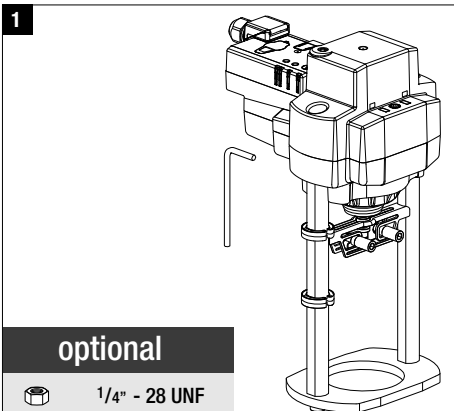
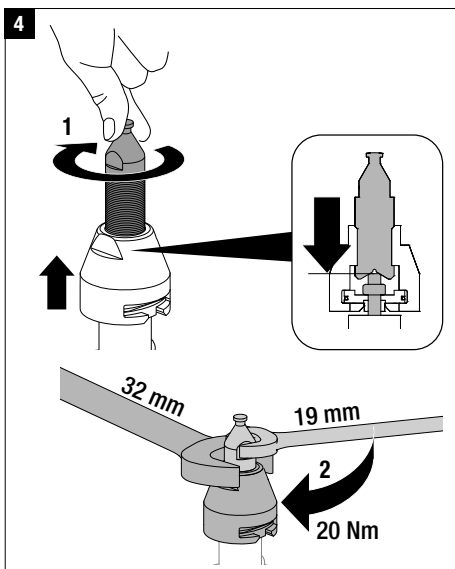
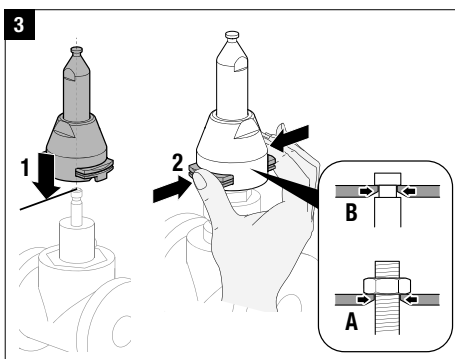
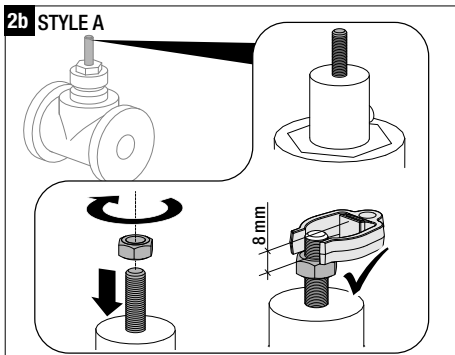
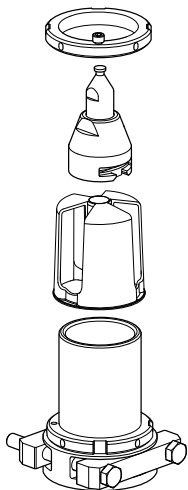
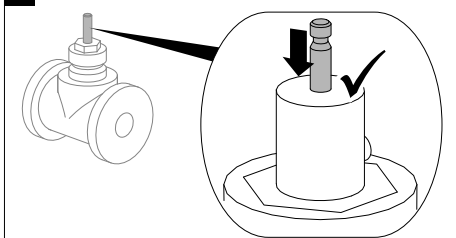


QUICK MOUNT VISUAL INSTRUCTION MANUAL

FGVL Linkage with EV Series Actuators

**optional**

	1/4" - 28 UNF
	1/4"- 32 UNEF
	3/8"- 24 UNF
	7/16" - 20 UNF
	1/2" - 20 UNF
	M8 x 1.25
	M8 x 1
	M10
	M12 x 1.25
	M16 x 2
	M16 x 1.5

**2a STYLE B**

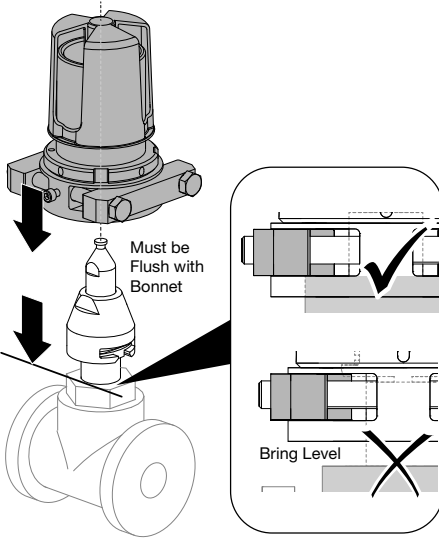
View the installation video for FGVL on Belimo's YouTube channel:

