

# HYOSUNG IE2 SUPREME MOTOR

## Reliability 1<sup>st</sup> Induction Motor

Hyosung Supreme Motor has the robust structure with high quality materials and durable bearings.

Hyosung Supreme Motor can enhance the reliability of rotating machines and also save the maintenance cost.



### Korea's No.1 electric motor manufacturer

Hyosung is a professional manufacturer of electric motors, meeting IEC, NEMA, KS, and JIS standard. It has systemized manufacturing facilities to produce more than 40,000 units monthly such as low voltage to medium & high voltage, IE1 to IE4, explosion-proof, DC and synchronous motors, which are optimized for various purposes and customers.

Hyosung is also providing high-speed industrial generators, gears, geared motors and other industrial equipment. Hyosung's high-quality products are widely used in steel, oil & gas, cement, power, water treatment, agriculture, HVAC, and etc.

### Always by your side

Hyosung works in a variety of industrial and technology areas that make your lifestyle more convenient and more comfortable such as spandex, tire codes, ATM, films, plastic, power transmission. You may not know us, but we are always working for you.

# Performance Data

kW	Speed (RPM)	Frame Size	Rated Torque (Nm)	Rated Current (A)			Efficiency at Load (%)			Power Factor at Load (%)			Starting Current (%FLC)	Starting Torque (%FLT)	Break down Torque (%FLT)	Moment (kgm <sup>2</sup> )	Weight B3 (kg)
				380V	400V	415V	100%	75%	50%	100%	75%	50%					
0.75	2865	80M	2.5	1.7	1.6	1.6	80.6	79.4	77.2	0.83	0.77	0.67	610	220	230	0.0008	17
	1420	80M	5.2	1.8	1.7	1.7	82.4	80.4	78.4	0.76	0.71	0.66	600	240	230	0.0021	19
	940	90L	7.9	2	1.9	1.9	77.8	76.8	74.8	0.72	0.67	0.62	550	250	250	0.0029	24
1.1	2865	80M	3.7	2.4	2.3	2.2	83.5	84.9	83.5	0.83	0.76	0.64	770	300	320	0.008	17
	1420	90L	7.5	2.6	2.5	2.4	84	84.8	83.3	0.76	0.65	0.5	680	300	320	0.0262	23
	940	90L	11.4	2.9	2.7	2.6	81.5	80	77	0.71	0.6	0.48	566	245	270	0.0618	26
1.5	2875	90L	5	3.3	3.1	3	84.8	85.9	84.8	0.82	0.71	0.57	788	300	320	0.0096	23
	1420	90L	10.2	3.4	3.3	3.2	85.1	86.1	85.5	0.78	0.68	0.55	690	300	320	0.0389	28
	930	100L	15.3	3.6	3.5	3.3	82.6	83	81.5	0.76	0.72	0.6	587	230	250	0.107	34
