

Краны шаровые 4030, 4032, 4037, 4040, 4080, 4083

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Ball Sector Valve 4030

DN 25 up to DN 300

Motorvalve for the control of neutral and aggressive fluids

- DN 25 up to DN300
- High Kvs-values up to 3840
- Excellent control characteristics
- Suitable for abrasive media
- Easily exchangeable seat ring
- Low maintenance
- Actuators can be easily fitted
- Efficient and easy to install
- optional with face to face dimension acc. ANSI ISA 75.08.02



Technical Information Valve

Design		DN 25 - DN 250 flangeless wafer type DN 300 flange connection	
Nominal sizes		DN 25 up to DN 300	
Body material	cast parts turned parts	1.4408 (CF8M) 1.4404 (316L)	
Bearing material		high temperature plain bearing (Iglidur Z)	
Connection to the actuator		mounting kit DIN/ISO 5211	
Nominal pressure	DN 25 - DN 50 DN 65 - DN100 DN 150 - DN 250 DN 300	PN40 (for flanges PN 10 - PN 40), ANSI150, ANSI300 PN25 (for flanges PN 10 - PN 25), optional PN 40, ANSI150, ANSI 300 PN16 (for flanges PN 10 - PN 16), optional PN 25, ANSI150 PN16, ANSI150	
Fluid Temperature		-40°C up to +220°C	according to the sealings
Ambient temperature		-20°C up to +70°C special version on request	according to the acuator
Vacuum		up to 50 mbar abs.	
Characteristic		almost equal percentage	
Rangeability		100:1	
Classification DIN EN ISO15848-1		series KS2, DN25-DN250: ISO FE-BH-CC3-SSA0-t(-40°C/+220°C)-PN40-ISO 15848-1 series KS1; DN300: ISO FE-BH-CC-SSA0-t(RT)-PN16-ISO 15848-1	
Leakage rate		Seat ring: PTFE / PEEK Ball sector: Polished stainless steel	Seat ring: PTFE / PEEK Ball sector: Hard chrome-plated stainless steel
% of Kvs IEC 60534-4		< 0,00001 IV-S1	< 0,00005 IV-S1
			Seat ring: Stellite Ball sector: Stainless steel hard chrome-plated and lapped < 0,0005 IV-S1

Ball Sector Valve 4030

Working pressure max.

Nominal size	maximum differential pressure (delta p)									
	seat ring PTFE			seat ring PEEK				seat ring Stellite		
DN	up to 80°C	120°C	170°C	up to 80°C	120°C	170°C	220°C	up to 80°C	170°C	220° C
	bar	bar	bar	bar	bar	bar	bar	bar	bar	bar
25-50	25	16	6	40	40	25	16	40	40	25
80-100	16	12	5	25	25	16	10	25	25	16
150-300	16	12	4	16	16	12	8	16	16	12

Actuators for mounting according DIN/ISO5211

Temperature limits

Seat ring	Sealing seating									
	Viton		EPDM		NBR		FFKM		PFA-Silicon	
	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]
PTFE	-15	170	-40	140	-30	100	-15	170	-45	170
PEEK	-15	200	-40	140	-30	100	-15	220	-45	220
Stellite	-15	200	-40	140	-30	100	-15	220	-45	220

Kvs-Values

DN	Kvs-Value reduced to					
	100%	63%	40%	25%	16%	6,3%
25	25	12,7	7,9	5,3	3,6	1,45
40	70	40	25			
50	109	65	41			
65	190					
80	300					
100	390					
125	756					
150	810					
200	1365					
250	2220					
300	3840					

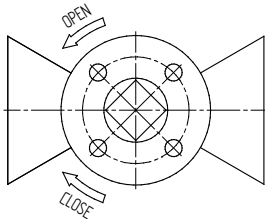
Operation time / 90° with standard actuator

DN	operation time / 90° [s]
25	9
40	13
50	13
65	29
80	29
100	34
125	58
150	58
200	58

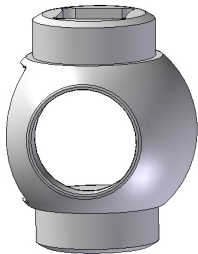
Ball Sector Valve 4030

Torques and mounting kits for retrofitting actuators

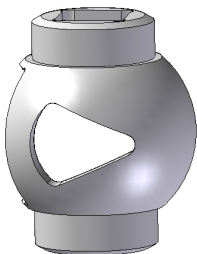
DN	rotation angle nominal	max. nominal pressure PN	max. nominal pressure ANSI	req. torque [Nm]		mounting kit ISO 5211 diagonal square shaft	
				on/off-operation	control operation	series 1	series 2
25	90°	PN40	ANSI 300	15	25	F04/SW11	F05/SW14
40	90°	PN40	ANSI 300	30	50	F05/SW14	F07/SW17
50	90°	PN40	ANSI 300	30	50	F05/SW14	F07/SW17
65	90°	PN25	ANSI 300	60	100	F07/SW17	F10/SW22
80	90°	PN25	ANSI 300	60	100	F07/SW17	F10/SW22
100	90°	PN25	ANSI 300	90	150	F07/SW17	F10/SW22
125	90°	PN16	ANSI 150	150	250	F10/SW22	F12/SW27
150	90°	PN16	ANSI 150	150	250	F10/SW22	F12/SW27
200	90°	PN16	ANSI 150	210	350	F12/SW27	F14/SW36
250	90°	PN16	ANSI 150	360	600	F12/SW27	F14/SW36
300	90°	PN16	ANSI 150	900	1500	F14/SW36	F16/SW46



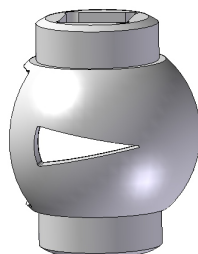
Ball Sector Valve with reduced Kvs-values



100%



reduced to
63%

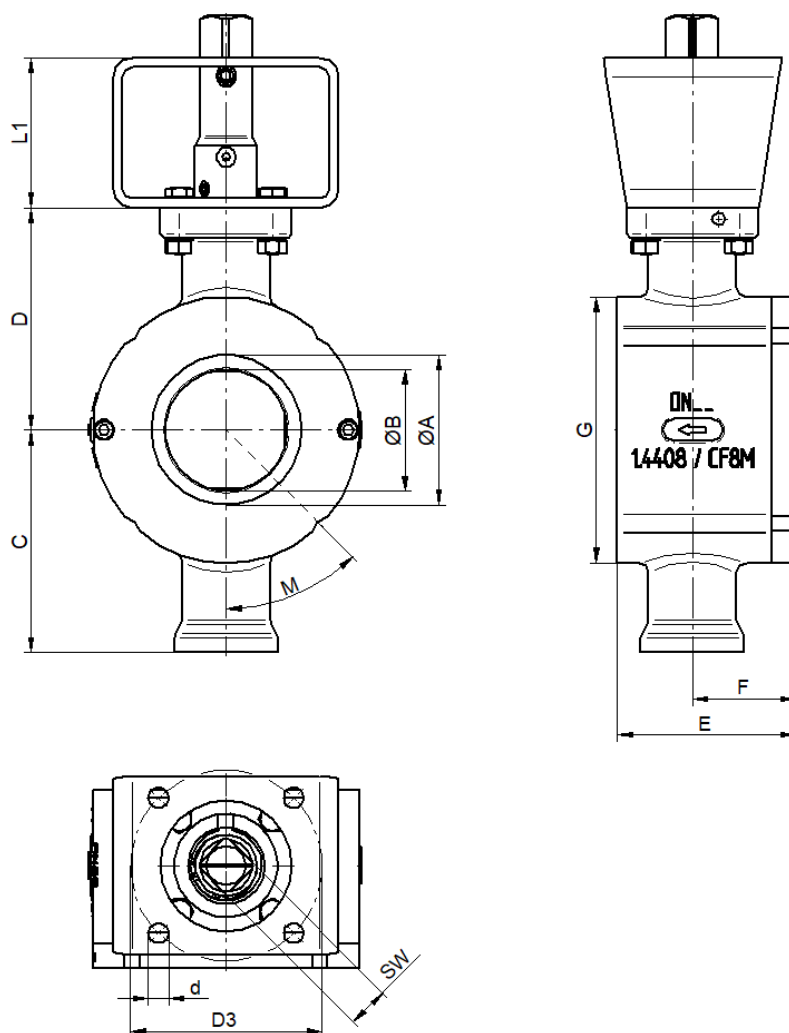


reduced to
25%

Ball Sector Valve 4030

Dimensions KS2 without actuator (with mounting kit ISO 5211)

Sealing of the bearing shaft with PTFE-packing



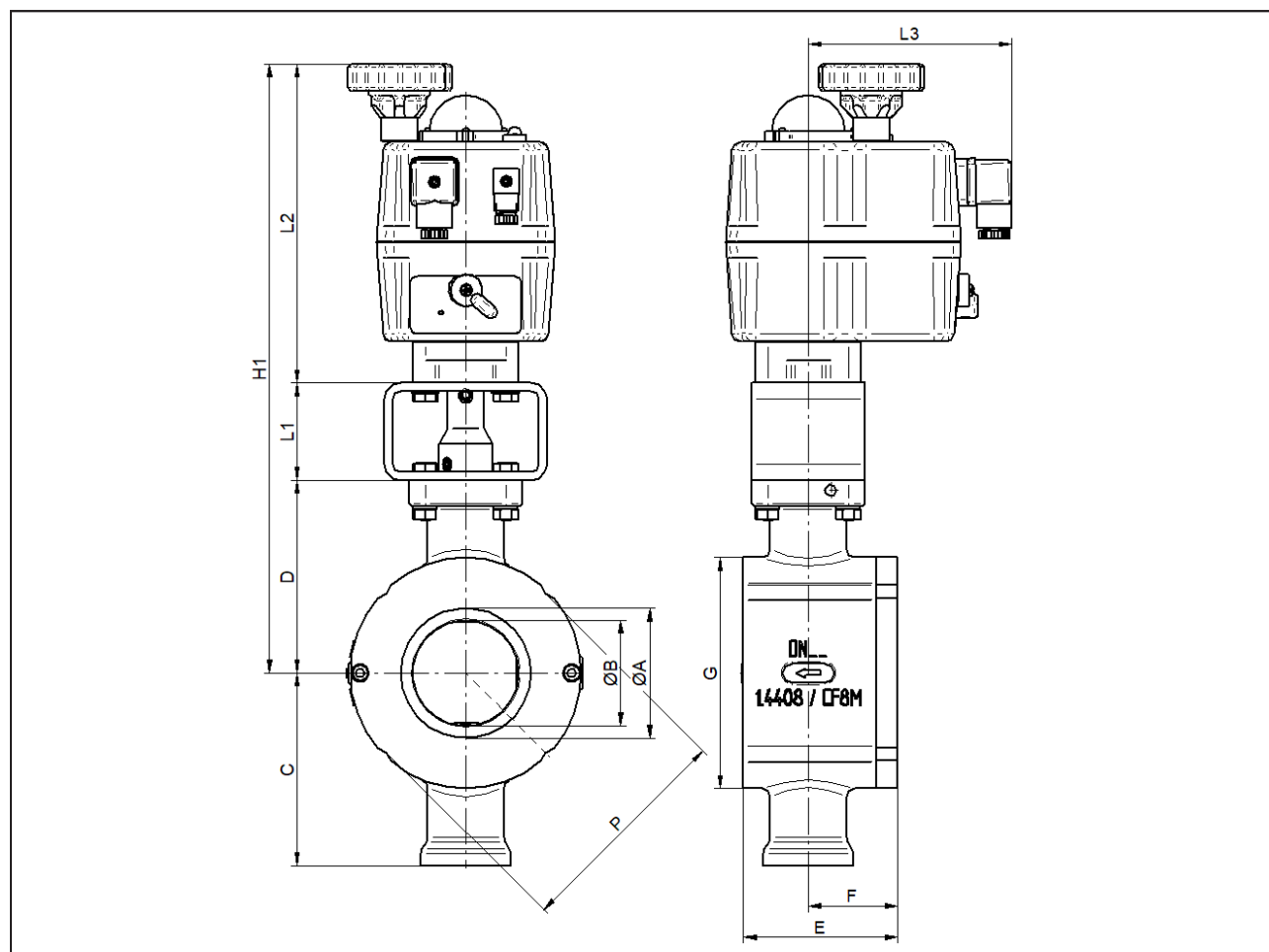
DN	A	B	C	D	E	F	G	series 1				DIN ISO 5211	series 2				DIN ISO 5211	weight [kg]
								L1	SW	d	D3		L1	SW	d	D3		
25	25	20	85	85	50	26	75	60	11	5,5	42	F 04	60	14	6,6	50	F 05	2,2
40	41	32	92	92	58	31	96	60	14	6,6	50	F 05	60	17	9	70	F 07	3
50	53	40	95	95	71	38	112	60	14	6,6	50	F 05	60	17	9	70	F 07	3,8
65	65	50	115,5	115,5	85	49	129	60	17	9	70	F 07	80	22	11	102	F 10	6,4
80	80	65	118,5	118,5	95	55	142	60	17	9	70	F 07	80	22	11	102	F 10	7,2
100	100	80	129,5	129,5	112	62	174	60	17	9	70	F 07	80	22	11	102	F 10	11
125	100	125	177,5	177,5	148	85	200	80	22	11	102	F 10	80	27	13,5	125	F 12	20
150	150	120	187	187	170	95	220	80	22	11	102	F 10	80	27	13,5	125	F 12	23
200	200	155	216	216	210	120	275	80	27	13,5	125	F 12	80	36	17	140	F 14	40
250	250	195	242	242	270	145	338	80	27	13,5	125	F 12	80	36	17	140	F 14	66

Dimensions in mm

Ball Sector Valve 4030

Dimensions KS2 with standard actuator

Sealing of the bearing shaft with PTFE-packing



DN	A	B	C	D	E	F	L1	L2	L3	H1	Weight [kg]
25	25	20	85	85	50	26	60	169	130	314	4,8
40	41	32	92	92	58	31	60	196	130	348	6,2
50	53	40	95	95	71	38	60	196	130	351	6,9
65	65	50	115,5	115,5	85	49	60	196	130	372	11
80	80	65	118,5	118,5	95	55	60	196	130	375	17
100	100	80	129,5	129,5	112	62	80	254	128	464	18
125	100	125	177,5	177,5	148	85	80	254	128	512	27
150	150	120	187	187	170	95	80	254	128	521	30
200	200	155	216	216	210	120	80	254	128	550	48

DN	PN					ANSI 150				ANSI 300			
	PN	G	P	M	Amount	G	P	M	Amount	G	P	M	Amount
25	PN40	75	73	45	4	75	67,6	45	4	79	73	45	4
40	PN40	96	94	45	4	96	87	45	4	99	94	45	4
50	PN40	112	106	45	4	112	106	45	4	112	0	0	0
65	PN25	129	0	0	0	129	125	45	4	129	0	0	0
80	PN25	142	0	0	0	142	138	45	4	150	0	0	0
100	PN25	174	164	22,5	8	176	0	0	0	182	0	0	0
125	PN16	200	194	22,5	8	200	194	45	8	---	---	---	---
150	PN16	220	0	0	0	220	0	0	0	---	---	---	---
200	PN16	275	0	0	0	275	0	0	0	---	---	---	---

Dimensions in mm

Ball Sector Valve 4032

with high precision valve actuator, DN25 - DN250

Control valve with high-precision electric actuator for ball sector valves

- High-precision actuator
- Suitable for abrasive media (e.g. chalk milk and paper materials)
- Developed for use as a basis weight valve
- Actuation via step signal or analogue 4-20 mA (standard)
- Feedback via analogue signal 4-20 mA
- Easily replaceable seat ring
- Low maintenance
- Manual override

