

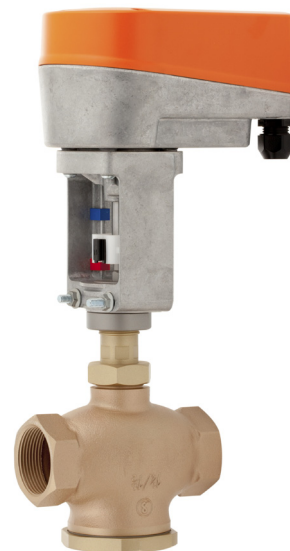
# 3/2-Way Motor Valve compact 7280

DN 15 up to DN 40



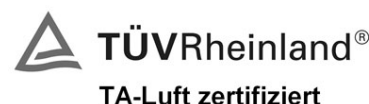
## 3/2-Way Compact Motor Valve for distributing function, mixing function and modulating operation for neutral and aggressive media

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



### Technical Information Valve

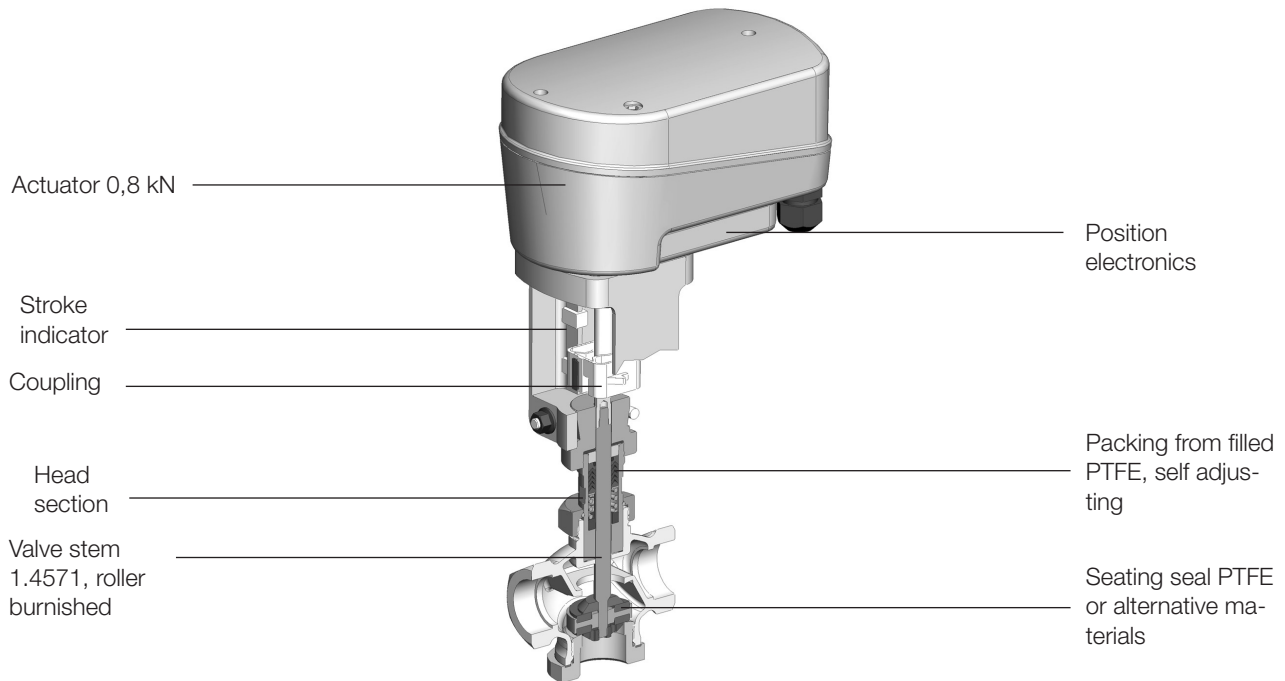
Body material	Bronze CC491K
Nominal size	DN 15 up to DN 40
Connections	Pipe thread acc. ISO 228-1 NPT thread
Nominal pressure	PN 16
Max. fluid temperature	-30°C up to +200°C
Viscosity of media	max. 600 mm <sup>2</sup> /s (600cSt, 80°E)



