



RETROFIT®

Retrofit

Actuators for third-party globe valves

Replacement / Renovation / Modernisation

Globe Valves

Actuators for third-party globe valves	Manufacturers A-Z	1
	Checklist for dimensions	13
Mechanical and electrical accessories for globe valve actuators	Attachments, spacer rings and disks, auxiliary switches	15
Actuators for third-party short stroke globe valves	Manufacturers A-Z	16

Safe investment

Actuators and globe valve from Belimo for a better and energy-saving room climate after renovations.

Pleasantly flexible

Thanks to a wide product range of actuators and adapters, the motorisation of valves from other manufacturers can be modernised without any problem.



Retrofit App

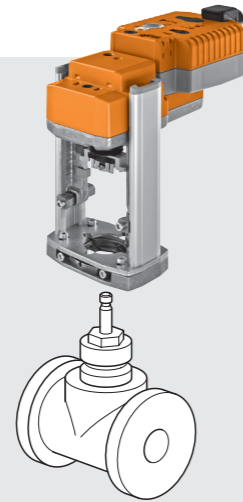
Convenient replacement and modernisation of actuators in existing installations. Install the App via "AppStore" or "Google Play". The QR codes take you there directly.



Manufacturers A-Z

Degree of protection IEC/EN IP54

With the clever, unique and universal retrofit concepts, mounting Belimo globe valve actuators on numerous series from various valve manufacturers is extremely simple. You will find the right globe valve actuator in a few steps even without knowing the manufacturer.



Suitable actuators

Actuating force	Nominal stroke	Actuating time per nominal stroke	Open-close	3-point	Modulating (2...10 V)	Emergency control function ²	Nominal voltage AC/DC 24 V AC 230 V	Valve manufacturer ¹⁾	Valve manufacturer ¹⁾										
									Armstrong	Cazzaniga	Controlli		Danfoss					Elesta	
DN range min/max								15 / 40	15 / 50	15 / 50	15 / 50	15 / 80	25 / 50	40 / 100	65 / 100	100 / 150	125 / 250	15 / 50	
Valve series								ACV ECV	V2BM V3BM	VMB VMB..F VSB VSB..F	(H)VFS2 (H)VL2 (H)VL3 (H)VRB2 (H)VRB3 (H)VRG2 (H)VRG3	(H)VF2 (H)VF3	(H)VE2	AB - QM	(H)VL2 (H)VL3	(H)VF2 (H)VF3	AB - QM	BKF.. BKG..	
2) Spacer ring type																			
3) Attachment type																			
4) Disk type																			
1) Actuator type																			
Standard actuators																			
NV.. SV..	1000 N	20 mm	150 s	•	•		24 V	NV24A-RE	•	•	•	•	•	•	•	•			
							230 V	NV230A-RE	•	•	•	•	•	•	•	•	•		
SVL.. EV..	1500 N	20 mm	150 s	•	•		24 V	SV24A-RE	•	•	•	•	•	•	•	•			
							230 V	SV230A-RE	•	•	•	•	•	•	•	•	•		
	2500 N	50 mm	150 s	•	•		230 V	SVL230A-RE											
							24 V	EV24A-RE											
	2500 N	50 mm	188 s	•	•		230 V	EV230A-RE											
							24 V	EV24A-RE											
Actuators with emergency control function																			
NVK..	1000 N	20 mm	150 s	•		-II-	AC 24 V	NVK24A-3-RE	•	•	•	•	•	•	•	•			
							230 V	NVK230A-3-RE	•	•	•	•	•	•	•	•	•		
	2000 N	32 mm	150 s	•		-II-	AC 24 V	AVK24A-3-RE ³⁾											
							230 V	AVK230A-3-RE ³⁾											
Parameterisable actuators																			
NV.. NVC.. NVK.. NVKC.. SV.. SVC..	1000 N	20 mm	150 s	•		-II-	24 V	NV24A-MP-RE	•	•	•	•	•	•	•	•			
			35 s				NVC24A-MP-RE	•	•	•	•	•	•	•	•				
			150 s				NVK24A-MP-RE	•	•	•	•	•	•	•	•	•			
			35 s				NVKC24A-MP-RE	•	•	•	•	•	•	•	•	•			
	1500 N	20 mm	150 s	•		-II-	24 V	SV24A-MP-RE	•	•	•	•	•	•	•	•			
			35 s				SVC24A-MP-RE	•	•	•	•	•	•	•	•	•			
	2000 N	32 mm	150 s	•		-II-	24 V	SVL24A-MP-RE											
			150 s				AVK24A-MP-RE ³⁾												
SVL.. AVK.. EV.. RV..	2500 N	50 mm	188 s	•			24 V	EV24A-MP-RE											
			44 s				EVC24A-MF-RE ⁴⁾												
	4500 N	50 mm	150 s	•			24 V	RV24A-MF-RE ⁴⁾											
			150 s				RV24A-MF-RE ⁴⁾												

