



Low Speed High Torque Orbital Hydraulic Motors 低速大扭矩摆线液压马达

SMP/SMR Series Technical Information

SMP/SMR 系列马达 技术参数



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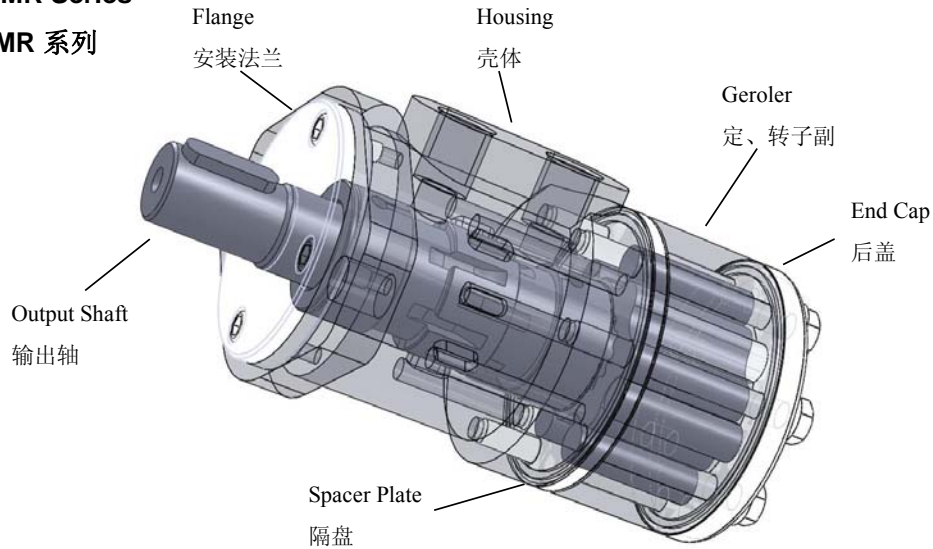
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SMP/ SMR Series

SMP/SMR 系列



• Design Features

• 结构特点

- Geroler design, including ring, star, needle
- 镶齿式定转子副设计
- Use high pressure capacity shaft seal
- 采用耐高压轴密封
- Wide variety of mounting flanges, shafts, and displacement provides design flexibility
- 可灵活选择不同的安装法兰，输出轴，排量等，为客户提供更宽泛的选择空间
- Direction of shaft rotation and speed can be controlled easily and smoothly
- 可灵活平滑地控制马达的旋转方向和转速
- No bearing between shaft and housing
- 壳体与输出轴间无轴承
- High efficiency
- 高效率
- Smooth low speed operation
- 低速稳定性好
- Extended motor life
- 超长整机使用寿命
- Extended leak-free performance
- 超长的密封部件使用寿命

Applications:

产品应用:

- Agricultural augers, harvesters, seeders
- 农用钻孔设备，收割机械，播种机械
- Car wash brushes
- 刷车设备
- Food processing
- 食品加工设备
- Railroad maintenance equipment
- 铁路维护设备
- Machine tools
- 机床，工具
- Conveyors
- 输送设备
- Industrial sweepers and floor polishers
- 工业和地板抛光设备
- Saw mill works
- 锯木机械
- Turf equipment
- 草坪维护设备
- Concrete and asphalt equipment
- 混凝土和沥青设备
- Skid steer attachments
- 滑移辅件
- Many more
- 其它更多应用

• Specification Data

SMP/SMR轴配流液压马达

•性能参数

Displacement(排量) cc/r		50	63	80	100	125	160	200	250	305	370	395	
Max.Speed	RPM	Continuous (连续)	698	663	679	558	452	354	284	235	178	147	145
		Intermittent (不连续)	859	774	811	669	544	425	339	281	208	173	171
Flow	LPM	Continuous (连续)	38	45	57	57	57	57	57	57	57	57	57
		Intermittent (不连续)	45	53	68	68	68	68	68	68	68	68	68
Torque N.m		Continuous (连续)	73	86	124	154	194	228	285	304	364	435	466
		Intermittent (不连续)	84	93	139	173	216	261	319	378	403	516	552
Pressure drop	ΔBar	Continuous (连续)	124	124	124	124	124	115	110	100	90	90	90
		Intermittent (不连续)	138	138	138	138	138	124	124	124	124	110	110

Maximum Case Pressure -- Without Case Drain (不接外泄油口时, 壳体最大承受压力) ---90 Bar

Max. pressure is the allowed pressure at the inlet port. Rated pressure is the working pressure difference between inlet and outlet port.

A simultaneous maximum RPM and maximum pressure NOT recommended
Maximum pressure or maximum RPM operation: 10% of every minute

Recommended fluids: Anti-wear type of hydraulic oil. Viscosity recommended 37-73 cSt. Recommended filtration ISO18/13. Maximum operating temperature recommended 80°C

Special high pressure capacity shaft seal ensures back pressure up to 10 Mpa. Recommended preferable back pressure 5 Mpa. Case drain line is recommended when back pressure higher than 5 Mpa. When case drain line is used, make sure the motor is always filled with oil. The motor life is benefited from a case drain line.

It is highly recommended that the motor runs at 30% of rated pressure for at least one hour before application of full load. Be sure the motor is filled with fluid prior to any load applications.

•不连续压力是指马达进油口允许承受的压力, 连续压力指两油口连续工作时的压力差

•马达不允许同时在最大转速和最大压力的工况下使用
•不连续运行工况 --- 指马达在此工况下每分钟运行不超过10%

•推荐液压油: 粘度为37-73cSt, 过滤精度: ISO18/13, 系统最高温度不超过80°C

•轴密封可承受10Mpa的背压, 推荐马达背压不要超过5Mpa, 超过5Mpa时, 建议接外泄油管。马达在运行前和运行中, 应保证腔体内始终充满液压油, 以使马达得到良好的润滑和冷却



•强烈建议马达在满负荷运行前先以30%的负荷运行约1小时, 以使马达得到充分的磨合

• SMP/SMR Series Motor Performance Data

SMP/SMR 系列马达性能参数

50 cc/r

		压差ΔBar										
		28	41	55	69	83	97	110	124	138		
7.6	流量LPM	18	28	38	45	54	62					
		125	110	96	86	76	65					
15.1	流量LPM	18	27	37	44	53	62	70	78	79		
		260	250	238	231	215	206	196	188	229		
22.7	流量LPM	16	24	32	40	49	58	65	71	80		
		414	406	395	385	375	368	356	345	370		
30.3	流量LPM	13	21	30	37	46	55	62	68	81		
		550	540	528	515	502	485	480	672	518		
37.9	流量LPM	14	23	34	43	51	61	68	71	81		
		698	698	693	690	689	684	681	676	672		
45.4	流量LPM		24	30	42	51	60	68	73	84		
			859	856	853	851	847	844	837	832		

 Continuous 连续工况
 Intermittent 非连续工况

63 cc/r

		压差ΔBar										
		28	41	55	69	83	97	110	124	138		
7.6	流量LPM	20	29	40	52	63	74					
		110	108	108	105	104	103					
15.1	流量LPM	20	29	40	50	58	69	77	86	93		
		220	214	212	212	206	202	200	198	198		
22.7	流量LPM	20	28	38	47	58	67	76	84	93		
		332	330	326	324	320	316	314	310	305		
30.3	流量LPM	18	26	34	44	53	63	74	82	89		
		443	440	436	434	432	430	428	426	425		
37.9	流量LPM	16	25	34	43	51	61	72	80	88		
		554	550	548	546	542	540	538	534	530		
45.4	流量LPM		23	30	42	51	60	68	78	84		
			663	660	658	654	650	648	645	643		
53	流量LPM			28	39	48	58	65	74	81		
				774	770	768	764	760	754	750		



80 cc/r

		压差 Δ Bar								
		28	41	55	69	83	97	110	124	138
7.6	26	40	56	67	82	95	108			
	91	90	87	84	83	77	73			
15.1	26	40	55	68	82	95	110	124	138	
	184	182	179	178	173	168	163	157	127	
22.7	25	39	53	68	82	95	109	124	138	
	277	276	270	268	265	256	254	245	210	
30.3	23	38	51	66	80	94	108	123	139	
	370	368	362	359	356	384	344	355	293	
37.9	22	37	50	65	79	93	107	122	139	
	426	46	452	450	446	436	432	423	376	
45.4	20	35	48	63	78	91	106	120	137	
	555	552	544	540	536	527	521	511	457	
53		33	47	61	76	90	104	118	136	
		634	633	629	626	616	611	599	535	
56.8			46	60	74	89	104	118	136	
			670	674	671	659	654	642	574	
68			42	57	72	86	102	116		
			811	808	804	791	787	772		

100 cc/r

		压差 Δ Bar								
		28	41	55	69	83	97	110	124	138
7.6	33	50	67	85	103	123	141			
	73	72	69	67	65	61	57			
15.1	32	49	67	84	102	122	141	154	173	
	149	147	144	142	140	135	131	125	99	
22.7	30	48	66	84	102	120	140	155	172	
	224	222	219	217	213	208	204	196	165	
30.3	28	46	64	81	99	117	1308	151	173	
	299	298	293	290	288	282	278	271	235	
37.9	26	44	61	79	97	114	138	149	172	
	374	372	366	364	361	354	351	343	302	
45.4	25	43	59	77	95	112	131	147	169	
	448	447	440	437	434	426	422	414	368	
53	22	40	58	75	94	110	129	143	168	
	522	520	512	510	509	500	495	485	436	
56.8		39	56	74	93	107	127	141	168	
		558	549	547	545	535	531	521	468	
68		35	51	71	89	104	125	140		
		669	660	657	654	644	641	680		