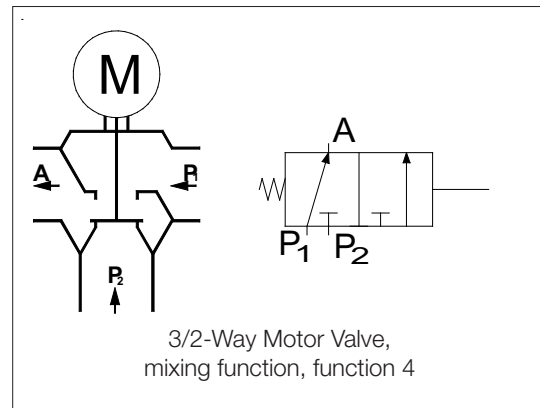
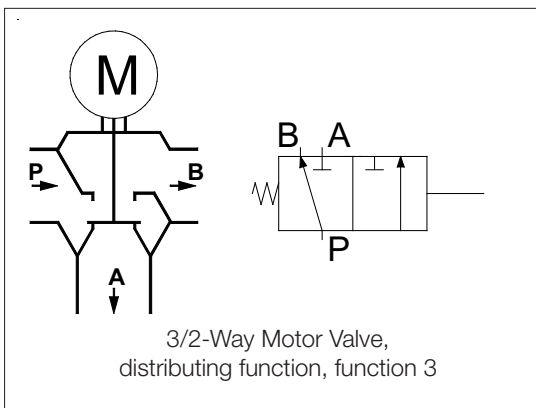
### Technical Information Motor Actuator

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						

# 3/2-Way Motor Valve compact 7280



## Versions



## Kvs-Values

DN	P-B	P-A	P1-A	P2-A
15	5,5	5,3	5,7	5,3
20	7,4	8,7	7,3	9,5
25	12,3	12,5	12,6	14
32	24,4	20	25,5	21
40	26,6	23	30,3	23,3

## Admissible Differential Pressures

	Differential pressure max. (bar)				
Nominal size	DN15	DN20	DN25	DN32	DN40
	15	15	8	3	3

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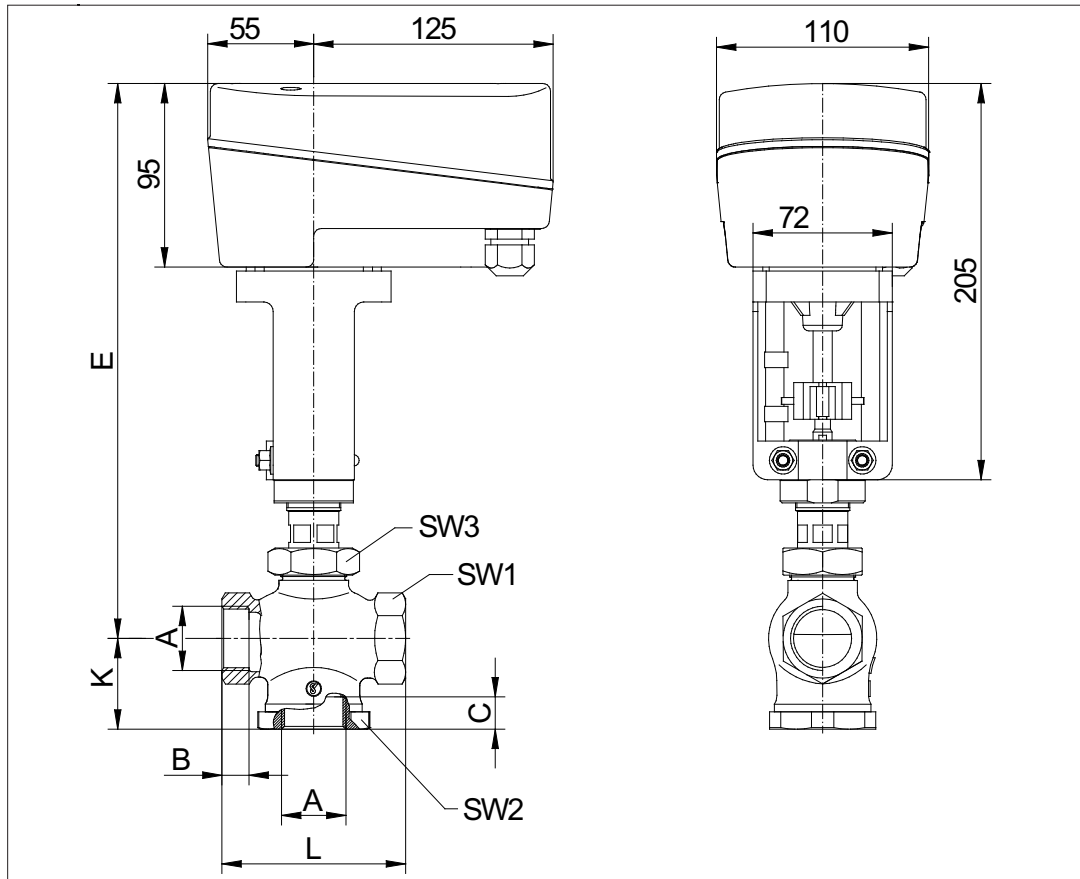
## Ordering Number System

