

# Portable Mixers

PRODUCT BROCHURE



Where Innovation Flows



# PORTABLE MIXING SOLUTIONS



Reliability. Accuracy. Peace of mind. These are things that Neptune™ provides through our innovative water treatment solutions. Since 1961, Neptune has manufactured the benchmark in hydraulic and mechanical diaphragm metering pumps, chemical feed systems, mixers and accessories. This commitment to quality and precision allows operators to maintain peace of mind and continued performance across a variety of industries, including agriculture, energy, mining, chemical processing, and water/wastewater treatment.

With any piece of industrial equipment, portable mixers are most efficient, effective and reliable when the proper model and style is used for a particular mixing or blending task. That's why it's imperative to consider several operational variables when specifying portable mixers.

Neptune has a full range of portable mixers, which are ideally suited for blending liquids, suspending or dissolving solids, dispersing immiscible liquids and small amounts of gases in liquids.

Through Neptune's Mixer Selection Guide, the best portable mixers can be identified for a particular task.

# Neptune™ Mixer Selection

## PORTABLE MIXERS

Neptune™ offers a complete line of portable mixers for a wide variety of critical blending and mixing operations. Engineered to provide a long life and trouble-free operation, Neptune mixers are ideally suited for the following applications:

1. Blending liquids
2. Suspending or dissolving solids
3. Dispersing immiscible liquids
4. Dispersing small amounts of gases in liquids

Neptune mixers can be clamp- or base-mounted on beams, tank walls and other supports (angle of entry may be adjusted to meet specific mixing requirements). Neptune mixers are used in a variety of industrial applications, including waste treatment, water treatment and batch chemical preparation. These portable mixers are also ideal for mixing paints; varnishes; polymers; textile sizes and dyes; pharmaceuticals; soaps; and countless other materials from 1 to over 25,000 cP viscosity. Neptune mixers are available at either 350 or 420 rpm (gear-driven) or 1,750 rpm (direct-drive).

To help you select the proper Neptune mixer for your application, Neptune has developed the following guide to

provide users with valuable information such as specifications, dimensions and dimensional drawings. It is important to note that selecting the proper mixer depends on a number of parameters, including the size of the batch, viscosity of the components, final product and other parameters.

## NEPTUNE MIXER SELECTION CHART

The chart below provides some basic guidelines for selecting the proper Neptune mixer(s) that offers mild blending of various viscosity liquids in different size tanks.

The information provided is based on an approximate mix/blend time of two liquids for 30 minutes, with both liquids already in the tank. Mixing times will be shorter if one liquid is added to a second liquid while the mixer is operating. Powders should always be added while the mixer is running.

This chart also applies to the suspension of solids with settling velocities of less than one ft. (304.8 mm) per min.

For more rapid or vigorous mixing, use a mixer one or two sizes larger.

Dual propellers are recommended for tanks 1,000 gal. (3,785.4 L) and larger at viscosities of 1,000 cP and higher.

VISCOSITY CP	UP TO 50 GAL. (189.3 L)	UP TO 100 GAL. (378.5 L)	UP TO 200 GAL. (757.1 L)	UP TO 500 GAL. (1,892.7 L)	UP TO 1,000 GAL. (3,785.4 L)	UP TO 2,000 GAL. (7,570.8 L)	UP TO 3,000 GAL. (11,356.2 L)	UP TO 5,000 GAL. (18,927.1 L)
≤1	BN-3.0*	BN-3.0*	JD-2.0	JD-2.0	JG-2.0	JG-2.0	JG-2.0	JG-4.0
≤100	BN-3.0*	BN-3.0*	JD-2.0	JG-2.0	JG-2.0	JG-2.0	JG-3.0	JG-5.0
≤300	BN-3.0*	BN-3.0*	JG-2.0	JG-2.0	JG-2.0	JG-4.0	JG-5.0	JG-5.0
≤500	BN-3.0*	JG-2.0	JG-2.0	JG-2.0	JG-3.0	JG-5.0	JG-6.0	JG-7.0
≤1,000	JD-2.0	JG-2.0	JG-2.0	JG-2.0	JG-4.0	JG-6.0	JG-7.0	JG-8.0
≤2,000	JG-2.0	JG-2.0	JG-3.0	JG-3.0	JG-5.0	JG-6.0	JG-8.0	JG-9.0
≤3,000	JG-2.0	JG-2.0	JG-4.0	JG-4.0	JG-6.0	JG-8.0	JG-9.0	
≤5,000	JG-2.0	JG-2.0	JG-5.0	JG-5.0	JG-7.0	JG-8.0		
≤15,000	JG-3.0	JG-3.0	JG-5.0	JG-8.0	JG-9.0	JG-9.0		
≤25,000	JG-6.0	JG-7.0	JG-8.0	JG-9.0				

For full specifications and information on the above mixers: Series JG - see page 4, Series JD - see page 8, Series BN - see page 10

\*Specifications are for sanitary 3A applications too. See page page (insert page number for BNS model) for more information on BNS models

Portable mixers for small batches play an essential role in critical industrial liquid-handling applications. Neptune's range of small-batch, portable mixers can blend liquids, suspend or dissolve solids, and disperse immiscible liquids and small amounts of gases in liquids. Small batch mixers

are best suited for batches sizes up to 100 gallons and viscosity CPS' of 500 or less. These mixers are also ideal when the final product is small in volume with a low viscosity. Small batch mixers can also be clamped to the side of the tank, which provides for the proper angle for optimum mixing.

CONNECTION	UNDER 50 GALLON	50 GALLON	100 GALLON	55 GALLON DRUM	55 GALLON DRUM HIGH VISCOSITY		TOTE/IBC CONTAINERS		PAIL/5 GALLON/SPECIALTY	NOTES
Clamp	L-1-CL			F-1.X			JGT-3.X	***		
	A-1.0	B-2.X	B-3.X	F-2.X			JGT-4.X	***		
		B-4.0*	B-4.0*	F-3.X			JGT-5.X	***		JGT VISCOSITY LIMIT 5000 CPS
	BN-1.X	BN-2.X	BN-3.X	F-4.0*			JGT-3.4*	***		
		BN-4.0*	BN-4.0*				JGT-5.4*	***		
			BC-5.4*							
			BC-7.4*							
		BC-8.4*								
Bung				E-1.X	H-2.X	HGS-2.X	HGL-3.X	RAB-3.X		HGL & RAB VISCOSITY LIMIT 5000 CPS
				E-2.X	H-3.X	HGS-3.X	HGL-5.X	RAB-5.X		H MIXER LIMIT HGS MIXER LIMIT
				E-3.X	H-4.0*	HGS-4.0*	HGL-6.X	RAB-6.X		2.X -1,000 CPS 2.X -4,000 CPS
				E-4.0*	H-5.0	HGS-5.0	HGL-4.0*	RAB-4.0*		3.X -4,000 CPS 3.X -16,000 CPS
					H-6.0	HGS-6.0	HGL-7.0*	RAB-7.0*		5.X -6,000 CPS 5.X -24,000 CPS
					H-7.0*	HGS-7.0*				6.X -8,000 CPS 6.X -32,000 CPS
										7.X -8,000 CPS 7.X -32,000 CPS
Bracket	L-1-BK						RGT-1.X	**		
							RGT-2.X	**		
							RGT-3.X	**		RGT VISCOSITY LIMIT 5000 CPS
							RGT-1.4*	**		
							RGT-3.4*	**		
Flange			BF-5.4*							
			BF-7.4*							
			BF-8.4*							
Pipe Clamp								B-4.0P*	VISCOSITY LIMITS 1000 CPS	
Pail Rim Clamp								PAM-6.0*		
Handle Bar								HAJ-3.X*		
Hand Held									HH12*	
									HH10*	
									HH55*	HH55 55 GALLON MODEL

X - Electric motors: specify specific motor - Voltage, phase, enclosure (TEFC / Explosion proof).  
 Motor Examples: BN-3.0 = 1/2hp-1ph-115/220-TEFC motor | E-2.3 = 1/3hp-3ph-220/460-EXP motor.  
 \*Air motor models.  
 \*\*Series RGT optional adjustable mounting bracket fits flat top, square edge containers from 31-1/2" to 50" wide. Available in painted steel / Model RGT-BKT.

\*\*\* Series JGT optional adjustable mounting bracket fits 32" to 50 1/2" wide containers. Model DTS, Steel.  
 PVC coatings available.  
 Unless noted viscosity limits are water like materials.

# Proper Mixer Mounting and Positioning

In most applications involving small mixing tanks of 1,000 gal. (3,785.4 L) or less, the mixer is clamped to the side of the tank. Optimum mixing will be achieved when the mixer is angled from the tank wall, either off-center (figure 1) or on-center (figure 2). Improperly mounting a portable mixer will greatly lessen mixing efficiency, cause vibration and could possibly damage the mixer.

Angling off-center is preferred when good material turnover is required, as in mixing slurry. Angling on-center is desired for more gentle mixing and when vortexing must be minimized.

Larger size tanks may require that a mixer be mounted directly in the center of the tank with the shaft vertical (figure 3). When a mixer is used in this arrangement, baffles are recommended to prevent the contents of the tank from turning in the direction of the mix. If this occurs, mixing action will be poor.

Such baffling will avoid vortexing and allow mixing to be as thorough as possible. Neptune suggests that four baffles be used, located 90° apart and sized approximately 1/12 of the tank diameter. The baffle should not fully extend to the bottom of the tank and a gap should be provided between the baffle and the tank wall.

**For assistance in choosing a mixer or to help solve your mixing problems, please call one of our sales engineers at +1 (215) 699-8700.**

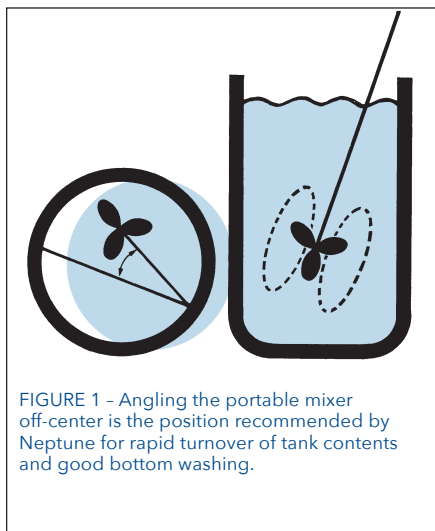


FIGURE 1 - Angling the portable mixer off-center is the position recommended by Neptune for rapid turnover of tank contents and good bottom washing.

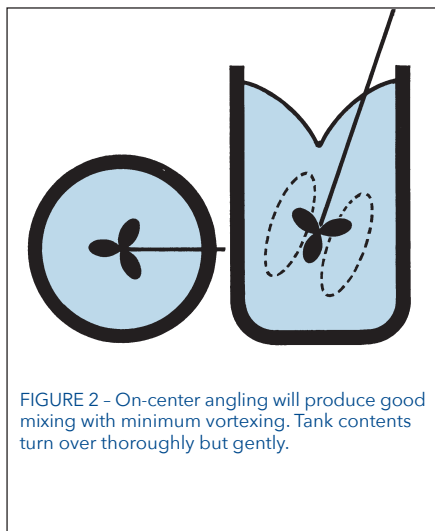


FIGURE 2 - On-center angling will produce good mixing with minimum vortexing. Tank contents turn over thoroughly but gently.

