

Agitation Systems

Leading edge mechanical mixing
for laboratory applications

Feature comparisons



Agitation systems features comparisons

Comparison of the features of available agitation systems from BPC Instruments

	BPC® Move	BPC Standard/Smart Agitation Systems	BPC CSTR Agitator	BPC Strong Agitator
Mixing strength	Medium to high	Medium	Medium	High
Mixing efficiency	High	High	High	High
User Interface	1.3" 128x64 OLED screen	via Aurora software and motor controller unit	Analogue panel or via Aurora software	Analogue panel or via Aurora software
Rotation Speed	1-600 rpm	10-200 rpm	15-300 rpm	15-300 rpm
Torque	0.4 Nm	0.1 Nm	0.7 Nm	1.6 Nm
Operation Modes	Normal and silent	Normal	Normal	Normal
Weight*	0.48 kg	0.38 kg	1.75 kg	2.36 kg
Dimensions*	4.6 x 4.5 x 17.5 cm	4.9 x 4.4 x 14.3 cm	9.3 x 6.7 x 16.6 cm	6.7 x 9.3 x 19.5 cm
Typical Usage	Standalone, high viscosity or long term mixing	Long term mixing in batch or coupled with BPC Instruments' systems	Long term mixing in large CSTR bioreactors	Long term mixing in large CSTR bioreactors
Compatibility	Compatible with GL45 standard laboratory Available as 500 mL, 1 L and 2L	Compatible with GL45 standard laboratory models and BPC Instruments systems or Smart Agitation System. Available as 500 mL, 1 L and 2L	Compatible with CSTR bioreactors, available from BPC Instruments	Compatible with CSTR bioreactors, available from BPC Instruments
Mixing features	Single stirring direction (clockwise or counterclockwise), alternating stirring directions, continuous, intermittent, different mixing intensities in a cycle.	Single stirring direction (clockwise or counterclockwise), alternating stirring directions, continuous, intermittent, different mixing intensities in a cycle.	Single stirring direction (clockwise or counterclockwise), alternating stirring directions, continuous, intermittent, different mixing intensities in a cycle.	Single stirring direction (clockwise or counterclockwise), alternating stirring directions, continuous, intermittent, different mixing intensities in a cycle.

*Refers to one motor without stirrer

BPC® Move features comparison

Comparison of the features of BPC® Move against conventional stirring methods

	Magnetic stirring	BPC® Move	Classical top mounted agitator
Mixing strength	Low	Medium to high	High
Mixing efficiency	Poor or Medium	High	High
User interaction	Low	High	Medium
Operation features	Limited	High	Limited
Product lifetime	Medium	High	High
Cost	Low to medium	Medium	Medium to high
Setting up experience	Easy	Easy	Difficult and requires laboratory stand
Operation experience	Problems with irregular spin or magnets that are out of place	Stable and robust for long term operations	Stable and robust for long term operations
Applicable for both closed-chamber and open-vessel system	No	Yes	No
Noise level	Low	Low (very low noise level in silent mode)	High
Dimension	Compact	Compact	Medium to big
Weight	Light	Light	Heavy
Applicable media	Liquids with low viscosity and suspended solid	Liquids and slurries up to high viscosity and suspended solid	Liquids and slurries up to high viscosity and suspended solid
Typical Usage	Dissolve and disperse chemical solutions	Dissolve and disperse chemical solutions, gas-liquid mixing, disperse high viscosity, solid and particulate media, reactor stirring	Disperse high viscosity and solid content media, particulate media and reactor stirring