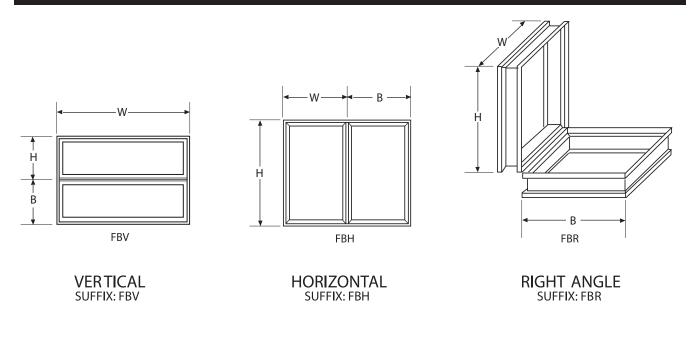


### Face & By-Pass Mixing Damper



EXAMPLE: To order a right-angle face and by-pass damper of Model No. CCD-GV5-3V-LL where the vertical damper is 48" W x 36" H (1,219 mm x 914 mm) and is to be parallel blade, and the horizontal damper is 48" W x 40" H (1,219 mm x 1,016 mm) and is to be opposed blade:

CCD-GV5-3V-LL-FBR

W = Width = 48" (1219mm) H = Height = 36" (914mm)B = Bypass Dimension = 40" (1016mm)

\*\*DAMPERS ARE FURNISHED APPROXIMATELY 1/4" SMALLER THAN GIVEN OPENING DIMENSIONS \*NOTE: "W" DIMENSION IS PARALLEL TO BLADE AXIS (i.e. DAMPER WIDTH).

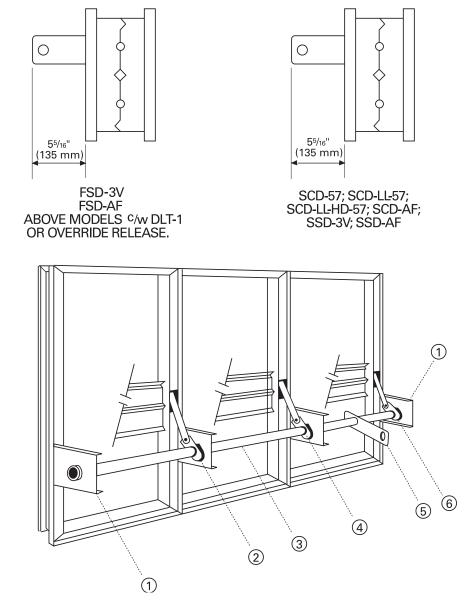
Specifications are correct at time of printing. However, as part of our 'continuous improvement program,' we reserve the right to make further improvements without notice.

PROJECT:		Р	<b>Price</b> ®	
ENGINEER:				
CUSTOMER:		Jul / 12		
SUBMITTAL DATE:	SPEC. SYMBOL:	244977		
	All Metric dimensions () are soft conversion.	•	© Copyright E.H. Price Limited 2012	



### **Actuator and Jackshaft Dimensions**

**NOTE:** Dampers are intended to be selfsupporting only in the largest recommended single sections. Multiple assemblies may require additional bracing. PRICE recommends appropriate bracing on multiple assemblies at over 8' (2438mm) of width and height.



JA	СК	SH/	<b>AFT</b> I	NG:

#### **STANDARD CONTRUCTION**

- 1. Bearing support bracket. Located at either end of assembly and at each vertical mullion.
- 2. Lever arm attached directly to blade axle to maximize torque transfer.
- 3. Either  $1/2^{"}$  (13 mm) diameter solid steel rod or rod +  $3/4^{"}$  (19 mm) diameter steel pipe (depending on dampersize, static pressure, etc.)
- 4. Pivot arm of heavy gauge steel and attached to rotation bar (No. 3) with steel bolts.
- 5. Operator arm for connection to motor operator. (Required for internal motor mount.)
- 6. Ball bearings.

