

Bin Activator BAV 04

General Information

The Brabender Bin Activator [BAV 04](#) is capable of reliably discharging bulk materials from bins and silos either continuously or in batches.

The BAV has the following main components: An [outlet cone](#) with an integrated flange ring and an internal welded baffle. On the exterior of the cone a force adjustable [electromechanical vibrator](#) is mounted. This complete assembly is isolated and suspended from a bin mating flange by flexible hanger rods and sealed with a [flexible sleeve](#). The bin mating [flange](#) is supplied loose and field welded to the customer bin or silo by others. The suspended assembly forms an integral structure that ensures uniform distribution of the dynamic forces.

The BAV operation allows non-compacting "[first in - first out](#)" discharge for consistent filling of downstream feeders or processes. When the vibrator is started, the outlet cone and baffle oscillate horizontally promoting ingredient flow. In addition, the vibration de-aerates floodable ingredients preventing uncontrolled flow and provides a uniform bulk density.

The product line includes models from 600 to 1800 (23.6 to 70.9 in) diameter so that suitable units for most bins and silos are available. Bins and silos may be made of mild steel, stainless steel, aluminum or plastics material. The Brabender Bin Activator is available in mild steel or stainless steel.

The BAV can be integrated with downstream conveying and feeding equipment, e.g. our volumetric, gravimetric or weigh belt feeders.

The unit conforms to CE directives.



Bin Activator BAV 04

Model Specification

BAVxx04	Bin Activator
BAVxx04	Diameter (mm)/100
BAVxx04	Series 04



Control Modules

The vibrator motor can be directly started at a constant speed with a motor starter or by means of a frequency converter (VFD) in the range of 20-60 Hz. In addition, the vibrator unbalanced force can be adjusted mechanically from 0-100%.

A start/stop signal can be provided by the customer.

Technical Drawings and Dimensions

	1 unbalanced motor	2 unbalanced motor
BAV Ø600	BAV604	-
BAV Ø900	BAV904	-
BAV Ø1200	BAV1204	-
BAV Ø1500	BAV1504	-
BAV Ø1800	-	BAV1804

* other sizes on request

Outlet options		
Pipe	Emergency shut-off valve	Double-pipe
Pipe with flange	Flange with flexible sleeve	Flexible outlet sleeve



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Technical Specification

Ambient temperature:	0°C to +45°C (32°F to 113°F)				
Humidity of the air:	up to 85% without condensation				
	BAV 604	BAV 904	BAV 1204	BAV 1504	BAV 1804
max. underpressure [mbar, psi]:	190 (2.75)	165 (2.4)	185 (2.7)	125 (1.8)	220 (3.2)
max. overpressure [mbar, inches Hg]:	500 (14.7)	330 (9.7)	250 (7.4)	200 (5.9)	120 (3.5)
Product temperature:	0°C to +60°C (32°F to 140°F)				
Max. bulk density (volumetric):	1.5 kg/dm ³ (93 lbs/cuft)*				
Steel ingredient contact surfaces:	1.4571 (316), 1.4301 (304) or R-St37-2 mild steel (primed)				
Sleeve and outlet:	polyurethane *				
Non-contact components:	steel or stainless steel, galvanised or painted				
Unbalanced motor:	1500 min ⁻¹ (50 Hz); IP66; ISO-class F; (60Hz, Class II, Division 2, Group F&G)				
Power supply:	AC 230/400 V - 50Hz** (220/380V – 240/415V at 50 Hz permissible), (AC 230/575 V – 60Hz)				
Noise level:	<70 dB				
* other values upon request	** 3 phase motors are designed for a power supply of: 230/400 V, 50 (60) Hz, and for the operation in TT networks, TN networks or networks with earthed neutral conductor. For different networks adaptation measures are necessary.				

Options and Accessoires

- Versions for higher and lower temperatures
- Explosion-proof execution as per device 2014/34/EU (ATEX) or NFPA
- [shut-off valve](#) or flap shutter
- Special sleeves made of silicone or neoprene
- Special motors for higher voltages and frequencies
- Surfaces: steel primed, stainless steel glass bead blasted, outer surfaces optionally painted according to RAL colour chart
- [small-size bin](#)
- Discontinuation options: pipe, double-pipe, pipe with flange, flexible outlet sleeve, [flange with outlet sleeve](#), [pipe with plug-in plate](#)

