

Angle Seat Motor Valve compact 7210

DN 8 up to DN 80

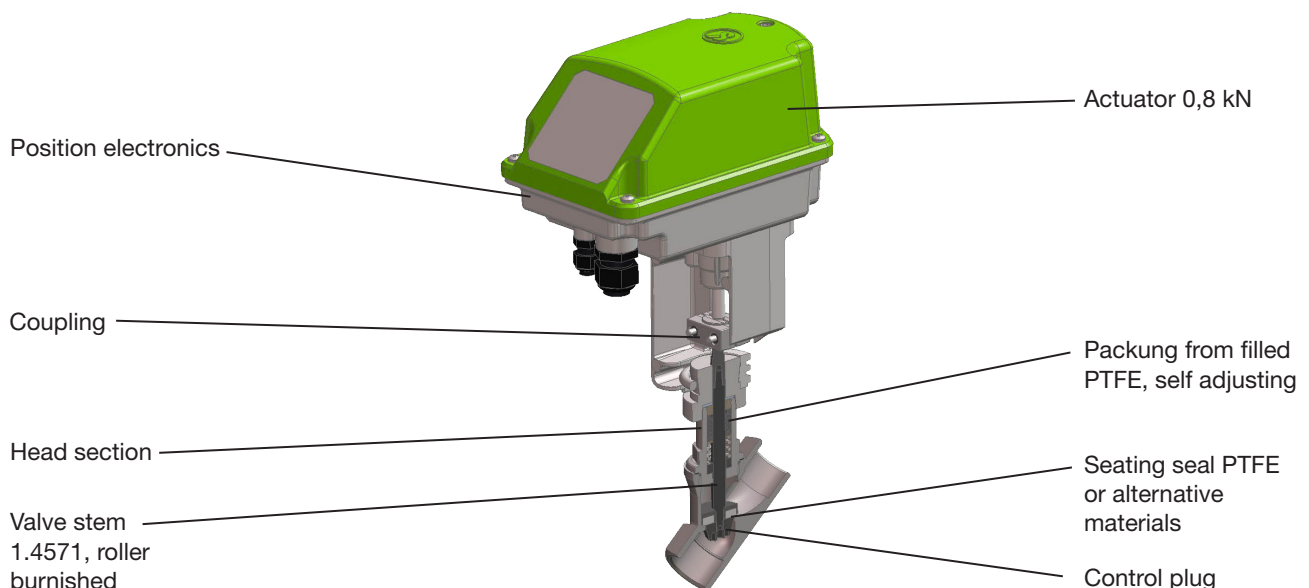


Motor valve for on/off- and modulating operation for neutral and aggressive media.

- Compact design
- Self calibration
- Unaffected by lightly contaminated media
- For operating temperatures from -50 °C up to +220 °C
- Working pressure up to 40 bar
- Versatile actuator options
- Actuators with control function also available with safety position

Technical Information Valve

Body material	Stainless steel 1.4408	Bronze CC491K
Nominal size	DN 8 up to DN 80 1/4" up to 3"	DN 15 up to DN 50 1/2" up to 2"
Connections:		
Pipe threads acc. ISO 228-1	DN 8 - 80 / 1/4"-3"	DN 15 - 50 / 1/2"-2"
NPT thread	DN 8 - 80 / 1/4"-3"	DN 15 - 50 / 1/2"-2"
Welding ends	DN15 - 80 / 1/2"-3"	-
Clamp connections	DN15 - 80 / 1/2"-3"	-
Nominal pressure	PN 40	PN 16
Max. fluid temperature	-30 °C up to 200 °C, opt -50 °C up to +220 °C	
Viscosity	max. 600 mm ² /s (600 cSt)	
Vacuum	max. 0,001 bar,abs. / 0,015 psia	
Operating pressure packing underneath	max. 12 bar / 174 psi	
Working pressure for Tri-Clamp connection	max. 16 bar / 235 psi	
Packing leakage	tested according to TA-Luft as defined in DIN EN ISO 15848-1 and VDI 2440	



