

# Angle Seat Motor Valve compact 7210

## DN 8 up to DN 80

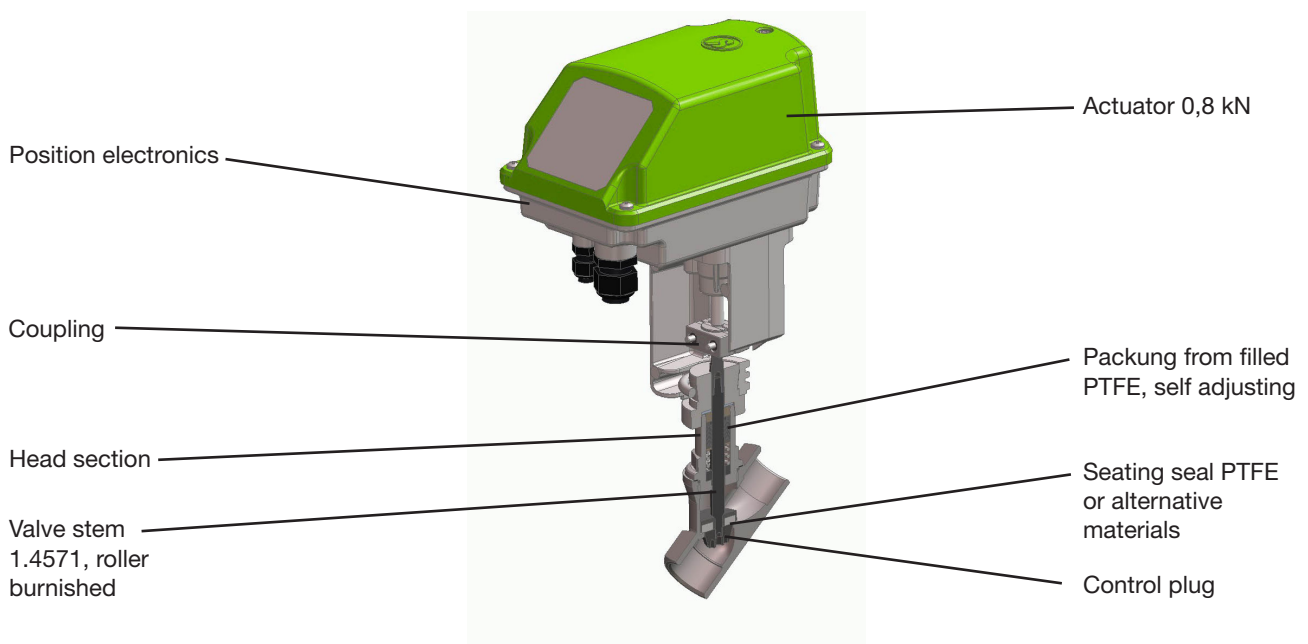
**Motor valve for on/off- and modulating operation for neutral and aggressive media.**

- 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	DN 15 - 50: Bronze CC491K DN 65 - 80: Brass CC754S	Stainless steel 1.4408
Nominal size	DN 15 up to DN 80 1/2" up to 2"	DN 8 up to DN 80 1/4" up to 3"
Connections:		
Pipe threads acc. ISO 228-1	DN 15 - 50 / 1/2"-3"	DN 8 - 80 / 1/4"-3"
NPT thread	DN 15 - 50 / 1/2"-3"	DN 8 - 80 / 1/4"-3"
Welding ends	-	DN15 - 80 / 1/2"-3"
Clamp connections		DN15 - 80 / 1/2"-3"
Nominal pressure	PN 16	PN 40
Max. fluid temperature	-30°C up to 200°C, opt -50°C up to +220°C	
Viscosity	max. 600 mm <sup>2</sup> /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	24V AC/DC	90-260V AC	24V AC/DC	90-260V AC	24V AC/DC	90-260V AC
Set point range	(0)2-10V / (0)4-20mA				3-term**	
Feedback	(0)2-10V / (0)4-20mA				optional	
Limit switch	2				optional	
Potentiometer feedback	-				optional	
Max. switching capacity	24V AC/DC 200 mA				250V AC/DC 1A	
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. input	13 W	12 W	13 W	12 W	13 W	12 W
Input heating resistor	10 W					
Starting current heating resistor	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	100%					

