

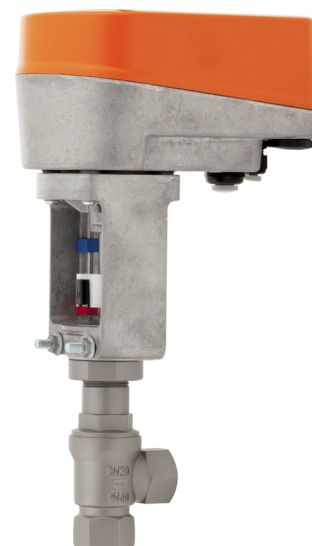
Right Angle Seat Motor Valve 7250



1/2" up to 2"

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 -22°F up to +392°F
- Working pressure up to 580 psi
- Versatile actuator options
- Also available with spring return



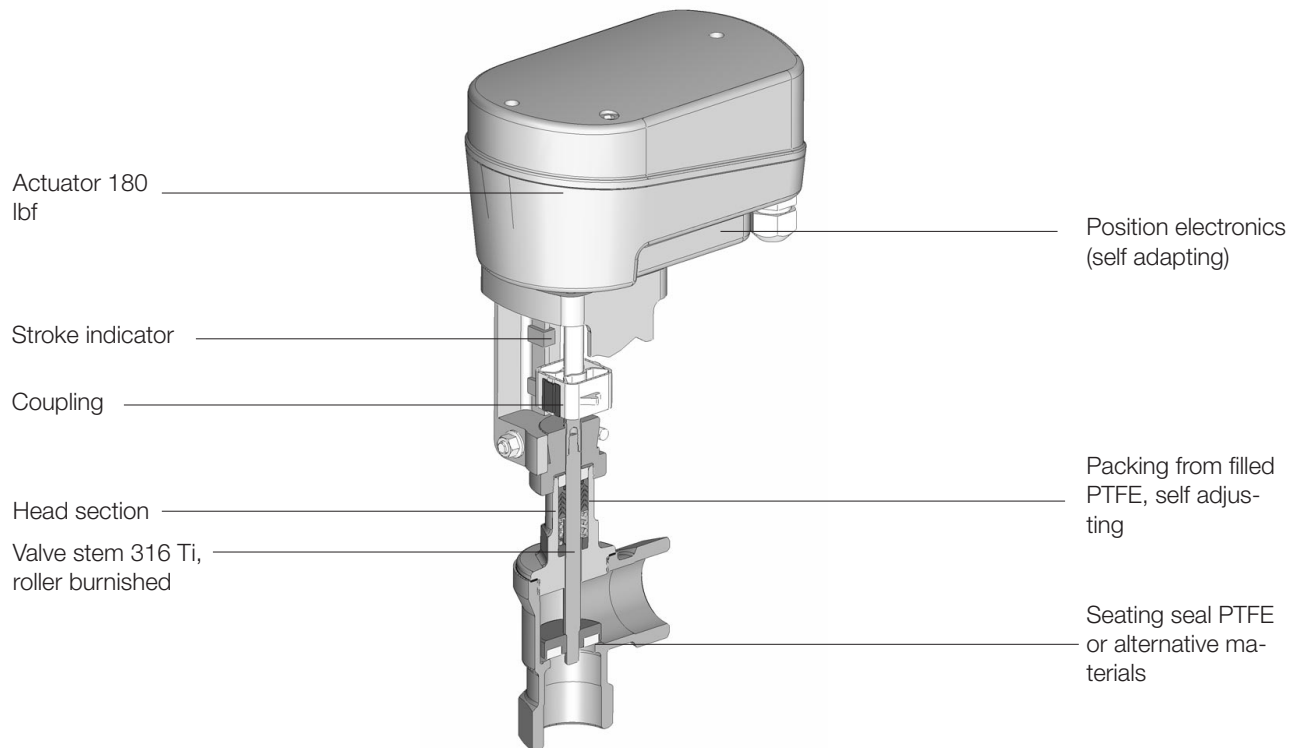
Technical Information Valve

Body materials	Stainless steel 316L
Nominal sizes	1/2" up to 2"
Connections:	
Pipe threads acc. ISO 228-1	1/2" - 2"
NPT thread	1/2" - 2"
Nominal pressure	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

