KHM
ELECTRIC
MOTORS

SINGLE PHASE
INDUCTION MOTOR

ISO 9001

CE

KHM Limited

Introduction

KHM Single Phase ML, MC, MY Series Aluminum or Cast Iron Motors are acknowledged as having a name of Quality and reliability. They are suitable for driving small type machine tools, water pump, etc, specially for small workshop where only single phase current supply is available.

MC – Capacitor start series.

MY – Capacitor run series.

ML – Dual capacitor series

KHM Single Phase Motors incorporate:

Superior finish

Motor size according to IEC. DIN

Totally Enclosed Fan cooled

Light construction

Top mounted terminal box

IP55 Protection, IC411 cooling

Choice of foot or flange mounting

Motor frame size from 56 ~ 112

Rated at 230V / 50Hz

Mounting Arrangements

Types of mounting	IEC 34-7 Code I	1992 Code II
	IM B_3	IM 1001
	IM B_5	IM 3001
	IM B_6	IM 1051
	IM B_7	IM 1061
	IM B_8	IM 1071
	IM B_{14}	IM 3601
	IM B_{34}	IM 2101
	IM B_{35}	IM 2001
	IM V_1	IM 3001

Types of mounting	IEC 34-7 Code I	1992 Code II
	IM V_1	IM 3021
	IM V_3	IM 1011
	IM V_5	IM 1031
	IM V_6	IM 2011
	IM V_{15}	IM 12111
	IM V_{15}	IM 3611
	IM V_{18}	IM 3631
	IM V_{36}	IM 2031
	IM V_{36}	IM 2131

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MC Capacitor Start Series

Motor Type	Rated output power kw	full-load current 220V A	Rated speed min^{-1}	full-load power factor cosø	Full-load efficiency η %	locked rotor current I_s/I_n	locked rotor torque M_s/M_n	break down torque M_k/M_n	Starting capacitor (250 V) μF	net weight kg
MC7112	0.18	1.9	2750	0.72	60	6.3	3.0	1.8	75	6.2
MC7122	0.25	2.4	2770	0.74	64	6.25	3.0	1.8	75	6.3
MC8012	0.37	3.36	2800	0.77	65	6.25	2.8	1.8	100	8.3
MC8022	0.55	4.65	2810	0.79	68	6.24	2.8	1.8	150	9.0
MC90S-2	0.75	6.1	2820	0.82	70	6.1	2.5	1.8	200	12.5
MC90L-2	1.1	8.4	2820	0.83	72	7.2	2.5	1.8	300	14.0
MC100LA-2	1.5	11.2	2830	0.84	73	7.2	2.5	1.8	400	22.5
MC100LB-2	2.2	15.7	2830	0.85	75	7.65	2.2	1.8	2X300	25.5
MC112M-2	3.0	21.2	2840	0.85	76	7.1	2.2	1.8	2X300	26.0
MC7114	0.12	1.9	1350	0.58	50	4.8	3.0	1.8	75	6.1
MC7124	0.18	2.5	1370	0.62	53	4.8	2.8	1.8	75	6.7
MC8014	0.25	3.1	1400	0.63	58	4.8	2.8	1.8	100	8.9
MC8024	0.37	4.2	1410	0.64	62	5	2.5	1.8	100	9.6
MC90S-4	0.55	5.55	1420	0.69	66	5.2	2.5	1.8	150	12.5
MC90L-4	0.75	6.77	1420	0.73	68	5.5	2.5	1.8	200	15.0
MC100LA-4	1.1	9.5	1430	0.74	71	6.4	2.5	1.8	400	23.0
MC100LB-4	1.5	12.5	1430	0.75	73	6.4	2.5	1.8	400	27.0
MC112M-4	2.2	17.8	1440	0.76	74	6.8	2.2	1.8	2X300	35.0

