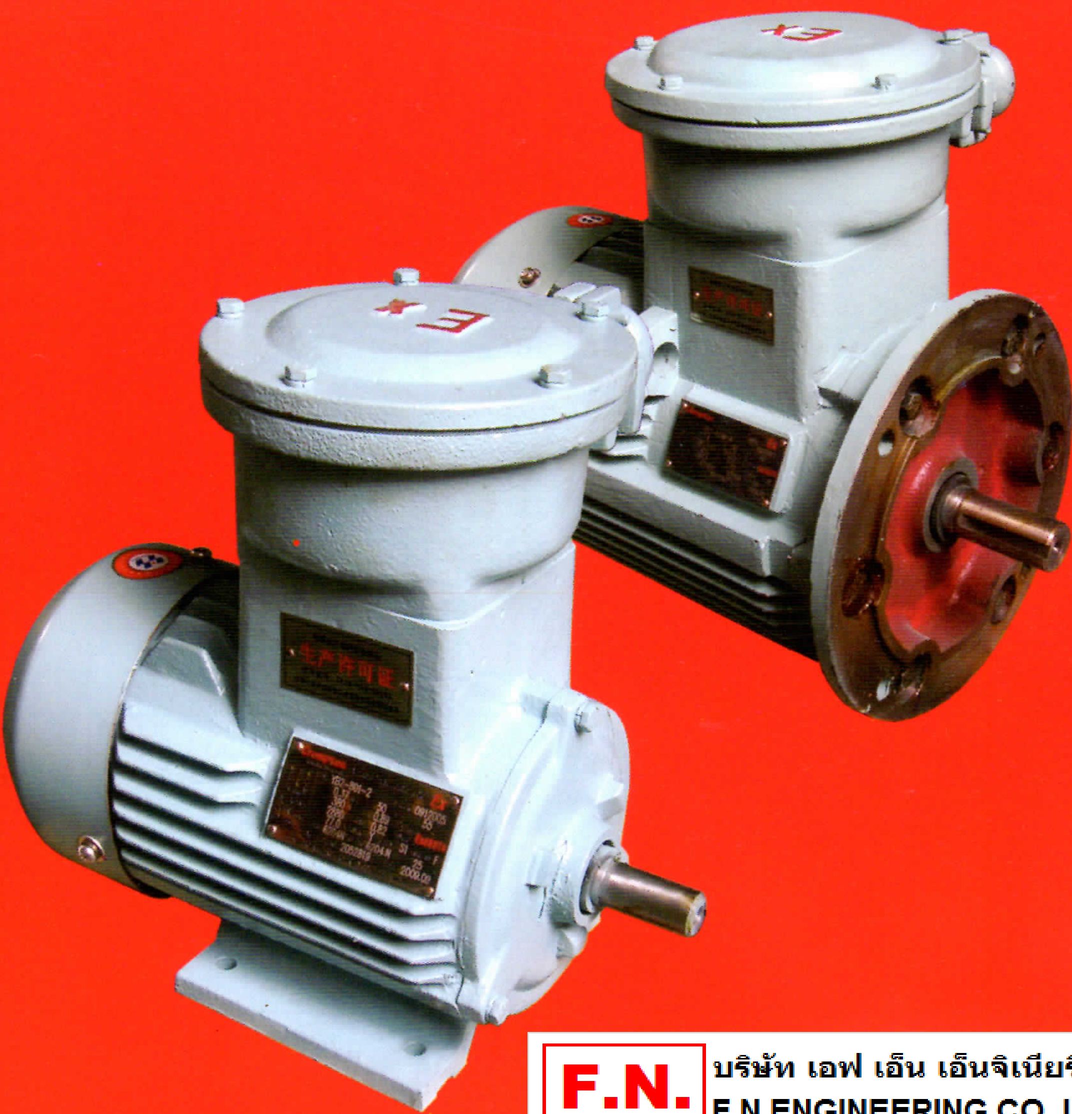
Crompton

Power Behind
The Drive



F.N.

