4" 2-Wire Single Phase Motors - Control Box Not Required

Motor Type	HP	Kw	Volts	Service Factor	Full Load				Service Factor (Max. Load)				Locked Rotor	KVA Code	Line-to-Line Resistance (Ohm)		Max. Thrust	RPM
					Amps	Watts*	Power Fact.	Eff. %	Amps	Watts*	Power Fact.	Eff. %	Amps**		Black-Yellow	Red-Yellow		
MS402	1/2	0.37	115	1.60	9.5	675	0.67	55.0	12.0	1076	0.78	62	82.8	R	1.1 - 1.3		900	3450
	1/2	0.37	230	1.60	4.5	646	0.63	57.7	6.0	1049	0.76	62	37.2	R	4.0 - 4.8			
	3/4	0.55		1.50	6.9	994	0.63	56.3	8.4	1449	0.75	62	51.2	N	3.2 - 3.8			
	1	0.75		1.40	8.8	1260	0.67	59.7	9.8	1848	0.82	63	55.9	M	2.5 - 3.1			
	1 1/2	1.10		1.30	11.6	1760	0.70	62.7	13.1	2561	0.85	64	81.2	L	1.7 - 2.1			

4" 3-Wire Single Phase Motors - Control Box Required

Motor Type	HP	Kw	Volts	Service Factor	Full Load*				Service Factor (Max. Load)				Locked Rotor	KVA Code	Line-to-Line Resistance (Ohm)		Max. Thrust	RPM
					Amps	Watts**	Power Fact.	Eff. %	Amps	Watts**	Power Fact.	Eff. %	Amps***		Black-Yellow	Red-Yellow		
MS402	1/2	0.37	115	1.60	10.0	992	0.74	37.6	12.0	1049	0.73	61	44.4	L	0.9 - 1.1	1.9 - 2.4	900	3450
	1/2	0.37	230	1.60	5.6	968	0.75	38.2	6.0	1049	0.76	62	24.6	L	4.0 - 4.9	15.8 - 19.6		
	3/4	0.55		1.50	8.4	1410	0.76	39.7	8.4	1449	0.75	62	34.4	L	3.2 - 3.9	14 - 17.2		
	1	0.75		1.40	9.0	1662	0.81	44.9	9.8	1848	0.82	63	42.1	K	2.6 - 3.1	10.3 - 12.5		
	1 1/2	1.10		1.30	10.7	2169	0.89	51.6	11.6	2375	0.89	69	58.0	H	1.9 - 2.3	7.8 - 9.6		
MS4000	2	1.50	230	1.25	13.1	2582	0.86	57.8	13.2	2611	0.86	72	55.4	G	1.5 - 1.8	3.4 - 4.1	1500	3450
	3	2.20		1.15	16.8	3601	0.93	62.1	17.0	3636	0.93	74	103.7	F	1.2 - 1.4	2.5 - 3.0		
	5	3.70		1.15	25.7	5645	0.96	66.0	27.5	5819	0.92	77	110.0	F	0.65 - 0.85	1.7 - 2.1		

*Calculated Value (Voltage x Current x Cos F)

**Calculated Value (Full Load current x Locked Rotor Current %)

Table 10

4" 2-Wire Single Phase Motors - Control Box Not Required

HP	kW	Volt	SF Amps	Fuses / Circuit Breakers (Maximum Per NEC)		
				Standard Fuse	Time Delay Fuse	Circuit Breaker
1/2	0.37	115	12.0	35	20	30
1/2	0.37	230	6.0	20	10	15
3/4	0.55		8.4	25	15	20
1	0.75		9.8	30	20	25
1 1/2	1.10		11.6	35	20	30

4" 3-Wire Single Phase Motors - Control Box Required

HP	kW	Volt	SF Amps	Fuses / Circuit Breakers (Maximum Per NEC)		
				Standard Fuse	Time Delay Fuse	Circuit Breaker
1/2	0.37	115	12.0	35	20	30
1/2	0.37	230	6.0	20	10	15
3/4	0.55		8.4	25	15	20
1	0.75		9.8	30	20	25
1 1/2	1.10		11.6	35	20	30
2	1.50		13.2	35	20	30
3	2.20		17.0	50	30	45
5	3.70		27.5	80	45	75

