

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 wafer type
		12" flange connection
Nominal sizes		1" up to 12"
Body material	cast parts	CF8M (1.4408)
	turned parts	316 L (1.4404)
Material of the bearing shaft		1.4122
Bearing material		high temperature plain bearing
Connection to the actuator		mounting kit DIN/ISO 5211
Nominal pressure	1" - 2"	ANSI300, ANSI150, 580 psi (for flanges 145 psi - 580 psi)
	3" - 4"	ANSI150, 365 psi (for flanges 145 psi - 365 psi)
	6" - 12"	ANSI150, 235 psi (for flanges 145 psi - 235 psi)
Fluid Temperature		-40°F up to +428°F depending on the sealings
Ambient temperature		-40°F up to +176°F depending on the sealings
		special version on request
Characteristic		almost equal percentage
Rangeability		300:1

Working pressure max.

Nominal size	maximum differential pressure (delta p)									
	seat ring PTFE			seat ring PEEK				seat ring Stellite		
	up to 176°F	248°F	338°F	up to 176°F	248°F	338°F	428°F	up to 176°F	338°F	428°F
	psi	psi	psi	psi	psi	psi	psi	psi	psi	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, pilot pressure 5 - 6 bar
(for less than 5 bar pilot pressure, please inform us)

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

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"	74.9	47.2	29.3		
2"	110	70.6			
2 1/2"	179,2				
3"	298				
4"	456				
5"	874				
6"	948				
8"	1597				
10"	2597				
0	4493				

Leakage

Seat ring	Ball sector	Leakage	
		Amount of the max. Cvs-value	class acc. IEC 60534-4 (ANSI/FCI 70-2)
PTFE/PEEK	stainless steel polished or hard chrome plated or lapped	5x10 ⁻⁷	IV-S1
PTFE/PEEK	stainless steel, hard chrome plated and lapped		VI
Stellite	stainless steel, hard chrome plated and lapped	5x10 ⁻⁶	IV-S1

