation variants	Hand-operated (lockable hand lever or manual reduction gear)				
	Pneumatic actuated: FC, FO, DA				
	Electric actuated: EA25-250 AC: 100 – 230 V, AC/DC: 24 V, Smart actuator dEA				
Approvals	Multiple approvals available on request				
	Leak test	ISO 9393-2, EN 12266 (leak rate A), ISO 5208 (Rate A)			

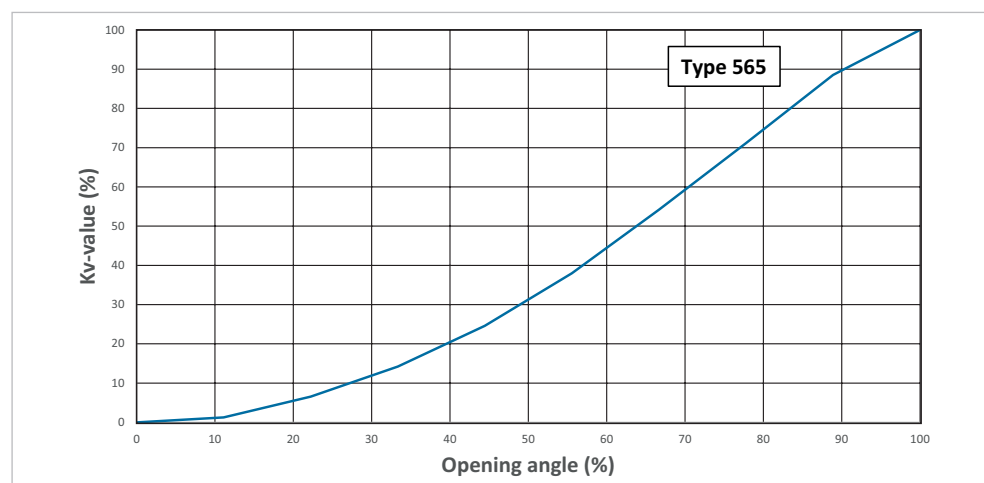
Flow characteristics

Kv 100-values

DN (mm)	d (mm)	Inch (")	Kv 100 (l/min)	Cv 100 (US gal./min)	Kv 100 (m³/h)
50	63	2	1445	101	87
65	75	2 ½	2530	177	152
80	90	3	4020	281	241
100	110	4	5850	400	351
125	140	5	11900	832	714
150	160	6	18050	1262	1083
200	225	8	43667	3052	2620
250	280	10	*	*	*
300	315	12	*	*	*

* On request

Flow characteristics according to opening angle



Operating torques

DN (mm)	d (mm)	Inch (")	Operating torque (Nm)	
			@ Operating pressure 10 bar	@ Operating pressure 16 bar
50	63	2	15	15
65	75	2 ½	20	20
80	90	3	25	25
100	110	4	40	40
125	140	5	50	50
150	160	6	60	60
200	225	8	160	-
250	280	10	250	-
300	315	12	300	-

Pressure-temperature diagrams

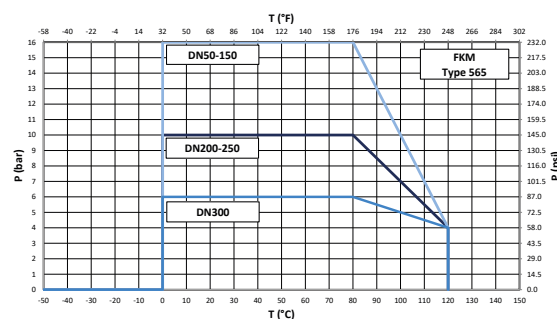
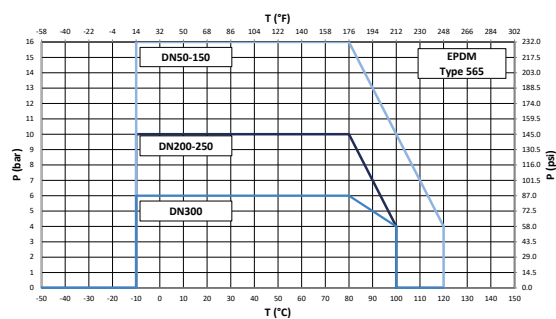
The following pressure-temperature diagrams are based on a lifetime of 25 years and water or similar media.