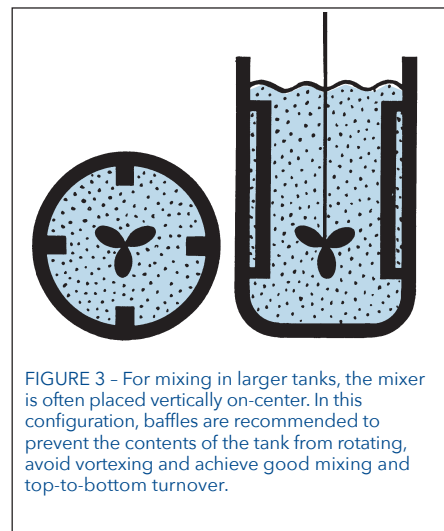


FIGURE 3 - For mixing in larger tanks, the mixer is often placed vertically on-center. In this configuration, baffles are recommended to prevent the contents of the tank from rotating, avoid vortexing and achieve good mixing and top-to-bottom turnover.

# JG Series Gear Drive Mixer

Clamp or Cup Plate Mount, Heavy Helical Gear, 350 rpm, Grease Lube

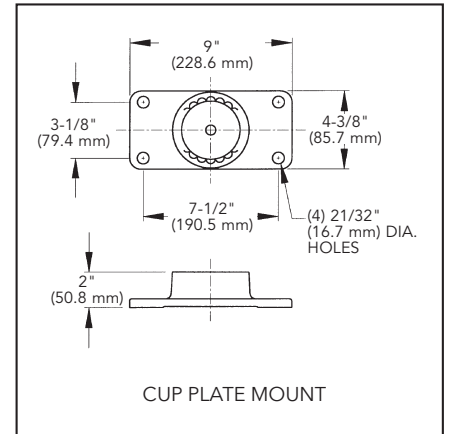
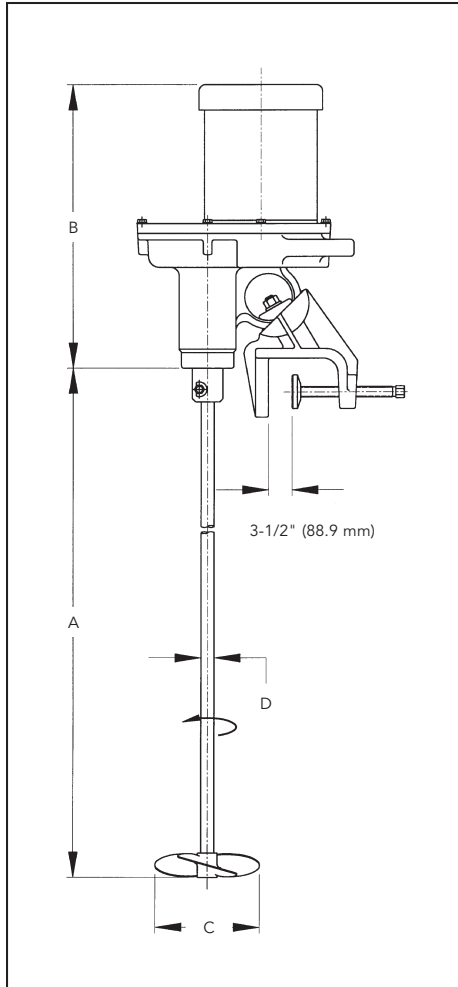
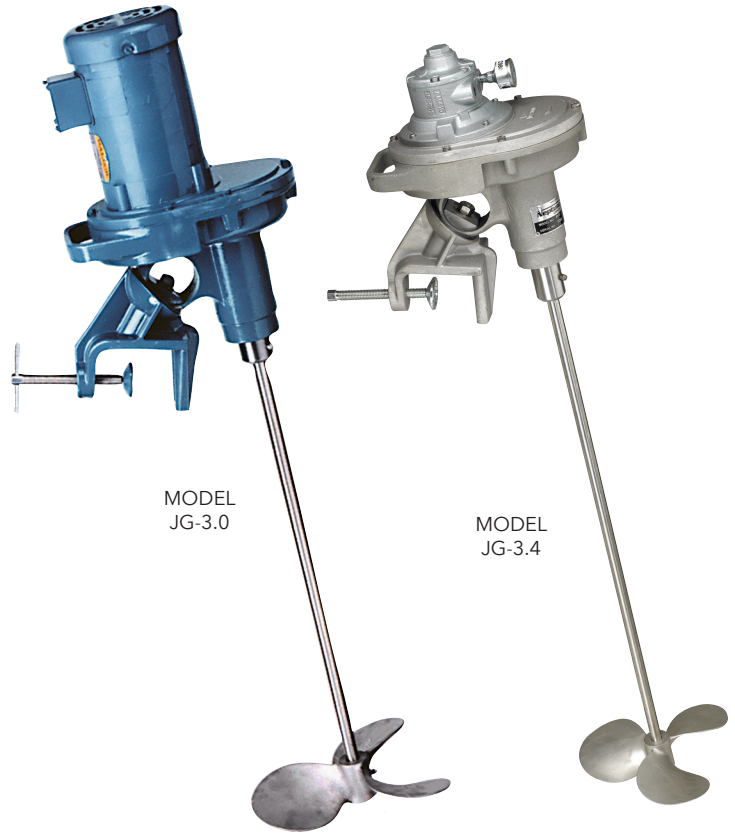
The most powerful mixers from Neptune for the most difficult mixing applications. These mixers feature a grease-filled gearbox that eliminates an oil seal and the possibility of oil contamination.

MODEL	STANDARD MOTOR DESCRIPTION	DIMENSIONS INCHES (MM)				
		A SHAFT LENGTH	B MOTOR GEAR SECTION LENGTH	C		D
				SINGLE	DUAL	SHAFT DIAMETER
<b>TOTALLY-ENCLOSED, FAN-COOLED (TEFC)</b>						
JG-2.0	1/3 HP-1-115/230	48 (1,219.2)	17-5/8 (447.7)	10 (254.0)	8 (203.2)	3/4 (19.1)
JG-2.1	1/3 HP-3-230/460	48 (1,219.2)	17-3/8 (441.3)	10 (254.0)	8 (203.2)	3/4 (19.1)
JG-3.0	1/2 HP-1-115/230	48 (1,219.2)	18-1/2 (469.9)	12 (304.8)	10 (254.0)	3/4 (19.1)
JG-3.1	1/2 HP-3-230/460	48 (1,219.2)	17-5/8 (447.7)	12 (304.8)	10 (254.0)	3/4 (19.1)
JG-4.0	3/4 HP-1-115/230	60 (1,524.0)	18-3/4 (476.3)	13 (330.2)	11 (279.4)	3/4 (19.1)
JG-4.1	3/4 HP-3-230/460	60 (1,524.0)	18-1/8 (460.4)	13 (330.2)	11 (279.4)	3/4 (19.1)
JG-5.1	1 HP-3-230/460	60 (1,524.0)	18-3/8 (466.7)	14 (355.6)	12 (304.8)	1 (25.4)
JG-6.1	1-1/2 HP-3-230/460	60 (1,524.0)	18-3/4 (476.3)	15 (381.0)	13 (330.2)	1 (25.4)
JG-7.1	2 HP-3-230/460	60 (1,524.0)	20-5/8 (523.9)	16 (406.4)	14 (355.6)	1-1/4 (31.8)
JG-8.1	3 HP-3-230/460	72 (1,828.8)	21-5/8 (549.3)	16 (406.4)	15 (381.0)	1-1/4 (31.8)
<b>EXPLOSION-PROOF CLASS 1 GROUP D (EP)</b>						
JG-2.2	1/3 HP-1-115/230	48 (1,219.2)	20-1/2 (520.7)	10 (254.0)	8 (203.2)	3/4 (19.1)
JG-2.3	1/3 HP-3-230/460	48 (1,219.2)	17-3/8 (441.3)	10 (254.0)	8 (203.2)	3/4 (19.1)
JG-3.2	1/2 HP-1-115/230	48 (1,219.2)	21 (533.4)	12 (304.8)	10 (254.0)	3/4 (19.1)
JG-3.3	1/2 HP-3-230/460	48 (1,219.2)	19-5/8 (498.5)	12 (304.8)	10 (254.0)	3/4 (19.1)
JG-4.2	3/4 HP-1-115/230	60 (1,524.0)	21-1/2 (546.1)	13 (330.2)	11 (279.4)	3/4 (19.1)
JG-4.3	3/4 HP-3-230/460	60 (1,524.0)	19-5/8 (498.5)	13 (330.2)	11 (279.4)	3/4 (19.1)
JG-5.3	1 HP-3-230/460	60 (1,524.0)	20-1/2 (520.7)	14 (355.6)	12 (304.8)	1 (25.4)
JG-6.3	1-1/2 HP-3-230/460	60 (1,524.0)	20-1/2 (520.7)	15 (381.0)	13 (330.2)	1 (25.4)
JG-7.3	2 HP-3-230/460	60 (1,524.0)	22-1/8 (561.9)	16 (406.4)	14 (355.6)	1-1/4 (31.8)
<b>AIR MOTOR</b>						
JG-3.4	1/3-1/2 HP AIR 12-20 CFM (0.34-0.57 CMM) AT 40-80 PSI (2.8-5.5 BAR)	48 (1,219.2)	17-1/8 (434.9)	12 (304.8)	10 (254.0)	3/4 (19.1)
JG-4.4	3/4 HP AIR 30 CFM (0.85 CMM) AT 60 PSI (4.1 BAR)	60 (1,524.0)	18 (457.2)	13 (330.2)	11 (279.4)	3/4 (19.1)
JG-5.4	1 HP AIR 40 CFM (1.13 CMM) AT 40 PSI (2.8 BAR)	60 (1,524.0)	19-1/8 (485.8)	14 (355.6)	12 (304.8)	1 (25.4)
JG-6.4	1-1/2 HP AIR 55 CFM (1.56 CMM) AT 60 PSI (4.1 BAR)	60 (1,524.0)	19-1/8 (485.8)	15 (381.0)	13 (330.2)	1 (25.4)
JG-7.4	2 HP AIR 65 CFM (1.84 CMM) AT 70 PSI (4.8 BAR)	60 (1,524.0)	15-5/8 (396.9)	16 (406.4)	14 (355.6)	1-1/4 (31.8)
JG-8.4	4 HP AIR 125 CFM (3.54 CMM) AT 90 PSI (6.2 BAR)	72 (1,828.8)	16-3/4 (425.5)	16 (406.4)	15 (381.0)	1-1/4 (31.8)
<b>VARIABLE SPEED 35 TO 350 RPM TOTALLY-ENCLOSED, FAN-COOLED (TEFC)*</b>						
JG-2.7	1/3 HP VARIABLE SPEED, 1/115 V	48 (1,219.2)	17-5/8 (447.7)	10 (254.0)	8 (203.2)	3/4 (19.1)
JG-3.7	1/2 HP VARIABLE SPEED, 1/115 V	48 (1,219.2)	18-1/2 (469.9)	12 (304.8)	10 (254.0)	3/4 (19.1)
JG-4.7	3/4 HP VARIABLE SPEED, 1/230 V	60 (1,524.0)	18-3/4 (476.3)	13 (330.2)	11 (279.4)	3/4 (19.1)
JG-5.7	1 HP VARIABLE SPEED, 1/230 V	60 (1,524.0)	18-3/8 (466.7)	14 (355.6)	12 (304.8)	1 (25.4)

\*Using AC motor/control package.