¹⁾For unknown versions or versions that are not listed in the catalogue, see Page 13 or on request
²⁾ Actuators with -II- = electrical emergency control function
³⁾ Actuators AVK.. with maximum stroke 32 mm
⁴⁾ Multifunctional, parameterisable, non-bus-capable actuators

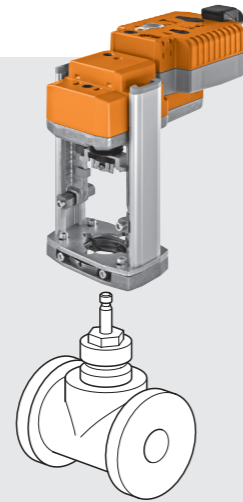
Continued next page

Ordering example:
SVL230A-RE + ZRV-303
 1) Actuator type
 2) Spacer ring type
 3) Attachment type
 4) Disk type

Suitable accessories from Page 15

Manufacturers A-Z

Degree of protection IEC/EN IP54



Suitable actuators

Actuating force	Nominal stroke	Actuating time per nominal stroke	Open-close	3-point	Modulating (2...10 V)	Emergency control function ²	Nominal voltage AC/DC 24 V AC 230 V	Valve manufacturer ¹⁾	Honeywell						HORA									
									DN range min/max	15 / 50	15 / 65	15 / 80	20 / 80	25 / 80	32 / 50	80 / 150	100 / 150	15 / 25	15 / 50	15 / 50	1/2" / 2"	3/4"		
								Valve series	V5011N V5011P V5011R V5011S V5013N V5013R	V5049A V5050A	V5011A-H, J V5013A-F V5016A V5025A V5328A V5329A V5329C	V5095A	V5015	V5013P	V5049A V5050A	V5015A V5016A	BR225RG	BR206GF BR206GG BR216GF BR216GG BR216RA BR216RA-TW	BR306GF BR306GG BR316GF BR316GG BR316RA BR316RA-TW	BR216RGA BR316RGA	BR316RGAMS			
								2) Spacer ring type																
								3) Attachment type																
								4) Disk type																
								1) Actuator type																
Standard actuators																								
NV.. SV..	1000 N	20 mm	150 s	•	•		24 V	NV24A-RE	•	•	•	•	•	•	•	•	•	•	•	•				
							230 V	NV230A-RE	•	•	•	•	•	•	•	•	•	•	•	•				
	1500 N	20 mm	150 s	•	•		24 V	SV24A-RE	•	•	•	•	•	•	•	•	•	•	•	•				
SVL.. EV..		50 mm	150 s	•	•		230 V	SVL230A-RE	•	•	•	•	•	•	•	•	•	•	•	•				
	2500 N	50 mm	188 s	•	•		24 V	EV24A-RE						•	•									
							230 V	EV230A-RE						•	•									
Actuators with emergency control function																								
NVK..	1000 N	20 mm	150 s	•		— —	AC 24 V	NVK24A-3-RE	•	•	•	•	•	•	•	•	•	•	•	•				
							230 V	NVK230A-3-RE	•	•	•	•	•	•	•	•	•	•	•	•				
	2000 N	32 mm	150 s	•		— —	AC 24 V	AVK24A-3-RE ³⁾						•	•									
							230 V	AVK230A-3-RE ³⁾						•	•									
Parameterisable actuators																								
	1000 N	20 mm	150 s	•	•		24 V	NV24A-MP-RE	•	•	•	•	•	•	•	•	•	•	•	•				
			35 s				24 V	NVC24A-MP-RE	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
			150 s				•	— —	24 V	NVK24A-MP-RE	•	•	•	•	•	•	•	•	•	•	•	•	•	•
			35 s						24 V	NVKC24A-MP-RE	•	•	•	•	•	•	•	•	•	•	•	•	•	•
	1500 N	20 mm	150 s	•	•		24 V	SV24A-MP-RE	•	•	•	•	•	•	•	•	•	•	•	•				
			35 s				24 V	SVC24A-MP-RE	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	2000 N	32 mm	150 s	•	•	— —	24 V	SVL24A-MP-RE						•	•									
			150 s				24 V	AVK24A-MP-RE ³⁾									•	•						
	2500 N	50 mm	188 s	•	•		24 V	EV24A-MP-RE						•	•									
			44 s				24 V	EVC24A-MF-RE ⁴⁾									•	•						
	4500 N	50 mm	150 s	•	•		24 V	RV24A-MF-RE ⁴⁾						•	•									