T Temperature (°C, °F)

P Permissible pressure (bar, psi)

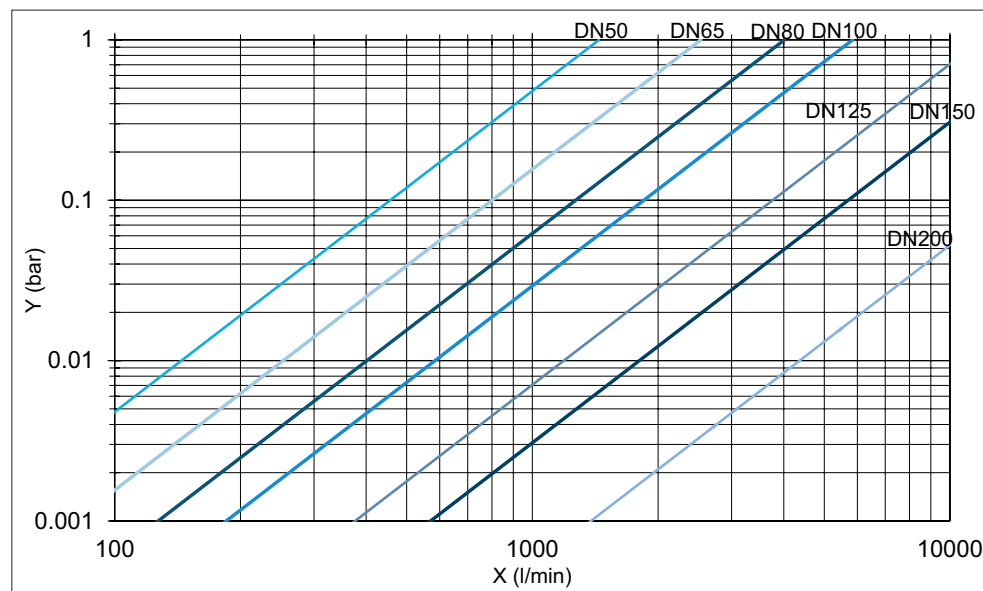
EPDM (DN50 – DN300)

FKM (DN50 – DN300)



Pressure losses

DN50 – DN200



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

Standard values for screw fastening

DN50 – DN300 in ISO flange connections

DN (mm)	d (mm)	Inch (")	Screws ISO*	Tightening torque	
				(Nm)	Inch-lbs
50	63	2	4 x M16 x 140mm	25	221
65	75	2 ½	4 x M16 x 140mm	25	221
80	90	3	8 x M16 x 150mm	25	221
100	110	4	8 x M16 x 160mm	30	265
125	140	5	8 x M16 x 170mm	35	310
150	160	6	8 x M20 x 180mm	40	352
200	225	8	8 x M20 x 200mm	50	442
250	280	10	12 x M20 x 220mm	80	708
300	315	12	12 x M20 x 250mm	80	708

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

DN50 – DN300 in ANSI flange connections

DN (mm)	d (mm)	Inch (")	Screws ANSI*	Tightening torque	
				(Nm)	Inch-lbs
50	63	2	4 x 5/8" x 5 ½"	25	221
65	75	2 ½	4 x 5/8" x 5 ½"	25	221
80	90	3	4 x 5/8" x 6"	25	221
100	110	4	8 x 5/8" x 6 ½"	30	265
125	140	5	8 x ¾" x 6 ¾"	35	310
150	160	6	8 x ¾" x 7"	40	352
200	225	8	8 x ¾" x 8"	50	442
250	280	10	12 x 7/8" x 8 ½"	80	708
300	315	12	12 x 7/8" x 10"	80	708