บริษัท เอฟ เอ็น เอ็นจิเนียริ่ง จำกัด

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EXPLOSION-PROOF MOTOR

Three phase induction motor

Catalogue 2012

Explosion-proof

three phase induction motor

Crompton
Power Behind The Drive

General

Frame 63-355 Power 0.12-315 Kw Class F IE1 Application : Ideal for the coal mine where methane amd coal dust may be present (Ex d) and dangerous explosion areas (Ex d II AT4, d II BT4) in the plant with the class II A, II B and temperature T1~T4 flammable gas. T1 (450˚C), T2 (300˚C), T3 (200˚C), T4 (135˚C)

Features : all ratings Class I, Class II A & II B and Group T4, Cast iron conduit-box with three or six termminals for rubber jacket cable and steel conduit entry. Ambient temperature : -15˚C~35˚C in coal mine and -15˚C~40˚C in plant Power supply 380V, 660V, 380V/660V,

Performance Data

380V 50Hz,

Type	KW	Current	r/min	Eff. η%	Power Factor cos ϕ	Tst TN	Ist IN	Tmax TN
1500 r/min								
YB2-631-4	0.12	0.44	1310	58.0	0.72	2	4.0	2.2
YB2-632-4	0.18	0.62	1310	63.0	0.73	2	4.0	2.2
YB2-711-4	0.25	0.79	1330	66.0	0.74	2	4.0	2.2
YB2-712-4	0.37	1.12	1330	69.0	0.75	2	4.0	2.2
YB2-801-4	0.55	1.6	1390	71.0	0.75	2.4	5.0	2.3
YB2-802-4	0.75	2	1390	73.0	0.77	2.4	5.0	2.3
YB2-90S-4	1.1	2.9	1390	75.0	0.77	2.3	6.0	2.3
YB2-90L-4	1.5	3.7	1390	78.0	0.79	2.3	6.0	2.3
YB2-100L1-4	2.2	5.2	1410	80.0	0.81	2.3	6.0	2.4
YB2-100L2-4	3	6.8	1410	82.0	0.82	2.3	6.0	2.4
YB2-112M-4	4	8.8	1440	84.0	0.82	2.3	6.0	2.4
YB2-132S-4	5.5	11.8	1440	86.0	0.84	2.3	7.0	2.4
YB2-132M-4	7.5	15.6	1440	87.0	0.85	2.3	7.0	2.4
YB2-160M-4	11	22.3	1460	88.0	0.85	2.2	7.0	2.4
YB2-160L-4	15	30.1	1460	89.0	0.85	2.2	7.0	2.4
YB2-180M-4	18.5	36.1	1470	90.5	0.85	2.2	7.0	2.3
YB2-180L-4	22	42.7	1470	91.2	0.85	2.2	7.0	2.3
YB2-200L-4	30	57.6	1470	92.0	0.85	2.2	7.2	2.4
YB2-225S-4	37	69.9	1475	92.5	0.87	2.2	7.2	2.4
YB2-225M-4	45	84.7	1475	92.8	0.87	2.2	7.2	2.4
YB2-250M-4	55	103	1480	93.0	0.87	2.2	7.2	2.4
YB2-280S-4	75	140	1480	93.8	0.87	2.2	7.2	2.4
YB2-280M-4	90	167	1480	94.2	0.87	2.2	7.2	2.4
YB2-315S-4	110	201	1480	94.5	0.89	2.1	7.0	2.4
YB2-315M-4	132	240	1480	94.8	0.89	2.1	7.0	2.4
YB2-315L1-4	160	288	1480	95.0	0.90	2.1	7.0	2.4
YB2-315L2-4	200	359	1480	95.2	0.90	2.1	7.0	2.4
YB2-355S1-4	185	330	1490	95.0	0.90	2.1	7.0	2.4
YB2-355S2-4	200	356	1490	95.2	0.90	2.1	7.0	2.3
YB2-355M1-4	220	443	1490	95.2	0.90	2.1	7.0	2.4
YB2-355M2-4	250	442	1490	95.5	0.90	2.1	7.0	2.4
YB2-355L1-4	280	495	1490	95.5	0.90	2.1	7.0	2.4
YB2-355L2-4	315	556	1490	95.6	0.90	2.1	7.0	2.4

