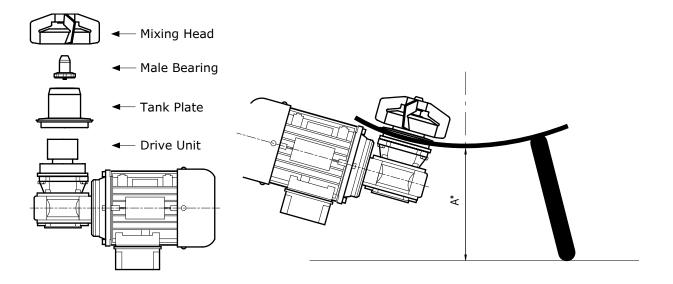


Specification Sheet

NovAseptic® Mixer, Mixer Assembly Recommendation, GMP

Product Description

The NovAseptic® mixers offer a complete solution for mixing throughout the process line and are designed for a wide variety of mixing applications in the pharmaceutical and biotechnology industries.





Assembly recommandation

Mixer Model	Mixing Head	Mixing Head, with Exchangeable Bearing, GMP	Male Bearing	Tank plate	Drive Unit	A *	Surface finish/Bearing Material
		<u> </u>			GM05/4A01-6410		Surface finish
GMP50					GM05/4B01-6410	- 282	Tank Plate, Mixing Head, Male bearing: Grinded and Mechanically
	GM05/12		GM05/24		GM05/4A11-6410		- Polished
						- 325	Mixing Head with Exchangeable bearing: Grinded and Electro-Polished
		- GM05/15-322		_	GM05/4B11-6410		Bearing Material: Silicone Carbide (SiC)
					GM05/4A01-6410	- 282	Surface finish Tank Plate: Grinded and Mechanically Polished
	GM05/12EP		GM05/24EP	GM05/33	GM05/4B01-6410		Mixing Head, Male bearing, Mixing Head with Exchangeable
					GM05/4A11-6410	- 325	bearing: Grinded and Electro-Polished
				_	GM05/4B11-6410		Bearing Material: Silicone Carbide (SiC)
	GM05/12EPDC				GM05/4A01-6410	- 282	Surface finish
		CM0E/1E 226			GM05/4B01-6410	202	Tank Plate: Grinded and Mechanically Polished
	GM05/12EPDC	GM05/15-326	GM05/24EPDC		GM05/4A11-6410	225	Mixing Head, Male bearing, Mixing Head with Exchangeable bearing: Grinded and Electro-Polished
					GM05/4B11-6410	- 325	Bearing Material: Silicone Carbide (SiC) with Diamond Coating (UNDO
					GM1/4A01-6410		Surface finish
	GM1/12			_	GM1/4B01-6410	- 280	Tank Plate, Mixing Head, Male bearing: Grinded and Mechanically
			GM1/24		GM1/4A21-6410		- Polished
						- 365	Mixing Head with Exchangeable bearing: Grinded and Electro-Polisher
		- GM1/15-322			GM1/4B21-6410		Bearing Material: Silicone Carbide (SiC)
9					GM1/4A01-6410	- 280	Surface finish Table Plate: Crinded and Machanian III. Polished
GMP100	GM1/12EP		GM1/24EP	GM1/33	GM1/4B01-6410		Tank Plate: Grinded and Mechanically Polished Mixing Head, Male bearing, Mixing Head with Exchangeable
Σ			GI11/ 24LI		GM1/4A21-6410	- 365	bearing: Grinded and Electro-Polished
_					GM1/4B21-6410	303	Bearing Material: Silicone Carbide (SiC)
					GM1/4A01-6410		Surface finish
	GM1/12EPDC	GM1/15-326	GM1/24EPDC		GM1/4B01-6410	- 280	Tank Plate: Grinded and Mechanically Polished
					GM1/4A21-6410		Mixing Head, Male bearing, Mixing Head with Exchangeable
					GM1/4B21-6410	- 365	bearing: Grinded and Electro-Polished Bearing Material: Silicone Carbide (SiC) with Diamond Coating (UNDO
					GM5/4A01-6420		Surface finish
	GM5/120	– GM5/15-322	GM510/24	— GM5/33		- 299	Tank Plate, Mixing Head, Male bearing: Grinded and Mechanically
					GM5/4B01-6420		- Polished
					GM5/4A21-6420	- 384	Mixing Head with Exchangeable bearing: Grinded and Electro-Polished