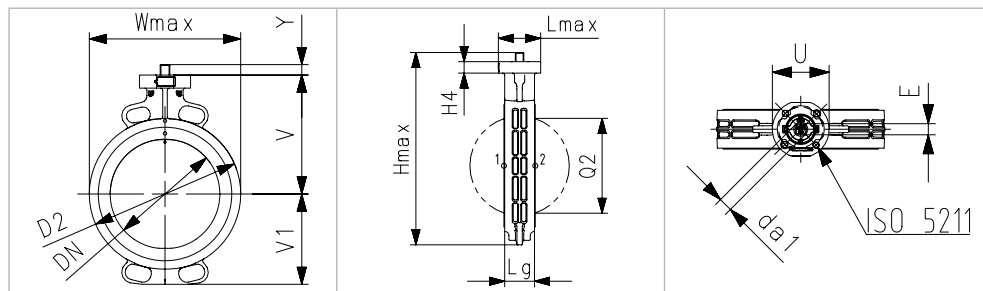
*for PVC-U socket flange adaptors and PP-V flange



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

Dimensions

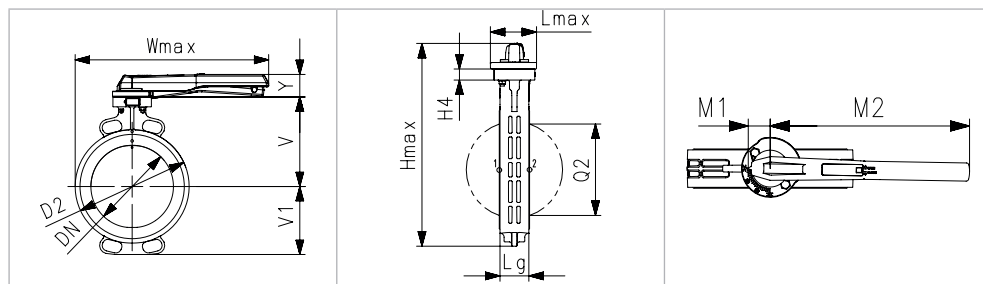
Butterfly Valve Type 565 DN50 – DN300 with free shaft end



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	195.0	60.0
250	280	10	325.5	325.5	125.5	499.0	23.0	262.5	195.5	68.0
300	315	12	380.0	380.0	125.5	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)	Weight (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	19.0	191.5	5.2
250	280	10	F10	28.2	22.0	125.0	41.0	239.0	9.5
300	315	12	F10	28.2	22.0	125.0	41.0	285.5	13.7

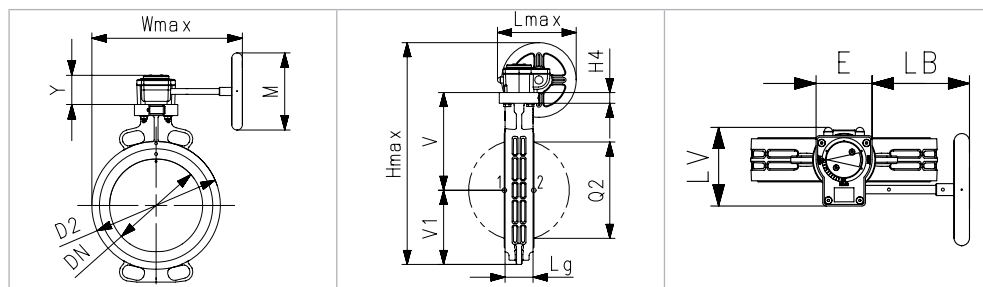
Butterfly Valve Type 565 DN50 – DN200 with hand lever



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	195.0	60.0

Dimensions			Actuator			Q	Weight
DN (mm)	d (mm)	Inch (")	M1 (mm)	M2 (mm)	Y (mm)	Q2 (mm)	Weight (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	191.5	5.7

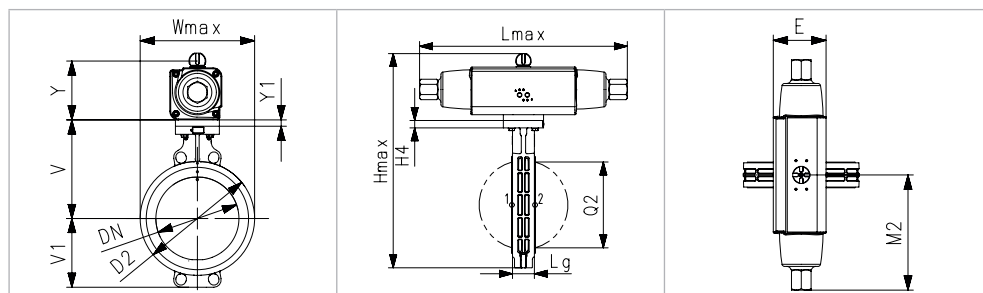
Butterfly Valve Type 565 DN50 – DN300 with manual reduction gear