2.2	2865	90L	7.4	4.6	4.4	4.2	85.7	86.5	85.5	0.85	0.77	0.65	805	300	320	0.0077	26
	1440	100L	14.7	4.8	4.6	4.4	86.5	86.7	85.6	0.8	0.72	0.58	747	275	320	0.0432	35
	955	112M	22.2	5.3	5	4.9	84.1	84	82	0.75	0.67	0.55	578	230	250	0.096	42
3	2860	100L	10	6	5.7	5.5	86.8	88.5	89.1	0.88	0.86	0.78	800	300	330	0.016	34
	1460	100L	19.9	6.5	6.2	5.9	87.5	87.6	86	0.81	0.68	0.55	750	275	320	0.0539	37
	965	132S	29.8	6.9	6.5	6.3	86.6	87.6	83	0.77	0.75	0.63	646	230	250	0.3568	62
4	2880	112M	13.3	7.7	7.3	7	87.9	89.2	88.9	0.9	0.9	0.85	760	270	320	0.0278	41
	1445	112M	26.5	8.5	8.1	7.8	88.5	88.7	87.3	0.81	0.74	0.61	675	265	320	0.0733	45
	970	112M	39.6	9.1	8.7	8.3	86.2	85	83.2	0.78	0.73	0.6	672	230	260	0.4469	73
5.5	2925	132S	18.1	10.6	10.1	9.7	88.9	89.9	87.1	0.89	0.87	0.79	790	220	330	0.0575	62
	1455	132S	36.3	11.5	10.9	10.5	89.4	89.9	89.3	0.82	0.75	0.64	720	230	310	0.1647	66
	960	132M	54.7	12.3	11.7	11.2	87.3	86	84	0.78	0.77	0.66	627	210	260	0.5615	80
7.5	2925	132S	24.6	14.5	13.7	13.2	89.8	90	88.5	0.84	0.84	0.74	798	220	330	0.0668	67
	1460	132M	49.4	15.2	14.4	13.9	90.3	90.9	90.3	0.84	0.77	0.65	741	230	330	0.2368	77
	970	160M	73.8	16.4	15.6	15	89.1	89	87	0.78	0.75	0.64	637	220	260	1.0405	122
11	2945	160M	35.8	20.6	19.5	18.8	90.9	90.8	89.2	0.9	0.88	0.82	775	200	320	0.2039	110
	1465	160M	71.6	21.8	20.7	20	91	91.6	91	0.84	0.82	0.75	723	210	280	0.5804	118
	975	160L	108	23.8	22.6	21.8	89.6	90.5	89	0.79	0.73	0.63	694	245	265	1.408	140
15	2940	160M	48.8	27.8	26.4	25.5	91.5	92	91.1	0.9	0.89	0.84	770	200	320	0.241	120
	1470	160L	97.8	29	27.6	26.6	92	92.4	91.7	0.86	0.82	0.72	755	220	295	0.7429	134
	970	180L	147.7	31.3	29.7	28.6	90.7	90.7	89.5	0.81	0.76	0.72	650	220	250	2.191	177
18.5	2935	160L	60.3	34	32.4	31.2	91.8	91.9	91	0.9	0.88	0.82	755	200	310	0.2115	135
	1470	180M	120.2	35.3	33.5	32.3	92.4	92.6	91.7	0.87	0.83	0.73	742	220	310	0.682	169
	975	180L	181.7	38	36.1	34.8	90.9	90.1	89.5	0.82	0.78	0.69	675	220	250	1.9695	218
22	2950	180M	71.3	40	38	36.7	92.3	92.1	90.5	0.91	0.89	0.82	798	225	330	0.286	171
	1470	180L	142.9	42	39.9	38.5	92.8	93.1	92.5	0.86	0.82	0.72	729	210	290	0.759	183
	975	200L	216	43.8	41.6	40.1	92	90.9	90	0.83	0.8	0.71	660	215	250	2.232	229
30	2950	200L	97.1	54	51.2	49.4	93.1	93.1	92	0.91	0.92	0.88	755	210	310	0.4785	227
