HELISEM® Mixers

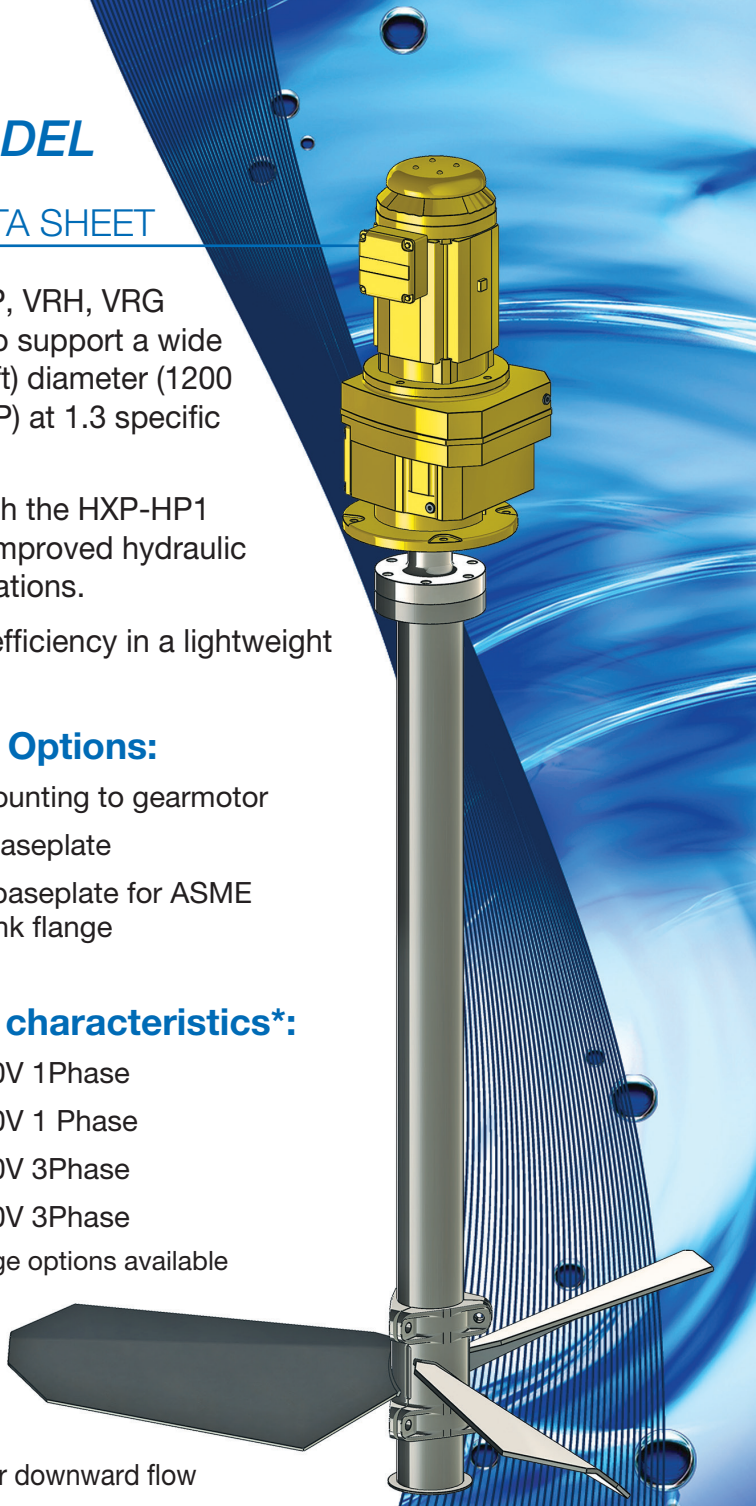
VRH MODEL

DATA SHEET

The HELISEM® series offers 5 distinct models - VDA, VRP, VRH, VRG and FRH - with the VRH mounted with a HXP propeller, to support a wide range of open or closed tank applications up to 9.5m (31ft) diameter (1200 m^3 - 317000 gallons) and viscosities up to 1,000 mPas (cP) at 1.3 specific gravity.

The VRH model is a gearmotor driven mixer equipped with the HXP-HP1 propeller with 3 blades. This is a powerful mixer with an improved hydraulic efficiency to meet the demands of a wide range of applications.

Powerful and compact, the VRH model provides energy efficiency in a lightweight mixer with uncompromising results.



