



**PERMANENT-MAGNET
SYNCHRONOUS MOTORS**
永磁同步电机 (0.37kW~500kW)

产品概述

三相稀土永磁同步电动机是我司自主研发设计的高效节能电机，采用永磁材料产生磁场，无需励磁电流，没有励磁绕，不仅效率高，而且结构简单、运行可靠，还可做到体积小、重量轻。既可达到传统电励磁电机所无法比拟的高性能(如特高效、特高速、特高响应速度)，又可以制成能满足特定运行要求的特种电机，可广泛用于各种机械、风机、水泵、纺织、化工、石油、电力、压缩机、注塑机、粉碎机等行业。

Product Overview

Three-phase rare earth permanent magnet synchronous motor is our independent research and development of high efficiency and energy saving motor design, a magnetic field with permanent magnet materials, without excitation current, without excitation winding, not only high efficiency, and simple structure, reliable operation, small volume, light weight can also do. Can achieve for traditional electric excitation motor's high performance (such as high efficiency, high speed, high response speed, and can be made into special motor can meet the requirements of a specific operation, can be widely used in all kinds of machinery, fans, pumps, textile, chemical, petroleum, electric power, compressor, injection molding machine, grinder, etc.

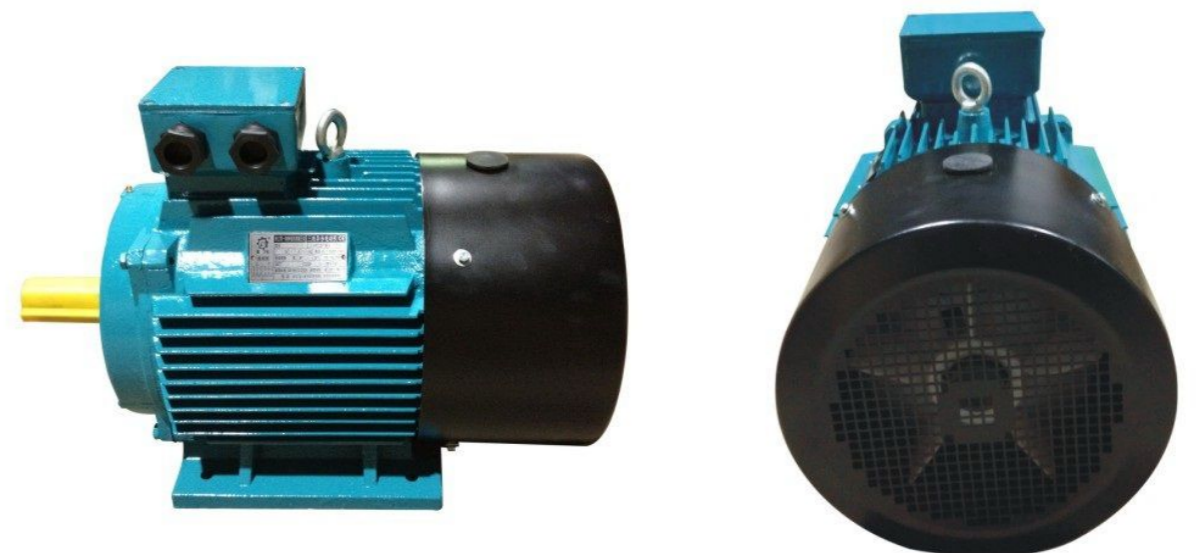


性能特点

- 1、转速恒定，为同步转速。
- 2、功率因数高：通过合理设计能达到极限值1.0。
- 3、体积小，重量轻，噪声低。
- 4、效率高：正常运转时，转子无绕组铜耗；高功率因数，可使定子电流较小，定子绕组铜耗小。
- 5、转速与电机频率保持恒定，可简化控制系统。
- 6、电机可制成多级、低速大转矩，以直驱式取消齿轮箱，实现无齿化传动。
- 7、调速范围宽，高转速设计可达10000r/min

Performance Characteristics

- 1、the rotating speed is constant, for the synchronous speed.
- 2、high power factor: 1.0 through the reasonable design can achieve the ultimate value.
- 3、small volume, light weight, low noise.
- 4、high efficiency, normal operation, rotor winding copper consumption; High power factor, can make the stator current is small, the stator winding copper loss is small.
- 5、maintain a constant speed and the motor frequency, can simplify control system.
- 6、multistage, low speed high torque motor can be made, with a direct-drive type cancel gear box, without gear transmission.
- 7、wide speed range, high speed of 10000 r/min