					GM5/4B21-6420		Bearing Material: Silicone Carbide (SiC)
GMP500	GM5/120EP		GM510/24EP		GM5/4A01-6420	- 299	Surface finish
					GM5/4B01-6420		Tank Plate: Grinded and Mechanically Polished
Ξ	0113/12021		011310/2121	0115/55	GM5/4A21-6420	- 384	Mixing Head, Male bearing, Mixing Head with Exchangeable bearing: Grinded and Electro-Polished
Ū					GM5/4B21-6420	304	Bearing Material: Silicone Carbide (SiC)
					GM5/4A01-6420		Surface finish
					GM5/4B01-6420	- 299	Tank Plate: Grinded and Mechanically Polished
	GM5/120EPDC	GM5/15-326	GM510/24EPDC		GM5/4A21-6420		Mixing Head, Male bearing, Mixing Head with Exchangeable bearing: Grinded and Electro-Polished
					GM5/4B21-6420	- 384 	Bearing Material: Silicone Carbide (SiC) with Diamond Coating (UNDC
					GM10/4A01-6420		Surface finish
	GM10/120 GM10/120EP	– GM10/15-322	GM510/24 GM510/24EP	 GM10/33	GM10/4B01-6420	- 311	Tank Plate, Mixing Head, Male bearing: Grinded and Mechanically
							- Polished
					GM10/4A21-6420	- 391	Mixing Head with Exchangeable bearing: Grinded and Electro-Polished
					GM10/4B21-6420		Bearing Material: Silicone Carbide (SiC)
0					GM10/4A01-6420	- 311	Surface finish
GMP1000					GM10/4B01-6420	- 391	Tank Plate: Grinded and Mechanically Polished Mixing Head, Male bearing, Mixing Head with Exchangeable
Ä					GM10/4A21-6420		bearing: Grinded and Electro-Polished
U					GM10/4B21-6420	331	Bearing Material: Silicone Carbide (SiC)
				_	GM10/4A01-6420	- 311	Surface finish
					GM10/4B01-6420		Tank Plate: Grinded and Mechanically Polished
	GM10/120EPDC	GM10/15-326	GM510/24EPDC		GM10/4A21-6420		Mixing Head, Male bearing, Mixing Head with Exchangeable bearing: Grinded and Electro-Polished
					GM10/4B21-6420	- 391	Bearing Material: Silicone Carbide (SiC) with Diamond Coating (UNDC
					GM20/4A01-6430		Surface finish
GMP2000						- 332	Tank Plate, Mixing Head, Male bearing: Grinded and Mechanically
	GM20/12		GM20/24		GM20/4B01-6430		- Polished
		- GM20/15-322			GM20/4A21-6430	- 420	Mixing Head with Exchangeable bearing: Grinded and Electro-Polished
				 GM20/33	GM20/4B21-6430	- 332	Bearing Material: Silicone Carbide (SiC)
	GM20/12EP		GM20/24EP		GM20/4A01-6430		Surface finish
					GM20/4B01-6430		Tank Plate: Grinded and Mechanically Polished
	GM20/12EP		GI*12U/ 24EP	GM20/33	GM20/4A21-6430	420	 Mixing Head, Male bearing, Mixing Head with Exchangeable bearing: Grinded and Electro-Polished
					GM20/4B21-6430	- 420	Bearing Material: Silicone Carbide (SiC)
				_	GM20/4A01-6430		Surface finish
					GM20/4B01-6430	- 332	Tank Plate: Grinded and Mechanically Polished
	GM20/12EPDC	GM200/15-326	GM20/24EPDC				Mixing Head, Male bearing, Mixing Head with Exchangeable
					GM20/4A21-6430	- 420	bearing: Grinded and Electro-Polished Penning Material: Silicona Carbida (SiC) with Diamond Capting (UNDO
					GM20/4B21-6430		Bearing Material: Silicone Carbide (SiC) with Diamond Coating (UND

