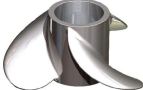


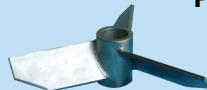



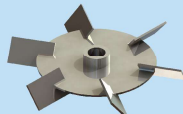






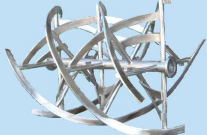
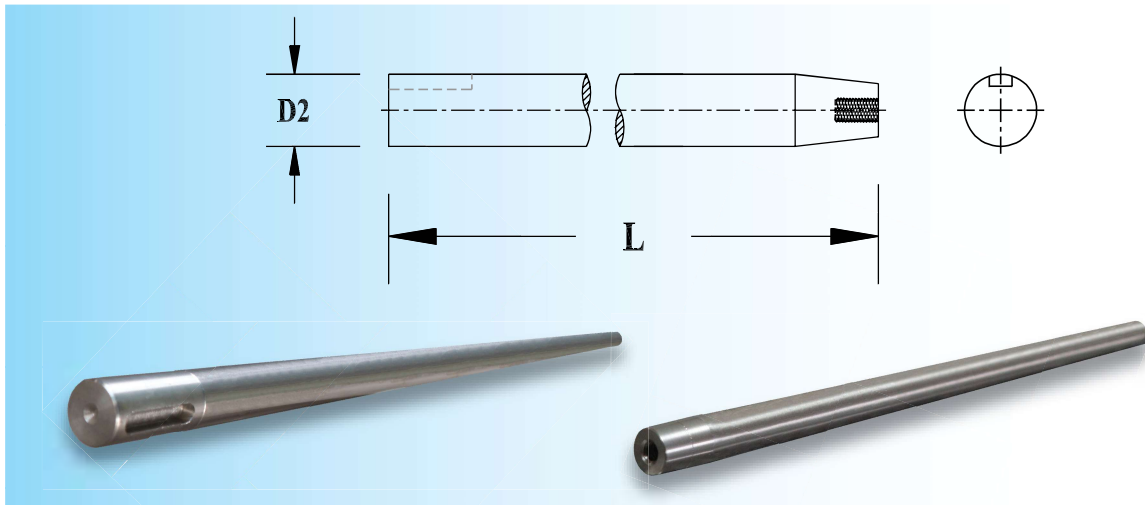