使用条件

环境温度：-15℃~40℃

海拔：不超过1000米

额定电压：380V、220V、其它电压可选

额定频率：100Hz、200Hz、其它频率可选

工作制：连续工作制 (S1)

防护等级：IP54/IP55

绝缘等级：F

冷却方式：IC411/IC416

接法：Y/△

Conditions of use

Operating Conditions

Ambient Temperature:-15℃~40℃

Rated Voltage:380V、220V、or other rated voltage

Rated Frequency:50Hz、60Hz、or other rated frequency

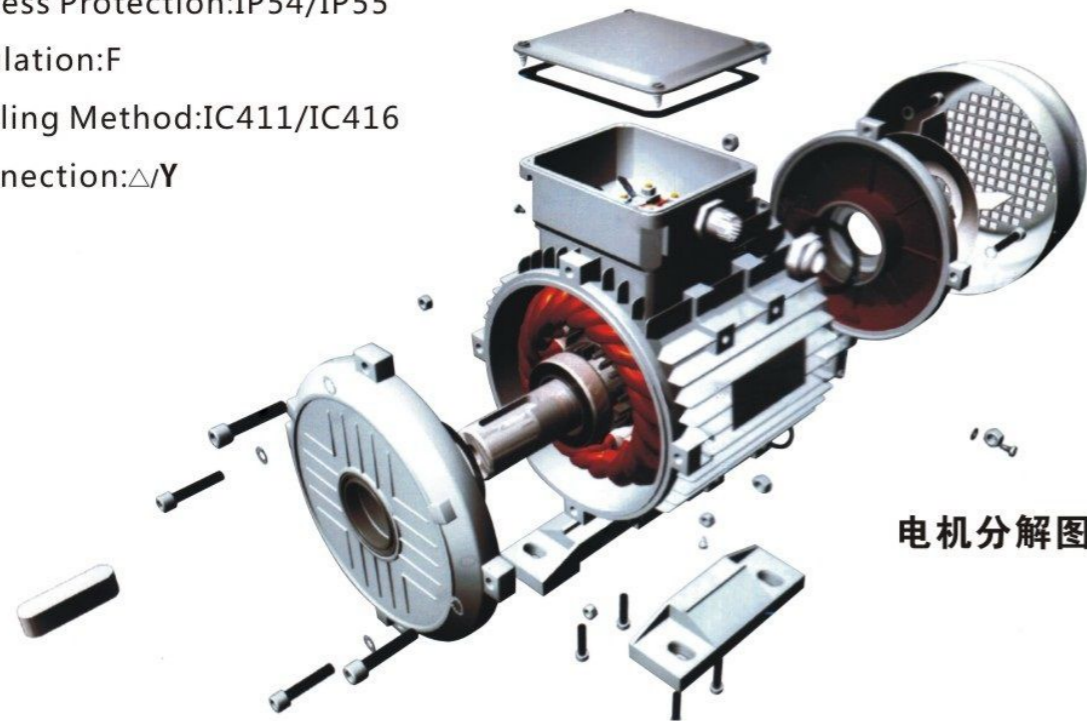
Working Duty:Continuous (S1)

Ingress Protection:IP54/IP55

Insulation:F

Cooling Method:IC411/IC416

Connection:△/Y



电机分解图

型号说明 Model Description

FTY- XXX - X



示例(Example)

功率：7500w 转速:1500r/min

Rated Power : 7500w 1500r/min

电动机型号：FTY-7500-4

motor model : FTY-7500-4



磁钢

技术性能参数 Technical performance data

型号	机座号	功率	额定电流	效率	功率因素	额定转矩	牵入转矩 额定转矩	失步转矩 额定转矩	堵转转矩 额定转矩	堵转电流 额定电流
		kW	A	%		N.m				
		同步转速 3000r/min		50Hz/380V						
FTY750-2	80M	0.75	1.4	84.9	0.96	2.39	1.2	2.0	2.0	9
FTY1100-2	80M	1.1	2.0	86.7	0.96	3.50	1.2	2.0	2.0	9
FTY1500-2	90S	1.5	2.7	87.5	0.96	4.78	1.2	2.0	2.0	9
FTY2200-2	90L	2.2	3.9	89.1	0.96	7.0	1.2	2.0	2.0	9

