

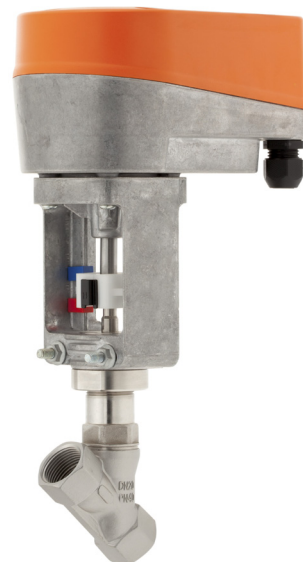
Angle Seat Motor Valve compact 7210

DN 8 up to DN 50



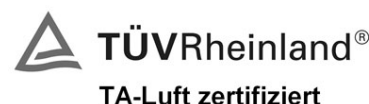
Motor valve for on/off- and modulating operation for neutral and aggressive media.

- Compact design
- Self calibration
- Unaffected by lightly contaminated media
- For operating temperatures from -30°C up to +200°C
- Working pressure up to 40 bar
- Versatile actuator options
- Actuators with control function also available with spring return



Technical Information Valve

Body material	Bronze CC491K	Stainless steel 1.4408
Nominal size	DN 15 up to DN 50 1/2" up to 2"	DN 8 up to DN 50 1/4" up to 2"
Connections:		
Pipe threads acc. ISO 228-1	DN 15 - 50 / 1/2"-2"	DN 8 - 50 / 1/4"-2"
NPT thread	DN 15 - 50 / 1/2"-2"	DN 8 - 50 / 1/4"-2"
Welding ends	-	DN15 - 50 / 1/2"-2"
Clamp connections		DN15 - 50 / 1/2"-2"
Nominal pressure	PN 16	PN 40
Max. fluid temperature	-30°C up to 200°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 psig	

