

**SIEMENS**

*Ingenuity for life*



## Retrofit with Siemens

Our valves and damper actuators are easy on the budget and easy to install – the perfect solution for your next retrofit job.

[usa.siemens.com/hvac](http://usa.siemens.com/hvac)

# Siemens retrofit solutions give you the perfect solution for replacing Siemens and competitive actuators.

- Rely on Powermite valve actuators, your high-performing, lowest cost solution, to replace a Siemens Powermite valve actuator
- Retrofit Siemens Series 591 and 658 globe valve actuators and JCI, Honeywell, and Siebe globe valve actuators with Siemens universal ARK retrofit kits
- Replace a Griswold and Honeywell ball valve and PICV actuator with a Siemens ball valve actuator and bracket kit
- Select from the largest range of electronic actuation solutions to replace pneumatic actuators
- Take advantage of Siemens technical support and cross-reference tools
- Let our manufacturer warranty provide complete peace-of-mind. Our Product Guard Plus 3 warranty offers two years – plus an additional three years – of coverage on all of our valves and damper actuators.



# Universal ARK valve linkage kits save time

The Universal Globe Valve Retrofit Kits are engineered to provide a solid, reliable connection between a Flowrite 599 Series actuator and a Siemens, Honeywell, Johnson Controls, Siebe, or other valve. The valve kit adapts both the bonnet connection on the valve and the stem connection to the actuator without using complicated linkage arrangements that require painstaking adjustment during installation.

To accommodate different stroke lengths, the modulating valve actuators in the SQV, SAX, SKB, SKC, and SKD series employ an automatic calibration feature that will set the actuator's stroke to match that of the valve body (within the specific calibration range of the actuator). With one-touch calibration, installation is as easy as selecting the correct bonnet and stem adapters, bolting the assembly in place and initiating the automatic actuator calibration.

Repeatable, accurate valve positioning and 100:1 position resolution enables superior control over an HVAC system, which allows for more efficient operation. Greater control and efficiency translate into cost savings and improved occupant comfort.

- Outstanding precision
- High force with output forces up to 1,000 pounds
- Built-in manual override — no tools required
- Meets industry standards requirements
- Easy installation
- Greater control
- Maintenance-free



## Universal Valve Linkage Ordering Information

Brand Name	Valve Product Number	Kit Number
Siemens	658-XXXX and 339-XXXX	ARK10
	591-XXXX and 598-XXXX	ARK11
Honeywell	V3XXXX (2-1/2 inch and 3 inch)	ARK16
	V3XXXX (4 inch through 6 inch)	ARK18
	V501X (A, B, C, F, G, N) 1/2 inch through 3 inch	ARK17
	V501X (A, B, C) 4 inch through 6 inch	ARK21
Johnson Controls	VG2XXX	ARK12
	VG7XXX (1 inch through 2 inch)	ARK13
	VG7XXX (1/2 inch and 3/4 inch)	ARK19
Siebe	VB7XXX and VB9XXX (threaded and flanged)	ARK14

## Electronic Actuators — With or Without Advanced Electronic Features

Actuator Stroke	Stroke Calibration Range	Part Number
3/4 inch (20 mm)	SAX – 0.590" (15 mm) to 0.787" (20 mm)	SAX61.03U and SAX81.03U
	SKD – 0.236" (6 mm) to 0.787" (20 mm)	SKD60U, SKD62U, SKD62UA, SKD82.50U, SKD82.51U
	SKB – 0.236" (6 mm) to 0.787" (20 mm)	SKB62U, SKB62UA, SKB82.50U, SKB82.51U
1-1/2 inch (40 mm)	SKC – 0.472" (12 mm) to 1.575" (40 mm)	SKC62U, SKC62UA, SKC82.60U, SKC82.61U
3/4 inch (20 mm) to 1 1/2 inch (40 mm)	SQV- 0.315" (8 mm) to 1.929" (49 mm)	SQV91030U, SQV01P40U

# Reliable retrofit solutions

Since time is money, we're making your next retrofit job easier with a selection of proven, cost-effective performers. Trust only Siemens valves and actuators for long-lasting reliability.

## Replace Powermite with... the original and less-expensive Powermite

Other competitors offer more expensive replacement actuator kits for Powermite MZ/MT valve actuators. Why pay more? Replace Siemens with Siemens.

