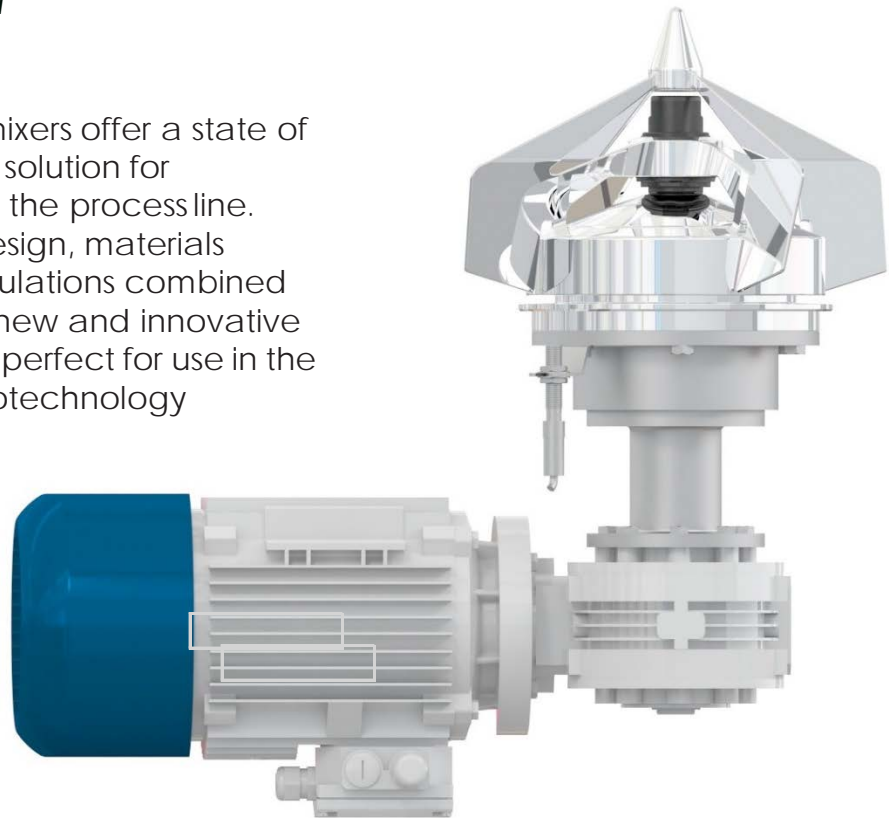


Zero-g Mixers

Product Description

The Metenova, Zero-g mixers offer a state of the art patented mixing solution for applications throughout the process line. The excellent aseptic design, materials complying with FDA regulations combined with the benefits of the new and innovative bearing design makes it perfect for use in the pharmaceutical and biotechnology industries



| Type | RPM 50Hz/60Hz | Motor 50Hz kW / hp | Motor 60Hz kW / hp | Volume range liter / gallon | Weight kg / lbs * |
|---------|------------------|-----------------------|-----------------------|--------------------------------|-------------------|
| ZG1 DC | 400 / 490 | 0.07 / 0.09 | 0.07 / 0.09 | 10 / 2.6 | 2.2 / 4.85 |
| ZG2 DC | 400 / 490 | 0.07 / 0.09 | 0.07 / 0.09 | 50 / 13 | 2.4 / 5.29 |
| ZG2 AC | 400 / 490 | 0.12 / 0.16 | 0.17 / 0.22 | 50 / 13 | 6.0 / 13.2 |
| ZG3 AC | 400 / 490 | 0.25 / 0.34 | 0.33 / 0.44 | 250 / 66 | 7.0 / 15.4 |
| ZG5 AC | 400 / 490 | 0.37 / 0.50 | 0.50 / 0.67 | 850 / 225 | 10.5 / 23.1 |
| ZG6 AC | 400 / 490 | 0.55 / 0.74 | 0.64 / 0.86 | 1200 / 317 | 12.0 / 26.5 |
| ZG7 AC | 400 / 490 | 0.75 / 1.00 | 0.87 / 1.17 | 2000 / 1320 | 16.0 / 35.3 |
| ZG8 AC | 290 / 345 | 2.20 / 2.95 | 2.60 / 3.34 | 5000 / 1320 | 31.0 / 68.3 |
| ZG9 AC | 205 / 245 | 1.50 / 2.01 | 1.80 / 2.41 | 10000 / 2641 | 32.0 / 70.5 |
| ZG10 AC | 205 / 245 | 3.00 / 4.02 | 3.60 / 4.83 | 20000 / 5283 | 46.0 / 101.4 |