## Lambda Agitator Impellers

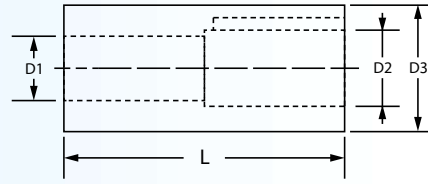
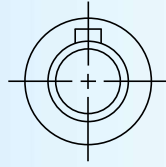
<p><b>P1</b></p> 	<p><b>Marine Propeller</b></p> <p>For mixing low viscous liquid (less than 100 cPS) Example : mixing of syrup in fruit juice</p>	<p><b>A1</b></p>  <p><b>Pitch-blade Turbine</b></p> <p>For rapid submergence of floating particulate solids (less than 10,000 cPs) Example : dispersion of gas droplet in polymerization</p>
<p><b>P2</b></p> 	<p><b>Standard Propeller</b></p> <p>For mixing low viscous liquid (less than 100 cPS) Example : preparation of acid and alkali solutions in chemical industries</p>	<p><b>A2</b></p>  <p><b>Pitch-blade Turbine</b></p> <p>For rapid submergence of floating particulate solids (less than 10,000 cPs) Example : dispersion of gas droplet in polymerization</p>
<p><b>P3</b></p> 	<p><b>Stretched Propeller</b></p> <p>For mixing low viscous liquid (less than 100 cPS)</p>	<p><b>T1</b></p>  <p><b>Flat-blade Disc Turbine</b></p> <p>For high shear gas-liquid dispersion (less than 15,000 cPs) Example : dispersion of air bubbles in fermenter dispersion of air bubbles in fermentor.</p>
<p><b>P4</b></p> 	<p><b>Constant-pitched Propeller (Hydro foil)</b></p> <p>For mixing low viscous liquid (less than 100 cPs) with high flow rate at very low shear</p>	<p><b>T2</b></p>  <p><b>Flat-blade Disc Turbine</b></p> <p>For high shear gas-liquid dispersion (less than 15,000 cPs) Example : dispersion of air bubbles in fermenter dispersion of air bubbles in fermentor.</p>
<p><b>D1</b></p> 	<p><b>Saw-toothed Disc Turbine (High-shear dispersing)</b></p> <p>For dispersion of solid particles in liquid phase Example : dispersion of pigment in paint industries</p>	<p><b>T3</b></p>  <p><b>Curve-blade Turbine</b></p> <p>For aiding solid settlement</p>
<p><b>C1</b></p> 	<p><b>Anchor</b></p> <p>For blending and heat transfer of high viscous liquid (5,000 - 50,000 cPs) Example : mixing of grinded cassava in hydrolysis tank</p>	<p><b>T4</b></p>  <p><b>Flat-blade Turbine</b></p> <p>For high shear gas-liquid dispersion and emulsion mixing (less than 50,000 cPs.). This impeller can be used for blending applications when high torque agitation is required. Example : mixing chemicals in wastewater treatment plants</p>
<p><b>S1</b></p> 	<p><b>Double Spiral</b></p> <p>For blending of slurry and solid particles less than 1,000,000 cPs Example : blending of chilli paste in food industries</p>	<p><b>T5</b></p>  <p><b>Bar Disc Turbine</b></p> <p>For very high shear solid liquid dispersion (less than 50,000 cPs) Example : production of adhesive emulsion</p>
<p><b>R1</b></p> 	<p><b>Double Ribbon</b></p> <p>For mixing free flowing ingredients for fine powder including plastics, chemicals, coloring and mixing feed for agriculture</p>	

## Agitator Shaft ( Type : S-3 ) Solid Shaft



Approx. Dimension (mm)		Part Number	Approx. Total Weight (kg)
D2	L		
12	250	S3x012A-R0250	0.23
	300	S3x012A-R0300	0.28
	350	S3x012A-R0350	0.32
	400	S3x012A-R0400	0.37
	450	S3x012A-R0450	0.41
	500	S3x012A-R0500	0.46
16	250	S3x016A-R0250	0.41
	300	S3x016A-R0300	0.49
	350	S3x016A-R0350	0.57
	400	S3x016A-R0400	0.65
	450	S3x016A-R0450	0.73
	500	S3x016A-R0500	0.81
19	450	S3x019A-R0450	1.03
	500	S3x019A-R0500	1.14
	550	S3x019A-R0550	1.25
	600	S3x019A-R0600	1.37
	650	S3x019A-R0650	1.48
	750	S3x019A-R0750	1.71
25	500	S3x025A-R0500	1.97
	550	S3x025A-R0550	2.16
	600	S3x025A-R0600	2.36
	650	S3x025A-R0650	2.56
	750	S3x025A-R0750	2.95
	950	S3x025A-R0950	3.74
	1,000	S3x025A-R1000	3.93
	1,100	S3x025A-R1100	4.32
	1,250	S3x025A-R1250	4.91
32	750	S3x032A-R0750	4.83
	800	S3x032A-R0800	5.15
	900	S3x032A-R0900	5.80
	950	S3x032A-R0950	6.12
	1,000	S3x032A-R1000	6.44
	1,100	S3x032A-R1100	7.08
	1,250	S3x032A-R1250	8.05
	1,350	S3x032A-R1350	8.69
	1,500	S3x032A-R1500	9.66

## Agitator Coupling

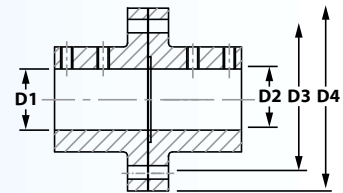
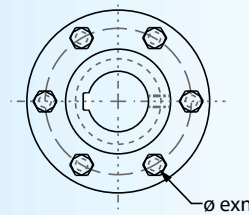