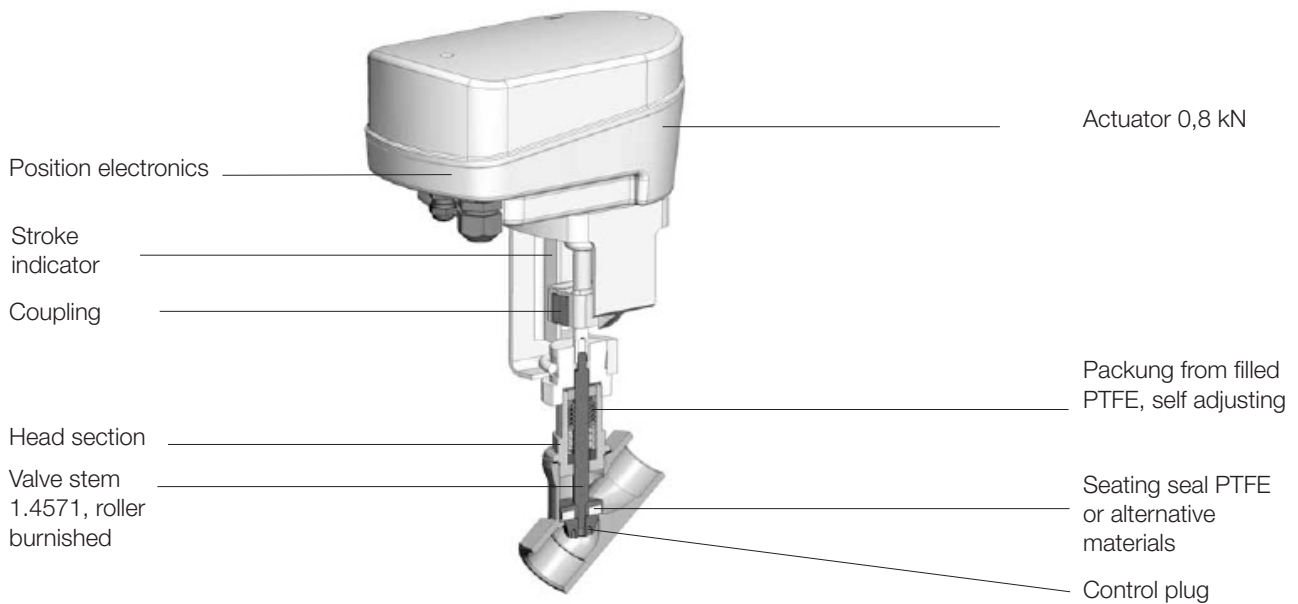


TÜVRheinland®
TA-Luft zertifiziert

Technical Information Motor Actuator

Type of motor	BM24C	BM24C/I	BM24C/IOS2	BM250C/IO2	BM24	BM115	BM230
Function	Control	Control	Control	Control	On/Off	On/Off	On/Off
Nominal voltage	24 V AC/DC	24 V AC/DC	20-30V AC 20-45V DC	85-250V AC 120-250V DC	24 V AC/DC	115V AC	230 V AC
Set point	2 - 10 V	4 - 20 mA	4 - 20 mA	4 - 20 mA	3-step	3-step	3-step
Load	100 kOhm	500 Ohm	500 Ohm	500 Ohm	-	-	-
Position feedback	2 - 10 V	2 - 10 V	4 - 20 mA	4 - 20 mA	-	-	-
external load	-	-	< 700 Ohm	< 700 Ohm	-	-	-
limit switches	-	-	2 x	2 x	-	-	-
max. switching load	-	-	24V AC/DC 70mA	24V AC/DC 70mA	-	-	-
Power consumption	3 W	3 W	3 W	4 W	3 W	6 W	6 W
Stroking time (standard)	3,50 s/mm	3,50 s/mm	3,50 s/mm	3,50 s/mm	7,5 s/mm	7,5 s/mm	7,5 s/mm
Thrust	800 N						
Class of protection	IP 65						
Ambient temperature	-10°C up to +60°C						

Angle Seat Motor Valve compact 7210



Admissible Differential Pressures

Nominal size	p max [bar]													
	DN8		DN15		DN20		DN25		DN32		DN40		DN50	
	On/off	Control	On/off	Control	On/off	Control	On/off	Control	On/off	Control	On/off	Control	On/off	Control
Stainless steel body	-	16	40	16	20	16	12	12	7	7	4,8	4,8	2,8	2,8
Bronze body	-	-	16	-	16	-	12	-	7	-	4,8	-	2,8	-

Kvs-Values

Characteristic	linear							equal percentage						
	DN 8	15	20	25	32	40	50	8	15	20	25	32	40	50
100 %	0,6	3,8	8,8	14	20	27	37	0,6	3	6	10	16	25	-
40 %	0,24	1,5	3,5	5,8	8	11	-	-	1,2	2,4	4	6	10	-
25 %	0,15	0,93	2,2	3,6	-	-	-	-	0,8	1,5	2,6	-	-	-
15 %	-	-	-	-	-	-	-	-	0,46	-	-	-	-	-
10 %	-	0,4	-	-	-	-	-	-	-	-	-	-	-	-
7,5 %	-	-	-	-	-	-	-	-	0,23	-	-	-	-	-
On-Off	0,95	3,8	9	17	28	35	45							

