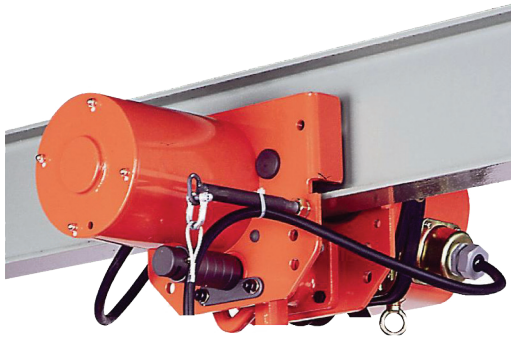


# Electric Motorized Trolley, MAS MAF Type



- MAS series motorized trolley, three phase, single speed, slower traversing speed, for combination with the FA FB & DA DB series electric chain hoists
- MAF series motorized trolley, three phase, single speed, faster traversing speed, for combination with the FA FB & DA DB series electric chain hoists
- MB series motorized trolley, three phase, dual speed, for combination with the FA FB & DA DB series electric chain hoists
- Trolleys come with pivoting adapter for hook to hook type suspension or lug type suspension

## Wiring - Simple Plug-In Type Connection

### SPECIFICATIONS - FAM/FBM 1 SPEED & 2 SPEED HOIST, 1 SPEED & 2 SPEED MOTORIZED TROLLEY

Model	W.L.L. (lbs)	W.L.L. (mt)	Standard Lift (ft)	Lifting Speed (ft/min) (FB) High:Low Speed		Traversing Motor Output (H.P.)	Traversing Speed (ft/min)		Min. Distance H (in) Hook : Lug	Traversing I-beam Width	Trolley Min. Radius (in)	Net Weight (lbs)
				50Hz	60Hz		50Hz/60Hz	50Hz/60Hz				
FAM-0.5	1100	0.5	10	23	27.5	0.54	65 / 78 MAF type	32 / 39 MAS type	27.36 (23.62)	2.95-5.91	43.31	163
FAM-1	2200	1	10	20	24.5				28.74 (24.61)		43.31	192
FAM-2	4400	2	10	10	12.5				35.83 (29.53)	3.94-5.91	59.06	229
FAM-3	6600	3	10	7	8				40.16 (33.86)		59.06	324
FAM-5	11000	5	10	*	4.8	1.02		38.8	4.92-6.89	78.74	428	
FAMB-0.5	1100	0.5	10	23	27.5	0.54	[16] [65] MB type	[19] [78] MB type	27.36 (23.62)	2.95-5.91	43.31	163
FAMB-1	2200	1	10	20	24.5				28.74 (24.61)		43.31	192
FAMB-2	4400	2	10	10	12.5				35.83 (29.53)	3.94-5.91	59.06	229
FAMB-3	6600	3	10	7	8				40.16 (33.86)		59.06	324
FAMB-5	11000	5	10	*	4.8	1.02		38.8	4.92-6.89	78.74	433	

### DIMENSIONS (IN.) - FAMB/FBMB 1 SPEED & 2 SPEED HOIST, 2 SPEED MOTORIZED TROLLEY

W.L.L. (lbs)	W.L.L. (mt)	A	B	C	*D	*E	*F	G	I	*J	K	L	M	N	O	P (dia. of wheel)
1100	0.5	6.34	4.88	8.82	17.97	9.88 (10.94)	8.6	4.72	9.69	4.49	1.69	1.04	3.31	0.75	0.55	2.68
2200	1	6.69	5.04	9.41	19.25	9.88 (10.94)	8.6	4.72	9.69	4.49	1.97	1.22	4.06	0.98	0.75	2.68
4400	2	5.24	6.5	9.41	21.65	10.51 (11.57)	9.72	5.83	12.76	5.39	2.56	1.5	5.33	1.38	1.02	3.29
6600	3	5.83	8.19	9.41	22.91	12.76 (15.75)	9.92	6.3	12.44	7.13	2.36	1.69	6.5	1.93	1.26	3.86
11000	5	7.2	10.74	9.4	19.9	16.5	10.62	6.7	13.2	6.77	2.76	1.77	6.7	2.08	1.38	3.9