Type : C-1

SUS 304

SUS 316

Approx. Dimension (mm.)				Part Number	Part Number
D1	D2	D3	L		
11	12	20	46	C1T011A-xxx04	C1U011A-xxx04
14	16	25	60	C1T014A-xxx05	C1U014A-xxx05
19	19	32	80	C1T019A-xxx06	C1U019A-xxx06
20	19	32	80	C1T020A-xxx08	C1U020A-xxx08
24	25	38	100	C1T024A-xxx08	C1U024A-xxx08
25	25	38	100	C1T025A-xxx08	C1U025A-xxx08
28	25	44	120	C1T028A-xxx08	C1U028A-xxx08
30	32	44	120	C1T030A-xxx08	C1U030A-xxx08
35	35	50	140	C1T035A-xxx10	C1U035A-xxx10
38	38	55	160	C1T038A-xxx10	C1U038A-xxx10
40	38	55	160	C1T040A-xxx12	C1U040A-xxx12
42	44	60	180	C1T042A-xxx12	C1U042A-xxx12
45	44	60	180	C1T045A-xxx14	C1U045A-xxx14
48	50	75	200	C1T048A-xxx14	C1U048A-xxx14
50	57	75	200	C1T050A-xxx14	C1U050A-xxx14
60	63	80	240	C1T060A-xxx18	C1U060A-xxx18
70	69	90	280	C1T070A-xxx20	C1U070A-xxx20
80	76	110	320	C1T080A-xxx22	C1U080A-xxx22
90	89	120	360	C1T090A-xxx25	C1U090A-xxx25



Type : C-4

SUS 304

SUS 316

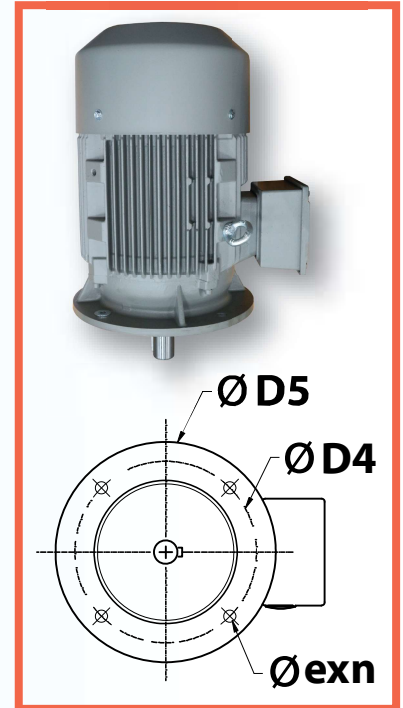
Approx. Dimension (mm.)							Part Number	Part Number
D1	D2	D3	D4	L	$\phi_e$	n		
20	19	60	80	80	9	4	C4T020A-xxx06	C4U020A-xxx06
25	25	67	90	100	11	4	C4T025A-xxx08	C4U025A-xxx08
30	32	72	95	120	11	4	C4T030A-xxx08	C4U030A-xxx08
35	35	82	105	140	11	4	C4T035A-xxx10	C4U035A-xxx10
40	38	87	110	160	11	6	C4T040A-xxx12	C4U040A-xxx12
45	44	92	115	180	11	6	C4T045A-xxx14	C4U045A-xxx14
50	57	97	120	200	11	6	C4T050A-xxx14	C4U050A-xxx14
60	63	115	140	240	13	6	C4T060A-xxx18	C4U060A-xxx18
70	69	125	150	280	13	6	C4T070A-xxx20	C4U070A-xxx20
80	76	140	165	340	13	6	C4T080A-xxx22	C4U080A-xxx22
90	89	150	175	340	13	8	C4T090A-xxx25	C4U090A-xxx25
100	100	160	185	420	13	8	C4T100A-xxx25	C4U100A-xxx25
110	100	170	195	420	13	8	C4T110A-xxx28	C4U110A-xxx28
120	100	185	210	420	13	8	C4T120A-xxx32	C4U120A-xxx32