## FEATURES AND BENEFITS

- No clutches to slip, wear or replace
- 316SS propellers and shafts are standard. PVC coating available
- Square-pitch 1:1 ratio marine propellers are used exclusively. Flow coefficients and power consumption characteristics equal those of the best hydrofoil impeller designs
- Vibration-absorbing pad standard
- Motors are available in TEFC or explosion-proof enclosures (1,750 rpm, 56C frame). Air motors also available
- Gears run in grease lubrication. Cannot leak oil
- All JG mixer shaft bearings are permanently lubricated
- Cast aluminum housing
- Mounting clamp has adjustable angle of entry by indexed ball-and-socket design to achieve various process results
- Fixed cup plate mount optional on 1/3 HP through 1-1/2 HP. Standard on 2 HP and larger models



- A:** SHAFT LENGTH
- B:** MOTOR GEAR LENGTH
- C:** SINGLE/DUAL
- D:** SHAFT DIAMETER

# JGF Series (Flange Mount) & JGR Series (Angle-Riser Mount) Gear Drive Mixers

Heavy Helical Gear, 350 rpm, Grease Lube

All features of JG Series gear drive mixers (see page 4) are provided with alternate flange and angle-riser mounts.

FLANGE MOUNT MODEL	ANGLE-RISER MODEL	STANDARD MOTOR DESCRIPTION	DIMENSIONS INCHES (MM)				
			A SHAFT LENGTH	B MOTOR GEAR SECTION LENGTH	SINGLE	DUAL	SHAFT DIAMETER
<b>TOTALLY-ENCLOSED, FAN-COOLED (TEFC)</b>							
JGF-2.0	JGR-2.0	1/3 HP-1-115/230	48 (1,219.2)	17-5/8 (447.7)	10 (254.0)	8 (203.2)	3/4 (19.1)
JGF-2.1	JGR-2.1	1/3 HP-3-230/460	48 (1,219.2)	17-3/8 (441.3)	10 (254.0)	8 (203.2)	3/4 (19.1)
JGF-3.0	JGR-3.0	1/2 HP-1-115/230	48 (1,219.2)	18-1/2 (469.9)	12 (304.8)	10 (254.0)	3/4 (19.1)
JGF-3.1	JGR-3.1	1/2 HP-3-230/460	48 (1,219.2)	17-5/8 (447.7)	12 (304.8)	10 (254.0)	3/4 (19.1)
JGF-4.0	JGR-4.0	3/4 HP-1-115/230	60 (1,524.0)	18-3/4 (476.3)	13 (330.2)	11 (279.4)	3/4 (19.1)
JGF-4.1	JGR-4.1	3/4 HP-3-230/460	60 (1,524.0)	18-3/4 (476.3)	13 (330.2)	11 (279.4)	3/4 (19.1)
JGF-5.1	JGR-5.1	1 HP-3-230/460	60 (1,524.0)	18-3/4 (476.3)	14 (355.6)	12 (304.8)	1 (25.4)
JGF-6.1	JGR-6.1	1-1/2 HP-3-230/460	60 (1,524.0)	18-3/4 (476.3)	15 (381.0)	13 (330.2)	1 (25.4)
JGF-7.1	JGR-7.1	2 HP-3-230/460	60 (1,524.0)	20-5/8 (523.9)	16 (406.4)	14 (355.6)	1-1/4 (31.8)
JGF-8.1	JGR-8.1	3 HP-3-230/460	72 (1,828.8)	21-5/8 (549.3)	16 (406.4)	15 (381.0)	1-1/4 (31.8)
JGF-9.1	JGR-9.1	5 HP-3-230/460	72 (1,828.8)	23 (584.2)	16 (406.4)	15 (381.0)	1-1/4 (31.8)
<b>EXPLOSION-PROOF CLASS 1 GROUPD (EP)</b>							
JGF-2.2	JGR-2.2	1/3 HP-1-115/230	48 (1,219.2)	20-1/2 (520.7)	10 (254.0)	8 (203.2)	3/4 (19.1)
JGF-2.3	JGR-2.3	1/3 HP-3-230/460	48 (1,219.2)	17-3/8 (441.3)	10 (254.0)	8 (203.2)	3/4 (19.1)
JGF-3.2	JGR-3.2	1/2 HP-1-115/230	48 (1,219.2)	21 (533.4)	12 (304.8)	10 (254.0)	3/4 (19.1)
JGF-3.3	JGR-3.3	1/2 HP-3-230/460	48 (1,219.2)	19-5/8 (498.5)	12 (304.8)	10 (254.0)	3/4 (19.1)
JGF-4.2	JGR-4.2	3/4 HP-1-115/230	60 (1,524.0)	21-1/2 (546.1)	13 (330.2)	11 (279.4)	3/4 (19.1)
JGF-4.3	JGR-4.3	3/4 HP-3-230/460	60 (1,524.0)	19-5/8 (498.5)	13 (330.2)	11 (279.4)	3/4 (19.1)
JGF-5.3	JGR-5.3	1 HP-3-230/460	60 (1,524.0)	20-1/2 (520.7)	14 (355.6)	12 (304.8)	1 (25.4)
JGF-6.3	JGR-6.3	1-1/2 HP-3-230/460	60 (1,524.0)	20-1/2 (520.7)	15 (381.0)	13 (330.2)	1 (25.4)
JGF-7.3	JGR-7.3	2 HP-3-230/460	60 (1,524.0)	22-1/8 (561.0)	16 (406.4)	14 (355.6)	1-1/4 (31.8)
<b>AIR MOTOR</b>							
JGF-3.4	JGR-3.4	1/3-1/2 HP AIR 12-20 CFM (0.34-0.57 CMM) AT 40-80 PSI (2.8-5.5 BAR)	48 (1,219.2)	17-1/8 (435.0)	12 (304.8)	10 (254.0)	3/4 (19.1)
JGF-4.4	JGR-4.4	3/4 HP AIR 30 CFM (0.85 CMM) AT 60 PSI (4.1 BAR)	60 (1,524.0)	18 (457.2)	13 (330.2)	11 (279.4)	3/4 (19.1)
JGF-5.4	JGR-5.4	1 HP AIR 40 CFM (1.13 CMM) AT 40 PSI (2.8 BAR)	60 (1,524.0)	19-1/8 (485.8)	14 (355.6)	12 (304.8)	1 (25.4)
JGF-6.4	JGR-6.4	1-1/2 HP AIR 55 CFM (1.56 CMM) AT 60 PSI (4.1 BAR)	60 (1,524.0)	19-1/8 (485.8)	15 (381.0)	13 (330.2)	1 (25.4)
JGF-7.4	JGR-6.4	2 HP AIR 65 CFM (1.84 CMM) AT 70 PSI (4.8 BAR)	60 (1,524.0)	15-5/8 (396.9)	16 (406.4)	14 (355.6)	1-1/4 (31.8)
JGR-8.4	JGF-8.4	4 HP AIR 125 CFM (3.54 CMM) AT 90 PSI (6.2 BAR)	72 (1,828.8)	16-3/4 (425.5)	16 (406.4)	15 (381.0)	1-1/4 (31.8)
<b>VARIABLE SPEED 35 TO 350 RPM TOTALLY-ENCLOSED, FAN-COOLED (TEFC)*</b>							
JGF-2.7	JGR-2.7	1/3 HP VARIABLE SPEED, 1/115 V	48 (1,219.2)	17-5/8 (447.7)	10 (254.0)	8 (203.2)	3/4 (19.1)
JGF-3.7	JGR-3.7	1/2 HP VARIABLE SPEED, 1/115 V	48 (1,219.2)	18-1/2 (469.9)	12 (304.8)	10 (254.0)	3/4 (19.1)
JGF-4.7	JGR-4.7	3/4 HP VARIABLE SPEED, 1/230 V	60 (1,524.0)	18-3/4 (476.3)	13 (330.2)	11 (279.4)	3/4 (19.1)
JGF-5.7	JGR-5.7	1 HP VARIABLE SPEED, 1/230 V	60 (1,524.0)	18-3/8 (466.7)	14 (355.6)	12 (304.8)	1 (25.4)

\*Using AC motor/control package.



**FEATURES AND BENEFITS**

## JGF Series Mixers

### Flange Mount

- Flange stuffing box rated to 15 psi (1.0 bar)
- Standard mounting flange is 6" (152.4 mm) carbon steel, 316SS optional
- Optional flanges available in 8" (203.2 mm), 10" (254.0 mm), 12" (304.8 mm), or 14" (355.6 mm)

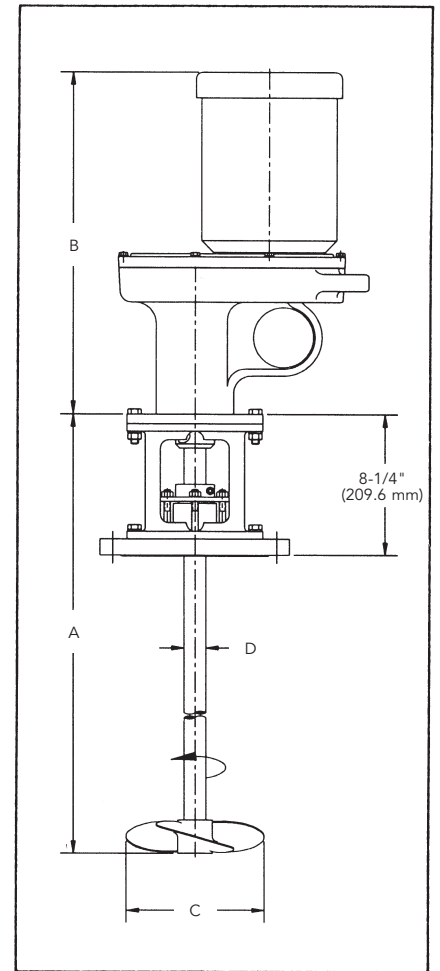
## JGR Series Mixers

### Angle-Riser Mount

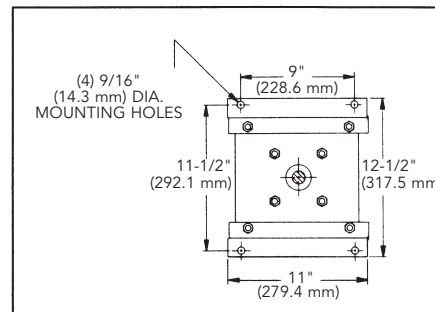
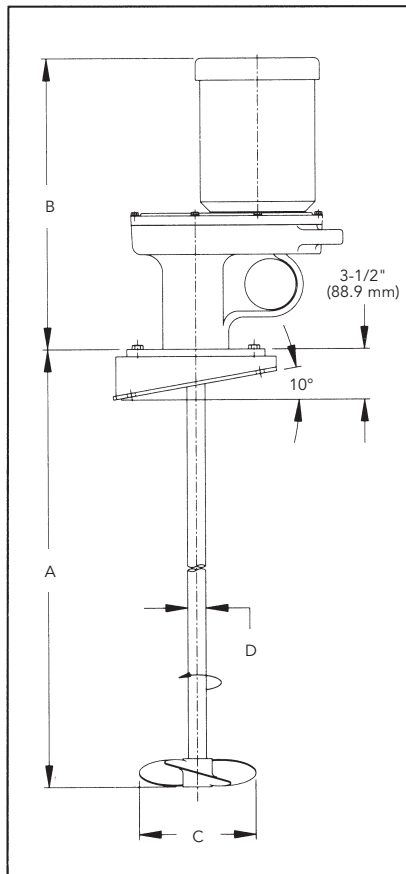
- Angle-riser mount provides a fixed 10° angle of entry