技术性能参数 Technical performance data

型号	机座号	功率	额定电流	效率	功率因素	额定转矩	牵入转矩 额定转矩	失步转矩 额定转矩	堵转转矩 额定转矩	堵转电流 额定电流
		kW	A	%		N.m				
		同步转速 1500r/min		50Hz/380V						
FTY550-4	80M	0.55	1.0	84.5	0.96	3.50	1.2	2.0	2.3	9
FTY750-4	80M	0.75	1.4	85.6	0.96	4.78	1.2	2.0	2.3	9
FTY1100-4	90S	1.1	2.0	87.4	0.96	7.0	1.2	2.0	2.3	9
FTY1500-4	90L	1.5	2.7	88.1	0.96	9.55	1.2	2.0	2.3	9
FTY2200-4	100L	2.2	3.9	89.7	0.96	14.0	1.2	2.0	2.3	9
FTY3000-4	100L	3	5.3	90.3	0.96	19.1	1.2	2.0	2.3	9
FTY4000-4	112M	4	7.0	90.9	0.96	25.5	1.2	2.0	2.3	9
FTY5500-4	132S	5.5	9.5	92.1	0.96	35.0	1.2	2.0	2.3	9
FTY7500-4	132M	7.5	12.8	92.6	0.96	47.8	1.2	2.0	2.3	9
FTY11000-4	160M	11	18.6	93.6	0.96	70.0	1.2	2.0	2.2	9
FTY15000-4	160L	15	25.3	94.0	0.96	95.5	1.2	2.0	2.2	9
FTY18500-4	180M	18.5	31.0	94.3	0.96	118	1.2	2.0	2.2	9
FTY22000-4	180L	22	36.8	94.7	0.96	140	1.2	2.0	2.2	9
FTY30000-4	200L	30	50.0	95.0	0.96	191	1.2	2.0	2.2	9
FTY37000-4	225S	37	61.4	95.3	0.96	236	1.2	2.0	2.2	9
FTY45000-4	225M	45	74.5	95.6	0.96	287	1.2	1.8	2.2	9
FTY55000-4	250M	55	90.9	95.8	0.96	350	1.2	1.8	2.2	9
FTY75000-4	280S	75	123.6	96.0	0.96	478	1.2	1.8	2.2	9
FTY90000-4	280M	90	148.1	96.2	0.96	573	1.2	1.8	2.2	9
FTY110000-4	315S	110	180.6	96.4	0.96	700	1.2	1.8	2.1	9
FTY132000-4	315M	132	216.5	96.5	0.96	921	1.2	1.8	2.1	9
FTY160000-4	315L	160	262.4	96.5	0.96	1019	1.2	1.8	2.1	9
FTY200000-4	315L	200	327.7	96.6	0.96	1273	1.2	1.8	2.1	9
FTY220000-4	355M	220	360.4	96.6	0.96	1401	1.2	1.8	2.1	9
FTY250000-4	355M	250	409.2	96.7	0.96	1592	1.2	1.8	2.1	9
FTY315000-4	355L	315	515.0	96.8	0.96	2006	1.2	1.8	2.1	9