Whether you are upgrading from pneumatic to electric control, or just replacing an electronic actuator, the high-performing and compact Powermite SAS, SSC and SSB actuators are perfect for the job. In nearly every competitive retrofit kit analyzed by Siemens, the competitor's actuator was larger, more expensive, and couldn't perform at the same high close off range of a Siemens actuator. Powermite valve assemblies have been rigorously field tested. This leaves no question that your next replacement Powermite valve actuator comes from the original manufacturer – Siemens.

Description	Part Number
Fail-in-place, 0-10V, MZ Series	SSB61U
Fail-in-place, Floating, MZ Series	SSB81U
Fail-in-place, 0-10V, MT Series	SSC61U, SAS61.03U
Fail Safe, 0-10V, MT Series	SSC61.5U, SAS61.33U
Fail-in-place, Floating, MT Series	SSC81U, SAS81.03U
Fail Safe, Floating, MT Series	SSC81.5U, SAS81.33U

## Retrofit Griswold or Honeywell ball valves and PICVs with Siemens actuators

Replace your failed ball valve or PICV actuators from Griswold or Honeywell's VBN and VRN series with the Siemens standard ball valve bracket 599-10078 or low profile ball valve bracket 599-10088 and the appropriate GDE, GLB, GMA or GQD OpenAir™ actuators.

The Siemens ball valve bracket is a direct replacement for the Griswold and Honeywell ball valve and PICV bracket with no additional adapters required.

This makes the ball or PICV valve actuator replacement easy; simply remove the old bracket and actuator and replace directly with the 599-10078 bracket or 599-10088 low profile ball valve bracket and appropriate OpenAir actuator solution.

Description	Part Number
Siemens Ball Valve Bracket	599-10078
Siemens Low Profile Ball Valve Bracket	599-10088



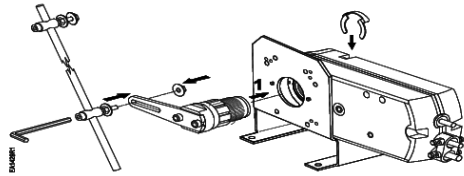
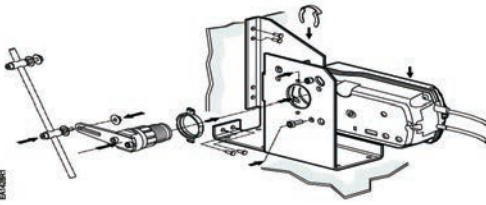
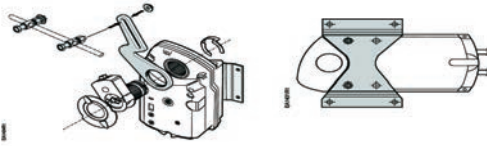
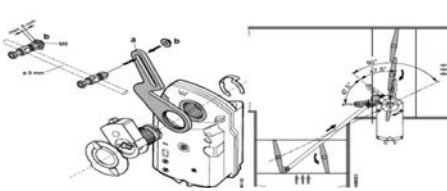
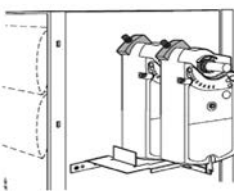
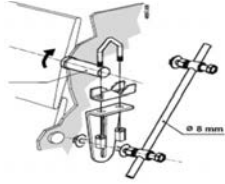

## Need a customized quote?








Your Siemens territory manager can help you win more bids with competitive pricing and exclusive Siemens solutions such as FREE valve and actuator tagging for job sites.











## Damper Actuator Linkages for Retrofit

Solve your most difficult retrofit needs with a smaller footprint actuator that makes installation into tight spaces easier. Replace a variety of competitor products for direct-coupled or indirect-mounted applications.

