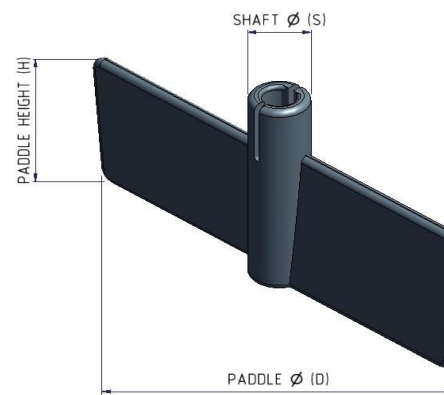


1L Jar - 75 x 25mm Paddle

Speed [rpm]	VELOCITY GRADIENT [s ⁻¹]															
	Temperature [°C/°F]															
	0 / 32	2 / 35.6	4 / 39.2	6 / 42.8	8 / 46.4	10 / 50	12 / 53.6	14 / 57.2	16 / 60.8	18 / 64.4	20 / 68	22 / 71.6	24 / 75.2	26 / 78.8	28 / 82.4	30 / 86
10	4.7	4.9	5.0	5.2	5.4	5.5	5.7	5.8	6.0	6.1	6.3	6.4	6.6	6.7	6.9	7.0
20	13.3	13.8	14.2	14.7	15.2	15.6	16.0	16.5	16.9	17.4	17.8	18.2	18.7	19.1	19.5	19.9
30	24.5	25.3	26.2	27.0	27.8	28.7	29.5	30.3	31.1	31.9	32.7	33.5	34.3	35.1	35.9	36.6
40	37.7	39.0	40.3	41.6	42.9	44.1	45.4	46.6	47.9	49.1	50.4	51.6	52.8	54.0	55.2	56.4
50	52.7	54.5	56.3	58.1	59.9	61.7	63.4	65.2	66.9	68.7	70.4	72.1	73.8	75.5	77.1	78.8
60	69.3	71.7	74.0	76.4	78.8	81.1	83.4	85.7	88.0	90.3	92.5	94.8	97.0	99.2	101.4	103.6
70	87.3	90.3	93.3	96.3	99.2	102.2	105.1	108.0	110.9	113.7	116.6	119.4	122.3	125.0	127.8	130.5
80	106.6	110.3	114.0	117.6	121.3	124.8	128.4	131.9	135.5	139.0	142.4	145.9	149.4	152.7	156.1	159.5
90	127.2	131.7	136.0	140.4	144.7	148.9	153.2	157.4	161.7	165.8	169.9	174.1	178.2	182.2	186.3	190.3
100	149.0	154.2	159.3	164.4	169.5	174.4	179.4	184.4	189.4	194.2	199.0	203.9	208.8	213.4	218.2	222.9
110	171.9	177.9	183.8	189.6	195.5	201.2	207.0	212.7	218.5	224.1	229.6	235.3	240.8	246.2	251.7	257.1
120	195.9	202.7	209.4	216.1	222.8	229.3	235.9	242.4	248.9	255.3	261.6	268.1	274.4	280.6	286.8	293.0
130	220.9	228.6	236.1	243.7	251.2	258.5	265.9	273.3	280.7	287.9	295.0	302.3	309.4	316.4	323.4	330.3
140	246.9	255.4	263.8	272.3	280.7	288.9	297.2	305.4	313.7	321.7	329.7	337.8	345.8	353.6	361.4	369.2
150	273.8	283.3	292.6	302.0	311.3	320.4	329.6	338.7	347.9	356.8	365.7	374.7	383.5	392.1	400.8	409.4
160	301.6	312.1	322.4	332.7	343.0	353.0	363.1	373.2	383.2	393.0	402.8	412.7	422.5	432.0	441.6	451.0
170	330.3	341.8	353.0	364.4	375.6	386.6	397.7	408.7	419.7	430.5	441.2	452.0	462.7	473.1	483.6	494.0
180	359.9	372.4	384.6	397.0	409.2	421.2	433.3	445.3	457.3	469.0	480.7	492.5	504.1	515.4	526.9	538.2
190	390.3	403.8	417.1	430.5	443.8	456.8	469.9	482.9	495.9	508.6	521.3	534.1	546.7	559.0	571.4	583.7
200	421.5	436.1	450.5	465.0	479.3	493.4	507.5	521.5	535.6	549.3	563.0	576.8	590.4	603.7	617.1	630.3

Constants

Area of paddle	0.00164 [m ²]	(less shaft cross-sectional area)
Paddle diameter	75 [mm]	
Paddle Height	25 [mm]	
Shaft diameter	9.4 [mm]	
Tip distance travelled /rev of the small paddle	0.235619449 [m]	
Relative velocity constant	0.75	
Volume	0.001 [m ³]	
Coefficient of Drag	1.9	

