

Right Angle Seat Motor Valve compact 7250

DN 15 up to DN 50

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

- Compact design
- Self adaption
- 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

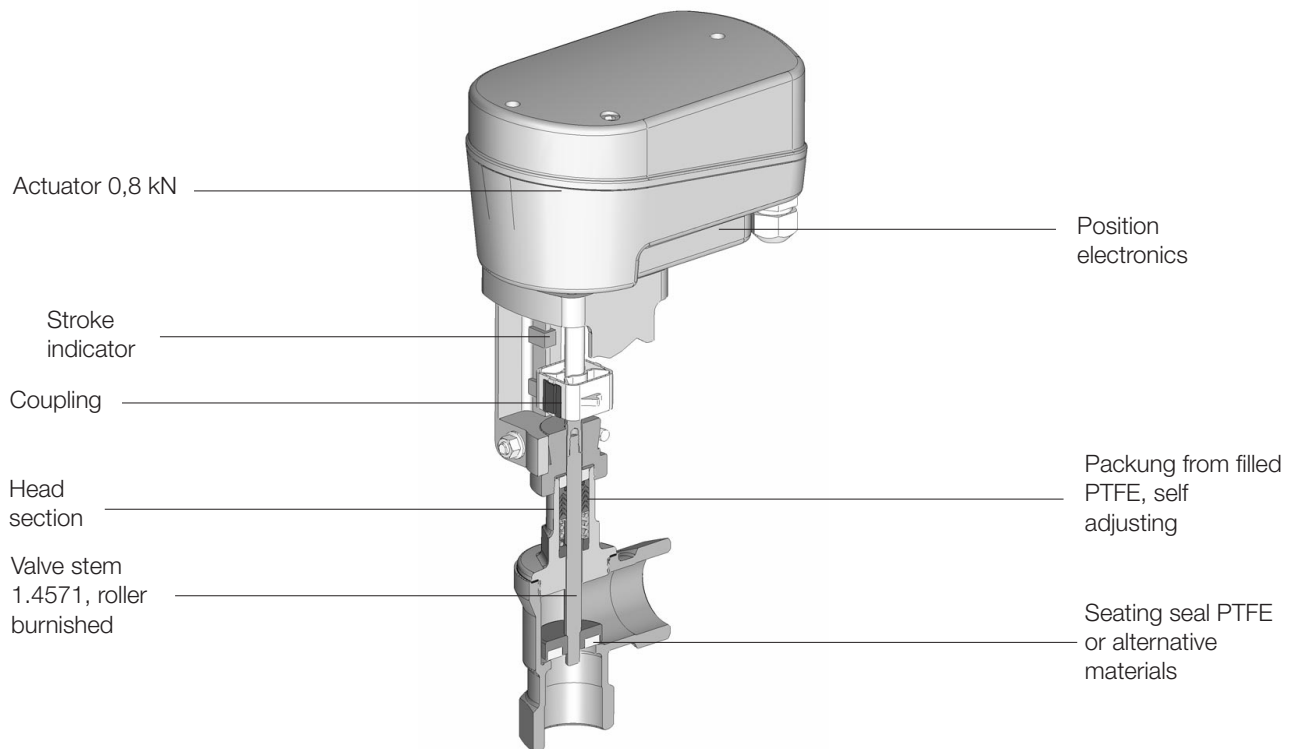


Technical Information Valve

Body materials	Stainless steel 1.4408
Nominal sizes	DN 15 up to DN 50
Connections: Pipe threads acc. ISO 228-1 NPT thread	DN15 - DN 50 DN15 - DN 50
Nominal pressure	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.
Operating pressure packing underneath	max. 12 bar

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						



Admissible Differential Pressures

Nominal size	p max (bar)											
	DN15		DN20		DN25		DN32		DN40		DN50	
	On/off	Control	On/off	Control	On/off	Control	On/off	Control	On/off	Control	On/off	Control
Stainless steel body	40	16	20	16	12	12	7	7	4,8	4,8	2,8	2,8

