

ELEPHANT

HEAVY DUTY ELECTRIC CHAIN BLOCK



DA type **DB** type
SINGLE SPEED **DOUBLE SPEED**



No.2

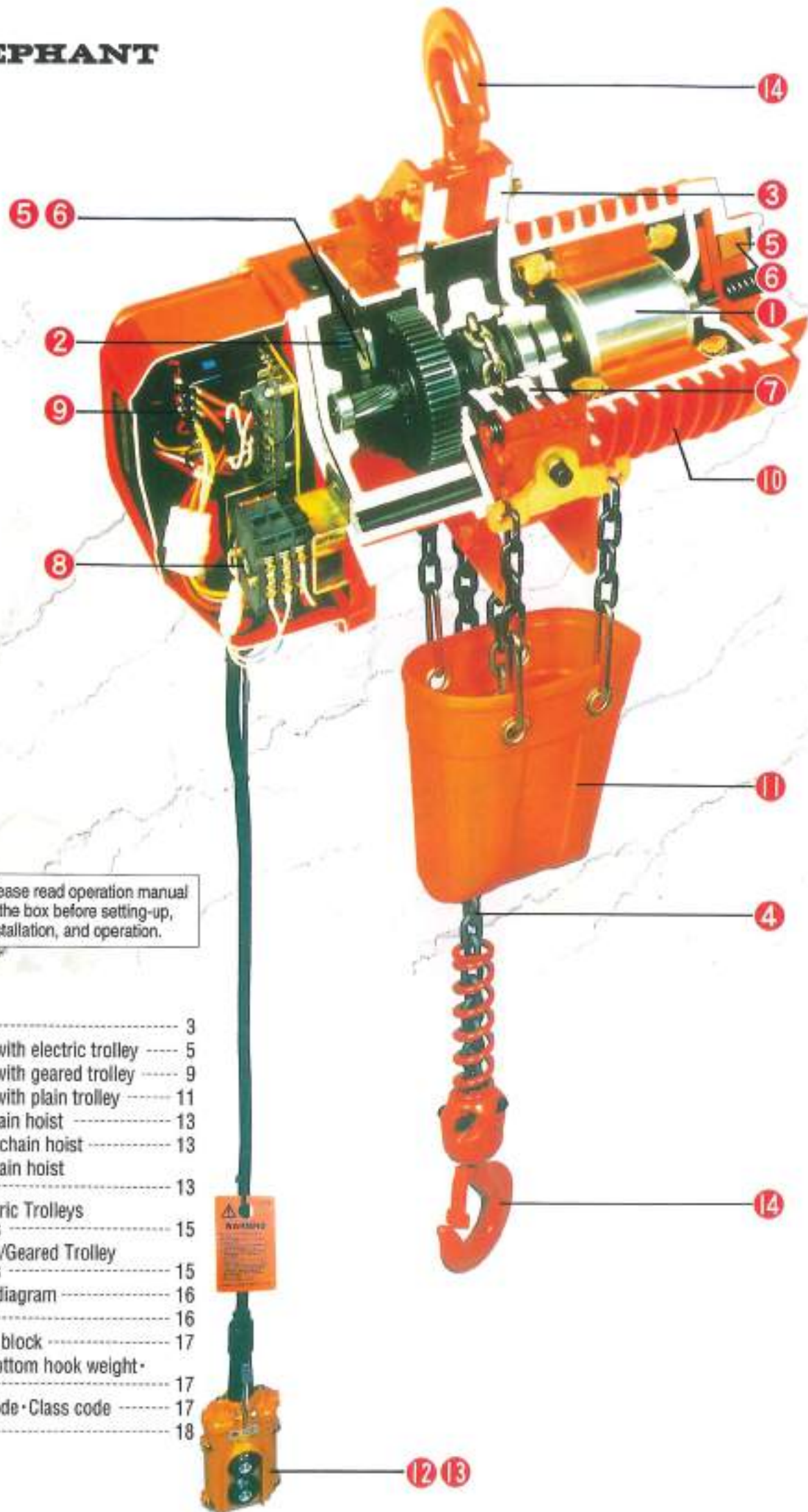


ELEPHANT CHAIN BLOCK CO.,LTD.

EPDFDA-2



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CAUTION

Please read operation manual in the box before setting-up, installation, and operation.

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ELEPHANT ELECTRIC CHAIN BLOCK DA/DB TYPE IS DESIGNED BY UNIQUE IDEA AND TRUSTABLE TECHNIQUE. THIS TYPE IS USEFUL FOR VARIOUS OPERATIONS OF HEAVY LOAD.



