

FSTF Linkage Mounting

Contacts:

East Coast 800 543-9038

Chris Sheehan 203 749-3112

Mike Knipple 203 749-3170

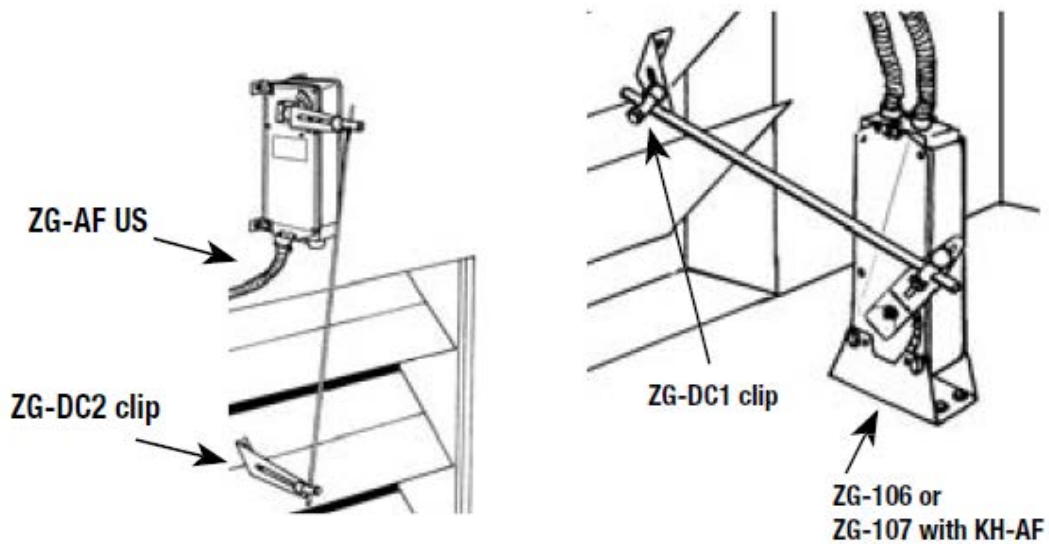
West Coast 800 543-9038

Larry Felker 775 355-2461 (250-4160 Cell)

Laure Pomianowski 775 355-2466



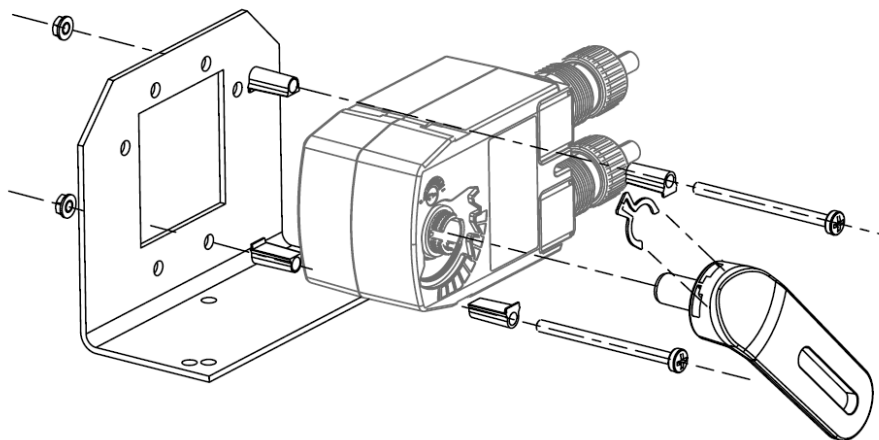
Given the typical space constraints of installed dampers, it is likely that all the actuator and linkage parts will need to be assembled as much as possible and then installed as an assembly.



Possible alternate arrangements for damper clip. (FSNF, FSAF actuators shown.)