MODEL JGF-8.1



MODEL JGR-8.1



- A:** SHAFT LENGTH
- B:** MOTOR GEAR LENGTH
- C:** SINGLE/DUAL
- D:** SHAFT DIAMETER

# JD Series Direct Drive Mixer

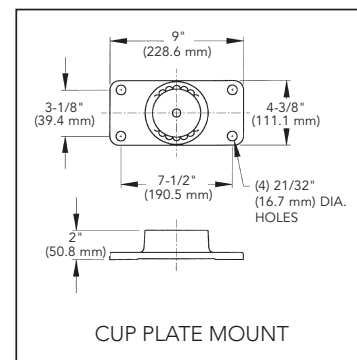
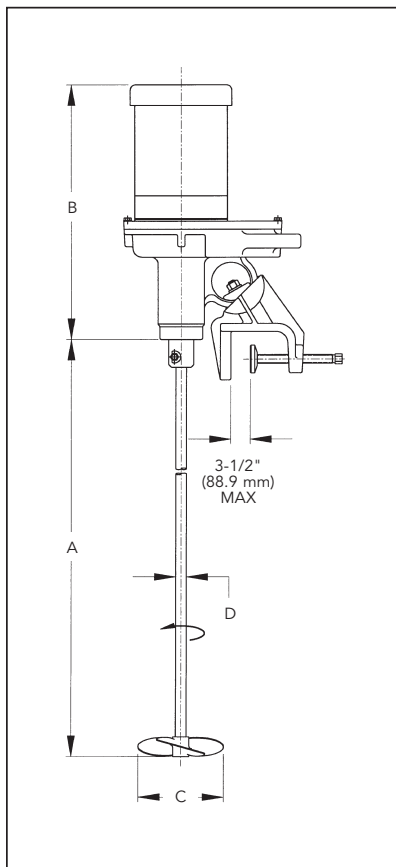
Clamp or Cup Plate Mount 1,750 rpm, Grease Lube

Engineered to meet the need for a large direct-drive mixer with a housing that cannot leak oil.

MODEL	STANDARD MOTOR DESCRIPTION	DIMENSIONS INCHES (MM)				
		A SHAFT LENGTH	B	C		D SHAFT DIAMETER
				SINGLE	DUAL	
<b>TOTALLY-ENCLOSED, FAN-COOLED (TEFC)</b>						
JD-2.0	1/3 HP-1-115/230	36 (914.4)	21-1/8 (536.6)	4 (101.6)	4 (101.6)	3/4 (19.1)
JD-2.1	1/3 HP-3-230/460	36 (914.4)	20-3/4 (527.1)	4 (101.6)	4 (101.6)	3/4 (19.1)
JD-3.0	1/2 HP-1-115/230	48 (1,219.2)	22 (558.8)	5 (127.0)	4 (101.6)	3/4 (19.1)
JD-3.1	1/2 HP-3-230/460	48 (1,219.2)	21-1/8 (536.6)	5 (127.0)	4 (101.6)	3/4 (19.1)
JD-4.0	3/4 HP-1-115/230	48 (1,219.2)	22-1/4 (565.2)	5 (127.0)	4 (101.6)	3/4 (19.1)
JD-4.1	3/4 HP-3-230/460	48 (1,219.2)	21-1/2 (546.1)	5 (127.0)	4 (101.6)	3/4 (19.1)
JD-5.1	1 HP-3-230/460	60 (1,524.0)	21-3/4 (552.5)	6 (152.4)	5 (127.0)	1 (25.4)
JD-6.1	1-1/2 HP-3-230/460	60 (1,524.0)	22-1/4 (565.2)	6 (152.4)	5 (127.0)	1 (25.4)
JD-7.1	2 HP-3-230/460	60 (1,524.0)	23-1/2 (596.9)	7 (177.8)	6 (152.4)	1 (25.4)
<b>EXPLOSION-PROOF CLASS 1 GROUP D (EP)</b>						
JD-2.2	1/3 HP-1-115/230	36 (914.4)	24 (609.6)	4 (101.6)	4 (101.6)	3/4 (19.1)
JD-2.3	1/3 HP-3-230/460	36 (914.4)	20-3/4 (527.1)	4 (101.6)	4 (101.6)	3/4 (19.1)
JD-3.2	1/2 HP-1-115/230	48 (1,219.2)	24-1/2 (622.3)	5 (127.0)	4 (101.6)	3/4 (19.1)
JD-3.3	1/2 HP-3-230/460	48 (1,219.2)	23-1/8 (587.4)	5 (127.0)	4 (101.6)	3/4 (19.1)
JD-4.2	3/4 HP-1-115/230	48 (1,219.2)	25 (635.0)	5 (127.0)	4 (101.6)	3/4 (19.1)
JD-4.3	3/4 HP-3-230/460	48 (1,219.2)	23-1/8 (587.4)	5 (127.0)	4 (101.6)	3/4 (19.1)
JD-5.3	1 HP-3-230/460	60 (1,524.0)	24 (609.6)	6 (152.4)	5 (127.0)	1 (25.4)
JD-6.3	1-1/2 HP-3-230/460	60 (1,524.0)	24 (609.6)	6 (152.4)	5 (127.0)	1 (25.4)
JD-7.3	2 HP-3-230/460	60 (1,524.0)	25-1/2 (647.7)	7 (177.8)	6 (152.4)	1 (25.4)
<b>AIR MOTOR</b>						
JD-3.4	1/3 HP TO 1/2 HP AIR REQUIREMENTS: 12-20 CFM (0.34-0.57 CMM) AT 40-80 PSI (2.8-5.5 BAR)	48 (1,219.2)	16-1/2 (419.1)	5 (127.0)	4 (101.6)	3/4 (19.1)
JD-4.4	3/4 HP AIR REQUIREMENTS: 30 CFM (0.85 CMM) AT 60 PSI (4.1 BAR)	48 (1,219.2)	17-3/8 (441.3)	5 (127.0)	4 (101.6)	3/4 (19.1)
JD-5.4	1 HP AIR REQUIREMENTS: 40 CFM (1.13 CMM) AT 40 PSI (2.8 BAR)	60 (1,524.0)	18-1/2 (469.9)	6 (152.4)	5 (127.0)	1 (25.4)
JD-6.4	1-1/2 HP AIR REQUIREMENTS: 55 CFM (1.56 CMM) AT 60 PSI (4.1 BAR)	60 (1,524.0)	18-1/2 (469.9)	6 (152.4)	5 (127.0)	1 (25.4)
JD-7.4	2 HP AIR REQUIREMENTS: 65 CFM (1.84 CMM) AT 75 PSI (5.1 BAR)	60 (1,524.0)	18-1/2 (469.9)	7 (177.8)	6 (152.4)	1 (25.4)

## FEATURES AND BENEFITS

- Square-pitch 1:1 ratio marine propellers are used exclusively. Flow coefficients and power consumption characteristics equal those of the best hydrofoil impeller designs
- 316SS propellers and shafts are standard. PVC coating available
- JD mixers have adjustable angles of entry by indexed ball-and-socket design to achieve different process results
- Motors are available in TEFC or explosion-proof enclosures (1,750 rpm, 56C frame). Air motors also available
- Vibration-absorbing pad standard
- All JD mixer shaft bearings are permanently lubricated
- Variable speed drives available
- Cast aluminum housing
- Fixed-cup plate mount optional



# BN Series Small Batch Mixer

## 1,750 rpm Direct Drive, Clamp Mount

BN Series mixers are the premier line of small direct drive mixers for mixing small batches of low viscosity fluids.

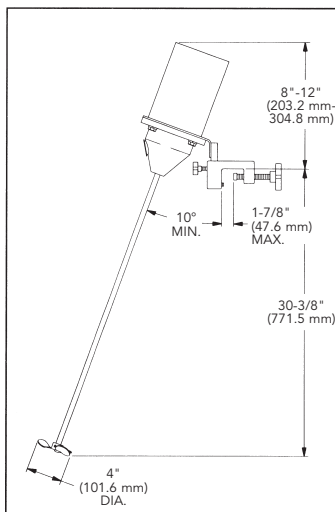
MODEL NUMBER	STANDARD MOTOR DESCRIPTION	DIMENSIONS INCHES (MM)	
		SHAFT LENGTH	SHAFT DIAMETER
<b>TOTALLY-ENCLOSED FAN-COOLED (TEFC)</b>			
BN-1.0	1/4 HP-1-115/230	32 (812.8)	1/2 (12.7)
BN-2.0	1/3 HP-1-115/230	32 (812.8)	1/2 (12.7)
BN-2.2	1/3 HP-3-230/460	32 (812.8)	1/2 (12.7)
BN-3.0	1/2 HP-1-115/230	32 (812.8)	5/8 (15.9)
BN-3.2	1/2 HP-3-230/460	32 (812.8)	5/8 (15.9)
<b>EXPLOSION-PROOF CLASS 1 GROUP D (EP)</b>			
BN-2.1	1/3 HP-1-115/230	32 (812.8)	1/2 (12.7)
BN-2.3	1/3 HP-3-230/460	32 (812.8)	1/2 (12.7)
BN-3.1	1/2 HP-1-115/230	32 (812.8)	5/8 (15.9)
BN-3.3	1/2 HP-3-230/460	32 (812.8)	5/8 (15.9)
<b>AIR MOTOR</b>			
BN-4.0	1/4 HP TO 1/2 HP AIR	32" (812.8 MM)	5/8" (15.9 MM)

To develop 1/4 HP at 1,725 rpm requires 10 cfm (0.28 cmm) at 15 psi (1.0 bar)  
 1/3 HP at 1,725 rpm requires 12 cfm (0.34 cmm) at 20 psi (1.4 bar)  
 1/2 HP at 1,725 rpm requires 22 cfm (0.62 cmm) at 40 psi (2.8 bar)



### FEATURES AND BENEFITS

- Easy mounting. Clamp cannot slip, preventing propeller from hitting side of tank
- Quick, easy adjustment between "angled-on-center" and "angled-off-center" positions without tools
- Coupling is fully enclosed
- Motors are available in TEFC or explosion-proof enclosures (56C frame). Air motors also available
- Off-the-shelf delivery
- Shaft and prop 316SS
  - PVC coating available
- Clamp adjusts to any angle



# L Series Laboratory Mixers

## Bar, Clamp and Bracket Mount

Neptune laboratory mixers are available in air or electric drive with clamp or bracket mount.