FEATURES OF DA/DB TYPE

① High speed and highly efficient lifting motor

To meet any severe conditions of operating the chain block, DA/DB model employs the newly-developed lifting motor which allows it to operate continuously for a long period and with the frequent starts/hour duties. Its lifting speed is made as high as possible to ensure the enhanced working efficiency.

② Noiseless and dust protective body

Durable helical gears & oil bath type gear case make quiet operation.

③ Solid steel side plate

④ Highly durable load chain

The load chain is the surface-hardened one whose properties completely agree with the ISO standard Grade T, offering the satisfactory degrees of breaking strength, wear resistance and impact absorption. Chains of high corrosion resistance for special uses are available upon request.

⑤ Mechanical brake and motor brake—safe double brake

The electric-magnetic brake is combined together with the mechanical brake to constitute a complete double brake system, and even the former alone has enough capacity to hold a static safe working load.

⑥ DC brake and motor with low power consumption

D.C. solenoid is used for the electro-magnetic brake, and this promises lower electrical consumption throughout the operation of the electric chain block.

⑦ Unique chain guide

Since this new chain block is designed in such a way that the chain guide rotation on the load sheave is transmitted to the electrical limit switch, operation stops automatically by the function of the limit switch, not only when the chain is wound up or down to its end, but also in situations like as the dust and foreign matters remain pressed and kept in the pockets of load sheave.

⑧ Reliable double—action electrical limit switch

Electrical limit switch for this model acts with two steps.

At the first step, the limit switch breaks the operating circuit, and at the following step, it breaks the main power circuit.

⑨ Negative phase contactor and highly efficient magnetic contactor with mechanical & electrical interlock

⑩ Motor frame

Cooling fin of aluminum motor frame can reduce the rise of temperature.

⑪ High durability Chain bucket

⑫ Control switch voltage set at 24V

⑬ Push-push type push button switch (DB type)

⑭ Top hook and bottom hook with safety latch

While overload situation, hooks open gradually and not break suddenly. Further compact thrust bearing prevent twisting of load chain.



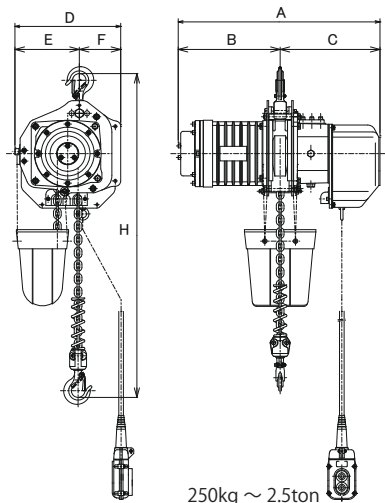
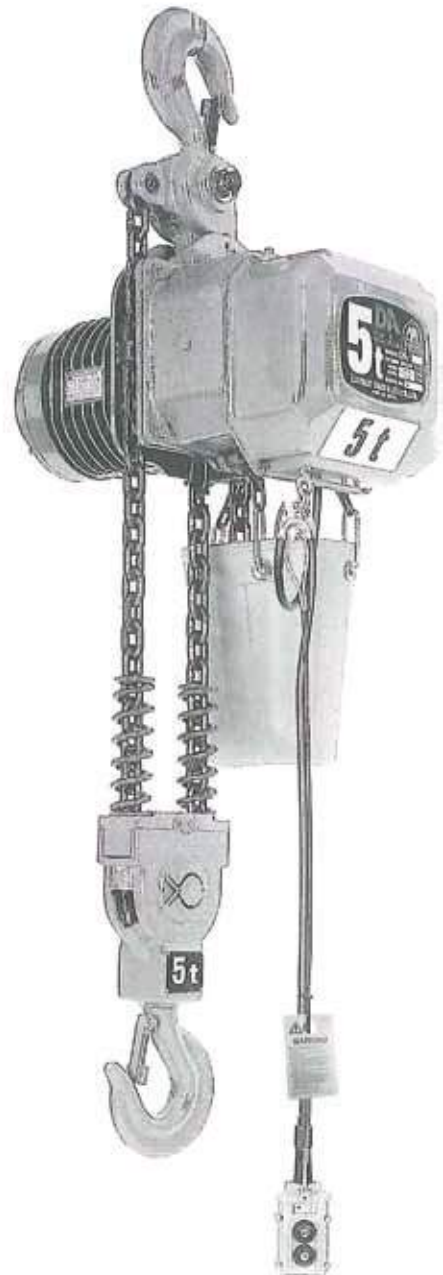
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ELECTRIC CHAIN BLOCK HOOK SUSPENSION TYPE

