

Ball Sector Valve 4030

1" up to 12"

Motorvalve for the control of neutral and aggressive fluids with integrated positioner

- 1" up to 12"
- High Cv-values up to 4454
- 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	1" - 10" flangeless wafertype 12" flange connection	
Nominal sizes	1" up to 12"	
Body material cast parts turned parts	CF8M (1.4408) 316L (1.4404)	
Bearing material	high temperature plain bearing (Iglidur Z)	
Connection to the actuator	mounting kit DIN/ISO 5211	
Nominal pressure 1" - 2" 3" - 4" 6" - 12"	ANSI300, ANSI150, 580 psi (for flanges 145 psi - 580 psi) ANSI150, 365 psi (for flanges 145 psi - 365 psi) ANSI150, 235 psi (for flanges 145 psi - 235 psi)	
Fluid Temperature	-40°F up to +428°F	according to the sealings
Ambient temperature	-40°F up to +176°F special version on request	according to the acuator
Vacuum	up to 1,48 mercury (Hg)	
Characteristic	almost equal percentage	
Rangeability	100:1	
Specific 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-CC1-SSA0-t(RT)-PN16-ISO 15848-1	

Working pressure max.

Nominal size	maximum differential pressure (delta p)									
	seat ring PTFE			seat ring PEEK				seat ring Stellite		
	up to 176°F psi	248°F psi	338°F psi	up to 176°F psi	248°F psi	338°F psi	428°F psi	up to 176°F psi	338°F psi	428°F psi
1" - 2"	365	230	85	580	580	365	230	580	580	365
3" - 4"	230	175	75	365	365	230	145	365	365	230
6" - 12"	230	175	60	230	230	175	115	230	230	175

Actuators for mounting according DIN/ISO5211

Temperature limits

Seating	Sealing seating							
	Viton		EPDM		NBR		FFKM	
	Tmin [°F]	Tmax [°F]	Tmin [°F]	Tmax [°F]	Tmin [°F]	Tmax [°F]	Tmin [°F]	Tmax [°F]
PTFE	5	338	-40	284	-22	212	5	338
PEEK	5	392	-40	284	-22	212	5	428
Stellite	5	392	-40	284	-22	212	5	428

Leakage

Seat ring	Ball sector	Leakage	
		Amount of the max. Kvs-value	class acc. EN 60534-4: (IEC 60534-4)
PTFE or PEEK	stainless steel polished	5x10 ⁻⁷	IV-S1
PTFE or PEEK	stainless steel lapped		VI
PTFE or PEEK	stainless steel hard chrome plated	5x10 ⁻⁷	IV-S1
PTFE or PEEK	stainless steel, hard chrome plated + lapped		VI
Stellite	stainless steel, hard chrome plated + lapped	5x10 ⁻⁶	IV-S1

Kvs-Values

Size	Cvs-value reduced to				
	100%	63%	40%	25%	6,3%
1"	24.6	14.9	9.83	6.14	1.7
1 1/2"	81	47.2	29.3		
2"	126	70.6			
2 1/2"	179,2				
3"	348				
4"	456				
5"	874,0				
6"	948				
8"	1597				
10"	2597				
0	4493				

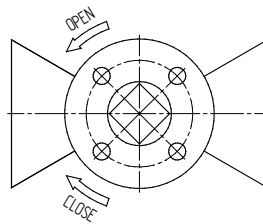
operation time / 90° with standard actuator

Size	operation time / 90° [s]
1"	9
1 1/2"	13
2"	13
2 1/2"	29
3"	29
4"	34
5"	58
6"	58
8"	58