¹⁾For unknown versions or versions that are not listed in the catalogue, see Page 13 or on request
²⁾ Actuators with —|— = electrical emergency control function
³⁾ Actuators AVK.. with maximum stroke 32 mm
⁴⁾ Multifunctional, parameterisable, non-bus-capable actuators

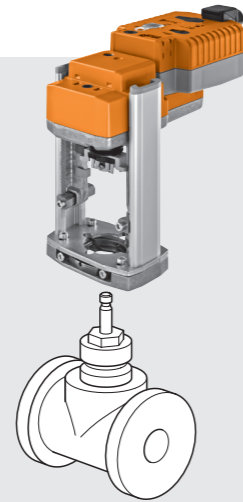
Continued next page

Ordering example:
SVL230A-RE + **ZRV-303**
 1) Actuator type
 2) Spacer ring type
 3) Attachment type
 4) Disk type

Suitable accessories from Page 15

Manufacturers A-Z

Degree of protection IEC/EN IP54



Suitable actuators

Actuator type	Actuator type	Actuator type	Actuator type	Actuator type	Actuator type	Actuator type	Actuator type	Actuator type	Actuator type	Actuator type	Actuator type	Actuator type	Actuator type	Actuator type	Actuator type	Actuator type	Actuator type	Valve manufacturer ¹⁾						
																		Johnson	Johnson	Kieback & Peter	LDM	MUT	Osby	Riccius + Seibt
Actuating force	Nominal stroke	Actuating time per nominal stroke	Open-close	3-point	Modulating (2...10 V)	Emergency control function ²⁾	Nominal voltage AC/DC 24 V AC 230 V	DN range min/max	15 / 40	15 / 50	50 / 150	65 / 100	65 / 150	15 / 50	15 / 50	15 / 50	15 / 50	25 / 40	15	15 / 50				
Standard actuators																								
NV.. SV..	1000 N	20 mm	150 s	•	•		24 V	NV24A-RE	•	•														
							230 V	NV230A-RE	•	•														
SVL.. EV..	1500 N	20 mm	150 s	•	•		24 V	SV24A-RE	•	•														
							230 V	SV230A-RE	•	•														
	2500 N	50 mm	188 s	•	•		24 V	EV24A-RE		•	•	•												
							230 V	EV230A-RE		•	•	•												
Actuators with emergency control function																								
NVK..	1000 N	20 mm	150 s	•	•	-II-	AC 24 V	NVK24A-3-RE	•	•														
							230 V	NVK230A-3-RE	•	•														
	2000 N	32 mm	150 s	•	•	-II-	AC 24 V	AVK24A-3-RE ³⁾		•	•	•												
							230 V	AVK230A-3-RE ³⁾		•	•	•												
Parameterisable actuators																								
NV.. NVC.. NVK.. NVKC.. SV.. SVC..	1000 N	20 mm	150 s	•	•		24 V	NV24A-MP-RE	•	•														
			35 s				NVC24A-MP-RE	•	•															
			150 s				NVK24A-MP-RE	•	•															
			35 s				NVKC24A-MP-RE	•	•	-II-	24 V	NVKC24A-MP-RE	•	•										
	1500 N	20 mm	150 s	•	•		24 V	SV24A-MP-RE	•	•														
			35 s				SVC24A-MP-RE	•	•															
	2000 N	32 mm	150 s	•	•	-II-	24 V	SVL24A-MP-RE		•	•	•												
			150 s				AVK24A-MP-RE ³⁾		•	•	•													
SVL.. AVK.. EV.. RV..	2500 N	50 mm	188 s	•	•		24 V	EV24A-MP-RE		•	•	•												
			44 s				EVC24A-MF-RE ⁴⁾		•	•	•													
	4500 N	50 mm	150 s	•	•		24 V	RV24A-MF-RE ⁴⁾		•	•	•												