Retrofit Solutions: Universal Mounting and Crankarm Adapter Kits	Description	Part Number
	<p>The <b>ASK71.1U Foot Mount Kit</b> with the GCA actuator series is provided with hole patterns used to replace the Honeywell™ foot mount Mod motor series . Kit includes everything you need for this replacement except damper rod. This kit is also compatible with the GBB and GIB actuator series.</p>	<p><b>ASK71.1U</b></p>
	<p>The <b>ASK71.11 Universal Mounting Kit</b> attaches a GMA or GEB actuator to the floor or frame of the damper. This universal foot and frame mount kit allows for easy retrofit to common foot mounted crank arm style actuators. Kit includes everything you need for installation except the damper rod.</p>	<p><b>ASK71.11</b></p>
	<p>The <b>ASK71.4 and the ASK71.14 Mounting Kits</b> allow rigid mounting of GCA/GBB/GIB actuators or GMA/GEB actuators respectively to rigid surfaces where space is a constraint and a linear stroke is required. The damper push rod is not included.</p>	<p><b>ASK71.4</b> <b>ASK71.14</b></p>
	<p>The <b>ASK71.3 and the ASK71.13 Mounting Kits</b> allow direct mounting of GCA/GBB/GIB actuators or GMA/GEB actuators respectively and also drive adjacent dampers with the crank arm assembly mounted under the self-centering shaft coupling. Damper push rod is not included.</p>	<p><b>ASK71.3</b> <b>ASK71.13</b></p>
	<p>The <b>ASK73.1</b> mounts dual GIB actuators and GCA 2-position, floating or GCA15 series actuators. The <b>ASK73.2U</b> mounts dual GCA16 (standard 0-10Vdc modulating actuators) . Both <b>tandem mounting brackets</b> are designed for use when the application requires high torque and units are mounted on the same side of the damper shaft.</p>	<p><b>ASK73.1</b> <b>ASK73.2U</b></p>
	<p>The <b>ASK71.9 Universal Crank Arm</b> is designed for linear applications requiring connection to the damper shaft when ball joint connection is not possible. The damper push rod is not included.</p>	<p><b>ASK71.9</b></p>
	<p>The 985-124 is a <b>500 ohm Resistor Kit</b> designed to convert a 4-20mA signal to a 2-10Vdc signal.</p>	<p><b>985-124</b></p>

Retrofit Solutions: Universal Mounting and Crankarm Adapter Kits	Description	Part Number
	<p>The <b>ASK71.5 Rotary to Linear Conversion Kit</b> is compatible with the Siemens GDE and GLB actuators.</p>	<p><b>ASK71.5</b></p>
	<p>The <b>ASK71.6 Rotary to Linear Kit with Universal Mounting Bracket</b> is a retrofit solution compatible with the Siemens GDE and GLB damper actuators.</p>	<p><b>ASK71.6</b></p>
	<p>The <b>Frame Mount Kit</b> is used for direct mounting to damper frame. This kit includes a crank arm to generate a linear stroke, a Teflon support-bearing ring to minimize side loading on the actuator's output bearings, and other mounting fasteners. This kit can be used with the Siemens GCA, GIB and GBB actuators.</p>	<p><b>ASK71.2U</b></p>
	<p>The various <b>Damper Push Rods</b> (5/16" (8mm) diameter) can be used with all of the various Siemens actuators that are offered. <i>Note: for each actuator type, please ensure the correct crank arm or conversion kit is used.</i></p>	<p><b>Combined Foot/Frame Mount Kit</b> is to be used with the GEB and GMA actuators.</p> <p><b>ASK71.11</b></p>
	<p>The <b>Anti-rotation Brackets</b> are to be mounted with each damper actuator to lock them in place during installation. The following Anti-rotation Brackets are available for use with these actuators:</p>	<p>– 12" (30 cm) Length <b>338-041</b>          – 15" (38 cm) Length <b>338-042</b>          – 18" (46 cm) Length <b>338-043</b>          – 24" (61 cm) Length <b>338-044</b>          – 36" (91 cm) Length <b>338-045</b>          – 48" (122 cm) Length <b>338-046</b></p>
	<p>The <b>Standard Shaft Adapter</b> is a replacement for the standard self-centering shaft adapter that is compatible with the following actuators.</p>	<p><b>Anti-rotation Bracket for GDE/GLB actuators – Pkg. of 24</b> <b>985-055P24</b>  <b>Mounting Screws for Anti-rotation Bracket used on GDE/GLB actuators – Pkg. of 48</b> <b>985-053P48</b>  <b>Anti-rotation Bracket for GCA, GIB and GBB actuators</b> <b>985-006</b>  <b>Anti-rotation Bracket for GEB and GMA actuators</b> <b>985-092</b></p>
	<p>The <b>Standard Shaft Adapter</b> is a replacement for the standard self-centering shaft adapter that is compatible with the following actuators.</p> <p>– up to 1" (25mm) diameter for GCA, GIB and GBB actuators <b>985-004</b>          – up to 3/4" (20 mm) diameter for GEB and GMA actuators <b>985-093</b></p> <p>The <b>Over-sized Shaft Adapter</b> accepts shaft sized up to 1.05" (27 mm) diameter and can be used on GCA, GIB and GBB actuators. <i>Note: when used with a GIB, this adapter accepts shaft diameters from 3/4" to 1-1/20" (19 to 27mm).</i></p>	<p><b>ASK74.1U</b></p>