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

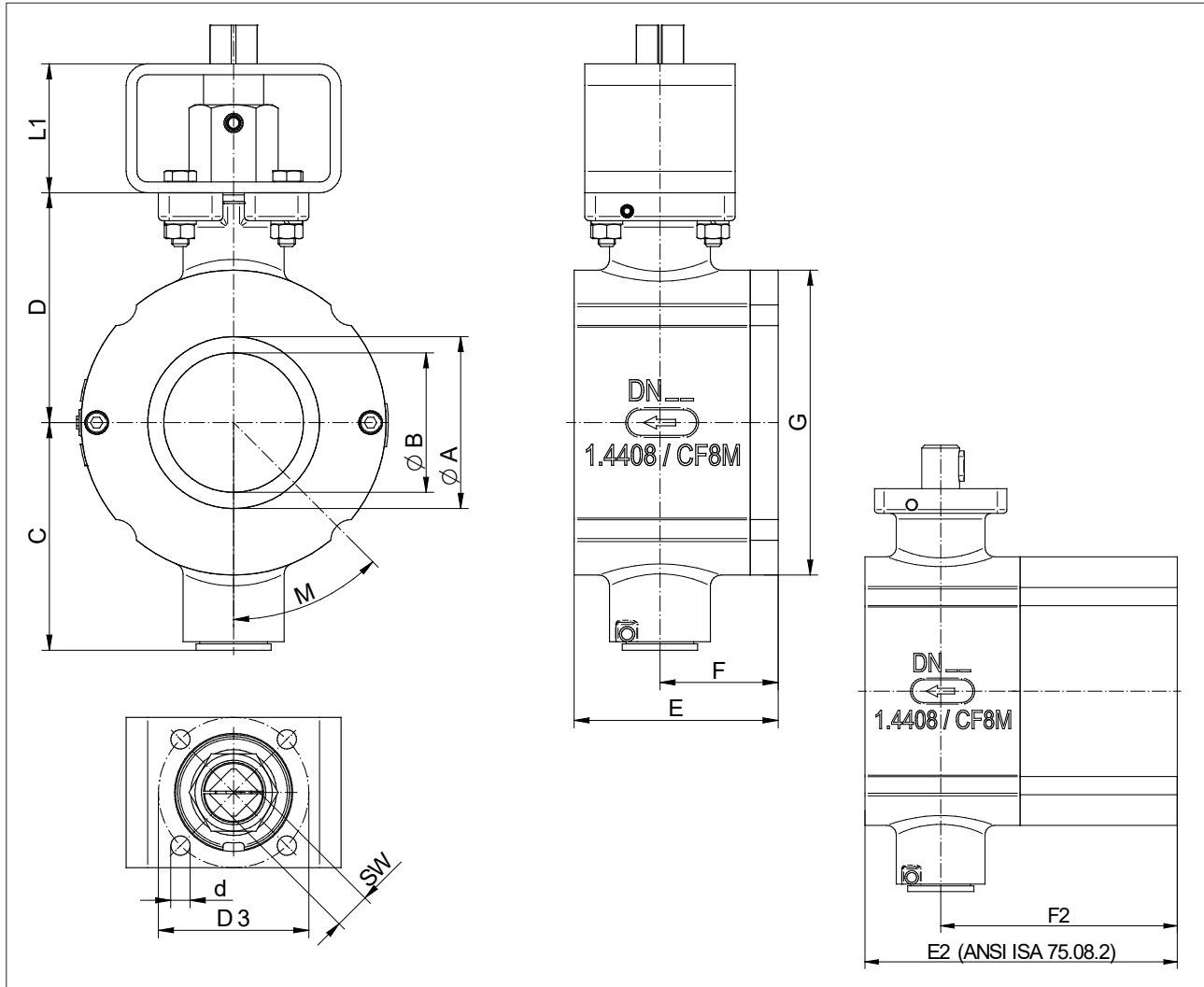
for retrofitting actuators

Size	rotation angle nominal	max. press. Nomial		req. torque [lbf ft]		mounting kit DIN/ISO	
		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

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Dimensions without actuator (with mountig kit ISO 5211)



