

HELISEM[®] Mixers

VDA MODEL

DATA SHEET

The HELISEM[®] 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 m³) and viscosities up to 1000 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
- Consult us for any other materials

Mounting Options:

- Direct mounting to motor
- Square baseplate
- Bung mount (select models)
- Clamp mount (select models)

Electrical characteristics*:

- 50 Hz 200 / 400V 3 Phase
- 50 Hz 230V 1 Phase
- 60 Hz 230 / 460V 3 Phase
- 60 Hz 115/230V 1 Phase

*Other voltage options available

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

Options:

- Powder coating
- Outside operation
- Tropical atmosphere
- ATEX mixers, Zone 1 or 2
- 1 or 2 impellers
- 50 Hz or 60 Hz supply
- PTC sensors



MILTON ROY[®]
Mixing

At the heart of mixing

Single Impeller

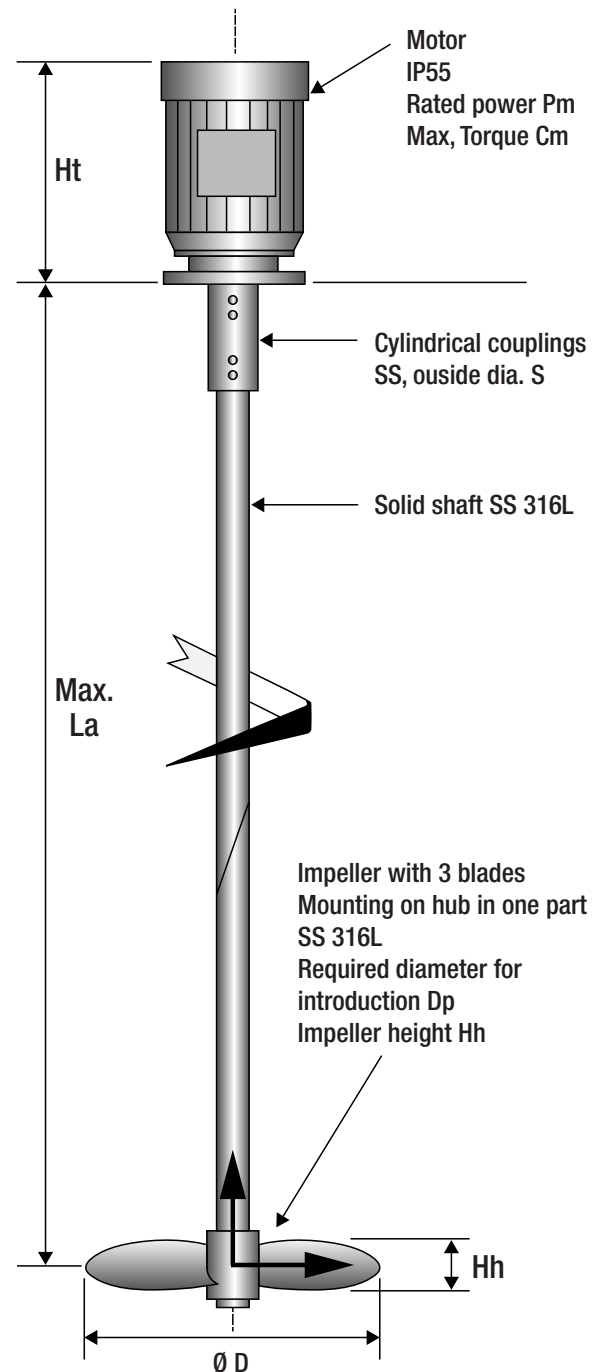
Single Impeller Dim.		50Hz (Metric)				60Hz IEC (Metric)				60Hz NEMA (Imperial)			
VDA		1218	2218	2528	4638	1219	2529	3639	4319	1219	2529	3639	4319
D	mm (in)	80	128	140	160	80	128	140	160	3.1	5.0	5.5	6.3
N	rpm	1500	1500	1500	1500	1800	1800	1800	900	1800	1800	1800	900
Pm	kW (HP)	0.25	0.25	0.75	1.5	0.25	0.75	1.5	0.37	1/3	1	2	1/2
Cm	Nm (ft-lb)	3	3	10	19	3	8	16	8	2.2	5.9	11.8	5.9
Weight	kg (lbs)	8	8	15	24	8	15	23	19	17.6	33.1	50.7	41.9
Load	N	160	160	300	480	160	300	460	380	160	300	460	380
Ht	mm (in)	210	210	250	285	210	250	285	260	8.3	9.8	11.2	10.2
Hh	mm (in)	25	30	30	30	25	30	30	30	1.0	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	56C	143T	145T	143T
Sq. Plate (option)		P250	P250	P350	P350	P250	P350	P350	P350	P250	P350	P350	P350
Max. La	mm (in)	1000	1000	1250	1500	1000	1250	1500	1000	39.4	49.2	59.1	39.4

