

Instructions for the BASIC BCBB Mixing section, Sizes 004–055

1. General

The BCBB mixing section has three interconnected dampers at one level for outdoor air, recirculated air and exhaust air. The mixing section has flow-perpendicular dampers with counter-rotating damper blades made of aluminium-zinc coated, double-skin sheet steel, to environment class M3. The mixing section offers excellent air mixture with linear flow characteristic.

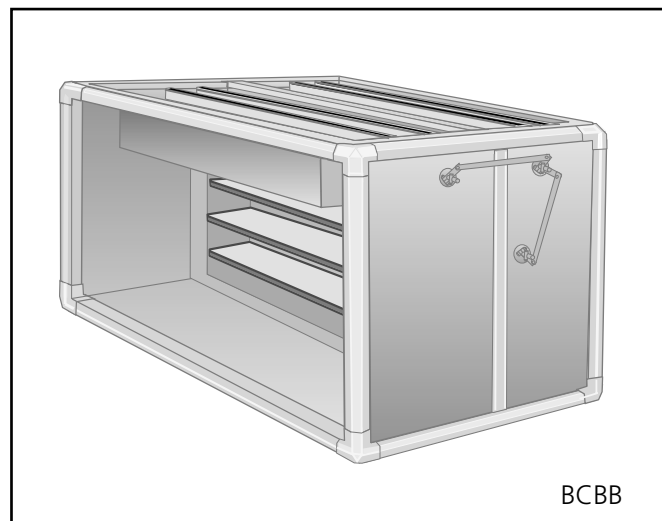
On the size 004-027 units, the damper actuator can be installed on the right-hand or left-hand side; on the size 035–055 units, it can be installed between the dampers at the centre of the mixing section.

The damper blades are journaled in nylon bearings.

The outdoor air damper and the exhaust air damper are coupled in parallel. The recirculated air damper pivots in the opposite direction. The three damper assemblies are individually adjustable for obtaining the appropriate mixing ratio.

1.1 Specification

The version, size, etc. are specified in the delivery documents.



