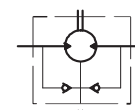
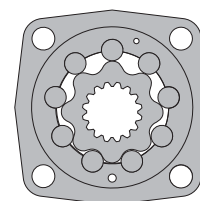




MA6K series motor adapt the advanced Geroler gear set designed with disc distribution flow and high pressure. The unit can be supplied the individual variant in operating multifunction in accordance with requirement of applications.



Main Specification

Type		MA6K	MA6K	MA6K	MA6K	MA6K	MA6K	MA6K	MA6K
		200	250	315	400	500	630	800	1000
Displacement	(cm ³ /rev)	195.6	246.1	311.6	391.3	490.8	623	802.4	981.6
Max.speed	(rpm)	cont.	765	610	480	382	304	240	186
Max.torque	(N·m)	cont.	865	830	690	570	455	360	280
Max.pressure drop	(bar)	cont.	565	710	920	1160	1450	1480	1580
Max.flow	(L/min)	cont.	840	1080	1330	1620	1880	1890	1880
Max. Inlet pressure	(bar)	cont.	200	200	200	200	200	175	140
Weight	(kg)	cont.	280	280	280	280	275	225	155
		peak(2)	300	300	300	300	300	240	175
		cont.	150	150	150	150	150	150	150
		int(1)	170	205	225	225	225	225	225
		cont.	225	225	225	225	225	225	225
		int(1)	290	290	290	290	290	290	290
		peak(2)	300	300	300	300	300	300	300

(1)Intermittent operation: The rating occur for max. 6 sec / min.

(2)Peak operation:The rating occur for max. 0.6 sec / min.

Type		MA6K	MA6K	MA6K	MA6K	MA6K	MA6K	MA6K	MA6K
		200	250	315	400	500	630	800	1000
Displacement	(in ³ /r)	11.9	15.0	19.0	23.9	29.9	38.0	49.0	59.9
Max.speed	(rpm)	cont.	750	600	470	375	300	240	185
Max.torque	(lb-in)	cont.	900	720	560	450	360	285	225
Max.pressure drop	(psi)	cont.	5000	6284	8142	10266	12833	13098	13983
Max.flow	(gpm)	cont.	7434	9558	11771	14337	16638	16727	16638
		cont.	2900	2900	2900	2900	2900	2540	2030
		int(1)	4060	4060	4060	4060	3990	3265	2250
		peak(2)	4350	4350	4350	4350	4350	3480	2540
		cont.	39.7	39.7	39.7	39.7	39.7	39.7	39.7
		int(1)	45.0	54.2	59.5	59.5	59.5	59.5	59.5
Max. Inlet pressure	(psi)	cont.	3265	3265	3265	3265	3265	3265	3265
		int(1)	4205	4205	4205	4205	4205	4205	4205
		peak(2)	4350	4350	4350	4350	4350	4350	4350
Weight	(lbs)	58.4	59.6	60.7	62.2	64.0	65.8	67.8	71.1

Performance Data

MA6K 200 [195.6cm³/rev.]
Pressure (bar)

		17.5	35	70	105	140	175	200	240	275	300
		Max.cont.					Max.int.		Peak		
Flow (L/min)	2	30 9	73 7	160 5							
	8	36 39	76 38	168 35	262 34	345 31	438 27	465 16			
	15	36 75	81 75	174 74	270 71	365 65	455 60	510 45	580 32	640 16	
	30	37 152	85 151	175 147	275 142	370 132	465 121	540 109	615 96	700 80	765 60
	45	37 228	85 227	180 223	280 218	375 210	470 200	535 185	650 165	740 146	805 110
	60	38 305	80 304	178 302	282 297	380 288	475 280	565 255	660 235	750 210	825 170
	75	32 382	78 380	175 376	275 370	378 362	480 350	565 328	670 300	760 270	840 230
	90	26 459	75 456	172 452	270 445	375 436	475 420	565 405	660 383	765 355	
	105	22 536	70 534	170 530	270 523	370 510	470 496	560 470	660 435	760 400	
	120	20 612	67 610	166 605	265 598	365 585	465 570	560 536	660 502	755 450	
Max.cont.	135	14 690	65 687	160 680	260 672	360 650	465 638	560 595	655 550	750 485	
	150	10 765	60 765	155 755	258 740	356 725	450 700	550 640	650 580		
Max.int.	170		60 865	155 850	255 840	350 820	450 800	545 745	640 700		