DN 8 up to DN 80

Technical Information CA-Actuator

Function	Control				On/Off	
Motor type	CA24C	CA260C	CA24C-R	CA260C-R	CA24	CA260
Mains connection	24 V AC/DC	100-240 V AC	24 V AC/DC	100-240 V AC	24 V AC/DC	100-240 V AC
Set point range	(0)2-10 V / (0)4-20 mA				3-point**	
Mains frequency	50/60 Hz				50/60 Hz	
Feedback	(0)2-10 V / (0)4-20 mA				optional	
Dead band	±0.6 % of the entire stroke				-	
Repeatability	±0.3 % of the entire stroke				-	
Limit switch	2				optional	
Potentiometer feedback	-				optional	
Max. switching capacity	24 V AC/DC 200 mA				250 V AC/DC 1 A	
Actuating speed	1.5 / 2 / 3 s/mm (Standard: 2 s/mm)				2 or 3 s/mm (Standard: 3 s/mm)	
Safety functions	Monitoring of tensile force, set point, temperature of the electronics, etc.				Tensile force monitoring	
Diagnostic functions	Storage of motor and total operating time, temperature and directional classes, etc.				-	
Fail Safe position	- - freely adjustable				-	
Load	500 Ω for current set point / 95 kΩ for voltage set point				-	
Max. power consumption	13 W	12 W	13 W	12 W	13 W	12 W
Input heating resistor	10 W					
Starting current	6 A	2,5 A	6 A	2,5 A	6 A	2,5 A
Actuating power	800 N					
Protection class (EN 60529)	IP 65***					
Adm. Ambient temperature	-10 °C to +60 °C					
Duty cycle	Storage of motor and total operating time, temperature and directional classes, etc.					

*: for control with volt-signal split range adjustments are possible

**.: Minimum on-time 200 ms

***: Dustproof, protection against water jets from any angle

Wiring diagrams of the actuators can be found in the manual.

Kvs-Values (Stroke)

Characteristic	linear										equal percentage									
DN	8	15	20	25	32	40	50	65	80	8	15	20	25	32	40	50	65	80	8	15
100 %	0,6 (9,0)	3,8 (9,2)	8,8 (15,2)	14 (18,2)	20 (21,2)	27 (21,2)	39 (21,2)	42 (20)	54 (20)	0,6 (9)	3 (9,2)	6 (11,2)	10 (18,2)	16 (21,2)	25 (21,2)	31 (21,2)	33 (20)	43 (20,7)	0,6 (9)	3 (9,2)
63%	-	-	-	-	-	-	24 (21,2)	26 (21,2)	-	-	-	-	-	-	-	17 (21,2)	19 (20)	-	-	-
40 %	0,24 (9,0)	1,5 (9,2)	3,5 (7,2)	5,8 (10,2)	8 (11,2)	11 (11,2)	-	-	-	-	1,2 (9,2)	2,4 (7,2)	4 (11,2)	6 (13,2)	10 (14,2)	-	-	-	-	-
25 %	0,15 (9,0)	0,93* (9,2)	2,2 (7,2)	3,6 (10,2)	-	-	-	-	-	-	0,8* (9,2)	1,5 (7,2)	2,6 (11,2)	-	-	-	-	-	-	-
15%	-	-	-	-	-	-	-	-	-	-	0,46* (9,2)	-	-	-	-	-	-	-	-	-
10%	-	0,4* (9,2)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
7,5%	-	-	-	-	-	-	-	-	-	-	0,23* (9,2)	-	-	-	-	-	-	-	-	-
On-Off	-	3,8 (9,2)	9 (15,2)	17 (18,2)	28 (21,2)	35 (21,2)	51 (21,2)	62 (20)	74 (20)	-	-	-	-	-	-	-	-	-	-	-

* Kvs-values not possible with bronze housing.

DN 8 up to DN 80

Admissible Differential Pressures

For seating seal made of PTFE or other soft gaskets

Nominal size	p max [bar]									
	DN8		DN15		DN20		DN25		DN32	
	On/off	Control	On/off	Control	On/off	Control	On/off	Control	On/off	Control
Stainless steel body	-	17	40	17	20	17	12	12	7	7
Bronze body	-	-	16	16	16	16	12	12	7	7
Body stainless steel pressure balanced	-	-	-	-	-	-	-	-	40	17

Nominal size	p max [bar]							
	DN40		DN50		DN65		DN80	
	On/off	Control	On/off	Control	On/off	Control	On/off	Control
Stainless steel body	4,8	4,8	2,8	2,8	-	-	-	-
Bronze body	4,8	4,8	2,8	2,8	-	-	-	-
Body stainless steel pressure balanced	25	17	25	17	17	17	14	14

For seating seal made of PEEK (T>160°C)

