



Bringing the unique FDM high shear mixing performance to the laboratory bench, the DB25 is both a flexible laboratory tool and a test bed for scaling larger machines.

Simple stirrers and agitators are useful tools in the lab but for fast, effective dispersion of powders, de-agglomeration of suspended solids, emulsification and a range of other difficult processes, a high shear mixer is the correct tool for the job.

The DB25 allows confident scaling of lab processes to production volumes by using a scaled version of a geometry which is common to all larger DB machines.

Up to five times the energy input of other high shear mixers ensures excellent all-round mixing performance and the ability to interchange mixing heads means that the DB25 can cope with a wide range of fluid volumes and mixing problems.

Special versions of DB25 using air motors are available for hazardous environments whilst hygienic food and pharmaceutical applications are catered for with cleanable design and autoclavable head and shaft assemblies.

Careful, intelligent design and use of state-of-the-art mixing technology make the DB25 the ideal general mixing partner in the laboratory.

- Dispersing
- Homogenising
- Rapid blending
- De-agglomerating
- Emulsifying
- Reacting
- Powder addition

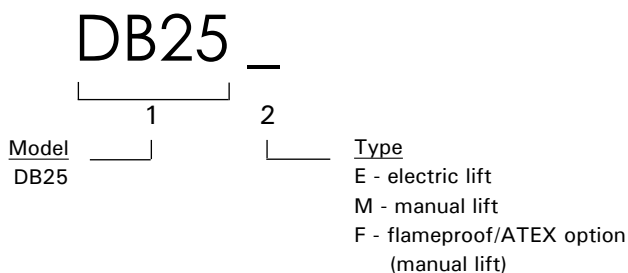


SPECIFICATIONS

		DB25 STANDARD	DB25 WITH 50MM HEAD OPTION
Nominal rotor diameter	mm	25	50
Rotor speed (typical)	rpm	1500 to 15000	
Typical minimum mixing volume at low viscosity (e.g. water)	litres (gals)	0.5 (1/8)	1 (1/4)
Typical maximum mixing volume at low viscosity (e.g. water)	litres (gals)	10 (2.5)	20 (5)
Typical maximum mixing volume at high viscosity (e.g. thick cream)*	litres (gals)	4 (1)	8 (2)
Viscosity range (approx.)	cP (Pa.s)	0.1 (0.0001) to 30000 (30)	
Materials of construction	316 stainless steel wetted parts with polymer bush bearing		
Control & Instrumentation	Power ON/OFF, Mixer START/STOP, speed control pot., LCD displays of power (load) and speed, optional PC link		
Weight**	kg (lbs)	25 (55)	
Motor power	kW (hp)	0.4 (0.5)	
Electrical	240V/120Vac, fused, 500W max.		
Approvals / Certification (standard)	CE marking (Europe), UL/ASME components (US) + others		



* For fluids in this viscosity range, supplementary agitation using some form of impeller may be required.
** Excluding control panel


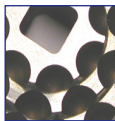
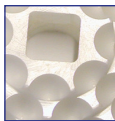






EXAMPLE

DB25E means a DB25 mixer with electric lift.

CODE POSITION	DETAILS
2	<p><u>Type</u> The DB25 motor, shaft and head assembly can be moved vertically up and down to enable easy insertion of the mixing head in a vessel. The mixer can be provided with an electric lift (E) with motorised up/down movement controlled by a switch on the control panel. Alternatively, a manual lift (M) allows the user to raise and lower the head with the support of a balanced gas strut and clamp. The flameproof/ATEX option (F) has a manual lift with an air motor main drive and other special features to ensure compliance with the relevant hazardous area legislation. Please contact Maelstrom for more details of the DB25F.</p>

OPTIONS AND ACCESSORIES

CODE	DETAILS			
DB25-50	<p><u>50mm mixing head</u> For mixing larger volumes, a 50mm rotor and stator can be interchangeably fitted to the DB25</p>			
DB25-ROT-SS DB25-ROT-TS DB25-ROT-ZR	<p><u>Spare rotor</u> SS - 316 stainless steel TS - 400 series toolsteel - 5x improved wear ZR - zirconia - 10x improved wear</p> <p>Other materials are available on request including Hastelloy® and titanium</p>			
		SS - 316 stainless (standard)	TS - toolsteel	ZR - zirconia ceramic
DB25-P	<p><u>Datalogging port</u> A serial connection port fitted to the DB25 control panel allowing load and speed data signals (0-10V) to be fed to a PC datalogger. Note that this option must be specified at the time of ordering.</p>			
LAB-USB	<p><u>USB data interface</u> Multi-channel external data acquisition device with USB connection to a PC to allow logging of load and speed data. Basic Windows® datalogging software included. Note that option DB25-P is required.</p>			
LAB-CBL	<p><u>Datalogging interface cable</u> Serial connection cable linking the DB25-P port to the LAB-USB interface.</p>			
LAB-XL	<p><u>Excel® datalogging upgrade</u> Upgrade to the basic datalogging software of the LAB-USB option to enable data export to Microsoft® Excel® for detailed analysis.</p>			



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