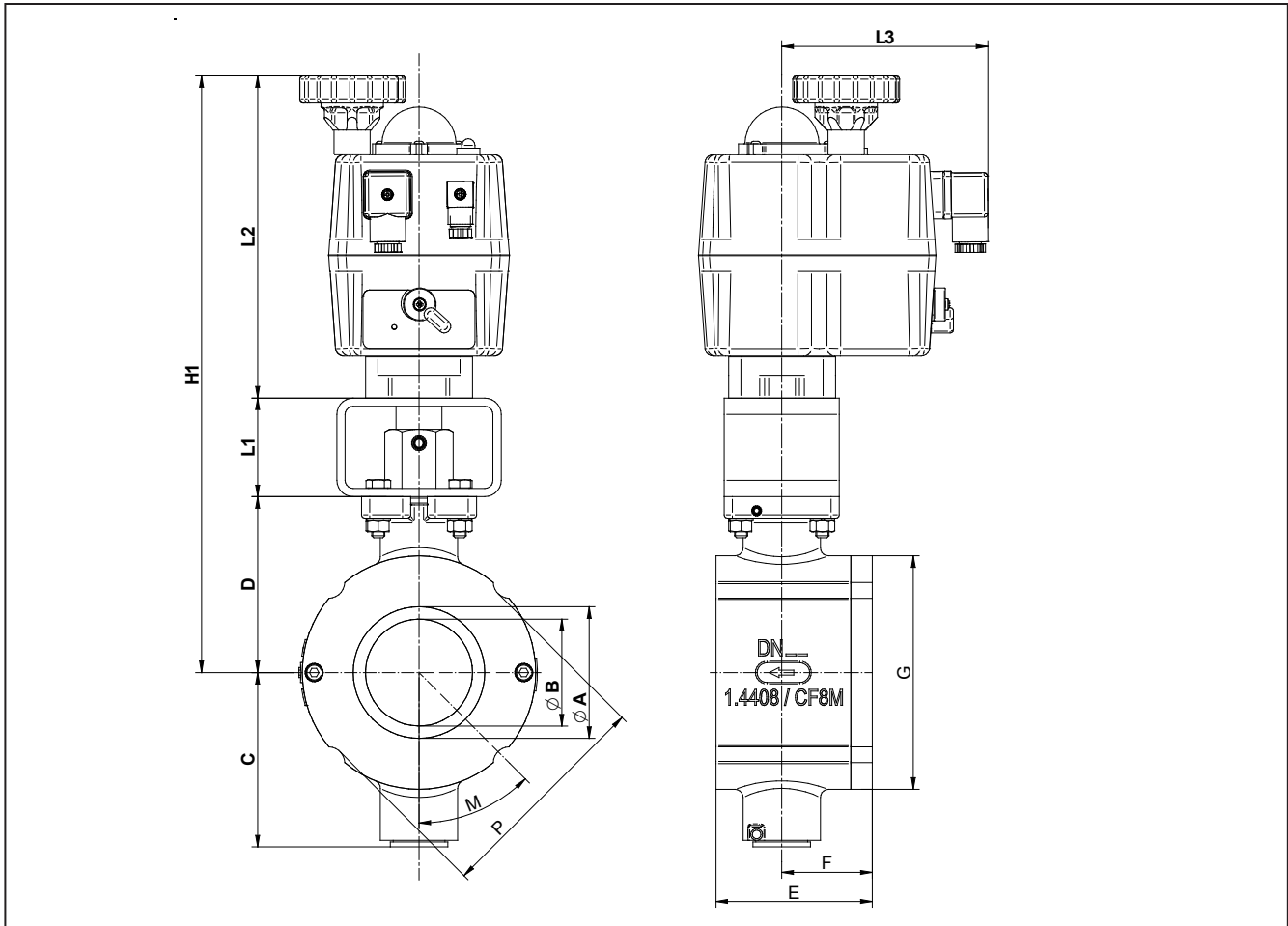
Size	A	B	C	D	E	F	G	L1	d	D3	SW	DIN/ISO 5211	weight (lbs)
1"	0.98	0.79 (0.59)	2.87	2.91	1.97	1.02	2.87	2.36	0.26	1.97	0.55	F 05	5.3
1 1/2"	1.61	1.26 (0.98)	3.11	3.15	2.28	1.22	3.7	2.36	0.26	1.97	0.55	F 05	7.3
2"	2.09	1.57	3.23	3.27	2.8	1.5	4.41	2.36	0.26	1.97	0.55	F 05	9.5
3"	3.15	2.56	4.17	4.21	3.74	2.17	5.59	2.36	0.35	2.76	0.67	F 07	17.7
4"	3.94	3.15	4.61	4.65	4.41	2.44	6.85	2.36	0.35	2.76	0.67	F 07	25.4
6"	5.91	4.72	6.1	6.14	6.69	3.74	8.66	3.15	0.43	4.02	0.87	F 10	51.6
8"	7.87	6.1	7.24	7.28	8.27	4.72	11.02	3.15	0.53	4.92	1.06	F 12	93.7
10"	9.84	7.68	8.98	9.02	10.63	5.71	12.95	3.15	0.53	4.92	1.06	F 12	145.8