	1470	200L	177.9	55.2	52.5	50.6	93.3	93.5	92.9	0.89	0.9	0.85	698	220	270	1.356	241
	980	225S	292.3	58.8	55.9	53.9	92.3	91.5	90.1	0.84	0.82	0.75	645	200	220	3.4235	291
37	2950	200L	119.8	66.2	63	60.7	93.4	93	92	0.91	0.91	0.88	758	200	315	0.535	241
	1475	225S	219	69.2	65.7	63.4	93.7	93.8	93.2	0.87	0.85	0.78	695	195	260	2.153	289
	985	250M	359.5	69.8	66.3	63.9	93.1	93.1	90.2	0.87	0.85	0.75	703	205	225	5.2635	380
45	2965	225S	144.8	80.5	76.4	73.7	93.8	93.6	92.5	0.91	0.9	0.86	748	260	300	0.89	312
	1475	225S	290.8	83.7	79.5	76.6	94	94.2	93.7	0.87	0.86	0.8	706	190	265	2.4845	324
	985	280S	437.4	85.5	81.2	78.3	93.6	93	91	0.86	0.85	0.76	703	205	225	8.699	482
55	2970	250M	176.8	97.8	92.8	89.5	94.4	94.5	93.5	0.91	0.89	0.84	810	190	300	1.2235	381
	1480	250M	354.9	101.2	96.1	92.6	94.4	94.6	94	0.88	0.86	0.81	730	200	280	3.53	390
	984	280M	534.9	103.8	98.8	95.3	94	94	91.5	0.86	0.83	0.75	689	160	215	10.413	543
75	2975	280S	240.9	133.7	126.8	122.1	94.7	94.5	93.5	0.9	0.9	0.86	697	190	285	1.7495	518
	1485	280S	483.1	136.4	129.5	124.7	95	95.1	94.4	0.88	0.88	0.83	713	200	280	4.2175	513
	984	315S	729.3	141	133.9	129	94.6	94.8	92	0.86	0.83	0.76	694	160	215	21.755	888
90	2980	280M	288.9	159.2	151.2	145.9	95.2	95	93.9	0.91	0.88	0.82	780	220	300	2	555
	1485	280M	578.7	163.3	155.2	149.5	95.2	95.3	94.8	0.88	0.89	0.83	719	200	280	5.616	606
	985	315M	872.5	167.7	159.4	153.6	94.8	94.9	92.1	0.86	0.83	0.76	695	170	215	25.29	967
110	2975	315S	352.8	193.7	183.9	177.5	95.2	94.8	93.7	0.91	0.9	0.87	675	180	270	3.415	925
	1485	315S	707.4	199.2	189.2	182.3	95.4	95.1	94.1	0.88	0.87	0.8	670	200	270	11.985	931
	985	315L	1066.5	204.3	194.2	187.2	95.1	95.3	92.5	0.86	0.84	0.77	695	160	210	28.875	1,088
132	2975	315M	423.4	232.2	220.4	212.4	95.4	95.1	93.9	0.91	0.9	0.87	655	170	250	5.285	980
	1485	315M	848.8	239.3	227.3	219.1	95.4	95.2	94	0.88	0.87	0.81	650	190	260	13.99	1,014
	985	315L	1279.8	243.3	231.1	222.9	95.3	95.4	93.6	0.87	0.85	0.78	697	165	210	30.76	1,180
160	2975	315L	513.2	279	265.5	255.6	95.7	95.4	94.2	0.91	0.89	0.84	722	180	240	6.065	1,085
	1485	315L	1029	286.9	272.6	262.7	95.8	95.6	94.2	0.89	0.85	0.8	690	190	260	16.225	1,140
	985	355M	1547.3	290.3	276	266	95.7	94.8	93.5	0.88	0.85	0.78	699	150	210	48.8	1,585

