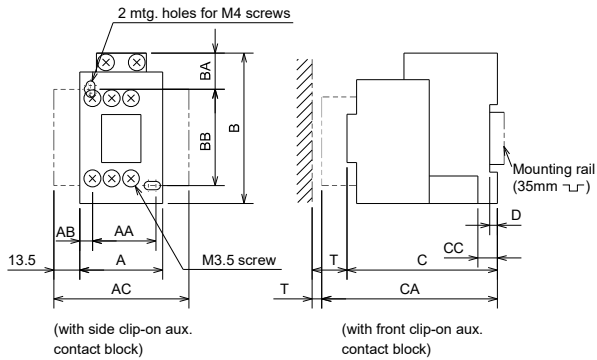


# 1.10 Outline Dimensions

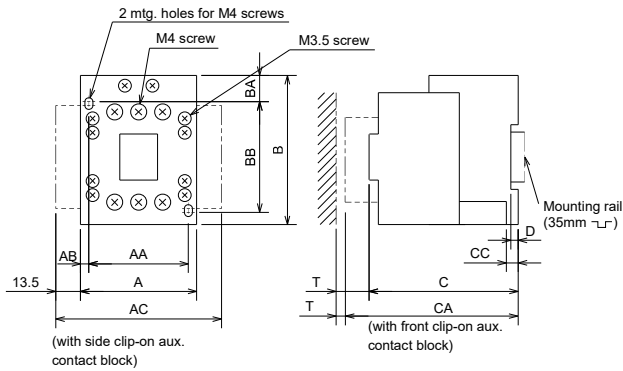
## 1.10.1 Outline Dimensions of Non-Reversing Contactors



### • Dimensions

Type	A	B	C	AA	AB	AC	BB	BA	CC	CA	D	Mass(kg)	T
S-N10(CX),-N11(CX)	43	78	78	35	4.5	70	50	19	10	106	4	0.3	5
S-N12(CX)	53	78	78	40	4.5	—	50	19	10	106	4	0.32	5
S-N18(CX)	43	79	81	30	6	—	60	13	10	109	4	0.33	5
SD-N11(CX)	43	78	110	35	4.5	70	50	19	10	138	4	0.62	5
SD-N12(CX)	53	78	110	40	4.5	—	50	19	10	138	4	0.64	5

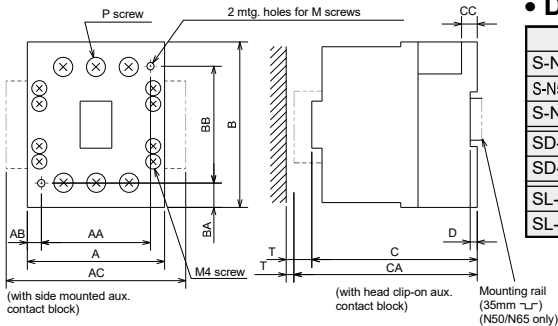
Note: Front clip-on and side clip-on aux. contact blocks should not be mounted both.



### • Dimensions

Type	A	B	C	AA	AB	AC	BB	BA	CC	CA	D	Mass(kg)	T
S-N20(CX),-21(CX)	63	81	81	54	4.5	90	60	14	6.5	109	4	0.4	5
S-N25(CX),-N35(CX)	75	89	91	65	5	102	70	13	6.5	119	4	0.52	5
SD-N21(CX)	63	81	113	54	4.5	90	60	14	6.5	141	4	0.72	5
SD-N35(CX)	75	89	123	65	5	102	70	13	6.5	151	4	0.85	5
SLD-N21	63	81	137	54	4.5	90	60	14	6.5	—	4	0.55	5
SLD-N35	75	89	147	65	5	102	70	13	6.5	—	4	0.67	5

Note: Front clip-on and side clip-on aux. contact blocks should not be mounted both.