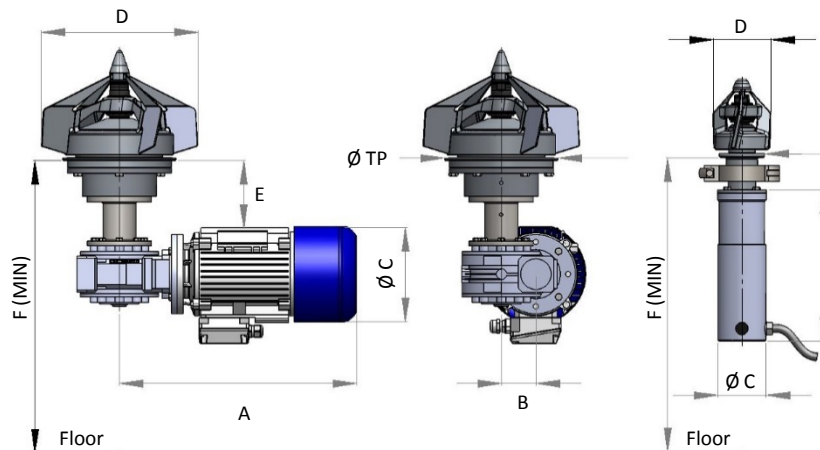
* Refers to Drive Units (excluding Mixing Head, Tank Plate & Male Post)

Zero-g Mixers

Dimensions

AC

DC



| --- | Item Description | A mm [in] | B mm [in] | ØC mm [in] | D mm [in] | E mm [in] | F mm [in] | ØTP mm [in] |
|------|--|----------------|--------------|---------------|----------------|---------------|----------------|-----------------|
| ZG1 | Complete Mixer Welded DC | 170 [6.69] | - | 58 [2.28] | 70 [2.76] | - | 250 [9.84] | 55 [2.17] |
| ZG2 | Complete Mixer Welded DC | 170 [6.69] | - | 58 [2.28] | 96 [3.78] | - | 250 [9.84] | 55 [2.17] |
| ZG2 | Complete Mixer Welded AC | 231 [9.09] | 28 [1.10] | 110 [4.33] | 96 [3.78] | 23 [0.91] | 225 [8.86] | 55 [2.17] |
| ZG2 | Complete Mixer Welded AC Extension 100 mm | 231 [9.09] | 28 [1.10] | 110 [4.33] | 96 [3.78] | 23 [0.91] | 325 [8.86] | 55 [2.17] |
| ZG3 | Complete Mixer Welded AC | 246 [9.69] | 30 [1.18] | 120 [5.0] | 117 [4.61] | 17 [0.67] | 250 [9.84] | 94 [3.70] |
| ZG3 | Complete Mixer Welded AC Extension 100 mm | 250 [9.84] | 30 [1.18] | 126 [4.72] | 117 [4.61] | 118 [4.65] | 350 [13.78] | 94 [3.70] |
| ZG5 | Complete Mixer Welded AC | 285 [11.22] | 40 [1.57] | 135 [5.31] | 148 [5.83] | 17 [0.67] | 280 [11.02] | 94 [3.70] |
| ZG5 | Complete Mixer Welded AC Extension 100 mm | 285 [11.22] | 40 [1.57] | 135 [5.31] | 148 [5.83] | 117 [4.61] | 380 [14.96] | 94 [3.70] |
| ZG6 | Complete Mixer Welded AC | 286 [11.22] | 40 [1.57] | 141 [5.50] | 160 [6.30] | 15 [0.59] | 280 [11.02] | 104 [4.09] |
| ZG6 | Complete Mixer Welded AC Extension 100 mm | 285 [11.26] | 40 [1.57] | 135 [5.31] | 160 [6.30] | 115 [4.53] | 380 [14.96] | 104 [4.09] |
| ZG7 | Complete Mixer Welded AC | 310 [12.17] | 50 [1.97] | 150 [6.0] | 177 [6.97] | 33 [1.30] | 320 [12.60] | 129.5 [5.10] |
| ZG7 | Complete Mixer Welded AC Extension 100 mm | 310 [12.17] | 50 [1.97] | 150 [6.0] | 177 [6.97] | 133 [5.23] | 420 [16.54] | 129.5 [5.10] |
| ZG8 | Complete Mixer Welded AC | 373 [14.69] | 60 [2.36] | 180 [7.09] | 236 [9.29] | 30 [1.18] | 400 [15.75] | 159.5 [6.28] |
| ZG8 | Complete Mixer Welded AC Extension 100 mm | 373 [14.69] | 60 [2.36] | 180 [7.09] | 236 [9.29] | 130 [5.11] | 500 [19.69] | 159.5 [6.28] |
| ZG9 | Complete Mixer Welded AC | 397 [15.63] | 60 [2.36] | 180 [7.0] | 300 [11.91] | 30 [1.18] | 400 [15.75] | 199.5 [7.85] |
| ZG9 | Complete Mixer Welded AC Extension 100 mm | 397 [15.63] | 60 [2.36] | 180 [7.0] | 300 [11.91] | 130 [5.11] | 500 [19.69] | 199.5 [7.85] |
| ZG10 | Complete Mixer Welded AC | 479 [18.86] | 70 [2.76] | 196 [7.72] | 350 [13.78] | 30 [1.18] | 400 [15.75] | 229.5 [9.04] |
| ZG10 | Complete Mixer Welded AC Extension 100 mm | 479 [18.86] | 70 [2.76] | 196 [7.72] | 350 [13.78] | 130 [5.11] | 530 [20.87] | 229.5 [9.04] |