Kvs-Values

Characteristic	linear						equal percentage						
	15	20	25	32	40	50	15	20	25	32	40	50	
100 %	5,2	10,5	16,5	25	40	57	4,1	9,3	12	16	32	-	
40 %	2,1	4,2	6,6	10	16	-	1,7	3,7	4,8	6,4	12,8	-	
25 %	1,3	2,65	4,1	-	-	-	1	2,3	2,6	-	-	-	
On-Off	5,5	9	17	25	35	45							

Optional Adjustments

	Control actuator	On-Off actuator
Stroking times	1,75 s/mm - 14,0 s/mm	7,5 / 4,5 s/mm
Sense of action	direct / reverse	-
Control signal	Starting point: 0,5-30 V / 1-60 mA Ending point: 2,5-32V / 3-64mA	-
Feedback	Starting point: 0,5-8 V / 1-16 mA Ending point: 1,5-10V / 3-20mA	-
Limit switches	0 - 100% stroke (adjustable)	-

Ordering Number System

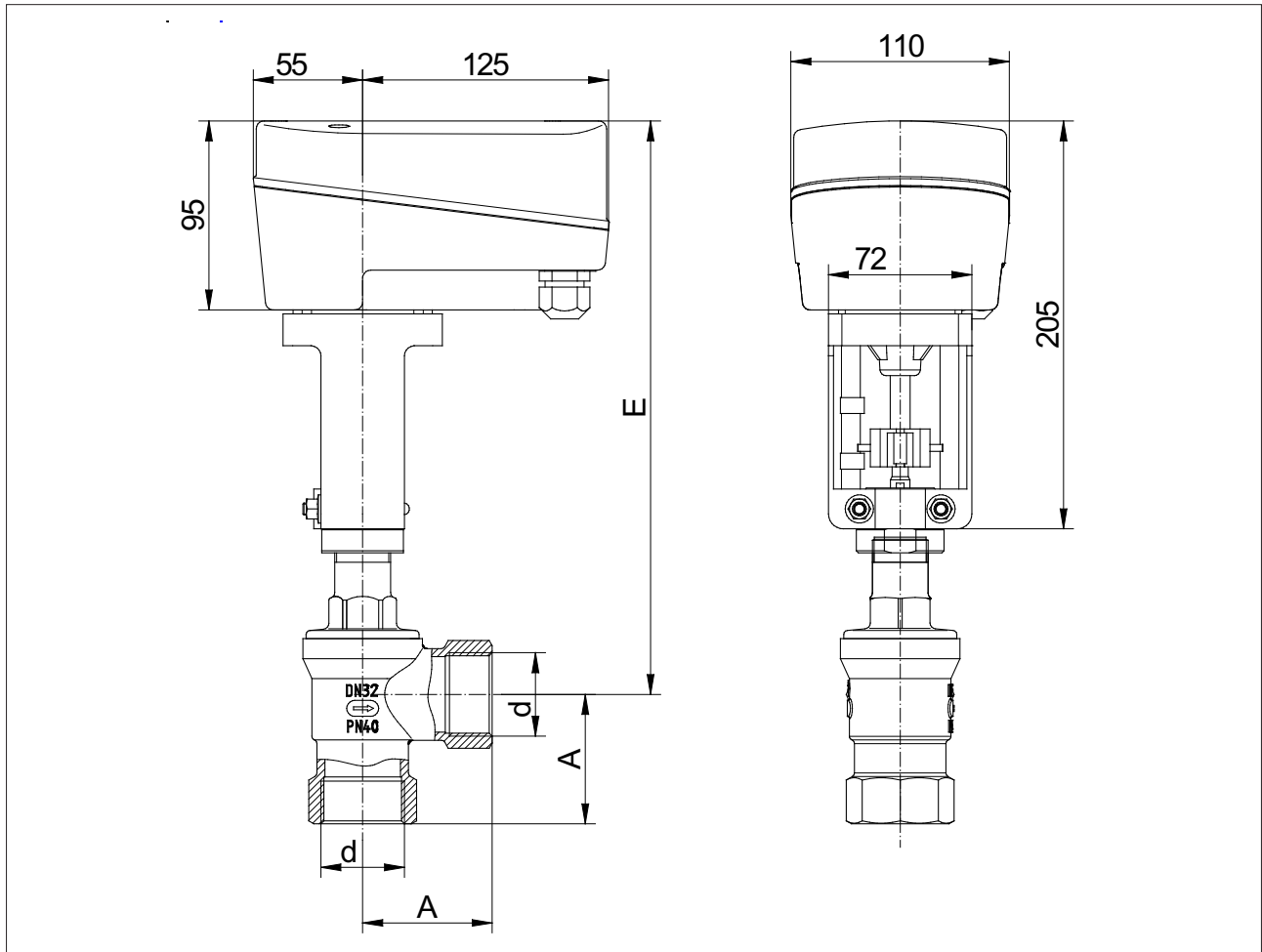
		Article number									
		7250/			K						S
Nominal size:											
DN 15		015									
DN 20		020									
DN 25		025									
DN 32		032									
DN 40		040									
DN 50		050									
Item:											
Valve		V									
Upper part		U									
Actuator		A									
Body design:											
Right angled body valve					7						
Connection:											
Whitworth-thread						0					
NPT thread						5					
without thread						6					
Body material:											
Stainless steel							2				
Seating seal:											
PTFE								0			
FKM (Viton)								1			
EPDM								2			
NBR								3			
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:											
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											-
spring to close											0
spring to open											1
Stroking times											
Standard (3,5s/mm for control actuators - 7,5 s/mm for on-off-actuators)											-
4,5 s/mm (on-off actuators only)											L
1,75s/mm (control actuators only), with safety spring return 3,0s/mm											1
7,0s/mm (control actuators only)											2
14,0s/mm (control actuators only)											3

