

# HELISEM<sup>®</sup> Mixers

## VRP MODEL

### DATA SHEET

The HELISEM<sup>®</sup> series offers 4 distinct models - VDA, VRP, VRH, and FRH - each with a specific impeller, to support a wide range of open tank applications from 10 to 100,000 gallons (50 L to 400 m<sup>3</sup>) and viscosities up to 1000 mPas (cP) at 1.3 specific gravity.

The VRP model is a gearmotor driven mixer using a pitch blade turbine (PBT) impeller. An ideal mixer for a wide range of applications, the VRP offers mixing during emptying, filling or with a variable speed drive.

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

### General Characteristics:

- Agitator with gear drive motor
- Lower shaft provided with a 4 pitch blade turbine (PBT) impeller
- Rated power from 0.18 to .37 kW (1/4 to 1/2 HP)

### Applications:

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

### Materials:

- Wetted Parts – Stainless steel 316L
- Painting PU: RAL 1018 on the drive system
- Consult us for any other materials

### Features & Benefits:

- Easy to install and maintain, saving valuable manpower and resources
- Short mixer lead-times to minimize downtime or interruptions in production
- Solid shafts provide easier cleaning while reducing resistance and corrosion
- Rotation during filling and draining

### Mounting Options:

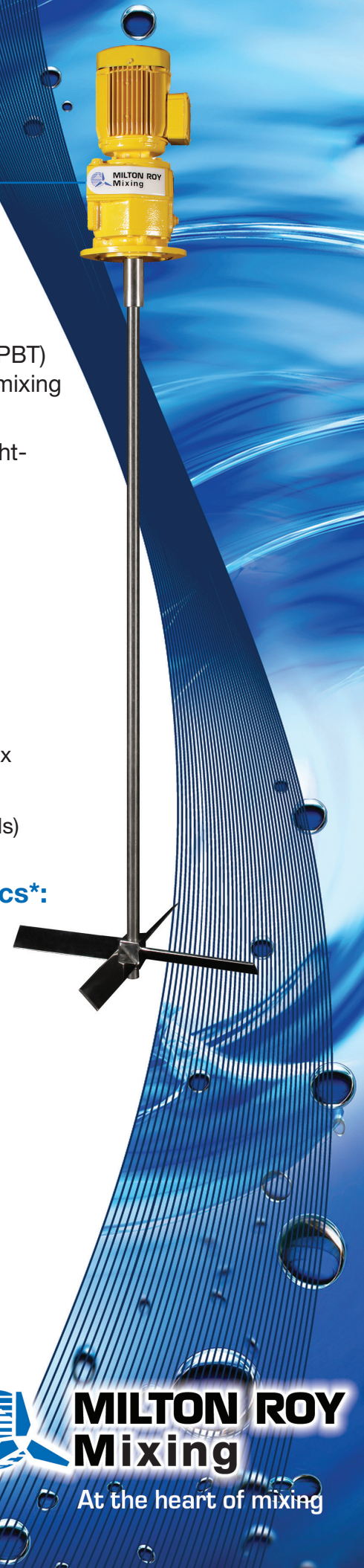
- Direct Mounting to Gear box
- Square baseplate
- Clamp mount (select models)

### Electrical Characteristics\*:

- 50Hz 230V 1Phase
  - 60Hz 230V 1 Phase
  - 50Hz 400V 3Phase
  - 60Hz 460V 3Phase
- \*Other voltage options available