MY Capacitor Run Series

Motor Type	Rated output power kw	full-load current 220V A	Rated speed min^{-1}	full-load power factor cosø	Full-load efficiency η %	locked rotor current I_s/I_n	locked rotor torque M_s/M_n	break down torque M_k/M_n	Running capacitor (450 V) μF	net weight kg
MY5612	0.09	0.8	2730	0.92	56	3.2	0.5	1.7	6	3.2
MY5622	0.12	1.0	2730	0.92	60	3.5	0.5	1.7	6	3.4
MY6312	0.18	1.37	2740	0.92	65	3.7	0.4	1.7	6	3.9
MY6322	0.25	1.90	2740	0.92	66	3.7	0.4	1.7	8	4.4
MY7112	0.37	2.73	2750	0.92	67	3.7	0.35	1.7	12	6.2
MY7122	0.55	3.9	2760	0.92	70	3.9	0.35	1.7	16	6.3
MY8012	0.75	5.2	2780	0.92	72	3.9	0.33	1.7	30	8.3
MY8022	1.1	7.1	2790	0.95	75	4.3	0.33	1.7	35	9.0
MY90S-2	1.5	9.5	2800	0.95	76	4.8	0.30	1.7	40	13
MY90L-2	2.2	13.7	2800	0.95	77	4.8	0.30	1.7	40	15
MY5614	0.06	0.61	1330	0.9	50	3.3	0.45	1.7	6	3.2
MY5624	0.09	0.87	1340	0.9	52	2.9	0.45	1.7	6	3.4
MY6314	0.12	1.1	1350	0.9	57	3.2	0.40	1.7	6	4.0
MY6324	0.18	1.54	1360	0.9	59	3.3	0.40	1.7	8	4.5
MY7114	0.25	2.1	1370	0.92	61	3.4	0.35	1.7	12	6.1
MY7124	0.37	3.0	1370	0.92	62	3.4	0.35	1.7	16	7.0
MY8014	0.55	4.3	1380	0.92	64	3.5	0.35	1.7	25	9.5
MY8024	0.75	5.5	1380	0.92	68	3.7	0.32	1.7	30	10
MY90S4	1.1	7.5	1390	0.95	71	4	0.32	1.7	40	13
MY90L4	1.5	9.9	1400	0.95	73	4.6	0.30	1.7	40	16

ML Dual Capacitor Series

Motor Type	Rated output power kw	full-load current 220V A	Rated speed min^{-1}	full-load power factor cosø	Full-load efficiency η %	locked rotor current I_s/I_n	locked rotor torque M_s/M_n	break down torque M_k/M_n	Capacitor Starting (250V) μF	Capacitor Running (450V) μF	net weight kg
ML8012	0.75	5.15	2800	0.92	75	5.7	1.8	1.7	100	25	8.3
ML8022	1.1	7.2	2800	0.95	78	5.6	1.8	1.7	150	25	9.0
ML90S-2	1.5	9.2	2800	0.95	78	6.0	1.7	1.7	300	40	12.5
ML90L-2	2.2	12.9	2800	0.95	82	6.2	1.7	1.7	300	40	14.0
ML100L1-2	3.0	17.3	2820	0.95	83	6.4	1.7	1.7	400	55	20.5
ML112M-2	3.7	21.2	2820	0.96	83	6.5	1.7	1.7	400	50	26.0
ML8014	0.55	3.9	1400	0.92	70	5.4	1.8	1.7	100	25	8.9
ML8024	0.75	5.3	1400	0.92	71	5.5	1.8	1.7	150	30	9.6
ML90S-4	1.1	7.0	1400	0.95	76	5.7	1.7	1.7	200	35	13
ML90L-4	1.5	9.2	1400	0.95	78	6.0	1.7	1.7	200	40	16
ML100LA-4	2.2	13.2	1410	0.95	80	6.1	1.7	1.7	400	50	23
ML100LB-4	3	17.3	1420	0.95	83	6.4	1.7	1.7	400	50	27
ML112M-4	3.7	21.1	1430	0.96	83	6.5	1.7	1.7	400	50	35

