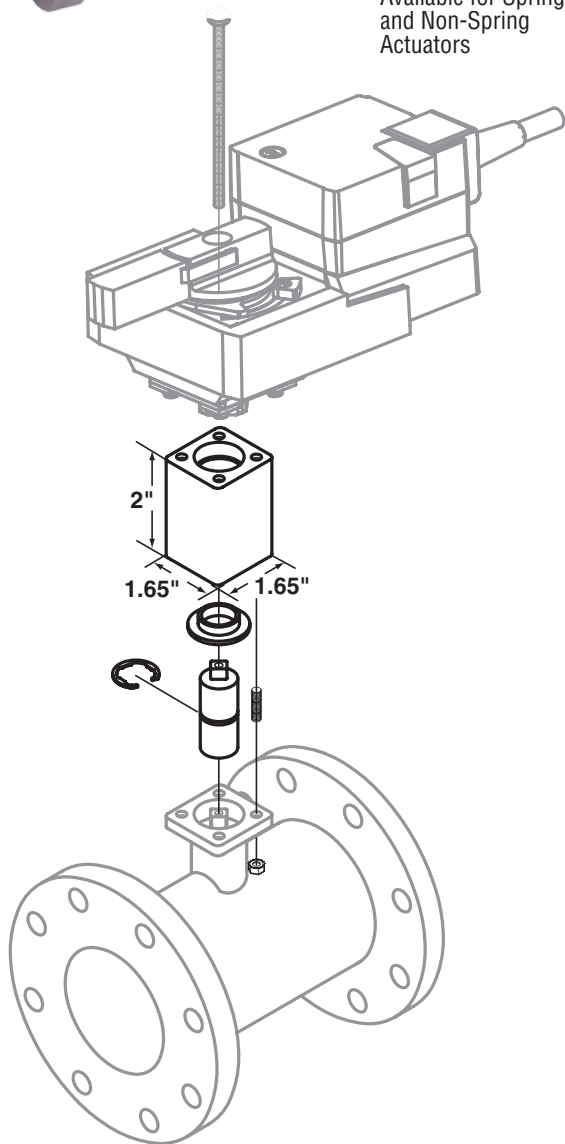


CCV-EXT-KIT, CCV and PICCV Valve Neck Extension Kit



Available for Spring
and Non-Spring
Actuators



Application

The CCV-EXT-KIT can be used with most CCV's* and PICCV in order to achieve a large clearance over the pipe. The Extension Kit will provide an additional 2" of space between the top of the valve and the base of the actuator. bracket is made from aluminum and is not intended as a thermal block.

- Extension kit will be automatically assembled with any Flanged CCV assembly.

Technical Data

Extension Height	2"
Total Weight	0.7 lb

Material

Extension Housing	Aluminum - Anodized
Shaft	Stainless Steel
Threaded Hardware	Stainless Steel
Bearing	Oilite® Bearing
Retaining Clip	Stainless Steel

	TR	LRB (X)	ARB (X)	TF	LF	AF
Extension Bracket	●	●	●	●	●	●
CCV-EXT-Kit	●	●	●	●	●	●

* Cannot be used with N4 actuators.

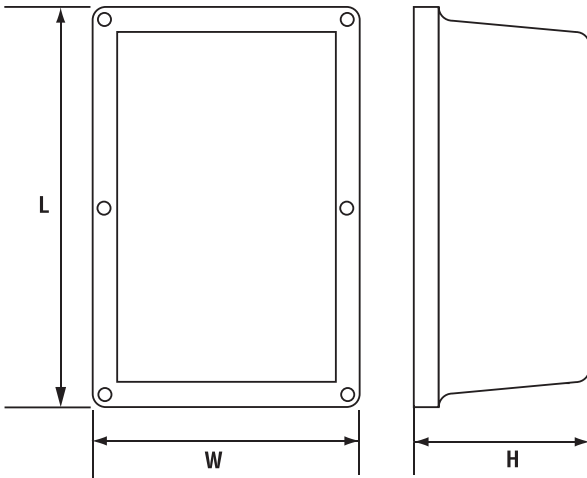
* Available for previous NF assemblies.