Technical Information Valve

Design	DN 25 - DN 250 flangeless wafer type DN 300 flange connection		
Nominal sizes	DN 25 up to DN 300		
Body material	cast parts turned parts	1.4408 (CF8M) 1.4404 (316L)	
Bearing material	high temperature plain bearing (Iglidur Z)		
Connection to the actuator	mounting kit DIN/ISO 5211		
Nominal pressure	DN 25 - DN 50 DN 80 - DN100 DN 150 - DN 250 DN 300	PN40 (for flanges PN 10 - PN 40), ANSI150, ANSI300 PN25 (for flanges PN 10 - PN 25), ANSI150, ANSI 300 PN16 (for flanges PN 10 - PN 16), ANSI150 PN16, ANSI150	
Fluid Temperature	-40°C up to +220°C		according to the sealings
Ambient temperature	-20°C up to +70°C special version on request		according to the acuator
Vacuum	up to 50 mbar abs.		
Characteristic	almost equal percentage		
Rangeability	100:1		
Classification DIN EN ISO15848-1	series KS2, DN25-DN250: ISO FE-BH-CC3-SSA0-t(-40°C/+220°C)-PN40-ISO 15848-1 series KS1; DN300: ISO FE-BH-CC-SSA0-t(RT)-PN16-ISO 15848-1		
Leakage rate	Seat ring: PTFE / PEEK Ball sector: Polished stainless steel	Seat ring: PTFE / PEEK Ball sector: Hard chrome-plated stainless steel	Seat ring: Stellite Ball sector: Stainless steel hard chrome-plated and lapped
% of Kvs IEC 60534-4	< 0,00001 IV-S1	< 0,00005 IV-S1	< 0,0005 IV-S1



Technical Information Actuator

Actuator	S1500		S2000		S4000	Papyros
Actuator colour	blue		red			-
Design	KS2					KS1
Set point	analogue*	Bus System	analogue*	Bus System	Step signal	analogue
Set point signal	4 - 20 mA / 0 - 10 V / 3-point	Modbus 485	4 - 20 mA / 0 - 10 V / 3-point	Modbus 485	Step point control 24V	4 - 20 mA
Pulse duration	-				40ms	-
Burden	-					470 Ohm
Supply energy, electrical	24 V DC [±10%]					100...230 V AC [±10%], 50-60 Hz [±10%]
Actuator	Step motor with gearbox					servo motor with planetary gear
Turning angle detection	Integrated in the actuator					15 Bit absolute turning angle trans- mitter
Control	In the actuator					In a control cabinet (included in the delivery)
Resolution at the spherical sector	1300 steps / 90°		1600 steps / 90°		4000 steps / 90°	8192 steps / 90°
Reverse hysteresis	0,1°					-
Adjusting range	0 - 90°					
Limit stops	Mechanical limit stops inside of the actuator					control system; no mechanical strokes
Feed back	4 - 20 mA					4 - 20 mA, load resistor: 1kΩ max.
Ambient temperature limit, actuator	-40°C up to +80°C					-10°C up to +60°C
Ambient temperature limit, control cabinet	-					0°C up to +40°C
Protection class acc. DIN 40050	IP 67					IP 65

*Resolution of the control signal at least 12 bits, with 14 bits for the S4000 actuator

Ball Sector Valve 4032

with high precision valve actuator

Working pressure max.

Nominal size	zulässiger Differenzdruck (delta p)									
DN	seat ring PTFE			seat ring PEEK				seat ring Stellite		
	up to 80°C bar	120°C bar	170°C bar	up to 80°C bar	120°C bar	170°C bar	220°C bar	up to 80°C bar	170°C bar	220°C bar
25-50	25	16	6	40	40	25	16	40	40	25
65-100	16	12	5	25	25	16	10	25	25	16
125-150	16	12	4	16	16	12	8	16	16	12
200-250	16	12	4	16	16	12	8	16	16	12

Actuators for mounting according DIN/ISO5211, pilot pressure 5 - 6 bar
(for less than 5 bar pilot pressure, please inform us)

Temperature limits

Seating	Viton		EPDM		NBR		FFKM		PFA-Silicone	
	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]
PTFE	-15	170	-40	140	-30	100	-15	170	-45	170
PEEK	-15	200	-40	140	-30	100	-15	220	-45	220
Stellite	-15	200	-40	140	-30	100	-15	220	-45	220

Kvs-Values

DN	Kvs-Value reduced to					
	100%	63%	40%	25%	16%	6,3%
25	25	12,7	7,9	5,3	3,6	1,45
40	70	40	25			
50	109	65	41			
65	190					
80	300					
100	390					
125	756					
150	810					
200	1365					
250	2220					

Operating time for 90° / starting current

DN	Operating time 90°			Starting current
	S1500	S2000	S4000	
DN25 - DN50	30s (4s - 15min)		225s (0,4°/s)	5A
DN65 - DN100	30s (4s - 15min)		225s (0,4°/s)	7A
DN125 - DN150	30s (4s - 15min)		225s (0,4°/s)	10A
DN200 - DN250	30s (4s - 15min)		225s (0,4°/s)	13A

Ball Sector Valve 4032

with high precision valve actuator

Ordering Number System

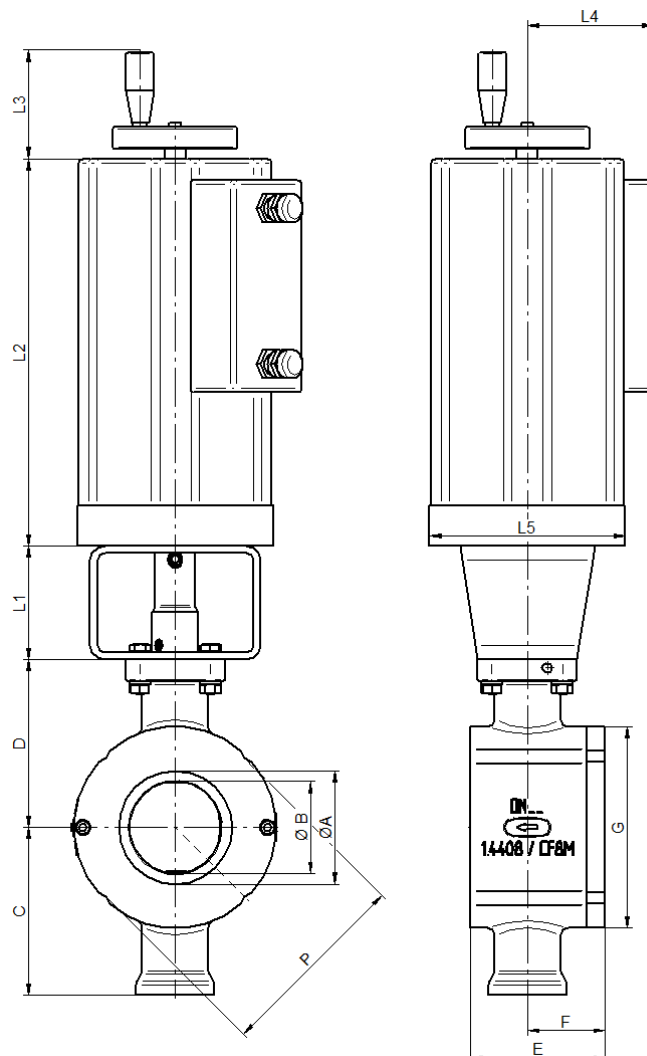
		Ordering Number:									
Nominal Size	4032/										...
E.g. DN 25 = 025	xxx										
Item											
Actuator	A										
Seal kit (repair kit without seat ring)	D										
Repair kit complete (with seat ring)	R										
Partial repair kit (seat ring, o-ring, part 15 and 16)	T										
Valve	V										
Design											
KS2-flangeless design according DIN EN 1092-1	3										
KS2-flangeless design according ASME B 16.5, ANSI 150	H										
KS2-flangeless design according ASME B 16.5, ANSI 300	I										
Body Material											
stainless steel 1.4408(CF8M) resp. 1.4404(AISI 316L)	1										
Seat-material combination											
seat ring: PTFE, ball sector: stainless steel, polished	1										
seat ring: PTFE; ball sector: stainless steel, hard-chromed	A										
seat ring: stellite; ball sector: stainless steel, hard chromed	B										
seat ring: stellite; ball sector: stainless steel, hard chromed and lapped; holding ring: hard chromed	C										
seat ring: PTFE (white); ball sector: stainless steel, polished (max. medium temperature: 170°C)	G										
seat ring: PEEK; ball sector: stainless steel polished	K										
seat ring: PEEK; ball sector: stainless steel, hard-chromed	P										
Sealing-material combination											
Packing made of PTFE; O-Ring (part 15) made of VITON, fluid temperature: -15°C up to +200°C	3										
Packing made of PTFE; O-Ring (part 15) made of NBR, fluid temperature: -40°C up to +100°C	5										
Packing made of PTFE; O-Ring (part 15) made of FFKM, fluid temperature: -15°C up to +220°C	6										
Packing made of PTFE; O-ring (part 15) made of PFA-silicone, fluid temperature: -45°C to +100°C	8										
Sealing of bearing pin with packing made of PTFE, O-ring (part 15) made of EPDM, Medium temperature: -40°C to +140°C	K										
Actuator											
Without mounting kit, without actuator, connection to bearing pin: square shaft	V										
High resolution electrical control actuator S1500	D										
High resolution electrical control actuator S2000	R										
High-resolution electric actuator S4000	T										
Control area											
At valve lower part only not selected	-										
4-20 mA	1										
3-point/step control 24V DC, pulse duration 40ms, position feedback 4-20 mA	3										
Activation via Modbus	M										
Supply voltage											
24V DC	3										
Kvs-value											
100%	-										
red. to 6,3%	3										
red. to 63%	A										
red. to 16%	D										
red. to 40%	K										
cabel, control											
control integrated in the actuator	B										

-> Actuator Papyros on request

Ball Sector Valve 4032

with high precision valve actuator

Dimensions KS2 with actuator S1500, S2000 or S4000



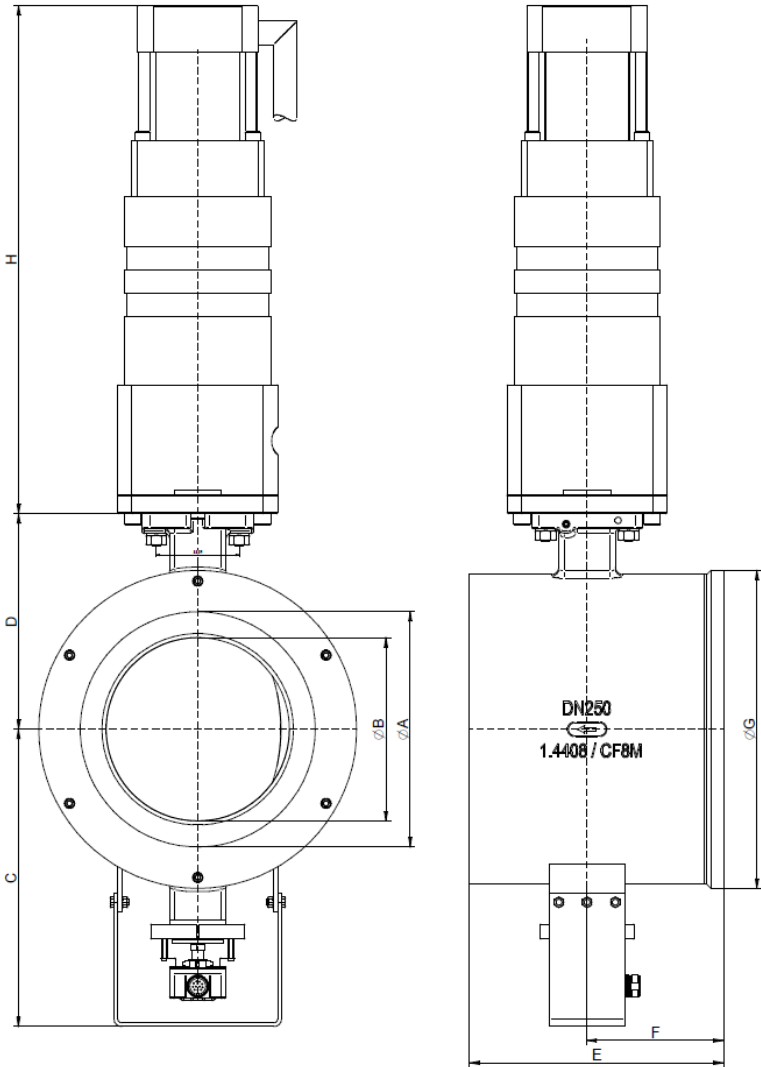
DN	A	B	C	D	E	F	L1	L2	L3	L4	L5	Weight (kg)
25	25	20	85	85	50	26	60	212	75	90	138	10,2
40	41	32	92	92	58	31	60	212	75	90	138	11
50	53	40	95	95	71	38	60	212	75	90	138	11,5
65	65	50	115,5	115,5	85	49	80	273	75	93	138	16
80	80	65	118,5	118,5	95	55	80	273	75	93	138	17,3
100	100	80	129,5	129,5	112	62	80	273	75	93	138	20,9
125	100	125	177,5	177,5	148	85	80	307	75	93	175	30,9
150	150	120	187	187	170	95	80	307	75	93	175	34,8
200	200	155	216	216	210	120	80	331	75	93	175	63,7
250	250	195	242	242	270	145	80	331	75	93	175	92

DN	PN					ANSI 150				ANSI 300			
	PN	G	P	M	Amount	G	P	M	Amount	G	P	M	Amount
25	PN40	75	73	45	4	75	67,6	45	4	79	73	45	4
40	PN40	96	94	45	4	96	87	45	4	99	94	45	4
50	PN40	112	106	45	4	112	106	45	4	112	0	0	0
65	PN25	129	0	0	0	129	125	45	4	129	0	0	0
80	PN25	142	0	0	0	142	138	45	4	150	0	0	0
100	PN25	174	164	22,5	8	176	0	0	0	182	0	0	0
125	PN16	200	194	22,5	8	200	194	45	8	---	---	---	---
150	PN16	220	0	0	0	220	0	0	0	---	---	---	---
200	PN16	280	0	0	0	280	0	0	0	---	---	---	---
250	PN16	338	329	22,5	8	338	0	0	0	---	---	---	---

*Dimensions in mm

Ball Sector Valve 4032 with high precision valve actuator

Dimensions of type KS1 with Papyros actuator



DN	Ø A	Ø B	C	D	E	F	Ø G	H
100	100	80	210	118	112	62	174	485
150	150	120	248	156	170	96	220	485

*Dimensions in mm

Ball Sector Motor Valve 4037

ex-proof

DN 25 up to DN 100

- DN 25 up to DN 100
- Robust alluminium body of the actuator
- Excellent control characteristics
- Universal voltage supply
- Easily exchangeable seat ring
- Low maintenance
- Adjustable strokingtimes
- Protection class IP 66
- Manual emergency adjustment
- Efficient and easy to install
- Integrated heating system
- Spring return function on demand
- Optional with face to face dimension acc. ANSI ISA 75.08.02