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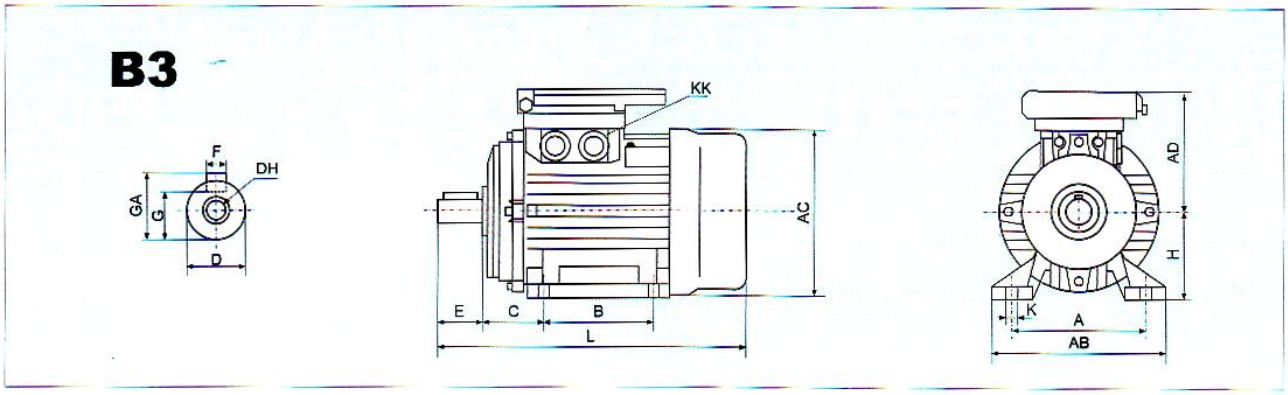
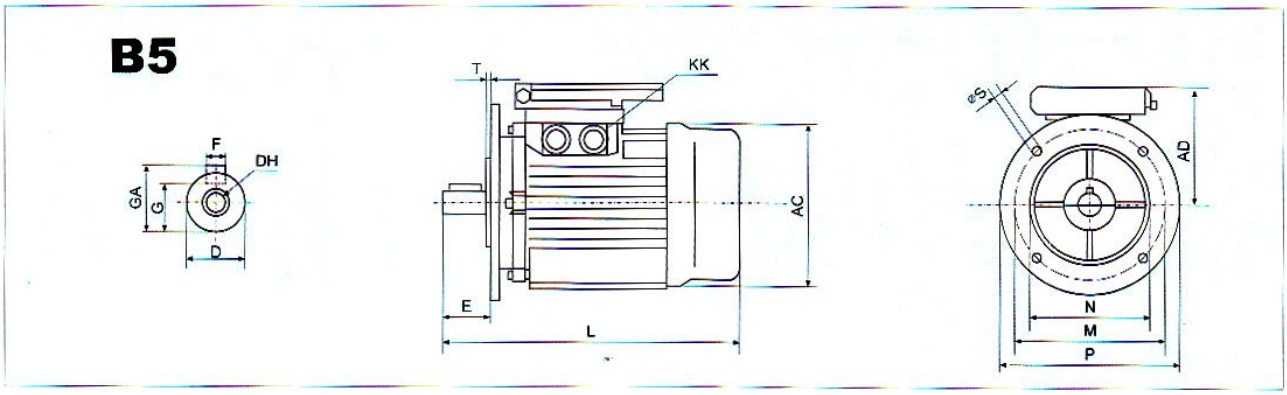
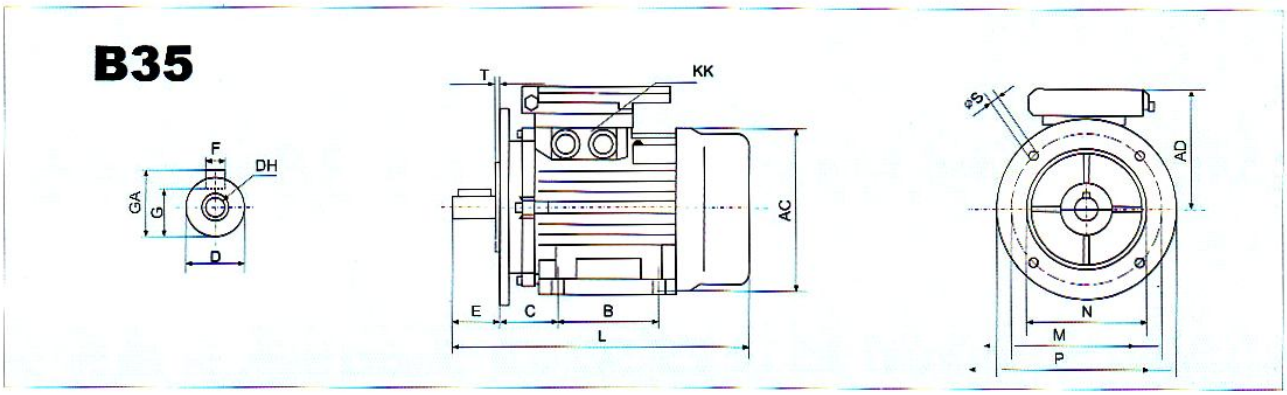
Mounting and Overall Dimensions
H56 ~ 90 without Lifting Bolt