\* Contact the Factory for Additional Information



**SPECIFICATIONS - DAM/DBM HEAVY DUTY ELECTRIC CHAIN HOIST**

Model	W.L.L. (lbs)	W.L.L. (mt)	Test Load (mt)	Standard Lift (ft)	Lifting Motor Output (H.P.) (DB) High:Low Speed	Traversing Motorized Trolley Motor Output (H.P.)	Lifting Speed (ft/min) (DB) High:Low Speed		Traversing Speed (ft/min)		Minimum Distance H (in)	Traversing Motorized Trolley Beam Range (in)	Trolley Min. Radius (in)	Net Wt. (lbs)		
							50Hz	60Hz	High Speed 50 Hz / 60 Hz	Low Speed 50 Hz / 60 Hz						
DAM-0.25	550	0.25	0.313	10	0.68	0.54	26	31	65 / 78	33 / 39	22.4	2.95 - 5.91	43.3 [31.4]	161		
DAM-0.5	1100	0.5	0.625	20			24	28						22.8	165	
DAM-1W	2200	1	1.25	10	12		14	29.1						203		
DAM-1S	2200	1	1.25	20	22		27	24.4						223		
DAM-1.5	3500	1.5	1.88	10	29		34	30.7			434					
DAM-2W	4400	2	2.5	20	11		13	31.2					273			
DAM-2S	4400	2	2.5	10	23		27	28.9					434			
DAM-2.5	5500	2.5	3.13	20	4.62		21	29.5					423			
DAM-3	6600	3	3.75	10	4.62		1.02	14			17		37.8	3.94 - 5.91	59 [31.4]	461
DAM-5	11000	5	6.25	10	4.62		9	11			41.3		542			
DAM-7.5	16500	7.5	9.38	10	4.62	1.02 x 2	6	7	47.4	4.92 - 6.89	*	1058				
DAM-10	22000	10	12.5	10	4.62 x 2		9	10	46.6			1365				
DBM-0.25	550	0.25	0.313	10	0.68 : 0.23	0.54	26 : 9	31 : 10	65 / 78	33 / 39	22.4	2.95 - 4.92	43.3 [39.4]	192		
DBM-0.5	1100	0.5	0.625	20	1.22 : 0.41		24 : 8	28 : 9						22.8	201	
DBM-1W	2200	1	1.25	10	1.22 : 0.41		12 : 4	14 : 5						29.1	245	
DBM-1S	2200	1	1.25	20	2.31 : 0.77		22 : 7	27 : 9						24.4	267	
DBM-1.5	3500	1.5	1.88	10	4.62 : 1.55		29 : 10	34 : 11			30.7		470			
DBM-2W	4400	2	2.5	20	2.31 : 0.77		11 : 4	13 : 4			31.2			317		
DBM-2S	4400	2	2.5	10	4.62 : 1.55		23 : 8	27 : 9			28.9			478		
DBM-2.5	5500	2.5	3.13	20	4.62 : 1.55		18 : 6	21 : 7			29.5			461		
DBM-3	6600	3	3.75	10	4.62 : 1.55		1.02	14 : 5			17 : 6		37.8	3.94 - 5.91	59 [39.4]	498
DBM-5	11000	5	6.25	10	4.62 : 1.55		9 : 3	11 : 3			41.3		580			

- \* If You Require 6 Button Pendant Control in Place of 4 Button, a "C" Should be Added to the End of the Model Name
- \* The Length of Power Cord 4Core Cable is 16'
- \* Standard Push Button Cord is 2' Less than Lift
- \* Contact the Factory for Special Beam Widths for Motorized Trolley
- \* Special Motorized Trolleys Can be Supplied where the Trolley Minimum Radius is the Number Bracketed Off

**DIMENSIONS (IN.) - DAM/DBM HEAVY DUTY ELECTRIC CHAIN HOIST**

MODEL	A	B	C	γ	D	E	F	G	I	J	K	M
DAM / DMB-0.25	19.0+2β	9.8+β	9.0+β	2.9	6.6	4.3	9.5	4.7	10.5 / 10.9	10.3 / 11.3	4.3	-
DAM / DMB-0.5	19.0+2β	9.8+β	9.0+β	2.9	6.6	4.3	9.5	4.7	10.5 / 11.0	10.3 / 11.3	4.3	-
DAM / DMB-1W	19.0+2β	9.8+β	9.0+β	2.9	8.1	2.7	9.5	4.7	10.5 / 11.0	10.3 / 11.3	4.3	-
DAM / DMB-1S	19.0+2β	9.8+β	9.0+β	2.9	6.8	5	9.5	4.7	11.4 / 12.5	10.8 / 11.7	4.3	-
DAM / DMB-1.5	20.0+2β	10.5+β	9.7+β	3.9	7.8	6.9	11.3	5.8	13.5 / 14.6	12.3 / 13.6	4.8	-
DAM / DMB-2W	20.0+2β	10.5+β	9.7+β	3.9	8.6	3.2	11.3	5.8	11.4 / 12.5	10.8 / 11.7	4.8	-
DAM / DMB-2S	20.0+2β	10.5+β	9.7+β	3.9	7.7	6.9	11.3	5.8	13.5 / 14.6	12.3 / 13.6	4.8	-
DAM / DMB-2.5	22.5+2β	12.7+β	9.8+β	3.9	7.7	6.9	12.4	6.3	13.5 / 14.6	12.3 / 13.6	6.6	-
DAM / DMB-3	22.5+2β	12.7+β	9.8+β	3.9	10.2	4.5	12.4	6.3	13.5 / 14.6	12.3 / 13.6	6.6	-
DAM / DMB-5	24+2β	13.4+β	13.4+β	4.9	10.7	4	13.2	6.7	13.5 / 14.6	12.3 / 13.6	6.8	-
DAM-7.5 & DAM-10	24+2β	13.4+β	13.4+β	4.9	-	-	27.4	14.2	13.5 / 14.6	12.3 / 13.5	6.8	31.4 & 37.8