<https://youtu.be/fqs8XfRPyQw>

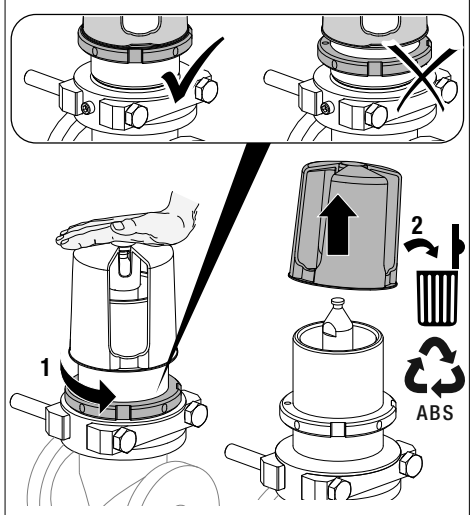
QUICK MOUNT VISUAL INSTRUCTION MANUAL

FGVL Linkage with EV Series Actuators

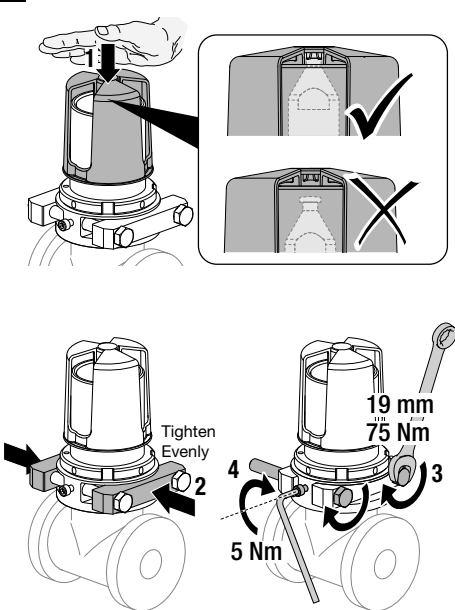
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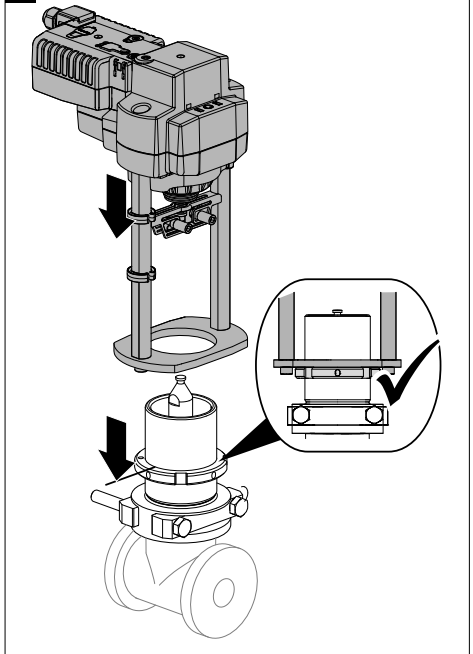
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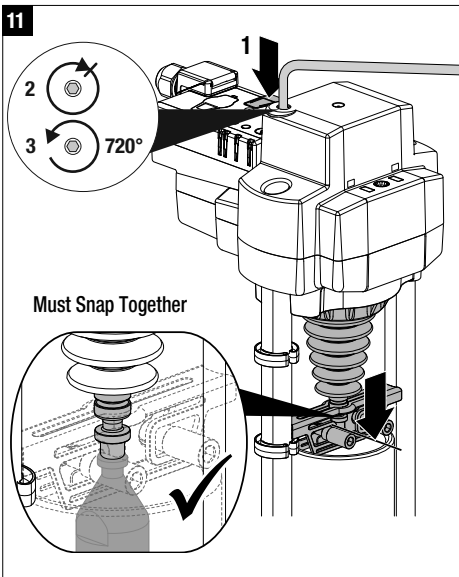
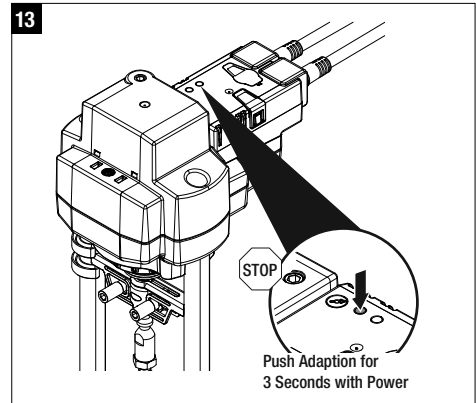
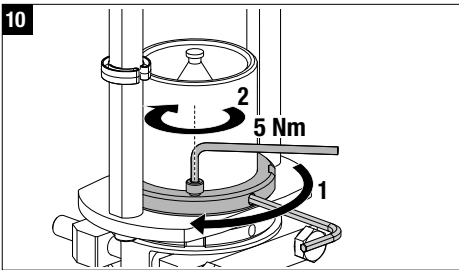
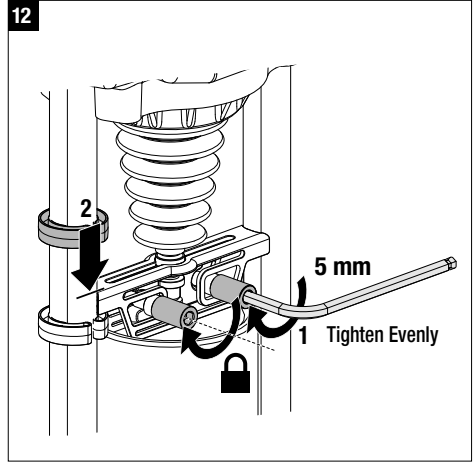
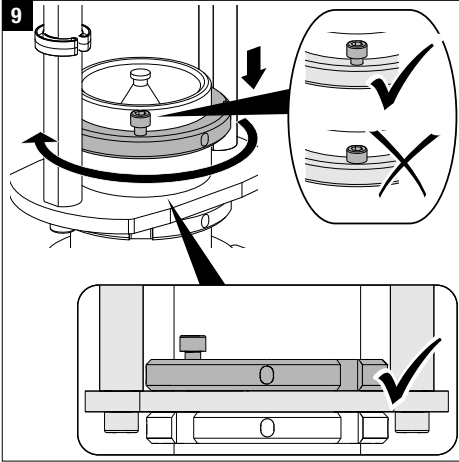


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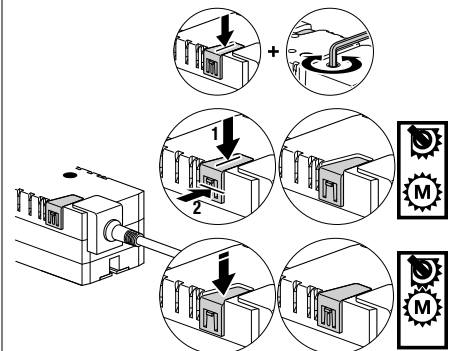


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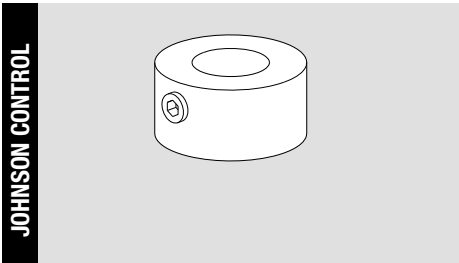
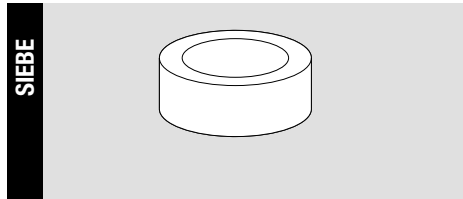


