

HELISEM® Mixers

VDA MODEL

DATA SHEET

The HELISEM® series offers 5 distinct models - VDA, VRP, VRH, VRG and FRH - with the VDA having a specific impeller, to support a wide range of open or closed tank applications up to 1.4m (4.75ft) diameter (4.4 m³ - 1200 gallons) and viscosities up to 1,000 mPas (cP) at 1.3 specific gravity.

The VDA model is a motor driven mixer available with a variety of marine impellers and mounting options.

Powerful and compact, the VDA model provides energy efficiency in a light-weight mixer with uncompromising results.

Applications:

- General Blending
- Homogenization
- Dissolution
- Preparation of reagents
- Neutralization

Materials:

- Wetted Parts – Stainless steel 316L
- Painting PU: RAL 1018 on the drive system

Features & Benefits:

- Easy to install and maintain, saving valuable manpower and resources
- Short mixer lead-times to minimize downtime or interruptions in production

Options:

- Powder coating (Abcite)
- Outside operation
- ATEX mixers
- 1 or 2 impellers

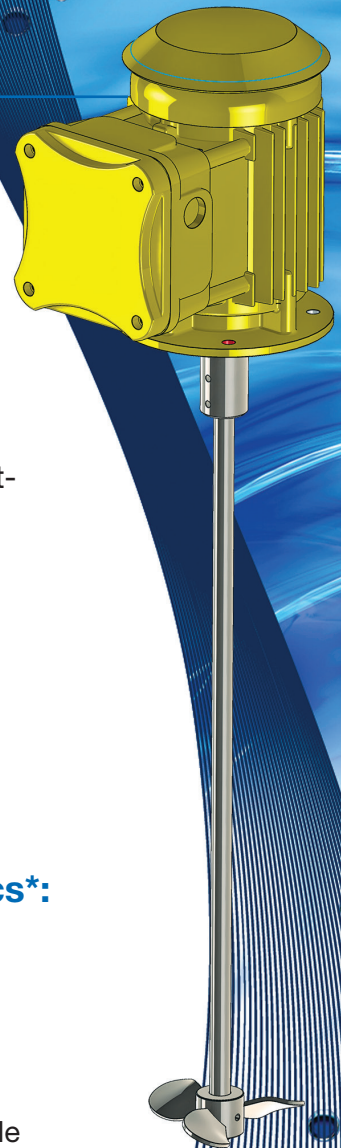
Mounting Options:

- Direct mounting to motor
- Square baseplate
- Circular baseplate for ASME B16.5 tank flange

Electrical characteristics*:

- 50Hz 230V 1 Phase
- 60Hz 230V 1 Phase
- 50Hz 400V 3 Phase
- 60Hz 460V 3 Phase

*Other voltage options available



MILTON ROY
Mixing

At the heart of mixing

Single Impeller

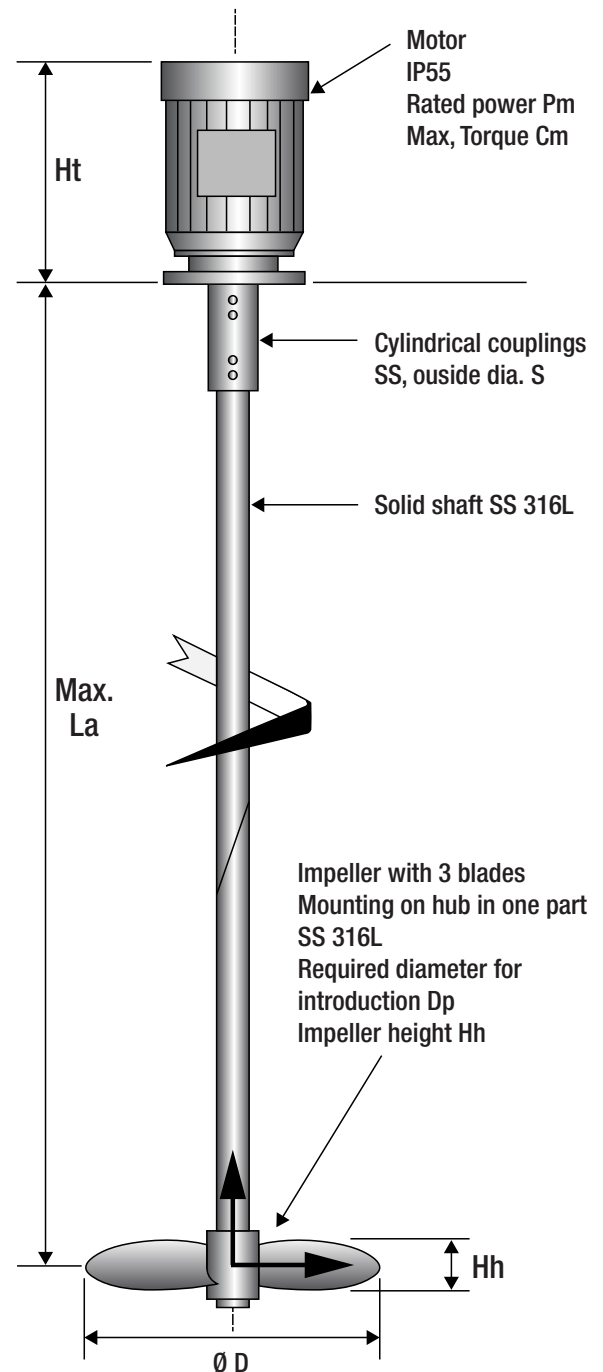
| Single Impeller Dim. | | 50Hz (Metric) | | | | 60Hz IEC (Metric) | | | | 60Hz IEC (Imperial) | | | |
|----------------------|----------|---------------|------|------|------|-------------------|------|------|------|---------------------|------|------|------|
| VDA | | 0085 | 0125 | 0135 | 0165 | 0086 | 0126 | 0146 | 0166 | 0086 | 0126 | 0146 | 0166 |
| D | mm (in) | 80 | 128 | 128 | 160 | 80 | 128 | 140 | 160 | 3.1 | 5 | 5.5 | 6.3 |
| N | rpm | 1500 | 1500 | 1500 | 1500 | 1800 | 1800 | 1800 | 900 | 1800 | 1800 | 1800 | 900 |
| Pm | kW (HP) | 0.25 | 0.25 | 0.75 | 1.5 | 0.25 | 0.75 | 1.5 | 0.37 | 0.33 | 1 | 2 | 0.5 |
| Weight | kg (lbs) | 10 | 10 | 14 | 20 | 8 | 15 | 23 | 19 | 18 | 33 | 51 | 42 |
| Hh | mm (in) | 25 | 30 | 30 | 30 | 25 | 30 | 30 | 30 | 1 | 1.2 | 1.2 | 1.2 |
| Dp | mm (in) | 80 | 110 | 110 | 130 | 80 | 110 | 120 | 130 | 3.1 | 4.3 | 4.7 | 5.1 |
| Flange | | F130 | F130 | F165 | F165 | F130 | F165 | F165 | F165 | F130 | F165 | F165 | F165 |
| Sq. Plate (option) | | P250 | P250 | P350 | P350 | P250 | P350 | P350 | P350 | P250 | P350 | P350 | P350 |
| Circ. Plate (option) | | 6" | 6" | 8" | 8" | 6" | 8" | 8" | 8" | 6" | 8" | 8" | 8" |
| Max. La | mm (in) | 1000 | 1000 | 1250 | 1500 | 1000 | 1250 | 1500 | 1000 | 39.4 | 49.2 | 59.1 | 39.4 |
| Min. La | mm (in) | 400 | 600 | 650 | 800 | 400 | 600 | 800 | 400 | 15.7 | 23.6 | 31.5 | 15.7 |

50 Hz Single Impeller

| TYPE | Model | Shaft length (mm) |
|---------|-------------|-------------------|
| VDA0085 | VDA0085S100 | 1000 |
| VDA0085 | VDA0085S40 | 400 |
| VDA0125 | VDA0125S100 | 1000 |
| VDA0125 | VDA0125S60 | 600 |
| VDA0135 | VDA0135S125 | 1250 |
| VDA0135 | VDA0135S65 | 650 |
| VDA0165 | VDA0165S150 | 1500 |
| VDA0165 | VDA0165S80 | 800 |

60 Hz Single Impeller

| TYPE | Model | Shaft length (mm) | Shaft length (in) |
|---------|--------------|-------------------|-------------------|
| VDA0086 | VDA0086S100 | 1000 | 39.4 |
| VDA0086 | VDA0086S40 | 400 | 15.7 |
| VDA0126 | VDA0126S1250 | 1250 | 49.2 |
| VDA0126 | VDA0126S60 | 600 | 23.6 |
| VDA0146 | VDA0146S150 | 1500 | 59.1 |
| VDA0146 | VDA0146S80 | 800 | 31.5 |
| VDA0166 | VDA0166S100 | 1000 | 39.4 |
| VDA0166 | VDA0166S40 | 400 | 15.7 |