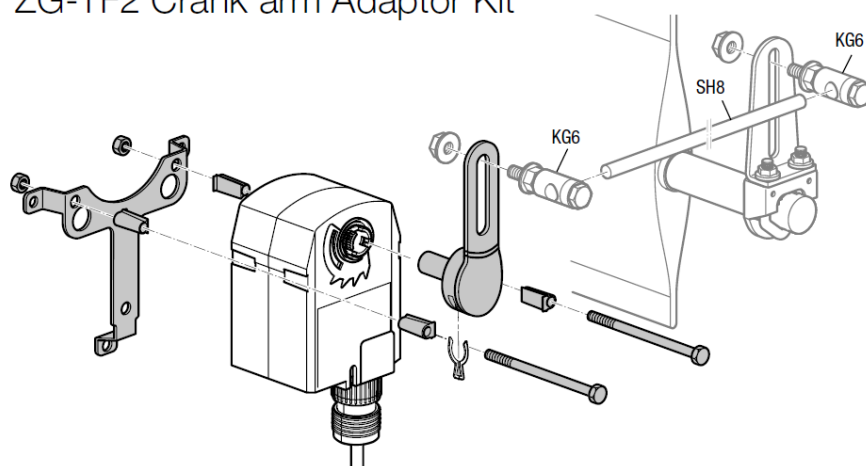
FSTF linkage kit mounting

The crank arm material is Duroplast Vyncolit® (phenolic compound similar to Bakelite). Smoldering temp is 500°F; auto-ignition temp is 900°F.



The ZG-TF112 Crank Arm Adaptor Kit includes:

- 1 ZG-113 Mounting Bracket
- 1 KH-TF-1 Crank arm with Retaining Clip
- 2 Bolts with Nuts
- Ball joints and 5/16" Rod not included
- ZG-TF2 Crank arm Adaptor Kit



The ZG-TF2 Crank Arm Adaptor Kit includes:

- 1 Mounting Bracket
- 1 KH-TF-1 Crank Arm with Retaining Clip
- 3 Bolts with Nuts
- Ball joints and 5/16" Rod not included

It is assumed that the bracket here will be installed on an existing sleeve or the Prefco mounting plate shown in the full damper pictures below. Belimo brackets and parts are shown in our Mounting Accessories Guide:

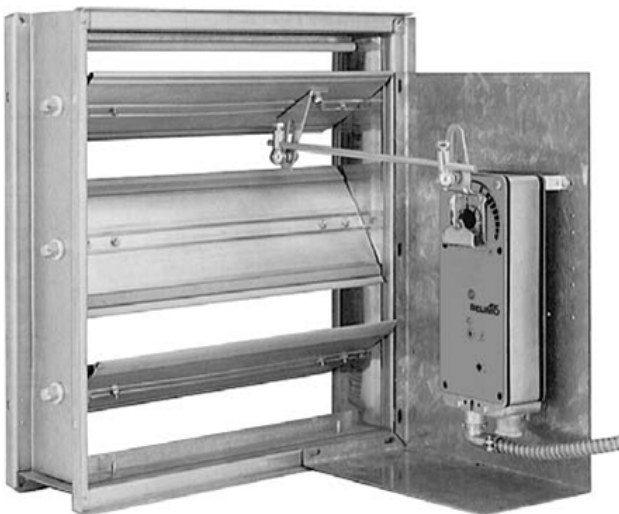
https://www.belimo.com/pim/mam/americas/technical_documents/data_sheets/man-air-acc/Mechanical_Accessories.pdf



COMPLETED INSTALLATION OF FSTF120

FSNF or FSAF mounting

There are many ways to correctly mount an FSNF or FSAF actuator with linkages. The picture below shows the ZG-101 damper frame bracket mounted using a ZG-AF leg kit with crank arm.



Miscellaneous parts

Should they be needed, Belimo carries a range of parts. Ball joints and 5/16" rods are available from most distributors.



KH12

Where the crank arm on the jackshaft is broken or not of the type needed, the KH12 fits over the shaft without removing it. Zinc plated steel. Slot is for the KG10A ball joint. V-bolt fits 3/4" to 1" (20 to 25mm) shafts.



KH8

KH-6. Zinc plated steel. For shafts 3/8" to 11/16"
Uses KG6 ball joint. Slot width 1/4"

KH-8. Zinc plated steel. For shafts 3/8" to 11/16"
Uses KG8 (90 degree) or KG10A ball joint. Slot width 21/64"



KG8 3/8"



KG6, KG10A 1/4"

SH8 (not shown – see picture page 9). Push-rod for KG6 & KG8 ball joints. 5/16" 36" long
Use SH10 3/8" rods for GMB and dual FSAF or FSNF linkages. 5/16" can bend under heavy loads.

ZG-DC1



ZG-DC1 Damper blade clip and ball joints for blades typically 3.5" in width. Typically the actuator or rod to shaft is in front of blade.

ZG-DC2



ZG-DC2 Damper blade clip and ball joints – typically used for 6" wide blade control dampers. Typically the actuator or rod to shaft is above or below the damper.

A variety of ideas for linkages can be found in the Belimo Mounting Methods Guide:

https://www.belimo.us/mam/americas/technical_documents/pdf-web/guides/mounting_methods.pdf