Zero-g Mixers

Technical specifications

General information

Material wetted parts

| | |
|----------------|--|
| Tank Plate: | Stainless Steel AISI 316L |
| Mix Head: | Stainless Steel AISI 316L (Optional: AL6XN, C22, 904L) |
| Male Post: | Silicon Carbide (SSiC) |
| O-Ring: | FDA & USP VI compliant EPDM (Optional: Silicone, Viton, Kalrez) |
| Female Sleeve: | Silicon Carbide (SSiC) |
| O-Ring: | FDA & USP VI compliant EPDM (Optional: Silicone, Viton, Kalrez) |

| | |
|--------------------|---|
| Surface Roughness: | $R_a \leq 0.5 \mu\text{m}$ (20 μin) (Optional: $R_a \leq 0.25 \mu\text{m}$ (10 μin)) |
|--------------------|---|

| | |
|--------------------|--|
| Surface Treatment: | Manually polished or Manually polished and Electro polished. Non animal origin polishing compounds are used. |
|--------------------|--|




| | |
|-----------------|---|
| Operating Temp: | 5°C - 150°C (41°F - 302°F) (Optional 170°C, 338°F) |
|-----------------|---|

| | |
|-------------------|---------------------------|
| Environment Temp: | 0°C - 40°C (32°F - 104°F) |
|-------------------|---------------------------|

| | |
|----------------------------------|---------------------------------|
| Design Pressure Tank Plate 316L: | -1 - 10 barg (-14.7 - 145 psig) |
|----------------------------------|---------------------------------|

| | |
|-----------|------|
| pH Range: | 1-14 |
|-----------|------|

Motor Data:

| | |
|-----------------------|---|
| Voltage DC: | 24V |
| Nominal Current: | 4.1 A |
| Degree of Protection: | IP55 |
| Certified |  |
| Voltage AC: | Δ 230 / Y400 VAC @ 50Hz / Y460 VAC @ 60Hz ($\pm 5\%$) |
| Degree of Protection | IP55, (Optional: IP66) |
| Certified: |   |

RPM Sensor data, Mix Head reading

| | |
|---------------------------|------------------------------|
| Pulses/turn: | 1 |
| Wiring method: | 3 Wire type |
| Sensor type: | PNP Current Sourcing |
| Operating voltage: | 10-65V DC |
| Current consumption: | 18mA@24V max. |
| Indicator: | Yellow LED |
| Temperature range: | -25°C – 70°C (-13°F - 158°F) |
| Enclosure: | IP67 |
| (Optional: Shaft reading) | |

Packaging & Labeling:

For traceability purposes items are marked with item and id number. They are individually packed in sealed and labeled boxes.