Optional Lock and Manual Override



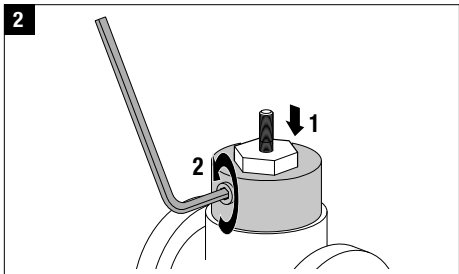
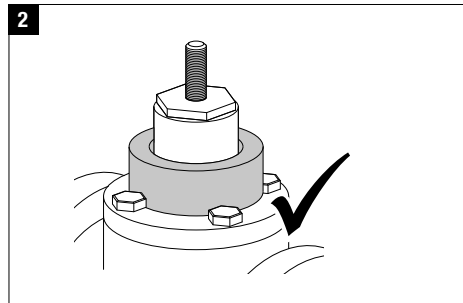
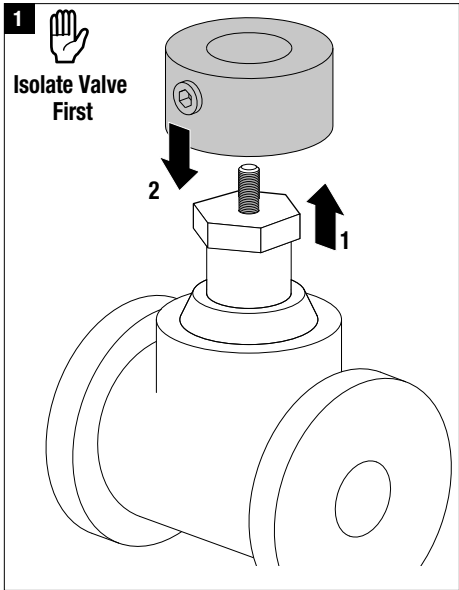
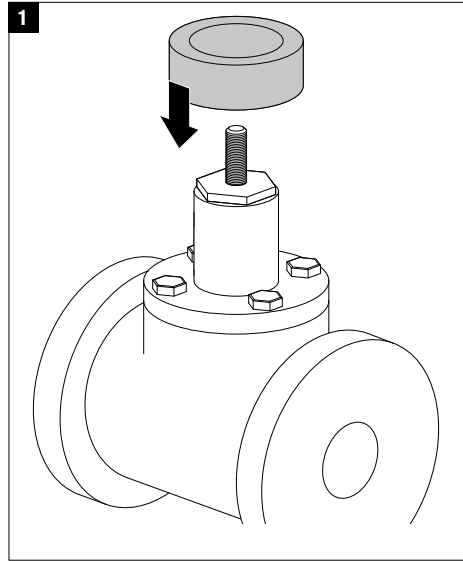
FGVL Linkage with EV Series Actuators

Optional



SIEBE	DN min. / max.	Temp.
VB9	65 / 300	2 ... 150 °C

JOHNSON CONTROLS	DN min. / max.	Temp.
VG2231 VN	65 / 100	2 ... 150 °C
VG2231 WN	65 / 150	2 ... 150 °C



WIRING DIAGRAMS

Non-Spring Return Actuator with -3

On/Off

On/Off

Triac Sink

Non-Spring Return Actuator with -SR

On/Off

On/Off

Triac Source

Non-Spring Return Actuator with MFT

On/Off

On/Off

Triac Sink

Notes:

- Meets cULus requirements without the need of an electrical ground connection
- Actuators with appliance cables are numbered.
- Actuators may be connected in parallel. Power consumption and input impedance must be observed.
- Actuators may also be powered by 24 VDC.
- Only connect common to neg. (-) leg of control circuits.
- A 500 Ω resistor converts the 4 to 20 mA control signal to 2 to 10 VDC.
- Control signal may be pulsed from either the Hot (Source) or Common (Sink) 24 VAC line.
- Contact closures A & B also can be triacs. A & B should both be closed for the triac source and open for triac sink.
- For triac sink the Common connection from the actuator must be connected to the Hot connection of the controller. Position feedback cannot be used with a triac sink controller. The actuator internal common reference is not compatible.
- IN4004 or IN4007 diode. (IN4007 supplied, Belimo Part number 40155)
- Actuators with plenum rated cable do not have numbers on wires; use color codes instead.