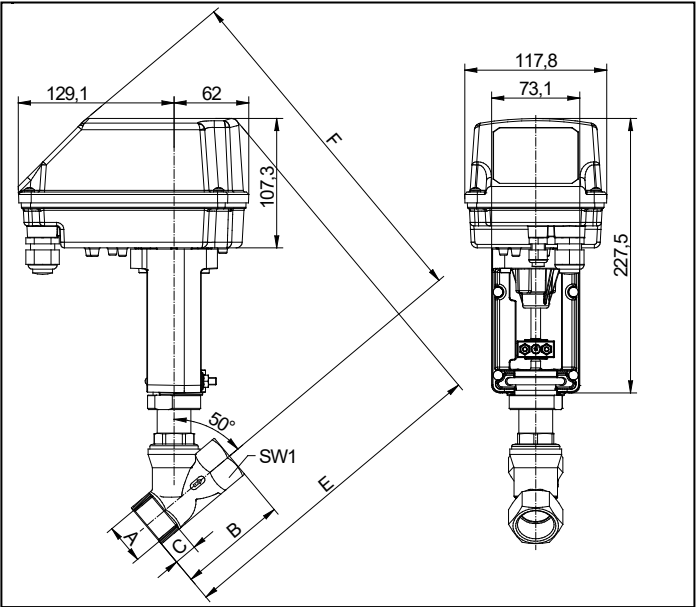
Nominal size	p max [bar]									
	DN8		DN15		DN20		DN25		DN32	
	On/off	Control	On/off	Control	On/off	Control	On/off	Control	On/off	Control
Stainless steel body	-	17	40	17	18,5	17	9,9	9,9	5,3	5,3
Bronze body	-	-	16	16	16	16	9,9	9,9	5,3	5,3
Body stainless steel pressure balanced	-	-	-	-	-	-	-	-	40	17

Nominal size	p max [bar]							
	DN40		DN50		DN65		DN80	
	On/off	Control	On/off	Control	On/off	Control	On/off	Control
Stainless steel body	3,1	3,1	1,5	1,5	0,3	0,3	-	-
Bronze body	3,1	3,1	1,5	1,5	0,2	0,2	-	-
Body stainless steel pressure balanced	40	17	40	17	25	17	-	-

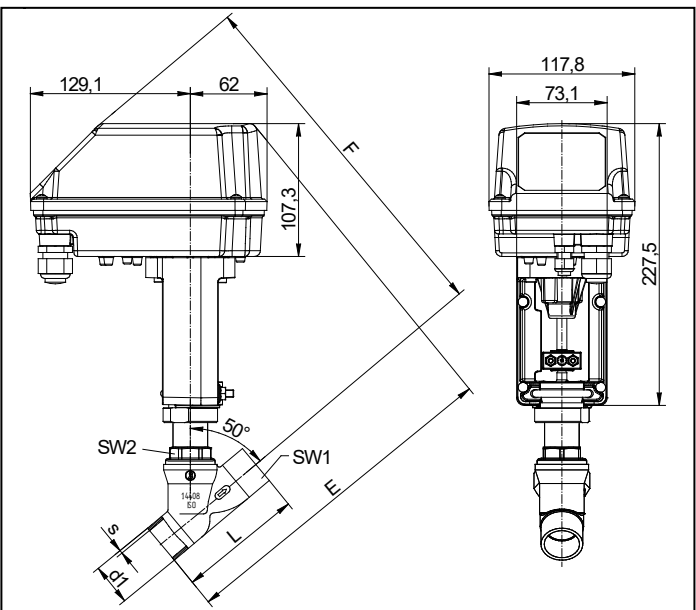
Article number

Dimensions and Weights for CA-actuators

Body with threaded ends
Rp/NPT



Body with welding ends
DIN/ISO



DN	A	C		ISO		DIN		B	L	E	F	E F pressure balanced		SW1	SW2	Stroke	Weight kg
	G / NPT	G	NPT	d1	s	d1	s	G / NPT	DIN/ISO								
08	1/4"	12	10,7	-	-	-	-	60	-	258	306	-	-	20	30	8,5	2,3
15	1/2"	15	14,5	21,3	2	18	1,5	65	80	263	310	-	-	25	30	9	2,4
20	3/4"	16,3	15	26,9	2,3	22	1,5	75	90	270	310	-	-	31	30	14	2,6
25	1"	19,1	18	33,7	2,6	28	1,5	90	100	275	314	294	337	39	30	18	2,8
32	1 1/4"	21,4	18,5	42,4	2,6	34	1,5	110	110	291	330	305	346	48	30	21	3,2
40	1 1/2"	21,4	18,5	48,3	2,6	40	1,5	120	120	295	334	312	354	55	30	22	3,5
50	2"	25,7	19	60,3	2,9	52	1,5	150	150	311	341	330	364	68	32	22	4,1
65	2 1/2"	30,2	25,5	76,1	2,9	70	2	214	180	-	-	353	358	100	41	22	6,1
80	3"	33,3	27,4	-	-	-	-	214	-	-	-	427	387	100	41	22	8,2

Other body designs on request

Dimensions in mm