MA6K 250 [246.1cm³/rev.]
Pressure (MPa)

		17.5	35	70	105	140	175	200	240	275	300
		Max.cont.					Max.int.		Peak		
Flow (L/min)	2	46 7	92 4								
	8	51 31	103 30	215 27	335 24	440 21	550 15	560 10			
	15	52 58	105 57	220 55	340 52	455 46	570 40	640 37	745 28	850 10	960 5
	30	55 118	110 116	232 113	352 110	470 105	600 96	685 80	790 64	900 48	1020 35
	45	58 180	110 177	235 174	355 170	475 164	610 155	705 140	840 126	940 106	1050 88
	60	53 242	110 240	230 237	350 233	480 224	615 212	705 198	845 185	955 162	1080 140
	75	45 302	105 298	230 292	355 285	485 278	620 268	710 254	850 230	960 206	1080 182
	90	45 364	105 360	225 352	350 342	480 338	615 322	710 305	845 288	955 265	
	105	40 424	100 420	220 414	340 408	475 394	610 372	705 352	840 334	950 315	
	120	38 485	95 479	210 471	340 463	470 454	590 442	700 420	830 385	940 365	
Max.cont.	135	35 546	85 540	205 532	325 525	460 516	580 504	690 478	820 445		
	150	30 608	80 605	200 600	320 592	450 580	570 566	680 532	815 496		
Max.int.	170		65 686	190 678	315 665	440 652	560 635	675 600	750 565		
	185			185 750	310 746	430 730	545 708	670 658			
	205			175 830	300 820	418 800	536 776	562 735			

MA6K 315 [311.6cm³/rev.]
Pressure (bar)

		17.5	35	70	105	140	175	200	240	275	300
		Max.cont.					Max.int.		Peak		
Flow (L/min)	2	65 5	126 4								
	8	68 24	135 23	280 22	410 20	540 16	650 13	750 9	880 3		
	15	70 46	135 45	285 44	435 41	565 36	690 30	810 22	940 16	1010 9	1035 3
	30	70 93	135 92	295 90	440 86	600 80	740 71	880 62	990 52	1100 43	1180 31
	45	70 142	140 140	300 138	460 132	610 127	750 120	900 118	1035 96	1165 85	1300 72
	60	70 190	140 189	300 186	460 182	615 176	775 167	920 154	1055 138	1200 124	1325 105
	75	65 238	135 237	295 235	455 231	615 225	780 214	920 200	1065 180	1215 160	
	90	60 285	130 284	290 280	450 276	615 270	780 260	920 245	1070 226	1220 210	
	105	50 335	125 333	280 330	445 324	605 316	770 302	915 290	1070 271	1205 248	
	120	45 384	120 382	280 380	440 372	600 364	765 350	910 338	1055 312		
Max.cont.	135	40 432	115 428	275 420	435 412	585 408	760 391	900 380	1050 350		
	150	35 480	110 475	270 462	420 458	570 450	755 435	880 420	1030 395		
Max.int.	190		100 595	245 580	375 574	520 560	685 548	820 530			
	225			220 690	350 683	500 674	640 652	770 634			

MA6K 400 [391.3cm³/rev.]
Pressure (bar)

		17.5	35	70	105	140	175	200	240	275	300
		Max.cont.					Max.int.		Peak		
Flow (L/min)	2	90 4	172 2	360 1							
	8	95 19	180 18	370 17	555 16	730 14	885 12	1025 9	1195 4		
	15	95 37	185 37	375 36	560 35	740 33	930 28	1070 22	1265 14	1380 5	1625 1
	30	98 75	185 74	380 73	575 71	760 68	960 65	1135 55	1315 45	1455 31	1625 20
	45	95 114	185 113	385 111	580 108	765 105	970 100	1145 90	1335 80	1530 72	
	60	90 152	180 152	380 150	580 147	770 142	975 134	1155 126	1345 112		
	75	85 191	180 191	380 188	580 186	775 181	980 172	1160 160	1355 148		
	90	80 230	175 229	375 227	570 224	765 220	975 212	1155 200			
	105	70 268	165 267	360 265	560 260	760 254	965 246	1150 232			
	120	65 306	160 305	355 303	550 298	745 290	950 278	1140 262			
Max.cont.	135	55 345	155 343	340 337	545 330	735 322	940 310	1120 295			
	150	45 382	145 380	320 376	530 370	730 362	925 352				
Max.int.	190		130 483	300 476	515 470	730 458	915 445				
	225			285 570	500 560	710 550	895 535				