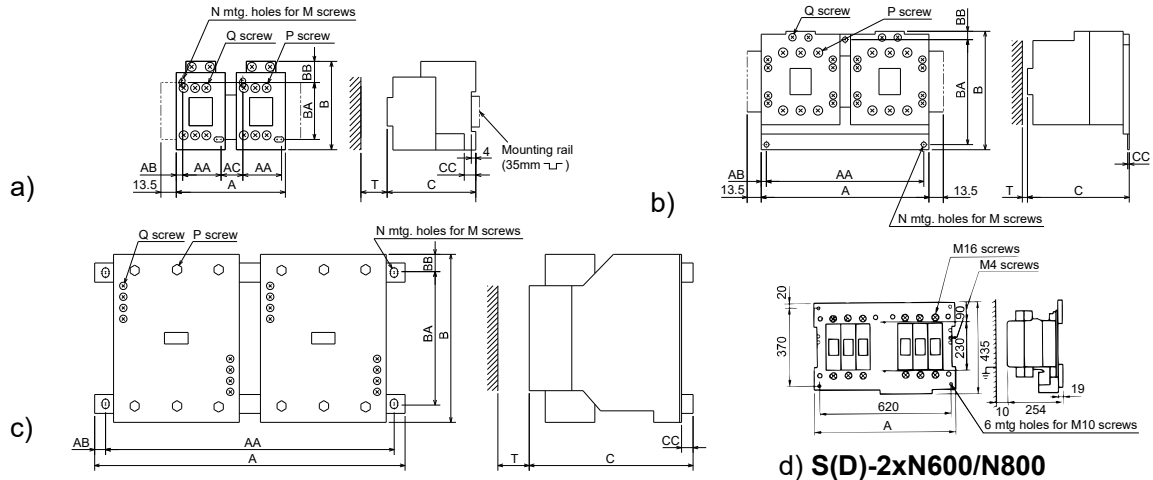
### • Dimensions

Type	A	B	C	AA	AB	AC	BB	BA	CC	CA	D	M	P	Mass(kg)	T
S-N50,-N65	88	106	106	70	9	—	75	15.5	10	135	4.5	M4	M6	0.75	10
S-N50CX,-N65CX	88	108	106	70	9	—	75	15.5	10	135	4.5	M4	M6	0.77	10
S-N80,-N95	100	124	127	80	10	128	110	7	12	—	—	M5	M6	1.8	10
SD-N50,-N65	88	107.5	133	70	9	—	75	15.5	10	—	—	M4	M6	2.1	10
SD-N80,-N95	100	134	157	80	10	128	110	7	12	—	—	M5	M6	3.3	10
SL-N50,-N65	88	106	135.5	70	9	—	75	15.5	10	—	—	M4	M6	1.3	10
SL-N80,-N95	100	172	127	80	10	128	110	7	12	—	—	M5	M6	2.1	10

### • Dimensions

Type	A	B	C	AA	AB	BB	BA	CC	CA	D	M	P	Mass(kg)	T
S-N125	100	150	137	90	5	125	12.5	1.6	—	—	M4	M8	2.5	10
S-N150	120	160	145	100	10	125	17.5	1.6	—	—	M5	M8	3.2	10
S-N180,-N220	138	204	175	120	9	190	7	1.6	—	—	M6	M10	5.5	10
S-N300,-N400	163	243	195	145	9	225	9	2.3	—	—	M8	M12	9.5	10
S-N600,-N800	290	310	235	250	20	250	30	10.5	—	—	M10	M16	27	10
SD-N125	102	150	162	90	5	125	12.5	1.6	—	—	M4	M8	4.3	30
SD-N150	120	160	169.5	100	10	125	17.5	1.6	—	—	M5	M8	4.3	30
SD-N220	138	204	200.5	120	9	190	7	2.0	—	—	M6	M10	7.5	30
SD-N300,-N400	163	243	221	145	9	225	9	2.3	—	—	M8	M12	13.5	50
SD-N600,-N800	375	310	235	250	20	250	30	10.5	—	—	M10	M16	28	10
SL(D)-N125	100	191	137	90	5	125	12.5	1.6	—	—	M4	M8	3.0	30
SL(D)-N150	120	201	145	100	10	125	17.5	1.6	—	—	M5	M8	3.6	30
SL(D)-N220	138	224	175	120	9	190	7	1.6	—	—	M6	M10	6.0	30
SL(D)-N300,-N400	163	259	195	145	9	225	9	2.3	—	—	M8	M12	10	50
SL(D)-N600,-N800	290	390	235	250	20	250	30	10.5	—	—	M10	M16	27	10

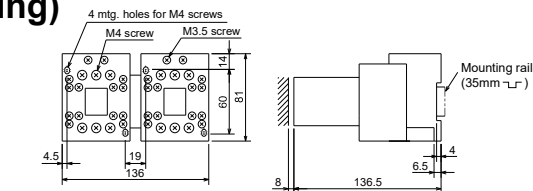
## 1.10.2 Outline Dimensions of Reversing Contactors