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	195.0	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)	Weight (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	191.5	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

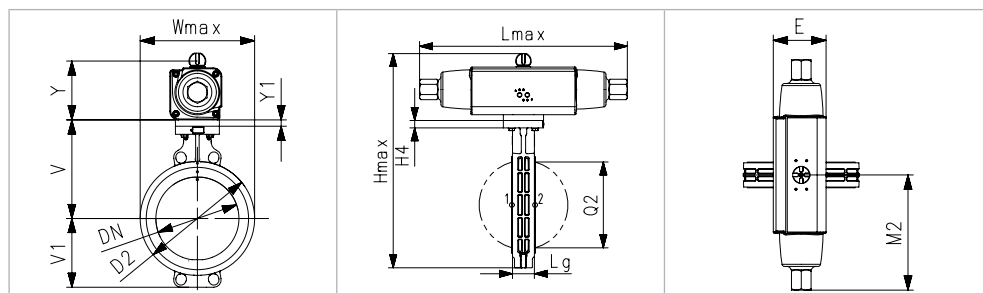
Butterfly Valve Type 565 DN50 – DN300 with pneumatic actuator FC/F0



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	195.0	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	742.5	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)	Weight (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	-	191.5	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

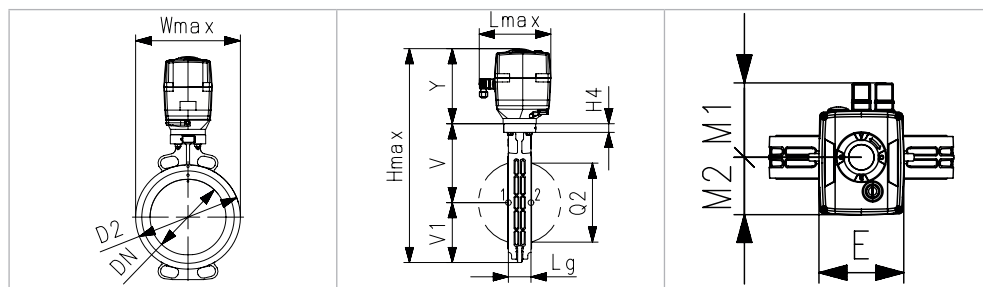
Butterfly Valve Type 565 DN50 – DN300 with pneumatic actuator Double DA



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	195.0	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)	Weight (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	-	191.5	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

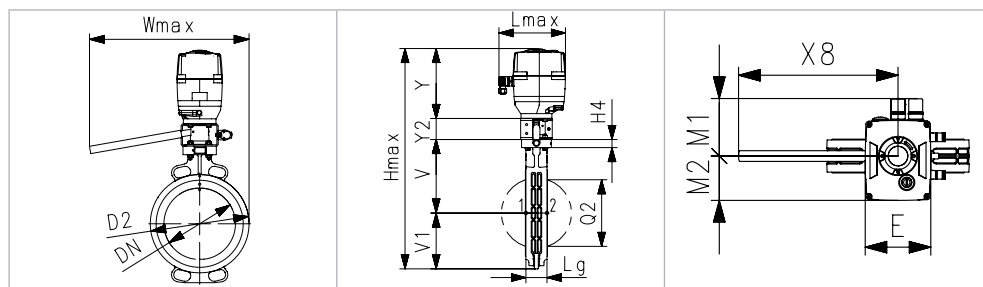
Butterfly Valve Type 565 DN50 – DN300 with electric actuator EA45-250



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	195.0	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)	Weight (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	191.5	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