# Agitator Accessories

## 1. Direct Drive Motor

Special design for agitator

Part Number	Description								
	Motor				Shaft Dia. (mm.) D1	Flange Dimension (mm.)			
	Power Supply	Hp	kW	Speed (rpm)		D4	D5	øe	n
MGS005B-D1500	1 Ph/ 220V./ 50Hz IP55, 4 Pole	0.50	0.37	1,500	19	130	160	M10	4
MGT005B-D1500	3 Ph/ 380V./ 50Hz IP55, 4 Pole	0.50	0.37	1,500	19	130	160	M10	4
MGT002B-D1000	3 Ph/ 380V./ 50Hz IP55, 6 Pole	0.25	0.18	1,000	19	130	160	M10	4
MGT005B-D1000		0.50	0.37		24	165	200	M12	
MGT010B-D1000		1.00	0.75		28	165	200	M12	
MGT002A-D0600	3 Ph/ 380V./ 50Hz IP55, 10 Pole	0.25	0.18	600	24	165	200	M12	4
MGT003A-D0600		0.33	0.25						
MGT002B-D1000	3 Ph/ 380V./ 50Hz IP55, 12 Pole	0.20	0.15	500	24	165	200	M12	4

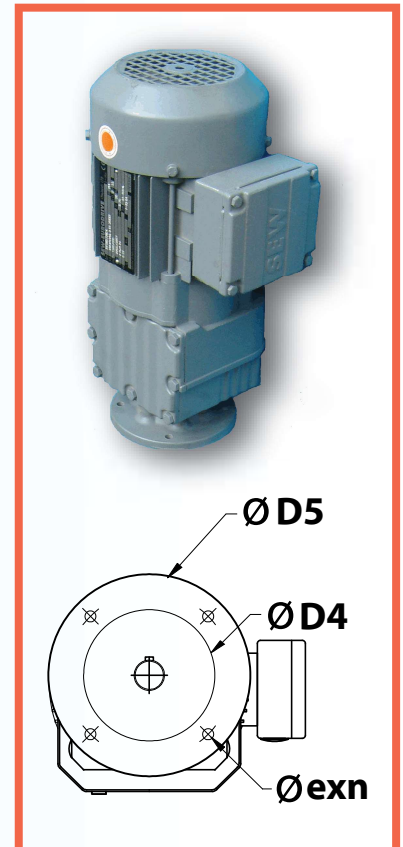


## 2. Geared Drive Motor

3 Phase, 380 V, 50Hz

Helical Geared motor "SEW" made in west Germany

Part Number	Description									
	Motor		Output Speed (rpm)	Flange Dimension (mm.)				Shaft Dia. (mm.) D1	S.F.	Output Torque (Nm.)
	Hp	kW		D4	D5	øe	n			
MGT001A-G0306	0.16	0.12	102	100	120	6.5	4	20	13	3.7
MGT001A-G0100			306					20	7.4	12
MGT002A-G0293	0.24	500	100	100	120	6.5	4	20	8.1	5.9
MGT002A-G0102			293					20	5	17
MGT003A-G0288	0.33	0.25	288	100	120	6.5	4	20	5.8	4.3
MGT003A-G0306	0.50	0.37	306	100	120	6.5	4	20	4.2	12
MGT003A-G0100			100	100	120	6.5	4	20	2.4	35
MGT010A-G0276	1.00	0.75	276	130	160	8.5	4	25	2.7	26
MGT010A-G0104			104	130	160	8.5	4	25	2.8	69
MGT020A-G0252	2.00	1.50	252	130	160	8.5	4	25	1.75	57
MGT030A-G0291	3.00	2.20	291	165	200	11.0	4	30	2.1	72
MGT040A-G0240	4.00	3.00	240	215	250	13.5	4	35	2.7	119
MGH055A-G0249	5.50	4.00	249	215	250	13.5	4	35	2	153
MGH075A-G0251	7.50	5.50	251	215	250	13.5	4	35	1.5	210
MGH100A-G0239	10.00	7.50	239	265	300	13.5	4	40	1.8	300
MGH150A-G0225	12.25	9.20	225	300	350	17.5	4	50	2.6	390
MGH122A-G0225	15.00	11.00	225	300	350	17.5	4	50	2.2	465
MGH200A-G0229	20.00	15.00	229	300	350	17.5	4	50	1.65	625