Technical Information Valve

Design	flangeless wafertype		
Nominal sizes	DN 25 up to DN 100		
Body material	cast parts	1.4408 (CF8M)	
	turned parts	1.4404 (316L)	
Bearing material	high temperature plain bearing (Iglidur Z)		
Nominal pressure	DN 25 - DN 50	PN40 (for flanges PN 10 - PN 40), ANSI150, ANSI300	
	DN 65 - DN 100	PN25 (for flanges PN 10 - PN 25), ANSI150, ANSI300	
Fluid Temperature	-40°C up to +220°C depending on the sealings		
Ambient Temperature	-40°C up to 50°C		
Vacuum	up to 50 mbar abs.		
Characteristic	almost equal percentage		
Rangeability	100:1		
Specific leakage rate shaft and body sealing	ISO FE-BH-CC3-SSA0-t(-40°C/+220°C)-PN40-ISO 15848-1		
Leakage rate	Seat ring: PTFE / PEEK Ball sector: Polished stainless steel < 0,00001 IV-S1	Seat ring: PTFE / PEEK Ball sector: Hard chrome-plated stainless steel < 0,00005 IV-S1	Seat ring: Stellite Ball sector: Stainless steel hard chrome-plated and lapped < 0,0005 IV-S1
% of Kvs IEC 60534-4			

Data of the actuator

Voltage supply	24 ... 230 V AC/DC
Protection class	IP 66
Input signal	4-20 mA or 0-10 V
Feedback signal	4-20 mA or 0-10 V
EX-Protection (gas)	II 2 (2) G Ex db [ib Gb] IIC T6, T5, T4 Gb
EX-Protection (dust)	II 2 (2) D Ex tb [ib Db] IIIC T80°C, T95°C, T130°C Db
Ambient Temperature	T5: -40°C up to 40°C T6: -40°C up to 50°C
Motor	Brushless DC Motor
Maintenance	Maintenance free actuator
Diameter of cable	~Ø7,1 mm and ~Ø7,4mm - 1m cable (for on/off different)
Reverse function	Bridge between clamp 3 and 4
Holding Power	20 W (~16 W when heating)
Current consumption initialization	2 A

ATEX - Versions

EX-Protection (gas)	II 2G Ex d [ia] IIC T6, T5	Zone 1 and 2
EX-Protection (dust)	II 2D Ex tD [iaD] A21 IP66 T80, T95°C	Zone 21 and 22
EX-Protection (gas)	II3G Ex nC II T6 / II3(1)G Ex nC [ia] IIC T6	Zone 2
EX-Protection (dust)	II3D Ex tD A22 IP66 T80°C	Zone 22
Industrial applications without Ex certification	none	

Ball Sector Motor Valve 4037

ex-proof

Working pressure

DN	seat ring PTFE			maximum differential pressure (delta p)				seat ring Stellite		
	up to 80°C bar	120°C bar	170°C bar	up to 80°C bar	120°C bar	170°C bar	220°C bar	up to 80°C bar	170°C bar	220°C bar
25-50	25	16	6	40	40	25	16	40	40	25
80-100	16	12	5	25	25	16	10	25	25	16

Temperature limits

Seating	Viton		EPDM		NBR		FFKM		PFA-Silicone	
	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]
PTFE	-15	170	-40	140	-30	100	-15	170	-45	170
PEEK	-15	200	-40	140	-30	100	-15	220	-45	220
Stellite	-15	200	-40	140	-30	100	-15	220	-45	220

Kvs-Values

DN	Kvs-Value reduced to					
	100%	63%	40%	25%	16%	6,3%
25	25	12,7	7,9	5,3	3,6	1,45
40	70	40	25			
50	109	65	41			
65	190					
80	300					
100	390					
125	756					
150	810					
200	1365					
250	2220					
300	3840					

Ball Sector Motor Valve 4037

ex-proof

Rotary time settings / rated current

rotary switch setting	DN25-DN50				DN65-DN100			
	rotation time	actuator torque	rated current		rotation time	actuator torque	rated current	
			24V	230V			24V	230V
0	3/7,5 sec/90°	15 Nm	4,7 A	0,5 A	40 sec/90°	50 Nm	1,0 A	0,3 A
1	15 sec/90°		1,45 A	0,3 A	60 sec/90°		0,7 A	0,2 A
2	30 sec/90°		0,52 A	0,15 A	90 sec/90°		0,5 A	0,15 A
3	60 sec/90°		0,4 A	0,1 A	120 sec/90°		0,4 A	0,1 A
4	120 sec/90°		0,4 A	0,1 A	150 sec/90°		0,4 A	0,1 A
5	7,5 sec/90°	30 Nm	4,7 A	0,5 A	40 sec/90°	75 Nm	1,0 A	0,3 A
6	15 sec/90°		1,45 A	0,3 A	60 sec/90°		0,7 A	0,2 A
7	30 sec/90°		0,52 A	0,15 A	90 sec/90°		0,5 A	0,15 A
8	60 sec/90°		0,4 A	0,1 A	120 sec/90°		0,4 A	0,1 A
9	120 sec/90°		0,4 A	0,1 A	150 sec/90°		0,4 A	0,1 A

Standard

rotary switch setting	rotation time	DN25 (with spring return)			rotation time	actuator torque	rated current	
		actuator torque	24V	230V			24V	230V
0	3/7,5 sec/90°	15 Nm	4,7 A	0,5 A	40 sec/90°	30 Nm (50Nm DN80)	2,0 A	0,4 A
1	15 sec/90°		1,45 A	0,3 A	60 sec/90°		1,8 A	0,3 A
2	30 sec/90°		0,52 A	0,15 A	90 sec/90°		1,4 A	0,15 A
3	60 sec/90°		0,4 A	0,1 A	120 sec/90°		1,4 A	0,1 A
4	120 sec/90°		0,4 A	0,1 A	150 sec/90°		1,4 A	0,1 A
5	7,5 sec/90°		4,7 A	0,5 A	40 sec/90°		2,0 A	0,4 A
6	15 sec/90°		1,45 A	0,3 A	60 sec/90°		1,8 A	0,3 A
7	30 sec/90°		0,52 A	0,15 A	90 sec/90°		1,4 A	0,15 A
8	60 sec/90°		0,4 A	0,1 A	120 sec/90°		1,4 A	0,1 A
9	120 sec/90°		0,4 A	0,1 A	150 sec/90°		1,4 A	0,1 A

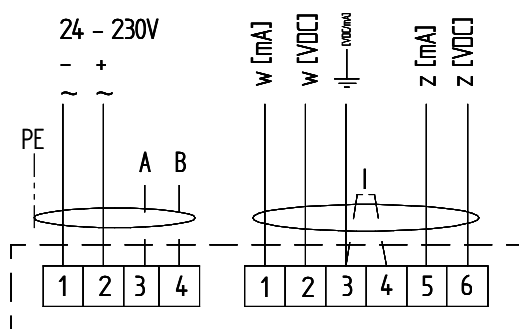
spring return about 3 or 10 sec./90°

spring return about 20 sec./90°

Standard

Wiring diagram (further more in the operating instructions)

Control



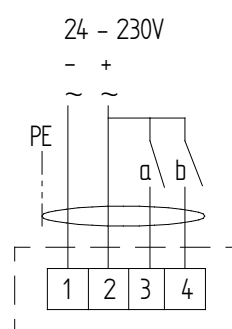
Options within every control actuator:

Jumper I: inverse the control and feedback signal

Voltage on A: Force the actuator to close

Voltage on B: Force the actuator to open

on/off - 3 point

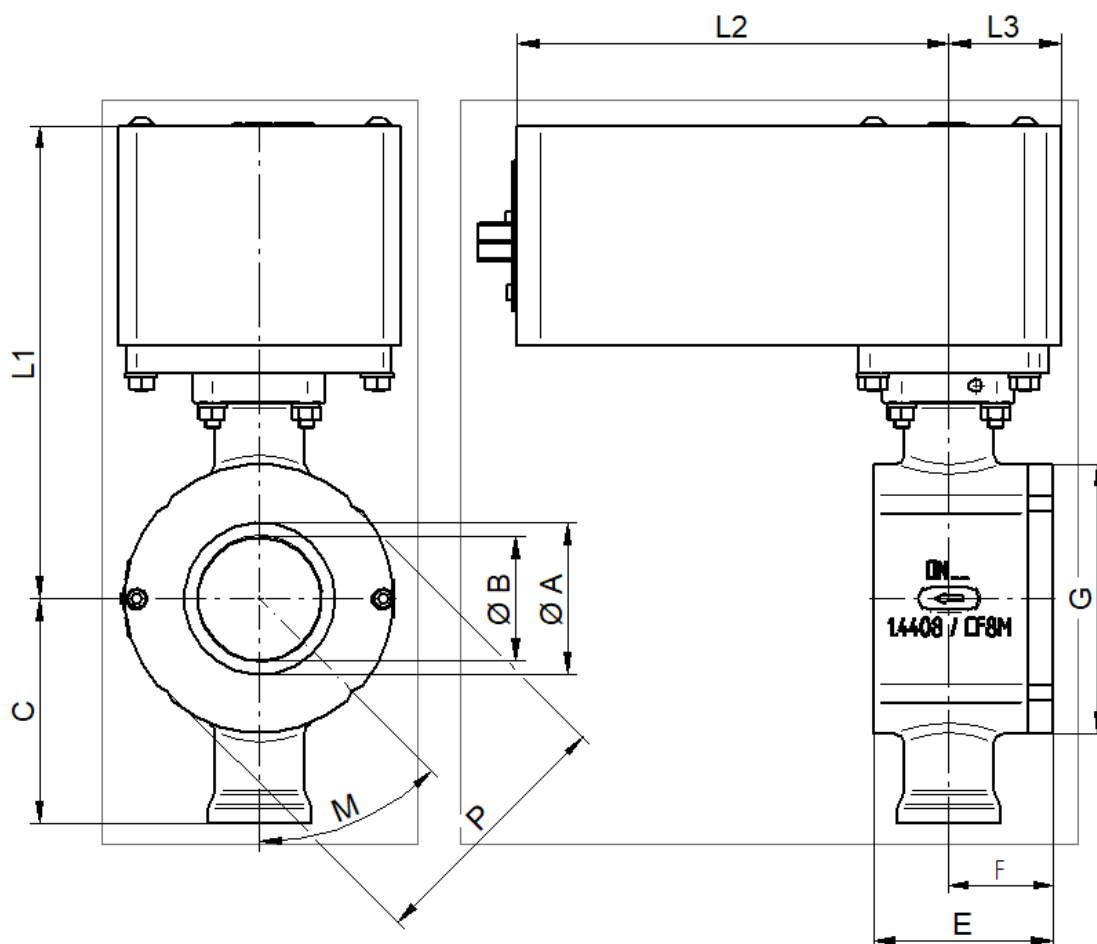


Ball Sector Motor Valve 4037

ex-proof

Dimensions KS2 with actuator

Sealing of the bearing shaft with PTFE-packing



DN	A	B	C	E	F	L1	L1*	L2	L2*	L3	L3*
25	25	20	85	50	26	180	180	166	166	44	44
40	41	32	92	58	31	187	223	166	229	44	59
50	53	40	95	71	38	190	226	166	229	44	59
65	65	50	115,5	85	49	247	247	229	229	59	59
80	80	65	118,5	95	55	250	250	229	229	59	59
100	100	80	129,5	112	62	261	---	---	---	59	---

DN	PN					ANSI 150				ANSI 300			
	PN	G	P	M	Amount	G	P	M	Amount	G	P	M	Amount
25	PN40	75	73	45	4	75	67,6	45	4	79	73	45	4
40	PN40	96	94	45	4	96	87	45	4	99	94	45	4
50	PN40	112	106	45	4	112	106	45	4	112	0	0	0
65	PN25	129	0	0	0	129	125	45	4	129	0	0	0
80	PN25	142	0	0	0	142	138	45	4	150	0	0	0
100	PN25	174	164	22,5	8	176	0	0	0	182	0	0	0

* With spring return
Dimensions in mm

Ball Sector Valve 4040

DN 25 up to DN 300

Pneumatic control valve for the control of neutral and aggressive fluids with integrated positioner

- DN 25 up to DN300
- High Kvs-values up to 3840
- Excellent control characteristics
- Suitable for abrasive media
- Easily exchangeable seat ring
- Low maintenance
- Actuators can be easily fitted
- Efficient and easy to install
- Optional volume booster Type 4090 (from DN150) in order to reduce the response time
- Optional with face to face dimension acc. ANSI ISA 75.08.02



Technical Information Valve

Design	DN 25 - DN 250 flangeless wafer type DN 300 flange connection		
Nominal sizes	DN 25 up to DN 300		
Body material	cast parts	1.4408 (CF8M)	
	turned parts	1.4404 (316L)	
Material of the bearing shaft	1.4122		
Bearing material	high temperature plain bearing		
Connection to the actuator	mounting kit DIN/ISO 5211		
Nominal pressure	DN 25 - DN 50 DN 65 - DN100 DN 125 - DN 250 DN 300	PN 40 (for flanges PN 10 - PN 40), ANSI150, ANSI 300 PN 25 (for flanges PN 10 - PN 25), optional PN 40, ANSI150, ANSI 300 PN16 (for flanges PN 10 - PN 16), optional PN 25, ANSI150 PN16, ANSI 150	
Fluid Temperature	-40°C up to +220°C depending on the sealings		
Ambient temperature	-20°C up to +80°C depending on the sealings special version on request		
Vacuum	up to 50 mbar abs.		
Characteristic	almost equal percentage		
Rangeability	300:1		
Spezific leakage rate shaft and body sealing	series KS2, DN25-DN250: ISO FE-BH-CC3-SSA0-t(-40°C/+220°C)-PN40-ISO 15848-1 series KS1; DN300: ISO FE-BH-CC-SSA0-t(RT)-PN16-ISO 15848-1		
Leakage rate	Seat ring: PTFE / PEEK Ball sector: Polished stainless steel < 0,00001 IV-S1	Seat ring: PTFE / PEEK Ball sector: Hard chrome-plated stainless steel < 0,00005 IV-S1	Seat ring: Stellite Ball sector: Stainless steel hard chrome-plated and lapped < 0,0005 IV-S1
% of Kvs IEC 60534-4			

Ball Sector Valve 4040

Working pressure max.