扭据 35Nm
转速 669RPM

125 cc/r

		压差 Δ Bar							
		28	41	55	69	83	100	124	138
7.6	43	64	86	108	130	157			
	61	59	56	54	51	49			
15.1	42	63	85	106	129	156	194	216	
	121	119	116	112	110	107	103	99	
22.7	42	63	84	106	128	156	192	215	
	182	180	177	174	171	168	165	162	
30.3	41	62	83	105	128	155	191	213	
	243	240	238	235	232	230	227	225	
37.9	40	61	83	104	126	155	190	213	
	304	302	319	317	314	311	308	305	
45.4	38	61	82	102	125	154	190	212	
	364	361	358	355	351	347	343	341	
53	36	60	81	101	124	152	189	211	
	424	421	418	415	412	408	403	401	
56.8		58	80	99	122	151	187	211	
		452	450	447	443	440	438	436	
68		57	79	97	121	149	185	209	
		544	542	539	536	533	531	527	

160 cc/r

		压差 Δ Bar							
		28	41	55	69	83	97	115	124
7.6	56	85	113	141	175	206			
	46	45	42	39	37	35			
15.1	54	79	111	140	173	205			
	94	93	91	88	84	79			
22.7	55	78	111	142	174	205	228	261	
	143	140	138	136	133	127	123	119	
30.3	51	81	109	139	171	203	226	258	
	190	187	186	183	179	175	168	166	
37.9	45	75	110	135	171	199	230	256	
	237	235	232	231	225	220	214	213	
45.4	40	65	102	134	163	192	212	247	
	285	285	281	279	276	267	263	258	
53.0	38	61	98	129	158	189	212	246	
	332	330	328	326	323	318	313	309	
56.8		57	95	126	154	182	209	240	
		354	350	345	348	346	342	338	
68		52	90	119	147	176	200	229	
		425	421	421	418	417	415	412	

200 cc/r

		压差 Δ Bar							
		28	41	55	69	83	97	110	124
7.6	69	102	135	173	215	252	281		
	37	35	33	30	27	23	19		
15.1	70	103	141	177	213	215	280	319	
	75	73	70	67	62	57	51	49	
22.7	64	95	135	176	215	248	238	318	
	114	113	113	111	107	103	101	100	
30.3	58	92	128	172	209	245	285	318	
	153	152	150	147	144	140	135	133	
37.9	63	96	135	173	210	247	282	315	
	192	190	181	182	177	173	167	165	
45.4	56	90	130	164	203	240	271	309	
	230	228	226	223	219	214	210	208	
53.0		88	128	161	201	238	270	308	
		267	264	262	256	252	246	242	
56.8		86	125	158	179	233	263	301	
		284	282	279	278	275	274	269	
68		81	118	152	192	226	265	295	
		339	337	336	333	331	328	324	

扭据 295Nm
转速 324RPM

250cc/r

		压差 Δ Bar						
		28	41	55	69	83	100	124
7.6	76	115	160	209	253	304		
	28	27	25	24	22	19		
15.1	76	116	159	207	252	303	378	
	62	61	59	58	55	48	48	
22.7	71	108	153	201	250	301	378	
	93	92	90	87	83	76	75	
30.3	63	102	150	200	249	297	376	
	124	124	122	119	115	109	107	
37.9	58	101	147	195	242	293	372	
	157	156	154	150	146	139	137	
45.4	48	90	136	185	230	284	368	
	188	187	185	180	176	171	169	
53.0	47	84	133	179	219	275	366	
	129	128	126	123	119	115	112	
56.8		81	129	171	204	273	365	
		235	234	232	229	228	228	
68		81	129	170	202	270	362	
		281	280	278	272	273	269	

Motors run with high efficiency in all areas designated with a number for torque and speed. however for best motor life select a motor to run with a torque and speed range shown in the light colour area. 为使马达获得更长的寿命, 请选择在浅色区域标注的工况下使用。

- Continuous 连续工况
- Intermittent 非连续工况

305 cc/r

		压差△Bar						
		28	41	55	69	83	90	124
7.6		97	145	206	260	326	352	
		23	22	20	19	16	12	
15.1		100	147	204	259	325	361	403
		47	45	44	42	37	34	31
22.7		97	140	188	262	320	364	401
		70	69	68	64	60	55	49
30.3		91	135	195	256	315	357	395
		94	94	92	88	83	79	75
37.9		75	125	185	247	305	350	393
		118	117	115	112	109	104	100
45.4		68	127	191	250	305	348	392
		143	142	140	138	134	130	128
53.0		65	113	177	240	296	342	390
		167	166	164	162	158	153	149
56.8			108	170	234	290	338	390
			178	178	176	175	172	168
68			102	168	233	288	336	387
			208	208	207	205	201	199

370 cc/r

		压差△Bar						
		28	41	55	69	83	90	110
7.6		120	186	280	355	419	425	
		17	15	14	12	11	9	
15.1		133	199	280	354	417	452	522
		37	36	33	28	28	26	24
22.7		126	190	267	347	416	450	522
		57	56	53	49	43	39	38
30.3		110	180	262	347	414	466	520
		76	75	72	66	62	56	52
37.9		95	157	228	306	373	410	426
		96	95	94	90	85	80	74
45.4		88	154	232	304	376	411	428
		115	115	112	108	103	99	90
53.0		72	139	215	296	349	390	465
		134	133	131	125	120	117	108
56.8		70	130	207	2899	345	388	426
		145	143	141	138	137	134	132
68			128	206	288	342	384	459
			171	169	168	166	161	157

扭矩 128Nm
转速 171RPM

395 cc/r

		压差△Bar					
		28	41	55	69	83	90
7.6		153	235	323	411	496	
		14	13	10	10	8	
15.1		142	215	305	390	485	488
		30	28	27	23	21	18
22.7		133	205	302	386	437	483
		46	45	43	39	33	29
30.3		123	184	296	370	466	506
		62	61	58	56	51	48
37.9		120	181	282	378	467	516
		78	76	75	71	66	62
45.4		110	192	287	377	457	510
		93	92	90	85	80	76
53.0		91	166	251	342	417	475
		109	108	106	101	96	93
56.8			165	249	338	403	471
			115	111	109	102	101
68			159	242	327	389	448
			136	134	129	127	122

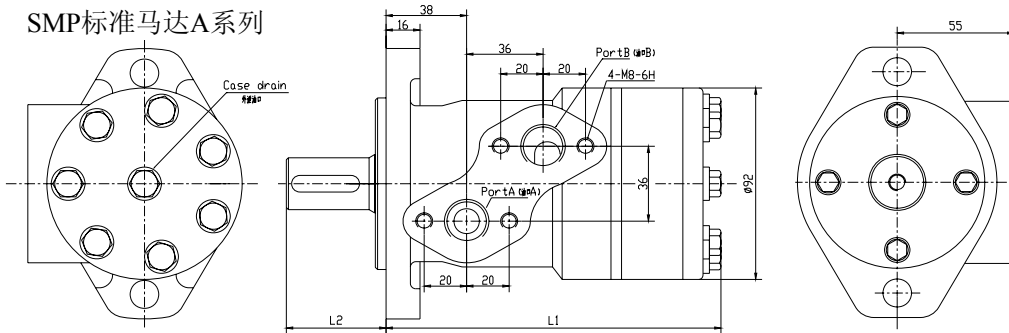
Continuous 连续工况
 Intermittent 非连续工况

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Performance data is typical at 120 SUS . Actual data may vary slightly from unit to unit in production 上表中的数据是标准马达在油液粘度120SUS工况下测得的数据, 不同的马达实测数据会略有差异。

•SMP Series Dimensions
SMP 系列连接尺寸
SMP Standard Motor A Series

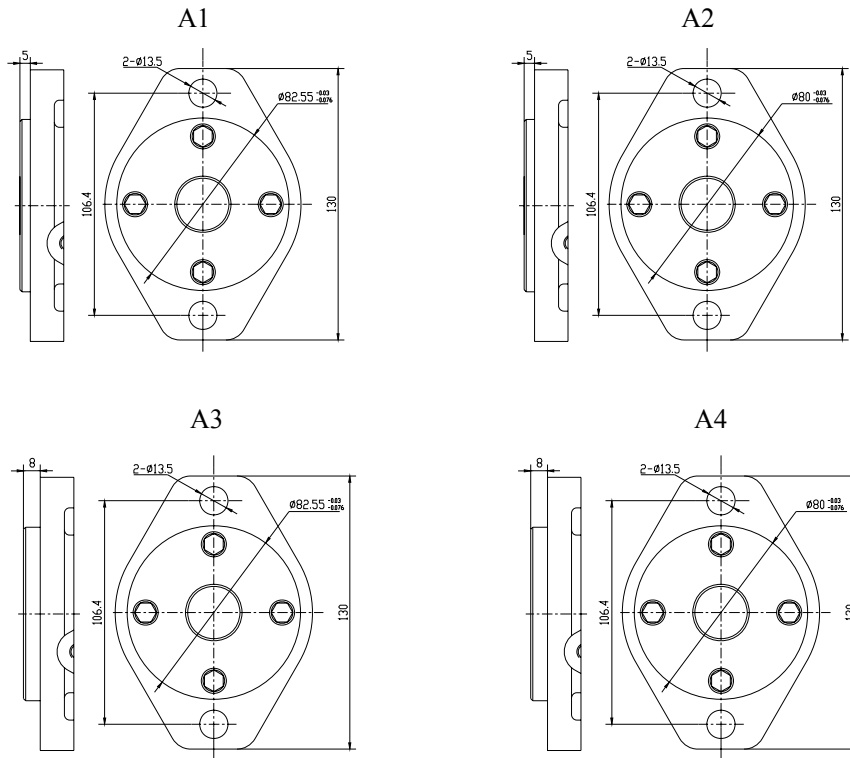
SMP标准马达A系列



Standard Rotation: Viewed From Shaft End, Port A Pressurized --- CW, Port B Pressurized --- CCW
 马达标准旋转方向: 面对输出轴轴端, A油口进油, 顺时针旋转, B油口进油, 逆时针旋转