Explosion-proof
three phase induction motor

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Performance Data

380V 50Hz,

Type	KW	Current	r/min	Eff. $\eta\%$	Power Factor $\cos\phi$	Tst TN	Ist IN	Tmax TN
3000 r/min								
YB2-631-2	0.18	0.53	2720	66.0	0.80	2.2	5.0	2.3
YB2-632-2	0.25	0.69	2720	68.0	0.81	2.2	5.0	2.3
YB2-711-2	0.37	0.99	2740	70.0	0.81	2.2	5.5	2.3
YB2-712-2	0.55	1.4	2740	73.0	0.83	2.2	5.5	2.3
YB2-801-2	0.75	1.8	2845	75.0	0.83	2.2	6.0	2.3
YB2-802-2	1.1	2.6	2845	78.0	0.84	2.2	6.0	2.3
YB2-90S-2	1.5	3.4	2840	79.0	0.84	2.2	7.0	2.3
YB2-90L-2	2.2	4.9	2840	81.0	0.85	2.2	7.0	2.3
YB2-100L-2	3	6.3	2860	83.0	0.88	2.2	7.0	2.3
YB2-112M-2	4	8.1	2880	85.0	0.88	2.2	7.0	2.3
YB2-132S1-2	5.5	11	2900	85.0	0.88	2.2	7.5	2.3
YB2-132S2-2	7.5	14.9	2900	87.0	0.88	2.2	7.5	2.3
YB2-160M1-2	11	21.3	2930	88.0	0.88	2.2	7.5	2.4
YB2-160M2-2	15	28.8	2930	89.0	0.89	2.2	7.5	2.4
YB2-160L-2	18.5	34.7	2930	89.0	0.89	2.0	7.5	2.3
YB2-180M-2	22	41.0	2940	90.5	0.90	2.0	7.5	2.4
YB2-200L1-2	30	55.5	2950	91.2	0.90	2.0	7.5	2.4
YB2-200L2-2	37	67.9	2950	92.0	0.90	2.0	7.5	2.3
YB2-225M-2	45	82.3	2960	92.5	0.90	2.0	7.5	2.3
YB2-250M-2	55	100	2965	92.5	0.90	2.1	7.5	2.3
YB2-280S-2	75	135	2970	93.2	0.91	2.0	7.5	2.3
YB2-280M-2	90	160	2970	93.8	0.91	2.1	7.5	2.3
YB2-315S-2	110	195	2975	94.0	0.91	1.8	7.0	2.3
YB2-315M-2	132	233	2975	94.5	0.91	1.8	7.0	2.3
YB2-315L1-2	160	279	2975	94.6	0.92	1.8	7.0	2.3
YB2-315L2-2	200	348	2975	94.8	0.92	1.8	7.0	2.3
YB2-355S1-2	185	323	2980	94.6	0.92	1.8	7.0	2.3
YB2-355S2-2	200	348	2980	94.8	0.92	1.8	7.0	2.3
YB2-355M1-2	220	383	2980	94.8	0.92	1.6	7.0	2.4
YB2-355M2-2	250	433	2980	95.3	0.92	1.6	7.0	2.4
YB2-355L1-2	280	485	2980	95.3	0.92	1.6	7.0	2.4
YB2-355L2-2	315	544	2980	95.6	0.92	1.6	7.0	2.4

1000 r/min

YB2-711-6	0.18	0.74	850	62.0	0.66	1.9	4.0	2.1
YB2-712-6	0.25	0.95	850	63.0	0.68	1.9	4.0	2.1
YB2-801-6	0.37	1.3	850	63.0	0.70	1.9	4.0	2.1
YB2-802-6	0.55	1.8	885	66.0	0.72	1.9	4.0	2.1
YB2-90S-6	0.75	2.3	910	69.0	0.72	2.1	4.0	2.1
YB2-90L-6	1.1	3.2	910	73.0	0.73	2.1	5.0	2.1

Explosion-proof
three phase induction motor

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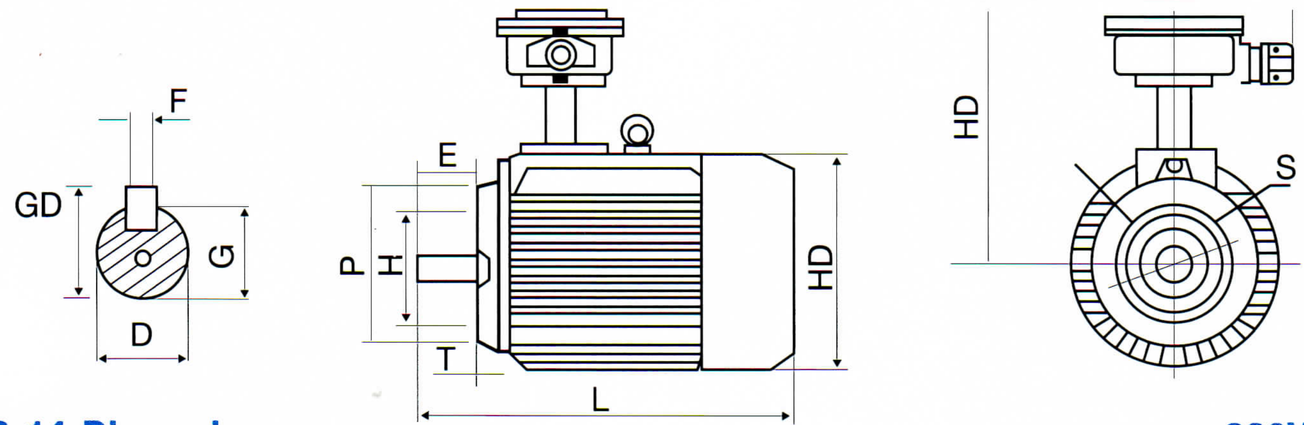
Performance Data