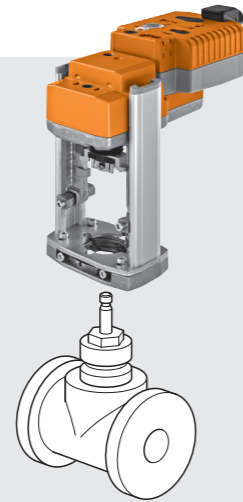
¹⁾For unknown versions or versions that are not listed in the catalogue, see Page 13 or on request
²⁾ Actuators with -II- = electrical emergency control function
³⁾ Actuators AVK.. with maximum stroke 32 mm
⁴⁾ Multifunctional, parameterisable, non-bus-capable actuators

Continued next page

Ordering example:
SVL230A-RE + ZRV-303
 1 Actuator type
 2 Spacer ring type
 3 Attachment type
 4 Disk type

Suitable accessories from Page 15

Manufacturers A-Z
Degree of protection IEC/EN IP54



Suitable actuators



Actuating force	Nominal stroke	Actuating time per nominal stroke	Open-close	3-point	Modulating (2...10 V)	Emergency control function ²	Nominal voltage AC/DC 24 V AC 230 V	Valve manufacturer ¹⁾	Satchwell / Schneider Electric		Sauter		Sauter												
									DN range min/max	15 / 50	32 / 150	15	15 / 32	15 / 40	15 / 50	15 / 50	15 / 50	20 / 32	40 / 50	65 / 80	65 / 80	65 / 100			
								Valve series	MJF VSF MZ VZ	MJF MZF VZF	V1T	V4F..	BT43B	B6F..F B6G..F B6R..F B6S..F BUN.. BXD..F BXE..F BXN..	V6F..F V6G..F V6R..F V6S..F VUN.. VXD..F VXE..F VXN..	BUE.. VUE..	BUG.. VUG..	B4F..F V4F..	BXD..F VXD..F	BQD BQE VQD VQE	BXE..F VXE..F				
								2) Spacer ring type																	
								3) Attachment type																	
								4) Disk type																	
								1) Actuator type																	
Standard actuators																									
1000 N	20 mm	150 s	•	•			24 V	NV24A-RE	•		•	•	•	•	•	•	•	•	•	•	•				
							230 V	NV230A-RE	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1500 N	20 mm	150 s	•	•			24 V	SV24A-RE	•		•	•	•	•	•	•	•	•	•	•	•				
							230 V	SV230A-RE	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2500 N	50 mm	150 s	•	•			230 V	SVL230A-RE	•		•	•	•	•	•	•	•	•	•	•	•				
							24 V	EV24A-RE			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
							230 V	EV230A-RE			•	•	•	•	•	•	•	•	•	•	•				
Actuators with emergency control function																									
1000 N	20 mm	150 s	•	•		-II-	AC 24 V	NVK24A-3-RE	•		•	•	•	•	•	•	•	•	•	•	•				
							230 V	NVK230A-3-RE	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
2000 N	32 mm	150 s	•	•		-II-	AC 24 V	AVK24A-3-RE ³⁾			•	•	•	•	•	•	•	•	•	•	•				
							230 V	AVK230A-3-RE ³⁾			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
Parameterisable actuators																									
1000 N	20 mm	150 s	•	•			24 V	NV24A-MP-RE	•		•	•	•	•	•	•	•	•	•	•	•				
		35 s					NVC24A-MP-RE	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•		
		150 s					NVK24A-MP-RE	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
		35 s					NVKC24A-MP-RE	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
1500 N	20 mm	150 s	•	•			24 V	SV24A-MP-RE	•		•	•	•	•	•	•	•	•	•	•	•				
		35 s					SVC24A-MP-RE	•		•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
2000 N	32 mm	150 s	•	•		-II-	24 V	SVL24A-MP-RE			•	•	•	•	•	•	•	•	•	•	•				
		24 V					AVK24A-MP-RE ³⁾			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
2500 N	50 mm	188 s	•	•			24 V	EV24A-MP-RE			•	•	•	•	•	•	•	•	•	•	•				
		44 s					EVC24A-MF-RE ⁴⁾			•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
4500 N	50 mm	150 s	•	•			24 V	RV24A-MF-RE ⁴⁾			•	•	•	•	•	•	•	•	•	•	•				