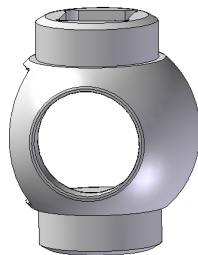
Torques and mounting kits

for retrofitting actuators

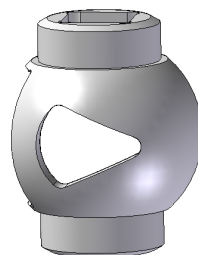
Size	rotation angle nominal	max. press. Nomial		req. torque [lbf ft]		mounting kit ISO 5211 diagonal square shaft	
		PN	ANSI	on/off-operation	control operation	series 1	series 2
1"	90°	PN40	ANSI 300	11	18	F04/SW11	F05/SW14
1 1/2"	90°	PN40	ANSI 300	22	37	F05/SW14	F07/SW17
2"	90°	PN40	ANSI 300	22	37	F05/SW14	F07/SW17
3"	90°	PN25	ANSI 150	44	74	F07/SW17	F10/SW22
4"	90°	PN25	ANSI 150	66	111	F07/SW17	F10/SW22
6"	90°	PN16	ANSI 150	111	184	F10/SW22	F12/SW27
8"	90°	PN16	ANSI 150	155	258	F12/SW27	F14/SW36
10"	90°	PN16	ANSI 150	266	443	F12/SW27	F14/SW36
12"	90°	PN16	ANSI 150	664	1106	F14/SW36	F16/SW46



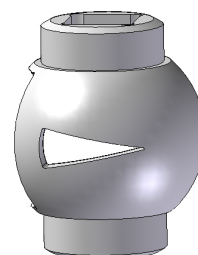
Ball Sector Valve with reduced Kvs-values