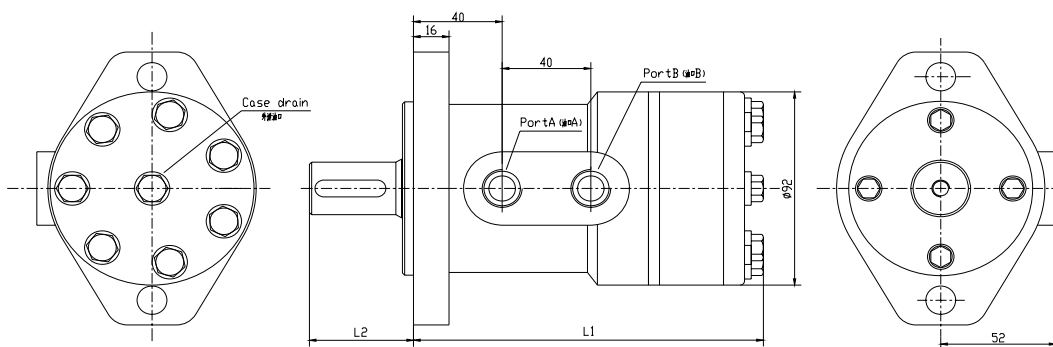
Flange Type to Fit Standard SMP Motor A series
与标准SMP马达A系列匹配的法兰型式

SMP/SMR轴配流液压马达



SMP Standard Motor B Series

SMP标准马达B系列

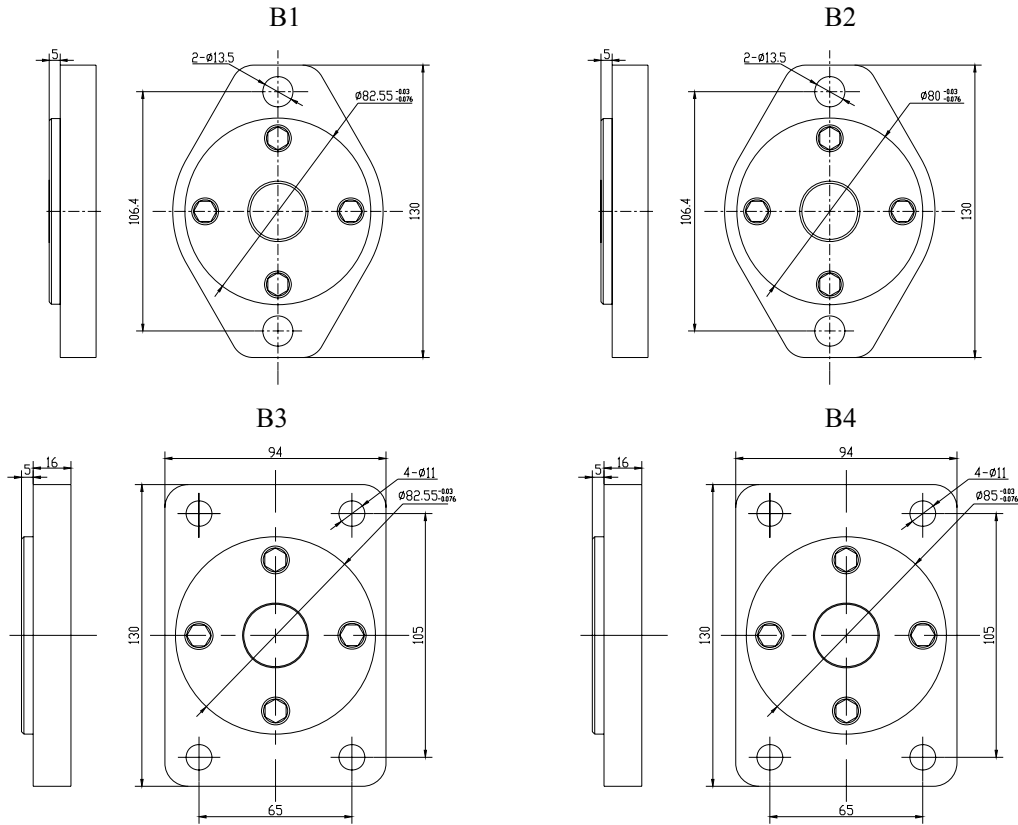


Standard Rotation: Viewed From Shaft End, Port A Pressurized --- CW, Port B Pressurized --- CCW

马达标准旋转方向: 面对输出轴轴端, A油口进油, 顺时针旋转, B油口进油, 逆时针旋转

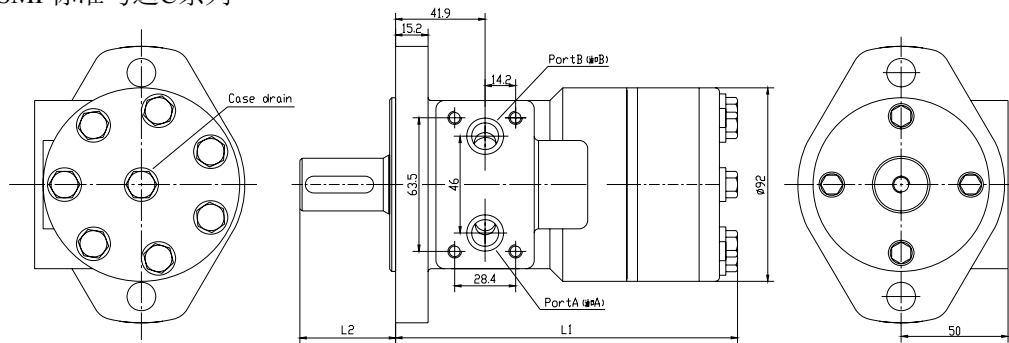
Flange Type to Fit Standard SMP Motor B series
与标准SMP马达B系列匹配的法兰型式

SMP/SMR轴配流液压马达



SMP Standard Motor C Series

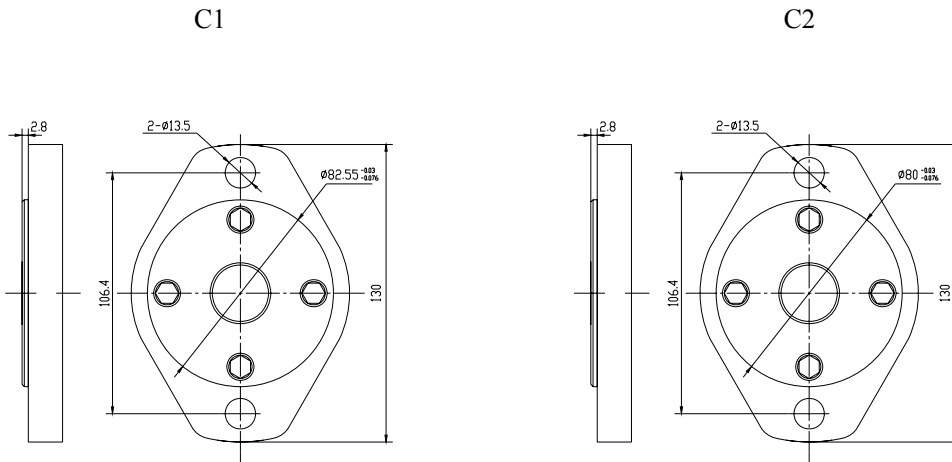
SMP标准马达C系列



Standard Rotation: Viewed From Shaft End, Port A Pressurized --- CW, Port B Pressurized --- CCW

马达标准旋转方向: 面对输出轴轴端, A油口进油, 顺时针旋转, B油口进油, 逆时针旋转

Flange Type to Fit Standard SMP Motor C series
与标准SMP马达C系列匹配的法兰型式



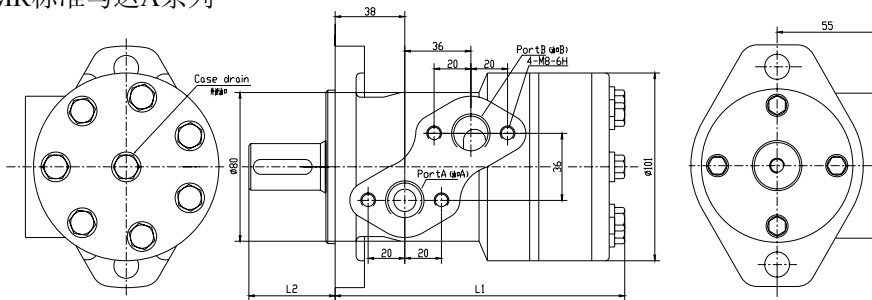
Dipl. 排量 cc/r		50	63	80	100	125	160	200	250	320	400	
A Series	A 系列	L1 mm	140	143	146	149	154	160	167	176	187	203
B Series	B 系列		140	143	146	149	154	160	167	176	187	203
C Series	C 系列		142	145	148	151	156	162	169	178	189	205