技术性能参数 Technical performance data

型号	机座号	功率	额定电流	效率	功率因素	额定转矩	牵入转矩 额定转矩	失步转矩 额定转矩	堵转转矩 额定转矩	堵转电流 额定电流
		kW	A	%		N.m				
		同步转速 1000r/min		380V/50Hz						
FTY750-6	90S	0.75	1.4	86.8	0.96	7.16	1.2	2.0	2.1	9
FTY1100-6	90L	1.1	2.0	88.2	0.96	10.5	1.2	2.0	2.1	9
FTY1500-6	100L	1.5	2.7	89.4	0.96	14.3	1.2	2.0	2.1	9
FTY2200-6	112M	2.2	3.9	90.5	0.96	21.0	1.2	2.0	2.1	9
FTY3000-6	132S	3	5.2	91.5	0.96	28.7	1.2	2.0	2.1	9
FTY4000-6	132M	4	6.9	92.4	0.96	38.2	1.2	2.0	2.1	9
FTY5500-6	132M	5.5	9.3	93.1	0.96	52.5	1.2	2.0	2.1	9
FTY7500-6	160M	7.5	12.7	93.7	0.96	71.6	1.2	2.0	2	9
FTY11000-6	160L	11	18.5	94.3	0.96	105	1.2	2.0	2	9
FTY13000-6	180M	13	21.8	94.5	0.96	124	1.2	2.0	2	9
FTY15000-6	180L	15	25.1	94.7	0.96	143	1.2	2.0	2	9
FTY18500-6	200L	18.5	30.8	95.1	0.96	177	1.2	2.0	2.1	9
FTY22000-6	200L	22	36.5	95.4	0.96	210	1.2	2.0	2.1	9
FTY30000-6	225M	30	49.6	95.7	0.96	287	1.2	2.0	2	9
FTY37000-6	250M	37	61.1	95.9	0.96	353	1.2	2.0	2.1	9
FTY45000-6	280S	45	74.2	96.0	0.96	430	1.2	1.8	2.1	9
FTY55000-6	280M	55	90.6	96.1	0.96	525	1.2	1.8	2.1	9
FTY75000-6	215S	75	123.4	96.2	0.96	716	1.2	1.8	2	9
FTY90000-6	315M	90	148.1	96.2	0.96	860	1.2	1.8	2	9
FTY110000-6	315L	110	180.8	96.3	0.96	1050	1.2	1.8	2	9
FTY132000-6	315L	132	216.9	96.3	0.96	1261	1.2	1.8	2	9
FTY160000-6	355M	160	263.0	96.3	0.96	1528	1.2	1.8	1.9	9
FTY200000-6	355M	200	328.4	96.4	0.96	1910	1.2	1.8	1.9	9
FTY250000-6	355L	250	410.4	96.4	0.96	2388	1.2	1.8	1.9	9

技术性能参数 Technical performance data

型号	机座号	功率	额定电流	效率	功率因素	额定转矩	牵入转矩 额定转矩	失步转矩 额定转矩	堵转转矩 额定转矩	堵转电流 额定电流
		kW	A	%		N.m				
		同步转速 750r/min		380V/50Hz						
FTY2200-8	132S	2.2	3.9	90.0	0.96	28.0	1.2	2.0	1.9	9
FTY3000-8	132M	3	5.2	91.0	0.96	38.2	1.2	2.0	1.9	9
FTY4000-8	160M	4	6.9	91.8	0.96	50.9	1.2	2.0	1.9	9
FTY5500-8	160M	5.5	9.4	92.6	0.96	70.0	1.2	2.0	2	9
FTY7500-8	160L	7.5	12.7	93.2	0.96	95.5	1.2	2.0	2	9
FTY11000-8	180L	11	18.6	93.7	0.96	140	1.2	2.0	2	9
FTY15000-8	200L	15	25.2	94.2	0.96	191	1.2	2.0	2	9
FTY18500-8	225S	18.5	31.0	94.6	0.96	236	1.2	2.0	1.9	9
FTY22000-8	225M	22	36.7	94.9	0.96	280	1.2	2.0	1.9	9
FTY30000-8	250M	30	49.9	95.1	0.96	382	1.2	2.0	1.9	9
FTY37000-8	280S	37	61.4	95.3	0.96	471	1.2	2.0	1.9	9
FTY45000-8	280M	45	74.6	95.5	0.96	573	1.2	1.8	1.9	9
FTY55000-8	315S	55	91.1	95.6	0.96	700	1.2	1.8	1.8	9
FTY75000-8	315M	75	124.0	95.7	0.96	955	1.2	1.8	1.8	9