	Article number									
	7280/				K					S
Nominal size:										
DN 15	015									
DN 20	020									
DN 25	025									
DN 32	032									
DN 40	040									
Item:										
Valve	V									
Valve without actuator	U									
Actuator	A									
Body design:										
3/2-Way Motor Valve, distributing function					3					
3/2-Way Motor Valve, mixing function					4					
Connection:										
Withworth-thread						0				
NPT thread						5				
Body material:										
Bronze							1			
Seating seal:										
PTFE								0		
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										-
Safety position:										
without safety position										-
Spindle travelling into valve, set point time < 1.5 mm/sec										0
Spindle travelling out of valve, set point time < 1.5 mm/sec										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: 7280/025VK40102  
 3/2-Way compact Motor valve Type 7280, DN 25, pipe thread acc. DIN 2999/ISO228, bronze body, seating seal PTFE, control actuator BM24C/I, 24V AC/DC, control electronics 4-20 mA, position feedback 2-10V

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## Dimensions and Weights



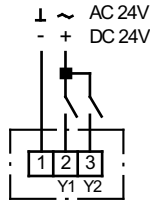
DN	A G / NPT	B	C G	C NPT	E	Stroke	K	L	SW1	SW2	SW3	Weight kg
15	1/2"	13	13,2	15	287	9	39	80	33	41	41	2,5
20	3/4"	13	16,3	15	287	9	42	80	33	41	41	2,5
25	1"	14	16,8	18	287	11	47	95	41	55	41	2,9
32	1 1/4"	18	19	19	304	18,5	61	132	58	75	41	3,8
40	1 1/2"	18	19	19	304	18,5	61	132	58	75	41	3,8

Dimensions in mm

## On/Off-Actuators

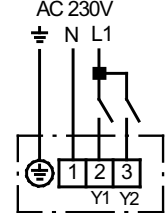
### Actuator: BM24

24V AC/DC  
3-step drive



### Actuator: BM230, BM115

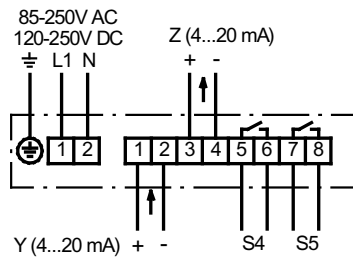
230V 50/60 Hz  
115V 50/60 Hz  
3-step drive



## Control Actuators

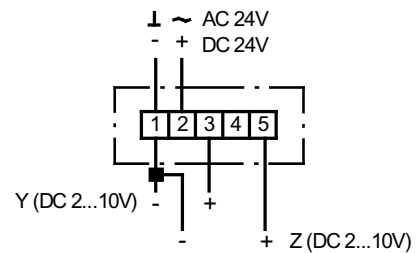
### Actuator: BM250C/IOS2, BM230C/IOS2-R

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



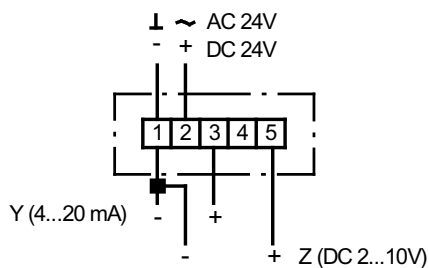
### Actuator: BM24C, BM24C-R

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



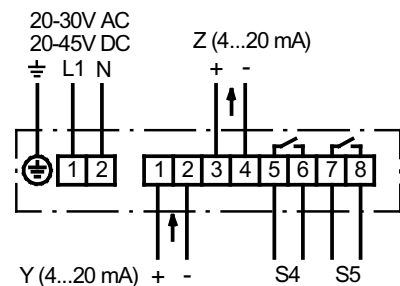
### Actuator: BM24C/I, BM24C/I-R

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