100%



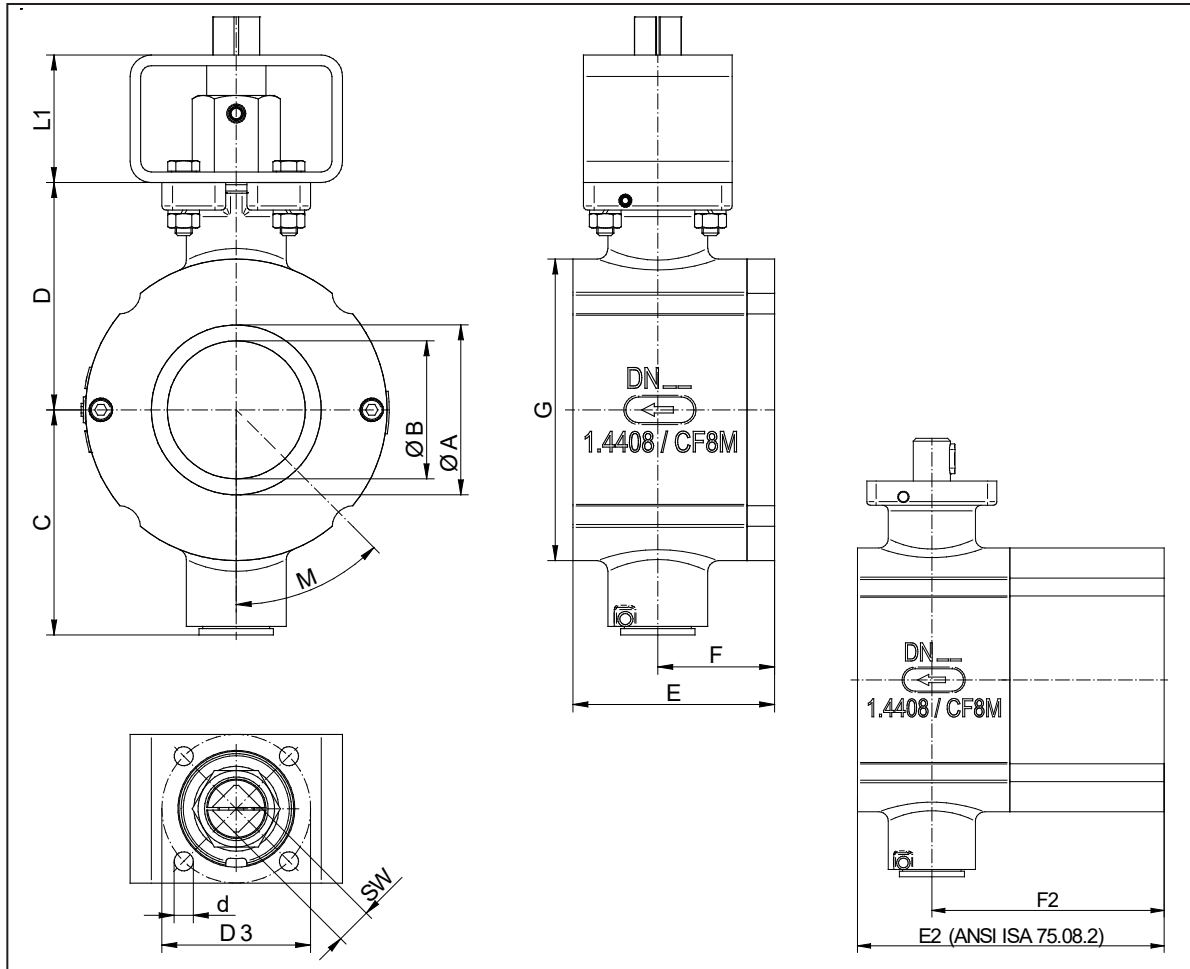
reduced to
63%



reduced to
25%

Ball Sector Valve 4030

Dimensions KS1 without actuator (with mountig kit ISO 5211) sealing of the bearing shaft with O-rings



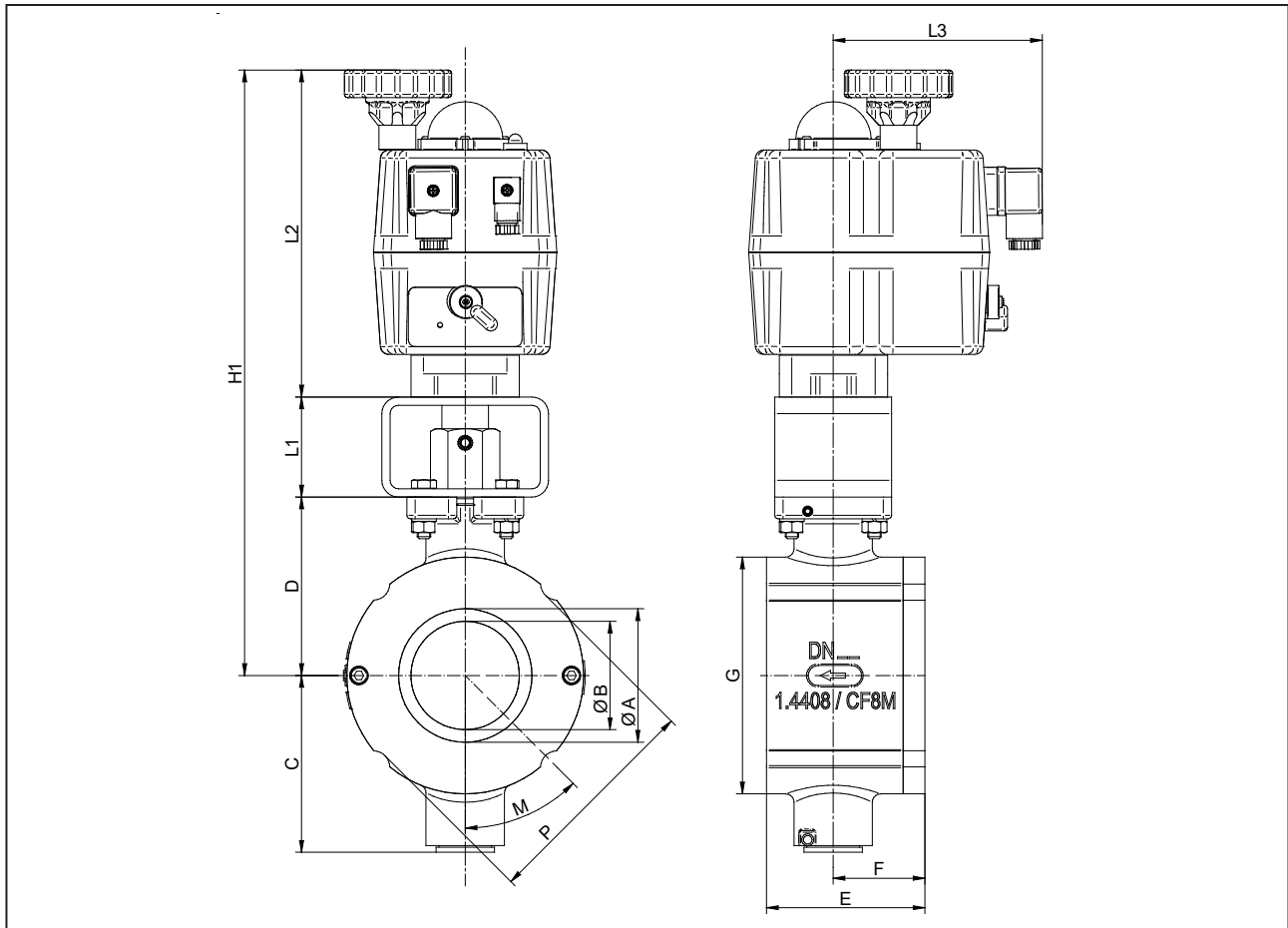
Nominal size	A	B	C	D	E	F	G	L1	d	D3	SW	DIN/ISO 5211
1"	1	0.8	2.85	2.9	1.95	1	2.85	2.35	0.25	1.95	0.55	F 05
1 1/2"	1.6	1.25	3.1	3.15	2.3	1.2	3.7	2.35	0.25	1.95	0.55	F 05
2"	2.1	1.55	3.25	3.25	2.8	1.5	4.4	2.35	0.25	1.95	0.55	F 05
3"	3.15	2.55	4.15	4.2	3.75	2.15	5.6	2.35	0.35	2.75	0.65	F 07
4"	3.95	3.15	4.6	4.65	4.4	2.55	6.85	2.35	0.35	2.75	0.65	F 07
6"	5.9	4.7	6.1	6.15	6.7	3.7	8.65	3.15	0.45	4	0.85	F 10
8"	7.85	6.1	7.25	7.3	8.25	4.7	10.85	3.15	0.55	4.9	1.05	F 12
10"	9.85	7.7	9	9	10.65	5.65	12.95	3.15	0.55	4.9	1.05	F 12