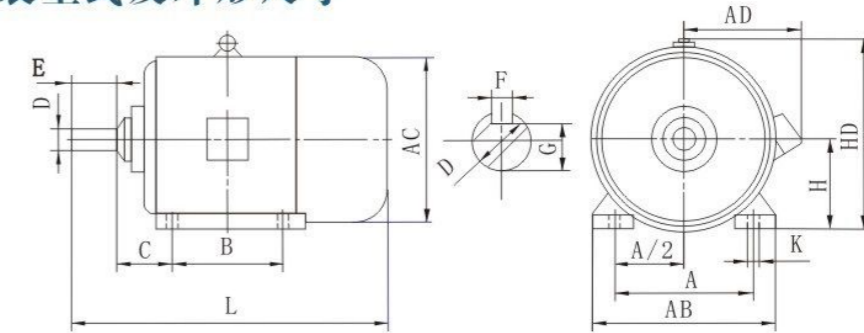
技术性能参数 Technical performance data

型号	机座号	功率	额定电流	效率	功率因素	额定转矩	牵入转矩 额定转矩	失步转矩 额定转矩	堵转转矩 额定转矩	堵转电流 额定电流
		kW	A	%		N.m				
		同步转速 750r/min		380V/50Hz						
FTY90000-8	315L	90	148.8	95.7	0.96	1146	1.2	1.8	1.8	9
FTY110000-8	315L	110	181.9	95.7	0.96	1401	1.2	1.8	1.8	9
FTY132000-8	315L	132	218.1	95.8	0.96	1681	1.2	1.8	1.8	9
FTY160000-8	355M	160	264.3	95.8	0.96	2037	1.2	1.8	1.8	9
FTY200000-8	355L	200	330.4	95.8	0.96	2547	1.2	1.8	1.8	9

技术性能参数 Technical performance data

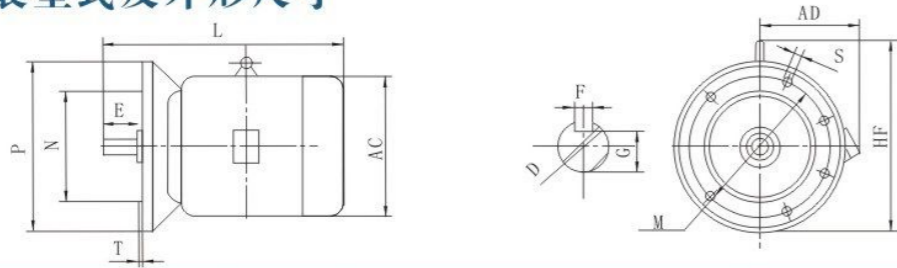
型号	机座号	功率	额定电流	效率	功率因素	额定转矩	牵入转矩 额定转矩	失步转矩 额定转矩	堵转转矩 额定转矩	堵转电流 额定电流
		kW	A	%		N.m				
		同步转速 600r/min		380V/50Hz						
FTY45000-10	315S	45	74.6	95.5	0.96	716	1.2	1.6	1.5	9
FTY55000-10	315M	55	91.1	95.6	0.96	875	1.2	1.6	1.5	9
FTY75000-10	315L	75	124.0	95.7	0.96	1194	1.2	1.6	1.5	9
FTY90000-10	315L	90	148.8	95.7	0.96	1433	1.2	1.6	1.5	9
FTY110000-10	355M	110	181.9	95.7	0.96	1751	1.2	1.6	1.3	9
FTY132000-10	355M	132	218.1	95.8	0.96	2101	1.2	1.6	1.3	9
FTY160000-10	355L	160	264.3	95.8	0.96	2547	1.2	1.6	1.3	9
		同步转速 500r/min		380V/50Hz						
FTY7500-12	225S	7.5	12.7	93.2	0.96	143	1.2	1.6	1.3	9
FTY11000-12	225S	11	18.6	93.7	0.96	210	1.2	1.6	1.3	9
FTY15000-12	225S	15	25.3	93.7	0.96	287	1.2	1.6	1.3	9
FTY22000-12	250M	22	36.7	94.9	0.96	420	1.2	1.6	1.3	9
FTY30000-12	250M	30	49.9	95.1	0.96	573	1.2	1.6	1.3	9