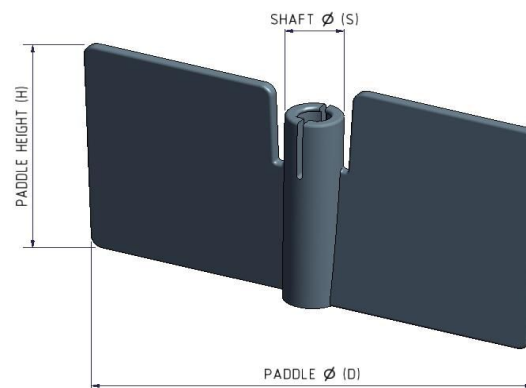


1L Jar - 75 x 40mm Paddle

VELOCITY GRADIENT [s ⁻¹]																
Speed [rpm]	Temperature [°C/°F]															
	0 / 32	2 / 35.6	4 / 39.2	6 / 42.8	8 / 46.4	10 / 50	12 / 53.6	14 / 57.2	16 / 60.8	18 / 64.4	20 / 68	22 / 71.6	24 / 75.2	26 / 78.8	28 / 82.4	30 / 86
10	6.0	6.2	6.4	6.6	6.8	7.0	7.2	7.4	7.6	7.8	8.0	8.2	8.4	8.5	8.7	8.9
20	16.9	17.4	18.0	18.6	19.2	19.7	20.3	20.9	21.4	22.0	22.5	23.1	23.6	24.1	24.7	25.2
30	31.0	32.0	33.1	34.2	35.2	36.3	37.3	38.3	39.4	40.4	41.4	42.4	43.4	44.4	45.4	46.3
40	47.7	49.3	51.0	52.6	54.2	55.8	57.4	59.0	60.6	62.1	63.7	65.3	66.8	68.3	69.8	71.3
50	66.6	69.0	71.2	73.5	75.8	78.0	80.2	82.5	84.7	86.9	89.0	91.2	93.4	95.5	97.6	99.7
60	87.6	90.6	93.6	96.6	99.6	102.5	105.5	108.4	111.3	114.2	117.0	119.9	122.7	125.5	128.3	131.0
70	110.4	114.2	118.0	121.8	125.5	129.2	132.9	136.6	140.3	143.9	147.5	151.1	154.6	158.1	161.6	165.1
80	134.9	139.6	144.2	148.8	153.4	157.9	162.4	166.9	171.4	175.8	180.2	184.6	188.9	193.2	197.5	201.7
90	160.9	166.5	172.0	177.5	183.0	188.4	193.8	199.1	204.5	209.7	215.0	220.3	225.5	230.5	235.6	240.7
100	188.5	195.0	201.5	207.9	214.4	220.6	226.9	233.2	239.5	245.7	251.8	258.0	264.1	270.0	276.0	281.9
110	217.5	225.0	232.4	239.9	247.3	254.5	261.8	269.1	276.3	283.4	290.5	297.6	304.6	311.5	318.4	325.2
120	247.8	256.4	264.8	273.3	281.8	290.0	298.3	306.6	314.9	322.9	331.0	339.1	347.1	354.9	362.8	370.6
130	279.4	289.1	298.6	308.2	317.7	327.0	336.4	345.7	355.0	364.1	373.2	382.4	391.4	400.2	409.1	417.8
140	312.3	323.1	333.7	344.4	355.1	365.5	375.9	386.3	396.8	406.9	417.1	427.3	437.4	447.2	457.2	467.0
150	346.3	358.3	370.1	382.0	393.8	405.3	416.9	428.5	440.0	451.3	462.5	473.9	485.1	496.0	507.0	517.9
160	381.5	394.7	407.7	420.8	433.8	446.5	459.3	472.0	484.8	497.2	509.5	522.1	534.4	546.4	558.6	570.5
170	417.8	432.3	446.6	460.9	475.1	489.0	503.0	517.0	530.9	544.5	558.1	571.8	585.3	598.4	611.7	624.8
180	455.2	471.0	486.5	502.1	517.6	532.8	548.1	563.2	578.4	593.2	608.0	623.0	637.7	652.0	666.5	680.8
190	493.7	510.8	527.6	544.6	561.4	577.8	594.4	610.8	627.3	643.4	659.4	675.6	691.6	707.1	722.8	738.3
200	533.2	551.7	569.8	588.1	606.3	624.0	641.9	659.7	677.5	694.8	712.1	729.6	746.9	763.6	780.6	797.3

Constants

Area of paddle	0.002624 [m ²]	(less shaft cross-sectional area)
Paddle diameter	75 [mm]	
Paddle Height	40 [mm]	
Shaft diameter	9.4 [mm]	
Tip distance travelled /rev of the large paddle	0.235619449 [m]	
Relative velocity constant	0.75	
Volume	0.001 [m ³]	
Coefficient of Drag	1.9	