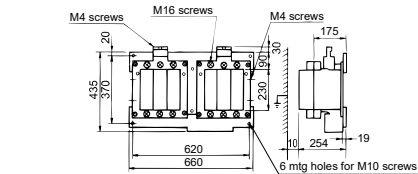
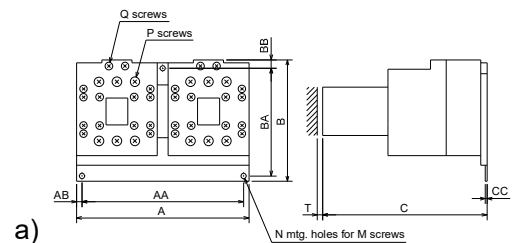
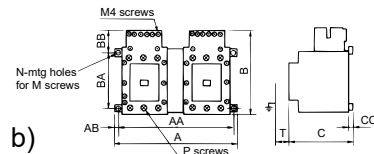
### • Dimensions

Type	Fig.	A	B	C	AA	AB	AC	BA	BB	CC	N	M	P	Q	Mass(kg)	T
S-2xN10/N11	a	99	78	78	35	4.5	21	50	19	10	4	M4	M3.5	M3.5	0.64	5
S-2xN18	a	96	79	109	30	3.5	23	60	13	10	4	M4	M4	M3.5	0.75	5
S-2xN20/N21	a	136	81	81	54	4.5	19	60	14	6.5	4	M4	M4	M3.5	0.8	5
S-2xN25/N35	b	160	110	97	150	15	—	100	8	1.6	3	M4	M5	M3.5	1.3	5
S-2xN50/N65	b	216	115	112	204	6	—	100	8	2	3	M5	M6	M4	2.6	10
S-2xN80/N95	b	270	140	137	247	11.5	—	100	32	10	3	M6	M6	M4	4.3	10
S-2xN125	c	276	150	148	255	10.5	—	125	12.5	1.6	4	M6	M8	M4	5.7	30
S-2xN150	c	296	160	156	275	10.5	—	125	17.5	1.6	4	M6	M8	M4	7.2	30
S-2xN180/220	c	370	215	189	340	15	—	190	12.5	1.6	4	M8	M10	M4	12	30
S-2xN300/N400	c	395	250	209	365	15	—	225	12.5	2.3	4	M8	M12	M4	20.5	50
S-2xN600/N800	d	660	—	—	—	—	—	—	—	—	—	—	—	—	54	—
SD-2xN11	a	99	78	110	35	4.5	21	50	19	10	4	M4	M3.5	M3.5	1.3	5
SD-2xN21	b	160	100	119	150	5	—	90	5	2	3	M4	M4	M3.5	1.7	5
SD-2xN35	b	160	113	129	150	5	—	100	8	1.6	3	M4	M5	M3.5	2.0	5
SD-2xN50/N65	b	216	116.5	133	204	6	—	100	8	2	3	M5	M6	M4	4.5	10
SD-2xN80/N95	b	270	140	167	247	11.5	—	100	32	10	3	M6	M6	M4	6.4	10
SD-2xN125	c	276	150	173	255	10.5	—	125	12.5	1.6	4	M6	M8	M4	9.2	30
SD-2xN150	c	296	160	180.5	275	10.5	—	125	17.5	1.6	4	M6	M8	M4	10	30
SD-2xN220	c	370	215	214.5	340	15	—	190	12.5	1.6	4	M8	M10	M4	17	30
SD-2xN300/N400	c	395	250	235	365	15	—	225	12.5	2.3	4	M8	M12	M4	29	50
SD-2xN600/N800	d	800	—	—	—	—	—	—	—	—	—	—	—	—	64	—