Signal Direction

Selector Switches

24 VAC Transformer

On/Off

On/Off

Triac Sink

24 VAC Transformer

On/Off

On/Off

Triac Sink

24 VAC Transformer

On/Off

On/Off

Triac Sink

24 VAC Transformer

On/Off

On/Off

Triac Sink

24 VAC Transformer

On/Off

On/Off

Triac Sink

24 VAC Transformer

On/Off

On/Off

Triac Sink

24 VAC Transformer

On/Off

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Triac Sink

24 VAC Transformer

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24 VAC Transformer

On/Off

On/Off

Triac Sink

24 VAC Transformer

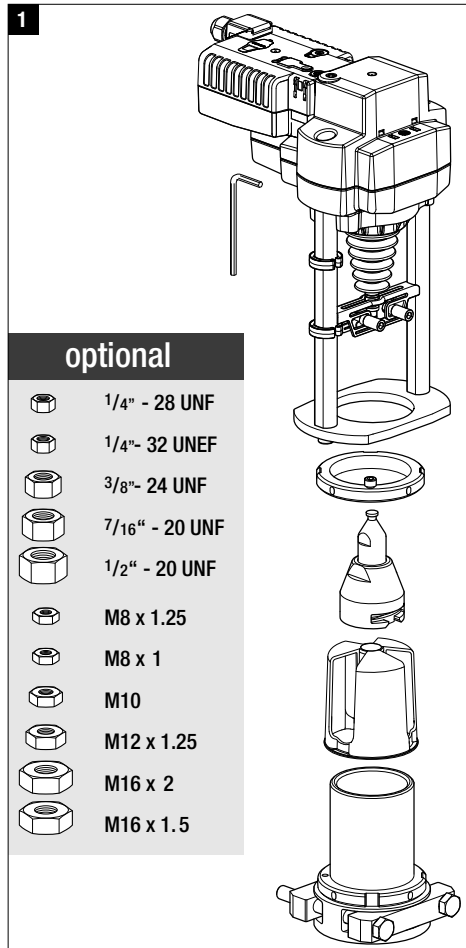
On/Off

On/Off

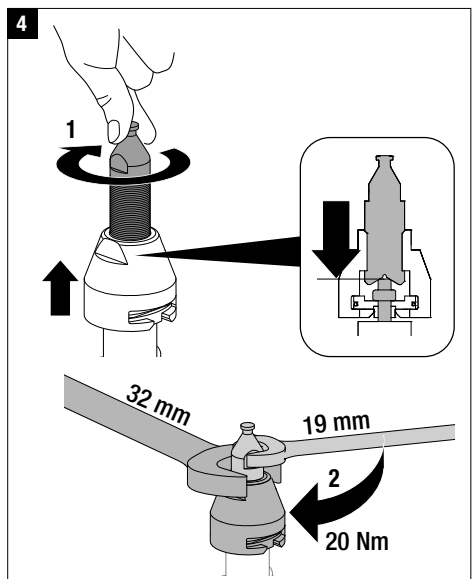
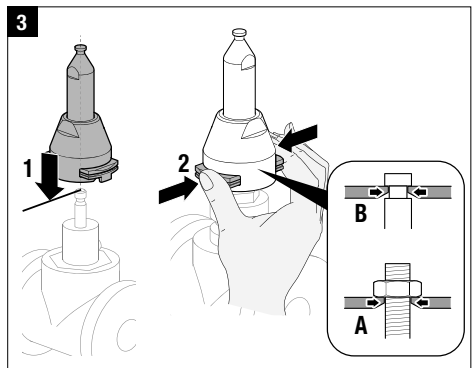
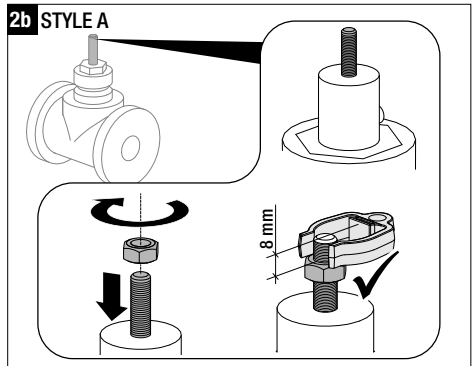
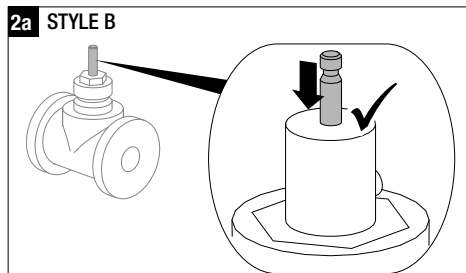
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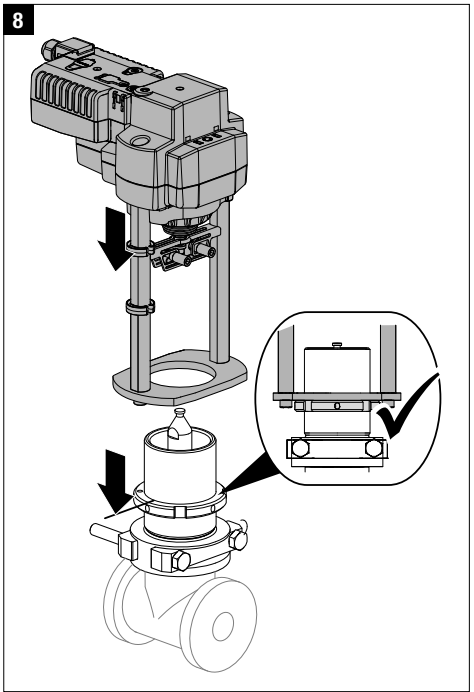
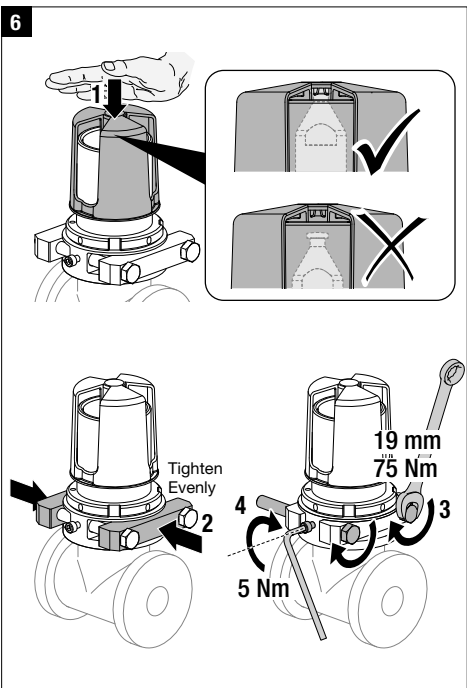
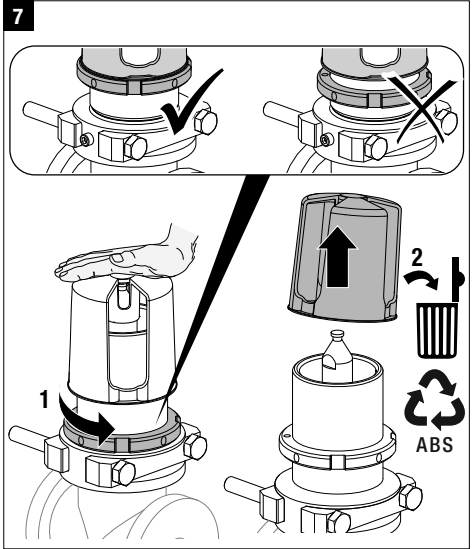
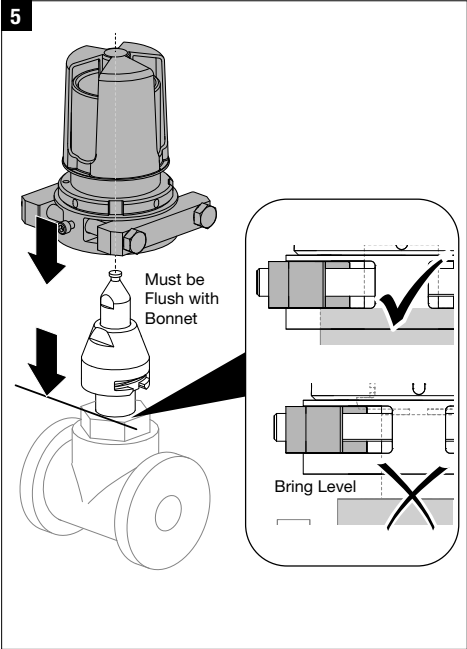
24 VAC Transformer

