

Angle Seat Motor Valve 7210

1/4" up to 2"



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 -22°F up to +392°F
- Working pressure up to 580 psi
- Versatile actuator options
- Actuators with control function also available with safety position

Technical Information Valve

Body material	DN15-50: Bronze	Stainless steel CF8M
	DN65-80: Brass	
Nominal size	1/2" up to 2"	1/4" up to 2"
Connections:		
Pipe threads acc. ISO 228-1	1/2" - 3"	1/4" - 3"
NPT thread	1/2" - 3"	1/4" - 3"
Welding ends	-	1/2" - 2 1/2"
Clamp connections		1/2" - 2"
Nominal pressure	230 psi	580 psi
Max. fluid temperature	-22°F up to 392°F	
Viscosity	max. 600 mm ² /s (600 cSt)	
Vacuum	max. 0.0295 mercury (Hg)	
Operating pressure packing underneath	max. 175 psi	



Position electronics
(self adapting)

Actuator 180 lbf

Coupling

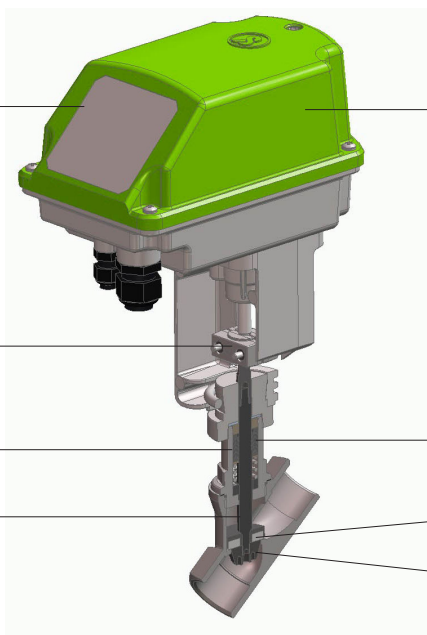
Head section

Valve stem
1.4571, roller
burnished

Packing from
filled PTFE, self
adjusting

Seating seal PTFE
or alternative
materials

Control plug



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	
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	24V AC/DC 200 mA				250V AC/DC 1A	
Actuating speed	38.1 / 50.8 / 76.2 s/inch (Standard: 70.8 s/inch)				50.8 or 76.2 s/inch (Standard: 76.2 s/inch)	
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	14°F to +140°F					
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.

	Inlet pressure psi									
Nominal size	1/4"		1/2"		3/4"		1"		1 1/4"	
	On/off	Control	On/off	Control	On/off	Control	On/off	Control	On/off	Control
Stainless steel body	-	230	580	230	290	230	175	175	100	100
Bronze body	-	-	230	-	230	-	175	-	100	-

	Inlet pressure psi							
Nominal size	1 1/2"		2"		2 1/2"		3"	
	On/off	Control	On/off	Control	On/off	Control	On/off	Control
Stainless steel body	70	70	40	40	-	-	-	-
Bronze body	70	-	40	-	-	-	-	-
Body stainless steel pressure balanced	365	230	365	230	230	230	205	205

[illegible]

Angle Seat Motor Valve 7210



Ordering Number System

		Article number									
		7210/			K						S
Nominal size:											
1/4" (DN 8) only with seating seal PEEK		008									
1/2" (DN 15)		015									
3/4" (DN 20)		020									
1" (DN 25)		025									
1 1/4" (DN 32)		032									
1 1/2" (DN 40)		040									
2" (DN 50)		050									
Item:											
Valve		V									
Valve without actuator		U									
Actuator		A									
Body design:											
Angle bodied				1							
Connection:											
Whitworth-thread					0						
NPT thread					5						
without thread					6						
Welding ends acc. ISO					H						
Tri-clamp					Z						
Body material:											
Bronze					1						
Stainless steel					2						
Seating seal:											
PTFE						0					
Viton						1					
EPDM						2					
BUNA-N						3					
PEEK						7					
Actuator:											
Control actuator CA24C, 24V AC/DC, with pos. electronic, stanard adjustm.: control sig. 4-20mA, feedback 4-20mA, 2 limit switch							C				
Control Actuator CA260C, 90-260V 50/60Hz, with pos. electronic, Standard adjustm. 4-20mA, feedb. 4-20mA, 2 limit switch							D				
On-Of (3-point) actuator CA24, 24V AC/DC							E				
On-Off (3-point) actuator CA260, 90-260V, 50/60Hz							F				
Control plug:											
none								-			
linear 100%								1			
equal percentage 100%								2			
linear 40%								3			
equal percentage 40%								4			
linear 25%								5			
equal percentage 25%								6			
Safety position:											
without safety position									-		
Fail-Safe: normally closed at power failure									2		
Fail-Safe: normaly open at power failure									3		
Stroking times											
Standard (51 s/inch for control actuators - 76 s/inch for on-off-actuators)									-		
76 s/inch									4		
38 s/inch									5		
51 s/inch (On/Off Actuator Type 2032)									9		

Ordering example:

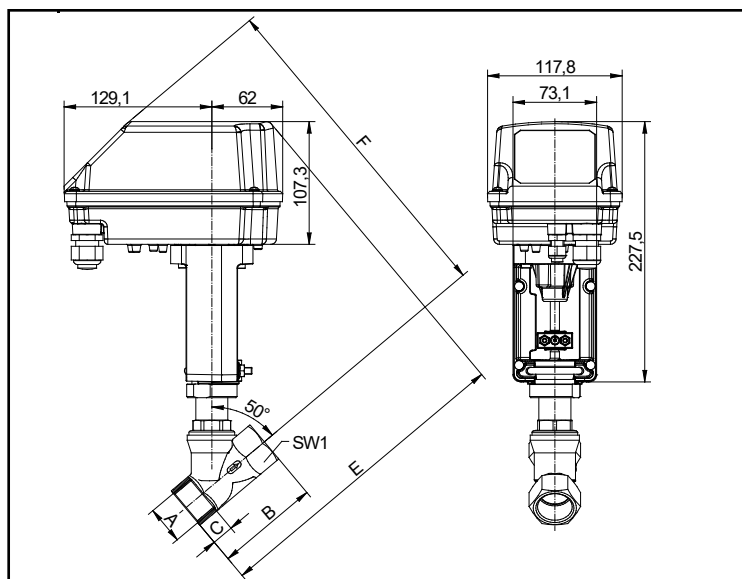
7210/025VK1520C1

Angle seat motor valve type 7210, 1", pipe thread NPT, stainless steel body, seating seal PTFE, control actuator CA24C, 24V AC/DC, 180 lbf, control electronics 4-20 mA, position feedback 2-10V, linear characteristic, Cv-value 16.2 (100 %).

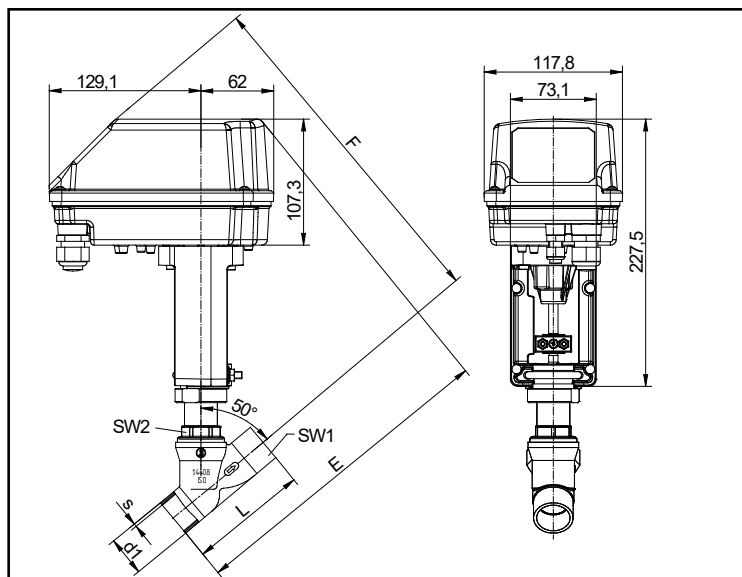
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Dimenstions and Weights CA-actuators

Body with threaded ends Rp/NPT



Body with welding ends DIN/ISO



Size	A	C		ISO		Size		B	L	E	F	E	F	SW1	SW2	Stroke	Weight lbs
	G / NPT	G	NPT	d1	s	d1	s	G / NPT	DIN/ISO			pressure balanced					
1/4"	1/4"	0.47	0.42	-	-	-	-	2.36	-	10.16	12.05	-	-	0.79	1.18	0.33	5
1/2"	1/2"	0.59	0.57	0.84	0.08	0.71	0.06	2.56	3.15	10.35	12.2	-	-	0.98	1.18	0,35	5.5
3/4"	3/4"	0.64	0.59	1.06	0.09	0.87	0.06	2.95	3.54	10.63	12.2	-	-	1.22	1.18	0,55	5.5
1"	1"	0.75	0.71	1.33	0.1	1.1	0.06	3.54	3.94	10.83	12.36	11.57	13.27	1.54	1.18	0,71	6
1 1/4"	1 1/4"	0.84	0.73	1.67	0.1	1.34	0.06	4.33	4.33	11.46	12.99	12.01	13.62	1.89	1.18	0,83	7
1 1/2"	1 1/2"	0.84	0.73	1.9	0.1	1.57	0.06	4.72	4.72	11.61	13.15	12.28	13.94	2.17	1.18	0,87	7.5
2"	2"	1.01	0.75	2.37	0.11	2.05	0.06	5.91	5.91	12.24	13.43	12.99	14.33	2.68	1.26	0,87	9
2 1/2"	2"	1.19	1	3	0.11	2.76	0.08	8.43	7.09	-	-	13.9	14.09	3.94	1.61	0,87	13.5
3"	2"	1.31	1.08	-	-	-	-	8.43	-	-	-	16.81	15.24	3.94	1.61	0,87	18

Other body designs on request

Dimensions in inch