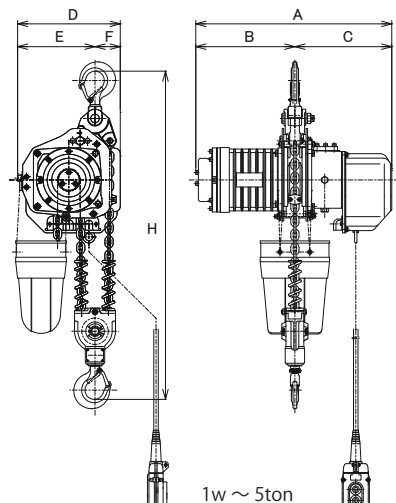
2 push button type (DA·DB)

2 push button type (DA)

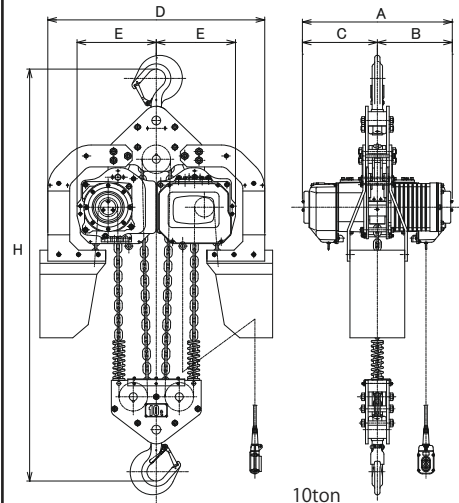
2 push button type (DB)



250kg ~ 2.5ton



1w ~ 5ton



10ton

DA type(single speed)/DB type(double speed)

SPECIFICATION

Model	Capacity (ton)	Test Load (ton)	Standard lift (m)	Standard push button cord length(m)	load chain dia × number of falls	Lifting motor output (kW) (DB)High:Low speed	Lifting speed(m/min) (DB)High:Low speed		Minimum distance H (mm)	Ampere (A) [220V]	Net weight (kg)
							50Hz	60Hz			
DA-0.25	250kg	313kg	3 or 6	2.5 or 5.5	5.6×1	0.5	7.8	9.3	525	2.5	51 (53)
DA-0.5	0.5	625kg			6.3×1	0.9	7.3	8.6	530	4.5	56 (59)
DA-1W	1	1.25			6.3×2	0.9	3.6	4.3	705	4.5	63 (69)
DA-1S	1	1.25			7.1×1	1.7	6.8	8.2	585	8.7	72 (76)
DA-1.5	1.5	1.88			9.5×1	3.4	8.7	10.3	730	15.3	120 (127)
DA-2W	2	2.5			7.1×2	1.7	3.4	4.1	790	8.7	84 (91)
DA-2S	2	2.5			11.2×1	3.4	6.9	8.1	730	15.3	124 (133)
DA-2.5	2.5	3.13	4	3.5	11.2×1	3.4	5.5	6.5	730	15.3	128
DA-3	3	3.75			9.5×2	3.4	4.35	5.15	975	15.3	145
DA-5	5	6.25			11.2×2	3.4	2.75	3.25	1045	15.3	163
DA-10	10	12.5			11.2×4	3.4×2	2.7	3.2	1390	15.3	396
DB-0.25	250kg	313kg	3 or 6	2.5 or 5.5	5.6×1	0.5:0.17	7.8:2.6	9.3:3.1	525	2.6	56 (59)
DB-0.5	0.5	625kg			6.3×1	0.9:0.3	7.3:2.4	8.6:2.8	530	4.7	62 (66)
DB-1W	1	1.25			6.3×2	0.9:0.3	3.6:1.2	4.3:1.4	705	4.7	69 (76)
DB-1S	1	1.25			7.1×1	1.7:0.57	6.8:2.2	8.2:2.7	585	9.2	79 (84)
DB-1.5	1.5	1.88			9.5×1	3.4:1.14	8.7:2.9	10.3:3.4	730	16.0	136 (144)
DB-2W	2	2.5			7.1×2	1.7:0.57	3.4:1.1	4.1:1.3	790	9.2	92 (100)
DB-2S	2	2.5			11.2×1	3.4:1.14	6.9:2.3	8.1:2.7	730	16.0	141 (150)
DB-2.5	2.5	3.13	4	3.5	11.2×1	3.4:1.14	5.5:1.8	6.5:2.1	730	16.0	144
DB-3	3	3.75			9.5×2	3.4:1.14	4.35:1.4	5.15:1.7	975	16.0	162
DB-5	5	6.25			11.2×2	3.4:1.14	2.75:0.9	3.25:1.0	1045	16.0	179

1) The number bracketed in "Net weight" indicates 6m lift. 2) The length of power cord is 4core-5m (standard).