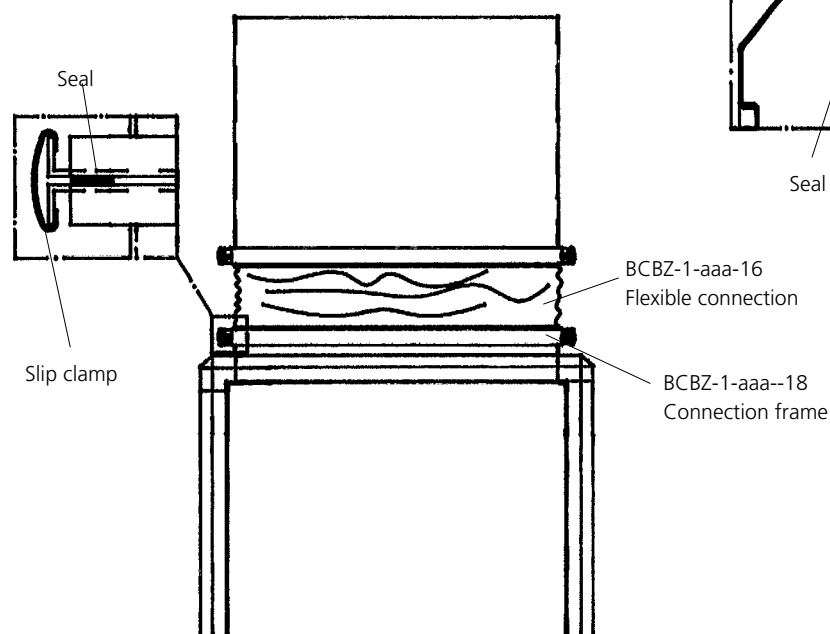
BCBB

2. Installation

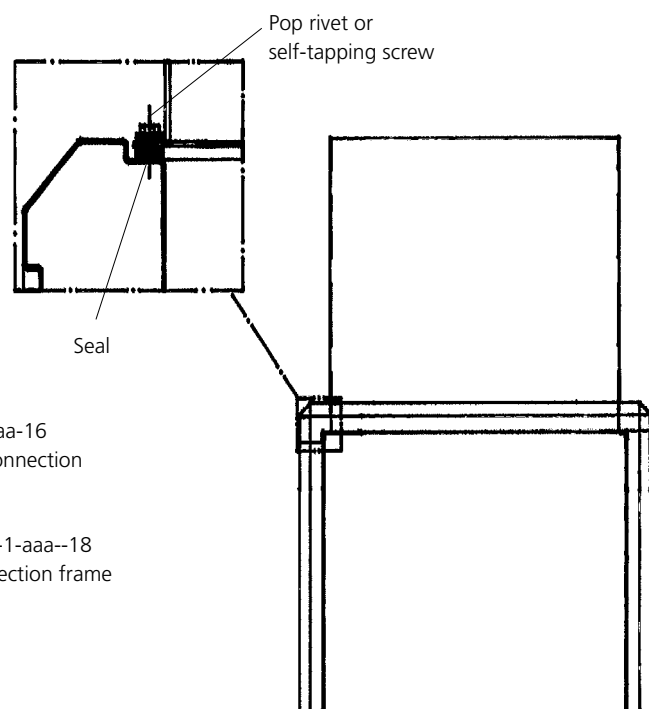
2.1 Mounting

Fit the mixing section with the damper shafts horizontal. The BCBB should be connected to the ducting as follows:

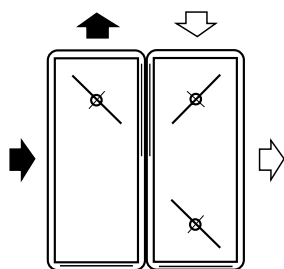
a) With BCBZ-1-aaa-18 connection frame



b) With flanged duct

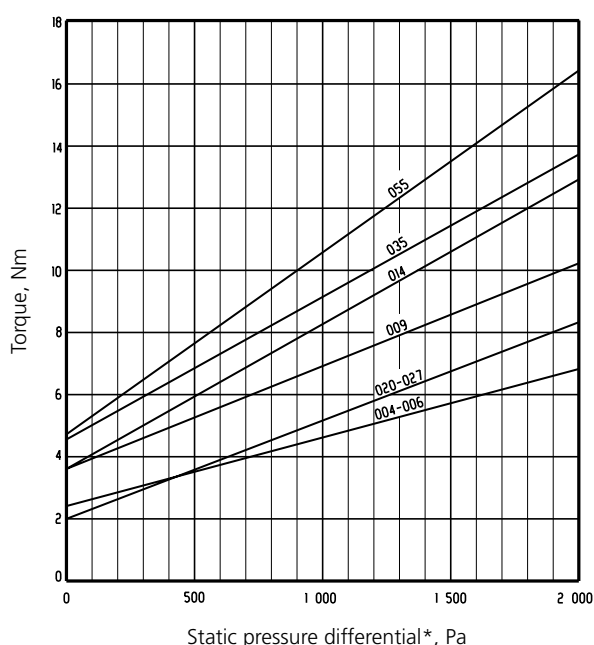


2.2 Installation alternatives



3. Technical data

3.1 Torque



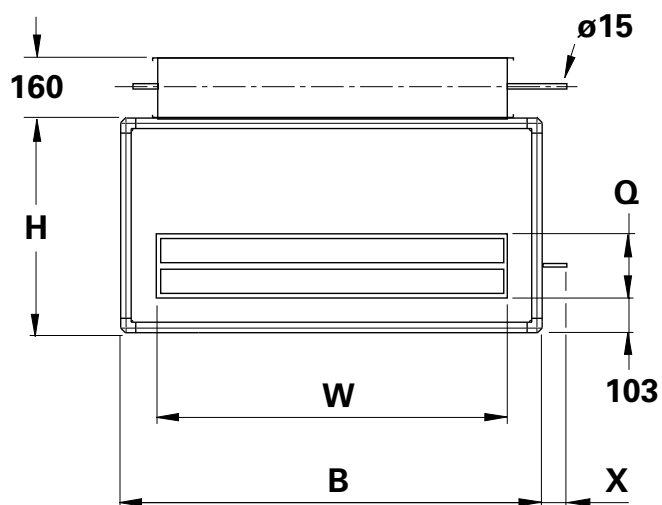
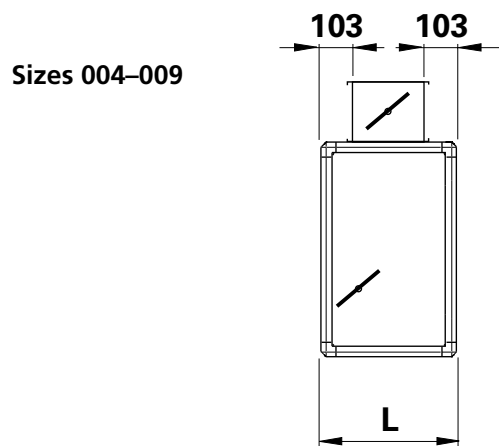
*Pressure differential across closed damper(s).