50 Hz Single Impeller

Type	Model	Shaft length mm
VDA1218	VDA1218S100	1000
	VDA1218S80	800
	VDA1218S70	700
	VDA1218S40	400
VDA2218	VDA2218S100	1000
	VDA2218S80	800
	VDA2218S70	700
	VDA2218S60	600
VDA2528	VDA2528S125	1250
	VDA2528S100	1000
	VDA2528S80	800
VDA4638	VDA4638S150	1500
	VDA4638S100	1000
	VDA4638S80	800

60 Hz Single Impeller

Type	Model	Shaft length mm	Shaft length in
VDA1219	VDA1219S100	1000	39.4
	VDA1219S80	800	31.5
	VDA1219S70	700	27.6
	VDA1219S40	400	15.7
VDA2529	VDA2529S125	1250	49.2
	VDA2529S80	800	31.5
	VDA2529S70	700	27.6
	VDA2529S60	600	23.6
VDA3639	VDA3639S150	1500	59.1
	VDA3639S125	1250	49.2
	VDA3639S100	1000	39.4
	VDA3639S80	800	31.5
VDA4319	VDA4319S100	1000	39.4
	VDA4319S80	800	31.5
	VDA4319S70	700	27.6
	VDA4319S40	400	15.7



Dual Impeller

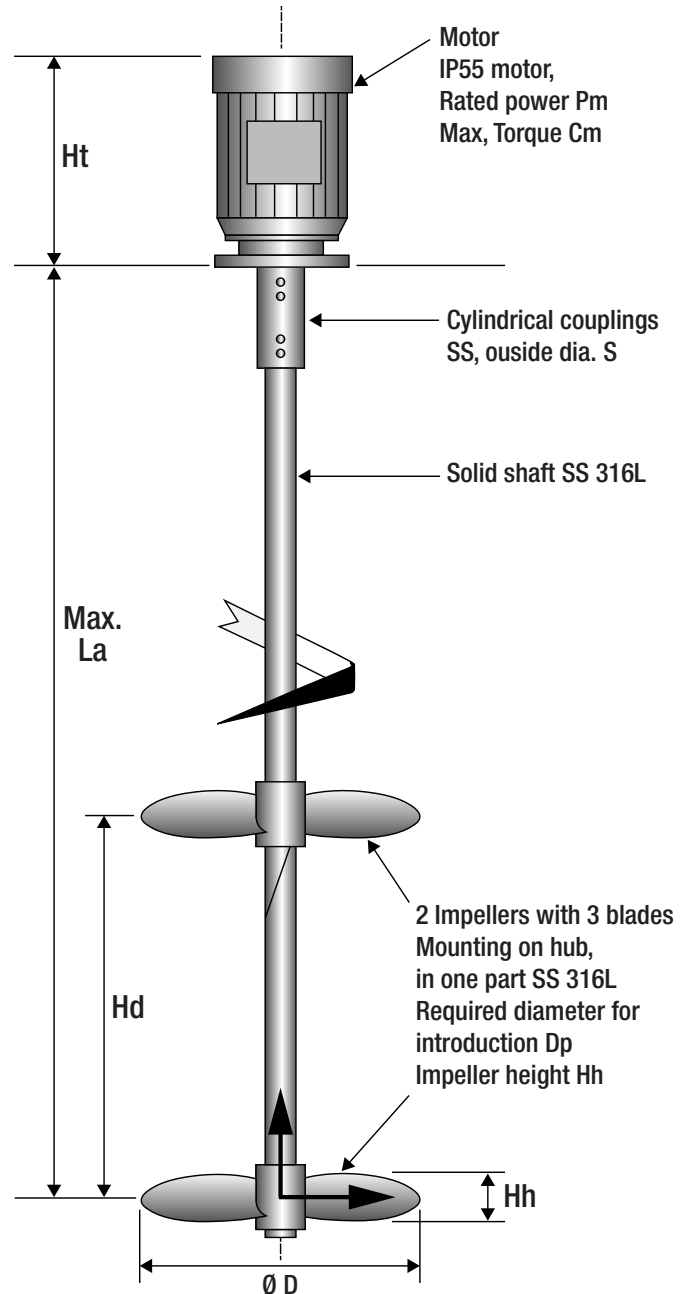
Dual Impeller Dim.		50Hz (Metric)				60Hz IEC (Metric)					60Hz NEMA (Imperial)				
VD2A		1218	2218	2528	4638	1219	2119	2636	3619	4319	1219	1219	2639	3619	4319
D	mm (in)	80	128	140	160	80	128	128	140	160	3.1	5.0	5.0	5.5	6.3
N	rpm	1500	1500	1500	1500	1800	900	1800	1800	900	1800	900	1800	1800	900
Pm	kW (HP)	0.25	0.25	0.75	1.5	0.25	0.25	1.5	1.5	0.37	1/3	1/3	2	2	1/2
Cm	Nm (ft-lb)	3	3	10	19	3	5	16	16	8	2.2	3.7	11.8	11.8	5.9
Weight	kg (lbs)	8	8	15	24	8	14	23	23	18	17.6	30.9	50.7	50.7	39.7
Load	N	160	160	300	480	160	280	460	460	360	160	280	460	460	360
Ht	mm (in)	210	210	250	285	210	250	285	285	260	8.3	9.8	11.2	11.2	10.2
Hh	mm (in)	25	30	30	30	25	30	30	30	30	1.0	1.2	1.2	1.2	1.2
Dp	mm (in)	80	110	110	130	80	110	110	120	130	3.1	4.3	4.3	4.7	5.1
Flange		F130	F130	F165	F165	F130	F165	F165	F165	F165	56C	56C	145T	145T	143T
Sq. Plate (option)		P250	P250	P350	P350	P250	P250	P350	P350	P350	P250	P250	P350	P350	P350
Max. La	mm (in)	1000	1000	1250	1500	1000	1000	1400	1000	600	39.4	39.4	55.1	39.4	23.6
Hd	mm (in)	100	200	200	200	100	200	200	200	250	3.9	7.9	7.9	7.9	9.8