FGVL Linkage with AVK Series Actuators

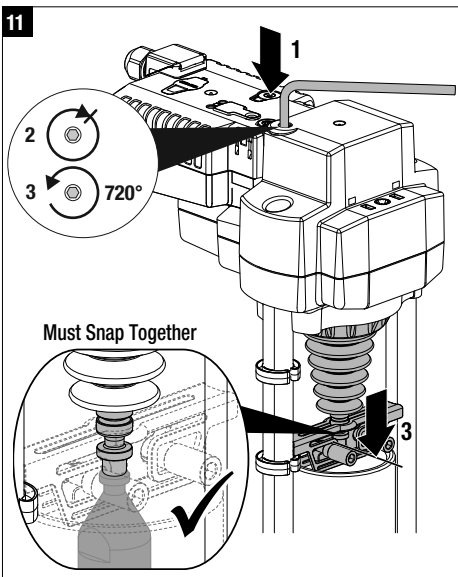
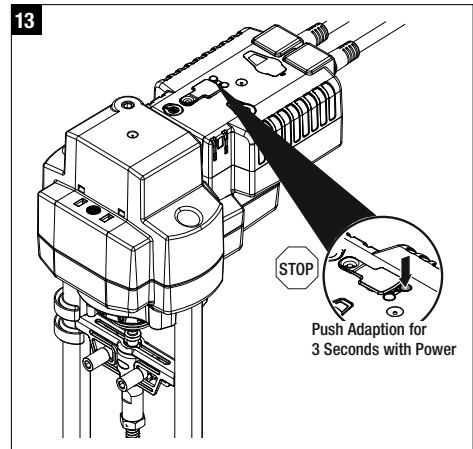
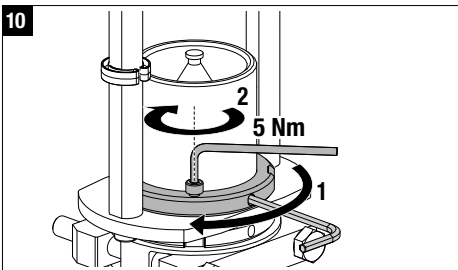
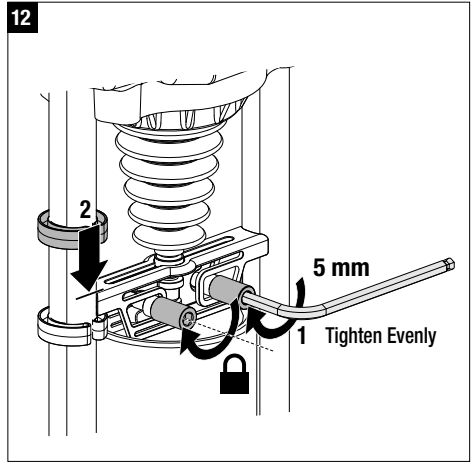
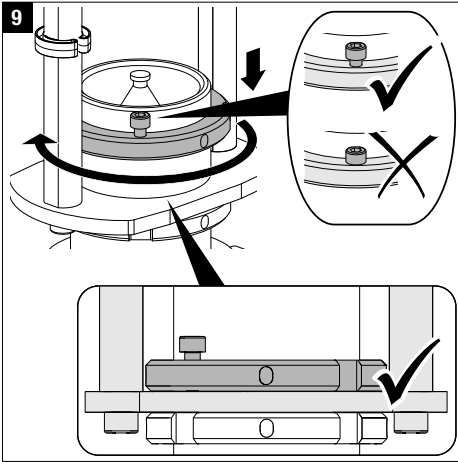


Optional	Siebe	VB9..	page 4
	Johnson Controls	VG2231 VN, VG2231 WN	page 4

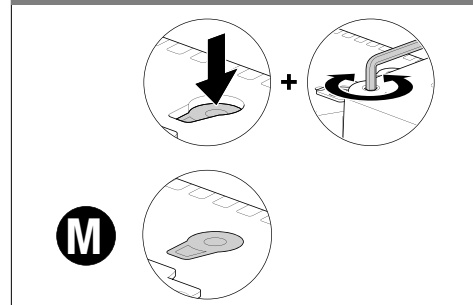


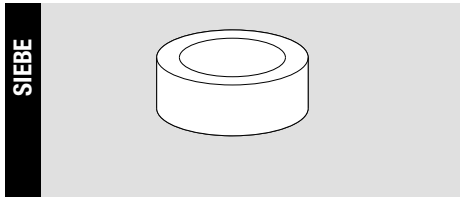


FGVL Linkage with AVK Series Actuators

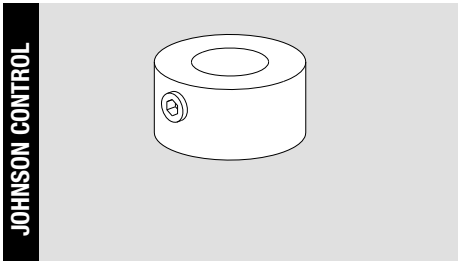
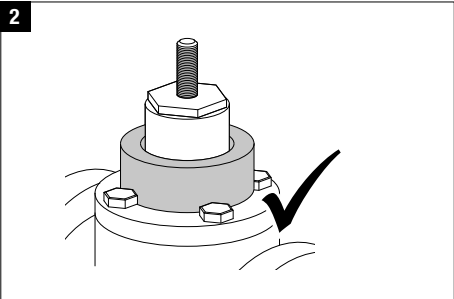
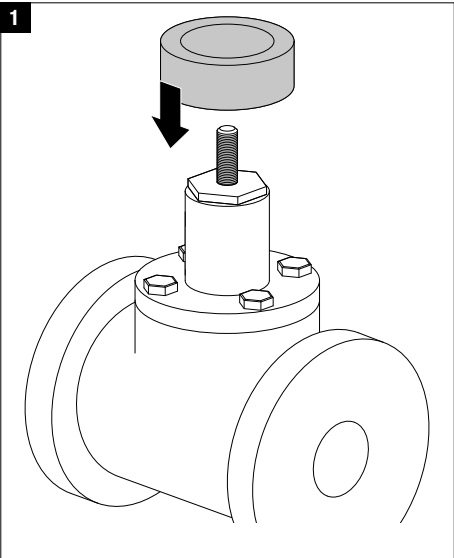


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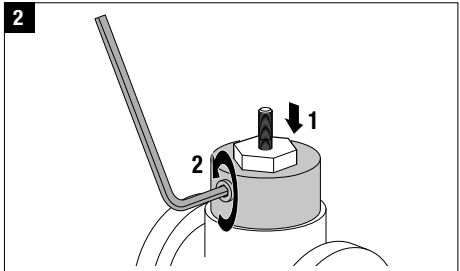
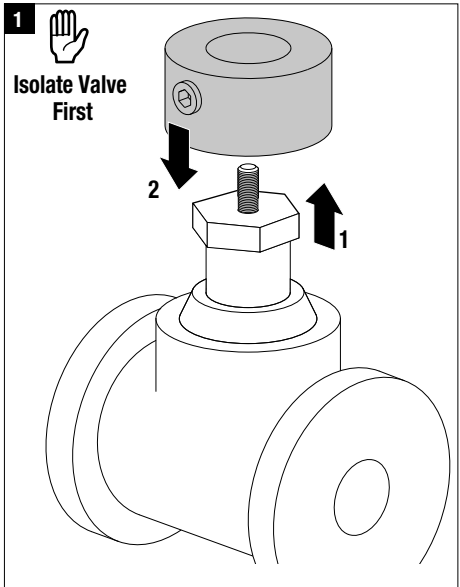