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 ball sector with O-rings



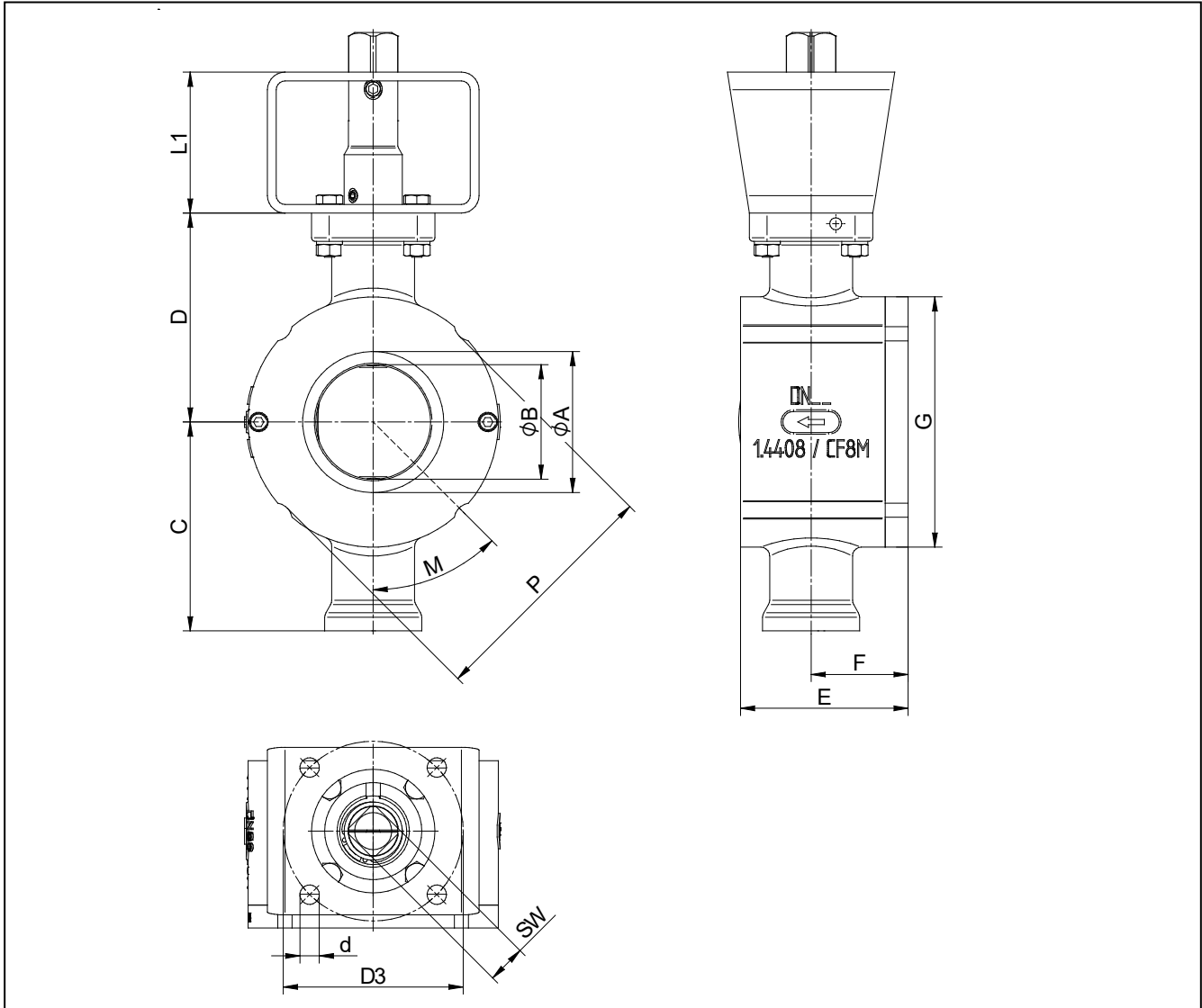
Size	A	B	C	D	E	F	L1	L2	L3	H1
1"	0.98	0.79	2.87	2.91	1.97	1.02	2.36	6.65	5.12	11.93
1 1/2"	1.61	1.26	3.11	3.15	2.28	1.22	2.36	7.72	5.12	13.23
2"	2.09	1.57	3.23	3.27	2.8	1.5	2.36	7.72	5.12	13.35
3"	3.15	2.56	4.17	4.21	3.74	2.17	2.36	7.72	5.12	14.29
4"	3.94	3.15	4.61	4.65	4.41	2.44	3.15	10	5.04	17.01
6"	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					ANSI 150				ANSI 300			
	PN	G	P	M	Amount	G	P	M	Amount	G	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	11.02	0	0	0	11.02	0	0	0	---	---	---	---

Dimensions in inch

Dimensions KS2 without actuator (with mounting kit ISO 5211)