General Characteristics:

- Agitator with gearmotor
- Lower shaft provided with a hydrofoil impeller
- Rated power from 1.1 to 15 kW (1.5 to 20 HP)

Applications:

- Dissolution
- Heat Transfer
- Homogenization
- Dilution
- Chemical Reactions

Materials:

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

Features & Benefits:

- Virtually no limitations from the process point of view
- Easy to install and maintain saving valuable manpower and resources
- All VRH mixers can rotate during emptying, filling and can be equipped with a frequency inverter

Mounting Options:

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

Electrical characteristics*:

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

*Other voltage options available

Options:

- Upward or downward flow
- 1 or 2 propellers
- Coated wetted parts (Abcite on solid shaft only)

MILTON ROY Mixing

At the heart of mixing

Single Impeller

Single Impeller Dim.		50Hz (Metric)					60Hz IEC (Metric)					60Hz IEC (Imperial)				
VRH		0705	1005	1455	2055	2855	0706	1006	1456	2056	2856	0706	1006	1456	2056	2856
D	mm (in)	700	1000	1450	2050	2850	700	1000	1450	2050	2850	27.6	39.4	57.1	80.7	112.2
N	rpm	110	79	52	36	29	113	80	51	37	26	113	80	51	37	26
Pm	kW (HP)	1.1	1.5	3	5.5	15	1.1	2.2	3	5.5	11	1.5	3	4	7.5	15
Weight	kg (lbs)	58	80	231	542	1315	58	84	231	538	1260	128	185	509	1186	2778
Ht	mm (in)	460	528	645	799	965	460	525	645	799	914	18.1	20.7	25.4	31.5	36
Hh	mm (in)	78	111	161	228	316	78	111	161	228	316	3.1	4.4	6.3	9	12.4
Dp	mm (in)	700	1000	335	475	660	700	1000	335	475	660	27.6	39.4	13.2	18.7	26
Flange		F130	F130	F265	F300	F500	F130	F130	F265	F300	F400	F130	F130	F265	F300	F400
Sq. Plate (option)		P250	P250	P400	P500	P700	P250	P250	P400	P500	P600	P250	P250	P400	P500	P600
Circ. Plate (option)		6”	6”	12”	12”	22”	6”	6”	12”	12”	18”	6”	6”	12”	12”	18”
Max. La	mm (in)	2100	2250	3750	5000	6000	2100	2250	3750	4900	6000	82.7	88.6	147.6	192.9	236.2
Min. La	mm (in)	550	800	1100	1500	2000	550	800	1100	1500	2000	21.7	31.5	43.3	59.1	78.7

50 Hz Single Impeller

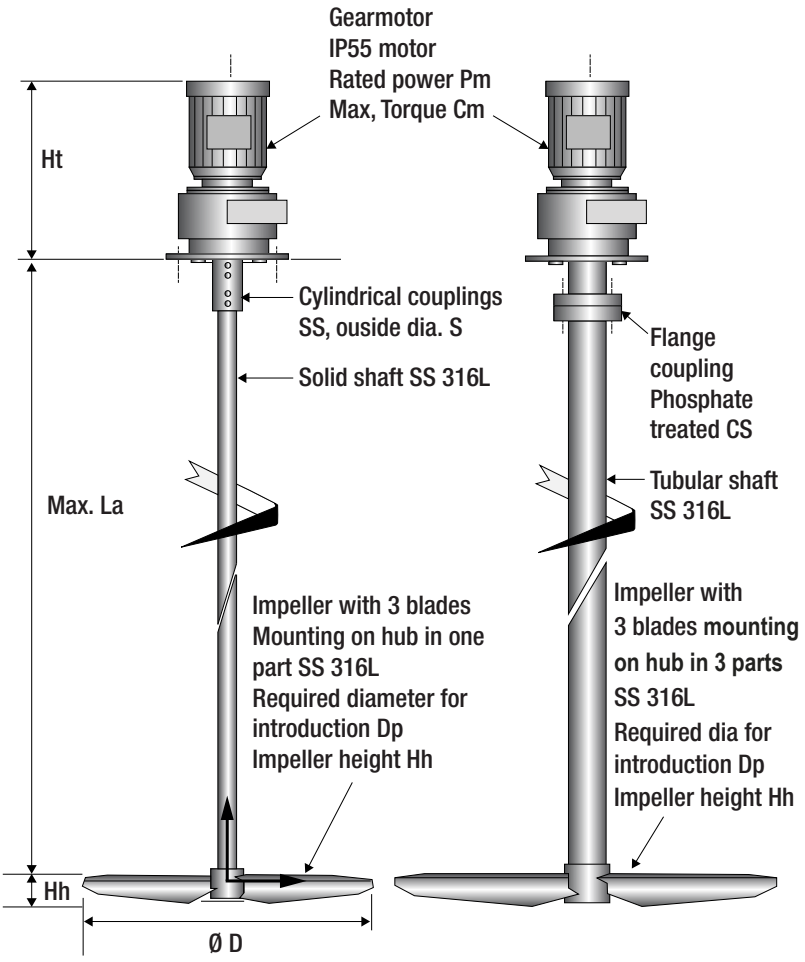
TYPE	Model	Shaft length (mm)
VRH0705	VRH0705S210	2100
VRH0705	VRH0705S55	550
VRH1005	VRH1005S225	2250
VRH1005	VRH1005S80	800
VRH1455	VRH1455S375	3750
VRH1455	VRH1455S110	1100
VRH2055	VRH2055S500	5000
VRH2055	VRH2055S150	1500
VRH2855	VRH2855S600	6000
VRH2855	VRH2855S200	2000