Ordering example:

7250/025VK702021

Right Angled seat compact motor valve type 7250, DN 25, pipe thread acc. ISO 228-1 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

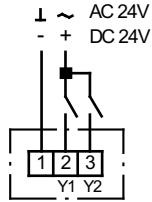


DN	d	A	B	D	E	Stroke	Weight kg
15	1/2"	41	139	62	261,5	9	2
20	3/4"	41	140	62	262,5	14	2,3
25	1"	41	140,5	62	275,5	18	2,4
32	1 1/4"	65	216,5	144	276	21	3
40	1 1/2"	65	160,5	62	279,5	22	3,2
50	2"	65	240	144	296,5	22	3,8

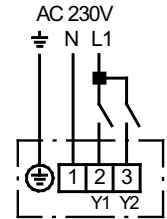
Dimensions in mm

On/Off-Actuators

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

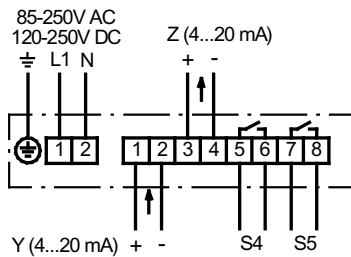


Actuator: BM230, BM115
230V 50/60 Hz
115V 50/60 Hz
3-step drive

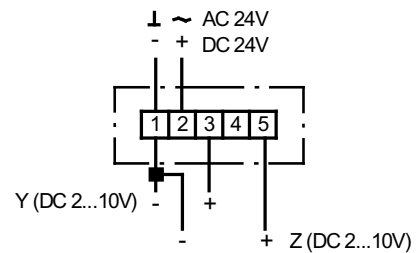


Control Actuators

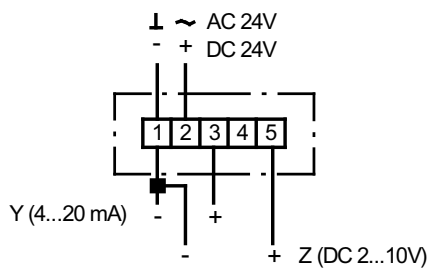
Actuator: BM250C/IOS2, BM230C/IOS2-R
85-250V AC 120-250V DC
input signal 4-20mA
feedback signal 4-20mA
2 limit switches



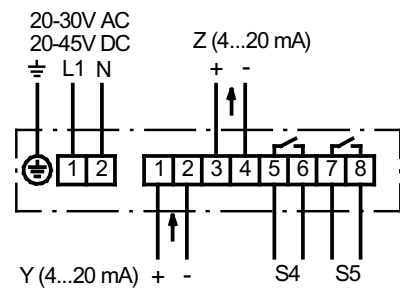
Actuator: BM24C, BM24C-R
24V AC/DC
input signal 2-10V
feedback signal 2-10V



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