### Options:

- Special motors
- Second impeller
- Powder coating



**MILTON ROY**  
**Mixing**

At the heart of mixing

# Single Impeller

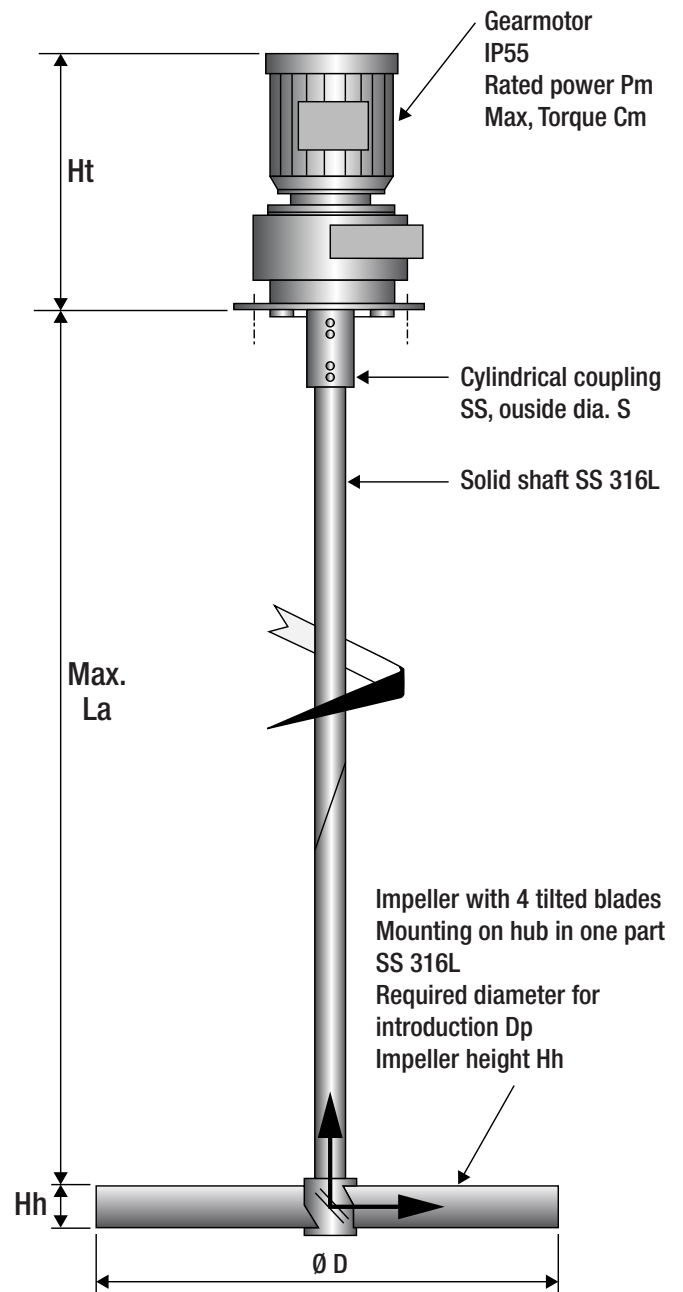
Single Impeller Dim.		50Hz (Metric)			60Hz IEC (Metric)			60Hz IEC (Imperial)		
<b>VRP</b>		0208	0358	0508	0209	0359	0509	0209	0359	0509
D	mm (in)	200	350	500	200	350	500	7.9	13.8	19.7
N	rpm	280	188	108	279	178	108	279	178	108
Pm	kW (HP)	0.18	0.37	0.37	0.18	0.37	0.37	1/4	1/2	1/2
Cm	Nm (ft-lb)	12	38	66	12	40	66	8.9	29.5	48.7
Weight	kg (lbs)	15	19	21	15	19	21	33.1	41.9	46.3
Load	N	300	380	420	300	380	420	300	380	420
Ht	mm (in)	335	367	367	335	367	367	13.2	14.4	14.4
Hh	mm (in)	55	55	55	55	55	55	2.2	2.2	2.2
Dp	mm (in)	160	240	400	160	240	400	6.3	9.4	15.7
Flange		F130	F130	F130	F130	F130	F130	F130	F130	F130
Sq. Plate (option)		P250	P250	P250	P250	P250	P250	P250	P250	P250
Max. La	mm (in)	1200	1400	1700	1200	1400	1700	47.2	55.1	66.9