¹⁾For unknown versions or versions that are not listed in the catalogue, see Page 13 or on request
²⁾ Actuators with -II- = electrical emergency control function
³⁾ Actuators AVK.. with maximum stroke 32 mm
⁴⁾ Multifunctional, parameterisable, non-bus-capable actuators
⁵⁾ Use spacer ring ZRV-302 on valves VB8223 and VB9223

Continued next page

Ordering example:

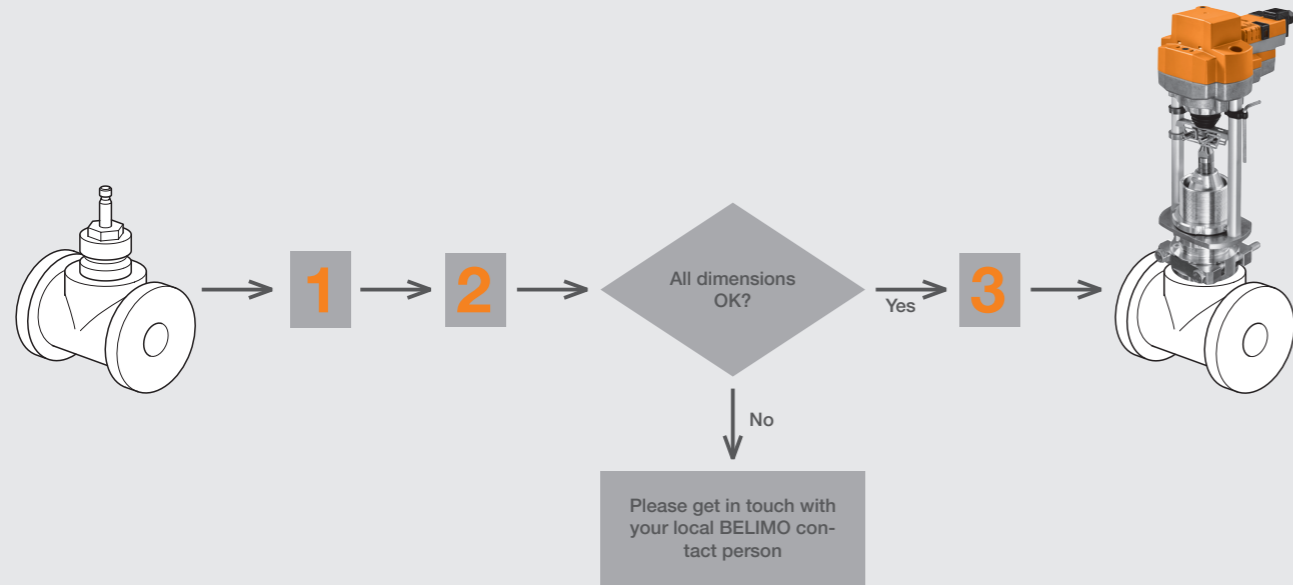
SVL230A-RE + ZRV-303

1) Actuator type
 2) Spacer ring type
 3) Attachment type
 4) Disk type

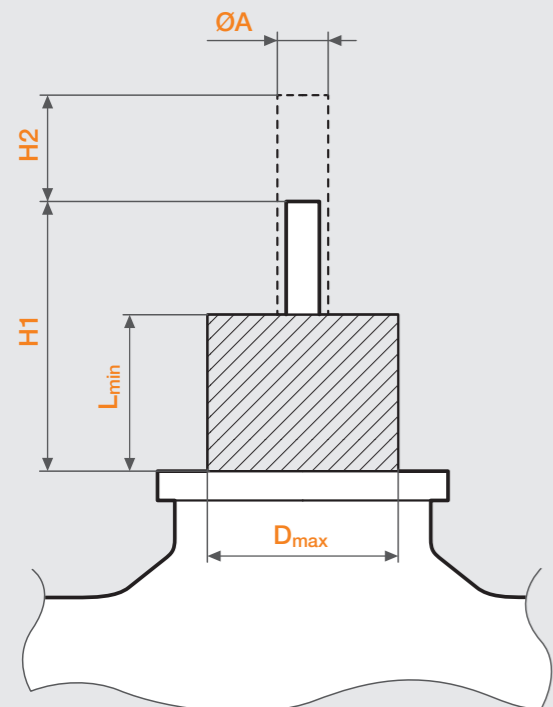
Suitable accessories from Page 15

Checklist for dimensions

Were you unable to find the third-party valve in the List of Manufacturers A–Z?
You can use the following process to determine the correct retrofit actuator in just a few simple steps.



1 Dimensions checklist



Tables for stems

C	M	M	
		M1 DN 15 – 50	M2 DN 65 – 150
		<input type="checkbox"/> M6	<input type="checkbox"/> M8
		<input type="checkbox"/> M8	<input type="checkbox"/> M8 x 1.0
		<input type="checkbox"/> M10	<input type="checkbox"/> M10
		<input type="checkbox"/> 1/4" 28 unf	<input type="checkbox"/> M12 x 1.25
		<input type="checkbox"/> 1/4" 32 unf	<input type="checkbox"/> M16 x 1.5
		<input type="checkbox"/> 3/8" 28 unf	<input type="checkbox"/> 1/4" 28 unf