•SMR Series Dimensions

SMR 系列连接尺寸

SMR Standard Motor A Series

SMR标准马达A系列

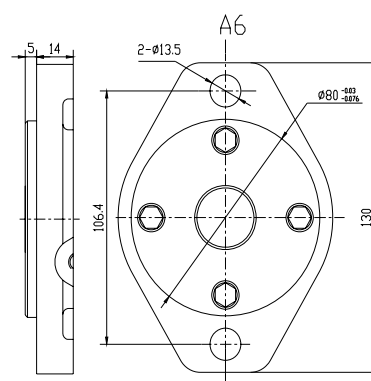
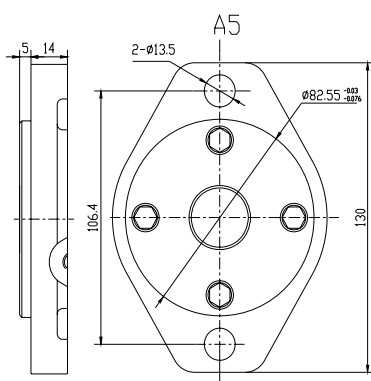
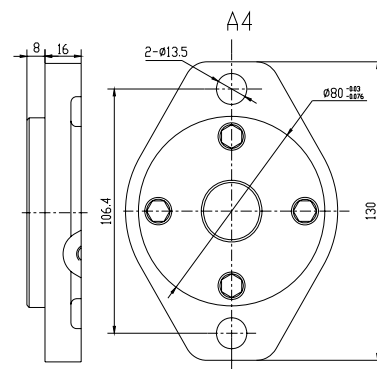
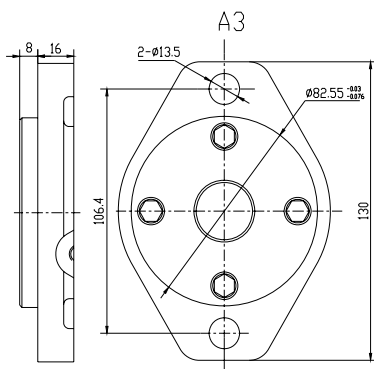
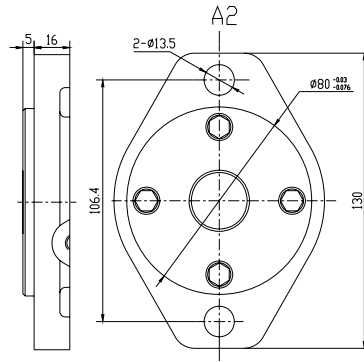
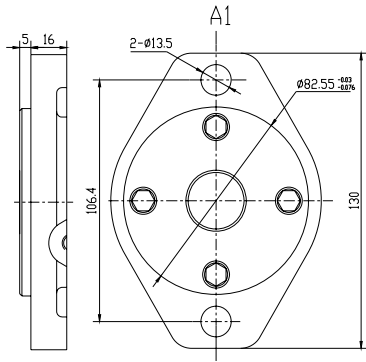


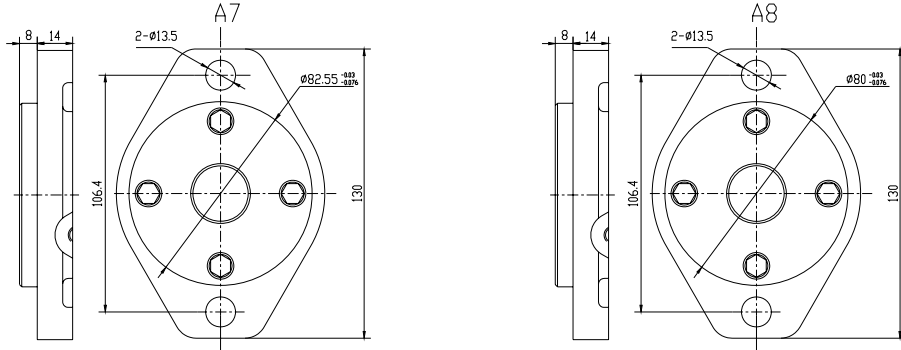
Standard Rotation: Viewed From Shaft End, Port A Pressurized --- CW, Port B Pressurized --- CCW

马达标准旋转方向: 面对输出轴轴端, A 油口进油, 顺时针旋转, B油口进油, 逆时针旋转

Flange Type to Fit Standard SMR Motor A series
与标准SMR马达A系列匹配的法兰型式

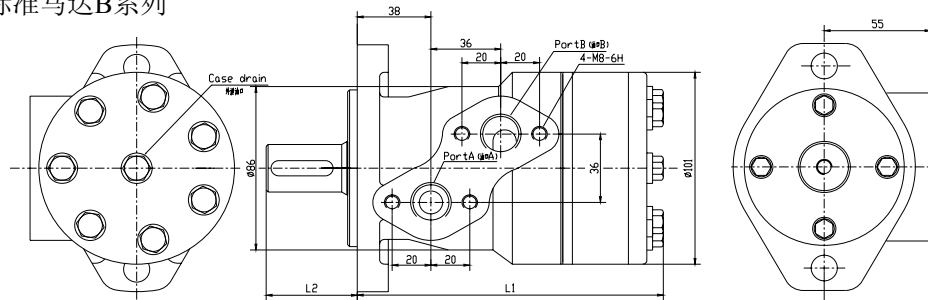
SMP/SMR轴配流液压马达





SMR Standard Motor B Series

SMR标准马达B系列

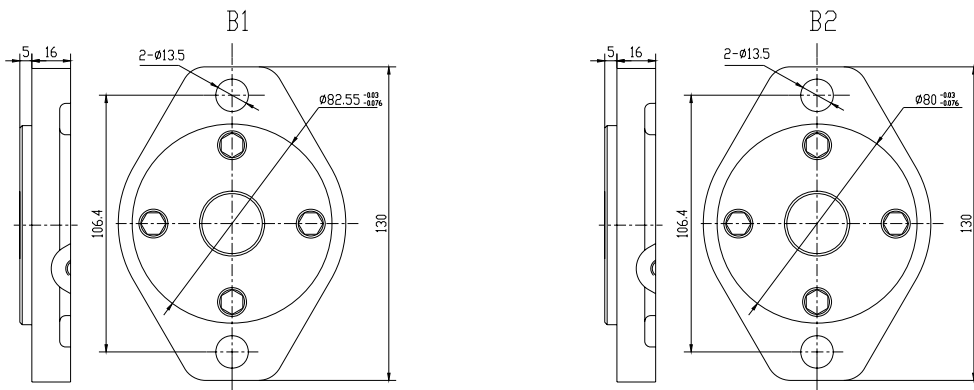


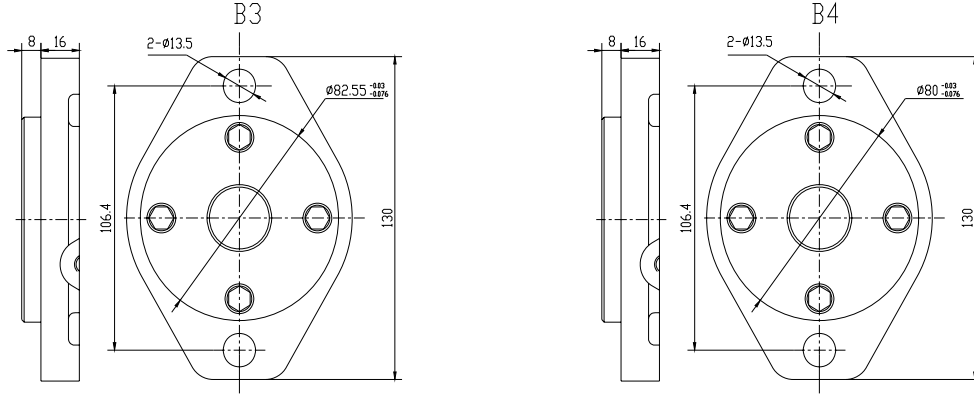
Standard Rotation: Viewed From Shaft End, Port A Pressurized --- CW, Port B Pressurized --- CCW

马达标准旋转方向: 面对输出轴轴端, A油口进油, 顺时针旋转, B油口进油, 逆时针旋转

Flange Type to Fit Standard SMR Motor B series

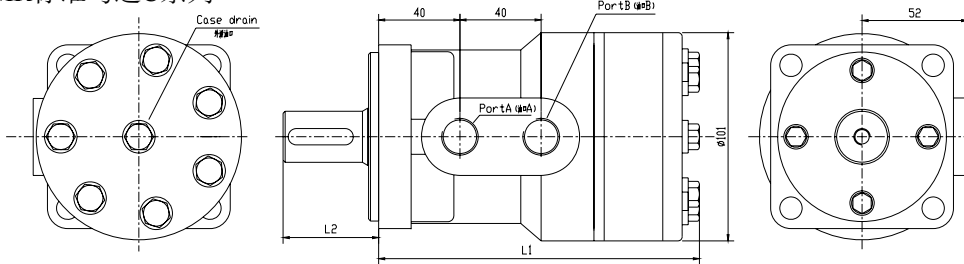
与标准SMR马达B系列匹配的法兰型式





SMR Standard Motor C Series

SMR标准马达C系列

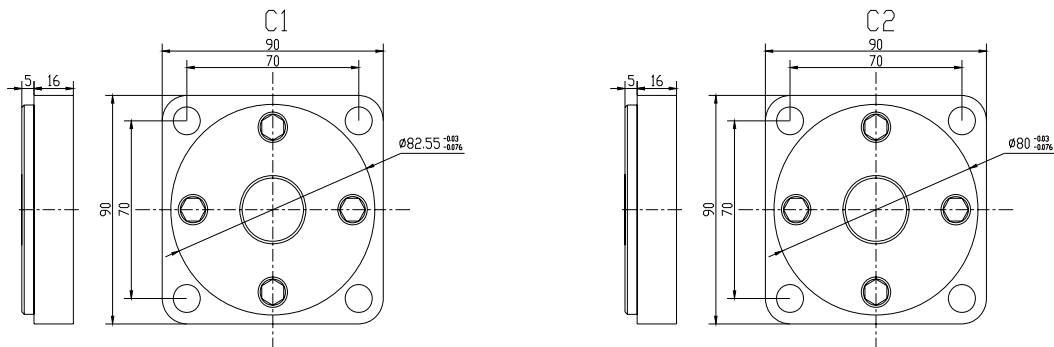


Standard Rotation: Viewed From Shaft End, Port A Pressurized --- CW, Port B Pressurized --- CCW