DN	maximum differential pressure (delta p)									
	seat ring PTFE			seat ring PEEK				seat ring Stellite		
	up to 80°C bar	120°C bar	170°C bar	up to 80°C bar	120°C bar	170°C bar	220°C bar	up to 80°C bar	170°C bar	220° C bar
25-50	25	16	6	40	40	25	16	40	40	25
65-100	16	12	5	25	25	16	10	25	25	16
125-300	16	12	4	16	16	12	8	16	16	12

Actuators for mounting according DIN/ISO5211, pilot pressure 5 - 6 bar
(for less than 5 bar pilot pressure, please inform us)

Temperature limits

Seating	Viton		EPDM		NBR		FFKM		PFA-Silicone	
	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]
PTFE	-15	170	-40	140	-30	100	-15	170	-45	170
PEEK	-15	200	-40	140	-30	100	-15	220	-45	220
Stellite	-15	200	-40	140	-30	100	-15	220	-45	220

Operating time with positioner 8049

DN	operating time opening 5% to 95%			operating time closing 5% to 95%		
	Standard 100 NI/min	with volume booster Type 4090	with external solenoid valves (1500NL)	Standard 100 NI/min	with volume booster Type 4090	with external solenoid valves (1500NL)
100	4,0 s	1,9 s	1,0 s	5,4 s	3,0 s	1,2 s
150	7,0 s	2,5 s	1,5 s	8,5 s	4,0 s	1,6 s
200	11,0 s	4,0 s	1,8 s	13,0 s	8,0 s	1,9 s
250	14,0 s	5,0 s	2,5 s	17,5 s	10,0 s	2,6 s
300	23,0 s	9,0 s	4,5 s	43,0 s	18,0 s	6,0 s

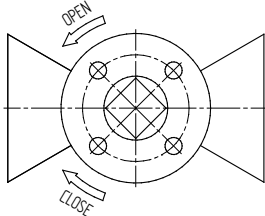
Kvs-Values

DN	Kvs-Value reduced to					
	100%	63%	40%	25%	16%	6,3%
25	25	12,7	7,9	5,3	3,6	1,45
40	70	40	25			
50	109	65	41			
65	190					
80	300					
100	390					
125	756					
150	810					
200	1365					
250	2220					
300	3840					

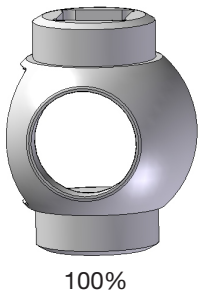
Ball Sector Valve 4040

Torques and mounting kits for retrofitting actuators

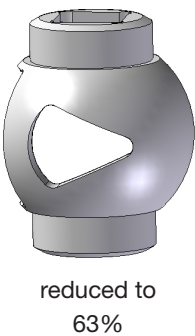
DN	rotation angle nominal	max. nominal pressure PN	max. nominal pressure ANSI	req. torque [Nm]		mounting kit ISO 5211 diagonal square shaft	
				on/off-operation	control operation	series 1	series 2
25	90°	PN40	ANSI 300	15	25	F04/SW11	F05/SW14
40	90°	PN40	ANSI 300	30	50	F05/SW14	F07/SW17
50	90°	PN40	ANSI 300	30	50	F05/SW14	F07/SW17
65	90°	PN25	ANSI 300	60	100	F07/SW17	F10/SW22
80	90°	PN25	ANSI 300	60	100	F07/SW17	F10/SW22
100	90°	PN25	ANSI 300	90	150	F07/SW17	F10/SW22
125	90°	PN16	ANSI 150	150	250	F10/SW22	F12/SW27
150	90°	PN16	ANSI 150	150	250	F10/SW22	F12/SW27
200	90°	PN16	ANSI 150	210	350	F12/SW27	F14/SW36
250	90°	PN16	ANSI 150	360	600	F12/SW27	F14/SW36
300	90°	PN16	ANSI 150	900	1500	F14/SW36	F16/SW46



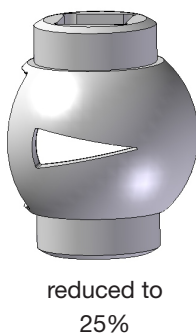
Ball Sector Valve with reduced Kvs-values



100%



reduced to
63%



reduced to
25%

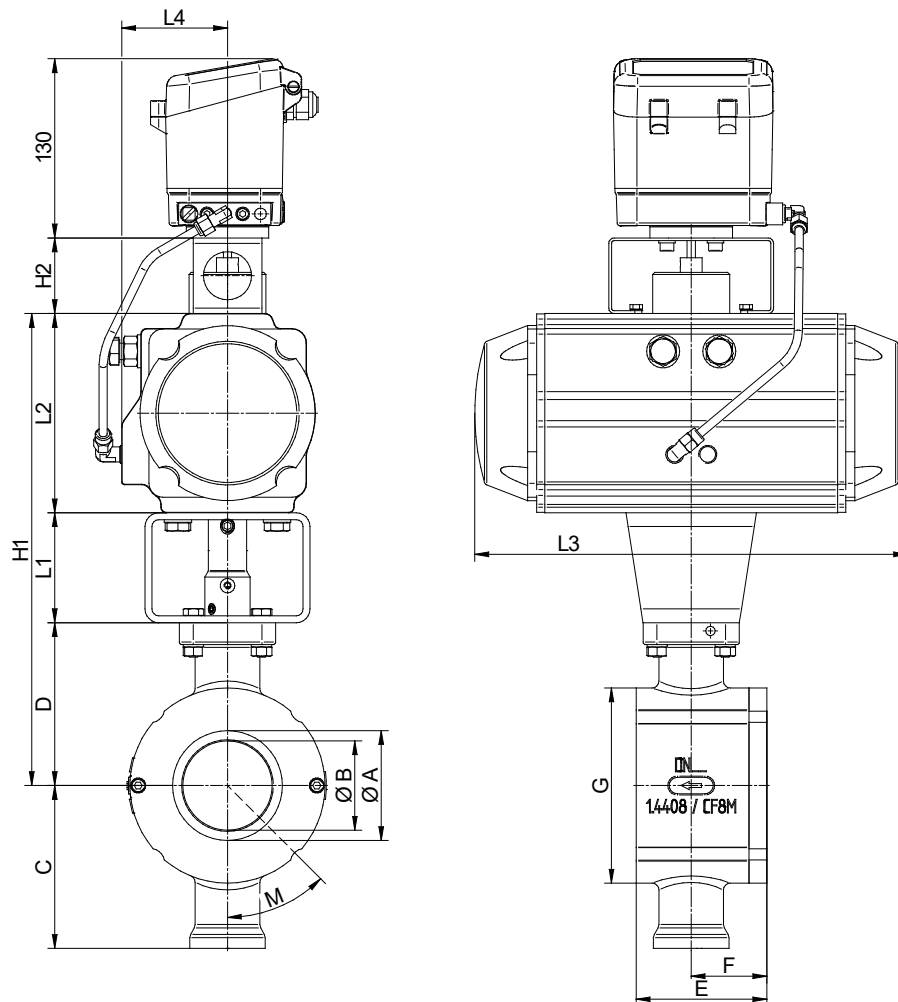
Ball Sector Valve Type 4040 with hand wheel gear box



40%

Ball Sector Valve 4040

Dimensions KS2 with actuator and positioner 8049



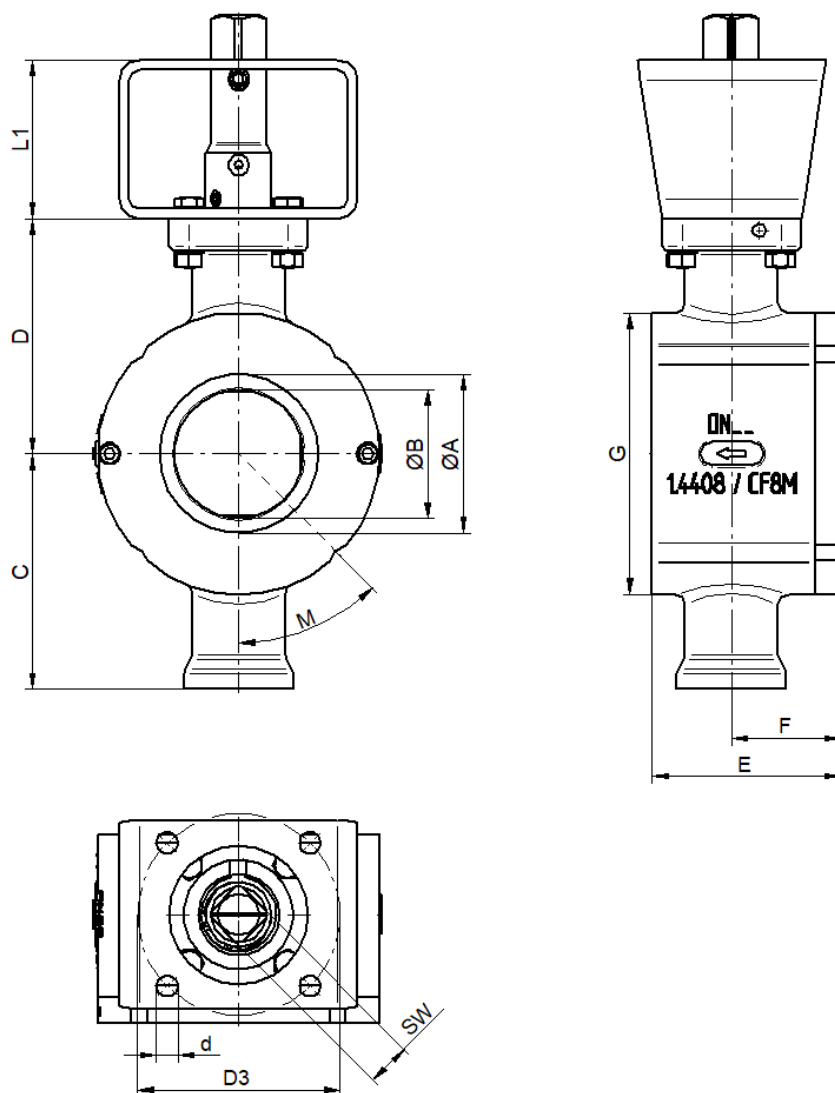
DN	actuator single acting						actuator double acting					
	L1	L2	L3	L4	H1	weight [kg]	L1	L2	L3	L4	H1	weight [kg]
25	60	102	210,5	52	247	6,2	60	85	158,5	47	230	4,3
40	60	115	247,5	56,8	267	8,3	60	102	210,5	52	254	6,7
50	60	115	247,5	56,8	270	9,1	60	102	210,5	52	257	7
65	80	145	315	77	340,5	16,6	60	115	247,5	53,8	290,5	11,3
80	80	145	315	77	343,5	17,4	60	115	247,5	53,8	293,5	12,1
100	80	157	345	82	366,5	24	60	127	268,5	67	316,5	17,2
125	80	177	408,5	91,5	434,5	37,6	80	157	345	82	414,5	26,2
150	80	177	408,5	91,5	444	40,6	80	157	345	82	424	34
200	80	220,5	487	105	516,5	72,3	80	177	408,5	96,5	473	55,2
250	80	245	543	112	567	109	80	196	437,5	99	518	84,8

DN	A	B	C	D	E	F	G	H2	Number of releases by pressure stage		
									PN	ANSI150	ANSI300
25	25	20	85	85	50	26	75	45	4	4	4
40	41	32	92	92	58	31	96	45	4	4	4
50	53	40	95	95	71	38	112	45	4	4	0
65	65	50	115,5	115,5	85	49	129	55	0	4	0
80	80	65	118,5	118,5	95	55	142	55	0	4	0
100	100	80	129,5	129,5	112	62	174	55	8	0	0
125	100	125	177,5	177,5	148	85	200	55	8	8	-
150	150	120	187	187	170	95	220	55	0	0	-
200	200	155	216	216	210	120	275	75	0	0	-
250	250	195	242	242	270	145	338	75	12	0	-

Dimensions in mm

Ball Sector Valve 4040

Dimensions KS2 without actuator (with mounting kit ISO 5211)

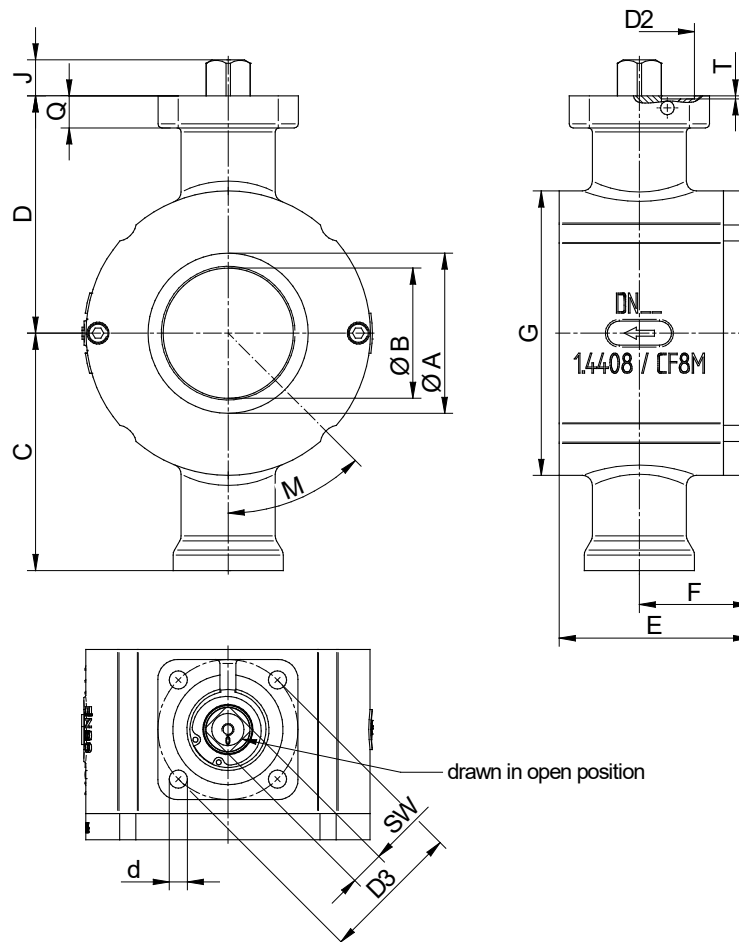


DN	A	B	C	D	E	F	G	series 1					series 2					weight [kg]
								L1	SW	d	D3	DIN ISO 5211	L1	SW	d	D3	DIN ISO 5211	
25	25	20	85	85	50	26	75	60	11	5,5	42	F 04	60	14	6,6	50	F 05	2,2
40	41	32	92	92	58	31	96	60	14	6,6	50	F 05	60	17	9	70	F 07	3
50	53	40	95	95	71	38	112	60	14	6,6	50	F 05	60	17	9	70	F 07	3,8
65	65	50	115,5	115,5	85	49	129	60	17	9	70	F 07	80	22	11	102	F 10	6,4
80	80	65	118,5	118,5	95	55	142	60	17	9	70	F 07	80	22	11	102	F 10	7,2
100	100	80	129,5	129,5	112	62	174	60	17	9	70	F 07	80	22	11	102	F 10	11
125	100	125	177,5	177,5	148	85	200	80	22	11	102	F 10	80	27	13,5	125	F 12	20
150	150	120	187	187	170	95	220	80	22	11	102	F 10	80	27	13,5	125	F 12	23
200	200	155	216	216	210	120	275	80	27	13,5	125	F 12	80	36	17	140	F 14	40
250	250	195	242	242	270	145	338	80	27	13,5	125	F 12	80	36	17	140	F 14	66

