

How to Select a Globe Valve Retrofit Solution

Follow the four steps listed below when ordering a globe valve retrofit kit for either UGLK or GVL series linkages.

Example: Siemens 658 series, 1¼" valve, needing **200 psi** close-off pressure and **Fail-Safe** actuation.

- Based on the **Valve Number, Configuration and Size**, select the proper linkage or linkages for your valve.
Some valves will have more than one linkage offered, use the actuator or combination pages to determine the appropriate linkage for a given application. In this example there is a **UGLK1214**, **UGLK1350** and a **UGVL** series linkage available.
- Use the selection guide and your close-off pressure requirement to select the correct actuator series for your application. Looking at the **UGLK1350** there are no fail-safe actuators that will achieve 200 psi close-off for 1¼" valve. Looking at the **UGLK1214** or **UGVL**, the **AF** or **SVK** Series actuator will provide over **200 psi close-off** for the 1¼" valve.
- Use the actuator listings to make your final actuator selection.

- HOW TO ORDER:

Option One:	
Item 1	1pc UGLK1214
Item 2	1pc AFB24-MFT

Option Two:	
Item 1	1pc UGVL + SVKX24-MFT



RETROFIT SOLUTIONS

1 Select linkage solution based on the **Valve Number, Configuration, and Size**; select the proper **Linkage Solution** for your valve.

Siemens\Landis\Powers 658 Series Valves Linkage/Actuator Selection Guide

Valve Body Model	Valve Configuration	Size	Fail-safe	Close-Off psi	Belimo Actuator Series	Belimo Linkage
658 Series	2-way	1¼"	No	78	LM	UGLK1350
				156	NM	UGLK1350
				236	SV	UGVL
			Yes	250	AM	UGLK1214
				61	LF	UGLK1350
				156	NF	UGLK1214
			236	SVK	UGVL	
			250	AF	UGLK1214	

Example: **Siemens Series #658**, **2-Way**, 1¼" valve to be retrofitted.

Choose correct kit **UGLK1214** or **UGVL**.

- Verify close-off is suitable for application. Looking at the **UGLK** or **UGVL**, the **AF** and **SVK** Series actuator will provide **200 psi close-off** for the 1¼" valve.

BASIC PRODUCTS

Model	Control Input	Feedback	Power Supply	Running Time(s)		VA Rating	Auxiliary Switch
				M	⊙		
AFB24	On/Off	-	24 VAC/DC	<75 seconds	20 secs	7.5	-
AFB24-S	On/Off	-	24 VAC/DC	<75 seconds	20 secs	7.5	Built-In
AFBUP	On/Off	-	24-240 VAC	<75 seconds	20 secs	8.5	-
AFBUP-S	On/Off	-	24-240 VAC	<75 seconds	20 secs	8.5	Built-In
AFB24-SR	2-10 VDC (4-20mA)	2-10 VDC	24 VAC/DC	95 seconds	<20 secs	8.5	-
AFB24-SR-S	2-10 VDC (4-20mA)	2-10 VDC	24 VAC/DC	95 seconds	<20 secs	8.5	Built-In
AFB24-PC	0-10 V Phasecut	2-10 VDC	24 VAC/DC	150 seconds	<20 secs	10	-
AFB24-MFT	2-10 VDC (4-20mA)	2-10 VDC	24 VAC/DC	150 seconds	<20 secs	10	-
AFB24-MFT-S	2-10 VDC (4-20mA)	2-10 VDC	24 VAC/DC	150 seconds	<20 secs	10	Built-In
AFB24-MFT95	0 to 135	2-10 VDC	24 VAC/DC	150 seconds	<20 secs	10	-

- Select actuator based on needed control type. Decide between **AFB24**, **AFB24-MFT**

or **SVKX24-3**, **SVKX24-MFT**.

- Complete Ordering Example
Option One:
Item 1: **UGLK1214**
Item 2: **AFB24-MFT**

- Complete Ordering Example
Option Two:
Item 1: **UGVL + SVKX24-MFT**

ACTUATOR PART #	LVKX24-3	LVKB24-SR	LVKX24-MFT	SVKX24-3	SVKB24-SR	SVKX24-MFT
Control type	On/Off, Floating Point	Proportional	Proportional/MFT	On/Off, Floating Point	Proportional	Proportional/MFT
Input signal / Feedback	-	2-10 VDC	Variable	-	2-10 VDC	Variable
Running time	150 seconds	150 seconds	150 seconds	150 seconds	150 seconds	150 seconds
Actuator travel	24mm	24mm	24mm	24mm	24mm	24mm
Actuator noise level	<45 dB(A)	<45 dB(A)	<45 dB(A)	<45 dB(A)	<45 dB(A)	<45 dB(A)
GVL LINKAGES						
UGVL	Universal Adjustable for 1/2" to 2"	\$	\$	\$	\$	\$
SGVL	Schnieder VB7... VB9...	\$	\$	\$	\$	\$