马达标准旋转方向: 面对输出轴轴端, A油口进油, 顺时针旋转, B油口进油, 逆时针旋转

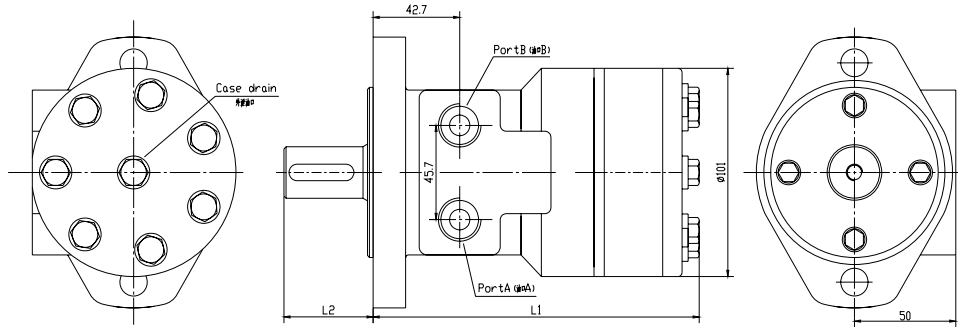
Flange Type to Fit Standard SMR Motor C series

与标准SMR马达C系列匹配的法兰型式



Standard Motor D Series

标准马达D系列

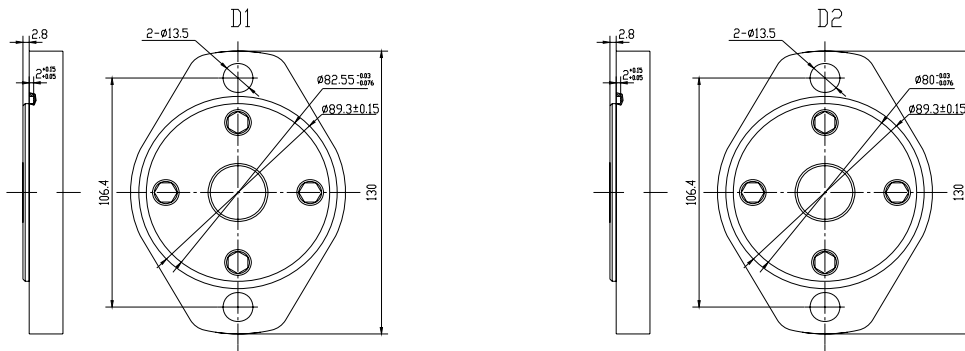


Standard Rotation: Viewed From Shaft End, Port A Pressurized --- CW, Port B Pressurized --- CCW

马达标准旋转方向: 面对输出轴轴端, A油口进油, 顺时针旋转, B油口进油, 逆时针旋转

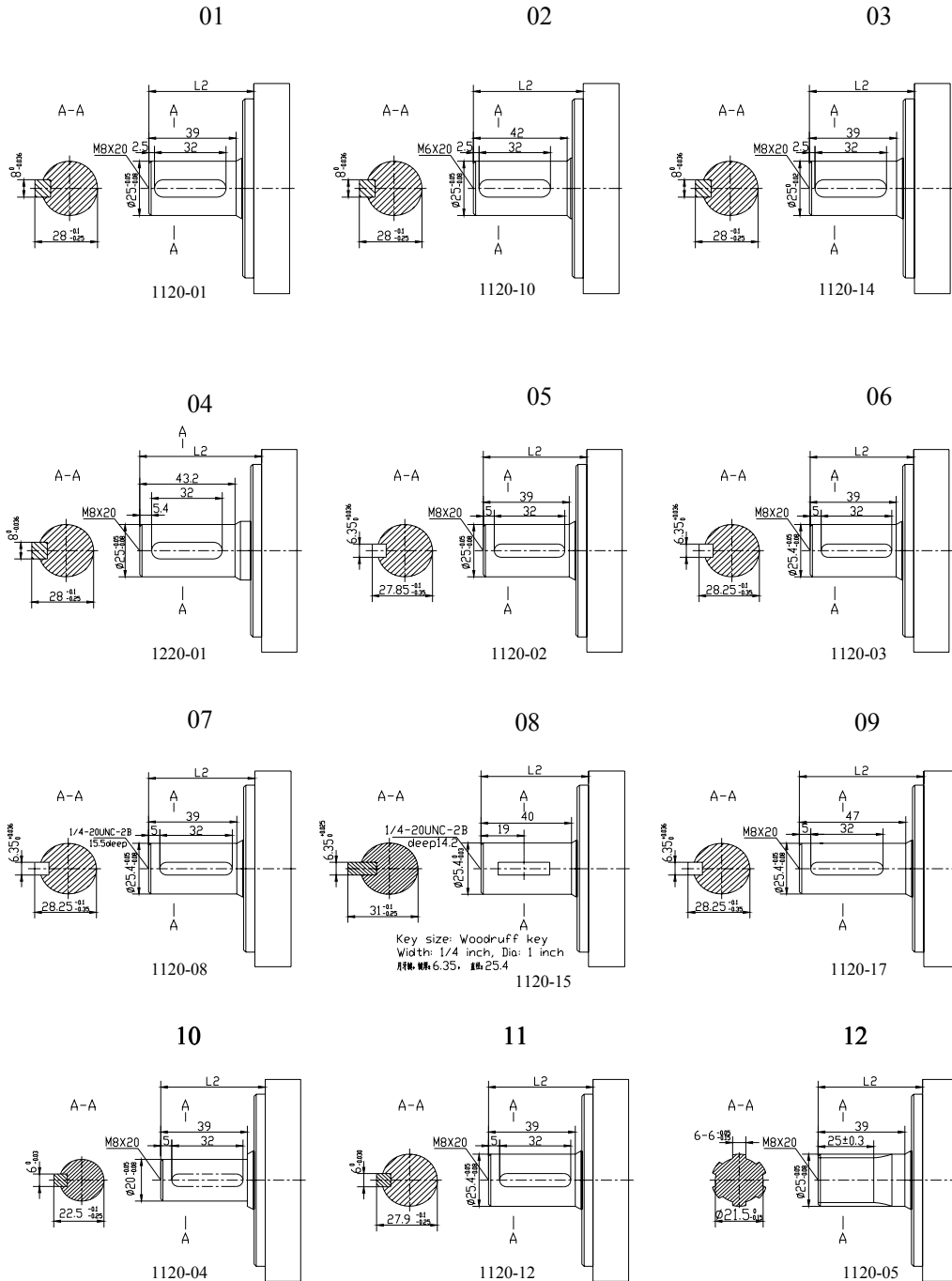
SMR Flange Type to Fit Standard Motor D series

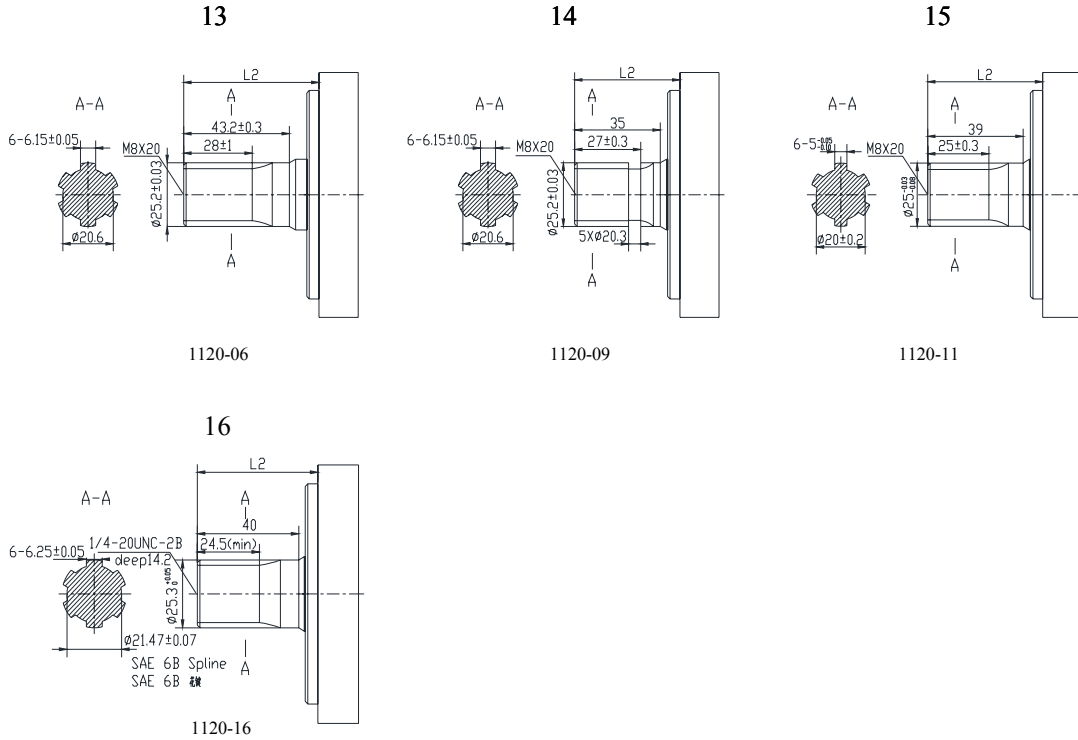
与标准SMR马达D系列匹配的法兰型式



Dipl. 排量 cc/r		50	63	80	100	125	160	200	250	320	400		
A Series	A 系列	L1	mm	140	143	146	149	154	160	167	176	187	203
B Series	B 系列			140	143	146	149	154	160	167	176	187	203
C Series	C 系列			140	143	146	149	154	160	167	176	187	203
D Series	D 系列			143	145	148	152	156	163	170	179	190	206