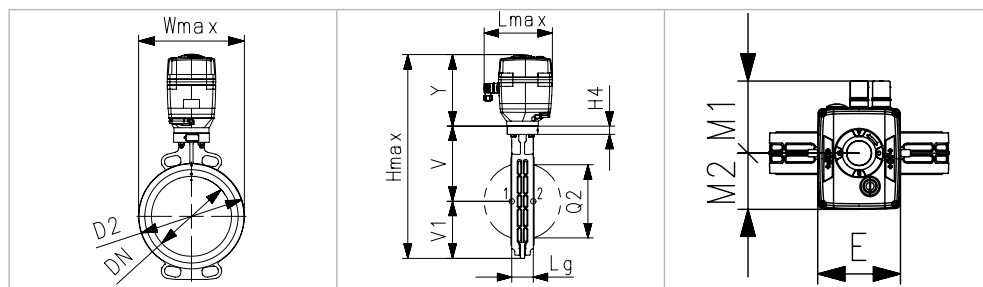
Butterfly Valve Type 565 DN50 – DN200 with electric actuator EA45-250 and manual override



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	195.0	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)	Weight (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	191.5	11.5

Butterfly Valve Type 565 DN50 – DN300 with smart electric actuator dEA



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	195.0	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)	Weight (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	191.5	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

Accessories

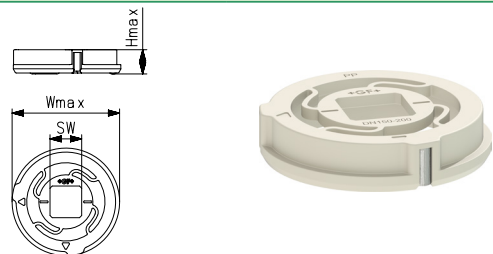
Double Sensor for electrical position feedback

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	Open Signal color	Closed Signal color	Output circuit	Product picture
198546001	LED red	LED green	PNP	
198546002	LED green	LED red	PNP	

i Suitable connection cable code 198546150 available as an accessory.

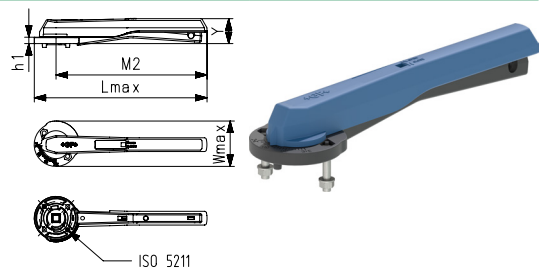
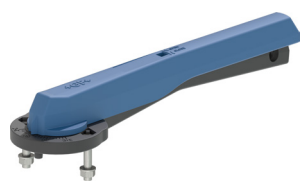
Switching ring for Double Sensor

DN (mm)	Code	Gemäss ISO 5211	SW (mm)	Wmax (mm)	Hmax (mm)	Dimensions	Product picture
50 - 80	199565900	F07	11	57.7	12.5		
100 - 125	199565901	F07	14	57.7	12.5		
150 - 200	199565902	F07	17	57.7	12.5		
250 - 300	199565903	F10	22.1	79.8	12.5		

i 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	199565906	96	251	F07	13.5	204.5	53		
100-125	199565907	96	301	F07	13.5	254.5	53		
150-200	199565908	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	161483471	
250-300	161483472	

Electric Actuator EA25-250

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	198153184	EA45	AC 100-230V	45 Nm	F05* (WS 11/14)	
50	198153185	EA45	AC/DC 24V	45 Nm	F05* (WS 11/14)	
50 - 125	198153186	EA120	AC 100-230V	120 Nm	F07 (WS17)	
50 - 125	198153187	EA120	AC/DC 24V	120 Nm	F07 (WS17)	
150 - 300	198153188	EA250	AC 100-230V	250 Nm	F07 (WS17)	
150 - 300	198153189	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	198153194	dEA45	AC 100-230V	45 Nm	F05* (WS 11/14)	
50	198153195	dEA45	AC/DC 24V	45 Nm	F05* (WS 11/14)	
50 - 125	198153196	dEA120	AC 100-230V	120 Nm	F07 (WS17)	
50 - 125	198153197	dEA120	AC/DC 24V	120 Nm	F07 (WS17)	
150 - 300	198153198	dEA250	AC 100-230V	250 Nm	F07 (WS17)	
150 - 300	198153199	dEA250	AC/DC 24V	250 Nm	F07 (WS17)	