380V 50Hz,

Type	KW	Current	r/min	Eff.	Power Factor	Tst	Ist	Tmax
				η%	cos φ	TN	IN	TN
				1000 r/min				
YB2-100L-6	1.5	3.9	920	76.0	0.76	2.1	5.0	2.1
YB2-112M-6	2.2	5.6	935	79.0	0.76	2.1	5.0	2.1
YB2-132S-6	3	7.4	960	81.0	0.77	2.1	6.0	2.4
YB2-132M1-6	4	9.8	960	83.0	0.78	2.1	6.0	2.4
YB2-132M2-6	5.5	12.9	965	85.0	0.78	2.1	6.5	2.4
YB2-160M-6	7.5	17.2	970	86.0	0.79	2.1	6.5	2.4
YB2-160L-6	11	24.5	970	87.0	0.79	2.1	6.5	2.4
YB2-180L-6	15	31.6	970	89.0	0.81	2.1	7.0	2.1
YB2-200L1-6	18.5	38.6	980	90.0	0.83	2.2	7.0	2.4
YB2-200L2-6	22	44.7	980	90.0	0.83	2.2	7.0	2.4
YB2-225M-6	30	59.3	980	92.0	0.86	2.1	7.0	2.4
YB2-250M-6	37	71.1	980	92.0	0.86	2.1	7.0	2.4
YB2-280S-6	45	85.9	980	92.5	0.86	2.1	7.0	2.4
YB2-280M-6	55	105	980	92.8	0.86	2.1	7.0	2.3
YB2-315S-6	75	142	985	93.5	0.86	2.0	7.0	2.2
YB2-315M-6	90	170	985	93.8	0.86	2.0	7.0	2.2
YB2-315L1-6	110	207	985	94.0	0.86	2.0	7.0	2.2
YB2-315L2-6	132	245	985	94.2	0.87	2.0	7.0	2.2
YB2-355S-6	160	292	990	94.5	0.88	2.0	7.0	2.2
YB2-355M1-6	185	338	990	94.5	0.88	2.0	7.0	2.2
YB2-355M2-6	200	365	990	94.7	0.88	2.0	7.0	2.2
YB2-355L1-6	220	401	990	94.7	0.88	2.0	7.0	2.2
YB2-355L2-6	250	455	990	95.0	0.88	2.0	7.0	2.2



B 14 Dimension mm.

380V 50Hz,

Frame	Pole	Mounting Dimenson										Flange Holes	Overall Dimension		
		D	E	F	G	GD	M	N	P	S	T		AC	AD	L
80	2,4,6,8	19	40	6	15.5	21.5	100	80	120	M6	3	4	165	240	330
90S	2,4,6,8	24	50	8	20	27	115	95	140	M8	3	4	180	260	360
90L	2,4,6,8	24	50	8	20	27	115	95	140	M8	3	4	180	260	385
100L	2,4,6,8	28	60	8	24	31	130	110	160	M8	3.5	4	205	300	440
112M	2,4,6,8	28	60	8	24	31	130	110	160	M8	3.5	4	230	310	460

Explosion-proof
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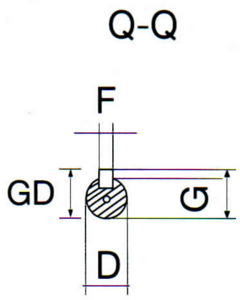