## Special Features



### Standard

Hyosung Reliability 1<sup>st</sup> motors comply with the relevant parts of EN60034, IEC60072.



### High-quality Insulation

The Hyosung motors windings are rated to class F (155 °C) with a class B (130 °C) temperature rise. Hyosung Ultra Insulation<sup>®</sup> technology protects windings and extends the life of motors.



### Robust Bearing

Hyosung only uses the world's leading bearing brand (Japanese, German) that can sustain some axial & radial loads to have lower friction, noise and vibration.



### Low Vibration

The combination of precision manufacturing, high-end components and quality control makes the low vibration.



### Mounting

Foot Mounted(B3), Flange mounted(B5), Foot Mounted with Flange(B35) and other mounting can be supplied by optional requests.



### Genuine IP55

Hyosung genuine IP55 enclosures that demonstrate almost complete protection from particles and a good level of protection against water.

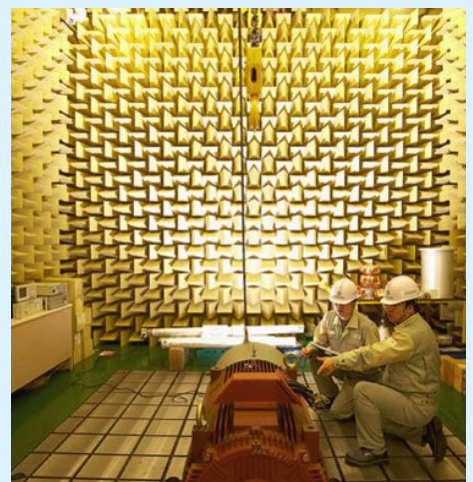


### Coating

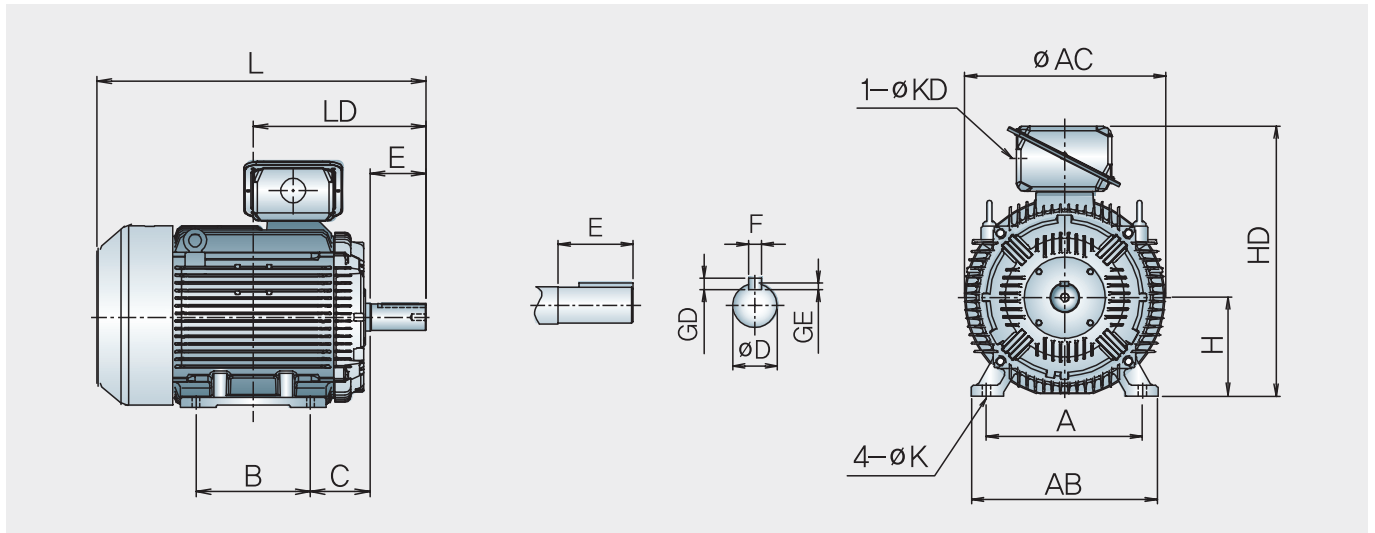
Hyosung paint color for motors is Munsell No. 0.5PB 3.2/4.4. Castings are coated with quality primer and urethane top coat. The dry film thickness of top coat is approximately 100 µm.