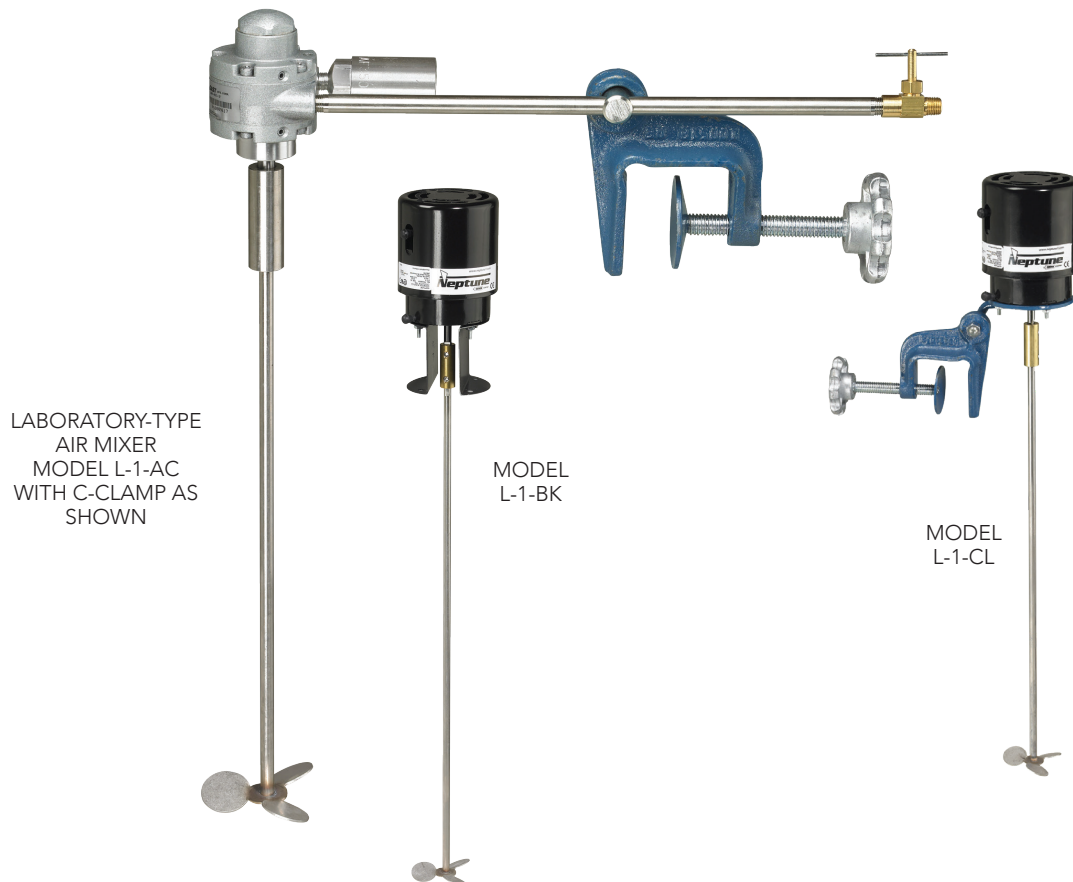
- The air motors include a control valve and muffler
- Shaft and prop 316SS

The Model L-1-AC includes a C-clamp and the air supply pipe that passes through the C-clamp. Model L-1-A does not include a C-clamp but the air supply pipe will fit a standard 1/2" (12.7mm) laboratory bar clamp.

Cord and plug are standard with 1,550-rpm electric models. Operating speed ranges from 200 - 2,000 rpm with air motors.

MODEL	STANDARD MOTOR DESCRIPTION	MOUNT TYPE	RPM	DIMENSIONS INCHES (MM)		
				SHAFT LENGTH	PROP DIAMETER	SHAFT DIAMETER
<b>TOTALLY-ENCLOSED FAN-COOLED (TEFC)</b>						
L-1-CL	1/20 HP-115-60	C-CLAMP	1,550	30 (762.0)	3 (76.2)	5/16 (7.9)
L-1-CL 24	1/20 HP-115-60	C-CLAMP	1,550	24 (609.6)	3 (76.2)	5/16 (7.9)
L-1-CL 18	1/20 HP-115-60	C-CLAMP	1,550	18 (457.2)	3 (76.2)	5/16 (7.9)
L-1-BK	1/20 HP-115-60	BRACKET	1,550	30 (762.0)	3 (76.2)	5/16 (7.9)
<b>AIR MOTOR</b>						
L-1-A	*HP AIR MOTOR	LAB CLAMP	VARIABLE	20 (508.0)	3 (76.2)	5/16 (7.9)
L-1-AC	*HP AIR MOTOR	C-CLAMP	VARIABLE	20" (508.0 MM)	3" (76.2 MM)	5/16" (7.9 MM)

Air (speed) control valve included on air motor models  
 \* Develops 0.10 HP at 2,000 rpm Requires 6 cfm (0.17 cmm) at 60 psi (4.1 bar)  
 0.175 HP at 2,000 rpm Requires 10 cfm (0.28 cmm) at 60 psi (4.1 bar)



LABORATORY-TYPE  
AIR MIXER  
MODEL L-1-AC  
WITH C-CLAMP AS  
SHOWN

MODEL  
L-1-BK

MODEL  
L-1-CL

# A and B Series Economy Batch Mixers

## 1,750 rpm Direct Drive, Clamp Mount

The economy line of small direct drive mixers for small batches of low viscosity fluids.

MODEL	STANDARD MOTOR DESCRIPTION	DIMENSIONS INCHES (MM)	
		SHAFT LENGTH	SHAFT DIAMETER
<b>TOTALLY-ENCLOSED FAN-COOLED (TEFC)</b>			
A-1.0	1/4 HP-1-115	32 (812.8)	1/2 (12.7)
B-1.0	1/4 HP-1-115/230	32 (812.8)	1/2 (12.7)
B-2.0	1/3 HP-1-115/230	32 (812.8)	1/2 (12.7)
B-3.0	1/2 HP-1-115/230	32 (812.8)	5/8 (15.9)
B-3.2	1/2 HP-3-230/460	32 (812.8)	5/8 (15.9)
<b>EXPLOSION-PROOF CLASS 1 GROUP D (EP)</b>			
B-3.1	1/2 HP-1-115/230	32 (812.8)	5/8 (15.9)
<b>AIR MOTOR</b>			
B-4.0	1/4 HP TO 1/2 HP AIR	35 (889.0)	5/8 (15.9)

To develop 1/4 HP at 1,725 rpm requires 10 cfm (0.28 cmm) at 45 psi (3.1 bar)  
 1/3 HP at 1,725 rpm requires 14 cfm (0.40 cmm) at 60 psi (4.1 bar)  
 1/2 HP at 1,725 rpm requires 18 cfm (0.51 cmm) at 80 psi (5.5 bar)

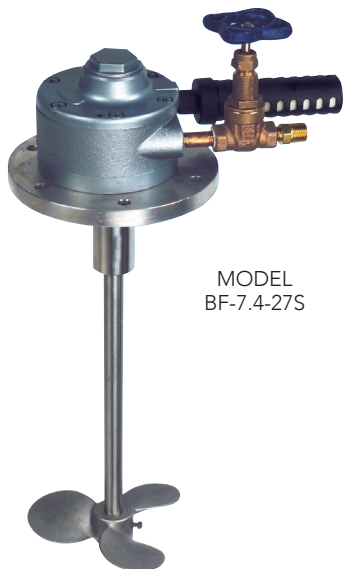
### FEATURES AND BENEFITS

- Universal motor mount accepts 48 and 56 frame foot-mounted motors
- Motors are available in TEFC or explosion-proof enclosures. Air motors also available
- Off-the-shelf delivery
- Shaft and prop 316SS
  - PVC coating available
- Clamp adjusts to any angle



MODEL B-1.0

MODEL B-4.0



MODEL BF-7.4-27S

## BF Series Direct Drive Air Mixer

### Flange Mount

The Neptune flange-mounted, air-driven mixer utilizes a 316SS shaft and 316SS marine propellers.

Single propeller models have one left-hand propeller pumping downward in normal operation.

Dual propeller models have one each left-hand and right-hand propellers providing counterflow mixing.

Air control valve included to allow speed adjustment. Motor may be stalled without damage.

MODEL	MOTOR HORSEPOWER	DIMENSIONS INCHES (MM)				
		MOUNTING FLANGE	SHAFT DIAMETER	SHAFT LENGTH	PROPELLER SIZE SINGLE	PROPELLER SIZE DUAL*
BF-5.4-15S	1 HP AIR MOTOR	6 (152.4)	5/8 (15.9)	15 (381.0)	6 (152.4)	6 (152.4)
BF-5.4-27S	1 HP AIR MOTOR	6 (152.4)	5/8 (15.9)	27 (685.8)	6 (152.4)	6 (152.4)
BF-5.4-48S	1 HP AIR MOTOR	6 (152.4)	5/8 (15.9)	48 (1,219.2)	6 (152.4)	6 (152.4)
BF-7.4-27S	2 HP AIR MOTOR	7 (177.8)	3/4 (19.1)	27 (685.8)	8 (203.2)	8 (203.2)
BF-7.4-48S	2 HP AIR MOTOR	7 (177.8)	3/4 (19.1)	48 (1,219.2)	8 (203.2)	8 (203.2)
BF-7.4-60S	2 HP AIR MOTOR	7 (177.8)	3/4 (19.1)	60 (1,524.0)	8 (203.2)	8 (203.2)
BF-8.4-27S	3 HP AIR MOTOR	7 (177.8)	1 (25.4)	27 (685.8)	10 (254.0)	10 (254.0)
BF-8.4-48S	3 HP AIR MOTOR	7 (177.8)	1 (25.4)	48 (1,219.2)	10 (254.0)	10 (254.0)
BF-8.4-60S	3 HP AIR MOTOR	7 (177.8)	1 (25.4)	60 (1,524.0)	10 (254.0)	10 (254.0)

Air set not included. Order P/N 100804 for complete air set consisting of regulator, filter and lubricator.

\* To specify dual props: change "S" in Model Number to "D".