Performance Data

MA6K 500 [490.8cm³/rev.]
Pressure (bar)

		Pressure (bar)					Max.cont.	Max.int.	Peak	
		17.5	35	70	105	140	175	200	240	275
Flow (L/min)	4	120 7	230 6	470 5	685 3					
	8	125 15	240 14	475 13	705 12	940 11	1165 8	1375 3		
	15	125 30	235 29	480 29	720 28	960 27	1190 25	1400 21	1625 17	1880 12
	30	125 60	235 59	485 58	735 57	975 54	1215 50	1445 45	1685 35	
	45	125 91	235 90	485 89	735 87	975 84	1215 78	1450 70		
	60	120 121	235 121	480 120	730 118	975 114	1220 108	1460 98		
	75	110 152	225 151	470 149	725 146	970 142	1220 135			
	90	100 182	220 182	465 180	720 178	965 175	1215 168			
	105	95 213	205 212	460 210	710 206	960 201	1210 195			
	120	90 244	195 243	450 240	700 235	950 228	1205 221			
Max.cont.	135	85 274	175 273	435 270	680 265	935 258	1170 250			
	150	70 304	155 303	420 301	665 292	920 287	1150 280			
	Max.int.	190		130 385	360 382	580 373	865 365			
225				320 455	555 440	800 432				

MA6K 630 [623cm³/rev.]
Pressure (bar)

		Max.cont. Max.int.							
		17.5	35	70	105	140	175	200	225
Flow (L/min)	4	130	245	500	750				
		6	5	4	2				
	8	135	265	540	805	1050			
		12	12	11	10	6			
	15	140	280	585	865	1085	1425		
		24	23	22	21	16	13		
	30	145	295	605	925	1270	1480	1780	1890
		48	47	45	42	38	34	30	27
	45	145	295	610	920	1330	1465	1770	
		72	71	70	68	65	58	50	
Max.cont.	60	135	285	605	915	1330	1465		
		95	94	91	87	83	78		
	75	130	275	595	915	1325			
		120	119	116	112	106			
	90	115	260	585	905	1310			
		145	144	141	137	130			
	105	100	255	575	895	1305			
		168	167	164	160	152			
	120	85	235	560	880	1280			
		192	191	186	182	175			
Max.int.	135	75	220	540	855				
		216	215	212	207				
	150	50	200	525	84				
		240	239	236	233				
	190			465	795				
				300	293				
	225			430	740				
				360	348				

MA6K 800 [802.4cm³/rev.]
Pressure (bar)

		Pressure (bar)								Max.cont.		Max.int.
		17.5	35	50	70	85	105	120	140	155	175	
Flow (L/min)	4	172 4	345 4	530 2	690 2	860 1						
	8	180 9	355 9	540 8	725 8	955 7	1080 6	1275 5	1360 4			
	15	185 18	370 18	565 17	758 17	980 16	1130 15	1265 14	1420 12	1655 10	1880 9	
	30	190 36	385 35	590 34	795 33	1005 32	1200 31	1330 29	1580 28	1740 26		
	45	190 55	385 55	590 54	800 53	1015 52	1200 52	1380 50	1550 48			
	60	185 74	380 73	580 72	790 70	1015 69	1200 67	1345 65				
	75	176 92	370 92	575 91	782 88	1000 87	1185 85	1365 82				
	90	165 112	360 111	560 110	765 108	990 106	1170 102					
	105	150 130	340 129	555 128	750 127	972 125	1155 120					
	120	132 149	325 148	545 146	735 143	945 140	1130 135					
Max.cont.	135	105 168	302 167	525 165	710 162	911 158						
	150	80 186	270 185	500 183	680 180	880 176						
	190		300 235	475 233	660 230	855 226						
	225			423 280	612 276	830 272						