3) Current ampere depends on the voltage and length of power cord.

DIMENSIONS

MODEL	A	B	C	D	E	F
DA-0.25/DB-0.25	528/563	267/276	261/287	276	168	108
DA-0.5/DB-0.5	528/590	267/303	261/287	276	168	108
DA-1W/DB-1W	528/590	267/303	261/287	276	208	68
DA-1S/DB-1S	564/619	290/321	274/298	301	174	127
DA-1.5/DB-1.5	655/717	342/372	313/345	372	198	174
DA-2W/DB-2W	564/619	290/321	274/298	301	219	82
DA-2S/DB-2S	655/717	342/372	313/345	372	198	174
DA-2.5/DB-2.5	655/717	342/372	313/345	372	198	174
DA-3/DB-3	655/717	342/372	313/345	372	258	114
DA-5/DB-5	655/717	342/372	313/345	375	273	102
DA-10	684	342	342	990	363	-

1) The dimensions D,E depends on the lift. 2) For top and bottom hooks, see page 17.

*The specification and dimensions may be changed without prior notice for improvement. **4**



ELECTRIC CHAIN BLOCK WITH ELECTRIC TROLLEY

4 push button type (DA)
For monorail



6 push button type (DA)
For crane



4 push button type (DA)
For monorail



6 push button type (DA)
For crane

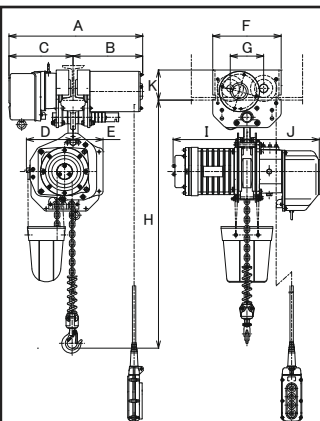


Option: Wiring box for saddle

- Magnetic contactor and transformer are included.
- Operating voltage is 24V
- Power cord and operating cord are not included

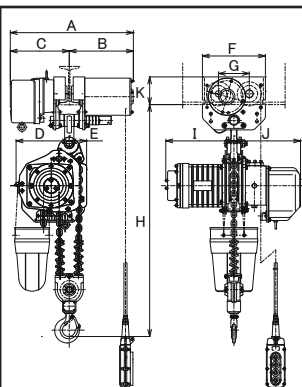
Option: Wiring box for saddle

- Magnetic contactor and transformer are included.
- Operating voltage is 24V
- Power cord and operating cord are not included



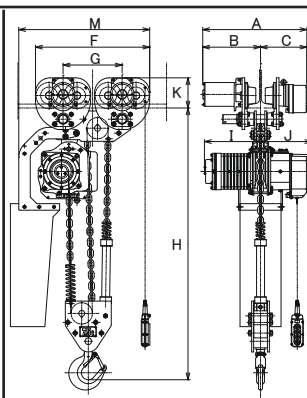
250kg ~ 2.5ton

The drawing of electric trolley 2.5t is different from above drawing.

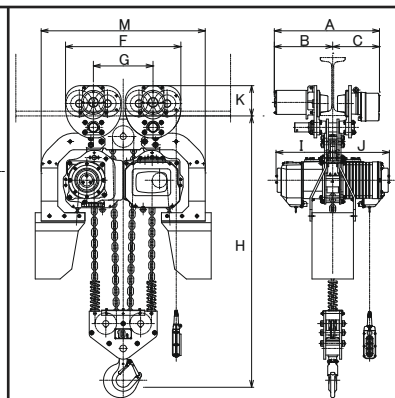


1w ~ 5ton

The drawing of electric trolley 3t, 5t is different from above drawing.