Frame	A	AB	AC	AD	B	C	D	DH	E	F	G	H	K	KK	L	M	N	P	S	T	Flange No .	GA
56	90	110	110	86	71	36	9	M4×12	20	3	7.2	56	7	2-M18×1.5	189	100	80	120	7	3	FF 100	10.2
63	100	122	122	96	80	40	11	M4×12	23	4	8.5	63	7	2-M18×1.5	218	115	95	140	9	3	FF 115	12.5
71	112	136	138	110	90	45	14	M5×12	30	5	11	71	7	2-M18×1.5	250	130	110	160	9	3.5	FF 130	16
80	125	154	157	152	100	50	19	M6×16	40	6	15.5	80	10	2-M20×1.5	278	165	130	200	12	3.5	FF 165	21.5
90S	140	174	175	158	100	56	24	M8×19	50	8	20	90	10	2-M20×1.5	335	165	130	200	12	3.5	FF 165	27
90L	140	174	175	158	125	56	24	M8×19	50	8	20	90	10	2-M20×1.5	335	165	130	200	12	3.5	FF 165	27
100L	160	194	196	177	140	63	28	M10×22	60	8	24	100	12	2-M20×1.5	377	215	180	250	15	4	FF 215	31
112M	190	224	220	184	140	70	28	M10×22	60	8	24	112	12	2-M25×1.5	395	215	180	250	15	4	FF 215	31

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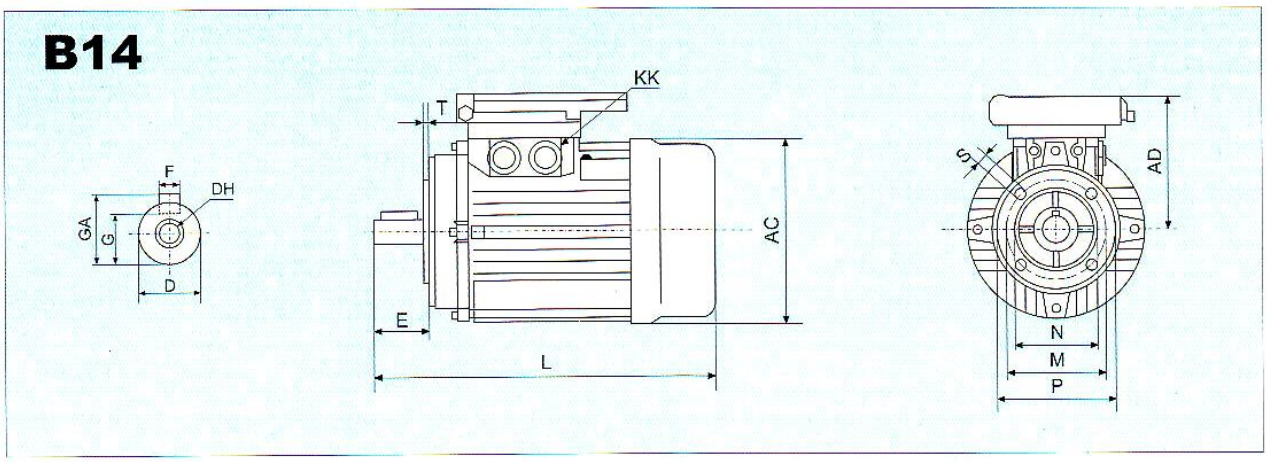
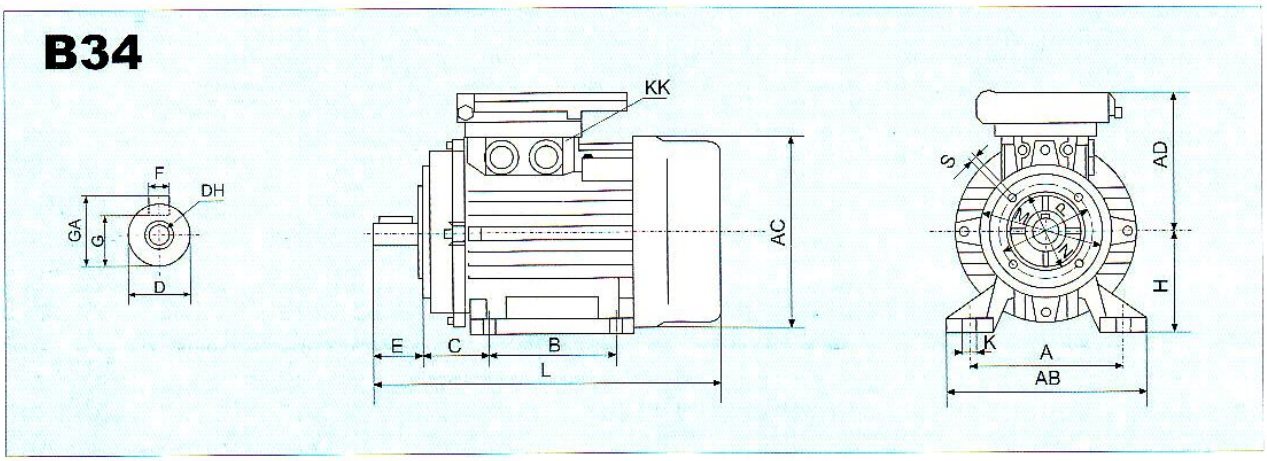
Mounting and Overall Dimensions