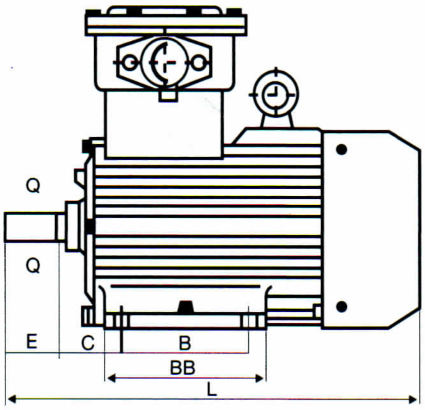

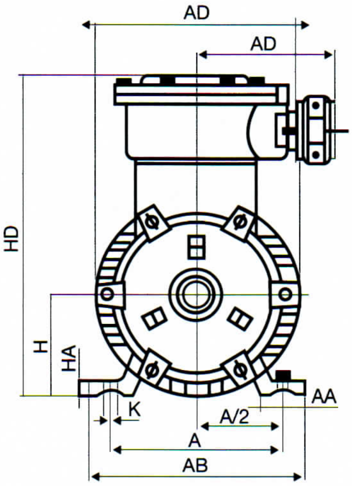

B3 Dimensions mm.

Frame	Pole	Mounting Dimension										Overall Dimension							
		A	B	C	D	E	F	G	GD	H	K	AA	BB	HA	AB	AC	AD	HD	L
80M	2,4,6,8	125	100	50	19	40	6	15.5	21.5	80	10	34	130	10	165	165	180	320	330
90S	2,4,6,8	140	100	56	24	50	8	20	27	90	10	36	130	14	180	180	180	350	360
90L	2,4,6,8	140	125	56	24	50	8	20	27	90	10	36	155	14	180	180	180	350	385
100L	2,4,6,8	160	140	63	28	60	8	24	31	100	12	40	176	14	200	205	180	400	440
112M	2,4,6,8	190	140	70	28	60	8	24	31	112	12	50	180	16	245	230	200	420	460
132S	2,4,6,8	216	140	89	38	80	10	33	41	132	12	60	190	18	280	270	200	450	510
132M	2,4,6,8	216	178	89	38	80	10	33	41	132	12	60	230	18	280	270	200	450	550
160M	2,4,6,8	254	210	108	42	110	12	37	45	160	15	70	258	21	330	325	220	520	670
160L	2,4,6,8	254	254	108	42	110	12	37	45	160	15	70	302	21	330	325	220	520	710
180M	2,4,6,8	279	241	121	48	110	14	42.5	51.5	180	15	70	311	22	355	360	220	550	730
180L	2,4,6,8	279	279	121	48	110	14	42.5	51.5	180	15	70	349	22	355	360	220	550	750
200L	2,4,6,8	318	305	133	55	110	16	49	59	200	19	70	366	25	390	400	250	645	805
225S	4,8	356	286	149	60	140	18	53	64	225	19	75	355	28	435	450	250	690	865
225M	2	356	311	149	55	110	16	49	59	225	19	75	388	28	435	450	250	690	860
	4,6,8				60	140	18	53	64										890
250M	2	406	349	168	60	140	18	53	64	250	24	80	420	30	490	500	300	730	945
	4,6,8				65	140	18	58	69										
280S	2	457	368	190	65	140	18	58	69	280	24	85	438	35	545	560	300	810	1010
	4,6,8				75		20	67.5	79.5										
280M	2	457	419	190	65	140	18	58	69	280	24	85	489	35	545	560	300	810	1060
	4,6,8				75	140	20	67.5	79.5										
315S	2	508	406	216	65	140	18	58	69	315	28		570		640	630	400	1020	1320
	4,6,8,10				80	170	22	71	85										1350
315M	2	508	457	216	65	140	18	58	69	315	28	120	680	45	640	630	400	1020	1350
	4,6,8,10				80	170	22	71	85										1380
315L	2	508	508	216	65	140	18	58	69	315	28				640	630	400	1020	1490
	4,6,8,10				80	170	22	71	85										1520
355S	2	610	500	254	75	140	20	67.5	79.5	355	28				740	750	500	1080	1570
	4,6,8,10				95	170	25	86	100										
355M	2	610	560	254	75	140	20	67.5	100	355	28	116	800	50	740	750	500	1080	1650
	4,6,8,10				95	170	25	86	79.5										
355L	2	610	630	254	75	140	20	67.5	100	355	28				740	750	500	1080	1750
	4,6,8,10				95	170	25	86	79.5										