Torque (N•m) 423
Speed (rpm) 280

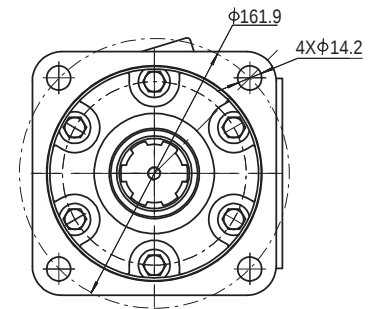
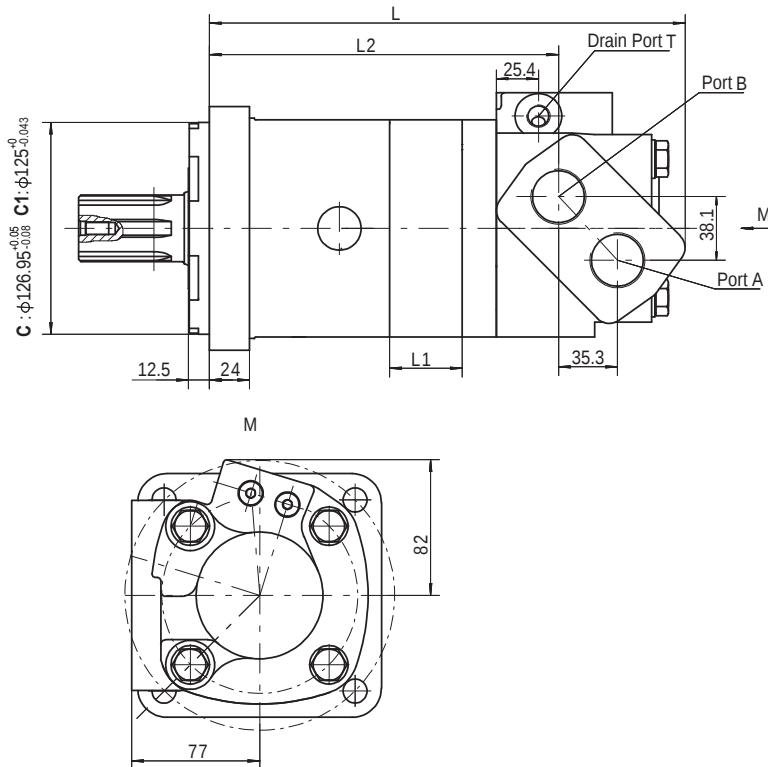
MA6K 1000 [981.6cm³/rev.]
Pressure (bar)

		Max.cont. Max.int.							
		17.5	35	50	70	85	105	120	140
Flow (L/min)	4	225	460	640	875	1085			
		3	3	2	2	1			
	8	230	470	695	945	1170	1415	1560	1675
		7	7	6	6	5	4	3	2
	15	240	485	715	965	1200	1445	1580	1780
		15	15	15	14	14	13	13	12
	30	240	495	720	995	1235	1480	1640	1860
		30	30	30	29	28	27	25	23
	45	240	495	720	1000	1250	1490	1700	
		45	45	44	44	43	42	40	
Max.cont.	60	235	490	715	990	1245	1500		
		60	60	60	59	57	55		
	75	225	475	710	980	1230	1485		
		76	76	76	75	73	70		
	90	215	460	705	960	1215	1465		
		91	91	91	90	88	85		
	105	200	445	690	940	1195	1440		
		106	106	105	105	103	100		
	120	185	420	665	920	1155			
		122	122	121	119	116			
Max.int.	135	150	390	635	890	1120			
		137	137	136	136	134			
	150	110	360	605	860	1080			
		152	151	150	148	145			
	190		320	575	820	1045			
			192	190	188	185			
	225			515	800	1020			
				230	228	224			

cont.
int.

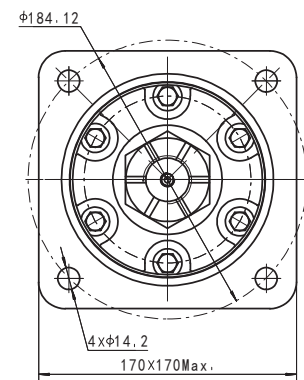
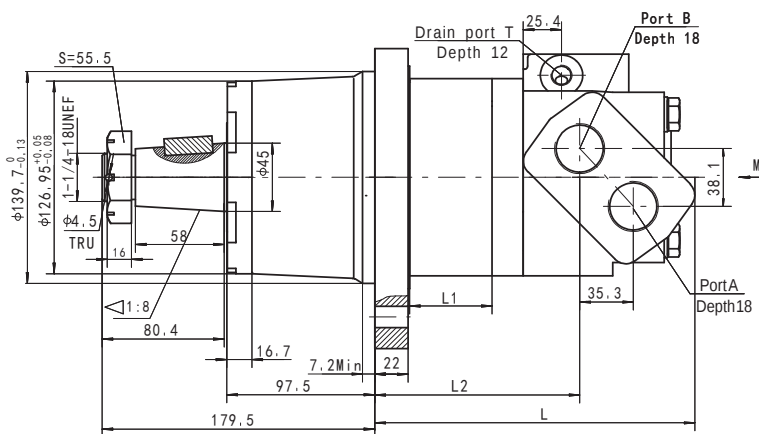
Dimension and Mounting Data