## General Specifications

Item	Specification
Frame material	Cast Iron (Fan hood : Steel)
Enclosure	TEFC
IP	55
Voltage	Up to 2.2kW : 220/240V(Δ), 380/415V(Y) From 3.0kW : 380/415V(Δ), 660/690(Y)
Frequency	50Hz
Insulation	Class F
Temperature rising	Class B
Bearing brand	NSK (Japan), FAG (Germany)
Re-greasing	From 200 Fr
Thermistors	80 to 355 Fr. with 3 X Thermistors (Optional)
Paint	Munsell 0.5PB 3.2/4.4



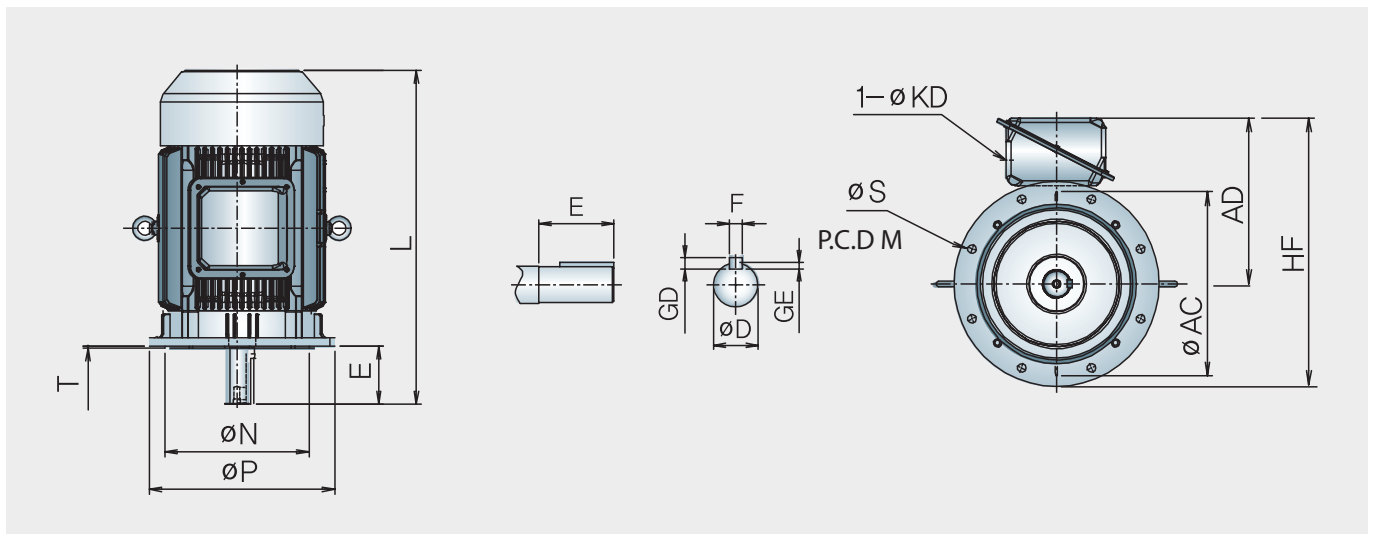
# Outline Drawing & Dimension



## Foot mounted type (B3)

Unit: mm

Output Power (kW)			Frame No.	General Dimension								Hole		Shaft Dimension				Bearing		
2P	4P	6P		A	AB	øAC	B	C	H	HD	L	øK	øKD	øD	E	F	GD	GE	DE	NDE
0.75 / 1.1	0.75	-	80M	125	150	174	100	50	80	254	273	10	1-M25	19	40	6	6	3.5	6204ZZ	6203ZZ
1.5	1.1	0.75	90S	140	167	199	100	56	90	274	315	10	1-M25	24	50	8	7	4	6205ZZ	6204ZZ
2.2	1.5	1.1	90L	140	167	199	125	56	90	274	335	10	1-M25	24	50	8	7	4	6205ZZ	6204ZZ
3	2.2 / 3	1.5	100L	160	196	220	140	63	100	295	372	12	1-M32	28	60	8	7	4	6206ZZ	6205ZZ
4	4	2.2	112M	190	226	244	140	70	112	315	377	12	1-M32	28	60	8	7	4	6206ZZ	6205ZZ
5.5 / 7.5	5.5	3	132S	216	264	284	140	89	132	355	480	12	1-M32	38	80	10	8	5	6208ZZ	6206ZZ
-	7.5	4 / 5.5	132M	216	264	284	178	89	132	355	480	12	1-M32	38	80	10	8	5	6208ZZ	6206ZZ
11 / 15	11	7.5	160M	254	311	326	210	108	160	465	585	15	1-M40	42	110	12	8	5	6309ZZ	6307ZZ
18.5	15	11	160L	254	311	326	254	108	160	455	630	15	1-M40	42	110	12	8	5	6309ZZ	6307ZZ
22	18.5	-	180M	279	353	374	241	121	180	505	655	15	1-M40	48	110	14	9	5.5	6311ZZ	6209ZZ
-	22	15	180L	279	353	374	279	121	180	520	685	15	1-M40	48	110	14	10	6	6212ZZ	6212ZZ