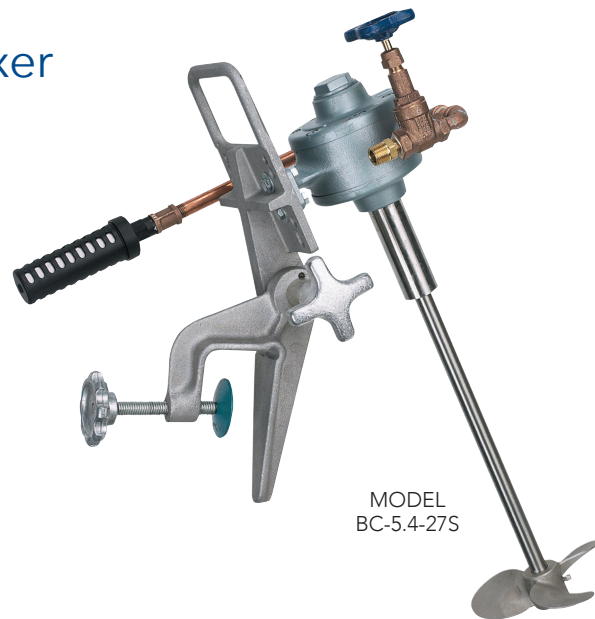
Air Consumption: 1 HP - 16 cfm (0.45 cmm) at 70 psi (4.8 bar)  
 2 HP - 20 cfm (0.57 cmm) at 70 psi (4.8 bar)  
 3 HP - 30 cfm (0.85 cmm) at 70 psi (4.8 bar)

## BC Series Direct Drive Air Mixer

### Clamp Mount

The Neptune BC Series clamp-mounted, air-driven mixer that uses a 316SS shaft and 316SS marine propellers.

Knob allows clamp to be loosened without tools to adjust shaft angle. Handle allows firm grip on mixer when positioning. Three blade, left-hand marine propellers pump downward in normal operation. Air control valve included to allow speed adjustment. Motor may be stalled without damage.



MODEL  
BC-5.4-27S

MODEL	MOTOR HORSEPOWER	DIMENSIONS INCHES (MM)			
		SHAFT DIAMETER	SHAFT LENGTH	PROPELLER SIZE SINGLE	PROPELLER SIZE DUAL*
BC-5.4-27S	1 HP AIR MOTOR	5/8 (15.9)	27 (685.8)	6 (152.4)	6 (152.4)
BC-5.4-36S	1 HP AIR MOTOR	5/8 (15.9)	36 (914.4)	6 (152.4)	6 (152.4)
BC-5.4-48S	1 HP AIR MOTOR	5/8 (15.9)	48 (1,219.2)	6 (152.4)	6 (152.4)
BC-7.4-27S	2 HP AIR MOTOR	3/4 (19.1)	27 (685.8)	8 (203.2)	N/A
BC-7.4-36S	2 HP AIR MOTOR	3/4 (19.1)	36 (914.4)	8 (203.2)	8 (203.2)
BC-7.4-48S	2 HP AIR MOTOR	3/4 (19.1)	48 (1,219.2)	8 (203.2)	8 (203.2)
BC-7.4-60S	2 HP AIR MOTOR	3/4 (19.1)	60 (1,524.0)	8 (203.2)	8 (203.2)

Air set not included. Order P/N 100804 for complete air set consisting of regulator, filter and lubricator.

\* To specify dual propellers: change "S" in Model Number to "D".

Air Consumption: 1 HP - 16 cfm (0.45 cmm) at 70 psi (4.8 bar)  
 2 HP - 20 cfm (0.57 cmm) at 70 psi (4.8 bar)

# E and F Series Drum Mixers

Bung-Entering - 55-gal. (208.2 L), 1,750 rpm

Neptune offers a complete line of bung-entering mixers. These mixers come in two styles for water-like solutions with each style utilizing a folding propeller (E & F Series). For viscous fluids, two styles (H & HGS Series) are also available that use permanent blades and are offered in higher horse-powers. All Neptune bung-entering mixers fit through the standard 2" (50.8 mm) bung on 55-gal. (208.2 L) drums.

## FEATURES AND BENEFITS

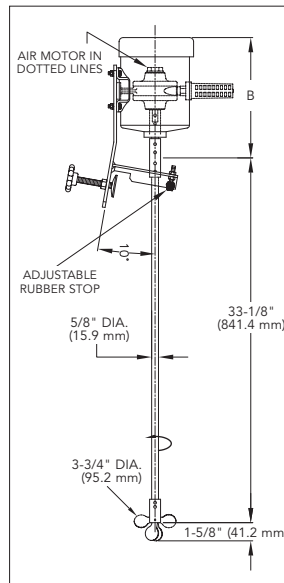
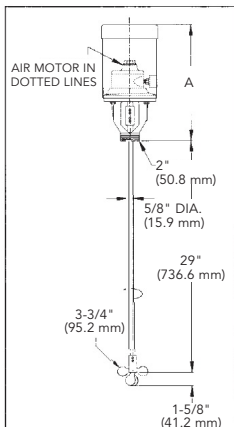
- Shaft and folding propeller are 316SS. Propeller folds for entry; opens to 3-3/4" (95.3 mm) diameter when operating
- All mixers are in stock for off-the-shelf delivery
- Motors are available in TEFC or explosion-proof enclosures (56C frame). Air motors also available



MODEL	STANDARD MOTOR DESCRIPTION	DIMENSIONS INCHES (MM)
		A
<b>TOTALLY-ENCLOSED FAN-COOLED (TEFC)</b>		
E-1.0	1/4 HP-1-115/230	13 (330.2)
E-2.0	1/3 HP-1-115/230	13-1/4 (336.6)
E-2.2	1/3 HP-3-230/460	13-1/4 (336.6)
E-3.0	1/2 HP-1-115/230	14 (355.6)
E-3.2	1/2 HP-3-230/460	13-5/8 (346.1)
<b>EXPLOSION-PROOF CLASS 1 GROUP D (EP)</b>		
E-2.1	1/3 HP-1-115/230	14-3/8 (365.1)
E-2.3	1/3 HP-3-230/460	14-3/8 (365.1)
E-3.1	1/2 HP-1-115/230	16-3/4 (425.5)
E-3.3	1/2 HP-3-230/460	14-3/8 (365.1)
<b>AIR MOTOR</b>		
E-4.0	1/4 HP TO 1/2 HP AIR REQUIREMENTS: 10-20 CFM (0.28-0.57 CMM) AT 20-40 PSI (1.4-2.8 BAR)	10-5/8 (269.9)

MODEL	STANDARD MOTOR DESCRIPTION	DIMENSIONS INCHES (MM)
		B
<b>TOTALLY-ENCLOSED FAN-COOLED (TEFC)</b>		
F-1.0	1/4 HP-1-115/230	10-5/8 (269.9)
F-2.0	1/3 HP-1-115/230	10-7/8 (276.2)
F-3.0	1/2 HP-1-115/230	11-5/8 (295.3)
F-3.2	1/2 HP-3-230/460	11-1/4 (285.8)
<b>EXPLOSION-PROOF CLASS 1 GROUP D (EP)</b>		
F-3.1	1/2 HP-1-115/230	14-3/8 (365.1)
<b>AIR MOTOR</b>		
F-4.0	1/4 HP TO 1/2 HP AIR REQUIREMENTS: 10-20 CFM (0.28-0.57 CMM) AT 40-480 PSI (2.8-33.1 BAR)	5-1/4 (133.4)

50 Hz Motors Available





# H and HGS Series Drum Mixers

Bung-Entering - 55-gal. (208.2 L) Drum, High Viscosity

## FEATURES AND BENEFITS

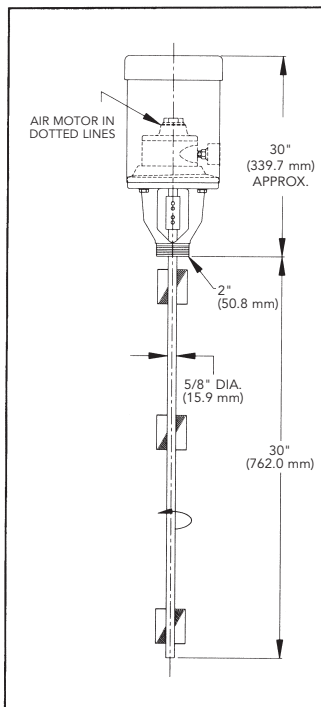
- Shaft and propeller are 316SS
- Available electric or air motor powered to 1 HP
- For mixing extremely heavy or shear-sensitive chemicals in drums
- Designed to screw into standard 2" (50.8 mm) bung opening on 55-gal. (208.2 L) drums

STANDARD MOTOR DESCRIPTION	H SERIES - DIRECT DRIVE		HGS SERIES - GEAR DRIVE	
	MODEL NUMBER	VISCOSITY LIMITATION CP	MODEL NUMBER	VISCOSITY LIMITATION CP
<b>TOTALLY-ENCLOSED, FAN-COOLED (TEFC)</b>				
1/3 HP-1-115/230	H-2.0	1,000	HGS-2.0	4,000
1/2 HP-1-115/230	H-3.0	4,000	HGS-3.0	16,000
3/4 HP-1-115/230	H-5.0	6,000	HGS-5.0	24,000
1 HP-1-115/230	H-6.0	8,000	HGS-6.0	32,000
<b>AIR MOTOR</b>				
1/4 HP - 1/2 HP AIR REQUIREMENTS: 10-20 CFM (0.28-0.57 CMM) AT 20-40 PSI (1.4-2.8 BAR)	H-4.0	4,000	HGS-4.0	24,000
3/4 HP - 1 HP AIR REQUIREMENTS: 30-40 CFM (0.85-1.1 CMM) AT 25-35 PSI (1.7-2.4 BAR)	H-7.0	8,000	HGS-7.0	32,000

Explosion-proof models available—contact factory.

