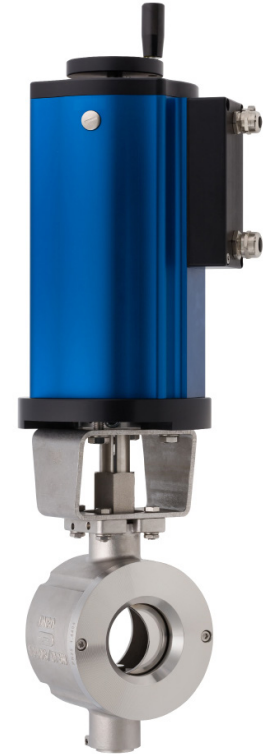


Ball Sector Valve 4032

with high-precision control-actuator

Electrically operated control valve with a high-precision control - actuator for Ball Sector Valves.

- High-precision actuator with high-efficient gear box
- Developed to use as a basis weight valve
- Input signal with step signal or analogue 4-20mA (standard)
- Feedback with analogue signal 4-20 mA
- Emergency manual operation
- Uneffected by contaminated media
- Seat ring facile convertible
- Low-maintenance



Technical Information Valve

Body design	flangeless wafer type	
Nominal sizes	1" up to 10"	
Body material	cast parts	CF8M (1.4408)
	turned parts	316 L (1.4404)
Bearing material	high temperature plain bearing	
Cutting site to the actuator	mounting kit DIN/ISO 5211	
Nominal pressure	1" - 2"	ANSI150, ANSI3000, 580 psi (for flanges 145 psi - 580 psi)
	3" - 4"	ANSI150, ANSI300, 365 psi (for flanges 145 psi - 365 psi)
	6" - 10"	ANSI150, 235 psi (for flanges 145 psi - 235 psi)
Fluid Temperature	-76°F up to +428°F depending on the sealings	
Ambient temperature	-40°F up to +176°F depending on the acuator	
	special version on request	
Vacuum	up to 1,48 mercury (Hg)	
Characteristic	almost equal percentage	
Rangeability	300:1	
Classification DIN EN ISO15848-1	ISO FE-BH-CC3-SSA0-t(-40°C/+220°C)-PN40-ISO 15848-1	

Technical Information Actuator

	S1500	S2000	S4000	Activation
Control	analogue	analogue	analogue	analog
Set point signal	4 - 20 mA / 3-point (40 ms)			4 - 20 mA
Burden				470 Ohm
Supply energy, electrical	24 VDC [±10%]			100...230 VAC [±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 transmitter
Control	Inside of the actuator			In a control cabinet
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
Stroking time	30s (4 s up to 15 min adjustable)			ca. 2 s up to 5 min.
Feed back	4 - 20 mA			4 - 20 mA (max. 10 bit), load resistor: 1kΩ max.
Ambient temperature limit, actuator	-40°F up to +176°F			14°F up to +140°F
Ambient temperature limit, control cabinet	-			32°F up to +104°F
Protection class acc. DIN 40050	IP 67			IP 65

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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
2 1/2" - 4"	230	175	75	365	365	230	145	365	365	230
5" - 10"	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		PFA-Silicon	
	Tmin [°F]	Tmax [°F]	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	-49	338
PEEK	5	392	-40	284	-22	212	5	428	-49	428
Stellite	5	392	-40	284	-22	212	5	428	-49	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		VI
PTFE or PEEK	stainless steel hard chrome plated	5x10-7	IV-S1
Stellite	stainless steel, hard chrome plated + lapped	5x10-6	IV-S1

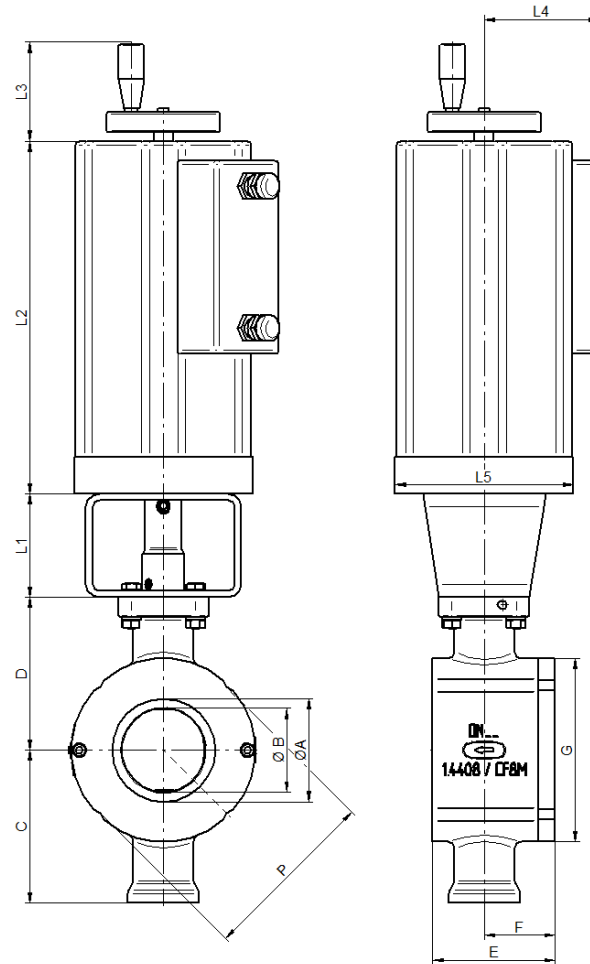
Kvs-Values

Size	Cvs-value reduced to					
	100%	63%	40%	25%	16%	6,3%
1"	29	14.7	9.2	6.2	4.2	1.7
1 1/2"	80.9	46.6	29			
2"	126	75.4	47.6			
2 1/2"	220.4					
3"	347					
4"	451					
5"	874					
6"	936					
8"	1578					
10"	2567					

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Dimensions KS2 with actuator S1500 and S2000



Size	A	B	C	D	E	F	L1	L2	L3	L4	L5
1"	0.98	0.79	3.35	3.35	1.97	1.02	2.36	8.35	2.95	3.54	5.43
1 1/2"	1.61	1.26	3.62	3.62	2.28	1.22	2.36	8.35	2.95	3.54	5.43
2"	2.09	1.57	3.74	3.74	2.8	1.5	2.36	8.35	2.95	3.54	5.43
2 1/2"	2.56	1.97	4.55	4.55	3.35	1.93	3.15	10.75	2.95	3.66	5.43
3"	3.15	2.56	4.67	4.67	3.74	2.17	3.15	10.75	2.95	3.66	5.43
4"	3.94	3.15	5.1	5.1	4.41	2.44	3.15	10.75	2.95	3.66	5.43
5"	3.94	4.92	6.99	6.99	5.83	3.35	3.15	12.09	2.95	3.66	6.89
6"	5.91	4.72	7.36	7.36	6.69	3.74	3.15	12.09	2.95	3.66	6.89
8"	7.87	6.1	8.5	8.5	8.27	4.72	3.15	13.03	2.95	3.66	6.89

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	---	---	---	---

Dimensions in inch