30 / 37	-	-	200L	318	382	404	305	133	200	550	780	19	1-M50	55	110	16	10	6	6212ZC3	6212ZC3
-	30	18.5 / 22	200L	318	382	404	305	133	200	550	780	19	1-M50	55	110	16	10	6	6313ZC3	6212ZC3
-	37	-	225S	356	426	457	286	149	225	685	825	19	1-M50	60	140	18	11	7	6312C3	6312C3
45	-	-	225M	356	435	457	311	149	225	685	820	19	1-M50	55	110	16	10	6	6312C3	6312C3
-	45	30	225M	356	435	457	311	149	225	685	845	19	1-M50	60	140	18	11	7	6314C3	6312C3
55	-	-	250M	406	500	512	349	168	250	730	910	24	1-M63	60	140	18	10	6	6313C3	6313C3
-	55	37	250M	406	500	512	349	168	250	730	940	24	1-M63	65	140	18	12	7.5	6313C3	6313C3
75	-	-	280S	457	550	578	368	190	280	810	1000	24	1-M63	65	140	18	10	6	6316C3	6316C3
-	75	45	280S	457	550	578	368	190	280	810	1060	24	1-M63	75	140	20	14	9	6319C3	6316C3
90	-	-	280M	457	550	578	419	190	280	810	1055	24	1-M63	65	140	18	10	6	6316C3	6316C3
-	90	55	280M	457	550	578	419	190	280	810	1115	24	1-M63	75	140	20	14	9	6319C3	6316C3
110	-	-	315S	508	628	578	406	216	315	845	1235	28	1-M63	65	140	18	12	7.5	6316C3	6316C3
-	110	75	315S	508	628	578	406	216	315	845	1265	28	1-M63	80	170	22	14	9	6222C3	6316C3
132	-	-	315M	508	628	578	457	216	315	845	1235	28	1-M63	65	140	18	12	7.5	6316C3	6316C3
-	132	90	315M	508	628	578	457	216	315	845	1265	28	1-M63	80	170	22	14	9	6222C3	6316C3
160 / 200	-	-	315L	508	628	578	508	216	315	1110	1695	28	1-M63	65	140	18	12	7.5	6316C3	6316C3
-	160 / 200	110 / 132	315L	508	628	578	508	216	315	1106	1515	28	1-M63	80	170	22	14	9	6222C3	6316C3
-	-	160 / 200	315L	508	628	578	508	216	315	1106	1515	28	1-M63	80	170	22	14	9	6222C3	6316C3



