



Spring

Electronic fail-safe



Functional data	Mounting Position	90° to 180°
Safety data	Ambient temperature	-22122°F [-3050°C]
	Storage temperature	-40176°F [-4080°C]
Materials	Housing material	galvanized steel
	Stem	steel
	Frame, plate, base	galanized steel
	Bearing	GF Delrin
Suitable actuators	Non-Spring	AMB(X) GMB(X)
		NMB(X)

 AF EFB(X) LF NF

For close-off pressure reference Select Pro or retrofit technical documentation.

Product features

Technical data

Default/Configuration

The ZG-JSL linkage can also be configured by moving the anti-rotation plate 90° for space-saving applications. See mounting configurations below. The ZG-JSLA will have a factory mounted actuator on the linkage in the vertical position only.

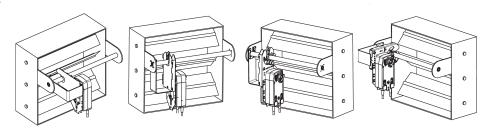
Application

The ZG-JSL jackshaft linkage is designed to easily attach to any part of a jackshaft and allow easy installation of select Belimo actuators. The unique open ended design and clamp insert allows the ZG-JSL to be used with any jackshaft from ½" to ¾" in diameter. Removal of the insert will allow the linkage to attach to a maximum shaft diameter of 1.05". Changing the antirotation plate will allow various actuators to be mounted.

Operation

The ¾" diameter built-in steel shaft allows direct coupling to the Belimo series actuators in the chart below. There is a torque reduction when using the ZG-JSL linkage. Verify application requirements before use.

Flow/Mounting details

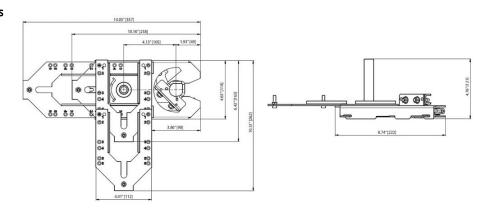


NKQB(X) * ZG-121 adapter must be used with EF. ** GM/GK not for use with 1/2" shafts. *** K6-1 clamp must be used with LF. For close-off pressure reference Select Pro or Retrofit Technical Documentation.



Dimensions

Dimensional drawings





On/Off, Spring Return, AC 120 V, Auxiliary Switch

On/Off, Spring Return, 120/230 VAC, Torque min. 35 in-lb, for control of air dampers

Technical data sheet





LF120-S US



Tec	hnica	ıl data

Electrical data	Nominal voltage	AC 120 V
	Nominal voltage frequency	50/60 Hz
	Power consumption in operation	5.5 W
	Power consumption in rest position	3.5 W
	Transformer sizing	7.5 VA
	Auxiliary switch	1 x SPDT, 3 A resistive (0.5 A inductive) @ AC 250 V, adjustable 095°
	Switching capacity auxiliary switch	3 A resistive (0.5 A inductive) @ AC 250 V
	Electrical Connection	(2) 18 GA appliance cables with 1/2" conduit connectors, 3 ft [1 m],
	Overload Protection	electronic throughout 095° rotation
	Electrical Protection	actuators are double insulated
Functional data	Torque motor	35 in-lb [4 Nm]
	Direction of motion motor	selectable with switch 0/1
	Direction of motion fail-safe	reversible with cw/ccw mounting
	Angle of rotation	Max. 95°,
	Running Time (Motor)	75 s
	Running time fail-safe	<25 s @ -4122°F [-2050°C], <60 s @ -22°F [-30°C]
	Noise level, motor	50 dB(A)
	Noise level, fail-safe	62 dB(A)
	Shaft Diameter	3/81/2" round, centers on 1/2"
	Position indication	Mechanical
Safety data	Degree of protection IEC/EN	IP54
	Degree of protection NEMA/UL	NEMA 2
	Enclosure	UL Enclosure Type 2
	Agency Listing	cULus acc. To UL 873 and CAN/CSA C22.2 No. 24-93; Listed to UL 2043 - suitable for use in air plenums per Section 300.22(c) of the NEC and Section 602.2 of the IMC
	Quality Standard	ISO 9001
	Ambient temperature	-22122°F [-3050°C]
	Storage temperature	-40176°F [-4080°C]
	Ambient humidity	Max. 95% RH, non-condensing
	Servicing	maintenance-free
Weight	Weight	3.8 lb [1.7 kg]
Materials	Housing material	galvanized steel