Dimensions in mm

Ball Sector Valve 4040

Dimensions KS2 without actuator version with square shaft

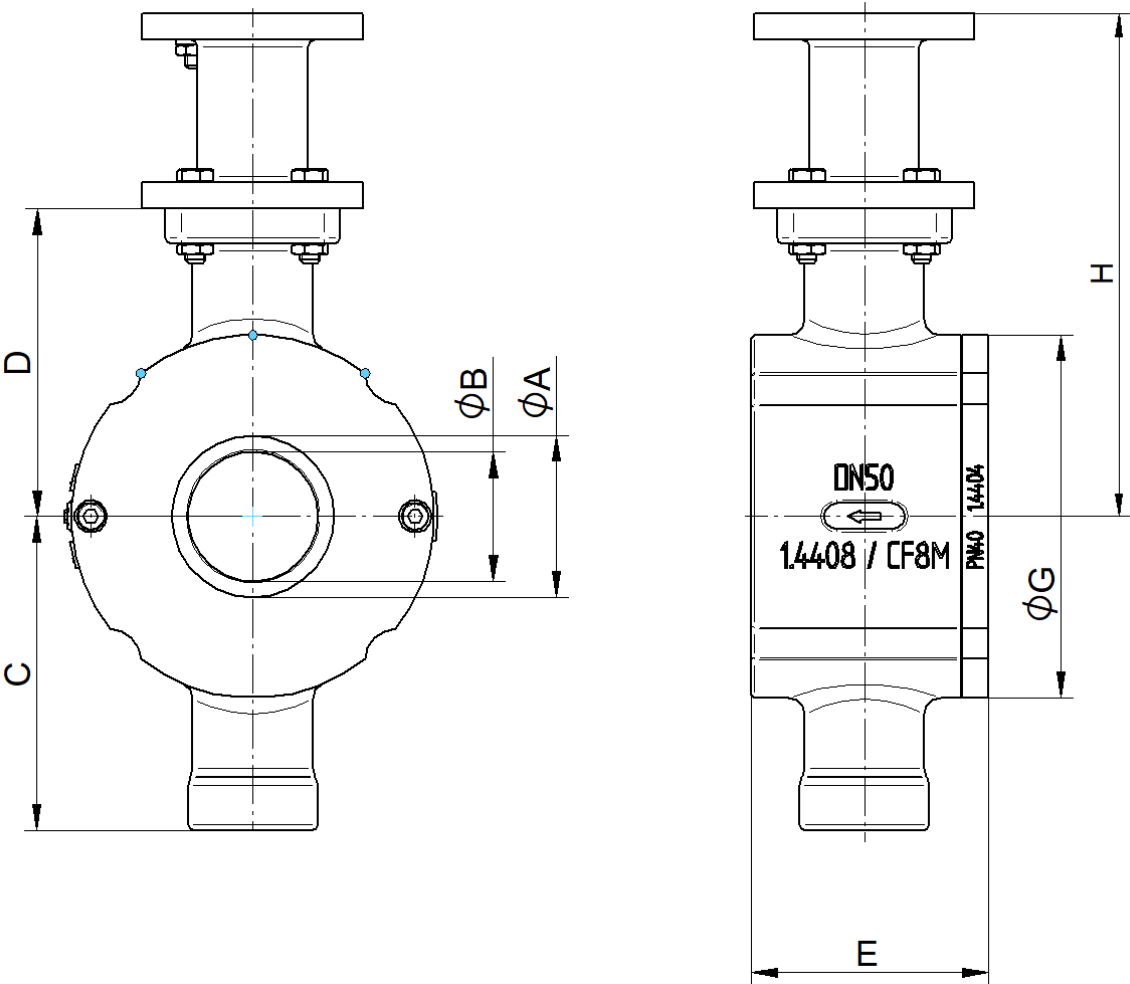


DN	A	B	C	D	E	F	J	SW	Q	d	D2	T	D3	DIN ISO 5211	Weight [kg]
25	25	20	85	85	50	26	15	14	11	6,6	35	1	50	F 05	2,2
40	41	32	92	92	58	31	15	14	11	6,6	35	1	50	F 05	3
50	53	40	95	95	71	38	15	14	11	6,6	35	1	50	F 05	3,8
65	65	50	115,5	115,5	85	49	18	17	16	9	55	1,5	70	F 07	6,4
80	80	65	118,5	118,5	95	55	18	17	16	9	55	1,5	70	F 07	7,2
100	100	80	129,5	129,5	112	62	18	17	16	9	55	1,5	70	F 07	11
125	100	125	177,5	177,5	148	85	22,5	22	17	11	70	1,5	102	F 10	20
150	150	120	187	187	170	95	22,5	22	17	11	70	1,5	102	F 10	23
200	200	155	216	216	210	120	27,5	27	17	13,5	85	1,5	125	F 12	40
250	250	195	242	242	270	145	27,5	27	17	13,5	85	1,5	125	F 12	66

Dimensions in mm

Ball Sector Valve 4040

Dimensions KS2 with stem extension

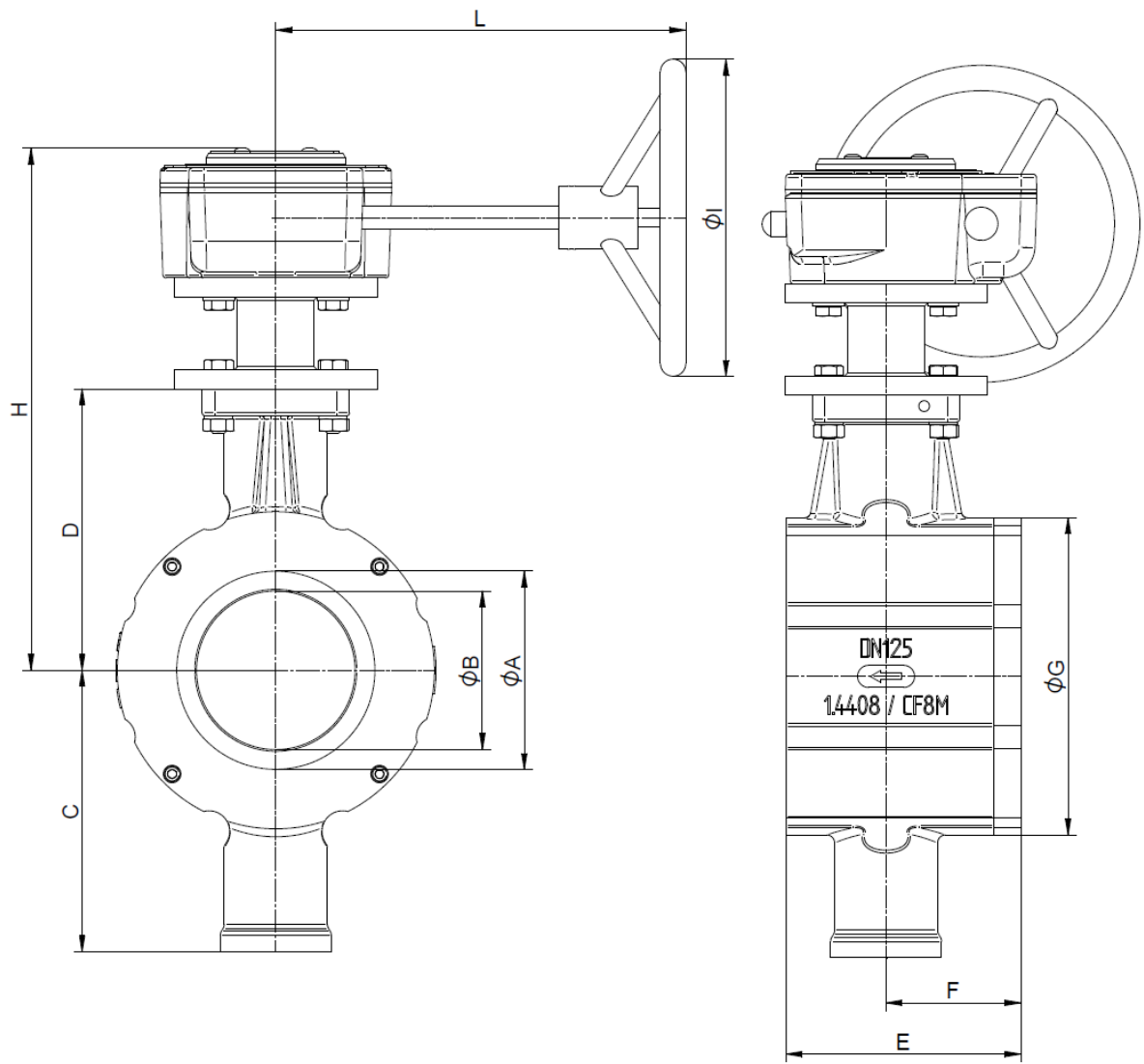


DN	A	B	C	D	E	F	G	H	Weight (kg)
25	25	20	85	85	50	26	73	145	2,86
40	41	32	92	92	58	31	94	152	3,66
50	53	40	95	95	71	38	112	155	4,46
65	65	50	116	116	85	49	112	196	7,96
80	80	65	119	119	95	55	142	199	8,76
100	100	80	130	130	112	62	174	210	12,56

Dimensions in mm

Ball Sector Valve 4040

Dimensions KS2 with stem extension and hand wheel gearbox

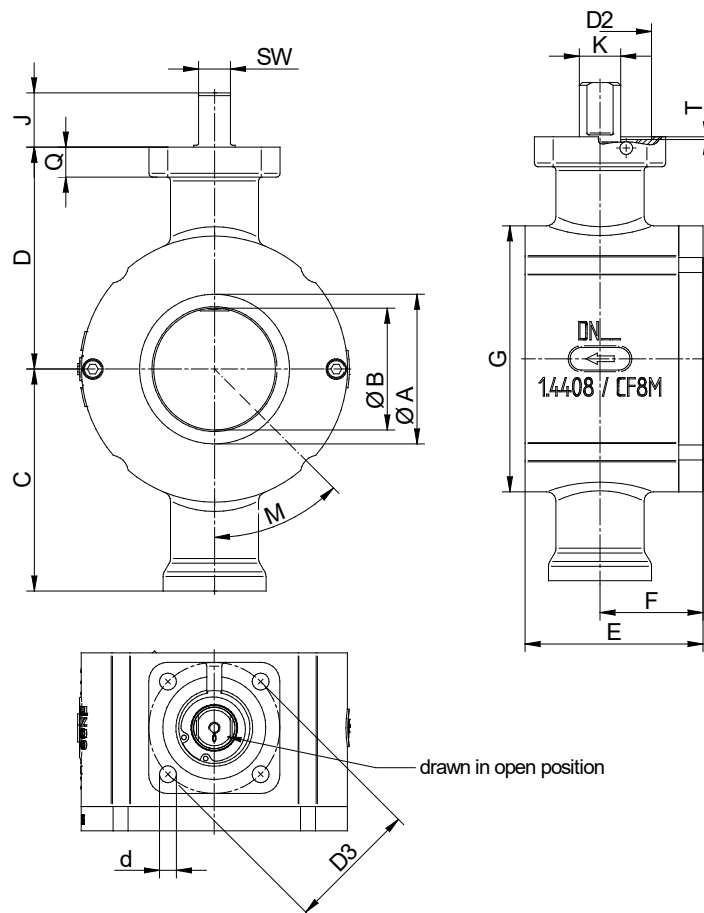


DN	A	B	C	D	E	F	G	H	I	L	Weight (kg)
125	125	100	178	178	148	85	200	330	200	259	28
150	150	120	187	187	170	95	220	339	200	259	31
200	200	155	216	216	210	120	275	358	200	259	49,2
250	250	195	242	242	270	145	344	384	200	259	75,2

Dimensions in mm

Ball Sector Valve 4040

Dimensions KS2 without actuator version with double flat

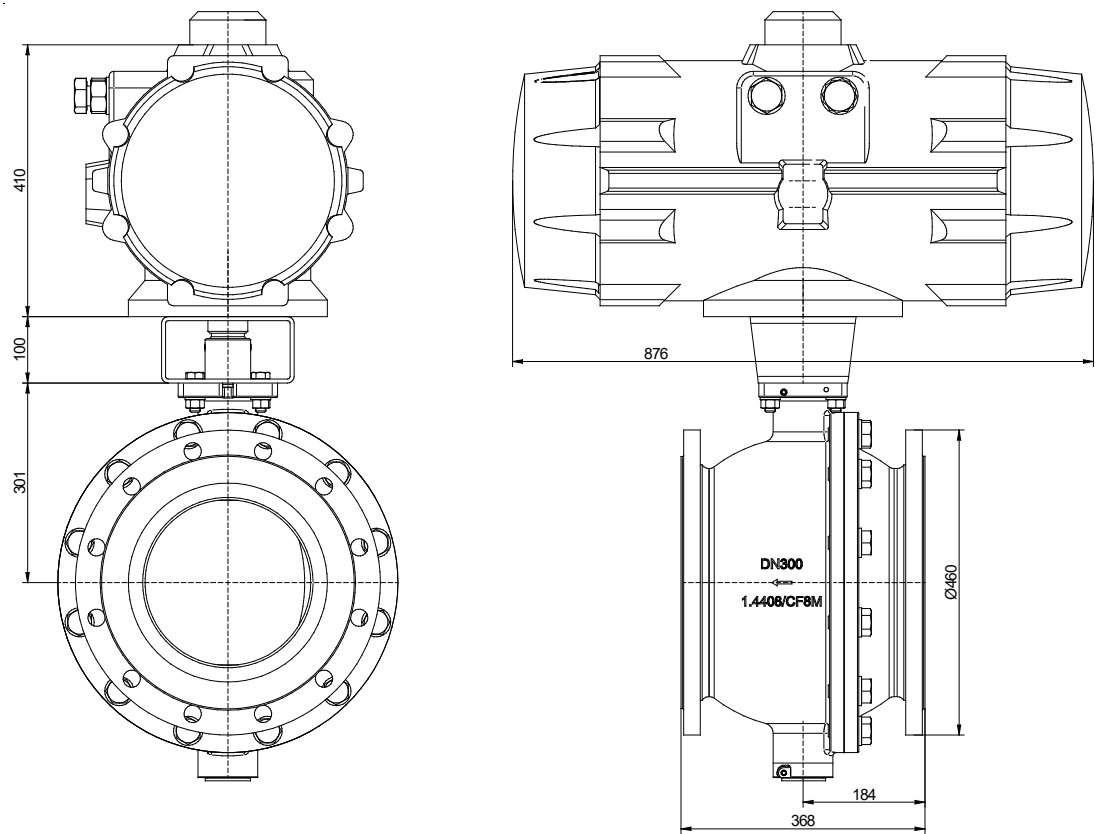


DN	A	B	C	D	E	F	J	SW	K	Q	d	D2	T	D3	DIN ISO 5211	weight [kg]
25	25	20	85	85	50	26	24	14	18	11	6,6	35	1	50	F 05	2,2
40	41	32	92	92	58	31	24	14	18	11	6,6	35	1	50	F 05	3
50	53	40	95	95	71	38	24	14	18	11	6,6	35	1	50	F 05	3,8
65	65	50	115,5	115,5	85	49	29	17	22	16	9	55	1,5	70	F 07	6,4
80	80	65	118,5	118,5	95	55	29	17	22	16	9	55	1,5	70	F 07	7,2
100	100	80	129,5	129,5	112	62	29	17	22	16	9	55	1,5	70	F 07	11
125	100	125	177,5	177,5	148	85	37,5	22	28	17	11	70	1,5	102	F 10	20
150	150	120	187	187	170	95	37,5	22	28	17	11	70	1,5	102	F 10	23
200	200	155	216	216	210	120	46,5	27	36	17	13,5	85	1,5	125	F 12	40
250	250	195	242	242	270	145	46,5	27	36	17	13,5	85	1,5	125	F 12	66

Dimensions in mm

Ball Sector Valve 4040

Dimensions KS1 DN300 with AirTorque actuator
(designed for a pilot pressure of 5 - 6 bar)



Dimension in mm

Three-Way Ball Sector Valve 4080

DN 50 up to DN 150

Three-way ball sector valve in a distribution or mixing function for controlling neutral and aggressive media.

- High KVs-Values
- Excellent control characteristics
- High control spread
- High rangeability 300:1
- DN 50 up to DN 150
- Variable installation options
- Simple maintenance
- Suitable for liquids and gases



Technical Information Valve

Nominal sizes	DN 50 up to DN 150	
Connection	Flanges according to DIN EN 1092-1	
Total length	according to DIN EN 558-1 series 1	
Body material	cast parts	1.4408 (CF8M)
	turned parts	1.4404 (316L)
Material of the bearing shaft	1.4122	
Bearing material	high temperature plain bearing	
Connection to the actuator	mounting kit DIN/ISO 5211	
Nominal pressure	DN 50	PN40
	DN 65 - DN150	PN25
Fluid Temperature	-40°C up to +220°C depending on the sealings	
Ambient temperature	-20°C up to +80°C depending on the sealings	
	special version on request	
Vacuum	up to 50 mbar abs.	
Characteristic	almost equal percentage	
Rangeability	300:1	
Leakage rate	Seat ring: PTFE / PEEK Ball sector: Polished stainless steel	
% of Kvs	< 0,00005	
IEC 60534-4	IV-S1	

Working pressure max.