- \* The Dimensions D and E Depend on the Lift
- \* For the Dimensions β and γ, see page 40
- \* The Dimension K is in case that "Traversing I Beam Width" is Minimum



# COMBINATION OF ELECTRIC TROLLEYS WITH TRAVERSING RAILS

Trolley model W.L.L.(ton) (number of falls)	Min. I-beam width (C)	I-beam H×B×t <sub>1</sub> / t <sub>2</sub> (mm) I' (cm <sup>4</sup> )	I-beam dimensions																						
			600×190×16/35 130000	600×190×13/25 98400	450×175×13/26 48800	450×175×11/20 39200	400×150×12.5/25 31700	400×150×10/18 24100	350×150×12/24 22400	350×150×9/15 16200	300×150×11.5/22 14700	300×150×10/18.5 12700	300×150×8/13 9480	250×125×10/19 7310	250×125×7.5/12.5 5180	200×150×9/16 4460	200×100×7/10 2170	180×100×6/10 1670	150×125×8.5/14 1760	150×75×5.5/9.5 819	125×75×5.5/9.5 538	100×75×5/8 281			
0.25 · 0.5	17	(a)								308		264			207	218	156	169	112	124	104	66	75	50	
		(b)							22	25				21	27	21	27	24	30	30	30	26	30	30	
1S · 1W	17	(a)					288	302	240	258	194	201	212	150	163	106	118	98			54	63			
		(b)					20	28	22	31	24	27	33	27	33	30	36	36			31	36			
1.5 · 2S · 2W	26	(a)			314	326	266	280	218	236	172	179	190	128	141		96								
		(b)			15	21	16	23	17	26	19	22	28	22	28		31								
2.5 · 3W	47	(a)			300	312	252	266	204	222	158	165	176	114	127	70									
		(b)			10	16	11	18	12	21	14	17	23	17	23	20									
5	33	(a)	426	446	294	306	246		198		152			108											
		(b)	13	23	22	18	23		24		26			29											
7.5	58	(a)	420	446	294	306	246		198		152														
		(b)	7	17	16	22	17		18		20														
10	58	(a)	426	446	294	306	246		198		152														
		(b)	7	23	16	22	17		18		20														

- For understanding the descriptions at the upper row of the Table:

- As for the rails belonging to the blue indicated zone, the standard type trolleys can be fitted to each of them.
- As for the rails belonging to the gray-indicated zone, such trolleys as having special dimensions to meet them must be prepared separately.

- For understanding the descriptions at the medium row of the Table:

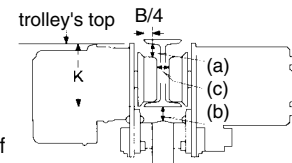
Each of the figures indicated at this row shows the distance [a](unit:mm) of the sketch at right side.

This distance [a] may be zero or negative depending on the combination of the standard trolley with some types of rails: for this case, no figure is given here because such combination can't be put in actual application.

In the case of the combination indicated with a blue figure, the trolley's top is higher than the rail's top so that the trolley may touch the ceiling suspending the rail ( $H \leq K$ ): pay attention to this.

- For understanding the descriptions at the lower row of the Table:

Each of the figures indicated at this row shows the distance [b](unit:mm) of the sketch at the right side. The distance [b] may be zero or negative depending on the combination of the standard trolley with some type of rails: for this case, no figure is given here because such combination can't be put in actual application. Also for the rails whose thickness  $t_2$  is too thin to hold the rated load, no figure is given.



If there is even one blank at either of the upper, medium and lower rows of the Table, this means that such relevant rail can't be used to together with the trolleys.

In this way, referring to the Table, you will see what type of rail(I beam) is suited to the trolley you have selected.

Then it is needed to check if such rail satisfies the following condition: even if it is given a 125% of the rated safety load, its deflection amount shall be  $1/1200$  of its support span or less. That is, the I beam to be selected shall have its moment of inertia of the longitudinal section (Ix) be as follows:

$$Ix: \text{Moment of inertia of the logitudinal section} \geq 119.1 \times W \times L^2$$

In which,

W: W.L.L.×1.25+Chain block's own weight(ton)

L: Support span(m)

For "Combination of Electric Trolleys with Traversing Rails", the following must be taken note of:

At the medium row of the table:

In the case of the combination indicated with a gray zone, the relation  $H \leq K$  applies to both plain trolley and geared trolley.

In the case of the combination indicated with a blue zone, the relation  $H \leq K$  applies only to the geared trolley.