### Latched Contactors (Reversing)



**SL(D)-2xN21**



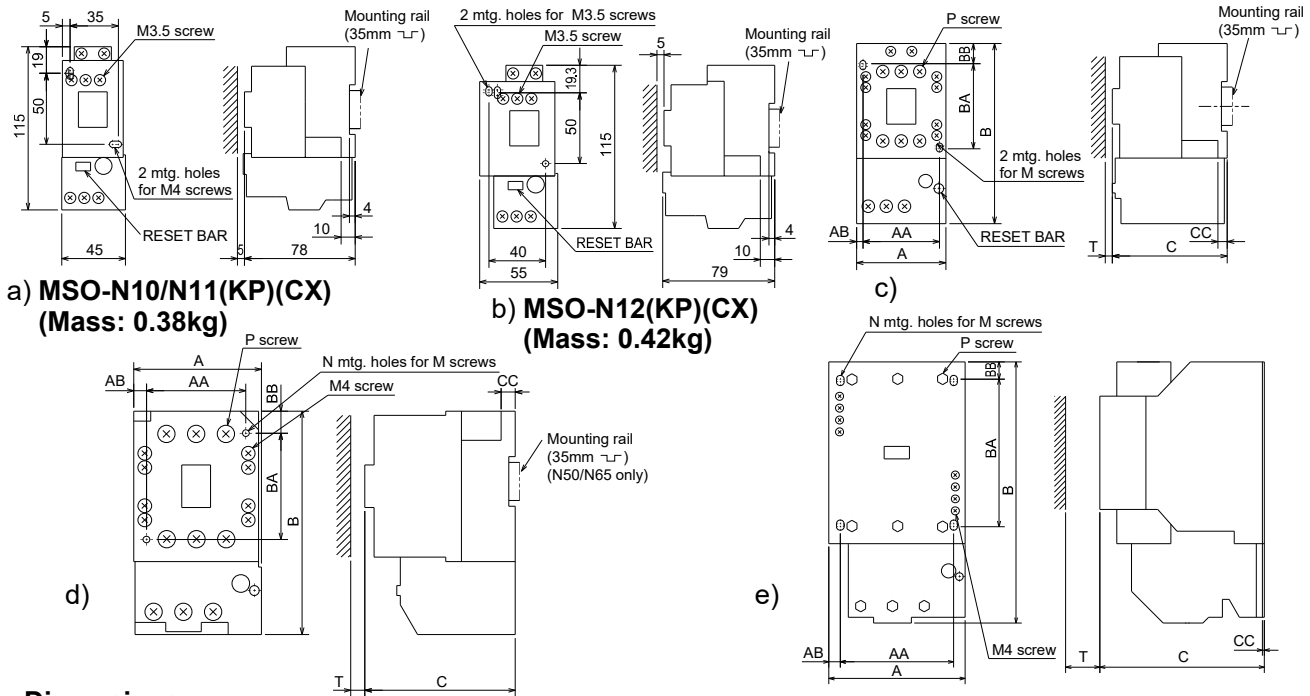
**SL-2xN600/N800 (Mass: 60kg)**

### • Dimensions

Type	Fig.	A	B	C	AA	AB	BA(BC)	BB	CC	N	M	P	Q	Mass(kg)	T
SL(D)-2xN35	a	160	113	153	150	5	100	8	1.6	3	M4	M5	M3.5	2.2	5
SL(D)-2xN50/N65	a	216	115	141.5	204	6	100	8	2	3	M5	M6	M4	3.2	10
SL(D)-2xN80/N95	b	270	184	137	247	11.5	100	74	10	3	M6	M6	M4	5.3	10
SL(D)-2xN125	b	276	191	148	255	10.5	125	53.5	11	4	M6	M8	M4	6.7	30
SL(D)-2xN150	b	296	201	156	275	10.5	125	58.5	11	4	M8	M8	M4	8.8	30
SL(D)-2xN220	b	370	230	189	340	15	190	27	14	4	M8	M10	M4	13	30
SL(D)-2xN300/N400	b	395	263	209	365	15	225	25	14	4	M8	M12	M4	21.5	50

## 1.10.3 Outline Dimensions of Open Type Starters

### ■ Nonreversing Starters without Enclosures



a) MSO-N10/N11(KP)(CX)  
(Mass: 0.38kg)

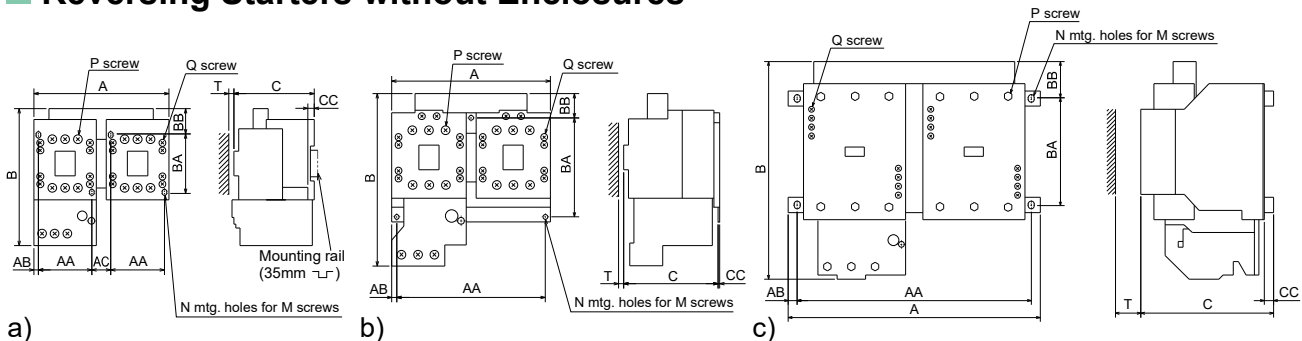
b) MSO-N12(KP)(CX)  
(Mass: 0.42kg)