## H Series Mixers

Direct Drive, 1,750 rpm  
Viscosity to 8,000 cP



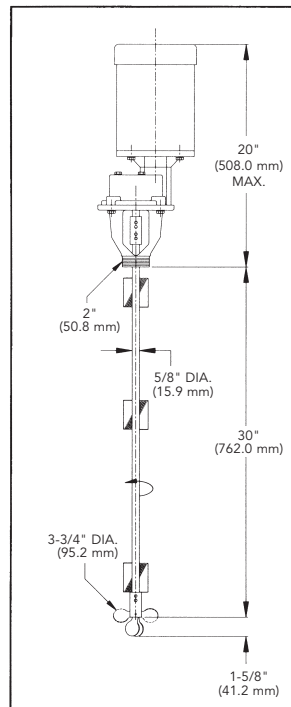
Six mixing blades



MODEL H-3.0

## HGS Series Mixers

Gear Drive, 430 rpm  
Viscosity to 32,000 cP



Six mixing blades with folding propeller



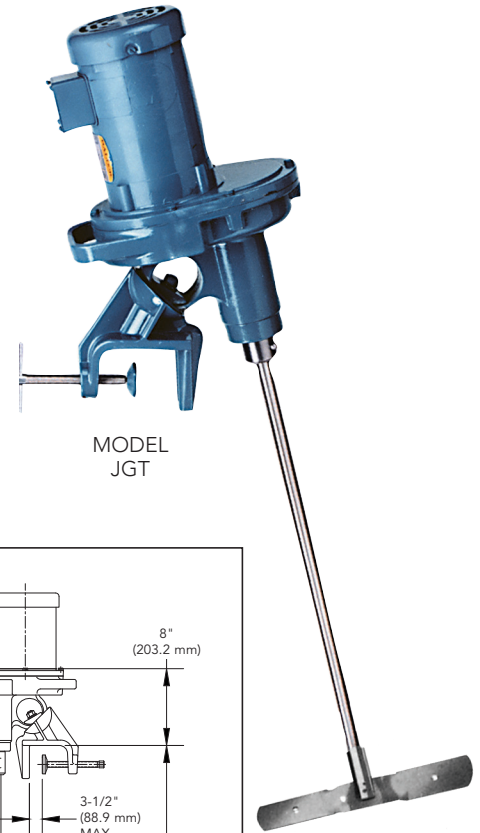
MODEL HGS-3.0

# JGT Series Bulk Container Mixer

Gear Drive, Bung or Bracket Mount, 350 rpm

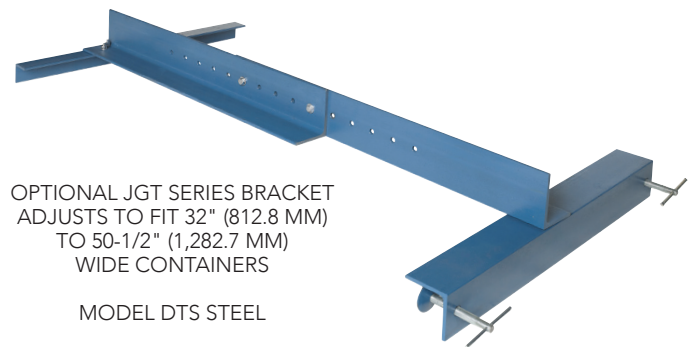
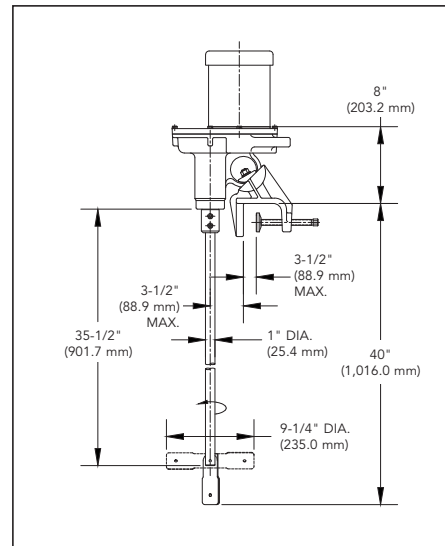
## FEATURES AND BENEFITS

- Mounts to the tank or optional universal bracket
- 316SS propeller folds to fit through 2" (50.8 mm) opening; opens to 9" (228.6 mm) operating diameter
- Standard useable length is 33" (838.2 mm) / overall 35.5" (901.7 mm)



MODEL JGT

MODEL	STANDARD MOTOR DESCRIPTION	DIMENSIONS INCHES (MM)
		SHAFT DIAMETER
<b>TOTALLY-ENCLOSED, FAN-COOLED (TEFC) AND EXPLOSION PROOF (EP)</b>		
JGT-3.0	1/2HP-1-115/230-TEFC	1 (25.4)
JGT-3.1	1/2HP-3-230/460-TEFC	1 (25.4)
JGT-3.2	1/2HP-1-115/230-EP	1 (25.4)
JGT-3.3	1/2HP-3-230/460-EP	1 (25.4)
JGT-4.0	3/4HP-1-115/230-TEFC	1 (25.4)
JGT-4.1	3/4HP-3-230/460-TEFC	1 (25.4)
JGT-4.2	3/4HP-1-115/230-TEFC	1 (25.4)
JGT-4.3	3/4HP-3-230/460-EP	1 (25.4)
JGT-5.1	1HP-3-230/460-TEFC	1 (25.4)
JGT-5.3	1HP-3-230/460-EP	1 (25.4)
<b>AIR MOTOR</b>		
JGT-3.4	1/2HP - AIR REQUIREMENTS - 20 CFM (0.57 CMM) AT 40 PSI (2.8 BAR)	1 (25.4)
JGT-5.4	1HP - AIR REQUIREMENTS - 40 CFM (1.13 CMM) AT 40 PSI (2.8 BAR)	1 (25.4)



OPTIONAL JGT SERIES BRACKET  
ADJUSTS TO FIT 32" (812.8 MM)  
TO 50-1/2" (1,282.7 MM)  
WIDE CONTAINERS

MODEL DTS STEEL

# Bulk Container Mixer

## Gear Drive, Bung or Bracket Mount

Neptune bulk container mixers allow mixing in semi-bulk shipping containers.

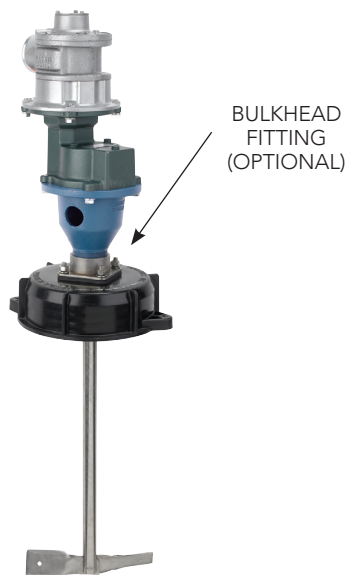
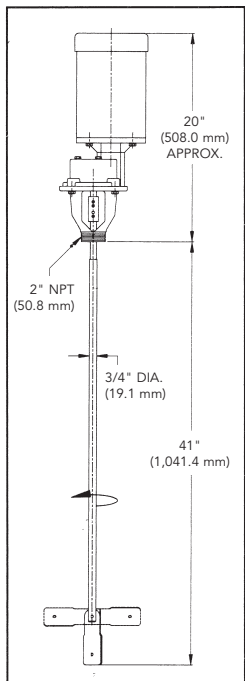
## HGL Series, 430 rpm

### FEATURES AND BENEFITS

- Mounts to 2" (50.8 mm) coupling or flange
- 316SS propeller folds to fit through 2" (50.8 mm) opening; opens to 9" (228.6 mm) operating diameter
- Second folding propeller bolts anywhere on 3/4" (19.1 mm) shaft – P/N 004479

MODEL	STANDARD MOTOR DESCRIPTION	DIMENSIONS INCHES (MM)
		SHAFT DIAMETER
<b>TOTALLY-ENCLOSED FAN-COOLED (TEFC)</b>		
HGL-3.0	1/2 HP-1-115/230	3/4 (19.1)
HGL-5.0	3/4 HP-1-115/230	3/4 (19.1)
HGL-6.0	1 HP-1-115/230	3/4 (19.1)
HGL-6.2	1 HP-3-230/460	3/4 (19.1)
<b>AIR MOTOR</b>		
HGL-4.0	1/2 HP AIR REQUIREMENTS: 20 CFM (0.57 CMM) AT 40 PSI (1.4-2.8 BAR)	3/4 (19.1)
HGL-7.0	3/4 HP - 1 HP AIR REQUIREMENTS: 30-40 CFM (0.85-1.13 CMM) AT 25-35 PSI (1.7-2.4 BAR)	3/4 (19.1)

For explosion-proof models, see price list.



HGL SERIES MIXER WITH CAP MOUNT CONVERTS ANY POLY CAP TO A 2" (50.8 MM), 316SS, THREADED, FEMALE FITTING TO MOUNT THE HGL MIXER. SPECIFY BULKHEAD FITTING (OPTIONAL)

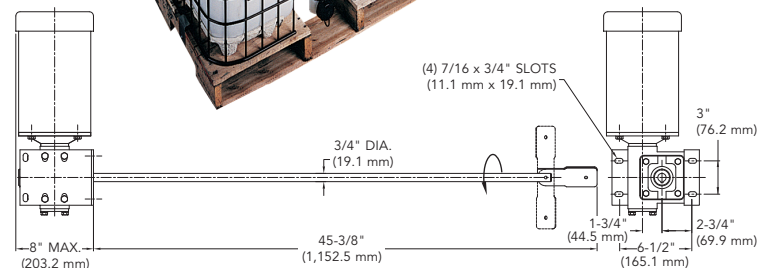
## RGT Series, 350 rpm

### FEATURES AND BENEFITS

- Mounts to the tank or optional bracket
- 316SS propeller folds to fit through 2" (50.8 mm) opening; opens to 9" (228.6 mm) operating diameter
- Second folding propeller bolts anywhere on 3/4" (19.1 mm) shaft – P/N 004479

MODEL	STANDARD MOTOR DESCRIPTION	DIMENSIONS INCHES (MM)
		SHAFT DIAMETER
<b>TOTALLY-ENCLOSED FAN-COOLED (TEFC)</b>		
RGT-1.0	1/2 HP-1-115/230	3/4 (19.1)
RGT-1.2	1/2 HP-3-230/460	3/4 (19.1)
RGT-2.0	3/4 HP-1-115/230	3/4 (19.1)
RGT-2.2	3/4 HP-3-230/460	3/4 (19.1)
RGT-3.0	1 HP-1-115/230	3/4 (19.1)
RGT-3.2	1 HP-3-230/460	3/4 (19.1)
<b>AIR MOTOR</b>		
RGT-1.4	1/2 HP AIR REQUIREMENTS: 20 CFM (0.57 CMM) AT 40 PSI (1.4-2.8 BAR)	3/4 (19.1)
RGT-3.4	3/4 HP - 1 HP AIR REQUIREMENTS: 30-40 CFM (0.85-1.13 CMM) AT 25-35 PSI (1.7-2.4 BAR)	3/4 (19.1)