* CCV-EXT-KIT cannot be used with any valve smaller than the B212(B) and B312(B).



Application

The ZS-CCV... weather shield provides moderate protection for valves which are mounted outdoors. This product is designed as a water tight enclosure. The housing allows easy mounting over the actuator, while allowing easy viewing of the actuator in operation. Weather shield for PICCV/CCV to provide protection for actuators in outdoor applications.



Specifications	
Cover	PETG with UV resistant smoke tint
Perimeter Gasket	Silicon Rubber
Rubber Gasket	Silicon Rubber
Spring Clips	Stainless Steel
Temperature limitations:	-22°F to 122°F (-30°C to 50°C)
Plate (ZS-CCV-100)	Aluminum
Plate	Galvaneal w/black powder coat

Part Number	Actuator
ZS - CCV - 90	AF
ZS - CCV - 100	LRB(X), ARX

Part Number	L	W	H
ZS - CCV - 90	16.25" [413]	8.75" [222]	4.5" [114]
ZS - CCV-100	15.67" [398]	7.61" [193]	4.0" [102]

Parts List

- Cover including Rubber Perimeter Gasket, Rubber Gasket
- Back Plate
- Anti-Rotation Post with screw and lock washer
- Valve Gasket
- Assorted Cap plugs for unused holes

- Screws AF - 2 bolts with nylon insert locking nuts
- LRB(X), ARX - 1 screw, 1 washer

No weather shield available at this time for the TF and TR actuators. Designed for NEMA 4 specifications.

Auxiliary Switches S1A, S2A

For the non-spring return direct-coupled actuators

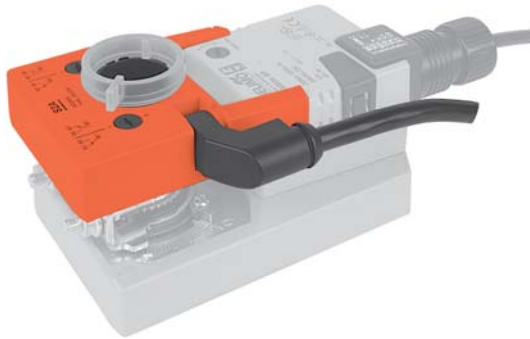
Application

The S1A and S2A auxiliary switches are used to indicate when a desired position of a valve is reached or to interface additional controls for a specific control sequence.

Operation

The S1A and S2A auxiliary switches are mounted onto the direct coupled actuator. The switches are modular units that mount directly onto LR and AR type actuators and are locked into place by guiding grooves on the sides of the actuator.

A driver disk is attached to the actuator handle and offers direct transmission of the actuator position to the micro switch cams. The switching points can be set over the full scale of 0 to 1 simply by adjusting the slotted discs.



Types		
S1A	1 SPDT	3 ft, 18 GA Appliance Cable
S1A/300	1 SPDT	6 ft, 18 GA Appliance Cable
S1A/500	1 SPDT	10 ft, 18 GA Appliance Cable
S2A	2 SPDT	3 ft, 18 GA Appliance Cable
S2A/300	2 SPDT	6 ft, 18 GA Appliance Cable
S2A/500	2 SPDT	10 ft, 18 GA Appliance Cable

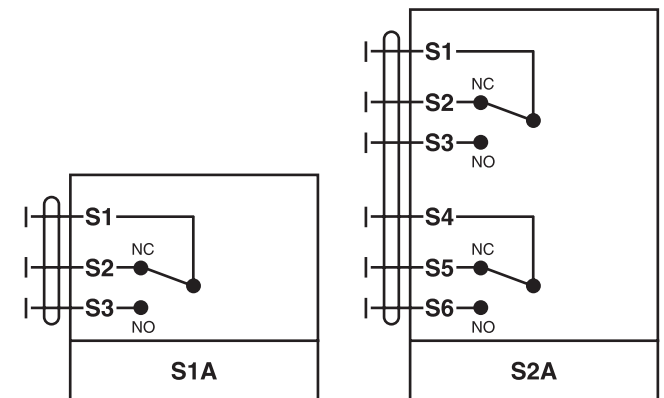
Technical Data	S1A	S2A
Number of Switches	1 SPDT	2 SPDT
Weight	4.6 oz [130 g]	6.0 oz [170 g]