## 50 Hz Single Impeller

TYPE	Model	Shaft length (mm)
VRP0208	VRP0208S120	1200
	VRP0208S100	1000
	VRP0208S80	800
	VRP0208S60	600
VRP0358	VRP0358S140	1400
	VRP0358S100	1000
	VRP0358S80	800
	VRP0358S60	600
VRP0508	VRP0508S170	1700
	VRP0508S150	1500
	VRP0508S120	1200
	VRP0508S100	1000

## 60 Hz Single Impeller

TYPE	Model	Shaft length (mm)	Shaft length (in)
VRP0209	VRP0209S120	1200	47.2
	VRP0209S100	1000	39.4
	VRP0209S80	800	31.5
	VRP0209S60	600	23.6
VRP0359	VRP0359S140	1400	55.1
	VRP0359S100	1000	39.4
	VRP0359S80	800	31.5
	VRP0359S60	600	23.6
VRP0509	VRP0509S170	1700	66.9
	VRP0509S150	1500	59.1
	VRP0509S120	1200	47.2
	VRP0509S100	1000	39.4



# Dual Impeller

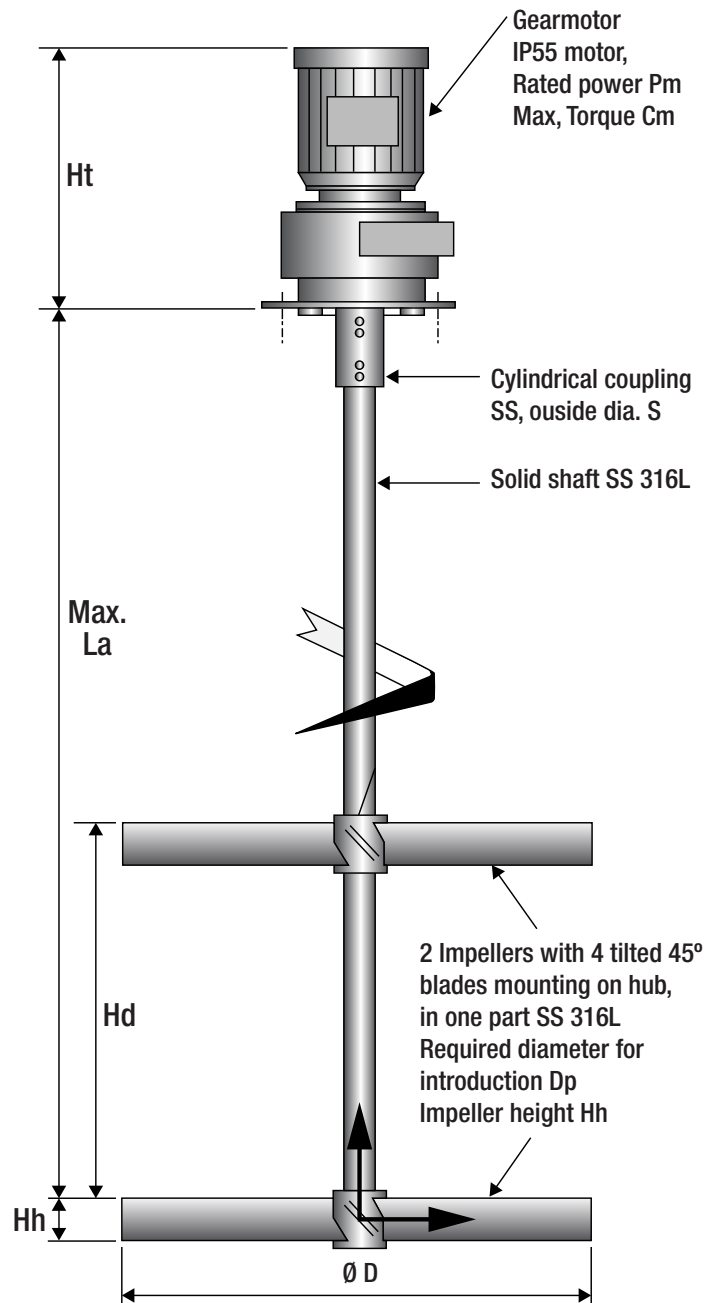
Dual Impeller Dim.		50Hz (Metric)			60Hz IEC (Metric)			60Hz IEC (Imperial)		
VR2P		0208	0358	0508	0209	0359	0509	0209	0359	0509
D	mm (in)	200	350	500	200	350	500	7.9	13.8	19.7
N	rpm	280	188	108	279	178	108	279	178	108
Pm	kW (HP)	0.18	0.37	0.37	0.18	0.37	0.37	1/3	1/2	1/2
Cm	Nm (ft-lb)	12	38	66	12	40	66	12.5	34.7	61.2
Weight	kg (lbs)	15	19	21	15	19	21	37.5	46.3	52.9
Load	N	300	380	420	300	380	420	340	420	480
Ht	mm (in)	335	367	367	335	367	367	14.4	14.4	14.4
Hh	mm (in)	55	55	55	55	55	55	2.2	2.2	2.2
Dp	mm (in)	160	240	400	160	240	400	6.3	9.4	15.7
Flange		F130	F130	F130	F130	F130	F130	F130	F130	F130
Sq. Plate (option)		P250	P250	P250	P250	P250	P250	P250	P250	P250
Max. La	mm (in)	1100	1500	1900	1100	1500	1900	43.3	59.1	74.8
Hd	mm (in)	200	350	500	200	350	500	7.9	13.8	19.7