安装及外型尺寸 Mounting and outline dimensions
IMB3安装型式及外形尺寸



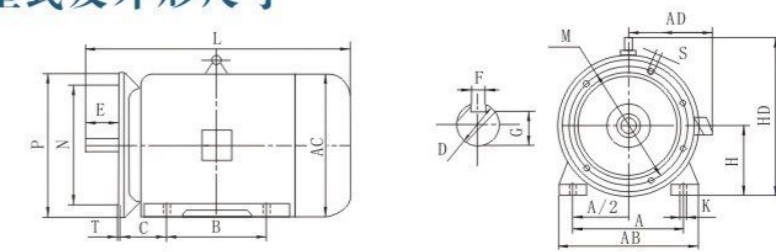
机座号 Frame Size	安装尺寸 / Rated Power (mm)											外形尺寸 / Rated Power (mm)								
	A	A/2	B	C	D		E		F		G		H	K	AB	AC	AD	HD	L	
					2P	4/6/8/ 10P	2P	4/6/8/ 10P	2P	4/6/8/ 10P	2P	10P							2P	4/6/8/ 10P
80M	125	62.5	100	50	19	40	6	15.5	80	10	165	175	150	175	290					
90S	140	70	100	56	24	50	20	90	180	195	160	195	315							
90L			125											340						
100L	160	80	140	63	28	60	8	24	100	12	205	215	180	245	380					
112M	190	95	140	70	38	80	10	33	132	15	245	240	190	265	400					
132S	216	108	140	89	38	80	10	33	132	15	280	275	210	315	475					
132M			178												515					
160M	254	127	210	108	42	110	12	37	160	15	330	335	265	385	605					
160L			254												650					
180M	279	139.5	241	121	48	110	14	42.5	180	15	355	380	285	430	670					
180L			279												710					
200L	318	159	305	133	55	16	49	200	395	420	315	475	775							
225S	356	178	286	149	60	140	18	53	225	19	435	475	345	530	820					
225M			311												55	60	110	140	16	18
250M	406	203	349	168	60	65	18	53	58	250	490	515	385	575	930					
280S	457	228.5	368	190	65	75	18	20	58	67.5	280	550	585	410	640	1000				
280M			419													1050				
315S	508	254	406	216	65	80	18	22	58	71	315	744	645	576	865	1240	1270			
315M			457													1310	1340			
315L	508	1310	1340																	
355M	610	305	560	254	75	95	20	25	67.5	86	355	730	710	655	1010	1660	1760			
355L			630																	

安装及外型尺寸 Mounting and outline dimensions IMB3安装型式及外形尺寸



机座号 Frame Size	安装尺寸/Rated Power(mm)														外形尺寸/Rated Power(mm)				
	D		E		F		G		M	N	P	S	n	T	AC	AD	HF	L	
	2P	4/6/8/10P	2P	4/6/8/10P	2P	4/6/8/10P	2P	4/6/8/10P										2P	4/6/8/10P
80M	19		40		6		15.5							175	150	185		290	
90S		24		50			20	165	130	200	12		3.5	195	160	195		315	
90L																		340	
100L					8									215	180	245		380	
112M		28		60			24	215	180	250		15	4	240	190	265		400	
132S													4					475	
132M	38		80		10		33	265	230	300				275	210	315		515	
160M																		605	
160L	42				12		37							335	265	385		650	
180M								300	250	350								670	
180L	48		110		14		42.5							380	285	430		710	
200L		55			16		49	350	300	400				420	315	480		775	
225S																		820	
225M	60		140		18		53				19		5	475	345	535		815 845	
250M		55	60	110	140	16	18	49	53									930	
280S																		1000	
280M	65	75		140		18	20	58	67.5				8	585	410	650		1050	
315S																		1240 1270	
315M		65	80			18	22	58	71	600	550	660		645	576	900		1310 1340	
315L				140	170								24					1310 1340	
355M																		1660 1760	
355L	75	95			20	25	67.5	86	740	680	800			710	655	1010		1660 1760	

安装及外型尺寸 Mounting and outline dimensions IMB3安装型式及外形尺寸



机座号 Frame Size	安装尺寸 /Rated Power(mm)														外形尺寸 /Rated Power(mm)												
	A	A/2	B	C	D		E		F		G		H	K	M	N	P	S	n	T	AB	AC	AD	HD	L		
					2P	4/6/8/10P	2P	4/6/8/10P	2P	4/6/8/10P	2P	4/6/8/10P													2P	4/6/8/10P	
80M	125	62.5	100	50	19		40		6		15.5	80									165	175	150	175		290	
90S																										315	
90L	140	70		100	56	24	50				20	90									180	195	160	195		340	
100L																										380	
112M	160	80	140	63					8			100									205	215	180	245		380	
112M					28		60				24				215	180	250									400	
132S	190	95	140	70								112	12					15			4	245	240	190	265		400
132S																										475	
132M	216	108		140	89	38	80		10	33	132			265	230	300					280	275	210	315		515	
160M																										605	
160L	254	127		210	108	42				12	37	160									330	335	265	385		650	
180M																										670	
180L	279	139.5		241	121	48	110		14	42.5	180										355	380	285	430		710	
200L																										775	
200L	318	159	305	133	55				16	49	200			350	300	400					395	420	315	475		775	
225S																										820	
225M																										820	
225M		286		60	140	18	53				19							19			5					815 845	
250M																										930	
280S																										1000	
280M																										1050	
315S																										1240 1270	
315M																										1310 1340	
315L																										1310 1340	
355M																										1660 1760	
355L																										1660 1760	