Explosion-proof

three phase induction motor

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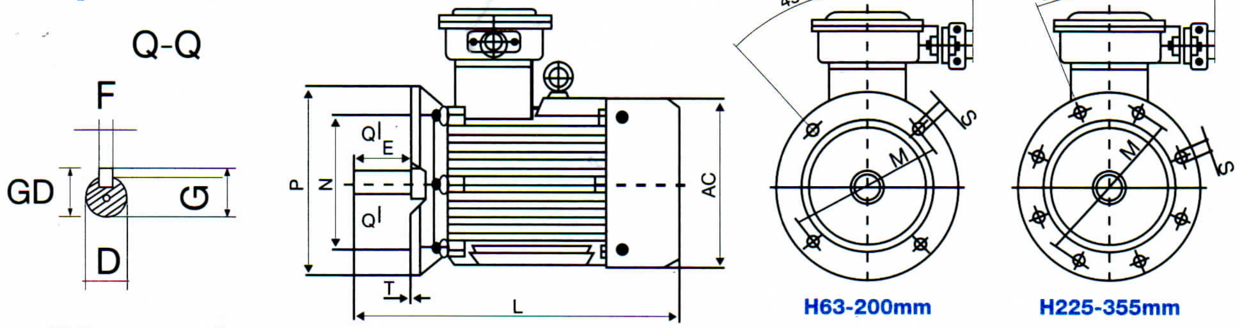
Power Behind The Drive



B5 Dimensions mm.

Frame	Series	Pole	Mounting Dimension										Flange Holes	Overall Dimension			
			D	E	F	G	GD	M	N	P	S	T		AC	AD	L B3	L B5
80M	FF165	2,4,6,8	19	40	6	15.5	21.5	165	130	200	12	3.5	4	165	240	330	375
90S	FF165	2,4,6,8	24	50	8	20	27	165	130	200	12	3.5	4	180	260	360	405
90L	FF165	2,4,6,8	24	50	8	20	27	165	130	200	12	3.5	4	180	260	385	430
100L	FF215	2,4,6,8	28	60	8	24	31	215	180	250	15	4	4	205	300	440	485
112M	FF215	2,4,6,8	28	60	8	24	31	215	180	250	15	4	4	230	310	460	520
132S	FF265	2,4,6,8	38	80	10	33	41	265	230	300	15	4	4	270	320	510	590
132M	FF265	2,4,6,8	38	80	10	33	41	265	230	300	15	4	4	270	320	550	630
160M	FF300	2,4,6,8	42	110	12	37	45	300	250	350	19	5	4	325	360	655	730
160L	FF300	2,4,6,8	42	110	12	37	45	300	250	350	19	5	4	325	360	695	770
180M	FF300	2,4,6,8	48	110	14	42.5	51.5	300	250	350	19	5	4	360	370	730	800
180L	FF300	2,4,6,8	48	110	14	42.5	51.5	300	250	350	19	5	4	360	370	750	820
200L	FF350	2,4,6,8	55	110	16	49	59	350	300	400	19	5	4	400	445	805	875
225S	FF400	4,8	60	140	18	53	64	400	350	450	19	5	8	450	465	865	935
225M	FF400	2	55	110	16	49	59	400	350	450	19	5	8	450	465	860	930
		4,6,8	60	140	18	53	64									890	960
250M	FF500	2	60	140	18	53	64	500	450	550	19	5	8	500	500	945	1035
		4,6,8	65	140	18	58	69										
280S		2	65	140	18	58	69	500	450	550	19	5	8	560	550	1010	1100
		4,6,8	75	140	20	67.5	79.5										
280M		2	65	140	18	58	69	500	450	550	19	5	8	560	550	1060	1150
		4,6,8	75	140	20	67.5	79.5										
315S	FF600	2	65	140	18	58	69	600	550	660	24	6	8	630	705		1340
		4,6,8,10	80	170	22	71	85										1370
315M		2	65	140	18	58	69	600	550	660	24	6	8	630	705		1420
		4,6,8,10	80	170	22	71	85										1450
315L		2	65	140	18	58	69	600	550	660	24	6	8	630	705		1510
		4,6,8,10	80	170	22	71	85										1540
355S	FF740	2	75	140	20	67.5	79.5	740	680	800	24	6	8	750	725		1600
		4,6,8,10	95	170	25	86	100										
355M		2	75	140	20	67.5	100	740	680	800	24	6	8	750	725		1600
		4,6,8,10	95	170	25	86	79.5										
355L		2	75	140	20	67.5	100	740	680	800	24	6	8	750	725		1780
		4,6,8,10	95	170	25	86	79.5										