#### • Dimensions

Type	Fig.	A	B	C	AA	AB	BA	BB	CC	N	M	P <sup>1</sup>	Mass(kg)	T
MSO-N18(CX)(KP)	c	54	122	81	30	7	60	13	10	2	M4	M4(M3.5)	0.5	5
MSO-N20(CX)(KP)	c	63	127	81	54	4.5	60	14	6.5	2	M4	M4(M3.5)	0.6	5
MSO-N21(CX)(KP)	c	63	127	81	54	4.5	60	14	6.5	2	M4	M4(M3.5)	0.6	5
MSO-N25/N35(CX)(KP)	c	75	157	91	65	5	70	13	6.5	2	M4	M5(M3.5)	0.8	5
MSO-N50/N65(KP)	d	90	158	106	70	9	75	16	10	2	M4	M6	2.2	10
MSO-N50/N65(CX)(KP)	d	92	160	106	70	9	75	18	10	2	M4	M6	2.3	10
MSO-N80/N95(KP)	d	100	196	127	80	10	110	7	12	2	M5	M6	3.2	10
MSO-N125(KP)	e	112	239	137	90	14	125	12.5	1.6	4	M4	M8	4.2	30
MSO-N150(KP)	e	120	250	145	100	10	125	17.5	1.6	4	M5	M8	7.7	30
MSO-N180/N220(KP)	e	144	282	180.5	120	12	190	7	1.6	4	M6	M10	7.7	30
MSO-N300/N400(KP)	e	163	358	195	145	9	225	9	2.3	4	M8	M12	12.5	50

Note: 1. Value in parenthesis shows terminal screw of coil and auxiliary contact.