SIEBE	DN min. / max.	Temp.
VB9	65 / 300	2 ... 150 °C



JOHNSON CONTROLS	DN min. / max.	Temp.
VG2231 VN	65 / 100	2 ... 150 °C
VG2231 WN	65 / 150	2 ... 150 °C



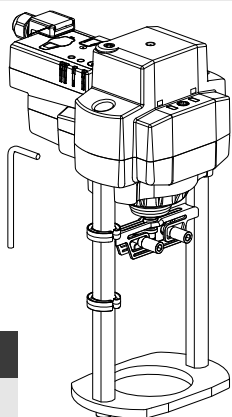
QUICK MOUNT VISUAL INSTRUCTION MANUAL

FGVL Linkage with AVK Series Actuators

WIRING DIAGRAMS

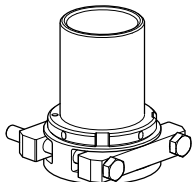
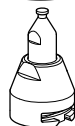
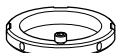
Electronic Fail-Safe Actuator with -3			Electronic Fail-Safe Actuator with MFT			Notes:	Color Codes
On/Off	Floating Point	On/Off	Floating Point	Notes: - Meets cULus requirements without the need of an electrical ground connection - Actuators with appliance cables are numbered. - Actuators may be connected in parallel. Power consumption and input impedance must be observed. - Actuators may also be powered by 24 VDC. - Only connect common to neg. (-) leg of control circuits. - A 500 Ω resistor converts the 4 to 20 mA control signal to 2 to 10 VDC. - Control signal may be pulsed from either the Hot (Source) or Common (Sink) 24 VAC line. - Contact closures A & B also can be triacs. A & B should both be closed for the triac source and open for triac sink. - For triac sink the Common connection from the actuator must be connected to the Hot connection of the controller. Position feedback cannot be used with a triac sink controller. The actuator internal common reference is not compatible. - IN4004 or IN4007 diode. (IN4007 supplied, Belimo Part number 40155) - Actuators with plenum rated cable do not have numbers on wires; use color codes instead.	Color Codes BRN Brown, Marron BLU Blue, Azul ORG Orange, Anaranjado PNK Pink, Rosado WHT White, Blanco RED Red, Rojo BLK Black, Negro PRB Purple, Púrpura		
Triac Sink	Triac Source	Triac Sink with Separate Transformer	Triac Sink with Separate Transformer	Notes: - Meets cULus requirements without the need of an electrical ground connection - Actuators with appliance cables are numbered. - Actuators may be connected in parallel. Power consumption and input impedance must be observed. - Actuators may also be powered by 24 VDC. - Only connect common to neg. (-) leg of control circuits. - A 500 Ω resistor converts the 4 to 20 mA control signal to 2 to 10 VDC. - Control signal may be pulsed from either the Hot (Source) or Common (Sink) 24 VAC line. - Contact closures A & B also can be triacs. A & B should both be closed for the triac source and open for triac sink. - For triac sink the Common connection from the actuator must be connected to the Hot connection of the controller. Position feedback cannot be used with a triac sink controller. The actuator internal common reference is not compatible. - IN4004 or IN4007 diode. (IN4007 supplied, Belimo Part number 40155) - Actuators with plenum rated cable do not have numbers on wires; use color codes instead.	Color Codes BRN Brown, Marron BLU Blue, Azul ORG Orange, Anaranjado PNK Pink, Rosado WHT White, Blanco RED Red, Rojo BLK Black, Negro PRB Purple, Púrpura		
VDC / 4 to 20 mA	VDC / 4 to 20 mA	VDC / 4 to 20 mA	VDC / 4 to 20 mA	Notes: - Meets cULus requirements without the need of an electrical ground connection - Actuators with appliance cables are numbered. - Actuators may be connected in parallel. Power consumption and input impedance must be observed. - Actuators may also be powered by 24 VDC. - Only connect common to neg. (-) leg of control circuits. - A 500 Ω resistor converts the 4 to 20 mA control signal to 2 to 10 VDC. - Control signal may be pulsed from either the Hot (Source) or Common (Sink) 24 VAC line. - Contact closures A & B also can be triacs. A & B should both be closed for the triac source and open for triac sink. - For triac sink the Common connection from the actuator must be connected to the Hot connection of the controller. Position feedback cannot be used with a triac sink controller. The actuator internal common reference is not compatible. - IN4004 or IN4007 diode. (IN4007 supplied, Belimo Part number 40155) - Actuators with plenum rated cable do not have numbers on wires; use color codes instead.	Color Codes BRN Brown, Marron BLU Blue, Azul ORG Orange, Anaranjado PNK Pink, Rosado WHT White, Blanco RED Red, Rojo BLK Black, Negro PRB Purple, Púrpura		
Override Control Min, Mid, Max Positions	Override Control Min, Mid, Max Positions	Override Control Min, Mid, Max Positions	Override Control Min, Mid, Max Positions	Notes: - Meets cULus requirements without the need of an electrical ground connection - Actuators with appliance cables are numbered. - Actuators may be connected in parallel. Power consumption and input impedance must be observed. - Actuators may also be powered by 24 VDC. - Only connect common to neg. (-) leg of control circuits. - A 500 Ω resistor converts the 4 to 20 mA control signal to 2 to 10 VDC. - Control signal may be pulsed from either the Hot (Source) or Common (Sink) 24 VAC line. - Contact closures A & B also can be triacs. A & B should both be closed for the triac source and open for triac sink. - For triac sink the Common connection from the actuator must be connected to the Hot connection of the controller. Position feedback cannot be used with a triac sink controller. The actuator internal common reference is not compatible. - IN4004 or IN4007 diode. (IN4007 supplied, Belimo Part number 40155) - Actuators with plenum rated cable do not have numbers on wires; use color codes instead.	Color Codes BRN Brown, Marron BLU Blue, Azul ORG Orange, Anaranjado PNK Pink, Rosado WHT White, Blanco RED Red, Rojo BLK Black, Negro PRB Purple, Púrpura		