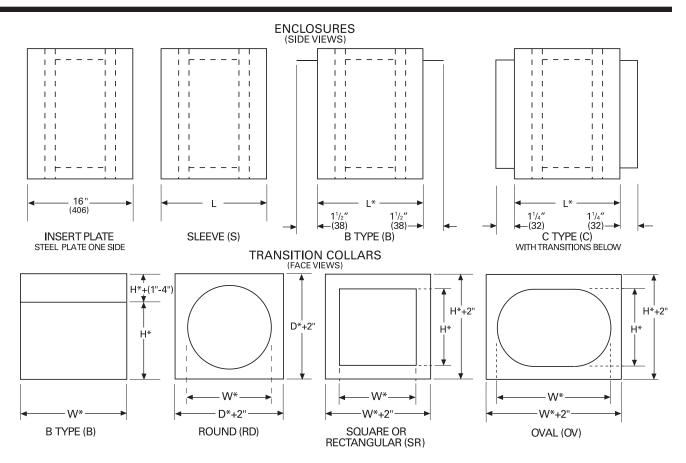
#### **Manufacturer's Recommendations**

All moving parts of the damper must be inspected and cycled at intervals not greater than every six months and in accordance with the latest edition of NFPA 90A, 92A, local codes and the actuator manufacturer. In addition, fuse links shall be removed and inspected for corrosion. Dry lubricants are recommended.

PROJECT:		
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All Metric dimensions () are soft conversion. Imperial dimensions are converted to metric and rounded to the nearest millimetre.

## **Damper Enclosures**



MINIMUM SLEEVE / ENCLOSURE LENGTH	
PRODUCT	MINIMUM LENGTH
CCD-GV5-3V	
CCD-GV5-3V-LL	10"
CCD-GV5-3V-LLHD	10"
NOTE: B TYPE TRANSITIONS MAY BE FURNISHED ON DAMPERS LESS THAN 8 REDUCE MINIMUM DAMPER/SLEEVE HEIGHT OF 8"TO 7", 6", 5" OR 4". (MININ	

### **Standard Construction:**

Sleeve: 20 ga. Galvanized Steel. Enclosure: 18 ga. Galvanized Steel. Transition Collars: 22 ga. Galv. Steel. \*D = DIAMETER \*W = WIDTH (DUCT) \*H = HEIGHT (DUCT) \*L = LENGTH (SEE CHART) DAMPER FRAME SHOWN AS DASHED LINES

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### **Damper Actuators**

Both electric and pneumatic damper actuators are available from PRICE and may be factory installed (see methods below) with our CCD series control dampers. Control dampers may be shipped with factory installed motors provided we have the following information: 1. damper/duct size; 2. maximum velocity; 3. maximum static pressure; 4. application (shut-off, balancing, or modulating damper); 5. location of operator (internal or external); 6. pneumatic or electric system.

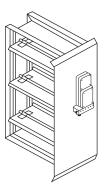
#### **Suggested Specification Manufacturer's Recommendations**

All moving parts of the damper must be inspected and cycled at intervals not greater than every six months and in accordance with the latest edition of NFPA 90A, 92A, local codes and the actuator manufacturer. In addition, fuse links shall be removed and inspected for corrosion. Dry lubricants are recommended.

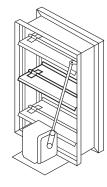
#### **Typical Installations:**



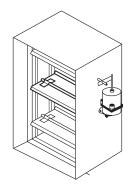
Dampers may be furnished with-out actuators but with an extended shaft for on site attachment to motor.



Dampers may be furnished with factory installed mounting plate (insert type: designation IT) either with actuators or extended shaft for on site attachment. Actuators mounted out of airstream.



Dampers may be furnished with actuators mounted inside duct with factory installed internal motor mount.



Dampers may be furnished with factory installed sleeves and with actuators mounted outside or inside air stream. Minimum sleeve depth 14" (356mm).

PROJECT:		PL	<b>Price</b> <sup>®</sup>	
ENGINEER:				
CUSTOMER:		Jul / 12		
SUBMITTAL DATE:	SPEC. SYMBOL:	244980		
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