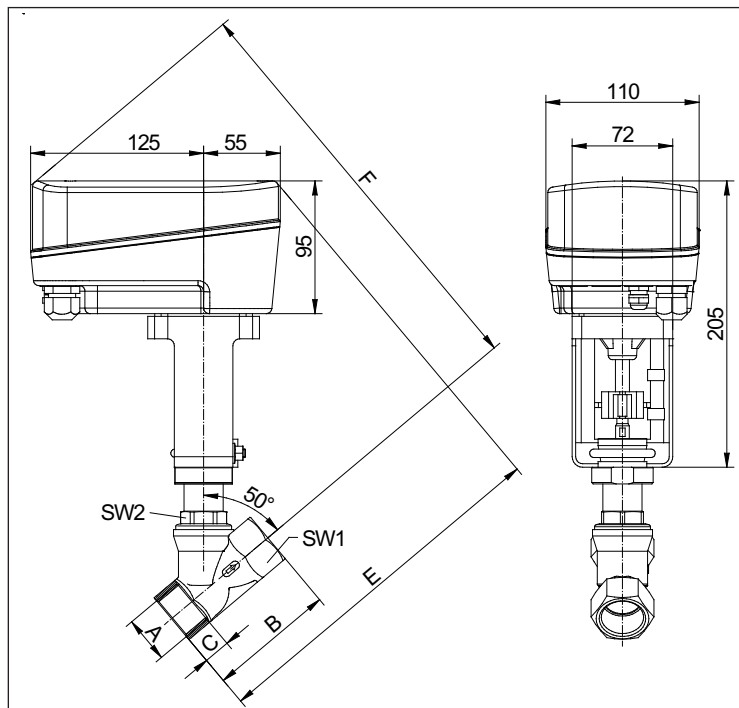
Ordering Number System

		Article number										
		7210/				K					S	
Nominal size:												
DN 8 (only with seating seal PEEK)		008										
DN 15		015										
DN 20		020										
DN 25		025										
DN 32		032										
DN 40		040										
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	
Welding ends acc. DIN 11850											D	
Body material:												
Bronze											1	
Stainless steel											2	
Seating seal:												
PTFE											0	
FKM (Viton)											1	
EPDM											2	
NBR											3	
PEEK											7	
Actuator:												
Control actuator BM250C/IOS2 85-250V AC/ 120-250V DC- control electr. 4-20mA - feedb. 4-20mA -2 limit switch.											0	
Control actuator BM24C - 24V AC/DC - control electronics 2-10V - feedback 2-10V											1	
Control actuator BM24C/I - 24V AC/DC - control electronics 4-20mA - feedback 2-10V											2	
On-Off actuator BM24 - 24V AC/DC											6	
On-Off actuator BM230 - 230V AC											7	
On-Off actuator BM115 - 115V AC											8	
Control actuator BM24C/IOS2 20-30V AC/ 20-45V DC- control electr. 4-20mA - feedback 4-20mA -2 limit switches											9	
Control plug:												
without											-	
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											-	
spring to close											0	
spring to open											1	
Stroking times:												
Standard (3,5 s/mm for control actuators - 7,5 s/mm for on-off-actuators)											-	
4,5 s/mm (on-off actuators only)											L	
1,75 s/mm (control actuators only), with safety spring return 3,0s/mm											1	
7,0 s/mm (control actuators only)											2	
14,0 s/mm (control actuators only)											3	

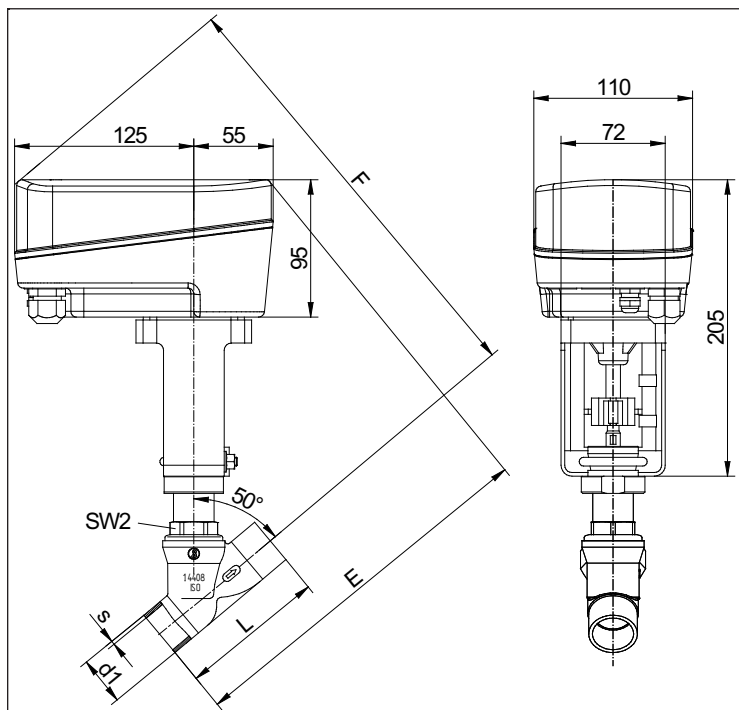
Ordering example: 7210/025VK102021
 Angle seat motor valve type 7210, DN 25, pipe thread acc. ISO228-1, stainless steel body, seating seal PTFE, control actuator BM24C/I, 24V AC/DC, 0,8 kN, control electronics 4-20 mA, position feedback 2-10V, linear characteristic, Kvs-value 14 (100 %).