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UGVL, SGVL, FGVL, WGVL Series Linkages with Non-Spring Return Actuators

Retrofit Linkages for NPT and Flanged Globe Valves

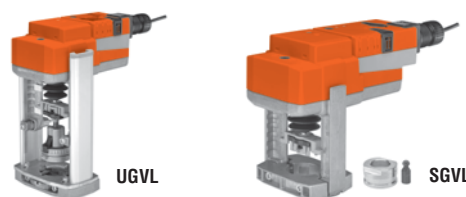


Actuator/Linkage Specifications

Force (valve size)	
LV	112 lbf [500N] (½" to ¾")
SV	337 lbf [1500N] (1" to 2")
EV	562 lbf [2500N] (2½" to 4")
RV	1011 lbf [4500N] (4" to 6")
Linkage material	aluminum and steel
Fits valve bonnet diameter	up to 1.7" [43.18 mm] UGVL up to 2.7" [68.5 mm] FGVL
Position indication	adjustable inserts on linkage
Manual override	4mm hex (wrench supplied) external push button
Direction of rotation	external switch
Dimensions	
UGVL	7.5" to 11.4" x 7.8" x 4.5"
SGVL	6" x 7.8" x 3.8"
FGVL	14" x 9.2" x 5.5"
WGVL	10" x 9.2" x 5.5"
Electrical connection	3 ft., 18 GA plenum rated cable, ½" conduit fitting
120V	appliance cable
Overload protection	electronic throughout stroke
Auxiliary switch(es)	add on: 2 SPDT, 3A @ 250V
Housing	NEMA 2/IP54, UL Enclosure Type 2
Agency listings	cULus according to UL 60730-1A/-2-14, CAN/CSA E60730-1:02, CE according to 2004/108/EC and 2006/95/EC



All actuators have BDCM
MFT



ACTUATOR PART #	LVB24-3	LVX120-3	LVB24-SR	LVX24-MFT	SVX24-3	SVX120-3	SVB24-SR	SVX24-MFT
Control type	On/Off, Floating Point	On/Off, Floating Point	Proportional	Proportional/MFT	On/Off, Floating Point	On/Off, Floating Point	Proportional	Proportional/MFT
Input signal / feedback	-	-	2-10 VDC*	Variable	-	-	2-10 VDC*	Variable
Running time	90 seconds	90 seconds	90 seconds	Variable	90 seconds	90 seconds	90 seconds	Variable
Actuator travel	15 mm	15 mm	15 mm	15 mm	20 mm***	20 mm	20 mm	20 mm
Actuator noise level	55 dB(A)	55 dB(A)	55 dB(A)	55 dB(A)	45 dB(A)	45 dB(A)	45 dB(A)	45 dB(A)

GVL LINKAGES

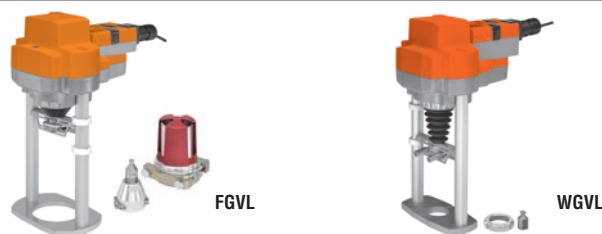
UGVL	Universal adjustable for ½" to 2"	\$609	\$634	\$663	\$725**	\$711	\$736	\$765	\$828**
SGVL	Schneider VB7000 (½" to 2"), VB9000 (½" to 1¼")	\$563	\$584	\$614	\$673**	\$634	\$705	\$691	\$750**

◆ Variable with MFT.

* 4-20 mA with 500 Ω resistor ZG-R01

**Prices do not reflect additional programming codes surcharge. See page 18-13 for linear actuator MFT codes.

*** Longer stroke available. Verify valve travel requirements. Contact Belimo Technical Support for details.



ACTUATOR PART #	EVB24-3	EVB120-3	EVB24-MFT	RVB24-3	RVB24-MFT
Control type	On/Off, Floating Point	On/Off, Floating Point	Proportional/MFT	On/Off, Floating Point	Proportional/MFT
Input signal / feedback	-	-	Variable	-	Variable
Running time	90 seconds	90 seconds	Variable	90 seconds	Variable
Actuator travel	50 mm	50 mm	50 mm	50 mm	50 mm
Actuator noise level	65 dB(A)	65 dB(A)	65 dB(A)	65 dB(A)	65 dB(A)

GVL LINKAGES

FGVL	Flanged valves adjustable for 2½" to 6"	\$1,496	\$1,581	\$1,556	\$1,685	\$1,759
WGVL	Warren Controls Type 20, 22, 30, 32	\$867	\$1,148	\$983**	\$972	\$1,087**

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Note: All "B" versions available as customizable "X" versions. Please see www.belimo.us for details.