## 50 Hz Dual Impeller

Type	Model	Shaft length (mm)	Clearance between impellers (mm)
VR2P0208	VR2P0208S110	1100	200
	VR2P0208S100	1000	200
	VR2P0208S80	800	200
VR2P0358	VR2P0358S150	1500	350
	VR2P0358S130	1300	350
	VR2P0358S110	1100	350
	VR2P0358S100	1000	350
	VR2P0358S80	800	350
VR2P0508	VR2P0508S190	1900	500
	VR2P0508S170	1700	500
	VR2P0508S150	1500	500
	VR2P0508S130	1300	500

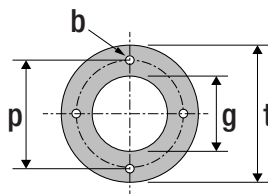
## 60 Hz Dual Impeller

Type	Model	Shaft length (mm)	Clearance between impellers (mm)	Shaft length (in)	Clearance between impellers (in)
VR2P0209	VR2P0209S110	1100	200	43.3	7.9
	VR2P0209S100	1000	200	39.4	7.9
	VR2P0209S80	800	200	31.5	7.9
VR2P0359	VR2P0359S150	1500	350	59.1	13.8
	VR2P0359S130	1300	350	51.2	13.8
	VR2P0359S110	1100	350	43.3	13.8
	VR2P0359S100	1000	350	39.4	13.8
	VR2P0359S80	800	350	31.5	13.8
	VR2P0509	VR2P0509S190	1900	500	74.8
VR2P0509S170		1700	500	66.9	19.7
VR2P0509S150		1500	500	59.1	19.7
VR2P0508S130		1300	500	51.2	19.7



## Mounting:

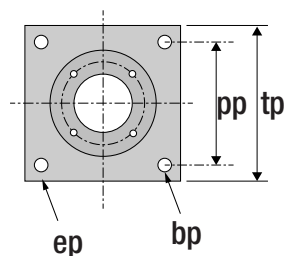
### Motor Flange



Type	Metric (mm)	Imperial (in)
	F130	F130
b	9	0.35
t	160	6.30
p	130	5.12
g	110	4.33
e	10	0.39

Square support plate (optional)

### Square support plate (optional)



Type	Metric (mm)	Imperial (in)
	P250	P250
bp	14	0.55
pp	190	7.48
tp	250	9.84
ep	15	0.59

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](http://www.IRCO.com).



HELISEM is a registered tradename of Milton Roy

© 2018 Milton Roy, All Rights Reserved

[miltonroy.com](http://miltonroy.com)  
[miltonroymixing.com](http://miltonroymixing.com)  
 Literature# MRMVRP 6/2018