Retrofit Solutions: Universal Mounting and Crankarm Adapter Kits	Description	Part Number
	<p><b>5/8 to 3/4" (10 mm to 19 mm) Actuator Shaft Insert</b> is to be used with a GIB actuator and the Over-sized Shaft Adapter, ASK74.1U. – Pkg. of 20</p>	<p><b>985-052P20</b></p>
	<p><b>3/8" (8-10 mm) Actuator Shaft Insert</b> is compatible with the GDE and GLB actuators. – Pkg. of 10</p>	<p><b>ASK78.3U</b></p>
	<p><b>NEMA 4X Rated Weathershield</b> can be used on all the actuators offered at Siemens and includes the full enclosure assembly, the NEMA 4X cover, 3 anti-rotation brackets that accommodate all control actuator types, and all the screws and standoffs needed to mount this kit to the equipment.</p>	<p><b>ASK75.7U</b></p>
	<p>The <b>NEMA 3R Rated Weathershield</b> includes a cover, base plate with factory installed gasketing, 15TEK self-drilling screws, and anti-rotation (mounting) bracket. Knockouts for connection of 1/2" conduit also included.</p>	<p>– for GEB and GMA actuators – for GCA, GIB and GBB actuators</p>
	<p>The <b>NEMA 3R Rated Heater and Weathershield</b> includes the weathershield listed above and heater assembly for operation in temps as low as -58°F.</p>	<p>– for GEB and GMA actuators – for GCA, GIB and GBB actuators</p>
	<p>This kit is a replacement <b>Heater Assembly</b>.</p>	<p>– for GEB and GMA actuators – for GCA, GIB and GBB actuators</p>
	<p>The <b>External Auxiliary Switch Kit</b> includes a dual switch package rated to 250 Vac, mounting screws and adapter rings. Mounts to the actuator, not the damper shaft and is compatible with the GEB, GMA, GCA, GIB and GBB damper actuators.</p>	<p><b>ASC77.2U</b></p>
	<p><b>Universal Indirect Mounting Kit</b> is a flow or frame mount for use with the GQD actuators series.</p>	<p><b>ASK80.1</b></p>

# Simplify installation with OpenAir™ damper actuators

## Damper Actuator Cross Reference Wiring Diagrams

Replace failed or end of life damper actuators easily with Siemens OpenAir™ damper actuators. Siemens offers a full range of indirect mounting kits, as the examples at left show. Wiring cross reference tables shown below (displaying wire color and number) are available in all Siemens OpenAir damper actuator installation instruction documents. Go online to [www.usa.siemens.com/damperactuatorwiringxref](http://www.usa.siemens.com/damperactuatorwiringxref) to download the complete Damper Actuator wiring cross reference guide.

Modulating Control (0 to 10 Vdc)	Siemens GCA Series		Belimo AFB Series		Honeywell MS7520 Series		Johnson M9220 Series	
	Color	Number	Color	Number	Color	Number	Color	Number
Supply 24V	Red	1	Red	2	Red	1	Red	2
Common	Black	2	Black	1	Black	2	Black	1
0(2) to 10 Vdc Input	Gray	8	White	3	White	3	Gray	3
0(2) to 10 Vdc Feedback	Pink	9	Orange	5	Brown	5	Orange	4

Floating Control	Siemens GDE Series GLB Series		Belimo LMB Series NMB Series		Honeywell MN6105 Series MN6110 Series*		Johnson M9104 Series M9109 Series*	
	Color	Number	Color	Number	Color	Number	Color	Number
Common	Red	1	Black	1	Black	2	Black	1
24V CW	Violet	6	Red	2	Red	3	Red	2
24V CCW	Orange	7	White	3	White	4	Orange	3

\* **Note:** MN6110 Series and M9109 Series is not available precabled.

Modulating Control (2 to 10 Vdc)	Siemens GQD Series		Belimo TF Series		Honeywell MS7503 Series		Johnson M9203 Series	
	Color	Number	Color	Number	Terminal Only	Number	Color	Number
Supply 24V	Red	1	Red	2	—	1	Red	2
Common	Black	2	Black	1	—	2	Black	1
2 to 10 Vdc Input	Gray	8	White	3	—	3	Gray	3
2 to 10 Vdc Feedback	Pink	9	Orange	5	—	5	Orange	4

2-Position Control (24 Vac/Vdc)	Siemens GMA Series		Belimo NF Series		Honeywell MS8105 Series		Johnson M9208 Series	
	Color	Number	Color	Number	Color	Number	Color	Number
Supply 24V	Red	1	Red	2	Red	1	Red	2
Common	Black	2	Black	1	Black	2	Black	1



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