60 Hz Single Impeller

TYPE	Model	Shaft length (mm)	Shaft length (in)
VRH0706	VRH0706S210	2100	82.7
VRH0706	VRH0706S55	550	21.7
VRH1006	VRH1006S225	2250	88.6
VRH1006	VRH1006S80	800	31.5
VRH1456	VRH1456S375	3750	147.6
VRH1456	VRH1456S110	1100	43.3
VRH2056	VRH2056S490	4900	192.9
VRH2056	VRH2056S150	1500	59.1
VRH2856	VRH2856S600	6000	236.2
VRH2856	VRH2856S200	2000	78.7

Solid Shaft:
From VRH0705 and VRH1005
From VRH0706 and VRH1006

Hollow Shaft:
From VRH1455 to VRH2855
From VRH1456 to VRH2856

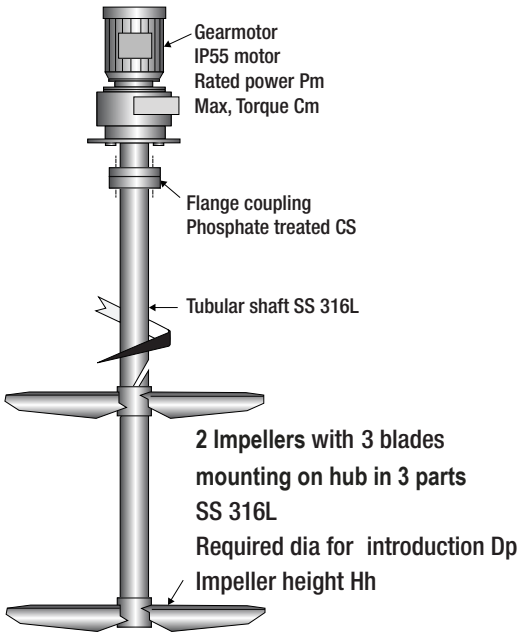


Dual Impeller

Dual Impeller Dim.		50Hz (Metric)					60Hz IEC (Metric)					60Hz IEC (Imperial)				
VR2H		0705	1005	1455	2055	2855	0706	1006	1456	2056	2856	0706	1006	1456	2056	2856
D	mm (in)	700	1000	1450	2050	2850	700	1000	1450	2050	2850	27.6	39.4	57.1	80.7	112.2
N	rpm	87	62	44	29	22	91	61	41	28	21	91	61	41	28	21
Pm	kW (HP)	1.1	2.2	4	7.5	15	1.1	2.2	3	5.5	15	1.5	3	4	7.5	20
Weight	kg (lbs)	122	201	501	890	1768	114	205	500	875	1768	251	452	1102	1929	3898
Ht	mm (in)	494	550	720	832	1033	482	550	693	805	1033	19	21.7	27.3	31.7	40.7
Hh	mm (in)	78	111	161	228	316	78	111	161	228	316	3.1	4.4	6.3	9	12.4
Dp	mm (in)	165	230	335	475	660	165	230	335	475	660	6.5	9.1	13.2	18.7	26
Flange		F215	F265	F300	F400	F500	F165	F265	F300	F400	F500	F165	F265	F300	F400	F500
Sq. Plate (option)		P350	P400	P500	P600	P700	P250	P400	P500	P600	P700	P250	P400	P500	P600	P700
Circ. Plate(option)		10”	12”	12”	18”	22”	8”	12”	12”	18”	22”	8”	12”	12”	18”	22”
Max. La	mm (in)	3150	4000	5650	6000	6000	3150	4150	5850	6000	6000	124	163.4	230.3	236.2	236.2
Min. La	mm (in)	1350	1800	2600	3650	5000	1300	1800	2600	3650	5000	51.2	70.9	102.4	143.7	196.9
Hd	mm (in)	700	1000	1450	2050	2850	700	1000	1450	2050	2850	27.6	39.4	57.1	80.7	112.2