Dual Impeller

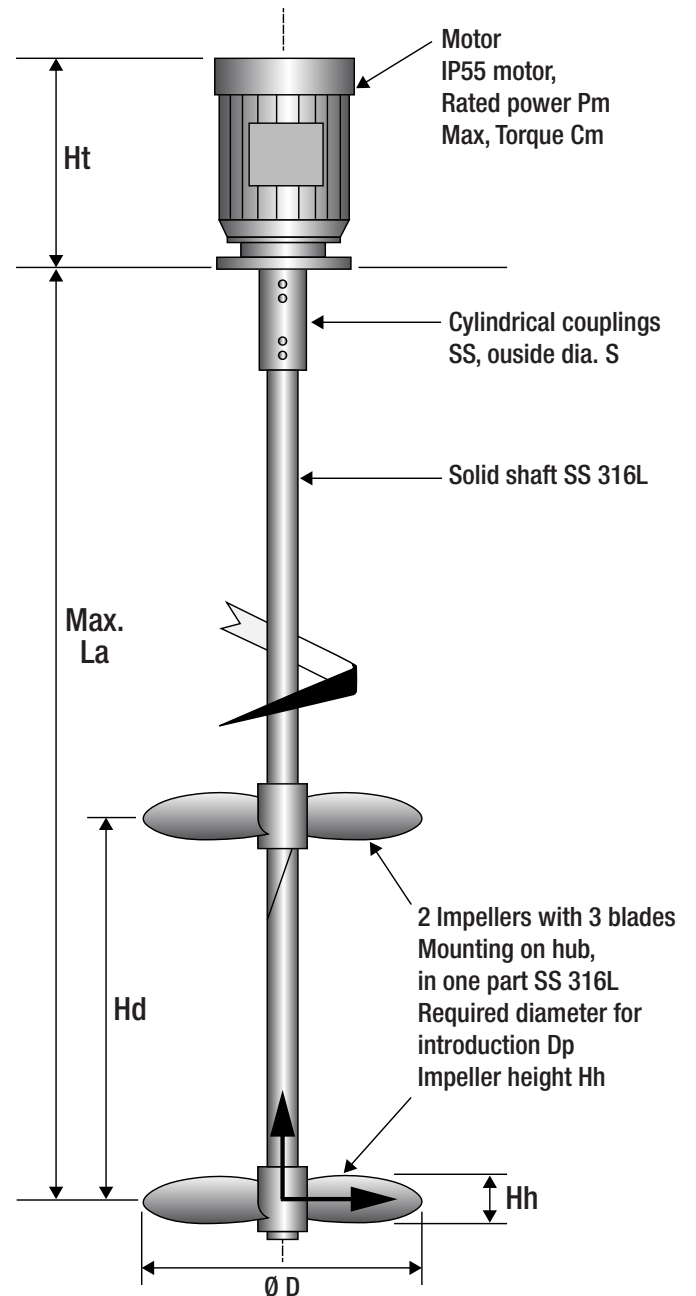
| Dual Impeller Dim. | | 50Hz (Metric) | | | | 60Hz IEC (Metric) | | | | | 60Hz IEC (Imperial) | | | | |
|----------------------|----------|---------------|------|------|------|-------------------|------|------|------|------|---------------------|------|------|------|------|
| VD2A | | 0085 | 0125 | 0135 | 0145 | 0086 | 0126 | 0136 | 0146 | 0166 | 0086 | 0126 | 0136 | 0146 | 0166 |
| D | mm (in) | 80 | 128 | 128 | 140 | 80 | 128 | 128 | 140 | 160 | 3.1 | 5 | 5 | 5.5 | 6.3 |
| N | rpm | 1500 | 750 | 1500 | 1500 | 1800 | 900 | 1800 | 1800 | 900 | 1800 | 900 | 1800 | 1800 | 900 |
| Pm | kW (HP) | 0.25 | 0.25 | 1.5 | 1.5 | 0.25 | 0.25 | 1.5 | 2.2 | 0.55 | 0.33 | 0.33 | 2 | 3 | 0.75 |
| Weight | kg (lbs) | 8 | 14 | 23 | 23 | 8 | 14 | 23 | 23 | 18 | 18 | 31 | 51 | 51 | 40 |
| Hh | mm (in) | 25 | 30 | 30 | 30 | 25 | 30 | 30 | 30 | 30 | 1 | 1.2 | 1.2 | 1.2 | 1.2 |
| Dp | mm (in) | 80 | 110 | 110 | 120 | 80 | 110 | 110 | 120 | 130 | 3.1 | 4.3 | 4.3 | 4.7 | 5.1 |
| Flange | | F130 | F165 | F165 | F165 | F130 | F165 | F165 | F165 | F165 | F130 | F165 | F165 | F165 | F165 |
| Sq. Plate (option) | | P250 | P350 | P350 | P350 | P250 | P350 | P350 | P350 | P350 | P250 | P350 | P350 | P350 | P350 |
| Circ. Plate (option) | | 6" | 8" | 8" | 8" | 6" | 8" | 8" | 8" | 8" | 6" | 8" | 8" | 8" | 8" |
| Max. La | mm (in) | 1000 | 1000 | 1400 | 1000 | 1000 | 1000 | 1400 | 1000 | 600 | 39.4 | 39.4 | 55.1 | 39.4 | 23.6 |
| Min. La | mm (in) | 400 | 500 | 800 | 500 | 400 | 500 | 800 | 650 | 500 | 15.7 | 19.7 | 31.5 | 25.6 | 19.7 |
| Hd | mm (in) | 100 | 200 | 200 | 200 | 100 | 200 | 200 | 200 | 200 | 3.9 | 7.9 | 7.9 | 7.9 | 7.9 |