50 Hz Dual Impeller

Type	Model	Shaft length (mm)	Clearance between impellers (mm)
VD2A1218	VD2A1218S100	1000	100
	VD2A1218S80	800	100
	VD2A1218S70	700	100
	VD2A1218S40	400	100
VD2A2118	VD2A2118S100	1000	200
	VD2A2118S80	800	200
	VD2A2118S70	700	200
	VD2A2118S40	400	200
VD2A2638	VD2A2638S140	1400	200
	VD2A2638S120	1200	200
	VD2A2638S100	1000	200
	VD2A2638S80	800	200
VD2A3618	VD2A3618S100	1000	200
	VD2A3618S80	800	200
	VD2A3618S70	700	200
	VD2A3618S40	400	200

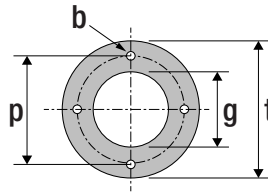
60 Hz Dual Impeller

Type	Model	Shaft length (mm)	Clearance between impellers (mm)	Shaft length (in)	Clearance between impellers (in)
VD2A1219	VD2A1219S100	1000	100	39.4	3.9
	VD2A1219S80	800	100	31.5	3.9
	VD2A1219S70	700	100	27.6	3.9
	VD2A1219S40	400	100	15.7	3.9
VD2A2119	VD2A2119S100	1000	200	39.4	7.9
	VD2A2119S80	800	200	31.5	7.9
	VD2A2119S70	700	200	27.6	7.9
	VD2A2119S40	400	200	15.7	7.9
VD2A2639	VD2A2639S140	1400	200	55.1	7.9
	VD2A2639S120	1200	200	47.2	7.9
	VD2A2639S100	1000	200	39.4	7.9
	VD2A2639S80	800	200	31.5	7.9
VD2A3619	VD2A3619S100	1000	200	39.4	7.9
	VD2A3619S80	800	200	31.5	7.9
	VD2A3619S70	700	200	27.6	7.9
	VD2A3619S40	400	200	15.7	7.9
VD2A4319	VD2A4319S60	600	250	23.6	9.8
	VD2A4319S40	400	200	15.7	7.9



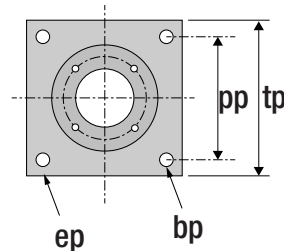
Mounting:

Motor Flange



Type	Metric (mm)		Imperial (in)		Imperial (in)	
	F130	F165	F130	F165	56C	143T/145T
b	9	11	0.35	0.43	3/8-16 UNC	3/8-16 UNC
t	160	200	6.30	7.87	-	-
p	130	165	5.12	6.50	5.875	5.875
g	110	130	4.33	5.12	4.5	4.5
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

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