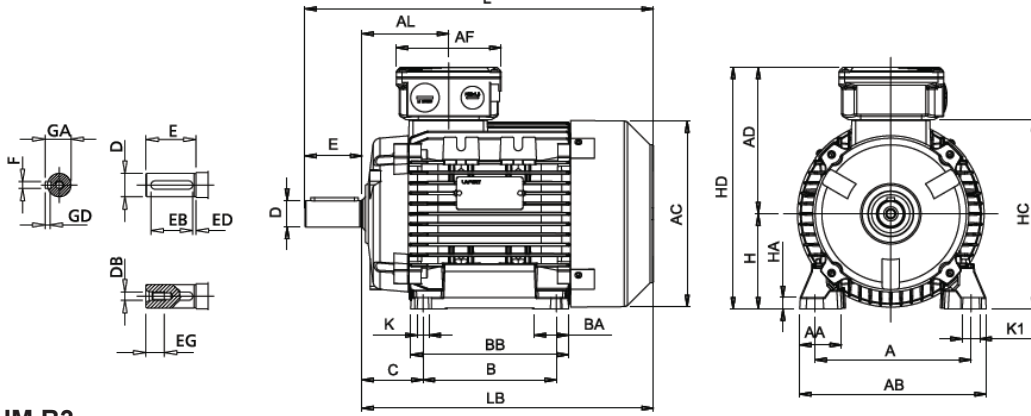


# HPS - High Performance Permanent Magnet Synchronous Motors



## IM B3 / IM B14 / IM B5 / NEMA C-Flange Dimensions (Aluminum Frame)



(N)\*\* = NEMA  
 1) Clearance hole for screw  
 2) Maximum dimension  
 3) Centering holes in shaft extensions to DIN 332 part 2

### IM B3

H (Frame)	A	B	C	K <sup>(1)</sup>	AB	BB	AD <sup>(2)</sup>	HD <sup>(2)</sup>	AC	HC	HA	K1	L	L(N)**	LB	LB (N)**
56	90	71	36	6	107	86	92	148	110	109	8	9	188	-	168	-
71	112	90	45	8	135	108	114	185	142	142	9	17	245	10.433"	215	8.386"
90 S/L	140	100/125	56	10	170	150	148	238	177	181	11	15	317	12.638"	267	10.512"
112 M	190	140	70	12.5	220	176	171	283	225	226	15	19	388	15.669"	328	13.051"
112 XL	190	140	70	12.5	220	176	171	283	225	226	15	19	410	16.535"	350	13.917"
132 M	216	178	89	12	256	218	195	327	248	261	17	20	485	19.055"	405	15.945"
132 XL	216	178	89	12	256	218	195	327	248	261	17	20	505	19.852"	425	16.732"
132 XXL	216	178	89	12	256	218	195	327	248	261	17	20	556	21.860"	476	18.740"
160 M	254	210	108	14	320	270	238	398	317	316	23	18	608	-	498	-
160 L	254	254	108	14	320	310	238	398	317	316	23	18	652	-	542	-