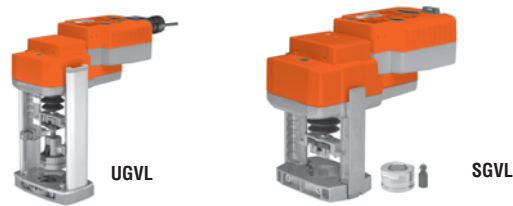
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Actuator/Linkage Specifications

Force (valve size)	
LVK	112 lbf [500N] (½" to ¾")
SVK	337 lbf [1500N] (1" to 2")
AVK	450 lbf [2000N] (2½" to 4")
Linkage material	aluminum and steel
Fits valve bonnet diameter	up to 1.7" [43.18 mm] UGVL up to 2.7" [68.5 mm] FGVL
Position indication	adjustable inserts on linkage
Manual override	4mm hex (wrench supplied) external push button
Fail position	field selectable
Direction of rotation	external switch
Dimensions	
UGVL	8" to 12" x 9.5" x 4.5"
SGVL	6.5" x 9.5" x 4.5"
FGVL	14" x 9.2" x 5.5"
WGPL	10" x 9.2" x 5.5"
Electrical connection	3 ft., 18 GA plenum rated cable, ½" conduit fitting
	120V appliance cable
Overload protection	electronic throughout stroke
Auxiliary switch(es)	add on: 2 SPDT, 3A @ 250V
Housing	NEMA 2/IP54, UL Enclosure Type 2
Agency listings	cULus according to UL 60730-1A/-2-14, CAN/CSA E60730-1:02, CE according to 2004/108/EC and 2006/95/EC



RETROFIT SOLUTIONS



ACTUATOR PART #	LVKX24-3	LVKX120-3	LVKB24-SR	LVKX24-MFT	SVKX24-3	SVKX120-3	SVKB24-SR	SVKX24-MFT
Control type	On/Off, Floating Point	On/Off, Floating Point	Proportional	Proportional/MFT	On/Off, Floating Point	On/Off, Floating Point	Proportional	Proportional/MFT
Input signal / feedback	-	-	2-10 VDC*	Variable	-	-	2-10 VDC*	Variable
Running time	Motor	90 seconds	90 seconds	90 seconds	90 seconds	90 seconds	90 seconds	90 seconds
	Fail-Safe	35 seconds	35 seconds	35 seconds	35 seconds	35 seconds	35 seconds	35 seconds
Actuator travel	15 mm	15 mm	15 mm	15 mm	20 mm***	20 mm	20 mm	20 mm
Actuator noise level	55 dB(A)	55 dB(A)	55 dB(A)	55 dB(A)	45 dB(A)	45 dB(A)	45 dB(A)	45 dB(A)

GVL LINKAGES

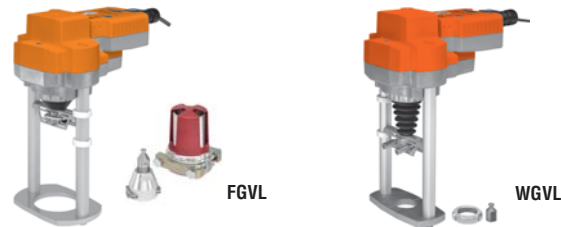
UGVL	Universal adjustable for ½" to 2"	\$867	\$893	\$913	\$983**	\$974	\$1,000	\$1,020	\$1,087**
SGVL	Schneider VB7000 (½" to 2"), VB9000 (½" to 1¼")	\$765	\$792	\$813	\$906**	\$842	\$867	\$895	\$957**

◆ Variable with MFT.

* 4-20 mA with 500 Ω resistor ZG-R01

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*** Longer stroke available. Verify valve travel requirements. Contact Belimo Technical Support for details.



ACTUATOR PART #	AVKB24-3	AVKB120-3	AVKB24-MFT
Control type	On/Off, Floating Point	On/Off, Floating Point	Proportional/MFT
Input signal / Feedback	-	-	Variable
Running time	Motor	90 seconds	90 seconds
	Fail-Safe	35 seconds	35 seconds
Actuator travel	32 mm	32 mm	32 mm
Actuator noise level	60 dB(A)	60 dB(A)	60 dB(A)

GVL LINKAGES

FGVL	Flanged valves adjustable for 2½" to 4"	\$1,881	\$1,755	\$1,963
WGPL	Warren Controls Type 20, 22, 30, 32	\$1,056	\$1,519	\$1,164**

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