H56 ~ 90 without Lifting Bolt

Frame	A	AB	AC	AD	B	C	D	DH	E	F	G	H	K	KK	L	M	N	P	S	T	Flange No.	GA
56	90	110	110	96	71	36	9	M4×12	20	3	7.2	56	7	2-M18×1.5	189	65	50	80	M5	3	FT 65	10.2
63	100	122	122	96	80	40	11	M4×12	23	4	8.5	63	7	2-M18×1.5	218	75	60	90	M5	3	FT 75	12.5
71	112	136	138	110	90	45	14	M5×12	30	5	11	71	7	2-M18×1.5	250	85	70	105	M6	3.5	FT 85	16
80	125	154	157	152	100	50	19	M6×16	40	6	15.5	80	10	2-M20×1.5	278	100	80	120	M6	3.5	FT 100	21.5
90S	140	174	175	158	100	56	24	M8×19	50	8	20	90	10	2-M20×1.5	335	115	95	140	M8	3.5	FT 115	27
90L	140	174	175	158	125	56	24	M8×19	50	8	20	90	10	2-M20×1.5	335	115	95	140	M8	3.5	FT 115	27
100L	160	194	196	177	140	63	28	M10×22	60	8	24	100	12	2-M20×1.5	377	130	110	160	M8	4	FT 130	31
112M	190	224	220	184	140	70	28	M10×22	60	8	24	112	12	2-M25×1.5	395	130	110	160	M8	4	FT 130	31