Dimensions and Weights

Body with threaded ends Rp/NPT



Body with welding ends DIN/ISO



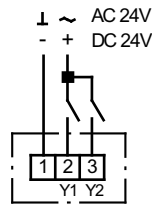
DN	A G / NPT	C G	C NPT	ISO		DIN		B G / NPT	L DIN/ISO	E	F	SW1	SW2	Stroke	Weight kg
				d1	s	d1	s								
08	1/4"	12	10,7	-	-	-	-	60	-	245	295	20	30	8,5	1,9
15	1/2"	15	14,5	21,3	2	18	1,5	65	80	250	295	25	30	9	2
20	3/4"	16,3	15	26,9	2,3	22	1,5	75	90	255	300	31	30	14	2,2
25	1"	19,1	18	33,7	2,6	28	1,5	90	100	260	305	39	30	18	2,4
32	1 1/4"	21,4	18,5	42,4	2,6	34	1,5	110	110	280	325	48	30	21	2,8
40	1 1/2"	21,4	18,5	48,3	2,6	40	1,5	120	120	285	325	55	30	22	3,1
50	2"	25,7	19	60,3	2,9	52	1,5	150	150	300	330	68	32	22	3,7

Other body designs on request

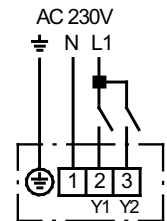
Dimensions in mm

On/Off-Actuators

Actuator: BM24
24V AC/DC
3-step drive

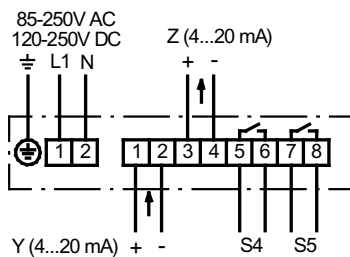


Actuator: BM230, BM115
230V 50/60 Hz
115V 50/60 Hz
3-step drive

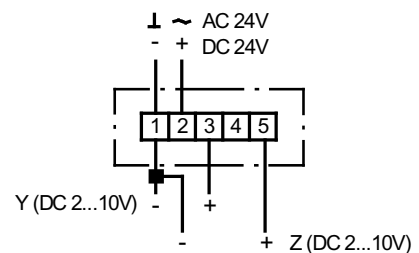


Control Actuators

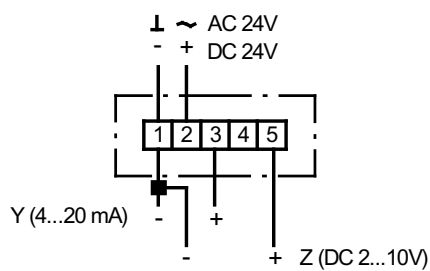
Actuator: BM250C/IOS2, BM230C/IOS2-R
85-250V AC 120-250V DC
input signal 4-20mA
feedback signal 4-20mA
2 limit switches



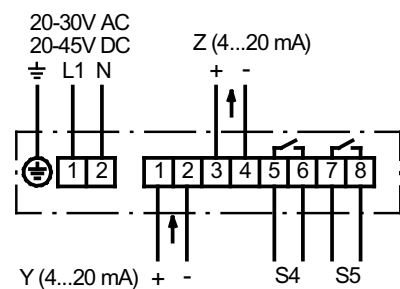
Actuator: BM24C, BM24C-R
24V AC/DC
input signal 2-10V
feedback signal 2-10V



Actuator: BM24C/I, BM24C/I-R
24V AC/DC
input signal 4-20mA
feedback signal 2-10V



Actuator: BM24C/IOS2
20-30V AC 20-45V DC
input signal 4-20mA
feedback signal 4-20mA
2 limit switches



BM.....-R: version with safety position
Y: signal, Z: feedback signal