7.5 t



10 t

DAM type/DAMB type SPECIFICATION

Model	Capacity (ton)	Test Load (ton)	Standard lift (m)	Standard push button cord length (m)	Lifting motor output (kW)	Traversing motor output (kW) High:Low (kW)	Lifting speed (m/min)		Traversing speed (MB) High:Low (m/min)		Minimum distance H (mm)	Traversing I beam width	Trolley minimum radius (mm)	Net weight (kg)			
							50Hz	60Hz	50Hz	60Hz							
DAM-0.25	250kg	313kg	3 or 6	2.5 or 5.5	0.5	0.4	7.8	9.3	20 (MAF) or 10 (MAS)	24 (MAF) or 12 (MAS)	570	75	1100 (800)	73 (77)			
DAM-0.5	0.5	625kg			0.9		7.3	8.6			575	100		75 (79)			
DAM-1W	1	1.25			0.9		3.6	4.3			740	125		92 (102)			
DAM-1S	1	1.25			1.7		6.8	8.2			620	150		101 (106)			
DAM-1.5	1.5	1.88			3.4		8.7	10.3			735	☆ 100	1500 (800)	192 (200)			
DAM-2W	2	2.5			1.7		3.4	4.1			795			124 (133)			
DAM-2S	2	2.5			3.4		6.9	8.1			735			125	197 (206)		
DAM-2.5	2.5	3.13			3.4		5.5	6.5			745			150	1500 (1000)	192	
DAM-3	3	3.75	4	3.5	3.4	0.75	4.35	5.15			990	125 · 150 · 175	2000 (1000)	209			
DAM-5	5	6.25			3.4		2.75	3.25			1055			246			
DAM-7.5	7.5	9.38			3.4		0.75 × 2	1.8			2.1			1200	150	∞	480
DAM-10	10	12.5			3.4 × 2			2.7			3.2			1180	175	∞	690
DAMB-0.25	250kg	313kg			3 or 6	2.5 or 5.5	0.5	0.4:0.1	7.8	9.3	20:5	24:6	570	75	1100 (800)	73 (77)	
DAMB-0.5	0.5	625kg					0.9		7.3	8.6			575	100		75 (79)	
DAMB-1W	1	1.25	0.9	3.6			4.3		740	125			92 (102)				
DAMB-1S	1	1.25	1.7	6.8			8.2		620	150			101 (106)				
DAMB-1.5	1.5	1.88	3.4	8.7			10.3		735	☆ 100			1500 (800)	192 (200)			
DAMB-2W	2	2.5	1.7	3.4			4.1		795					124 (133)			
DAMB-2S	2	2.5	3.4	6.9			8.1		735					125	197 (206)		
DAMB-2.5	2.5	3.13	3.4	5.5			6.5		745					150	1500 (1000)	192	
DAMB-3	3	3.75	4	3.5	3.4	0.75:0.19	4.35	5.15	990	125 · 150 · 175			2000 (1000)	209			
DAMB-5	5	6.25			3.4		2.75	3.25	1055					246			
DAMB-7.5	7.5	9.38			3.4		0.75:0.19 × 2	1.8	2.1					1200	150	∞	480
DAMB-10	10	12.5			3.4 × 2			2.7	3.2					1180	175	∞	690

1) The number bracketed in "Net weight" indicates 6m lift.

2) The length of power cord in standard is 4 core-0.5m in case of 4 push button, 7 core-0.5m in case of 6 push button.

3) When you need 6 push button for crane instead of 4 push button, "C" should be added to the end of model name.

4) We can supply the special electric trolley of which "Trolley mini radius" is the number bracketed off.

*mark-When you install more than 2.5 ton chain block to I beam width 100mm, please note that the strength of the rail may not be enough depends on the span.

DIMENSIONS

MODEL	A	B	C	*γ	D	E	F	G	I	J	K	M
DAM-0.25/DAMB-0.25	482+*2β	251+*β	231+*β	75	168	108	246	120	267	261	125	-
DAM-0.5/DAMB-0.5	482+*2β	251+*β	231+*β	75	168	108	246	120	267	261	125	-
DAM-1W/DAMB-1W	482+*2β	251+*β	231+*β	75	208	68	246	120	267	261	125	-
DAM-1S/DAMB-1S	482+*2β	251+*β	231+*β	75	174	127	246	120	290	274	125	-
DAM-1.5/DAMB-1.5	514+*2β	267+*β	247+*β	100	198	174	324	148	342	313	137	-
DAM-2W/DAMB-2W	514+*2β	267+*β	247+*β	100	219	82	324	148	290	274	137	-
DAM-2S/DAMB-2S	514+*2β	267+*β	247+*β	100	198	174	324	148	342	313	137	-
DAM-2.5/DAMB-2.5	576+*2β	324+*β	252+*β	100	198	174	316	160	342	313	182	-
DAM-3/DAMB-3	576+*2β	324+*β	252+*β	100	258	114	316	160	342	313	182	-
DAM-5/DAMB-5	610+*2β	340+*β	270+*β	125	273	102	336	170	342	313	189	-
DAM-7.5/DAMB-7.5	634+*2β	353+*β	281+*β	150	-	-	696	360	342	313	189	798
DAM-10/DAMB-10	634+*2β	353+*β	281+*β	150	-	-	696	360	342	313	189	990