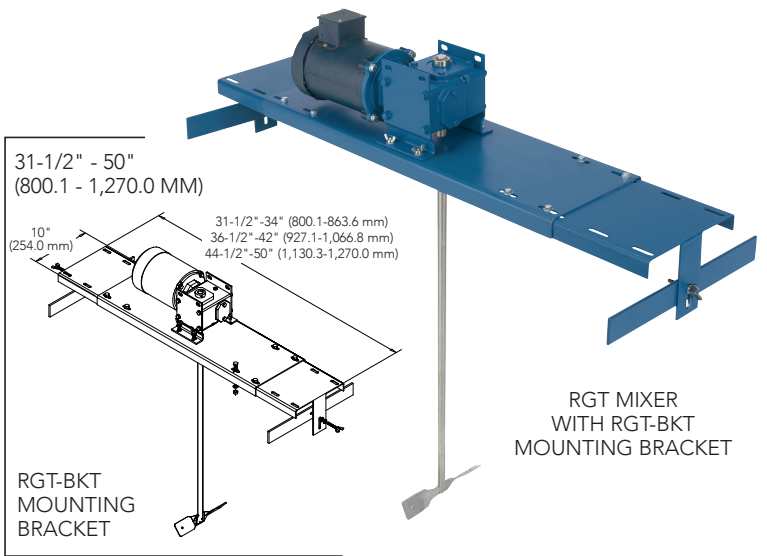
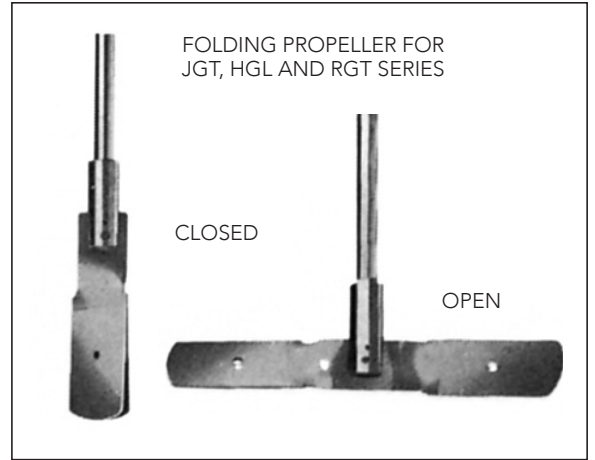
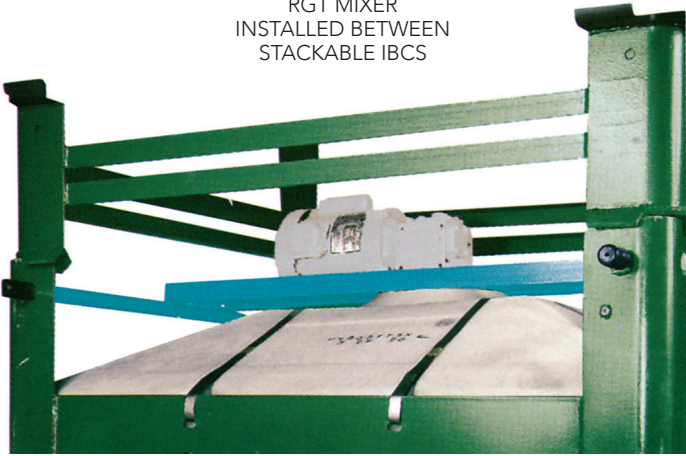
For explosion-proof models, see price list.



# RGT Mixers

Use Series RGT mixers on single containers or containers sandwiched between stacked semi-bulk shipping containers.

RGT MIXER  
INSTALLED BETWEEN  
STACKABLE IBCS



# Specialty Mixers

From pipe and pail to hand-held and handlebar, Neptune offers a complete line of specialty mixers for a wide variety of critical blending and mixing operations. Ideal for mixing small batches from 1-55 gal. (19-208 L), Neptune specialty mixers incorporate industry-leading design features that provide an operation that is easy, economical and efficient. All Neptune specialty mixers have been engineered and built to provide long life and trouble-free service.

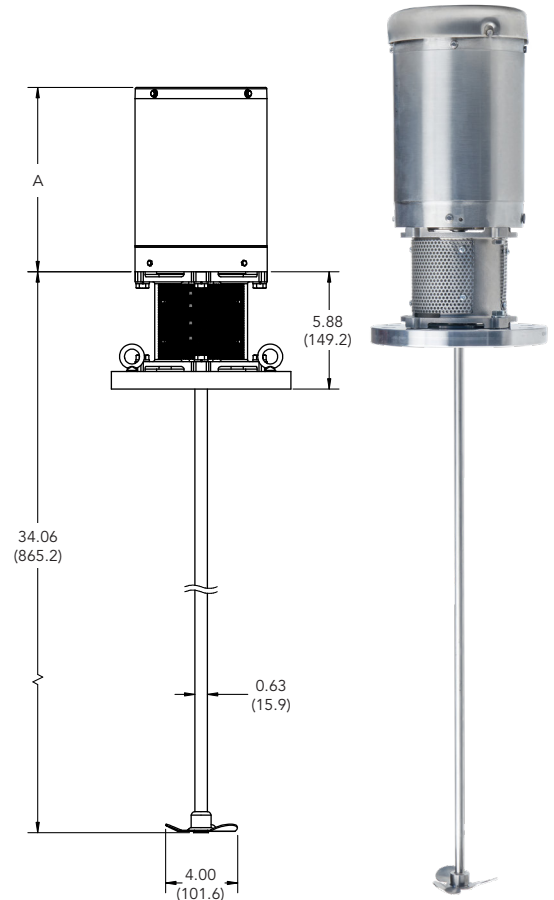
## Small Batch Sanitary Mixer - BNS Series

Neptune's Sanitary mixers are the premier line of small direct drive mixers for mixing small batches of low viscosity fluids in sanitary applications. These mixers can be easily mounted for optimum mixing. The BNS Series includes 8 models, which feature 32" (812.8 mm) shaft lengths and 5/8" (15.9 mm) shaft diameters. Flange sizes range from 4 to 6" (101.6 to 152.4 mm) and a power range between 1/3 and 1/2 hp. Sanitary applications include food and beverage, dairy, pharmaceutical and cosmetics.

### FEATURES AND BENEFITS

- Easy mounting - bolts to sanitary tank flanges for an easy clean connection
- All exterior parts are stainless steel for sanitary applications
- FDA compliant Duralast 4203 shaft seal to prevent contamination
- Off-the-shelf delivery
- Standard ANSI B16.5 Class 150 Flange Mount
- Certified to meet 3A standards

MODEL	STANDARD MOTOR DESCRIPTION	DIMENSIONS INCHES (MM)			
		FLANGE SIZE	SHAFT LENGTH	SHAFT DIAMETER	A
BNS-2.1.4	1/3 HP-1PH-115/230 Stainless Steel	4 (101.6)	32 (812.8)	5/8 (15.9)	9.64 (244.9)
BNS-2.1.6	1/3 HP-1PH-115/230 Stainless Steel	6 (152.4)	32 (812.8)	5/8 (15.9)	9.64 (244.9)
BNS-2.2.4	1/3 HP-3PH-230/460 Stainless Steel	4 (101.6)	32 (812.8)	5/8 (15.9)	7.72 (196.1)
BNS-2.2.6	1/3 HP-3PH-230/460 Stainless Steel	6 (152.4)	32 (812.8)	5/8 (15.9)	7.72 (196.1)
BNS-3.1.4	1/2 HP-1PH-115/230 Stainless Steel	4 (101.6)	32 (812.8)	5/8 (15.9)	10.64 (270.3)
BNS-3.1.6	1/2 HP-1PH-115/230 Stainless Steel	6 (152.4)	32 (812.8)	5/8 (15.9)	10.64 (270.3)
BNS-3.2.4	1/2 HP-3PH-230/460 Stainless Steel	4 (101.6)	32 (812.8)	5/8 (15.9)	9.16 (232.7)
BNS-3.2.6	1/2 HP-3PH-230/460 Stainless Steel	6 (152.4)	32 (812.8)	5/8 (15.9)	9.16 (232.7)



# Specialty Mixers: Pipe and Pail-Mount

## Pail Mixers – Pipe Clamp

Ideal for mixing materials in 5-gal. (18.9 L) containers and other open containers. Mixer clamps to a vertical 1-1/2" (38.1 mm) pipe that allows it to be lowered into container and raised to change containers.

### FEATURES AND BENEFITS

- Air control valve for speed adjustment
- Folding propeller optional



MODEL B-4.0P

MODEL	STANDARD MOTOR DESCRIPTION	DIMENSIONS INCHES (MM)		
		SHAFT LENGTH	PROPELLER DIAMETER	SHAFT DIAMETER
B-4.0P	1/4 HP - 1/2 HP AIR REQUIREMENTS: 10-17 CFM (0.3-0.5 CMM) AT 50-80 PSI (3.4-5.5 BAR)	24 (609.6)	4 (101.6) FIXED	5/8 (15.9)
B-4.0P-D	SAME AS ABOVE EXCEPT WITH DUAL PROPELLERS			



## Pail Mixers – Rim Clamp

Convenient mixer for mixing materials in 5-gal. (18.9 L) closed pails. The handle/motor assembly adjusts along the center line of the pail to align with the opening in pail lid.

### FEATURES AND BENEFITS

- Air control valve for speed adjustment on air motor model

MODEL	STANDARD MOTOR DESCRIPTION	DIMENSIONS INCHES (MM)		
		SHAFT LENGTH	PROPELLER DIAMETER	SHAFT DIAMETER
PAM-6.0	1/2 HP - 1 HP AIR REQUIREMENTS: 22-40 CFM (0.6-1.1 CMM) AT 40-80 PSI (2.8-5.5 BAR)	12 (304.8)	3-3/4 (95.3) FIXED	5/8 (15.9)

## HandleBar Pail and Drum Mixers

Popular for mixing open and closed head containers from 5 - 55 gal. (18.9 - 208.2 L). Can also be used to mix mortar, drywall compound and similar materials in 5-gal. (18.9 L) containers.

- Air control valve allows easy speed adjustment.
- Low speed mixing and stalling will not overheat as with an electric motor.
- Optional "deadman" trigger on right handle allows mixer to be started and stopped conveniently while maintaining grip with two hands. Specify Part Number 004646



MODEL HAJ-3.0

MODEL	RECOMMENDED CONTAINER SIZE/TYPE	DIMENSIONS INCHES (MM)		
		SHAFT DIAMETER AND LENGTH	PROPELLER TYPE	PROPELLER SIZE
HAI-3.0	TO 10 GAL. (67.9 L) OPEN HEAD	1/2 X 21 (12.7 X 533.4)	CAGED IMPELLER	5 (127.0)
HAI-3.1	TO 55 GAL. (208.2 L) OPEN HEAD	1/2 X 40 (12.7 X 1016.0)	CAGED IMPELLER	5 (127.0)

All mixers above use air motor rated from 1/2 - 1 HP using 22 - 40 cfm (0.62 - 1.13 cmm) at 40 - 80 psi (2.6 - 5.5 bar).

# Specialty Mixers: Hand-Held

Air-driven mixers that feature a cast aluminum pistol grip to comfortably fit the hand.

Used to mix small batches of thin or heavy liquids. Air control valve allows easy speed adjustment. Low speed mixing and stalling in heavy liquids will not cause overheating as with an electric mixer.

316SS multi-blade cage impeller will not damage container and is ideal for rapid, thorough mixing of paints, adhesives, drywall compounds, etc. Two impeller sizes and three shaft lengths fit most open top containers from 1 - 55 gal. (3.8 - 208.2 L).



MODEL  
HH10

MODEL	RECOMMENDED CONTAINER SIZE	DIMENSIONS INCHES (MM)	
		SHAFT DIAMETER AND LENGTH	MIXING HEAD DIAMETER
HH12	1 - 2 GAL. (3.8 - 7.6 L)	1/4 X 15 (6.4 X 381.0)	2-5/8 (66.7)
HH10	5 - 10 GAL. (18.9 - 37.9 L)	1/2 X 21 (12.7 X 533.4)	5 (127.0)
HH55	50/55 GAL. (189.3/208.2 L)	1/2 X 40 (12.7 X 1,016.0)	5 (127.0)



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