## Flange mounted type (B5)

Unit: mm

Output Power (kW)			Frame No.	Flange Dimension							Hole		Shaft Dimension				Bearing		
2P	4P	6P		M	øN	øP	T	øAC	AD	L	øS	øKD	øD	E	F	GD	GE	DE	NDE
0.75 / 1.1	0.75	-	80M	165	130	200	3.5	174	165	299	12	1-M25	19	40	6	6	3.5	6204ZZ	6203ZZ
1.5	1.1	0.75	90S	165	130	200	3.5	199	175	335	12	1-M25	24	50	8	7	4	6205ZZ	6204ZZ
2.2	1.5	1.1	90L	165	130	200	3.5	199	175	367	12	1-M25	24	50	8	7	4	6205ZZ	6204ZZ
3	2.2 / 3	1.5	100L	215	180	250	4	220	199	406	15	1-M32	28	60	8	7	4	6206ZZ	6205ZZ
4	4	2.2	112M	215	180	250	4	244	216	394	15	1-M32	28	60	8	7	4	6206ZZ	6205ZZ
5.5 / 7.5	5.5	3	132S	265	230	300	4	284	235	459	15	1-M32	38	80	10	8	5	6208ZZ	6206ZZ
-	7.5	4 / 5.5	132M	265	230	300	4	284	235	497	15	1-M32	38	80	10	8	5	6208ZZ	6206ZZ
11 / 15	11	7.5	160M	300	250	350	5	334	300	584	19	1-M40	42	110	12	8	5	6309ZZ	6307ZZ
18.5	15	11	160L	300	250	350	5	334	300	628	19	1-M40	42	110	12	8	5	6309ZZ	6307ZZ
22	18.5	-	180M	300	250	350	5	364	325	654	19	1-M40	48	110	14	9	5.5	6311ZZ	6209ZZ
-	22	15	180L	300	250	350	5	374	316	706	19	1-M40	48	110	16	10	6	6212ZZ	6212ZZ
30 / 37	-	-	200L	350	300	400	5	404	370	780	19	1-M50	55	110	16	10	6	6212ZC3	6212ZC3
-	30	18.5 / 22	200L	350	300	400	5	404	370	780	19	1-M50	55	110	16	10	6	6313ZC3	6212ZC3
-	37	-	225S	400	350	450	5	457	395	795	19	1-M50	60	140	18	12	7.5	6312C3	6312C3
45	-	-	225M	400	350	450	5	457	395	815	19	1-M50	55	110	16	10	6	6312C3	6312C3
-	45	30	225M	400	350	450	5	457	395	815	19	1-M50	60	140	18	12	7.5	6314C3	6312C3
55	-	-	250M	500	450	550	5	512	450	910	19	1-M63	60	140	18	12	7.5	6313C3	6313C3
-	55	37	250M	500	450	550	5	512	450	940	19	1-M63	65	140	18	12	7.5	6313C3	6313C3
75	-	-	280S	500	450	550	5	578	520	1000	19	1-M63	65	140	18	12	7.5	6316C3	6316C3
-	75	45	280S	500	450	550	5	578	520	1060	19	1-M63	75	140	20	12	7.5	6319C3	6316C3
90	-	-	280M	500	450	550	5	578	520	1055	19	1-M63	65	140	18	12	7.5	6316C3	6316C3
-	90	55	280M	500	450	550	5	578	520	1115	19	1-M63	75	140	20	12	7.5	6319C3	6316C3
110	-	-	315S	600	550	660	6	578	520	1235	24	1-M63	65	140	18	12	7.5	6316C3	6316C3
-	110	75	315S	600	550	660	6	578	520	1265	24	1-M63	80	170	22	14	9	6222C3	6316C3
132	-	-	315M	600	550	660	6	578	520	1235	24	1-M63	65	140	18	12	7.5	6316C3	6316C3
-	132	90	315M	600	550	660	6	578	520	1265	24	1-M63	90	170	25	14	9	6222C3	6316C3
160 / 200	-	-	315L	600	550	660	6	660	795	1695	24	1-M63	65	140	18	12	7.5	6316C3	6316C3
-	160 / 200	110 / 132	315L	600	550	660	6	660	795	1515	24	1-M63	90	170	25	14	9	6222C3	6316C3
-	-	160 / 200	315L	600	550	660	6	660	795	1515	24	1-M63	90	170	25	14	9	6222C3	6316C3

# HYOSUNG Offices in Asia



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