1

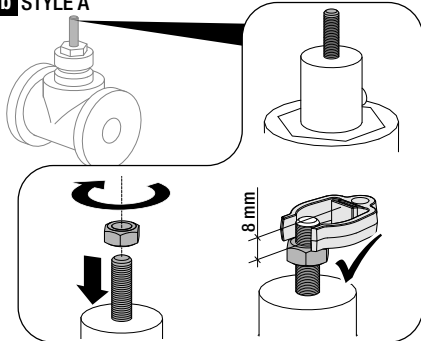


optional

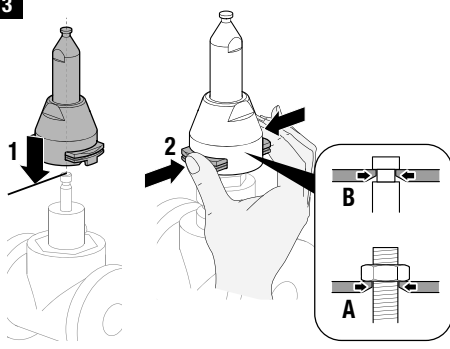
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-  1/4"- 32 UNEF
-  3/8"- 24 UNF
-  7/16" - 20 UNF
-  1/2" - 20 UNF
-  M8 x 1.25
-  M8 x 1
-  M10
-  M12 x 1.25
-  M16 x 2
-  M16 x 1.5



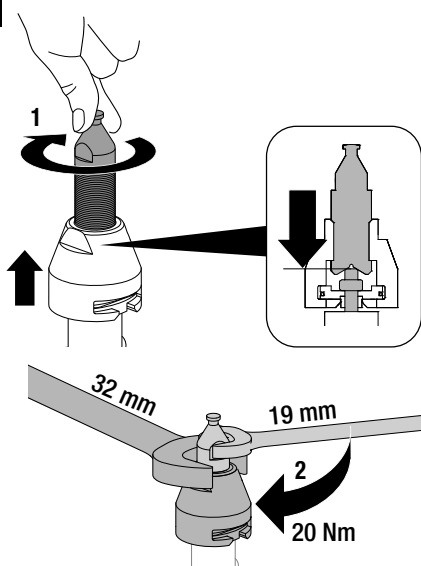
2b STYLE A



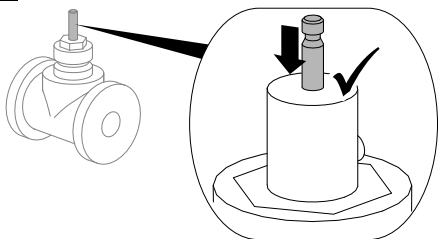
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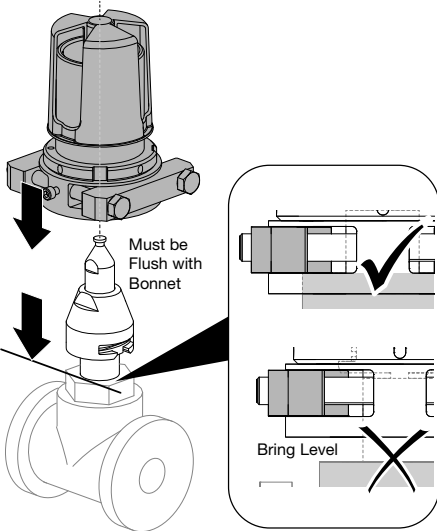
2a STYLE B



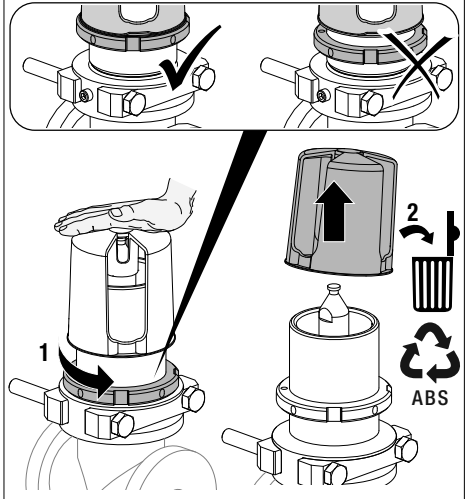
Optional	Siebe	VB9..	page 4
	Johnson Controls	VG2231 VN, VG2231 WN	page 4