Dimensions ---Shafts SMP/SMR Series
SMP/SMR系列马达输出轴尺寸





SMP Allowed Combinations of Flange and Shaft

SMP允许的法兰和输出轴的不同组合

SMP Standard Motor A Series

SMP标准马达A系列

Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2	Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2	Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2
A1	01	46.5-48	A1	13	55-56.5	A2	09	54.5-56
A1	02	48.7-50.2	A1	14	42.5-44	A2	10	46.5-48
A1	03	46.5-48	A1	15	46.5-48	A2	11	46.5-48
A1	04	55-56.3	A1	16	47-48.5	A2	12	46.5-48
A1	05	46.5-48	A2	01	46.5-48	A2	13	55-56.5
A1	06	46.5-48	A2	02	48.7-50.2	A2	14	42.5-44
A1	07	46.5-48	A2	03	46.5-48	A2	15	46.5-48
A1	08	47-48.5	A2	04	55-56.3	A2	16	47-48.5
A1	09	54.5-56	A2	05	46.5-48	A3	04	55-56.3
A1	10	46.5-48	A2	06	46.5-48	A3	13	55-56.5
A1	11	46.5-48	A2	07	46.5-48	A4	04	55-56.3
A1	12	46.5-48	A2	08	47-48.5	A4	13	55-56.5

SMP Standard Motor B Series

SMP标准马达B系列

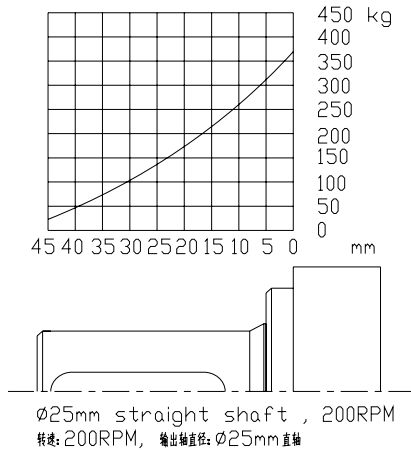
Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2	Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2	Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2
B1	01	46.5-48	B2	07	46.5-48	B3	13	55-56.5
B1	02	48.7-50.2	B2	08	47-48.5	B3	14	42.5-44
B1	03	46.5-48	B2	09	54.5-56	B3	15	46.5-48
B1	04	55-56.3	B2	10	46.5-48	B3	16	47-48.5
B1	05	46.5-48	B2	11	46.5-48	B4	01	46.5-48
B1	06	46.5-48	B2	12	46.5-48	B4	02	48.7-50.2
B1	07	46.5-48	B2	13	55-56.5	B4	03	46.5-48
B1	08	47-48.5	B2	14	42.5-44	B4	04	55-56.3
B1	09	54.5-56	B2	15	46.5-48	B4	05	46.5-48
B1	10	46.5-48	B2	16	47-48.5	B4	06	46.5-48
B1	11	46.5-48	B3	01	46.5-48	B4	07	46.5-48
B1	12	46.5-48	B3	02	48.7-50.2	B4	08	47-48.5
B1	13	55-56.5	B3	03	46.5-48	B4	09	54.5-56
B1	14	42.5-44	B3	04	55-56.3	B4	10	46.5-48
B1	15	46.5-48	B3	05	46.5-48	B4	11	46.5-48
B1	16	47-48.5	B3	06	46.5-48	B4	12	46.5-48
B2	01	46.5-48	B3	07	46.5-48	B4	13	55-56.5
B2	02	48.7-50.2	B3	08	47-48.5	B4	14	42.5-44
B2	03	46.5-48	B3	09	54.5-56	B4	15	46.5-48
B2	04	55-56.3	B3	10	46.5-48	B4	16	47-48.5
B2	05	46.5-48	B3	11	46.5-48			
B2	06	46.5-48	B3	12	46.5-48			

SMP Standard Motor C Series

SMP标准马达C系列

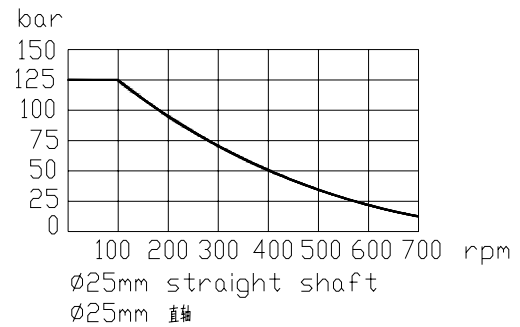
Flange Type 法兰 类型	Output Shaft No. 输出轴编号	L2	Flange Type 法兰 类型	Output Shaft No. 输出轴编号	L2	Flange Type 法兰 类型	Output Shaft No. 输出轴编号	L2
C1	01	44.3-45.8	C1	12	44.3-45.8	C2	07	44.3-45.8
C1	02	46.5-48	C1	13	52.8-54.1	C2	08	44.8-46.3
C1	03	44.3-45.8	C1	14	40.3-41.8	C2	09	52.3-53.8
C1	04	52.8-54.1	C1	15	44.3-45.8	C2	10	44.3-45.8
C1	05	44.3-45.8	C1	16	44.8-46.3	C2	11	44.3-45.8
C1	06	44.3-45.8	C2	01	44.3-45.8	C2	12	44.3-45.8
C1	07	44.3-45.8	C2	02	46.5-48	C2	13	52.8-54.1
C1	08	44.8-46.3	C2	03	44.3-45.8	C2	14	40.3-41.8
C1	09	52.3-53.8	C2	04	52.8-54.1	C2	15	44.3-45.8
C1	10	44.3-45.8	C2	05	44.3-45.8	C2	16	44.8-46.3
C1	11	44.3-45.8	C2	06	44.3-45.8			

Shaft Side Load Capacity SMP/SMR Series
SMP/SMR系列马达输出轴侧向载荷能力



An internal check valve is provided to relieve case pressure to the low pressure.
马达设计有内泄单向阀保证壳体压力不至于过高
Below is the Max.case pressure Graph.without use of drain connection.

下图标明了在不接外泄油管的情况下，壳体能承受的最大压力



SMP Order Information

SMP 订货信息

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
S	M	P												

Position 1,2,3 ---SMP Series Motor

第1, 2, 3位数字, 表示SMP系列马达

Position 4 ----Motor Type

第4位数字, 表示马达类型

A ---- Standard Motor A Series, 标准马达A系列

B ---- Standard Motor B Series 标准马达B系列

C ---- Standard Motor C Series 标准马达C系列

Position 5,6 ----Displacement, cc/r

第5, 6位数字, 表示马达排量

01 ---- 50	04 ---- 100	07 ---- 200	10 ---- 370
02 ---- 63	05 ---- 125	08 ---- 250	11 ---- 395
03 ---- 80	06 ---- 160	09 ---- 305	

Position 7,8 ----Flanges and Pilot

第7, 8位数字, 表示法兰和止口尺寸

A1 ---- A1 Flange for Standard Motor A Series	标准马达A系列用A1型法兰
A2 ---- A2 Flange for Standard Motor A Series	标准马达A系列用A2型法兰
B1 ---- B1 Flange for Standard Motor B Series	标准马达B系列用B1型法兰
B2 ---- B2 Flange for Standard Motor B Series	标准马达B系列用B2型法兰
B3 ---- B3 Flange for Standard Motor B Series	标准马达B系列用B3型法兰
B4 ---- B4 Flange for Standard Motor B Series	标准马达B系列用B4型法兰
C1 ---- C1 Flange for Standard Motor C Series	标准马达C系列用C1型法兰
C2 ---- C2 Flange for Standard Motor C Series	标准马达C系列用C2型法兰

Position 9,10 ----Output Shaft

第9, 10位数字, 表示输出轴尺寸

01 ---- No.01 Shaft	编号为01的输出轴
02 ---- No.02 Shaft	编号为02的输出轴
03 ---- No.03 Shaft	编号为03的输出轴
04 ---- No.04 Shaft	编号为04的输出轴
05 ---- No.05 Shaft	编号为05的输出轴
06 ---- No.06 Shaft	编号为06的输出轴
07 ---- No.07 Shaft	编号为07的输出轴
08 ---- No.08 Shaft	编号为08的输出轴
09 ---- No.09 Shaft	编号为09的输出轴
10 ---- No.10 Shaft	编号为10的输出轴
11 ---- No.11 Shaft	编号为11的输出轴
12 ---- No.12 Shaft	编号为12的输出轴
13 ---- No.13 Shaft	编号为13的输出轴
14 ---- No.14 Shaft	编号为14的输出轴
15 ---- No.15 Shaft	编号为15的输出轴
16 ---- No.16 Shaft	编号为16的输出轴

Position 11 ----Port 油口

A ----2 - \varnothing 12.5 Manifold Mount	2 - \varnothing 12.5 板式连接油口
B ----2 - G 1/2	2 - G1/2 油口
C ----2 - M20X1.5	2 - M20X1.5 油口
D ----2 - G1/2 BSP	2 - G1/2 BSP 油口
E ----2 - M18X1.5	2 - M18X1.5油口
F ----2 - 7/8-14UNF-2B O-ring	2 - 7/8-14UNF-2B O型圈 密封油口

Position 12 ---- Case drain Port

第12位数字，表示泄油口尺寸

A – None	无泄油口
B – G 1/4	G 1/4 油口
C – G 1/4 BSP	G 1/4 BSP 油口
D – M14X1.5	M14X1.5 油口
E - 7/16 -20UNF-2B O-ring	7/16 -20UNF-2B O型圈密封油口