			<input type="checkbox"/> 1/4" 32 unf
	<input type="checkbox"/> 3/8" 28 unf	<input type="checkbox"/> 7/16" 20 unf	
		<input type="checkbox"/> 1/2" 20 unf	

2 Checking dimensions and determining actuating force

DN 15 – 50

Actuator family	D _{max}	L _{min}	H1	H2	ØA	C	M	Actuating force	DN 15	DN 25	DN 32	DN 40	DN 50	DN 65	DN 80
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]									
NV.. / NVK..	≤ 45	≥ 15	≥ 42	5...20	5...12	> 2.5	See M1	1000 N	Recommended	Possible	Possible	Possible	Possible	Possible	Possible
SV..								1500 N	Possible	Recommended	Recommended	Recommended	Recommended	Recommended	Recommended
Values to be checked															

DN 65 – 150

Actuator family	D _{max}	L _{min}	H1	H2	ØA	C	M	Actuating force	DN 40	DN 50	DN 65	DN 80	DN 100	DN 125	DN 150
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]									
SVL..	≤ 60	≥ 30	≥ 59	5...50	6...16	> 3.5	See M2	1500 N	Possible	Possible	Recommended	Recommended	Recommended	Recommended	Recommended
AVK..				5...32				2000 N	Possible	Possible	Recommended	Recommended	Recommended	Recommended	Recommended
EV..				5...50				2500 N	Possible	Possible	Recommended	Recommended	Recommended	Recommended	Recommended
RV..								4500 N	Possible	Possible	Recommended	Recommended	Recommended	Recommended	Recommended
Values to be checked															