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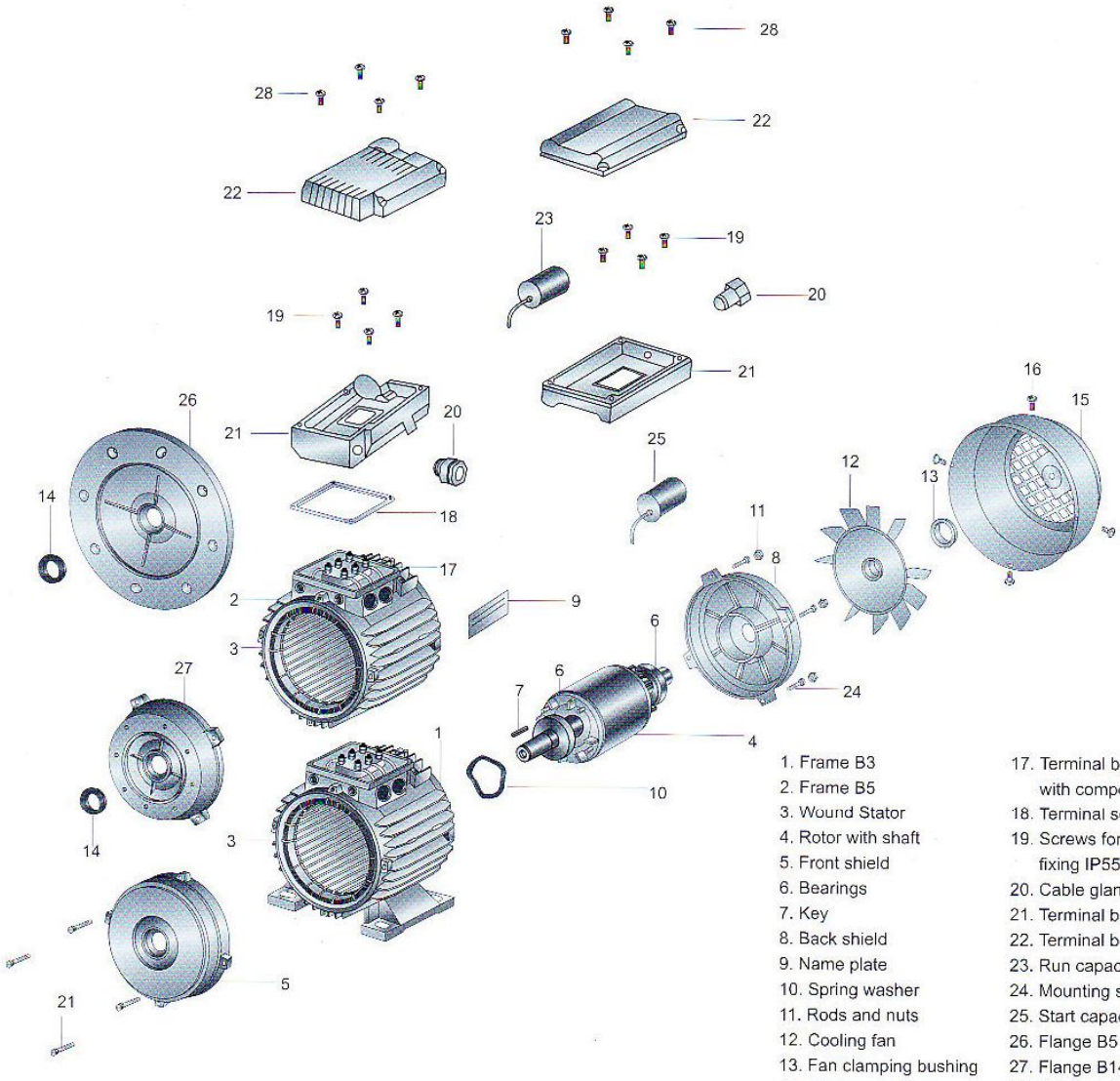
Mechanical Design



1. Frame B3
2. Frame B5
3. Wound Stator
4. Rotor with shaft
5. Front shield
6. Bearings
7. Key
8. Back shield
9. Name plate
10. Spring washer
11. Rods and nuts
12. Cooling fan
13. Fan clamping bushing
14. Rubber seal ring
15. Fan cover
16. Self-threading screws for fan cover fixing
17. Terminal board complete with components
18. Terminal seal IP55
19. Screws for terminal box fixing IP55
20. Cable gland
21. Terminal box IP55(base)
22. Terminal box IP55(cover)
23. Run capacitor
24. Mounting studs screws
25. Start capacitor
26. Flange B5
27. Flange B14
28. Screws for terminal box fixing Ip55

This catalogue is for reference only. The data may be changed, please contact us before ordering.

FRAME SIZE	DRIVING END BEARINGS	NON DRIVING END BEARINGS	OILSEAL
56	6201ZZ-C3	6201ZZ-C3	Ø12×Ø22×5
63	6201ZZ-C3	6201ZZ-C3	Ø12×Ø22×7
71	6202ZZ-C3	6202ZZ-C3	Ø15×Ø25×7
80	6204ZZ-C3	6204ZZ-C3	Ø20×Ø30×7
90	6205ZZ-C3	6205ZZ-C3	Ø25×Ø37×7
100	6206ZZ-C3	6206ZZ-C3	Ø30×Ø42×7
112	6206ZZ-C3	6206ZZ-C3	Ø30×Ø42×7

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