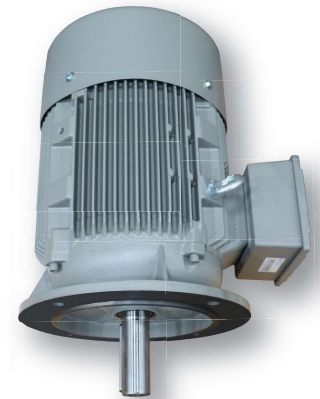
## Direct Drive Agitator

### Specification

- shaft, impeller and coupling are available in SUS304 or SS316 material
- output shaft of agitator motor is made from S45C steel or higher strength upon request
- over-sized output shaft and bearing get more stiffness with higher critical speed than the standard motor
- copper wire insulated is class H insulation (200 °C)

### Features

- motor is constructed for mechanical simplicity with maximum structural integrity
- elimination of gear, belt and reduces periodic maintenance requirements
- reliable and dynamically balanced to virtually eliminate vibration



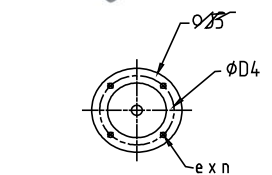
### 1,500 rpm, 220 V, 1 Phase., 50 Hz, IP55

Power		Speed (rpm)	Flange Dimension (mm)				Coupling	Shaft Dimension (mm)					Impeller Type/ No. of Stage	Dia (mm) D	Max. Agitation Capacity (Ltr.)
Hp	kW		D4	D5	e	n		D2	F	CV	C	L			
0.5	0.37	1,500	130	160	10	4	C-1 19-19	19	100	350	170	450	A2- 3A / 1	125	100
										450	170	550			200
										650	270	750			300
										650	210	750			500
										200	800	430			1,000
1.5	1.1		165	200	10	4	C-1 24-25	25	-	-	-	1,100	P3-3 / 1	200	1,500



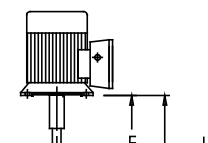
### 1,500 rpm, 380 V, 3 Phase., 50 Hz, IP55

Power		Speed (rpm)	Flange Dimension (mm)				Coupling	Shaft Dimension (mm)					Impeller Type/ No. of Stage	Dia (mm) D	Max. Agitation Capacity (Ltr.)
Hp	kW		D4	D5	e	n		D2	F	CV	C	L			
0.5	0.37	1,500	130	160	10	4	C-1 19-19	19	100	350	170	450	A2- 3 / 1	125	100
										450	170	550			200
										650	270	750			300
										650	210	750			500
										200	800	430			1,000
1.5	1.1		165	200	10	4	C-1 24-25	25	-	-	-	1,100	P3-3 / 1	200	1,500



### 1,000 rpm, 380 V, 3 Phase., 50 Hz, IP55

Power		Speed (rpm)	Flange Dimension (mm)				Coupling	Shaft Dimension (mm)					Impeller Type/ No. of Stage	Dia (mm) D	Max. Agitation Capacity (Ltr.)
Hp	kW		D4	D5	e	n		D2	F	CV	C	L			
0.5	0.37	1,000	165	200	10	4	C-1 24-25	25	100	350	170	450	P3- 3 / 1	150	100
										450	170	550			200
										650	270	750			300
										650	210	750			500
										200	800	430			1,000
1.5	1.1		0.65	200	10	4	C-1 24-25	25	-	-	-	1,100		200	1,500



### 750 rpm, 380 V, 3 Phase., 50 Hz, IP55

Power		Speed (rpm)	Flange Dimension (mm)				Coupling	Shaft Dimension (mm)					Impeller Type/ No. of Stage	Dia (mm) D	Max. Agitation Capacity (Ltr.)
Hp	kW		D4	D5	e	n		D2	F	CV	C	L			
0.5	0.37	1,000	165	200	10	4	C-1 24-25	25	100	350	170	450	P3- 3 / 1	150	100
										450	170	550			200
										650	270	750			300
										650	210	750			500
										200	800	430			1,000
1	0.75		0.65	200	10	4	C-1 24-25	25	-	-	-	1,100		200	1,500