Sealing of the bearing shaft with PTFE-packing

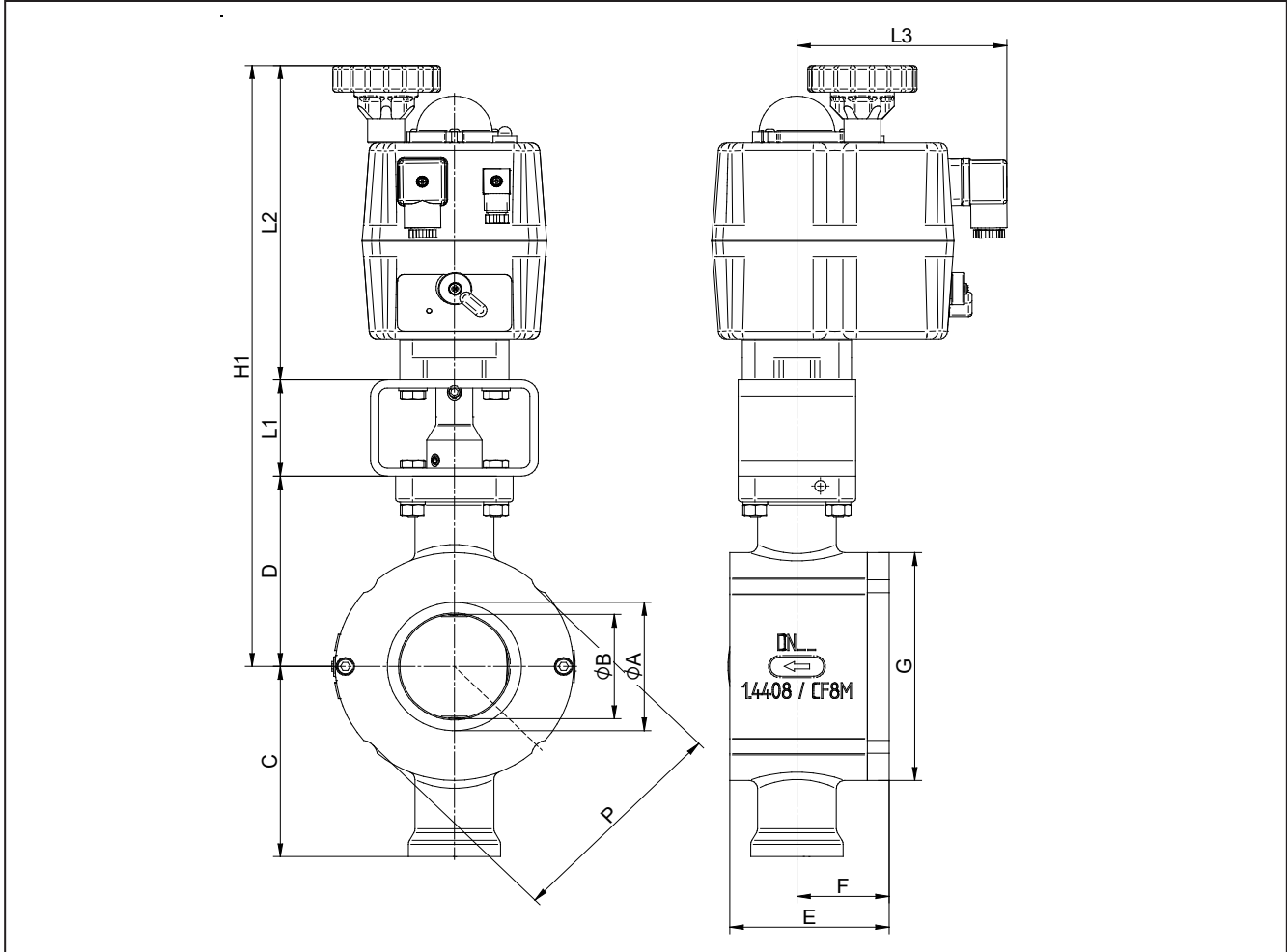


DN	A	B	C	D	E	F	G	L1	series 1				DIN ISO 5211	series 2				weight [lbs]
									SW	d	D3	L1		SW	d	D3	DIN ISO 5211	
1"	0.98	0.79	3.35	3.35	1.97	1.02	2.95	2.36	0.43	0.22	1.65	F 04	2.36	0.55	0.26	1.97	F 05	4.9
1 1/2"	1.61	1.26	3.62	3.62	2.28	1.22	3.78	2.36	0.55	0.26	1.97	F 05	2.36	0.67	0.35	2.76	F 07	6.6
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	11.02	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	11.02	0	0	0	11.02	0	0	0	---	---	---	---

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

Dimensions in inch