50 Hz Dual Impeller

TYPE	Model	Shaft length (mm)
VR2H0705	VR2H0705S315	3150
VR2H0705	VR2H0705S135	1350
VR2H1005	VR2H1005S400	4000
VR2H1005	VR2H1005S180	1800
VR2H1455	VR2H1455S565	5650
VR2H1455	VR2H1455S260	2600
VR2H2055	VR2H2055S600	6000
VR2H2055	VR2H2055S365	3650
VR2H2855	VR2H2855S600	6000
VR2H2855	VR2H2855S500	5000

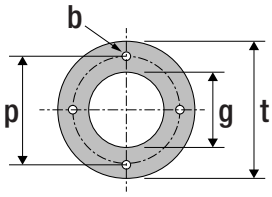


60 Hz Dual Impeller

TYPE	Model	Shaft length (mm)	Shaft length (in)
VR2H0706	VR2H0706S315	3150	124
VR2H0706	VR2H0706S130	1300	51.2
VR2H1006	VR2H1006S415	4150	163.4
VR2H1006	VR2H1006S180	1800	70.9
VR2H1456	VR2H1456S585	5850	230.3
VR2H1456	VR2H1456S260	2600	102.4
VR2H2056	VR2H2056S600	6000	236.2
VR2H2056	VR2H2056S365	3650	143.7
VR2H2856	VR2H2856S600	6000	236.2
VR2H2856	VR2H2856S500	5000	196.9

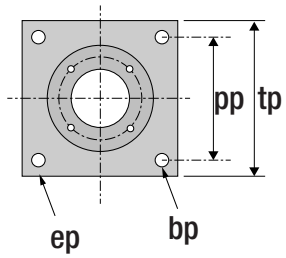
Mounting:

Gear Flange



Type	Metric (mm)							Imperial (in)						
	F130	F165	F215	F265	F300	F400	F500	F130	F165	F215	F265	F300	F400	F500
b	9	11	13.5	13.5	17.5	17.5	17.5	0.35	0.43	0.53	0.53	0.69	0.69	0.69
t	160	200	250	300	350	450	550	6.3	7.87	9.84	11.81	13.78	17.72	21.65
p	130	165	215	265	300	400	500	5.12	6.5	8.46	10.43	11.81	15.75	19.69
g	110	130	180	230	250	350	450	4.33	5.12	7.09	9.06	9.84	13.78	17.72
e	10	12	15	16	20	22	25	0.39	0.47	0.59	0.63	0.71	0.87	0.98

Square Support Plate (optional)



Type	Metric (mm)						Imperial (in)					
	P250	P350	P400	P500	P600	P700	P250	P350	P400	P500	P600	P700
bp	14	14	16	18	18	22	0.55	0.55	0.63	0.71	0.71	0.87
pp	190	280	320	420	500	600	7.48	11.02	12.6	16.54	19.69	23.62
tp	250	350	400	500	600	700	9.84	13.78	15.75	19.68	23.62	27.56
ep	15	15	15	20	20	25	0.59	0.59	0.59	0.79	0.79	0.98

ASME B16.5 150# FF Baseplate (optional)

Type	Metric (mm)						Imperial (in)					
	6”	8”	10”	12”	18”	22”	6”	8”	10”	12”	18”	22”
Outside Diameter	279	343	406	483	635	749	11	13.5	16	19	25	29.5
Diameter of Circle of Holes	241	299	362	432	578	692	9.5	11.75	14.25	17	22.75	27.25
Bolt Hole Diameter	22	22	25	25	32	35	0.88	0.88	1	1	1.25	1.38
Number of Holes	8	8	12	12	16	20	8	8	12	12	16	20

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