DN	maximum differential pressure (delta p)						
	seat ring PTFE			seat ring PEEK			
	up to 80°C	120°C	170°C	up to 80°C	120°C	170°C	220°C
	bar	bar	bar	bar	bar	bar	bar
50	25	16	6	40	38,5	25	16
65-150	16	12	5	25	24	16	10

Actuators for mounting according DIN/ISO5211, pilot pressure 5 - 6 bar
(for less than 5 bar pilot pressure, please inform us)

Three-Way Ball Sector Valve 4080

Temperature limits

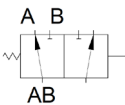
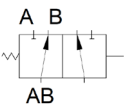
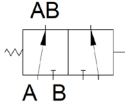
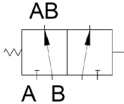
	O-ring behind seat ring							
	Viton		NBR		EPDM		FFKM	
Seatring	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]
PTFE	-15	170	-30	100	-40	140	-15	170
PEEK	-15	200	-30	100	-40	140	-15	220

Torques and mounting kits

for retrofitting actuators

DN	rotation angle nominal	max. nominal pressure PN	req. torque [Nm]		mounting kit ISO 5211 diagonal square shaft	
			on/off-operation	control operation	series 1	series 2
50	90°	PN40	30	50	F05/SW14	F07/SW17
65	90°	PN25	60	100	F07/SW17	F10/SW22
80	90°	PN25	60	100	F07/SW17	F10/SW22
100	90°	PN25	90	150	F07/SW17	F10/SW22
125	90°	PN25	150	250	F10/SW22	F12/SW27
150	90°	PN25	150	250	F10/SW22	F12/SW27

Functions

	Safety position	
	A-open	B-open
Distribution function		
Mixing function		

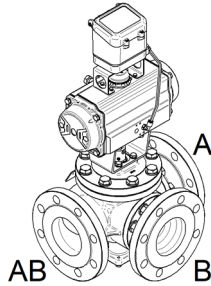
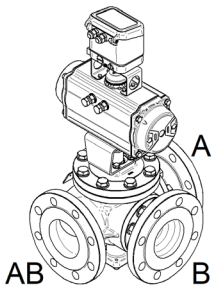
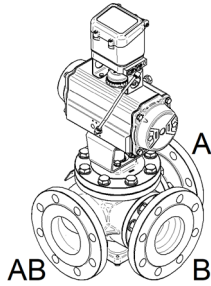
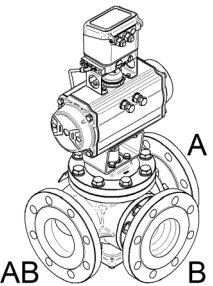
Kvs-Values

DN	Kvs-Value
50	61
65	106
80	139
100	202
125	296
150	382

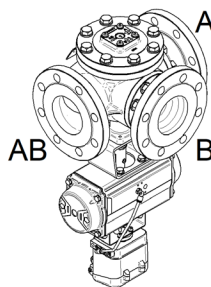
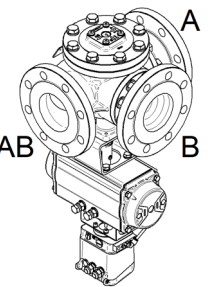
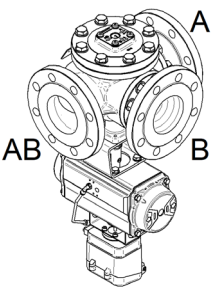
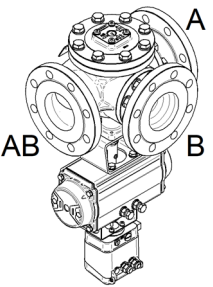
Three-Way Ball Sector Valve 4080

Installation position of the actuator

Actuator installation on the body cover

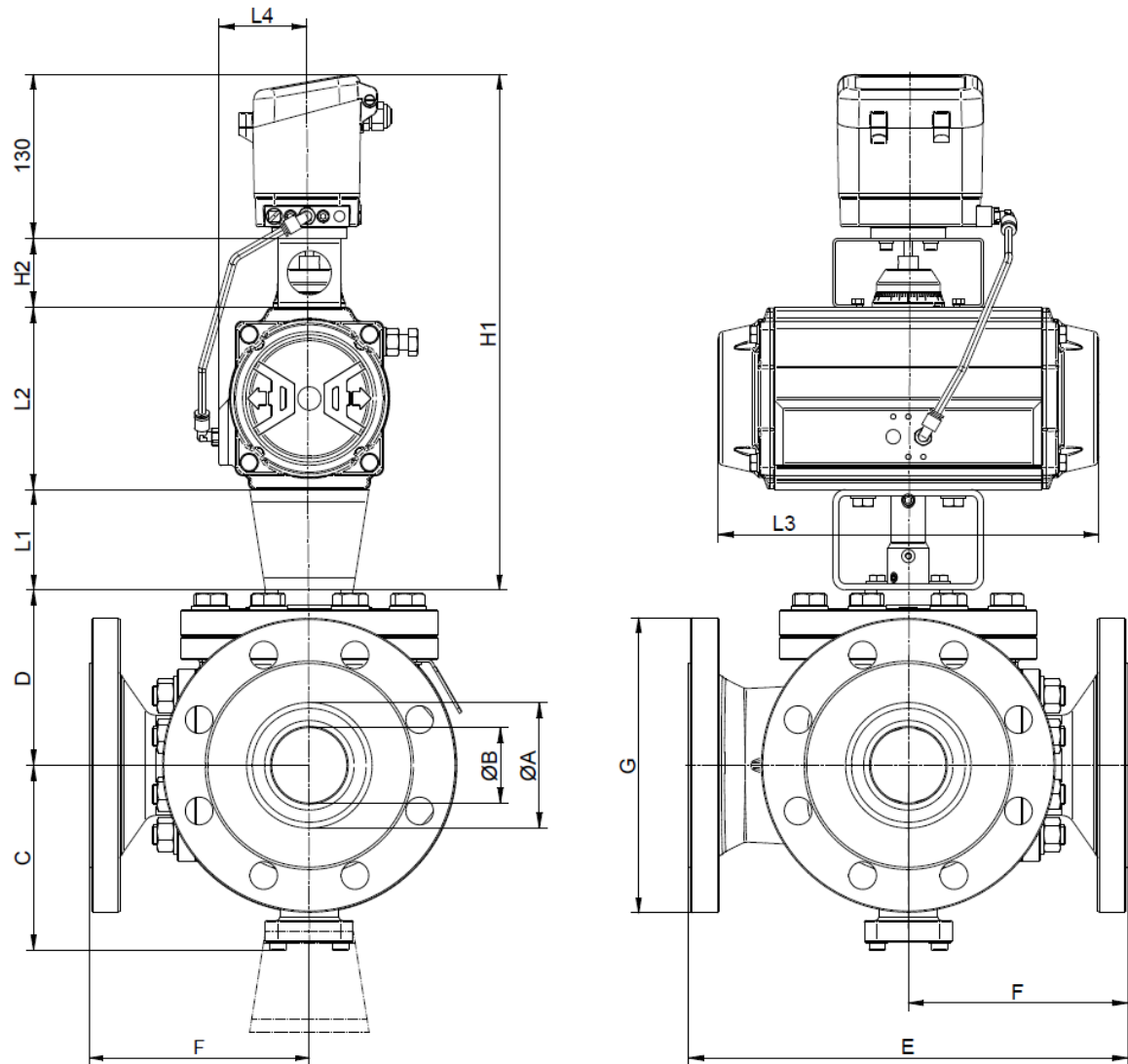
Standard installation position	Installation position code "1"	Installation position code "2"	Installation position code "3"
			

Actuator installation on the body flange

Installation position code "4"	Installation position code "5"	Installation position code "6"	Installation position code "7"
			

Three-Way Ball Sector Valve 4080

Dimensions with actuator and positioner 8049



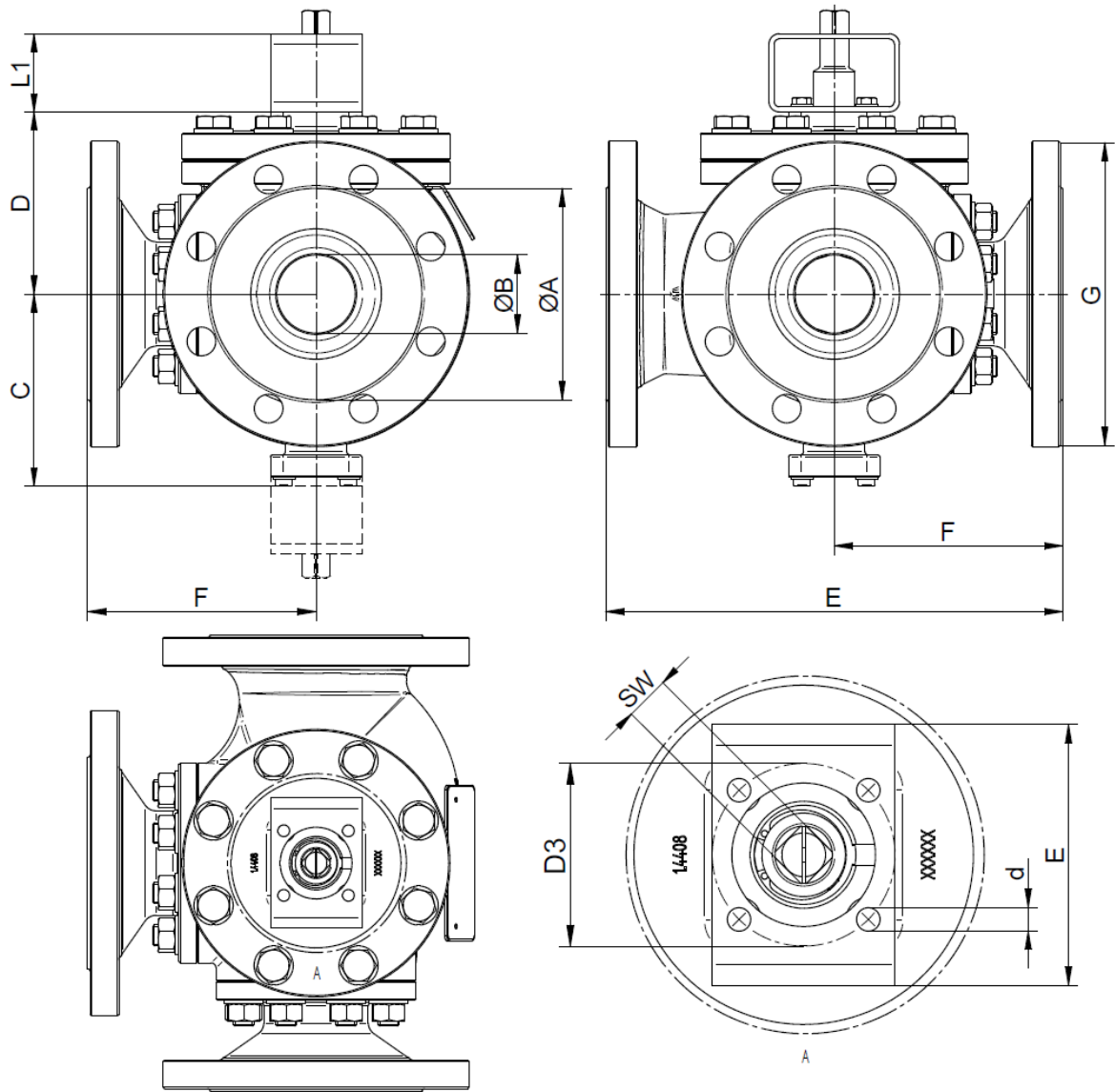
DN	actuator single acting						actuator double acting					
	L1	L2	L3	L4	H1	weight [kg]	L1	L2	L3	L4	H1	weight [kg]
50	60	115	247,5	56,8	350	29,8	60	102	210,5	52	337	26,6
65	80	145	315	77	410	46,2	60	115	247,5	53,8	360	39,0
80	80	145	315	77	410	54,9	60	115	247,5	53,8	360	47,8
100	80	157	345	82	422	69,5	60	127	268,5	67	372	60,7
125	80	177	408,5	91,5	442	125,9	80	157	345	82	422	113,0
150	80	177	408,5	91,5	442	163,6	80	157	345	82	422	155,5

DN	A	B	C	D	E	F	G	H2
50	50	35	105	96	230	115	165	45
65	65	45	125	116,5	290	145	185	55
80	80	50	133	125	310	155	200	55
100	100	60	148	139,5	350	175	235	55
125	125	75	182	168,5	400	200	270	55
150	150	85	196,5	183	480	240	300	55

Dimensions in mm

Three-Way Ball Sector Valve 4080

Dimensions without drive (with mounting kit ISO 5211)

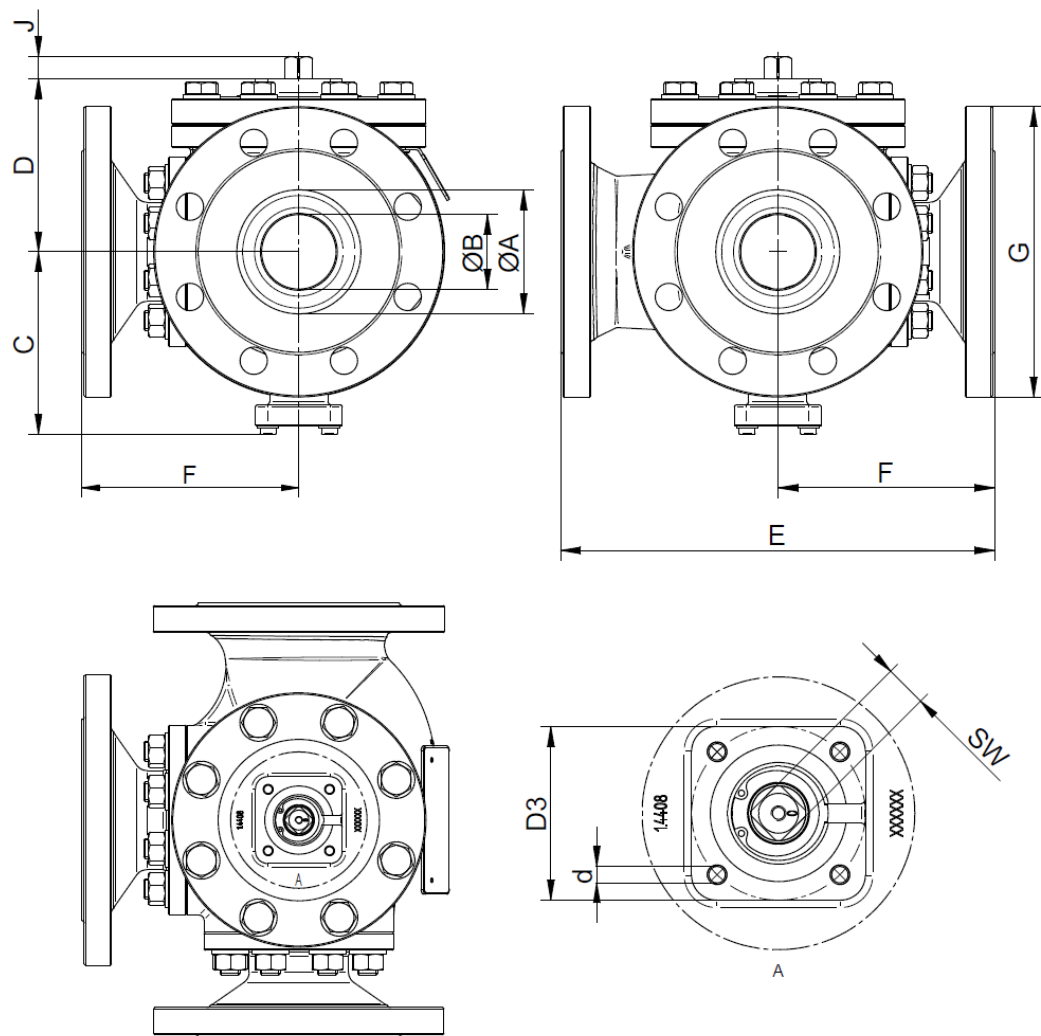


DN	A	B	C	D	E	F	G	series 1					weight [kg]	series 2					weight [kg]
								L1	SW	d	D3	DIN ISO 5211		L1	SW	d	D3	DIN ISO 5211	
50	50	35	105	96	230	115	165	60	14	6,6	50	F 05	22,6	60	17	9	70	F 07	24,0
65	65	45	125	116,5	290	145	185	60	17	9	70	F 07	33,8	80	22	11	102	F 10	35,4
80	80	50	133	125	310	155	200	60	17	9	70	F 07	42,6	80	22	11	102	F 10	44,2
100	100	60	148	139,5	350	175	235	60	17	9	70	F 07	54,2	80	22	11	102	F 10	55,7
125	125	75	182	168,5	400	200	270	80	22	11	102	F 10	106,5	80	27	13,5	125	F 12	107,4
150	150	85	196,5	183	480	240	300	80	22	11	102	F 10	144,2	80	27	13,5	125	F 12	145,1