Square Mounting **C** **C1**



Model	L	L1	L2
MA6K-200	265	21.7	187.5
MA6K-250	271	27.3	193.1
MA6K-315	278	34.5	200.3
MA6K-400	287	43.4	209.2
MA6K-500	298	54.4	220.2
MA6K-630	313	69.1	234.9
MA6K-800	333	89	254.8
MA6K-1000	353	108.9	274.7

Wheel Mounting **W**



Model	L	L1	L2
MA6K-200	179	21.7	102.5
MA6K-250	185	27.3	108
MA6K-315	192	34.5	115.5
MA6K-400	201	43.4	124.5
MA6K-500	212	54.4	135.5
MA6K-630	226.7	69.1	150.2
MA6K-800	246.5	89	170
MA6K-1000	266.5	108.9	190

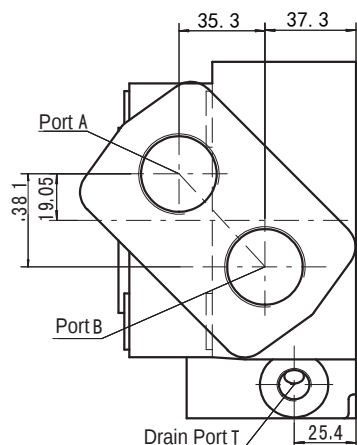
Direction of shaft rotation: Standard When facing shaft end of motor.

Shaft to rotate:

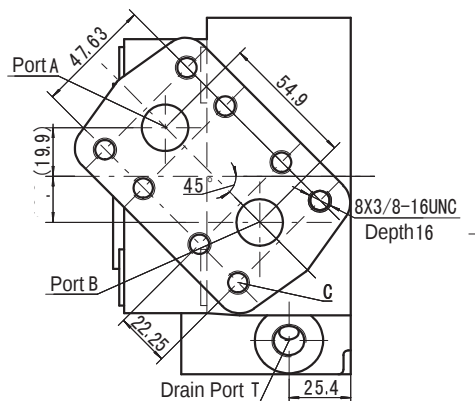
Clockwise when port "A" is pressurized.

Counter-clockwise when port "B" is pressurized.

Porting **U M G**



Porting **MU**



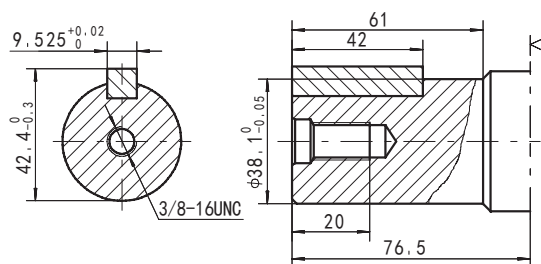
Code	Type			
	UU (depth)	M (depth)	G (depth)	MU (depth)
P(A,B)	1-5/16-12UN(18)	M33X2(18)	G1(18)	Φ19.05
T	7/16-20UNF(12)	M14X1.5(12)	G1/4(12)	7/16-20UNF(12)
C	-	-	-	8X3/8-16UNC