Switching Capacity	3A (0.5A), 250 VAC	
Switching Point	Adjustable over Full Rotation (0° to 95°)	
Pre-Setting	With Scale Possible	
Humidity	5 to 95% RH non-condensing	
Ambient Temperature	-22°F to 122°F [-30°C to +50°C]	
Storage Temperature	-40°F to 176°F [-40°C to 80°C]	
Housing	NEMA 2 / IP54	
Housing Rating	UL94-5VA	
Servicing	Maintenance Free	
Agency Listings	cULus acc. to UL60730-1 CE according to 73/23/EEC	
Quality Standard	ISO 9001	

Mounting Instructions

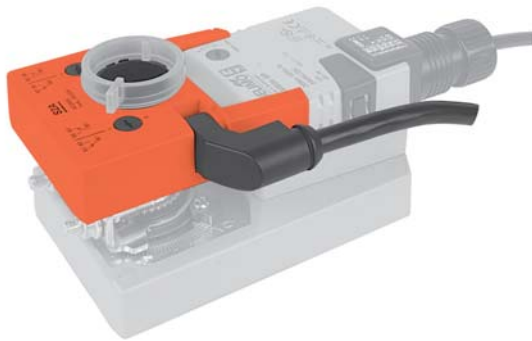
1. Press down the manual override button and rotate the actuator fully counter clockwise.
2. Place the switch/potentiometer adaptor onto the hex shaft of the handle which is in the center of the valve/actuator coupling.
3. Slide switch onto the actuator using the actuator guiding grooves on the sides of the actuator.
4. Check for correct mating of the adaptor to the switch.
5. Adjust switch dials as necessary.

Wiring Diagram



Feedback Potentiometer P...A

For the non-spring return direct-coupled actuators



Mounting Instructions

1. Press down the manual override button and rotate the actuator fully counter clockwise.
2. Place the switch/potentiometer adaptor onto the hex shaft of the handle which is in the center of the valve/actuator coupling.
3. Slide switch onto the actuator using the actuator guiding grooves on the sides of the actuator.
4. Check for correct mating of the adaptor to the switch.
5. Adjust switch dials as necessary.

Application

The P...A feedback potentiometers are used with LR and AR actuators to provide a resistive signal which varies with valve position.

The P...A units are applied with commercial proportional temperature controllers to provide feedback of the valve position, or with electric or electronic meters to provide position indication. The signal can also be used as a positioner for parallel operation of multiple actuators.

Operation

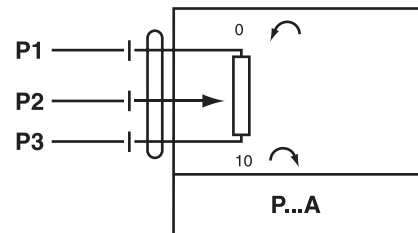
The P...A feedback potentiometers are mounted onto the direct coupled actuator. The switches are modular units that mount directly onto LR and AR type actuators and are locked into place by guiding grooves on the sides of the actuator.

A driver disk is attached to the actuator handle and offers direct transmission of the actuator position to the micro switch cams.