Table 11

MOTOR DIMENSIONS
4" MS402 / MS4000 AND 6" MS6000C

MS 402 4" Motor Dimensional Drawing

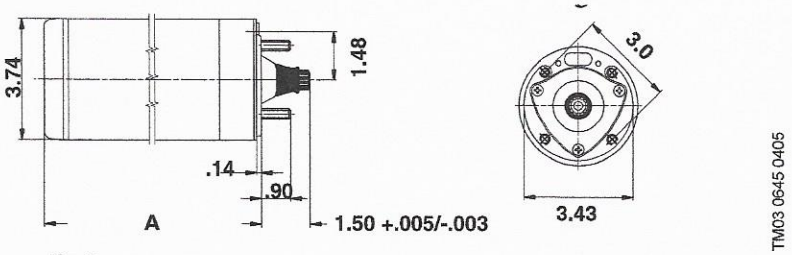

Fig. 6

MS 402 4" Motor Dimensions

Grundfos Motor Type	Standard Motor Output		Phase	Frequency	A-Dimensions	Motor Weight
	P2 HP	P2 kW	PH	Hz	in. (mm)	lbs. (kg)
MS 402	1/2	0.37	1	60	11.0 (279.4)	21.0 (9.5)
	3/4	0.55			11.6 (294.6)	22.3 (10.1)
	1	0.75			12.2 (309.9)	23.6 (10.7)
	1-1/2	1.10			13.7 (348.0)	28.0 (12.7)
MS 402	1/2	0.37	3	60	9.0 (228.6)	17.2 (7.8)
	3/4	0.55			9.6 (243.8)	18.7 (8.5)
	1	0.75			11.0 (279.4)	20.7 (9.4)
	1-1/2	1.10			12.2 (309.9)	23.6 (10.7)
	2	1.50			13.7 (348.0)	27.3 (12.4)

Table 25

MS 4000 4" Motor Dimensions

Grundfos Motor Type	Standard Motor Output		Phase	Frequency	A-Dimensions	Motor Weight
	P2 HP	P2 kW	PH	Hz	in. (mm)	lbs. (kg)
MS 4000	2	1.50	1	60	19.5 (495.3)	44.1 (20.0)
	3	2.20			22.6 (574.1)	53.0 (24.0)
	5	3.70			26.6 (675.6)	64.9 (29.0)
MS 4000	3	2.20	3	60	18.0 (457.2)	39.7 (18.0)
	5	3.70			22.7 (576.6)	52.9 (24.0)
	7-1/2	5.50			26.6 (675.6)	63.9 (29.0)
	10	7.50			30.6 (777.24)	72.8 (33.0)

Table 26

MS 6000C 6" Motor Dimensional Drawing

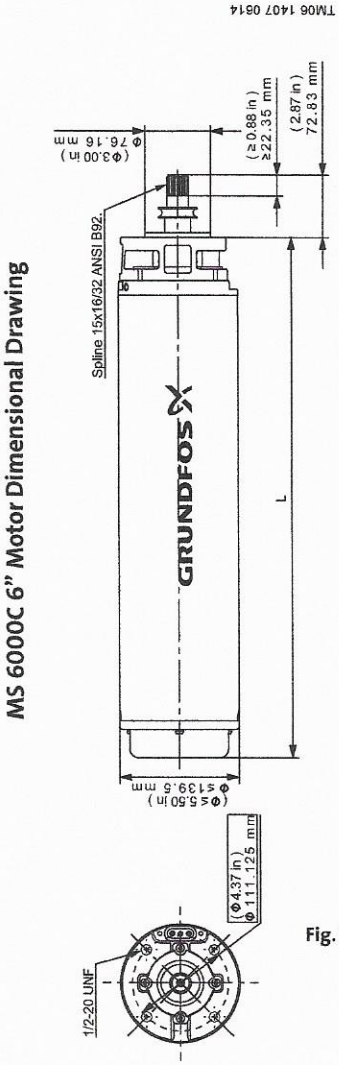

Fig. 7

MS 6000C 6" Motor Dimensions

Grundfos Motor Type	Standard Motor Output		Phase	Frequency	L-Dimensions	Motor Weight
	P2 HP	P2 kW	PH	Hz	in. (mm)	lbs. (kg)
MS 6000C	5	3.70	3	60	26.4 (670.60)	81.6 (37.0)
	7-1/2	5.50			23.5 (597.0)	97.0 (44.0)
	10	7.50			24.7 (627.4)	103.6 (47.0)
	15	11.00			27.1 (688.3)	125.7 (57.0)
	20	15.00			29.6 (751.84)	143.3 (65.0)
	25	18.50			31.8 (807.72)	152.2 (69.0)
	30	22.00			34.1 (866.14)	169.8 (77.0)
	40	30.00			39.3 (998.2)	200.6 (91.0)

Table 27