DN	E2	F2	ANSI ISA 75.08.2
25	4	3.05	
40	4.5	3.45	
50	4.9	3.6	
80	6.5	4.9	
100	7.65	5.65	
150	9	6.05	
200	9.55	6	
250	11.75	6.8	

Dimensions for 12" on request.

Dimension in inch

Dimensions KS1 with standard actuator sealing of the bearing shaft with O-rings



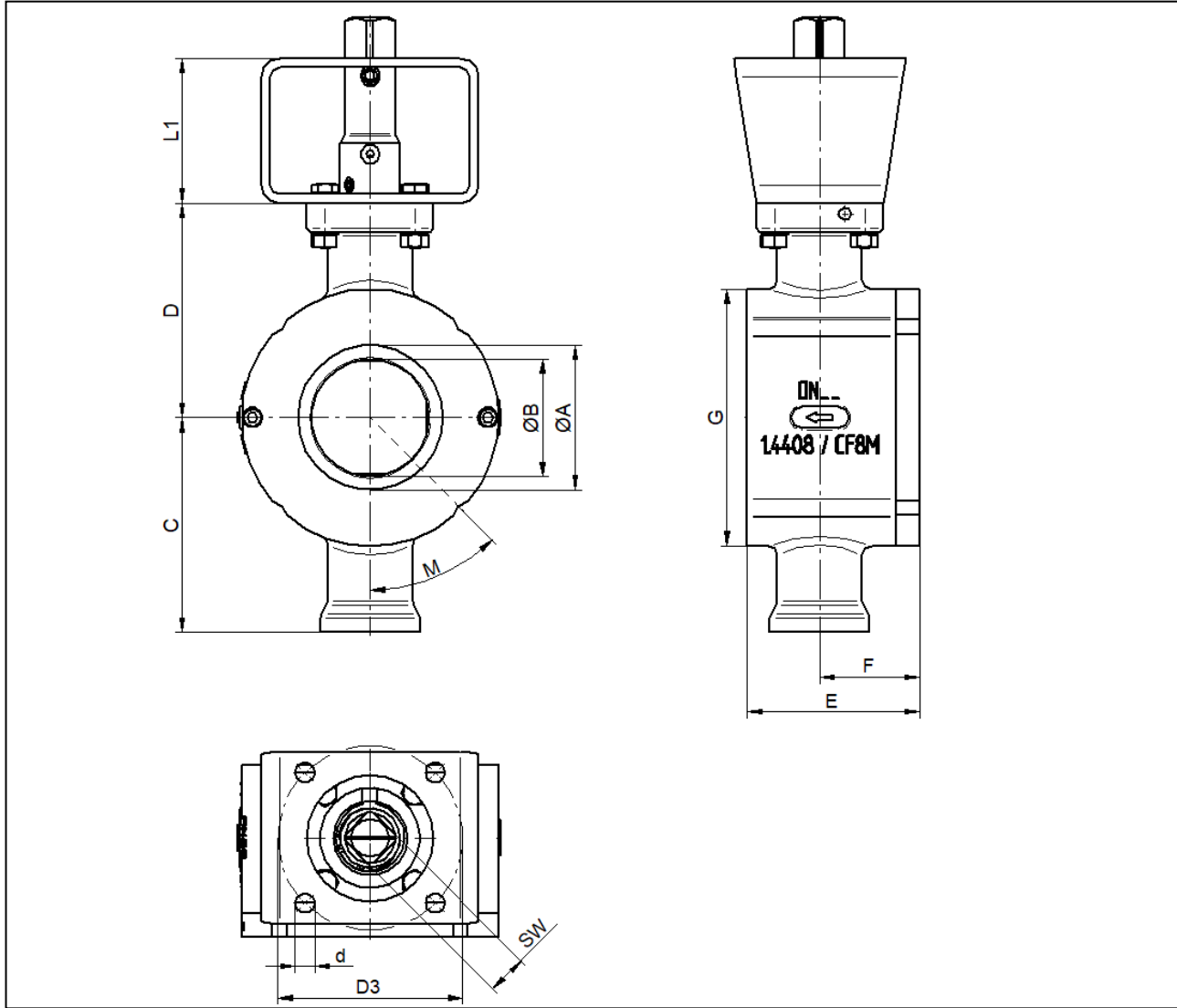
Size	A	B	C	D	E	F	L1	L2	L3	H1
1"	0.98	0.79	2.87	2.91	1.97	1.02	2.36	6.65	5.12	11.93
1 1/2"	1.61	1.26	3.11	3.15	2.28	1.22	2.36	7.72	5.12	13.23
2"	2.09	1.57	3.23	3.27	2.8	1.5	2.36	7.72	5.12	13.35
3"	3.15	2.56	4.17	4.21	3.74	2.17	2.36	7.72	5.12	14.29
4"	3.94	3.15	4.61	4.65	4.41	2.44	3.15	10	5.04	17.01
6"	5.91	4.72	6.1	6.14	6.69	3.74	3.15	10	5.04	19.29
8"	7.87	6.1	7.24	7.28	8.27	4.72	3.15	10	5.04	20.43

Size	PN	G	PN			G	ANSI 150			G	ANSI 300		
			P	M	Amount		P	M	Amount		P	M	Amount
1"	PN40	2.87	0	0	0	2.87	2.66	1.77	4	2.87	0	0	0
1 1/2"	PN40	3.7	0	0	0	3.7	3.35	1.77	4	3.7	0	0	0
2"	PN40	4.41	4.29	1.77	4	4.41	4.17	1.77	4	4.41	0	0	0
3"	PN25	5.59	0	0	0	5.59	5.35	1.77	4	5.91	0	0	0
4"	PN25	6.85	6.46	0.89	8	6.85	0	0	0	7.17	0	0	0
6"	PN16	8.66	0	0	0	8.66	0	0	0	---	---	---	---
8"	PN16	10.85	0	0	0	10.85	0	0	0	---	---	---	---

Dimensions in inch

Dimensions KS2 without actuator (with mounting kit ISO 5211)