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	115 V 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)	3.5s per 0.04inch	3.5s per 0.04inch	3.5s per 0.04inch	3.5s per 0.04inch	190 s/inch	190 s/inch	190 s/inch
Thrust	800 N						
Class of protection	IP 65						
Ambient temperature	14°F up to +140°F						

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Pressure Capability

Nominal size	Inlet pressure psi											
	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	580	230	290	230	175	175	100	100	70	70	40	40

Cv-Values

Characteristic	linear						equal percentage					
	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"	1/2"	3/4"	1"	1 1/4"	1 1/2"	2"
100 %	6	12.2	19.1	29	38.3	46.4	4.8	10.8	13.9	18.6	25.5	-
40 %	2.4	4.9	7.7	11.6	18.6	-	2	4.3	5.6	7.4	14.8	-
25 %	1.5	3	4.8	-	-	-	1.2	2.7	3.5	-	-	-
On-Off	6.4	12.2	19.7	29	40.6	52.2						

Optional Adjustments

	Control actuator	On-Off actuator
Stroking times	1,75 s/0,04 inch - 14,0 s/0,04 inch	185 / 110 s/inch
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)	-
	Safety spring return	

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Ordering Number System

		Article number									
		7250/		K							S
Nominal size:											
1/4" (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									
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 (89 s/inch for control actuators - 191 s/inch for on-off-actuators)			-								
114 s/inch (on-off actuators only)			L								
44 s/inch (control actuators only), with safety spring return 76 s/inch			1								
178 s/inch (control actuators only)			2								
356 s/inch (control actuators only)			3								

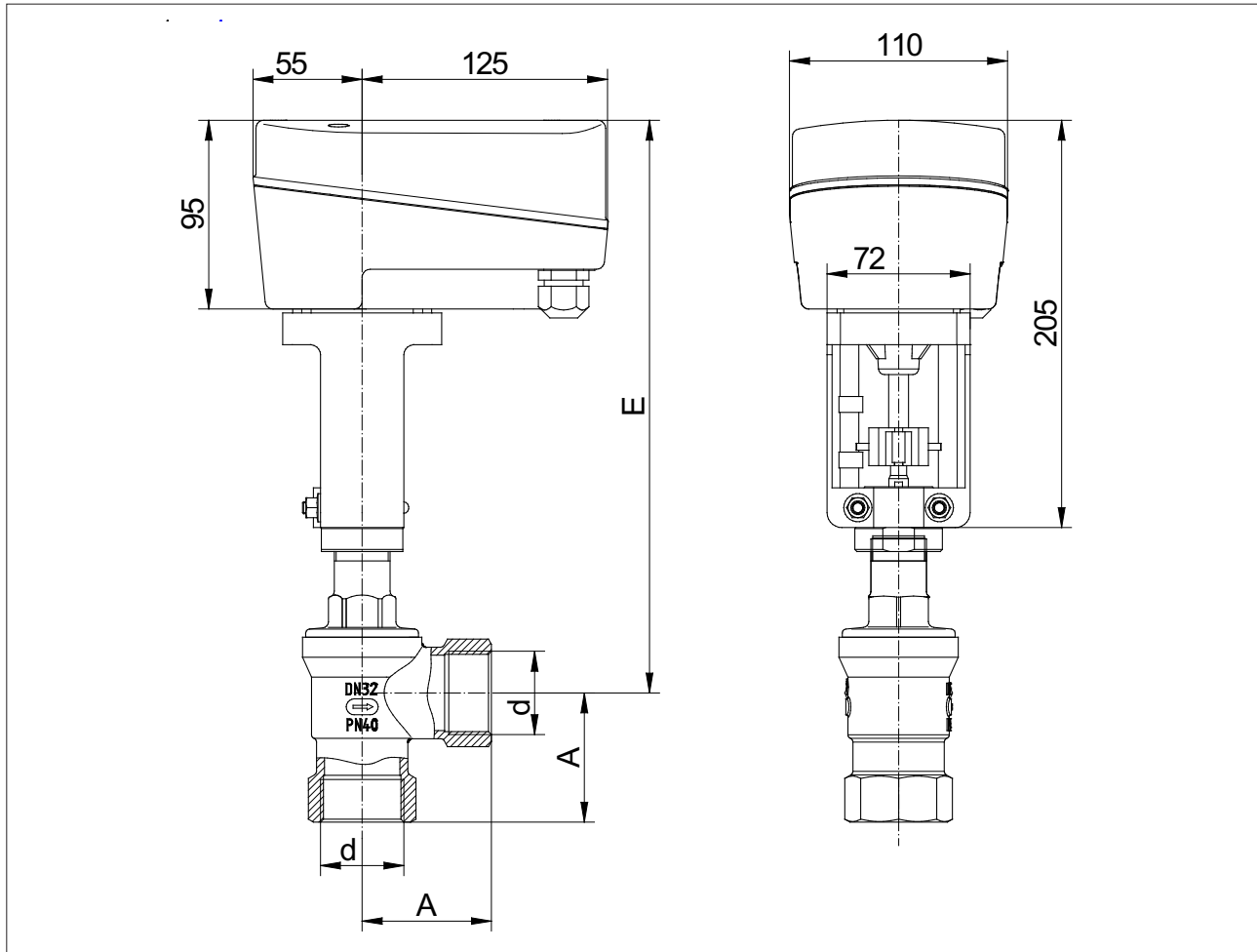
Ordering example:

