

Small 122
cc/in

Large 265
cc/in



SMA ROTATING SHAFT MOTOR TYPE C1

TECHNICAL DATA													
MODEL : SMA C1 standard													
Nominal displacement cc/rev (1)	2200	2000	2500	3200	3500	4350	4300*	7000	8600*	8700	7400	8800	10500
Geometric displacement cc/rev	2227.3	2003.0	2507.2	3215.0	3504.3	4349.0	4310.8	7008.6	8421.6	8698.0	7381.4	8811.7	10497.8
Max. speed cont. rev/min	216	285	285	240	240	240	195	240	195	240	180	150	125
Max. speed int. rev/min (2)	346	456	456	384	384	384	312	384	312	384	288	240	200
Max. speed freewheel	346	456	456	384	384	384	312	384	312	384	288	240	200
Min speed rev/min (std motor)	5-10	5-10	5-10	5-10	5-10	5-10	5-10	2-4	2-4	2-4	5-10	5-10	5-10
Max. torque cont. N.m	12405	11156	13964	10744	19518	17302	24010	39036	46906	34604	41112	49078	58470
Max. torque intermittent N.m (2)	17368	15619	19550	14837	27325	24223	33614	54650	65668	48445	57557	68710	81858
Max. power cont. K.w	195	165	185	237	245	304	301	490	602	608	443	528	630
Max power int. K.w (2)	390	330	370	474	490	608	602	980	1204	1216	886	1056	1260
Max diff. pressure cont. bar (3)	350	350	350	210	350	250	350	350	350	250	350	350	350
Max diff. pressure int bar (2)	490	490	490	290	490	350	490	490	490	350	490	490	490
Max flow cont L/min.	481	571	715	772	841	1044	841	1682	1642	2088	1329	1322	1312
Max flow int L/min. (2)	770	913	1143	1235	1346	1670	1345	2691	2628	3340	2126	2115	2100
Return pressure min. bar (3)	7	7	7	7	7	7	7	7	7	7	7	7	7
Return pressure max. bar (3)	350	350	350	210	350	250	350	350	350	250	350	350	350
Case pressure max. bar (4)	8	8	8	8	8	8	8	8	8	8	8	8	8
Fluid type (5)	HL;HLP TO DIN 51524 (for alternatives contact Rotary Power)												
Min/ Max viscosity cSt	15-1000 cSt												
Optimum viscosity cSt (6)	20-200 cSt												
Min / Max operating temp (7)	-20 + 90 Degrees centigrade												
Optimum operating temp	50 Degrees centigrade												
Fluid cleanliness	To NAS 1638 Class 9 ISO code 18/13 or better												
Filtration	B25 ratio 75 or better for simple closed loop systems												
Starting torque N.m : (8)													
Min@Max. cont. pressure	11290	10153	12709	9778	17764	15747	21852	35527	42690	31493	37417	44667	53214
Avr@Max. cont. pressure	11538	10377	12989	9993	18154	16093	22332	36308	43628	32186	38239	45649	54384
Min@Max. int. pressure	15806	14215	17793	13503	24869	22045	30592	49738	59766	44091	52383	62534	74500
Avr@ Max. int. pressure (2)	16154	14527	18184	13800	25416	22530	31265	50831	61079	45060	53535	63908	76137
Polar moment of inertia kg.sq.m	TBA	0.0715	0.0715	0.0715	0.2293	0.2293	TBA	TBA	TBA	TBA	TBA	TBA	TBA
Approx. weight kg (9)	TBA	440	440	440	790	790	790	1140	1140	1140	1250	1250	1250

NOTES FOR TECHNICAL DATA TABLE

- 5. SMAmotors will operate successfully on a wide variety of hydraulic fluids. Contact ROTARY POWER for further details.
- 6. For very high or low speed operation, fluid viscosity should be as high as possible within the optimum viscosity limits.
- 7. Higher temperatures may be possible if required, through
- 8. Many factors affect starting efficiencies. Figures shown are a reasonable approximation for most conditions. Please contact ROTARY POWER for a more detailed assessment of a specific application.
- 9. Weights shown are an approximation and depend on

viscosity remains within the optimum range, subject to approval by ROTARY POWER.

INSTALLATION DRAWING DATA

		MOTOR CAPACITY							
		200	500	750	1340	☆ 2000	3500	7000	7400
		290	650	850	1600	2500	☆ 4350	8700	8800
		350	720	1000	2200	3200	4800		10500
		480		1200					
DIMENSIONS	A1	315	335	394	449	507.5	602	761	601
	A2	250 nom.	280	315	400	450	560	560	790
	A3	ø345	ø370	ø436	ø545	ø583	ø695	ø700	ø900
	A4	-	-	464	557	-	715	807	-
	A5	139	150	187.5	215	242.0	86	100	102
	A6	12	16	16	19	15	27	27	13
	A7	236.5	259.5	308.5	345	386.0	462	690	474
	A8	-	-	306	345	-	513	650	-
	A9	-	-	362	-	-	-	814	-
	A10	296	-	474	534	575	-	-	-
	A11	256	-	418	478	490	-	-	-
	B1	122	154	156	181	184	225	225	305
	B2	82	105	105	130	150	165	165	220
	B3	69	74	92	120	135	145	145	208
	B4	ø50	ø60	ø63	ø80	ø95	ø110	ø110	ø160
	B5	16	18	18	22	25	28	28	40
	B6	122	154	156	181	184	225	223	305
	B7	63	85	80	105	100	140	130	180
	B8	19t 10/20	18t 8/16	19t 8/16	24t 8/16	28t 8/16	25t 6/12	26t 6/12	41t 6/12
	B9	-	-	76	-	-	-	120	-
B10	-	-	108	-	-	-	132	-	
C1	0	0	0	0	54	0	54	0	
C2	84	84	114	140	170	140	170	180	
C3	1"	1"	1-1/4"	1-1/2"	2"	2"	2"	2"	

Dimensions shown above are approximate and subject to change without notice. Before finalising your installation, Please ask for a copy of the latest issue drawing.