Quality Control: Metenova Quality Assurance system ensure the quality and traceability at all stages of the process.

Mixer Accessories:

- Lowering device
- Mounting tool Female Sleeve
- Mounting tool Male Post
- Lifting tool Mix Head
- Welding tools, Tank Plate

Mixer Spare Parts:

- O-rings
- Male Post
- Female Sleeve

Options:

Non-standard Metenova Mixer options are available, please contact Metenova for further information.

Zero-g Mixers

Features

Magnetically coupled mixer

No mechanical seals or stuffing boxes
Minimized cross-contamination risk

Bottom mounted

Low level mixing
No head space needed
Service friendly

Robust design

Ensured production reliability

Aseptic by design

Optimized for Cleaning and Sterilization
In-Place CIP/SIP
Aseptic Gap-Free Bearing Design

Mixing performance

Mixing characteristics optimal for Bio and
Pharma applications

Service friendly bearing design

Minimizing downtime during maintenance

Floating Zero-g Technology

Reducing shear
Minimizing particle shedding

Already commissioned vessel can easily be upgraded

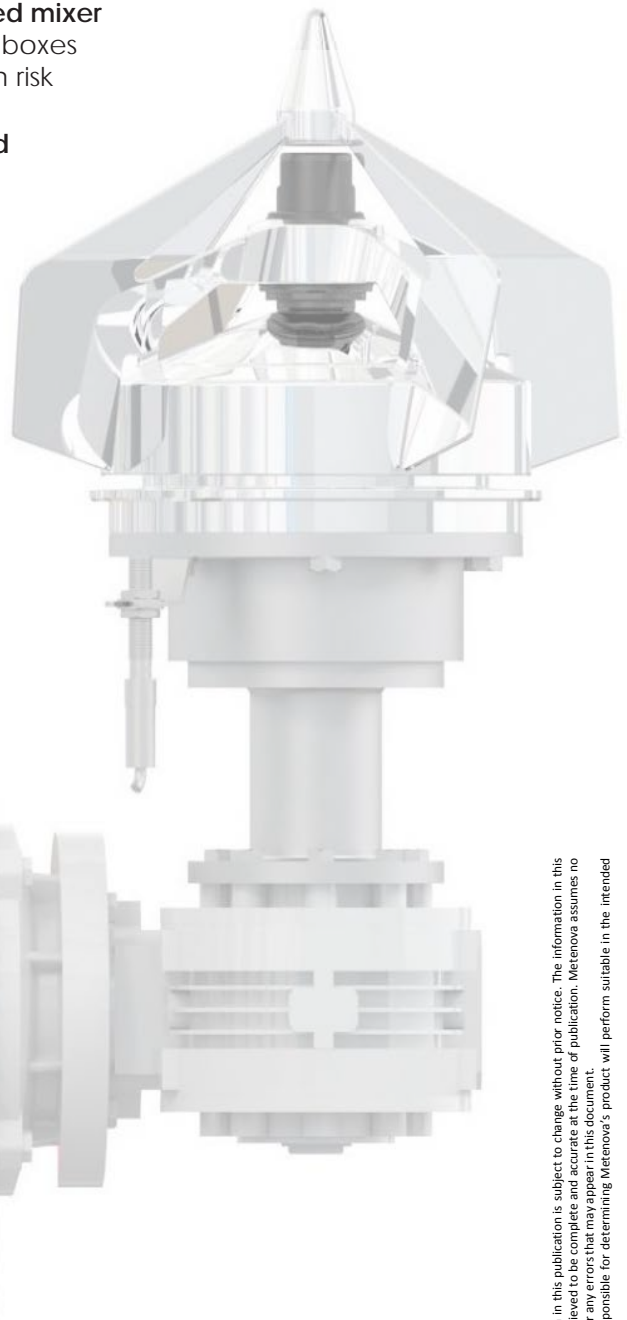
Fits onto other brands of existing equipment

Scalable design

Reliable and easy scale up and scale down

Large Fluid Path

Reducing product shear



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