Recommended Possible

3 Actuator selection

Actuator family	Actuator type	Actuating force	Nominal stroke	Actuating time per nominal stroke	Open-close	3-point	Modulating (2...10 V)	Emergency control function ²	Nominal voltage AC/DC 24 V AC 230 V	
Standard actuators										
NV.. / NVK..	NV24A-RE	1000 N	20 mm	150 s	•	•			24 V	
	NV230A-RE								230 V	
SV..	SV24A-RE	1500 N	20 mm	150 s	•	•			24 V	
	SV230A-RE								230 V	
SVL..	SVL230A-RE		50 mm	150 s	•	•			230 V	
EV..	EV24A-RE	2500 N	50 mm	188 s	•	•			24 V	
	EV230A-RE								230 V	
Actuators with emergency control function										
NV.. / NVK..	NVK24A-3-RE	1000 N	20 mm	150 s	•			-H-	AC 24 V	
	NVK230A-3-RE								230 V	
AVK..	AVK24A-3-RE ³⁾	2000 N	32 mm	150 s	•			-H-	AC 24 V	
	AVK230A-3-RE ³⁾								230 V	
Parameterisable actuators										
NV.. / NVK..	NV24A-MP-RE	1000 N	20 mm	150 s					24 V	
	NVC24A-MP-RE			35 s					•	24 V
	NVK24A-MP-RE			150 s					-H-	24 V
	NVKC24A-MP-RE			35 s						
SV..	SV24A-MP-RE	1500 N	20 mm	150 s					24 V	
	SVC24A-MP-RE			35 s						
SVL..	SVL24A-MP-RE		50 mm	150 s	•				24 V	
AVK..	AVK24A-MP-RE ³⁾	2000 N	32 mm	150 s	•		-H-		24 V	
EV..	EV24A-MP-RE	2500 N	50 mm	188 s					24 V	
	EVC24A-MF-RE ⁴⁾			44 s						
RV..	RV24A-MF-RE ⁴⁾	4500 N	50 mm	150 s	•				24 V	

²⁾ Actuators with -H- = electrical emergency control function
³⁾ Actuators AVK.. with maximum stroke 32 mm

⁴⁾ Multifunctional, parameterisable, non-bus-capable actuators

Attachments, spacer rings and disks

	Sauter adapter	Suitable for actuator						Type
		AVK..A..	EV..A..	NV..A..	RV..A..	SV..A..	SVL..A..	
	Sauter adapter	•	•		•			ZRV-301
	Siebe distance ring	•	•		•			ZRV-302
	Johnson Control distance ring	•	•		•			ZRV-303
	Sauter disk	•	•		•			ZRV-304
	LDM distance ring				•		•	ZNV-203
	Sauter distance ring				•		•	ZNV-204

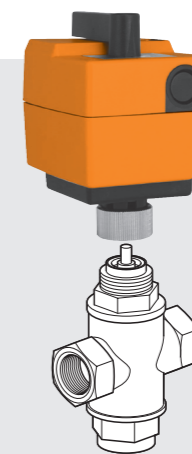
Auxiliary switch

	Add-on auxiliary switch 1mA...3 (0.5) A, AC 250 V Adjustable switching point 0...100%	Auxiliary switch SPDT	Suitable for actuator						Type
			AVK..A..	EV..A..	NV..A..	RV..A..	SV..A..	SVL..A..	
	Add-on auxiliary switch 1mA...3 (0.5) A, AC 250 V Adjustable switching point 0...100%	2	•	•	•	•	•	•	S2A-H

Manufacturers A-Z

Degree of protection IEC/EN IP40

Short-stroke retrofit actuators for easy motorisation of short stroke globe valves from various manufacturers.



Suitable actuators

Actuating force	Actuating time per nominal stroke	Open-close 3-point	Modulating (2...10 V)	Nominal voltage AC/DC 24 V AC 230 V	Valve manufacturer		
					Cazzaniga		
					DN range min/max	15 / 40	
					Valve series	V02BM.. LN	V03BM.. LN
					Actuator type		
Standard actuators							
500 N	140 s	•	•	AC 24 V	NRDVX24-3-T-CA	•	•
				230 V	NRDVX230-3-T-CA	•	•
				24 V	NRDVX24-SR-T-CA	•	•

Suitable actuators

Actuating force	Actuating time per nominal stroke	Open-close 3-point	Modulating (2...10 V)	Nominal voltage AC/DC 24 V AC 230 V	Valve manufacturer							
					Siemens							
					DN range min/max	15 / 40					20 / 40	
					Valve series	WVG44	WVI52	VXG44	VVP45	VXP45	VMP45	VXG48
					Actuator type							
Standard actuators												
500 N	140 s	•	•	AC 24 V	NRDVX24-3-T-SI	•	•	•	•	•	•	•
				230 V	NRDVX230-3-T-SI	•	•	•	•	•	•	•
				24 V	NRDVX24-SR-T-SI	•	•	•	•	•	•	•