^{*}Note: Minimum distance to dismount the Drive Unit

Mixer Model	Mixing Head	Mixing Head, with Exchangeable Bearing, GMP	Male Bearing	Tank plate	Drive Unit	A *	Surface finish/Bearing Material		
					GM50/4A01-6440		Surface finish		
			GM50300/24		GM50/4B01-6440	- 332	Tank Plate, Mixing Head, Male bearing: Grinded and Mechanically		
	GM50/12				GM50/4A21-6440		 Polished Mixing Head with Exchangeable bearing: Grinded and Electro-Polished 		
				- GM50/33	GM50/4B21-6440	- 420	Bearing Material: Silicone Carbide (SiC)		
_		- GM50/15-322	GM50300/24EP		GM50/4A01-6440		Surface finish		
GMP5000	GM50/12EP GM50/12EPDC				GM50/4B01-6440	- 332	Tank Plate: Grinded and Mechanically Polished		
					GM50/4A21-6440		Mixing Head, Male bearing, Mixing Head with Exchangeable bearing: Grinded and Electro-Polished		
					GM50/4B21-6440	- 420	Bearing Material: Silicone Carbide (SiC)		
					GM50/4A01-6440		Surface finish		
					GM50/4B01-6440	- 332	Tank Plate: Grinded and Mechanically Polished Mixing Head, Male bearing, Mixing Head with Exchangeable bearing: Grinded and Electro-Polished		
		GM50/15-326	GM50300/24EPDC		GM50/4A21-6440				
					GM50/4B21-6440	- 420	Bearing Material: Silicone Carbide (SiC) with Diamond Coating (UNDC)		
	,				GM100/4A01-6450		Surface finish		
				- GM100/33	GM100/4B01-6450	- 396 - 490	Tank Plate, Mixing Head, Male bearing: Grinded and Mechanically		
	GM100/12		GM50300/24		GM100/4A21-6450		Polished		
		- GM100/15-322	GM50300/24EP		GM100/4A21-0450		Mixing Head with Exchangeable bearing: Grinded and Electro-Polished Bearing Material: Silicone Carbide (SiC)		
					GM100/4B21-0430 GM100/4A01-6450		Surface finish		
000					GM100/4A01-6450	- 396 - 490	Tank Plate: Grinded and Mechanically Polished		
210	GM100/12EP						Mixing Head, Male bearing, Mixing Head with Exchangeable		
GMP10000					GM100/4A21-6450		bearing: Grinded and Electro-Polished		
	GM100/12EPDC GM200/12	GM100/15-326 - GM200/15-322	GM50300/24EPDC GM50300/24		GM100/4B21-6450		Bearing Material: Silicone Carbide (SiC)		
					GM100/4A01-6450	- 396	Surface finish Tank Plate: Grinded and Mechanically Polished		
					GM100/4B01-6450	490	Mixing Head, Male bearing, Mixing Head with Exchangeable		
					GM100/4A21-6450		bearing: Grinded and Electro-Polished		
					GM100/4B21-6450		Bearing Material: Silicone Carbide (SiC) with Diamond Coating (UNDC)		
				– GM200/33 –	GM200/4A01-6465	- 435 	Surface finish Tank Plate, Mixing Head, Male bearing: Grinded and Mechanically		
					GM200/4B01-6465		Polished		
					GM200/4A21-6465		Mixing Head with Exchangeable bearing: Grinded and Electro-Polished		
			GM50300/24EP		GM200/4B21-6465		Bearing Material: Silicone Carbide (SiC)		
0	GM200/12EP				GM200/4A01-6465	- 435 - 530	Surface finish Table Plate: Crinded and Machanian III. Poliched		
200					GM200/4B01-6465		Tank Plate: Grinded and Mechanically Polished Mixing Head, Male bearing, Mixing Head with Exchangeable		
GMP20000					GM200/4A21-6465		bearing: Grinded and Electro-Polished		
0					GM200/4B21-6465		Bearing Material: Silicone Carbide (SiC)		
	GM200/12EPDC	GM200/15-326	GM50300/24EPDC		GM200/4A01-6465	- 435 - 530	Surface finish		
					GM200/4B01-6465		Tank Plate: Grinded and Mechanically Polished Mixing Head, Male bearing, Mixing Head with Exchangeable		
					GM200/4A21-6465		bearing: Grinded and Electro-Polished		
					GM200/4B21-6465		Bearing Material: Silicone Carbide (SiC) with Diamond Coating (UNDC)		
	GM300/12		GM50300/24	GM300/33	GM300/4A01-6465	- 435	Surface finish		
					GM300/4B01-6465		Tank Plate, Mixing Head, Male bearing: Grinded and Mechanically Polished		
GMP30000		- GM300/15-322			GM300/4A21-6465	- 530	Mixing Head with Exchangeable bearing: Grinded and Electro-Polished		
			GM50300/24EP		GM300/4B21-6465	330	Bearing Material: Silicone Carbide (SiC)		
	GM300/12EP				GM300/4A01-6465	- 435	Surface finish Tank Plate: Grinded and Mechanically Polished Mixing Head, Male bearing, Mixing Head with Exchangeable		
					GM300/4B01-6465				
					GM300/4A21-6465		bearing: Grinded and Electro-Polished		
					GM300/4B21-6465		Bearing Material: Silicone Carbide (SiC)		
	GM300/12EPDC	GM300/15-326	GM50300/24EPDC		GM300/4A01-6465	- 435 	Surface finish		
					GM300/4B01-6465		Tank Plate: Grinded and Mechanically Polished		
					GM300/4A21-6465		Mixing Head, Male bearing, Mixing Head with Exchangeable bearing: Grinded and Electro-Polished		
					GM300/4B21-6465	- 530	Bearing Material: Silicone Carbide (SiC) with Diamond Coating (UNDC)		