Position 13 ---- Paint

第13位数字，表示喷漆要求

0 - No Paint	不喷漆
1 - Blue	喷标准蓝漆
2 - Black	喷标准磷化黑漆
3 – Others, Please Note on PO	其它要求，请下单时注明

Position 14 ----Special Features

第14位数字，表示一些特殊要求

0 – None	无特殊要求
1 – Viton Shaft Seal	轴密封材质为氟橡胶
2 – Viton Seals	密封圈材质为氟橡胶
3 – Viton Shaft Seal and Viton Seals	轴密封和其它密封圈材质均为氟橡胶

Position 15 ----Motor Rotation 马达旋转方向

Viewed From Shaft End

面对输出轴轴端

A – Port A Pressurized CW	A油口进压力油，顺时针旋转
B – Port A Pressurized CCW	A油口进压力油，逆时针旋转

SMP Series Order Information

Flange and Pilot	Shaft	Port&Drain	Displacement cc/r										
			50	63	80	100	125	160	200	250	320	400	500
2 Bolt Flange Pilot ϕ 82.5	Straight ϕ 25 Straight Key 8(01)	Staggerred PortG1/2 No Case Drain	125m 0160	0161	0162	0163	016a	0164	0165	0166	0167	0168	0169
4 Bolt Flange Pilot ϕ 85	Square pline 6D-25X22X6 (12)	M20X1.5 Rear Case Drain M14X1.5	125m 1140	1141	1142	1143	114a	1144	1145	1146	1147	1148	1149
2 Bolt Flange Pilot ϕ 82.5	Straight ϕ 25 Straight Key 8(01)	Port: G1/2 , No Case Drain	125m 0430	0431	0432	0433	043a	0434	0435	0436	0437	0438	0439
2Bolt Flange Pilot ϕ 82.5	Straight ϕ 25 Straight Key 8(01)	PortG1/2 Case Drain G1/4	125m 0380	0381	0382	0383	038a	0384	0385	0386	0387	0388	0389
2 Bolt Flange Pilot ϕ 82.55 Pilot length 5	Straight ϕ 25.4 Straight Key 6.35(06)	Staggerred Port G1/2" Case DrainG1/4	125m 9360	9361	9362	9363	936a	9364	9365	9366	9367	9368	9369

SMP 系列马达订货信息

法兰和止口	输出轴	油口和泄油口	排量cc/r										
			50	63	80	100	125	160	200	250	320	400	500
2孔法兰, 止口 ϕ 82.5	直轴 ϕ 25, 平键 8(01)	交错油口 G1/2, 无外泄	125m 0160	0161	0162	0163	016a	0164	0165	0166	0167	0168	0169
4 孔长方法兰, 止口 ϕ 85	矩形花键6D-25X22X6 (12)	油口M20X1.5 后泄油口 M14X1.5	125m 1140	1141	1142	1143	114a	1144	1145	1146	1147	1148	1149
2 孔法兰, 止口 ϕ 82.5	直轴 ϕ 25 平键8(01)	油口: G1/2 , 无外泄	125m 0430	0431	0432	0433	043a	0434	0435	0436	0437	0438	0439
2孔法兰, 止口 ϕ 82.5	直轴 ϕ 25 平键8(01)	油口G1/2 泄油口G1/4	125m 0380	0381	0382	0383	038a	0384	0385	0386	0387	0388	0389
2 孔法兰, 止口 ϕ 82.55 止口高: 5	直轴 ϕ 25.4 平键6.35(16)	交错油口G1/2" 无外泄	125m 9360	9361	9362	9363	936a	9364	9365	9366	9367	9368	9369

SMR Allowed Combinations of Flange and Shaft

SMR允许的法兰和输出轴的不同组合

SMR Standard Motot A Series

SMR标准马达A系列

Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2	Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2	Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2
A1	01	46.5-48	A2	09	54.5-56	A5	13	55-56.5
A1	02	48.7-50.2	A2	10	46.5-48	A5	14	42.5-44
A1	03	46.5-48	A2	11	46.5-48	A5	15	46.5-48
A1	04	55-56.3	A2	12	46.5-48	A5	16	47-48.5
A1	05	46.5-48	A2	13	55-56.5	A6	01	46.5-48
A1	06	46.5-48	A2	14	42.5-44	A6	02	48.7-50.2
A1	07	46.5-48	A2	15	46.5-48	A6	03	46.5-48
A1	08	47-48.5	A2	16	47-48.5	A6	04	55-56.3
A1	09	54.5-56	A3	04	55-56.3	A6	05	46.5-48
A1	10	46.5-48	A3	13	55-56.5	A6	06	46.5-48
A1	11	46.5-48	A4	04	55-56.3	A6	07	46.5-48
A1	12	46.5-48	A4	13	55-56.5	A6	08	47-48.5
A1	13	55-56.5	A5	01	46.5-48	A6	09	54.5-56
A1	14	42.5-44	A5	02	48.7-50.2	A6	10	46.5-48
A1	15	46.5-48	A5	03	46.5-48	A6	11	46.5-48
A1	16	47-48.5	A5	04	55-56.3	A6	12	46.5-48
A2	01	46.5-48	A5	05	46.5-48	A6	13	55-56.5
A2	02	48.7-50.2	A5	06	46.5-48	A6	14	42.5-44
A2	03	46.5-48	A5	07	46.5-48	A6	15	46.5-48
A2	04	55-56.3	A5	08	47-48.5	A6	16	47-48.5
A2	05	46.5-48	A5	09	54.5-56	A7	04	55-56.3
A2	06	46.5-48	A5	10	46.5-48	A7	13	55-56.5
A2	07	46.5-48	A5	11	46.5-48	A8	04	55-56.3
A2	08	47-48.5	A5	12	46.5-48	A8	13	55-56.5

SMR Standard Motot B Series

SMP/SMR轴配流液压马达

SMR标准马达B系列

Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2	Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2	Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2
B1	01	46.5-48	B1	13	55-56.5	B2	09	54.5-56
B1	02	48.7-50.2	B1	14	42.5-44	B2	10	46.5-48
B1	03	46.5-48	B1	15	46.5-48	B2	11	46.5-48
B1	04	55-56.3	B1	16	47-48.5	B2	12	46.5-48
B1	05	46.5-48	B2	01	46.5-48	B2	13	55-56.5
B1	06	46.5-48	B2	02	48.7-50.2	B2	14	42.5-44
B1	07	46.5-48	B2	03	46.5-48	B2	15	46.5-48
B1	08	47-48.5	B2	04	55-56.3	B2	16	47-48.5
B1	09	54.5-56	B2	05	46.5-48	B3	04	55-56.3
B1	10	46.5-48	B2	06	46.5-48	B3	13	55-56.5
B1	11	46.5-48	B2	07	46.5-48	B4	04	55-56.3
B1	12	46.5-48	B2	08	47-48.5	B4	13	55-56.5

SMR Standard Motor C Series

SMR标准马达C系列

Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2	Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2	Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2
C1	01	46.5-48	C1	12	46.5-48	C2	07	46.5-48
C1	02	48.7-50.2	C1	13	55-56.5	C2	08	47-48.5
C1	03	46.5-48	C1	14	42.5-44	C2	09	54.5-56
C1	04	55-56.3	C1	15	46.5-48	C2	10	46.5-48
C1	05	46.5-48	C1	16	47-48.5	C2	11	46.5-48
C1	06	46.5-48	C2	01	46.5-48	C2	12	46.5-48
C1	07	46.5-48	C2	02	48.7-50.2	C2	13	55-56.5
C1	08	47-48.5	C2	03	46.5-48	C2	14	42.5-44
C1	09	54.5-56	C2	04	55-56.3	C2	15	46.5-48
C1	10	46.5-48	C2	05	46.5-48	C2	16	47-48.5
C1	11	46.5-48	C2	06	46.5-48			

SMR Standard Motor D Series

SMP/SMR轴配流液压马达

SMR标准马达D系列

Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2	Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2	Flange Type 法兰类型	Output Shaft No. 输出轴编号	L2
D1	01	43.5-45	D1	12	43.5-45	D2	07	43.5-45
D1	02	45.7-47.2	D1	13	52-53.3	D2	08	44-45.5
D1	03	43.5-45	D1	14	39.5-41	D2	09	51.5-53
D1	04	52-53.3	D1	15	43.5-45	D2	10	43.5-45
D1	05	43.5-45	D1	16	44-45.5	D2	11	43.5-45
D1	06	43.5-45	D2	01	43.5-45	D2	12	43.5-45
D1	07	43.5-45	D2	02	45.7-47.2	D2	13	52-53.3
D1	08	44-45.5	D2	03	43.5-45	D2	14	39.5-41
D1	09	51.5-53	D2	04	52-53.3	D2	15	43.5-45
D1	10	43.5-45	D2	05	43.5-45	D2	16	44-45.5
D1	11	43.5-45	D2	06	43.5-45			

SMR Order Information

SMR订货信息

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
S	M	R												

Position 1,2,3 ---SMR Series Motor

第1, 2, 3位数字, 表示SMR系列马达

Position 4 ----Motor Type

第4位数字, 表示马达类型

- A ---- Standard Motor A Series, 标准马达A系列
- B ---- Standard Motor B Series 标准马达B系列
- C ---- Standard Motor C Series 标准马达C系列
- D ---- Standard Motor D Series 标准马达D系列

Position 5,6 ----Displacement, cc/r

第5, 6位数字, 表示马达排量

01 ---- 50	04 ---- 100	07 ---- 200	10 ---- 370
02 ---- 63	05 ---- 125	08 ---- 250	11 ---- 395
03 ---- 80	06 ---- 160	09 ---- 305	