Accessories

Electrical accessories	Description	Туре
	Auxiliary switch, mercury-free	P475
	Auxiliary switch, mercury-free	P475-1
	Signal simulator, Power supply AC 120 V	PS-100
	Conduit box converter	ZG-CBLS
Mechanical accessories	Description	Туре
	Shaft extension 170 mm Ø10 mm for damper shaft Ø 616 mm	AV6-20
	End stop indicator	IND-LF
	Shaft clamp	K6 US
	for LF	
	Shaft clamp reversible, clamping range Ø1620 mm	K6-1
	Ball joint suitable for damper crank arm KH8 / KH10	KG10A
	Ball joint suitable for damper crank arm KH8	KG6
	Ball joint suitable for damper crank arm KH8	KG8
	Actuator arm, clamping range Ø816 mm, Slot width 8.2 mm	KH-LF
	V-bolt Kit for KH-LF.	KH-LFV
	Damper crank arm Slot width 8.2 mm, for Ø1.05"	KH12
	Damper crank arm Slot width 6.2 mm, clamping range Ø1018 mm	KH6
	Damper crank arm Slot width 8.2 mm, clamping range Ø1018 mm	KH8
	Anti-rotation bracket LF.	LF-P
	Push rod for KG10A ball joint 36" L, 3/8" diameter	SH10
	Push rod for KG6 & KG8 ball joints (36" L, 5/16" diameter).	SH8
	Wrench 0.32 in and 0.39 in [8 mm and 10 mm]	TOOL-06
	Angle of rotation limiter, with end stop	ZDB-LF
	Form fit adapter 8x8 mm	ZF8-LF
	Mounting Bracket: ZS-260 Right Angle	ZG-109
	Linkage kit	ZG-110
	Mounting bracket	ZG-112
	for LF	
	Damper clip for damper blade, 3.5" width.	ZG-DC1
	Damper clip for damper blade, 6" width.	ZG-DC2
	LF crankarm adaptor kit (includes ZG-112).	ZG-LF112
	LF crankarm adaptor kit (T bracket included).	ZG-LF2
	Shaft extension for 3/8" diameter shafts (4" L).	ZG-LMSA-1
	Shaft extension for 1/2" diameter shafts (5" L).	ZG-LMSA-1/2-5
	Weather shield 330x203x152 mm [13x8x6"] (LxBxH)	ZS-100
	Base plate, for ZS-100	ZS-101
	Weather shield 406x213x102 mm [16x8-3/8x4"] (LxWxH)	ZS-150
	Explosion proof housing 406x254x164 mm [16x10x6.435"] (LxBxH), UL and CSA, Class I, Zone 1&2, Groups B, C, D, (NEMA 7), Class III, Hazardous	ZS-260
	(classified) Locations Weather shield 438x222x140 mm [17-1/4x8-3/4x5-1/2"] (LxBxH), NEMA	ZS-300
	4X, with mounting brackets	
	Weather shield 438x222x140 mm [17-1/4x8-3/4x5-1/2"] (LxBxH), NEMA	ZS-300-5
	4X, with mounting brackets	
	Shaft extension 1/2"	ZS-300-C1
	Shaft extension 3/4"	ZS-300-C2
	Shaft extension 1"	ZS-300-C3

Electrical installation



/ Warning! Live electrical components!

During installation, testing, servicing and troubleshooting of this product, it may be necessary to work with live electrical components. Have a qualified licensed electrician or other individual who has been properly trained in handling live electrical components perform these tasks. Failure to follow all electrical safety precautions when exposed to live electrical components could result in death or serious injury.



Meets cULus requirements without the need of an electrical ground connection.

Apply only AC line voltage or only UL-Class 2 voltage to the terminals of auxiliary switches. Mixed or combined operation of line voltage/safety extra low voltage is not allowed.

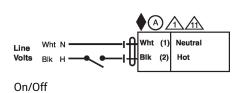


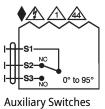
(A) Actuators with appliance cables are numbered.

Provide overload protection and disconnect as required.

Actuators may be connected in parallel if not mechanically linked. Power consumption and input impedance must be observed.

One built-in auxiliary switch (1x SPDT), for end position indication, interlock control, fan startup, etc.





Dimensions

Dimensional drawings