Sealing of the bearing shaft with PTFE-packing

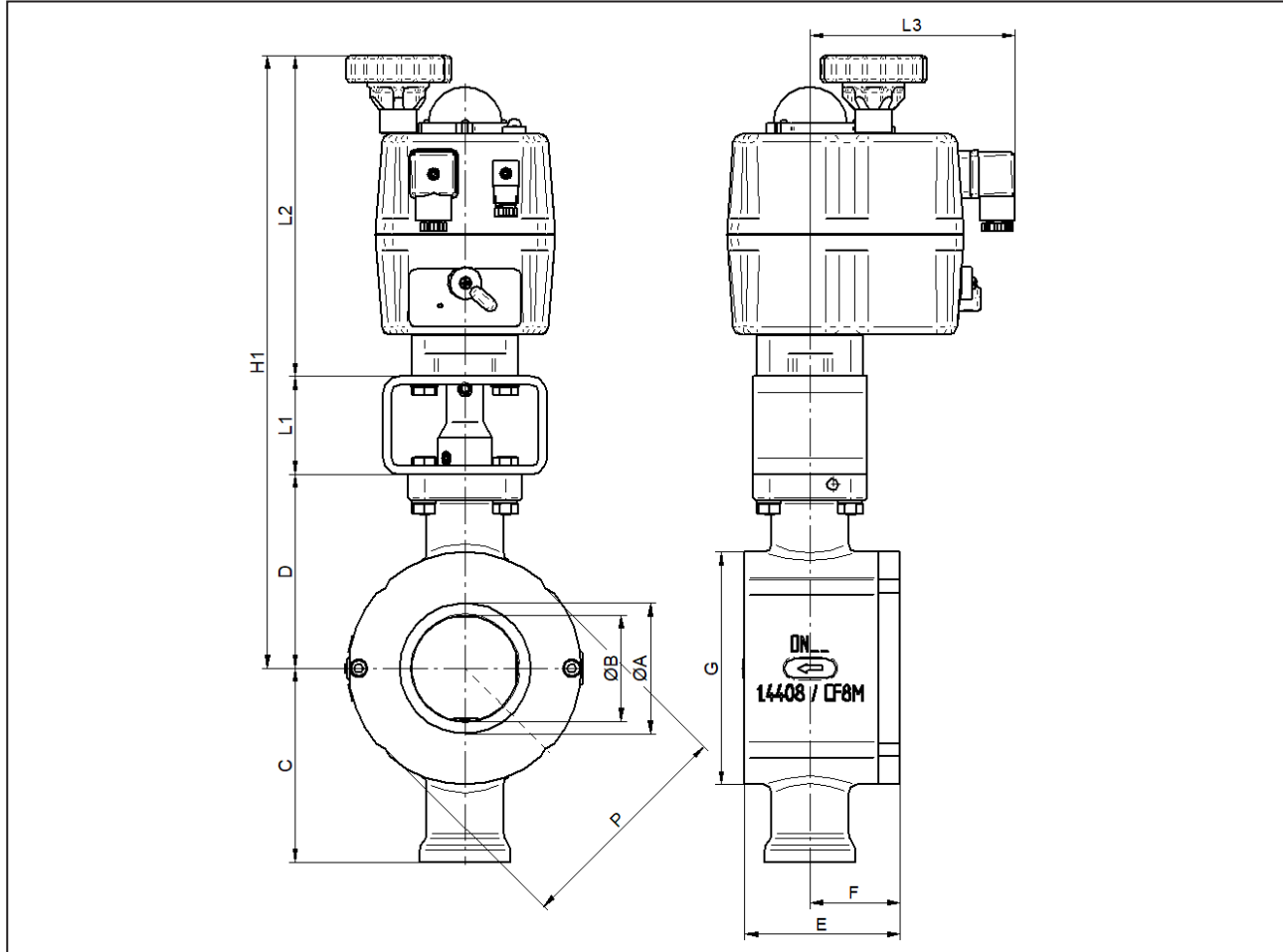


DN	A	B	C	D	E	F	G	L1	series 1				DIN ISO 5211	series 2				weight [lbs]
									SW	d	D3	L1		SW	d	D3	DIN ISO 5211	
1"	0.98	0.79	3.35	3.35	1.97	1.02	2.95	2.36	0.43	0.22	1.65	F 04	2.36	0.55	0.26	1.97	F 05	4.9
1 1/2"	1.61	1.26	3.62	3.62	2.28	1.22	3.78	2.36	0.55	0.26	1.97	F 05	2.36	0.67	0.35	2.76	F 07	6.6
2"	2.09	1.57	3.74	3.74	2.8	1.5	4.41	2.36	0.55	0.26	1.97	F 05	2.36	0.67	0.35	2.76	F 07	8.4
2 1/2"	2.56	1.97	4.55	4.55	3.35	1.93	5.08	2.36	0.67	0.35	2.76	F 07	3.15	0.87	0.43	4.02	F 10	14.1
3"	3.15	2.56	4.67	4.67	3.74	2.17	5.59	2.36	0.67	0.35	2.76	F 07	3.15	0.87	0.43	4.02	F 10	15.9
4"	3.94	3.15	5.1	5.1	4.41	2.44	6.85	2.36	0.67	0.35	2.76	F 07	3.15	0.87	0.43	4.02	F 10	24.3
5"	3.94	4.92	6.99	6.99	5.83	3.35	7.87	3.15	0.87	0.43	4.02	F 10	3.15	1.06	0.53	4.92	F 12	44.1
6"	5.91	4.72	7.36	7.36	6.69	3.74	8.66	3.15	0.87	0.43	4.02	F 10	3.15	1.06	0.53	4.92	F 12	50.7
8"	7.87	6.1	8.5	8.5	8.27	4.72	10.85	3.15	1.06	0.53	4.92	F 12	3.15	1.42	0.67	5.51	F 14	88.2
10"	9.84	7.68	9.53	9.53	10.63	5.71	13.31	3.15	1.06	0.53	4.92	F 12	3.15	1.42	0.67	5.51	F 14	145.5

Dimensions in inch

Dimensions KS2 with standard actuator