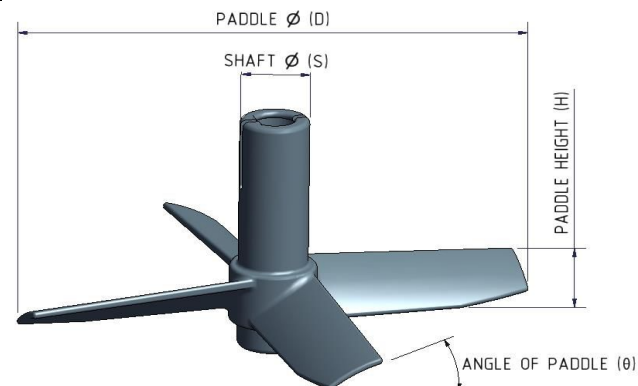


1L Jar - Axial Flow Impeller

Speed [rpm]	VELOCITY GRADIENT [s ⁻¹]															
	Temperature [°C/°F]															
	0 / 32	2 / 35.6	4 / 39.2	6 / 42.8	8 / 46.4	10 / 50	12 / 53.6	14 / 57.2	16 / 60.8	18 / 64.4	20 / 68	22 / 71.6	24 / 75.2	26 / 78.8	28 / 82.4	30 / 86
10	2.4	2.5	2.6	2.7	2.8	2.9	2.9	3.0	3.1	3.2	3.3	3.3	3.4	3.5	3.6	3.7
20	6.9	7.1	7.4	7.6	7.9	8.1	8.3	8.5	8.8	9.0	9.2	9.4	9.7	9.9	10.1	10.3
30	12.7	13.1	13.6	14.0	14.4	14.8	15.3	15.7	16.1	16.5	16.9	17.4	17.8	18.2	18.6	19.0
40	19.5	20.2	20.9	21.5	22.2	22.9	23.5	24.2	24.8	25.4	26.1	26.7	27.4	28.0	28.6	29.2
50	27.3	28.2	29.2	30.1	31.0	31.9	32.9	33.8	34.7	35.6	36.4	37.3	38.2	39.1	40.0	40.8
60	35.9	37.1	38.3	39.6	40.8	42.0	43.2	44.4	45.6	46.7	47.9	49.1	50.2	51.4	52.5	53.6
70	45.2	46.8	48.3	49.9	51.4	52.9	54.4	55.9	57.4	58.9	60.4	61.9	63.3	64.7	66.2	67.6
80	55.2	57.1	59.0	60.9	62.8	64.6	66.5	68.3	70.2	72.0	73.8	75.6	77.4	79.1	80.9	82.6
90	65.9	68.2	70.4	72.7	74.9	77.1	79.3	81.5	83.7	85.9	88.0	90.2	92.3	94.4	96.5	98.6
100	77.2	79.9	82.5	85.1	87.8	90.3	92.9	95.5	98.1	100.6	103.1	105.6	108.1	110.5	113.0	115.4
110	89.0	92.1	95.2	98.2	101.3	104.2	107.2	110.2	113.1	116.0	118.9	121.9	124.7	127.5	130.4	133.2
120	101.5	105.0	108.4	111.9	115.4	118.8	122.2	125.5	128.9	132.2	135.5	138.8	142.1	145.3	148.6	151.7
130	114.4	118.4	122.3	126.2	130.1	133.9	137.7	141.5	145.4	149.1	152.8	156.6	160.3	163.9	167.5	171.1
140	127.9	132.3	136.6	141.0	145.4	149.6	153.9	158.2	162.5	166.6	170.8	175.0	179.1	183.1	187.2	191.2
150	141.8	146.7	151.5	156.4	161.2	166.0	170.7	175.4	180.2	184.8	189.4	194.0	198.6	203.1	207.6	212.0
160	156.2	161.6	167.0	172.3	177.6	182.8	188.1	193.3	198.5	203.6	208.6	213.8	218.8	223.7	228.7	233.6
170	171.1	177.0	182.8	188.7	194.5	200.2	206.0	211.7	217.4	222.9	228.5	234.1	239.6	245.0	250.5	255.8
180	186.4	192.9	199.2	205.6	212.0	218.2	224.4	230.6	236.8	242.9	249.0	255.1	261.1	267.0	272.9	278.7
190	202.1	209.2	216.0	223.0	229.9	236.6	243.4	250.1	256.9	263.4	270.0	276.6	283.2	289.5	296.0	302.3
200	218.3	225.9	233.3	240.8	248.2	255.5	262.8	270.1	277.4	284.5	291.6	298.7	305.8	312.7	319.6	326.5

Constants

Area of Axial Flow Impeller	0.00080316 [m ²]	(less shaft cross-sectional area)
Blade diameter	70 [mm]	
Blade Height	6.9 [mm]	
Shaft diameter	11.8 [mm]	
Number of blades	4	
Tip distance travelled /rev of the large paddle	0.219911486 [m]	
Relative velocity constant	0.75	
Volume	0.001 [m ³]	
Blade angle	32 [degrees]	
Coefficient of Drag	1.28	



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