Size 004–014 mixing sections are equipped with three dampers. These three dampers are interconnected, which means that only one actuator is required. The torque has been calculated for all three dampers.

The size 020–027 mixing sections are equipped with three dampers. Two of the dampers are interconnected, while the third damper operates independently. This means that a total of two actuators are required, one actuator operates two dampers and the other operates one damper. The torque has been calculated for one damper.

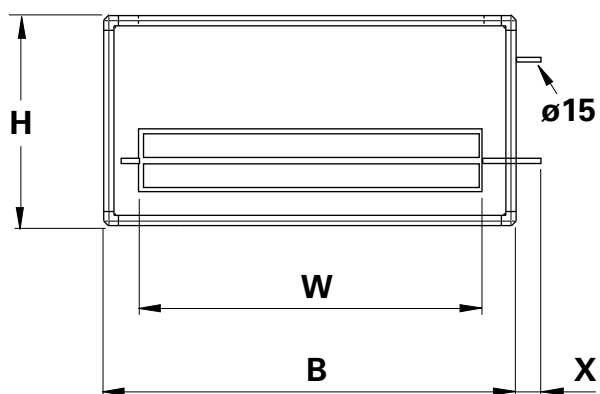
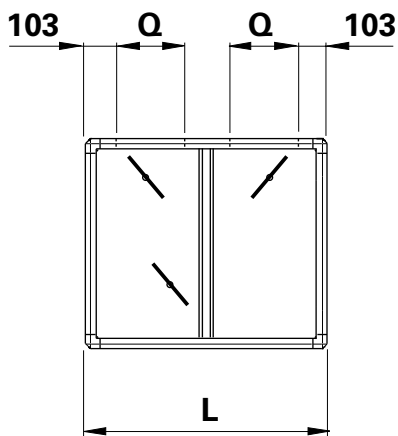
The size 035–055 mixing sections are equipped with two dampers per opening, i.e. a total of six dampers. The two dampers that are located in the same opening are interconnected. This means that three actuators are required (one for each opening). The torque has been calculated for two interconnected dampers.

3.2 Dimensions



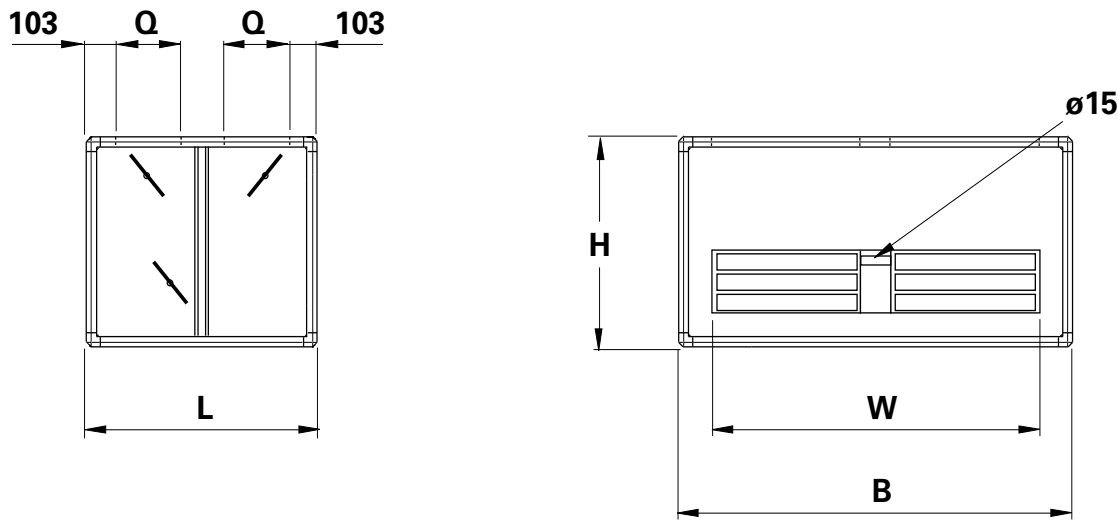
BCBB	B	H	L	Q	W	X	Weight	
							Std.	El 30
004	1039	546	759	200	800	65	84	101
006	1259	656	759	200	1000	55	101	121
009	1459	756	959	300	1000	70	142	173

Sizes 014–027



BCBB	B	H	L	Q	W	X	Weight	
							Std.	El 30
014	1759	906	959	300	1400	60	171	206
020	1946	1026	1359	500	1400	60	239	292
027	2306	1206	1359	500	1700	77	288	353

Sizes 035–055



BCBB	B	H	L	Q	W	Weight	
						Std.	EI 30
035	2706	1406	1559	600	2300	400	479
055	3206	1656	1559	600	2900	462	565