7250/025VK702021

Right angled seat compact motor valve type 7250, 1", pipe thread acc. ISO 228-1, stainless steel body, seating seal PTFE, control actuator BM24C/I, 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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Dimensions and Weights



Size d	A	B	D	E	Stroke	Weight lbs
1/2"	1,6	5,45	2,45	10,3	0,35	4,4
3/4"	1,6	5,5	2,45	10,35	0,55	5,1
1"	1,6	5,55	2,45	10,85	0,71	5,3
1 1/4"	2,55	8,5	5,65	10,85	0,83	6,6
1 1/2"	2,55	6,3	2,45	11	0,87	7
2"	2,55	9,45	5,65	11,65	0,87	8,4

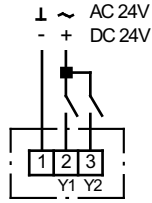
Dimensions in inch

Schematic Wiring Diagrams

On/Off-Actuators

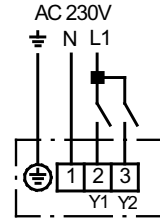
Actuator: BM24

24V AC/DC
3-step drive



Actuator: BM230, BM115

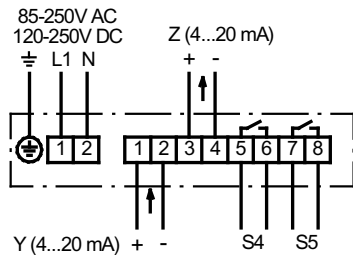
230V 50/60 Hz
115V 50/60 Hz
3-step drive



Control Actuators

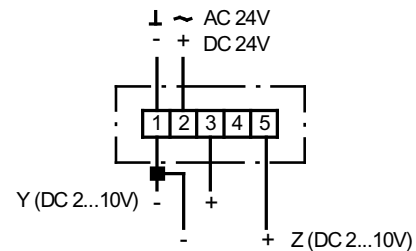
Actuator: BM250C/IOS2, BM250C/IOS2-R

85-250V AC 120-250V DC
input signal 4-20mA
feedback signal 4-20mA
2 limit switches



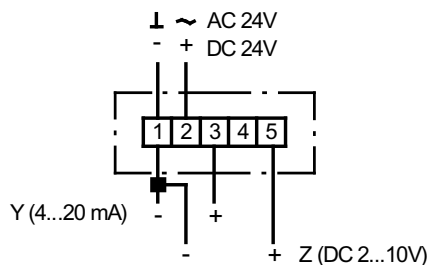
Actuator: BM24C, BM24C-R

24V AC/DC
input signal 2-10V
feedback signal 2-10V



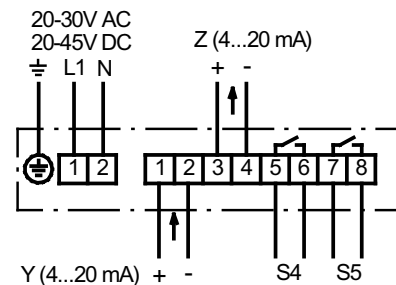
Actuator: BM24C/I, BM24C/I-R

24V AC/DC
input signal 4-20mA
feedback signal 2-10V



Actuator: BM24C/IOS, BM24C/IOS-R

24V AC/DC
input signal 4-20mA
feedback signal 4-20mA
2 limit switches



BM.....-R: version with safety position

Y: signal, Z: feedback signal