Pneumatic Actuator PA30-70

The PA30 - PA90 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	198811617	PA30	30 Nm	F05/07	
80	198811601	PA35	53 Nm	F05/07	
100	198811609	PA40	60 Nm	F05/07	
125	198811603	PA45	90 Nm	F07/10	
150	198811610	PA55	180 Nm	F07/10	
200	198811652	PA60	240Nm	F07/10/12	
250	198811607	PA65	360 Nm	F10/12	
300	198811612	PA70	480 Nm	F10/12	

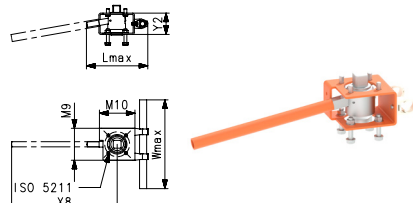
Single-acting FO

DN (mm)	Code	Typ	Torque max.	Acc. to ISO 5211	Product picture
50 - 65	198811627	PA30	30 Nm	F05/07	
80	198811628	PA35	53 Nm	F05/07	
100	198811629	PA40	60 Nm	F05/07	
125	198811630	PA45	90 Nm	F07/10	
150	198811631	PA55	180 Nm	F07/10	
200	198811653	PA60	240 Nm	F07/10/12	
250	198811633	PA65	360 Nm	F10/12	
300	198811634	PA70	480 Nm	F10/12	

Double-acting DA

DN (mm)	Code	Typ	Torque max.	Acc. to ISO 5211	Product picture
50 - 65	198811618	PA35	46 Nm	F03/05	
80	198811619	PA40	60 Nm	F05/07	
100 - 125	198811604	PA45	106 Nm	F05/07	
150	198811606	PA55	180 Nm	F07/10	
200	198811614	PA60	240 Nm	F07/10	
250	198811608	PA65	360 Nm	F07/10	
300	198811615	PA70	480 Nm	F10/12	

Manual override

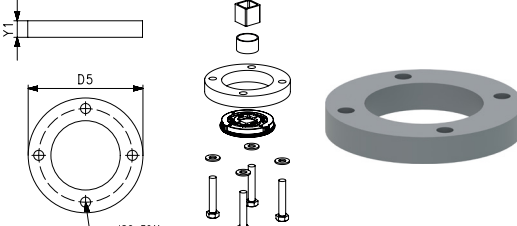
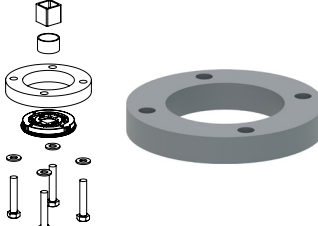
DN (mm)	Code	Acc. to ISO 5211	Lmax (mm)	Wmax (mm)	M9 (mm)	M10 (mm)	X8 (mm)	Y2 (mm)	Dimensions	Product picture
50 - 80	199565914	F07	172	250	90	100	298	60		
100 - 125	199565915	F07	172	250	90	100	298	60		
150 - 200	199565916	F07	172	250	90	100	298	60		

Intermediate elements

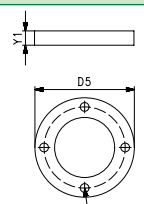
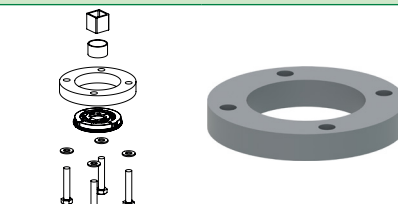
Intermediate elements are required as a connection between valve and Actuator. The intermediate elements include different screws, hexagon nuts, washer, switching rings, etc. (depends on actuator and dimension).

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

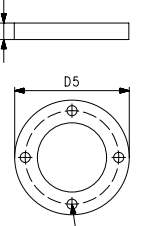
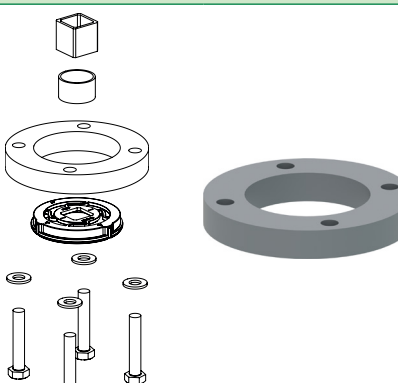
For reduction gear