Sealing of the bearing shaft with PTFE-packing



Size	A	B	C	D	E	F	L1	L2	L3	H	Weight [lbs]
1"	0.98	0.79	3.35	3.35	1.97	1.02	2.36	6.65	5.12	12.36	11
1 1/2"	1.61	1.26	3.62	3.62	2.28	1.22	2.36	7.72	5.12	13.7	14
2"	2.09	1.57	3.74	3.74	2.8	1.5	2.36	7.72	5.12	13.82	15
2 1/2"	2.56	1.97	4.55	4.55	3.35	1.93	2.36	7.72	5.12	14.65	24
3"	3.15	2.56	4.67	4.67	3.74	2.17	2.36	7.72	5.12	14.76	37
4"	3.94	3.15	5.1	5.1	4.41	2.44	3.15	10	5.04	18.27	40
5"	3.94	4.92	6.99	6.99	5.83	3.35	3.15	10	5.04	20.16	60
6"	5.91	4.72	7.36	7.36	6.69	3.74	3.15	10	5.04	20.51	66
8"	7.87	6.1	8.5	8.5	8.27	4.72	3.15	10	5.04	21.65	106

Size	PN					ANSI 150				ANSI 300			
	PN	G	P	M	Amount	G	P	M	Amount	G	P	M	Amount
1"	PN40	2.95	2.87	1.77	4	2.95	2.66	1.77	4	3.11	2.87	1.77	4
1 1/2"	PN40	3.78	3.7	1.77	4	3.78	3.43	1.77	4	3.9	3.7	1.77	4
2"	PN40	4.41	4.17	1.77	4	4.41	4.17	1.77	4	4.41	0	0	0
2 1/2"	PN25	5.08	0	0	0	5.08	4.92	1.77	4	5.08	0	0	0
3"	PN25	5.59	0	0	0	5.59	5.43	1.77	4	5.91	0	0	0
4"	PN25	6.85	6.46	0.89	8	6.93	0	0	0	7.17	0	0	0
5"	PN16	7.87	7.64	0.89	8	7.87	7.64	1.77	8	---	---	---	---
6"	PN16	8.66	0	0	0	8.66	0	0	0	---	---	---	---
8"	PN16	10.85	0	0	0	10.85	0	0	0	---	---	---	---

Text and pictures are not binding. We reserve the right to alter the equipment.