FGVL Linkage with RV Series Actuators

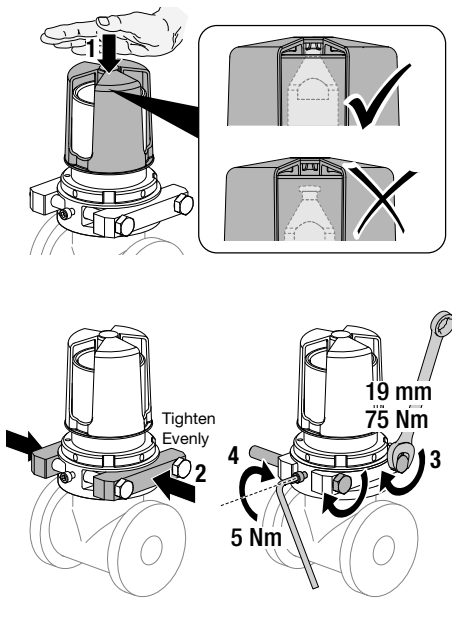
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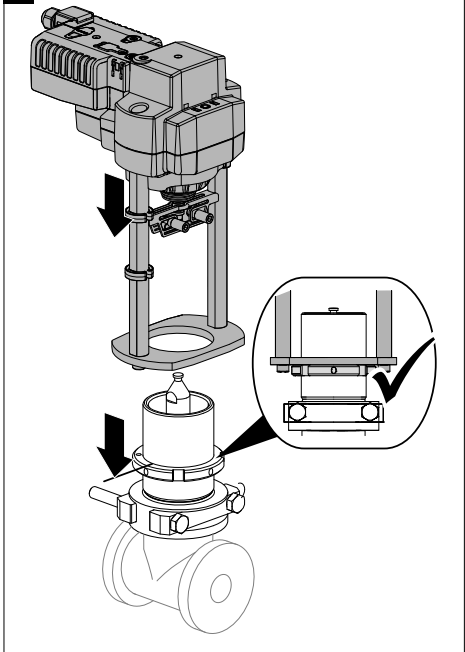
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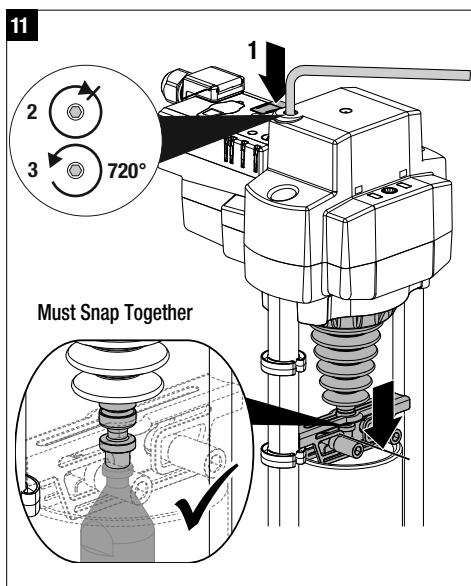
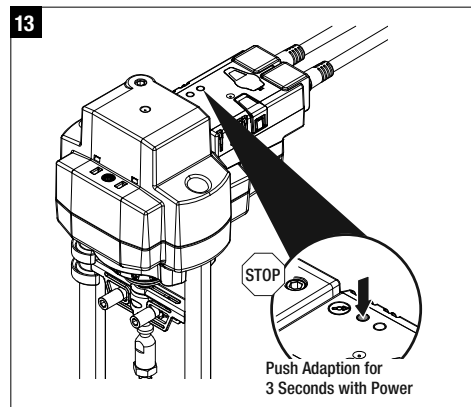
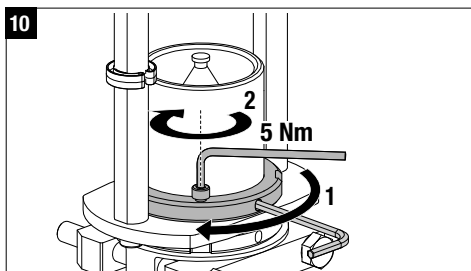
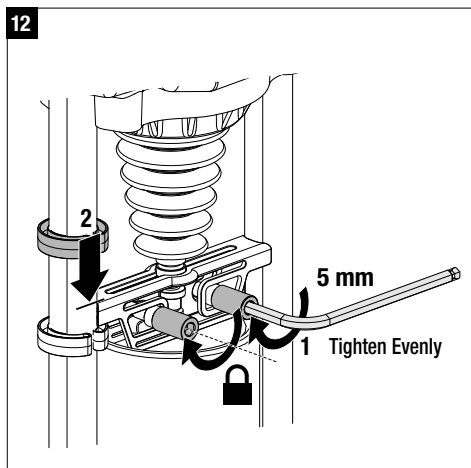
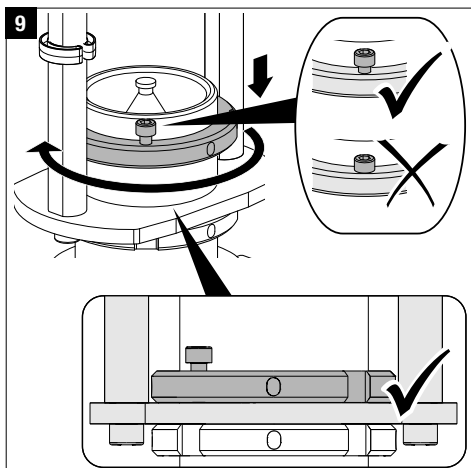


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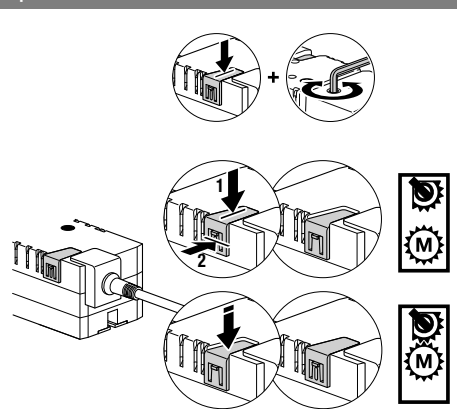


8





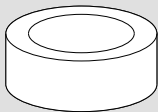
Optional Lock and Manual Override



QUICK MOUNT VISUAL INSTRUCTION MANUAL
FGVL Linkage with RV Series Actuators
Optional



SIEBE



SIEBE

DN
min. / max.

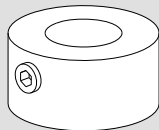
Temp.

VB9

65 / 300

2 ... 150 °C

JOHNSON CONTROL



JOHNSON
CONTROLS

DN
min. / max.

Temp.

VG2231 VN

65 / 100

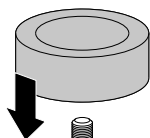
2 ... 150 °C

VG2231 WN

65 / 150

2 ... 150 °C

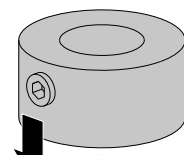
1



1



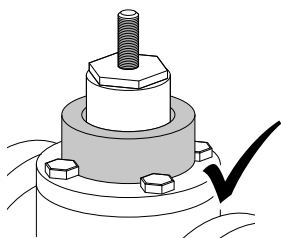
Isolate Valve
First



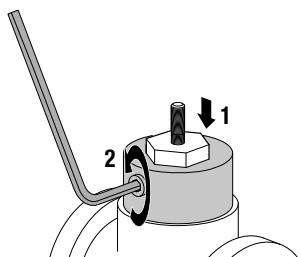
2



2



2



WIRING DIAGRAMS

Non-Spring Return Actuator with -3

On/Off

Floating Point

On/Off

Selector Switches

Signal Direction

Non-Spring Return Actuator with MFT

On/Off

Floating Point

On/Off

Notes:

- Meets cULus requirements without the need of an electrical ground connection
- Actuators with appliance cables are numbered.
- Actuators may be connected in parallel. Power consumption and input impedance must be observed.
- Actuators may also be powered by 24 VDC.
- Only connect common to neg. (-) leg of control circuits.
- A 500 Ω resistor converts the 4 to 20 mA control signal to 2 to 10 VDC.
- Control signal may be pulsed from either the Hot (Source) or Common (Sink) 24 VAC line.
- Contact closures A & B also can be triacs. A & B should both be closed for the triac source and open for triac sink.
- For triac sink the Common connection from the actuator must be connected to the Hot connection of the controller. Position feedback cannot be used with a triac sink controller. The actuator internal common reference is not compatible.
- IN4004 or IN4007 diode. (IN4007 supplied, Belimo Part number 40155)
- Actuators with plenum rated cable do not have numbers on wires; use color codes instead.

VDC / 4 to 20 mA

On/Off

Override Control Min, Mid, Max Postions

On/Off

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