DN (mm)	Code	Reduction gear	Acc. to ISO 5211	D5 (mm)	Y1 (mm)	Dimensions	Product picture
50 - 80	199565917	161483471	F07	-	-		
100 - 125	199565918	161483471	F07	-	-		
150 - 200	199565919	161483471	F07	-	-		
250 - 300	199565913	161483472	F07/F10	125	17		

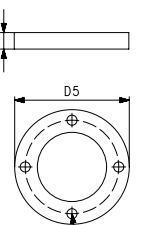
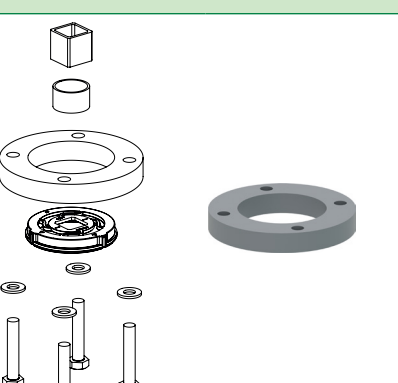
For Electric actuators EA45-250, dEA45-250

DN (mm)	Code	Type	Acc. to ISO 5211	D5 (mm)	Y1 (mm)	Dimensions	Product picture
50	199565909	EA45	F05/F07	90	15		
50 - 80	199565910	xEA120-250	F07	-	-		
100 - 125	199565911	xEA120-250	F07	-	-		
150 - 200	199565912	xEA250	F07	-	-		
250 - 300	199565913	xEA250	F07/F10	125	17		

For Pneumatic actuators, function FC/F0

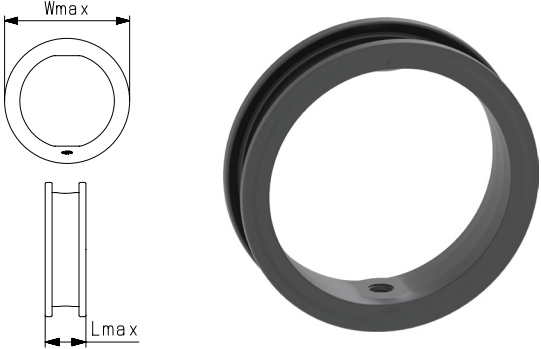
DN (mm)	Code	Type	Acc. to ISO 5211	D5 (mm)	Y1 (mm)	Dimensions	Product picture
50	199565921	PA30	F05/F07	90	15		
65	199565921	PA30	F05/F07	90	15		
80	199565922	PA35	F05/F07	90	15		
100	199565923	PA40	F07	-	-		
125	199565924	PA45	F07	-	-		
150	199565925	PA50	F07	-	-		
200	199565926	PA60	F07/F10	125	18		
250	199565927	PA65	F10	125	18		
300	199565928	PA70	F10	125	18		

For Pneumatic actuators, function DA

DN (mm)	Code	Type	Acc. to ISO 5211	D5 (mm)	Y1 (mm)	Dimensions	Product picture
50	199565920	PA35	F05/F07	90	15		
65	199565920	PA35	F05/F07	90	15		
80	199565921	PA40	F05/F07	90	15		
100	199565923	PA45	F07	-	-		
125	199565923	PA45	F07	-	-		
150	199565925	PA55	F07	-	-		
200	199565925	PA60	F07	125	18		
250	199565926	PA65	F10	125	18		
300	199565927	PA70	F10	125	18		

Replacement parts

Replacement seat liner

DN (mm)	EPDM	FKM	Lmax (mm)	Wmax (mm)	Dimensions	Product picture
50	199565930	199565940	45.2	85.5		
65	199565931	199565941	48.4	105.5		
80	199565932	199565942	48.4	122.5		
100	199565932	199565943	54.6	142.5		
125	199565934	199565944	59	169.5		
150	199565935	199565945	59	194.5		
200	199565936	199565946	63	248		
250	199565937	199565947	72	304		
300	199565938	199565948	82.8	358		

Replacement o-ring

DN (mm)	EPDM	FKM	Di	s	Dimensions	Product picture
50-80	199565951	199565961	13.95	2.62		
100-125	199565952	199565962	17.13	2.62		
150-200	199565953	199565963	20.22	3.53		
250-300	199565954	199565964	24.99	3.53		



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