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

\*\*: minimum switch on time 200ms

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

### Admissible Differential Pressures

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

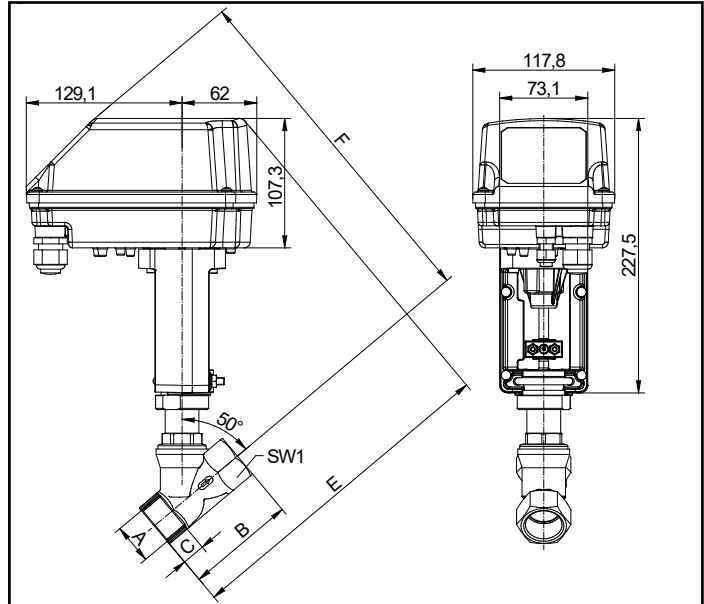
### Kvs-Values (Stroke)

Characteristic	linear										equal percentage									
	8	15	20	25	32	40	50	65	80	8	15	20	25	32	40	50	65	80		
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)		
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)	-	-	-	-	-	-	-	-			

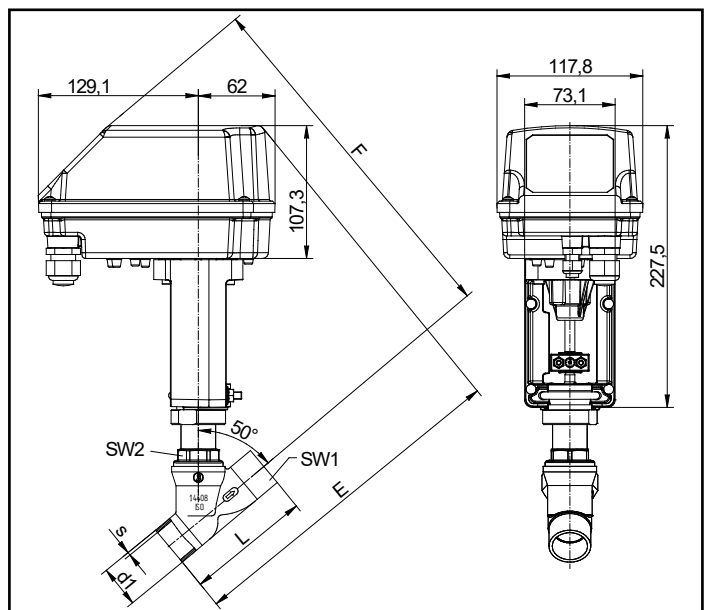


## Dimensions and Weights for CA-actuators

### Body with threaded ends Rp/NPT



### Body with welding ends DIN/ISO



DN	A		C		ISO		DIN		B	L	E	F	E	F	SW1	SW2	Stroke	Weight
	G / NPT	G	NPT	d1	s	d1	s	G / NPT										
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