Types		
P140A	Feedback Potentiometer	140 Ω
P200A	Feedback Potentiometer	200 Ω
P500A	Feedback Potentiometer	500 Ω
P1000A	Feedback Potentiometer	1000 Ω
P2800A	Feedback Potentiometer	2800 Ω
P5000A	Feedback Potentiometer	5000 Ω
P10000A	Feedback Potentiometer	10000 Ω

Technical Data	P...A
Resistance Values	As Above
Output	1 W
Tolerance	± 5%
Linearity	± 2%
Resolution	Min. 1%
Residual Resistance	max. 5% On Both Sides
Electrical Connection	3 ft, 18 GA Appliance Cable ½" Conduit Connector
Humidity	5 to 95% RH non-condensing
Ambient Temperature	-22°F to 122°F [-30°C to 50°C]
Storage Temperature	-40°F to 176°F [-40°C to 80°C]
Housing	NEMA 2 / IP54
Housing Rating	UL94-5VA
Servicing	Maintenance Free
Agency Listings	cULus acc. to UL60730-1 CE according to 73/23/EEC
Quality Standard	ISO 9001
Weight	4.6 oz [130 g]

Wiring Diagram



M40059 - 07/10 - Subject to change. © Belimo Aircontrols (USA), Inc.

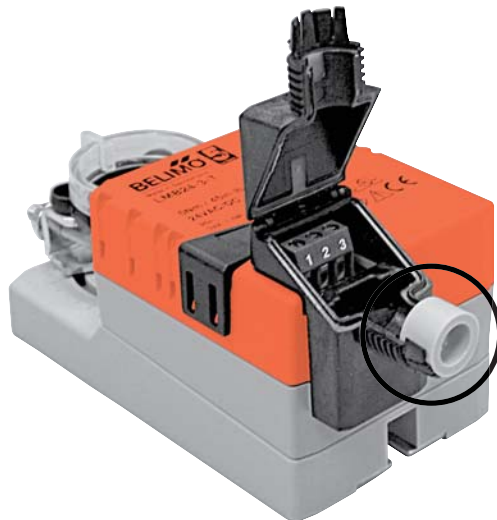
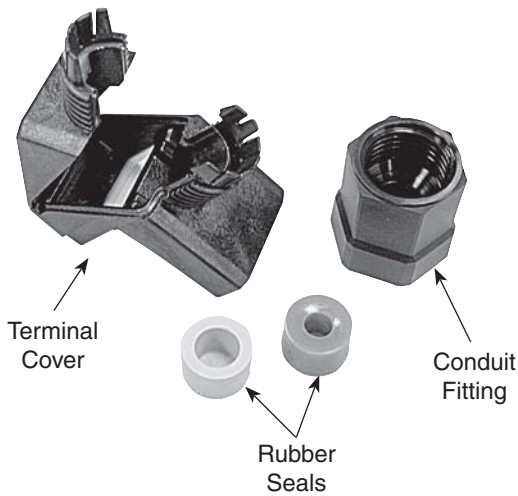
For the non-spring return direct-coupled actuators

Application

Belimo non-spring return actuators with terminal strips are can be converted from NEMA 1/IP20 to NEMA 2/IP54 using the protective terminal cover ZS-T.

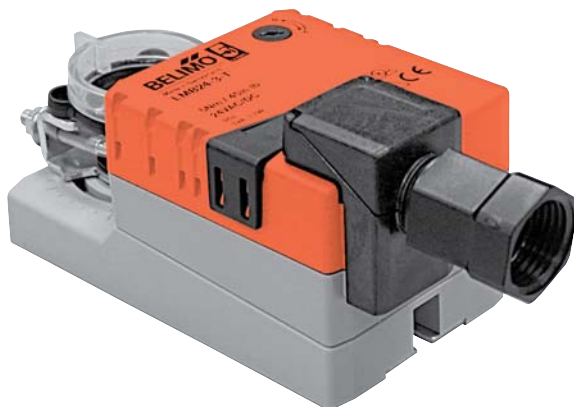
The ZS-T terminal cover accessory consists of:

- Terminal Cover
- Conduit Fitting
- Rubber Seal for Wire Diameter 4-6
- Rubber Seal for Wire Diameter 6-8



Mounting the Terminal Cover

1. Attach terminal cover to actuator, if not done already.
2. Slide the conduit fitting and correct size rubber seal onto wire.
3. Wire up actuator using the terminal strips.
4. Fit rubber seal into slot of terminal cover.



5. Shut terminal top and screw on conduit connector.

M40059 - 07/10 - Subject to change. © Belimo Aircontrols (USA), Inc.