Position 7,8 ----Flanges and Pilot

第7, 8位数字, 表示法兰和止口尺寸

A1 ---- A1 Flange for Standard Motor A Series	标准马达A系列用A1型法兰
A2 ---- A2 Flange for Standard Motor A Series	标准马达A系列用A2型法兰
A3 ---- A3 Flange for Standard Motor A Series	标准马达A系列用A3型法兰
A4 ---- A4 Flange for Standard Motor A Series	标准马达A系列用A4型法兰
A5 ---- A5 Flange for Standard Motor A Series	标准马达A系列用A5型法兰
A6 ---- A6 Flange for Standard Motor A Series	标准马达A系列用A6型法兰
A7 ---- A7 Flange for Standard Motor A Series	标准马达A系列用A7型法兰
A8 ---- A8 Flange for Standard Motor A Series	标准马达A系列用A8型法兰
B1 ---- B1 Flange for Standard Motor B Series	标准马达B系列用B1型法兰
B2 ---- B2 Flange for Standard Motor B Series	标准马达B系列用B2型法兰
B3 ---- B3 Flange for Standard Motor B Series	标准马达B系列用B3型法兰
B4 ---- B4 Flange for Standard Motor B Series	标准马达B系列用B4型法兰
C1 ---- C1 Flange for Standard Motor C Series	标准马达C系列用C1型法兰
C2 ---- C2 Flange for Standard Motor C Series	标准马达C系列用C2型法兰
D1 ---- D1 Flange for Standard Motor D Series	标准马达D系列用D1型法兰
D2 ---- D2 Flange for Standard Motor D Series	标准马达D系列用D2型法兰

Position 9,10 ----Output Shaft

第9, 10位数字, 表示输出轴尺寸

01 ---- No.01 Shaft	编号为01的输出轴
02 ---- No.02 Shaft	编号为02的输出轴
03 ---- No.03 Shaft	编号为03的输出轴
04 ---- No.04 Shaft	编号为04的输出轴
05 ---- No.05 Shaft	编号为05的输出轴
06 ---- No.06 Shaft	编号为06的输出轴
07 ---- No.07 Shaft	编号为07的输出轴
08 ---- No.08 Shaft	编号为08的输出轴
09 ---- No.09 Shaft	编号为09的输出轴
10 ---- No.10 Shaft	编号为10的输出轴
11 ---- No.11 Shaft	编号为11的输出轴
12 ---- No.12 Shaft	编号为12的输出轴
13 ---- No.13 Shaft	编号为13的输出轴
14 ---- No.14 Shaft	编号为14的输出轴
15 ---- No.15 Shaft	编号为15的输出轴
16 ---- No.16 Shaft	编号为16的输出轴



- Position 11 ----Port, 第11位数字, 表示油口尺寸
- | | | |
|---|------------------------------------|---------------------------|
| A | ----2 - ϕ 12.5 Manifold Mount | 2 - ϕ 12.5 板式连接油口 |
| B | ----2 - G 1/2 | 2 - G1/2 油口 |
| C | ----2 - M20X1.5 | 2 - M20X1.5 油口 |
| D | ----2 - G1/2 BSP | 2 - G1/2 BSP 油口 |
| E | ----2 - M18X1.5 | 2 - M18X1.5油口 |
| F | ----2 - 7/8-14UNF-2B O-ring | 2 - 7/8-14UNF-2B O型圈 密封油口 |
| G | ----2 - NPTF 1 / 2 | 2 - NPTF 1 / 2 油口 |
| H | ----2 - G 1 / 2 O-ring | 2 - G 1 / 2 O 型圈密封油口 |
| I | ----2 - G 1 / 4 | 2 - G 1 / 4 油口 |
| J | ----2 - M22X1.5 | 2 - M22X1.5 油口 |
- Position 12 ---- Case drain Port , 第12位数字, 表示泄油口尺寸
- | | | |
|---|-------------------------|------------------------|
| A | - None | 无泄油口 |
| B | - G 1/4 | G 1/4 油口 |
| C | - G 1/4 BSP | G 1/4 BSP 油口 |
| D | - M14X1.5 | M14X1.5 油口 |
| E | - 7/16 -20UNF-2B O-ring | 7/16 -20UNF-2B O型圈密封油口 |
| F | - M16X1.5 | M16X1.5油口 |
- Position 13 ---- Paint, 第13位数字, 表示喷漆要求
- | | | |
|---|-----------------------------|--------------|
| 0 | - No Paint | 不喷漆 |
| 1 | - Blue | 喷标准蓝漆 |
| 2 | - Black | 喷标准磷化黑漆 |
| 3 | - Others, Please Note on PO | 其它要求, 请下单时注明 |
- Position 14 ----Specical Feature,第14位数字, 表示一些特殊要求
- | | | |
|---|------------------------------------|------------------|
| 0 | - None | 无特殊要求 |
| 1 | - Viton Shaft Seal | 轴密封材质为氟橡胶 |
| 2 | - Viton Seals | 密封圈材质为氟橡胶 |
| 3 | - Viton Shaft Seal and Viton Seals | 轴密封和其它密封圈材质均为氟橡胶 |
- Position 15 ----Motor Rotation 第15位数字, 表示马达旋转方向
- | | | |
|---|--------------------------|----------------|
| | Viewed From Shaft End | 面对输出轴轴端 |
| A | - Port A Pressurized CW | A油口进压力油, 顺时针旋转 |
| B | - Port A Pressurized CCW | A油口进压力油, 逆时针旋转 |

SMR Series Order Information

SMP/ SMR轴配流液压马达

Flange & pilot	Shaft	Port&Drain Port	Displacement cc/r										
			50	63	80	100	125	160	200	245	305	370	395
2 Bolt Flat Pilot F82.55 Pilot	Straight Φ 25 Flat key 8(01)	Staggered port M18X1.5 No case drain	131m0380	0381	0382	0383	038a	0384	0385	0386	0387	0388	0389
	Straight Φ 25 Flat key 8(01)	Staggered port G1/2" No case drain	131m0390	0391	0392	0393	039a	0394	0395	0396	0397	0398	0399
	Straight Φ 25.4 Flat key 6.35(06)	Aligned port G1/2" Case drain M14X1.5	131m0400	0401	0402	0403	040a	0404	0405	0406	0407	0408	0409
	Straight Φ 25.4 Flat key 6.35(06)	Staggered port M18X1.5 No case drain	131m0410	0411	0412	0413	041a	0414	0415	0416	0417	0418	0419
	Straight Φ 25.4 Flat key 6.35(06)	Staggered port G1/2" No case drain	131m0420	0421	0422	0423	042a	0424	0425	0426	0427	0428	0429
	Straight Φ 25 Flat key 8(01)	Aligned port NPT1/2 Case drain M14X1.5	131m0480	0481	0482	0483	048a	0484	0485	0486	0487	0488	0489
		Aligned port G1/2" Case drain G1/4"	131m8390	8391	8392	8393	839a	8394	8395	8396	8397	8398	8399
	Straight Φ 25 Flat key 6.35(05)	Aligned port G1/2" Case drain G1/4"	131m8400	8401	8402	8403	840a	8404	8405	8406	8407	8408	8409
Straight Φ 25 Flat key 8(01)	Staggered port G1/4 Case drain G1/4	131m9390	9391	9392	9393	939a	9394	9395	9396	9397	9398	9399	
4 Pilot Flange, pilot Φ 80	Straight Φ 25 Flat key 8(01)	Port M18X1.5, No case drain	131m0010	0011	0012	0013	001a	0014	0015	0016	0017	0018	0019
		Port M18X1.5, case drain M14X1.5	131m0020	0021	0022	0023	002a	0024	0025	0026	0027	0028	0029

SMR 系列马达订货信息

法兰止口	输出轴	油口/泄油口	流量 CC/r										
			50	63	80	100	125	160	200	245	305	370	395
2孔菱形法兰, 止口 Φ 82.55	Φ 25直轴, 平键 8(01)	油口 M18X1.5, 内泄	131m0380	0381	0382	0383	038a	0384	0385	0386	0387	0388	0389
	Φ 25直轴, 平键 8(01)	油口 G1/2", 内泄	131m0390	0391	0392	0393	039a	0394	0395	0396	0397	0398	0399
	Φ 25.4直轴 平键 6.35(06)	交错油口面, 油口 G1/2" 泄油口 M14X1.5	131m0400	0401	0402	0403	040a	0404	0405	0406	0407	0408	0409
	Φ 25.4直轴, 平键 6.35(06)	油口 M18X1.5, 内泄	131m0410	0411	0412	0413	041a	0414	0415	0416	0417	0418	0419
	Φ 25.4直轴, 平键 6.35(06)	油口 G1/2", 内泄	131m0420	0421	0422	0423	042a	0424	0425	0426	0427	0428	0429
	Φ 25直轴, 平键 8(01)	交错油口面, 油口 NPT1/2, 泄油口 M14X1.5	131m0480	0481	0482	0483	048a	0484	0485	0486	0487	0488	0489
		交错油口面, 油口 G1/2" 泄油口 G1/4"	131m8390	8391	8392	8393	839a	8394	8395	8396	8397	8398	8399
	Φ 25直轴 平键 6.35(05)	交错油口面, 油口 G1/2" 泄油口 G1/4"	131m8400	8401	8402	8403	840a	8404	8405	8406	8407	8408	8409
Φ 25直轴, 平键 8(01)	油口 G1/4 泄油口 M14x1.5	131m9390	9391	9392	9393	939a	9394	9395	9396	9397	9398	9399	
4孔方法兰, 止口 Φ 80	Φ 25直轴, 平键 8(01)	油口 M18X1.5, 内泄	131m0010	0011	0012	0013	001a	0014	0015	0016	0017	0018	0019
		油口 M18X1.5, 泄油口 M14X1.5	131m0020	0021	0022	0023	002a	0024	0025	0026	0027	0028	0029