### ■ Reversing Starters without Enclosures

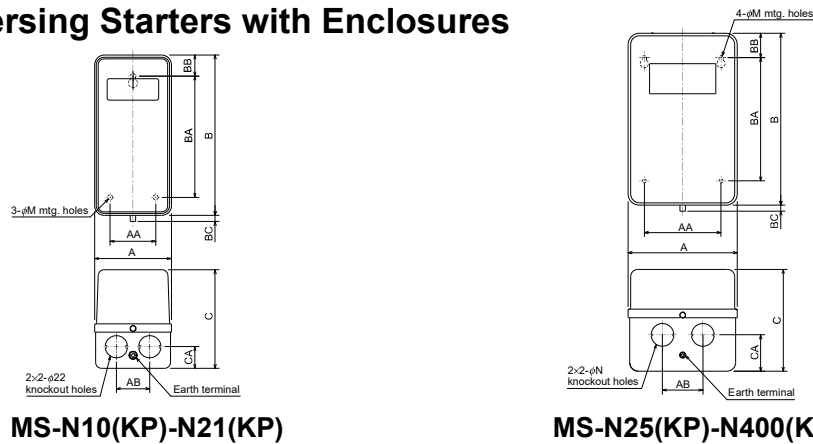


#### • Dimensions

Type	Fig.	A	B	C	AA	AB	AC	BA	BB	CC	N	M	P	Q	Mass(kg)	T
MSO-2xN10/N11(CX)(KP)	a	99	125	79	35	4.5	21	50	19	10	4	M4	M3.5	M3.5	0.76	5
MSO-2xN18(CX)(KP)	a	97	134	109	30	6.5	23	60	13	10	4	M4	M4	M3.5	0.9	5
MSO-2xN20/N21(CX)(KP)	a	136	138	81	54	4.5	19	60	14	6.5	4	M4	M4	M3.5	1.0	5
MSO-2xN25/N35(CX)(KP)	b	160	159	97	150	5	—	100	8	1.6	3	M4	M5	M3.5	1.3	5
MSO-2xN50/N60(CX)(KP)	b	216	169	112	204	6	—	100	17	2	3	M5	M6	M4	2.9	10
MSO-2xN80/N95(KP)	b	270	213	137	247	11.5	—	100	45.5	10	3	M6	M6	M4	4.6	10
MSO-2xN125(KP)	c	276	251	148	255	10.5	—	125	24.5	11	4	M6	M8	M4	6.6	30
MSO-2xN150(KP)	c	296	276	156	275	10.5	—	125	43.5	11	4	M6	M8	M4	8.5	30
MSO-2xN180/N220(KP)	c	370	304	194.5	340	15	—	190	28.5	14	4	M8	M10	M4	14.5	30
MSO-2xN300/N400(KP)	c	395	392	209	365	15	—	225	42.5	14	4	M8	M12	M4	24.5	50

## 1.10.4 Outline Dimensions of Enclosed Motor Starters

### ■ Nonreversing Starters with Enclosures



**MS-N10(KP)-N21(KP)**

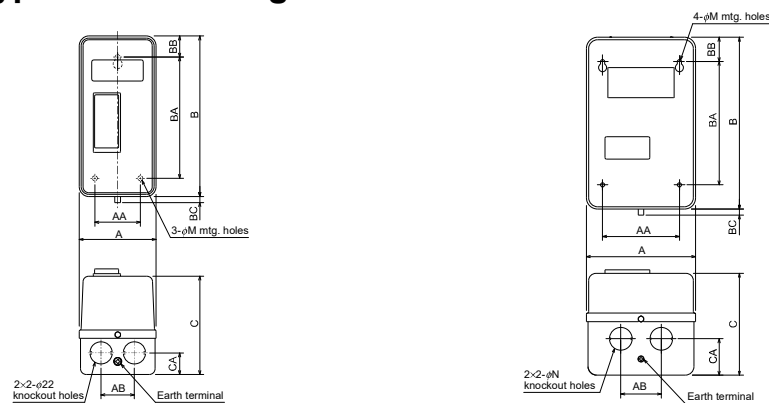
**MS-N25(KP)-N400(KP)**

#### • Dimensions

Type	A	AA	AB	B	BA	BB	BC	C	CA	M	N	Mass(kg)
MS-N10/K11(KP)	76	45	33	159	120	21	6	97.5	21.5	4	22	0.8
MS-N12(KP)	76	45	33	159	120	21	6	97.5	21.5	5	22	0.9
MS-N20(KP)/N21(KP)	104	76	50	170	140	15	6	110	30	6	22	1.1
MS-N25(KP)/N35(KP)	135	95	50	225	165	30	6	126	45	6	28	2.0
MS-N50(KP)	160	120	80	270	220	25	12	145	45	6	22 × 35	3.2
MS-N65(KP)	160	120	80	270	220	25	12	145	45	6	22 × 35	3.2
MS-N80/N95(KP)	190	150	100	300	260	20	12	163	67	7	22 × 35	4.0
MS-N125(KP)	230	170	90	384	330	29	12	190	80	9	44 × 50	8.0
MS-N150(KP)	270	200	120	484	400	44	12	209	85	9	44 × 50	12.8
MS-N180/N220(KP)	270	200	120	484	400	44	12	209	85	9	44 × 50	16.2
MS-N300/N400(KP)	440	320	160	590	480	55	12	220	140/90*	11	62 × 78	28

\* Left value is for power-supply side, right for load side.

### ■ Enclosed Type Nonreversing Starters with Pushbuttons



**MS-N10PM(KP)-N21PM(KP)**

**MS-N25PM(KP)-N95PM(KP)**

#### • Dimensions

Type	A	AA	AB	B	BA	BB	BC	C	CA	M	N	Mass(kg)
MS-N10/N11PM(KP)	76	45	33	159	120	21	6	114	22	4	22	0.9
MS-N20PM(KP)	104	76	50	170	140	15	6	114	30	6	22	1.3
MS-N21PM(KP)	104	76	50	170	140	15	6	114	30	6	22	1.3
MS-N25/N35PM(KP)	135	95	50	225	165	30	6	130	45	6	28	2.1
MS-N50/N65PM(KP)	160	120	80	270	220	25	12	149	45	6	22 × 35	3.3
MS-N80/N95PM(KP)	190	150	100	300	260	20	12	167	67	7	22 × 35	4.1