Shaft Extensions For Dimensions Data

C

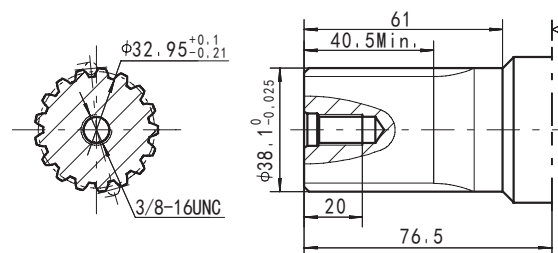
Ø38.1 Parallel key, 9.525x9.525x42

Max.Torque: 1350Nm


S

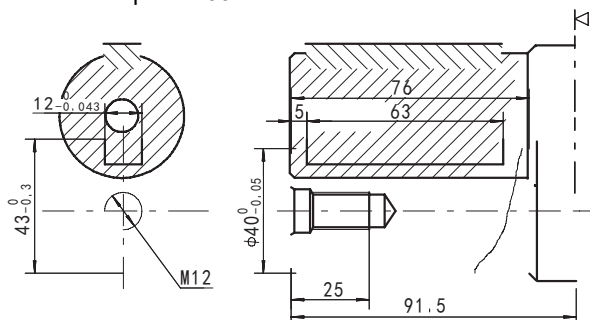
Splined 17-DP12/24

Max.Torque: 1350Nm


CO

Ø40 Parallel key 12x8x63

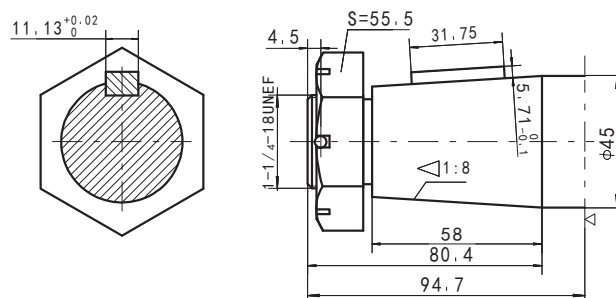
Max.Torque: 1400Nm


T

ConeØ45, Parallelkey11.13x11.13x31.75

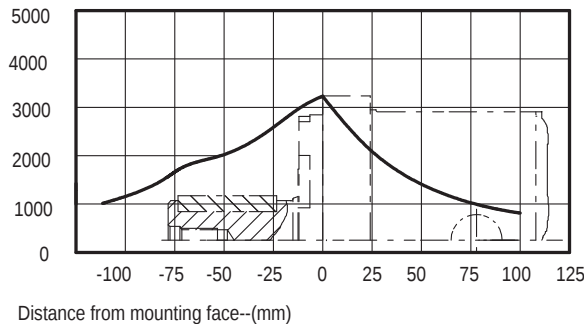
Tightening torque: 500±10Nm

Max. torque 2100Nm

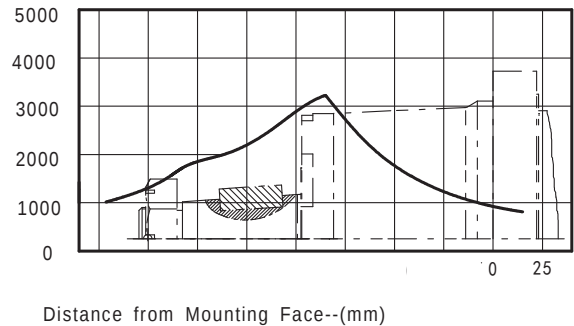


Shaft Loads

Square mounting - (daN)



Wheel mounting - (daN)



The bearing curve represents allowable bearing loads for an B10 bearing life (2000 hours or 12x10⁶ revolutions at 100rpm) at rated output torque. Other speed load multiply a load values.

The maximum load curve is defined by bearing static load capacity.

This curve should not be exceeded at any time including shock loads.

Ordering Information

	1	2	3	4	5	6	7
MA 6K							

Pos.1 Mounting Flange

Omit - Square Mount **C**, pilot $\Phi 127 \times 12.5$

C1 - Square Mount, pilot $\Phi 125 \times 12.5$

W - Wheel Mount

Pos.2 Displacement Code

200 - 195,6 cm³/rev [11.9 in³/rev]

250 - 250,0 cm³/rev [15.0 in³/rev]

315 - 311,6 cm³/rev [19.0 in³/rev]

400 - 391,3 cm³/rev [23.9 in³/rev]

500 - 490,8 cm³/rev [29.9 in³/rev]

630 - 623,0 cm³/rev [38.0 in³/rev]

800 - 802,4 cm³/rev [49.0 in³/rev]

1000 - 981,6 cm³/rev [59.9 in³/rev]

Pos.3 Shaft Extensions

C - Cylinder shaft $\Phi 38.1$, parallel key 9.52x9.52x57.15

CO - Cylinder shaft $\Phi 40$, parallel key 12x8x63

S - $\Phi 38.1$, splined tooth 17-DP12/24

T - Cone-shaft 1:8 $\Phi 45$, parallel key 11.13x11.13x31.75

Pos.4 Porting

U - 1-5/16-12UN / 7/16-20UNF

M - M33x2 / M14x1.5

G - G1 / G1/4

MU - Manifold Mount SAE 3/4"

Pos.5 Painting

Omit - **Blue**

G - Grey

B - Black

00 - No Paint

Pos.6 Rotation

Omit - Standard Rotation

R - Reverse Rotation

Pos.7 Other function

Omit - Standard