Dimensions in mm

Three-Way Ball Sector Valve 4080

Dimensions without drive Version with square

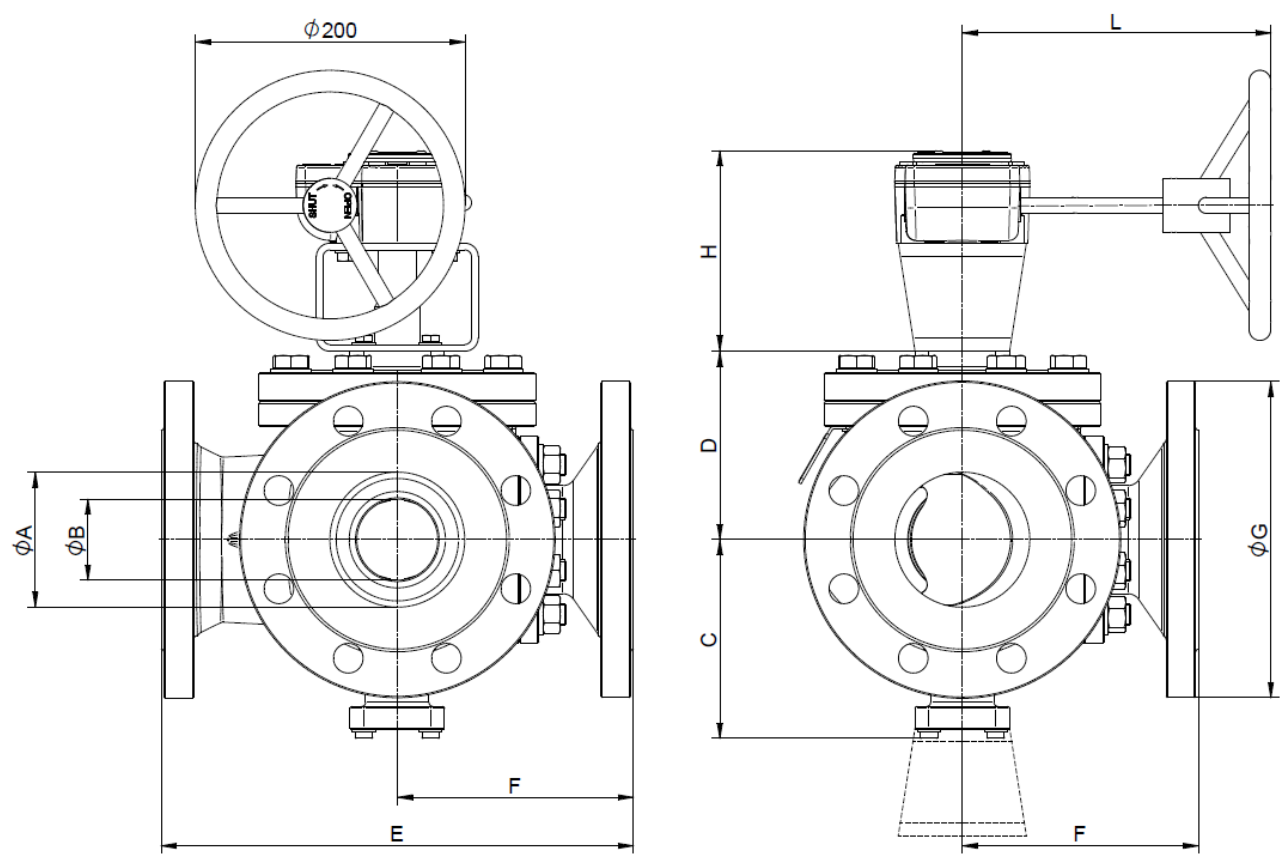


DN	A	B	C	D	E	F	J	SW	d	D3	DIN ISO 5211	Weight [kg]
50	50	35	105	96	230	115	15	14	M6	50	F 05	21,9
65	65	45	125	116,5	290	145	18	17	M8	70	F 07	33,1
80	80	50	133	125	310	155	18	17	M8	70	F 07	41,9
100	100	60	148	139,5	350	175	18	17	M8	70	F 07	53,4
125	125	75	182	168,5	400	200	22,5	22	M10	102	F 10	105,1
150	150	85	196,5	183	480	240	22,5	22	M10	102	F 10	142,8

Dimensions in mm

Three-Way Ball Sector Valve 4080

Dimensions with handwheel drive

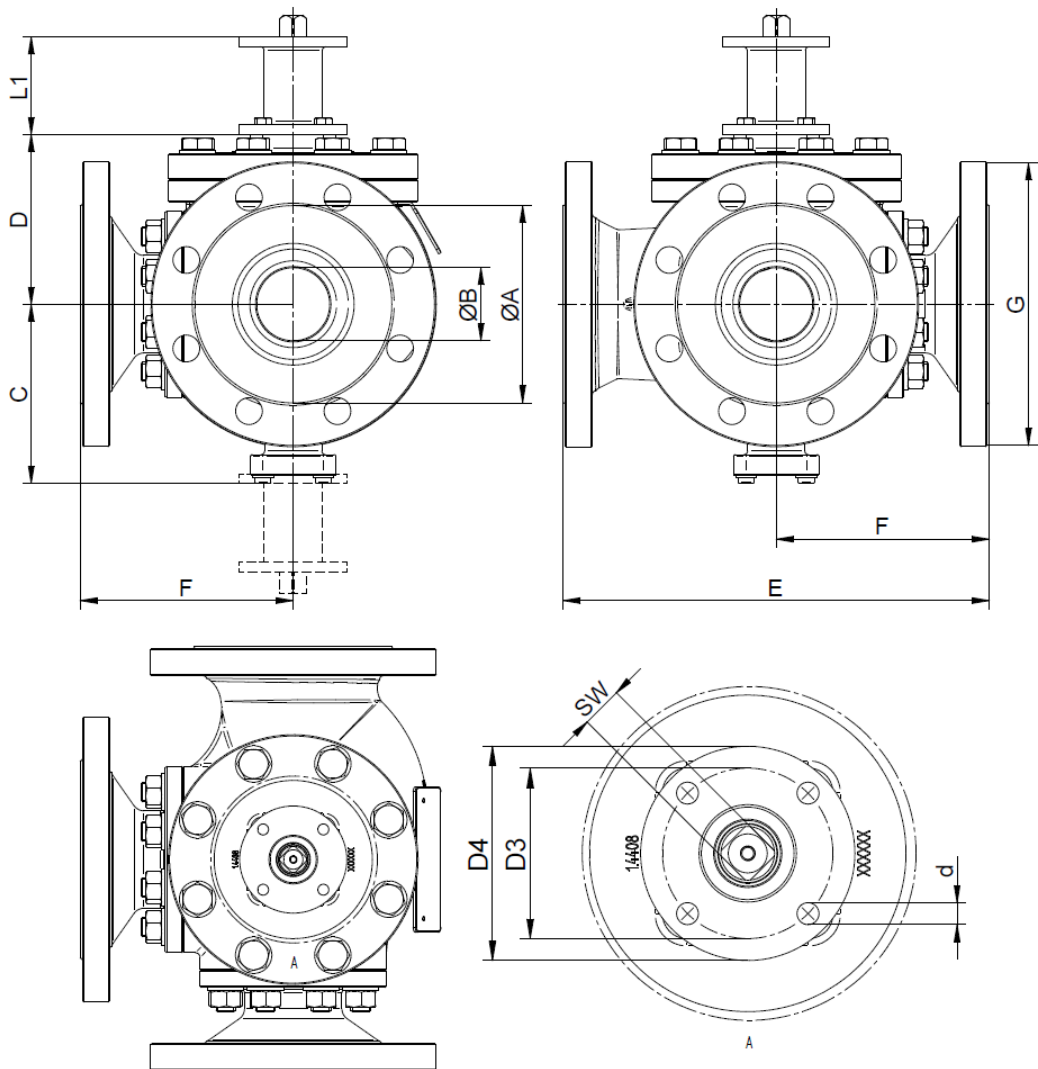


DN	A	B	C	D	E	F	G	H	L	Weight (kg)
50	50	35	105	96	230	115	165	114	163	25,9
65	65	45	125	116,5	290	145	185	114	163	35,7
80	80	50	133	125	310	155	200	114	163	44,5
100	100	60	148	139,5	350	175	235	149	259	58,3
125	125	75	182	168,5	400	200	270	149	259	109,1
150	150	85	196,5	183	480	240	300	149	259	146,8

Dimensions in mm

Three-Way Ball Sector Valve 4080

Dimensions with spindle extension for better insulation



DN	A	B	C	D	E	F	G	L1	SW	d	D3	D4	weight [kg]
50	50	35	105	96	230	115	165	60	14	6,6	50	68	24,0
65	65	45	125	116,5	290	145	185	80	17	9	70	88	35,4
80	80	50	133	125	310	155	200	80	17	9	70	88	44,2
100	100	60	148	139,5	350	175	235	80	17	9	70	88	55,7
125	125	75	182	168,5	400	200	270	80	22	11	102	128	107,4
150	150	85	196,5	183	480	240	300	80	22	11	102	128	145,1

Dimensions in mm

Three-Way Ball Sector Valve 4083

DN 50 up to DN 150

Three-way ball sector valve with motorised actuator in split function or mixing function for regulating neutral and aggressive media.

- High KVs-Values
- Excellent control characteristics
- High control spread
- High rangeability 100:1
- DN 50 up to DN 150
- Variable installation options
- Easy maintenance
- Suitable for liquids and gases



Technical Information Valve

Nominal sizes	DN 50 up to DN 150	
Connection	Flanges according to DIN EN 1092-1	
Total length	according to DIN EN 558-1 series 1	
Body material	cast parts	1.4408 (CF8M)
	turned parts	1.4404 (316L)
Material of the bearing shaft	1.4122	
Bearing material	high temperature plain bearing	
Connection to the actuator	mounting kit DIN/ISO 5211	
Nominal pressure	DN 50	PN40
	DN 65 - DN150	PN25
Fluid Temperature	-40°C up to +220°C	depending on the sealings
Ambient temperature	-20°C up to +80°C	depending on the sealings
	special version on request	
Vacuum	up to 50 mbar abs.	
Characteristic	almost equal percentage	
Rangeability	100:1	
Leakage rate	Seat ring: PTFE / PEEK Ball sector: Polished stainless steel	
% of Kvs	< 0,00005	
IEC 60534-4	IV-S1	

Working pressure max.

DN	maximum differential pressure (delta p)						
	seat ring PTFE			seat ring PEEK			
	up to 80°C	120°C	170°C	up to 80°C	120°C	170°C	220°C
	bar	bar	bar	bar	bar	bar	bar
50	25	16	6	40	38,5	25	16
65-150	16	12	5	25	24	16	10

Three-Way Ball Sector Valve 4083

Temperature limits

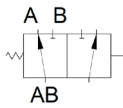
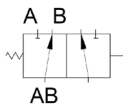
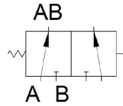
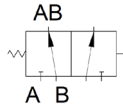
	O-ring behind seat ring							
	Viton		NBR		EPDM		FFKM	
Seatring	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]	Tmin [°C]	Tmax [°C]
PTFE	-15	170	-30	100	-40	140	-15	170
PEEK	-15	200	-30	100	-40	140	-15	220

Torques and mounting kits

for retrofitting actuators

DN	rotation angle nominal	max. nominal pressure PN	req. torque [Nm]		mounting kit ISO 5211 diagonal square shaft	
			on/off-operation	control operation	series 1	series 2
50	90°	PN40	30	50	F05/SW14	F07/SW17
65	90°	PN25	60	100	F07/SW17	F10/SW22
80	90°	PN25	60	100	F07/SW17	F10/SW22
100	90°	PN25	90	150	F07/SW17	F10/SW22
125	90°	PN25	150	250	F10/SW22	F12/SW27
150	90°	PN25	150	250	F10/SW22	F12/SW27

Functions

	Safety position	
	A-open	B-open
Distribution function		
Mixing function		

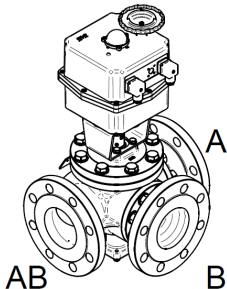
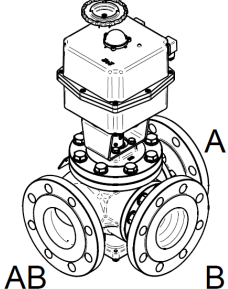
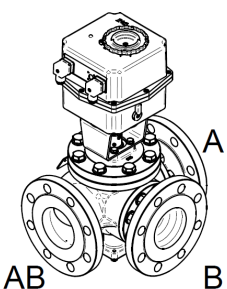
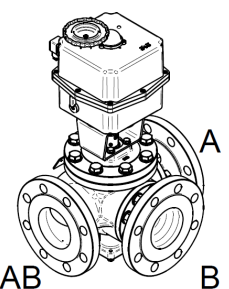
Kvs-Values

DN	Kvs-Values
50	61
65	106
80	139
100	202
125	296
150	382

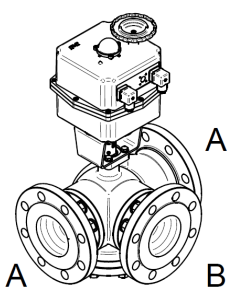
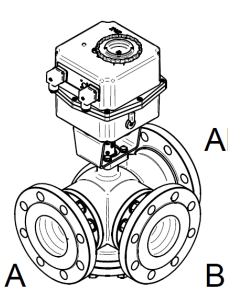
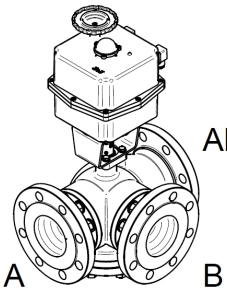
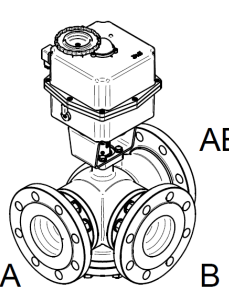
Three-Way Ball Sector Valve 4083