50 Hz Dual Impeller

| TYPE | Model | Shaft length (mm) |
|----------|--------------|-------------------|
| VD2A0085 | VD2A0085S100 | 1000 |
| VD2A0085 | VD2A0085S40 | 400 |
| VD2A0125 | VD2A0125S100 | 1000 |
| VD2A0125 | VD2A0125S50 | 500 |
| VD2A0135 | VD2A0135S140 | 1400 |
| VD2A0135 | VD2A0135S80 | 800 |
| VD2A0145 | VD2A0145S100 | 1000 |
| VD2A0145 | VD2A0145S50 | 500 |

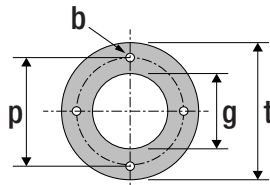
60 Hz Dual Impeller

| TYPE | Model | Shaft length (mm) | Shaft length (in) |
|----------|--------------|-------------------|-------------------|
| VD2A0086 | VD2A0086S100 | 1000 | 39.4 |
| VD2A0086 | VD2A0086S40 | 400 | 15.7 |
| VD2A0126 | VD2A0126S100 | 1000 | 39.4 |
| VD2A0126 | VD2A0126S50 | 500 | 19.7 |
| VD2A0136 | VD2A0136S140 | 1400 | 55.1 |
| VD2A0136 | VD2A0136S80 | 800 | 31.5 |
| VD2A0146 | VD2A0146S100 | 1000 | 39.4 |
| VD2A0146 | VD2A0146S65 | 650 | 25.6 |
| VD2A0166 | VD2A0166S60 | 600 | 23.6 |
| VD2A0166 | VD2A0166S50 | 500 | 19.7 |



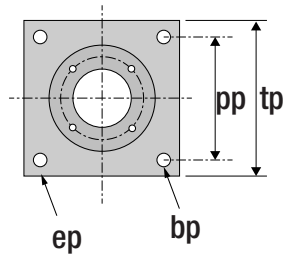
Mounting:

Gear Flange



| Type | Metric (mm) | | Imperial (in) | |
|------|-------------|------|---------------|------|
| | F130 | F165 | F130 | F165 |
| b | 9 | 11 | 0.35 | 0.43 |
| t | 160 | 200 | 6.30 | 7.87 |
| p | 130 | 165 | 5.12 | 6.5 |
| g | 110 | 130 | 4.33 | 5.12 |
| e | 10 | 12 | 0.39 | 0.47 |

Square Support Plate (optional)



| Type | Metric (mm) | | Imperial (in) | |
|------|-------------|------|---------------|-------|
| | P250 | P350 | P250 | P350 |
| bp | 14 | 14 | 0.55 | 0.55 |
| pp | 190 | 280 | 7.48 | 11.02 |
| tp | 250 | 350 | 9.84 | 13.78 |
| ep | 15 | 15 | 0.59 | 0.59 |

ASME B16.5 150# FF baseplate (optional)

| Type | Metric (mm) | | Imperial (in) | |
|-----------------------------|-------------|-----|---------------|-------|
| | 6" | 8" | 6" | 8" |
| Outside Diameter | 279 | 343 | 11 | 13.5 |
| Diameter of Circle of Holes | 241 | 299 | 9.5 | 11.75 |
| Bolt Hole Diameter | 22 | 22 | 0.88 | 0.88 |
| Number of Holes | 8 | 8 | 8 | 8 |

Ingersoll Rand Inc. (NYSE:IR), driven by an entrepreneurial spirit and ownership mindset, is committed to helping make life better. We provide innovative and mission-critical industrial, energy, medical and specialty vehicle products and services across 40+ respected brands designed to excel in even the most complex and harsh conditions where downtime is especially costly. Our employees connect to customers for life by delivering proven expertise, productivity and efficiency improvements. For more information, visit www.IRco.com.



HELISEM is a registered tradename of Milton Roy

© 2018 Milton Roy, All Rights Reserved

miltonroy.com

miltonroymixing.com

Literature# MRMVDA Rev.03 10/22