*Note: Minimum distance to dismount the Drive Unit

Specifications

Net Weight (approximate)									
Mixer Assembly	GMP50	GMP100	GMP500	GMP1000	GMP2000	GMP5000	GMP10000	GMP20000	GMP30000
Weight kg	9	9.5	12	14	19.2	21.2	33.9	60	65

	GMP—Catalogue No.	Specification Sheet—Lit. No.
Mixing Head	GM#/12, GM#/12EP, GM#/120 or GM#/120EP	SP1169EN00
Male Bearing	GM#/24 or GM#/24EP	SP1170EN00
Drive Unit	GM#/4#-64##	SP1004EN00
Tank Plate	GM#/33	SP1033EN00
Exchangeable mixing head and DC versions	GM#/15-322, GM#/15-326, GM#/12#DC, GM#/24DC	SP1011EN00 SP1013EN00 SP2255EN00

	GMP—Catalogue No.	Specification Sheet—Lit. No.
Mixing Head Attractor	GT#/AW	SP1178EN00
Multi Tool for Mixing Head & Male Bearing	GT#/25	SP1031EN00
Tightening Tool for Male Bearing	GT#/26	SP1032EN00
Welding Tool Tank Plate Heatsink	G94-#	SP1179EN00
NovAseptic® Gauge 1, for Tank Plate, Outer Drive Head Control	G91-#	SP1199EN00
NovAseptic® Gauge 2, for Tank Plate, Mixing Head Control	G92-#	SP1200EN00
Integrated Speed Counter Kit	GM#/67	SP1144EN00

Specifications					
Environment Temperature*	0 to 40 °C (32 to 104 °F)				
Operating Temperature*					
Operating Speed	Maximum operating speed has to be validated for each process individually, depending on volume, viscosity A variable frequency drive (VFD) must be used with all NovAseptic® mixers.				
Specification Sheet	Further information is available on the Specification Sheet of each NovAseptic® Mixer assembly part.				
Quality Control	Our Quality Assurance System guarantees the control and traceability at all stages of the manufacturing.				
Options	For non-standard NovAseptic® Mixer Options, please contact us for information.				

^{*} Note: The assembly parts of NovAseptic® Mixer may have different design temperature and/or pressure limits. The weakest part in the assembled product sets the final permitted design temperature and pressure limits.

Technical Assistance

For more information, please visit **SigmaAldrich.com** for up-to-date worldwide contact information