Installation position of the actuator

Actuator installation on the body cover

Standard installation position	Installation position code "1"	Installation position code "2"	Installation position code "3"
			

Actuator installation on the body flange

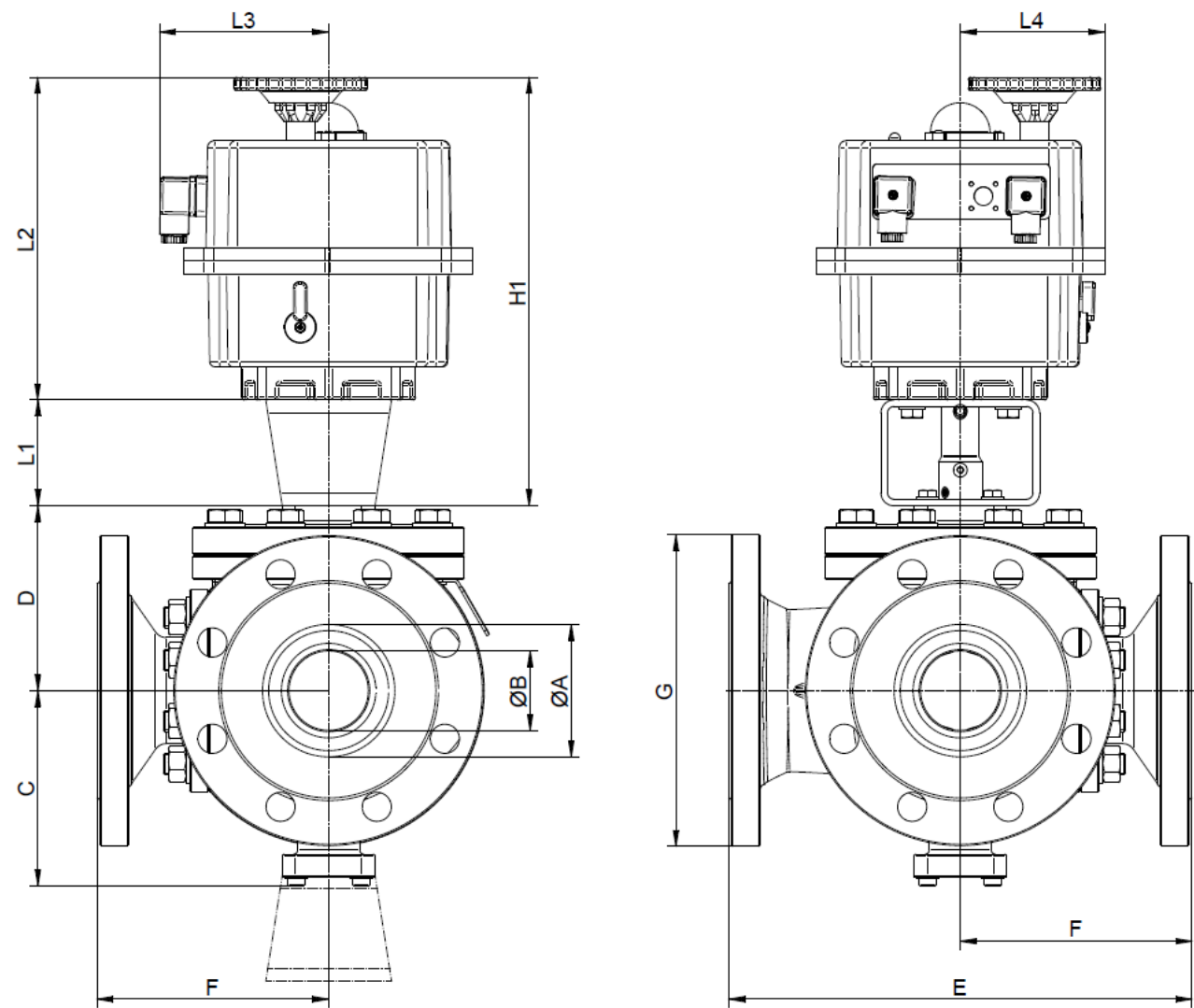
Installation position code "4"	Installation position code "5"	Installation position code "6"	Installation position code "7"
			

Operation time / 90° with standard actuator

DN	operation time / 90° [s]
50	13
65	29
80	29
100	34
125	58
150	58

Three-Way Ball Sector Valve 4083

Dimensions with standard actuator

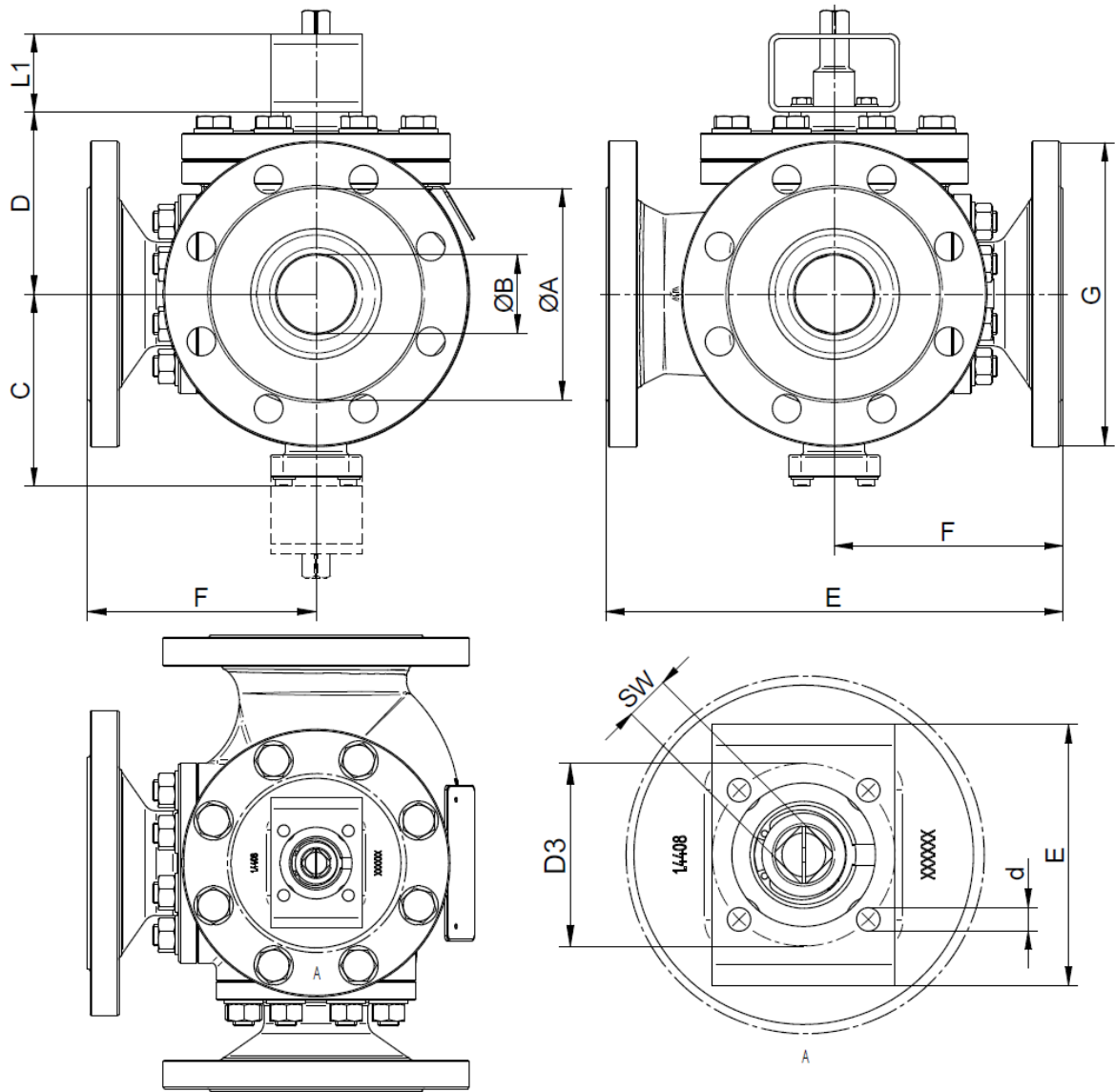


DN	L1	L2	L3	L4	H1	A	B	C	D	E	F	G	weight (kg)
50	60	196	130	55	256	50	35	105	96	230	115	165	26,4
65	60	196	130	73	256	65	45	125	116,5	290	145	185	36,8
80	60	196	130	73	256	80	50	133	125	310	155	200	45,6
100	80	254	128	110	334	100	60	148	139,5	350	175	235	60,9
125	80	254	128	110	334	100	75	182	168,5	400	200	270	111,7
150	80	254	128	110	334	150	85	196,5	183	480	245	300	149,4

dimensions in mm

Three-Way Ball Sector Valve 4083

Dimensions without actuator (with mounting kit ISO 5211)

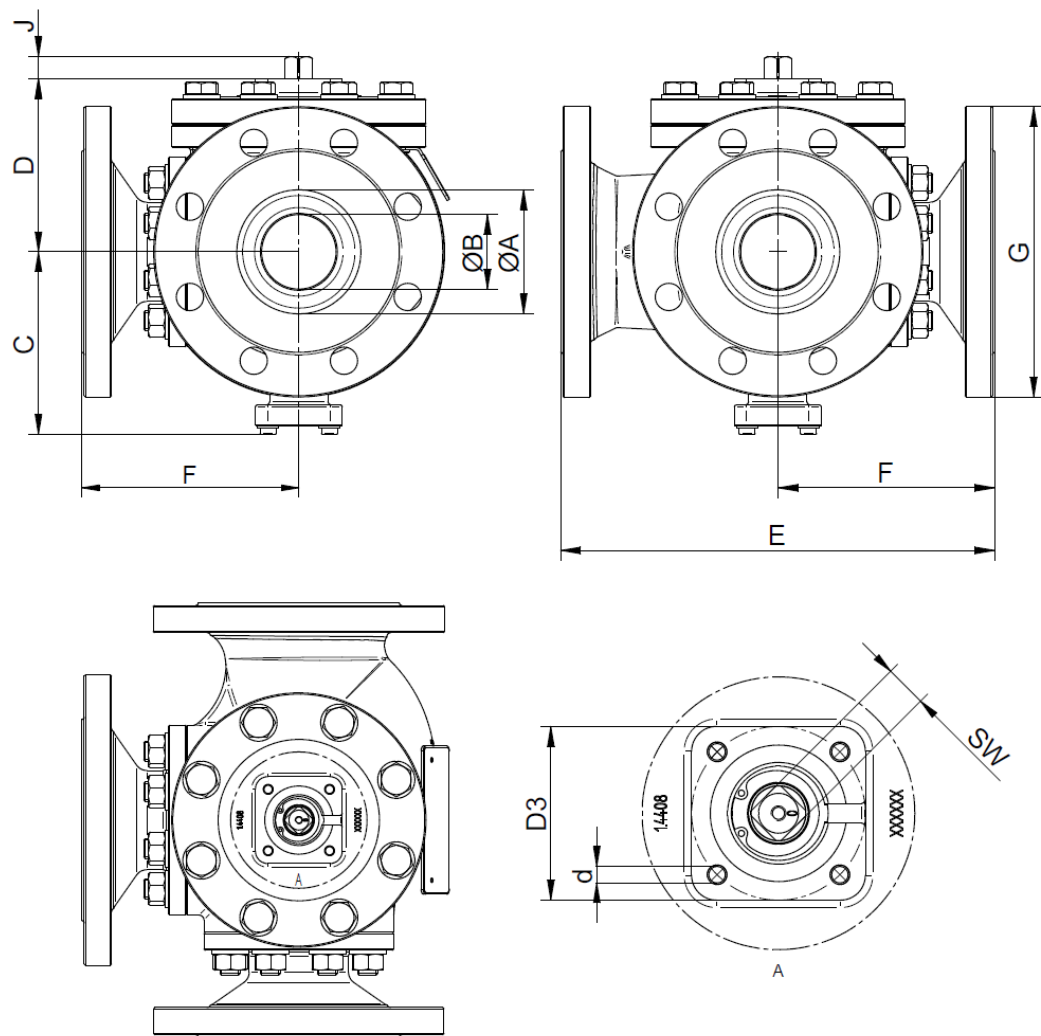


DN	A	B	C	D	E	F	G	series 1						series 2					
								L1	SW	d	D3	DIN ISO 5211	weight [kg]	L1	SW	d	D3	DIN ISO 5211	weight [kg]
50	50	35	105	96	230	115	165	60	14	6,6	50	F 05	22,6	60	17	9	70	F 07	24,0
65	65	45	125	116,5	290	145	185	60	17	9	70	F 07	33,8	80	22	11	102	F 10	35,4
80	80	50	133	125	310	155	200	60	17	9	70	F 07	42,6	80	22	11	102	F 10	44,2
100	100	60	148	139,5	350	175	235	60	17	9	70	F 07	54,2	80	22	11	102	F 10	55,7
125	125	75	182	168,5	400	200	270	80	22	11	102	F 10	106,5	80	27	13,5	125	F 12	107,4
150	150	85	196,5	183	480	240	300	80	22	11	102	F 10	144,2	80	27	13,5	125	F 12	145,1

dimensions in mm

Three-Way Ball Sector Valve 4083

Dimensions without actuator version with square



DN	A	B	C	D	E	F	J	SW	d	D3	DIN ISO 5211	weight [kg]
50	50	35	105	96	230	115	15	14	M6	50	F 05	21,9
65	65	45	125	116,5	290	145	18	17	M8	70	F 07	33,1
80	80	50	133	125	310	155	18	17	M8	70	F 07	41,9
100	100	60	148	139,5	350	175	18	17	M8	70	F 07	53,4
125	125	75	182	168,5	400	200	22,5	22	M10	102	F 10	105,1
150	150	85	196,5	183	480	240	22,5	22	M10	102	F 10	142,8

dimensions in mm



По вопросам продаж и поддержки обращайтесь:				
Алматы (727)345-47-04 Ангарск (3955)60-70-56 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Благовещенск (4162)22-76-07 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Владикавказ (8672)28-90-48 Владимир (4922)49-43-18 Волгоград (844)278-03-48 Вологда (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89	Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)279-98-46 Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Коломна (4966)23-41-49 Кострома (4942)77-07-48 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Курган (3522)50-90-47 Липецк (4742)52-20-81	Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокузнецк (3843)20-46-81 Ноябрьск (3496)41-32-12 Новосибирск (383)227-86-73 Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Петрозаводск (8142)55-98-37 Псков (8112)59-10-37 Пермь (342)205-81-47	Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Севастополь (8692)22-31-93 Саранск (8342)22-96-24 Симферополь (3652)67-13-56 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Сургут (3462)77-98-35 Сыктывкар (8212)25-95-17 Тамбов (4752)50-40-97 Тверь (4822)63-31-35	Тольятти (8482)63-91-07 Томск (3822)98-41-53 Тула (4872)33-79-87 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Улан-Удэ (3012)59-97-51 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Чебоксары (8352)28-53-07 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Чита (3022)38-34-83 Якутск (4112)23-90-97 Ярославль (4852)69-52-93
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