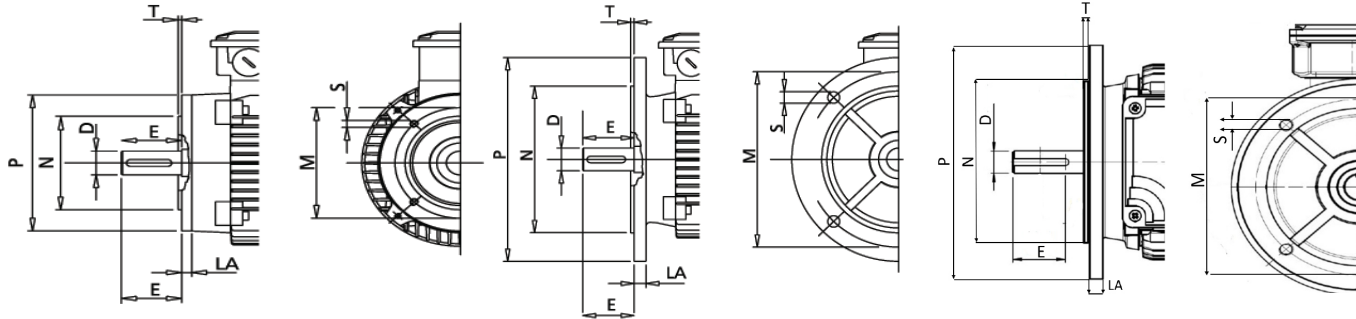
H (Frame)	AL	AF	BA	AA	D	D(N)**	E	E(N)**	F	F(N)**	GD	GA	DB <sup>(3)</sup>	EG	EB	EB (N)**	ED
56	61	93	27	27	14	-	30	-	5	-	5	16	M5	12.5	20	-	4
71	75	93	22	30	19 j6	0.625"	40	2.06"	6	0.188"	6	22	M6	16	30	1.41"	4
90 S/L	85	110	28/53	37	24 j6	0.875"	50	2.12"	8	0.188"	7	27	M8	19	40	1.41"	4
112 M	92	110	46	48	28 j6	1.125"	60	2.62"	8	0.25"	7	31	M10	22	50	1.78"	4
112 XL	92	110	46	48	28 j6	1.125"	60	2.62"	8	0.25"	7	31	M10	22	50	1.78"	4
132 M	122	133	45	59	38 k6	1.375"	80	3.12"	10	0.312"	8	41	M12	28	70	2.41"	4
132 XL	122	133	45	59	38 k6	1.375"	80	3.12"	10	0.312"	8	41	M12	28	70	2.41"	4
132 XXL	122	133	45	59	38 k6	1.375"	80	3.12"	10	0.312"	8	41	M12	28	70	2.41"	4
160 M	146	150	65	76	42 k6 *	-	110	-	12 *	-	8 *	45 *	M16	36	100	-	4
160 L	168	150	65	76	48 k6	-	110	-	14	-	9	51.5	M16	36	100	-	4

\* For HPS 160M in 18.5kW, refer to HPS 160L dimension

### IM B14 - C Flange

### IM B5 - D Flange

### NEMA - C Flange



Frame	Dimensions in Millimeters												Dimensions in Inches												
	B14 FLANGE						B14 FLANGE (Increasing)						B5 FLANGE						NEMA C-FLANGE						
	P	N	LA	M	T	S <sup>(1)</sup>	P	N	LA	M	T	S <sup>(1)</sup>	P	N	LA	M	T	S <sup>(1)</sup>	P	N	LA	M	T	S <sup>(1)</sup>	
56	80	50	8	65	2.5	M5	105	70	8	85	2.5	M6	120	80	7	100	2.5	M6	-	-	-	-	-	-	-
71	105	70	11	85	2.5	M6	140	95	8	115	3	M8	160	110	10	130	3.5	M8	6.5"	4.5"	0.354"	5.875"	0.16"	3/8"	
90 S/L	140	95	10	115	3.0	M8	160	110	9	130	3.5	M8	200	130	12	165	3.5	M10	6.5"	4.5"	0.472"	5.875"	0.16"	3/8"	
112 M/XL	160	110	10	130	3.5	M8	200	130	12	165	3.5	M10	250	180	14	215	4.0	M12	9"	8.5"	0.459"	7.25"	0.25"	1/2"	
132 M/XL/XXL	200	130	23	165	3.5	M10	250	180	12	215	4	M12	300	230	14	265	4.0	M12	9"	8.5"	0.36"	7.25"	0.25"	1/2"	
160 M/L	250	180	20	216	4.0	M12	300	230	12	265	5	M16	350	250	15	300	5.0	M16	-	-	-	-	-	-	

Permanent Magnet Motors require oversized bearing flanges. Please contact a Lafert N.A sales representative for details.