1) The dimensions D,E depends on the lift. 2) For the dimensions β and γ, see page 16.

3) The dimension K is in case of that "Traversing I beam width" is maximum.

*The specification and dimensions may be changed without prior notice for improvement.



ELECTRIC CHAIN BLOCK WITH ELECTRIC TROLLEY

4 push button type (DB)
For monorail



6 push button type
(DB)
For crane



Option: Wiring box for saddle

- Magnetic contactor and transformer are included.
- Operating voltage is 24V
- Power cord and operating cord are not included

4 push button type (DB)
For monorail

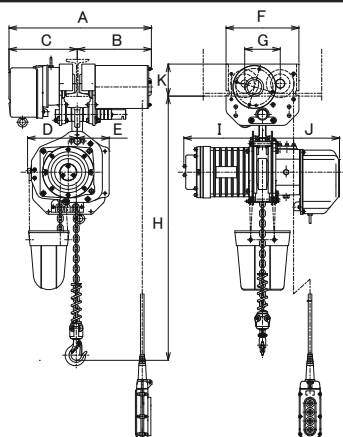


6 push button type
(DB)
For crane



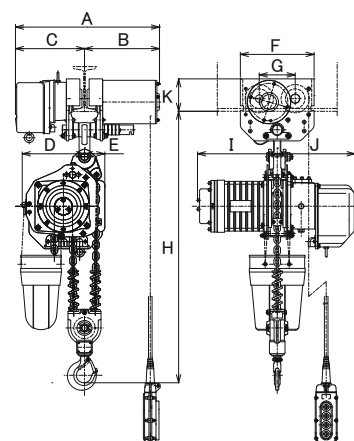
Option: Wiring box for saddle

- Magnetic contactor and transformer are included.
- Operating voltage is 24V
- Power cord and operating cord are not included



250kg ~ 2.5ton

The drawing of electric trolley 2.5t is different from above drawing.



1w ~ 5ton

The drawing of electric trolley 3t, 5t is different from above drawing.

DBM type/DBMB type SPECIFICATION

Model	Capacity (ton)	Test Load (ton)	Standard lift (m)	Standard push button cord length(m)	Lifting motor output (kW) High:Low speed	Traversing motor output (kW)	Lifting speed High:Low speed(m/min)		Traversing speed (MB) High:Low (m/min)		Minimum distance H (mm)	Traversing I beam width	Trolley minimum radius (mm)	Net weight (kg)
							50Hz	60Hz	50Hz	60Hz				
DBM-0.25	250kg	313kg	3 or 6	2.5 or 5.5	0.5:0.17	0.4	7.8:2.6	9.3:3.1	20 (MAF) or 10 (MAS)	24 (MAF) or 12 (MAS)	570	75	1100 (800)	87(91)
DBM-0.5	0.5	625kg			0.9:0.3		7.3:2.4	8.6:2.8			575	100		91(96)
DBM-1W	1	1.25			0.9:0.3		3.6:1.2	4.3:1.4			740	125		111(119)
DBM-1S	1	1.25			1.7:0.57		6.8:2.2	8.2:2.7			620	150		121(126)
DBM-1.5	1.5	1.88			3.4:1.14		8.7:2.9	10.3:3.4			735	☆ 100	1500 (800)	213(220)
DBM-2W	2	2.5			1.7:0.57		3.4:1.1	4.1:1.3			795			144(153)
DBM-2S	2	2.5			3.4:1.14		6.9:2.3	8.1:2.7			735			125
DBM-2.5	2.5	3.13	4	3.5	3.4:1.14	0.75	5.5:1.8	6.5:2.1			745	150	1500 (1000)	209
DBM-3	3	3.75			3.4:1.14		4.35:1.4	5.15:1.7			990	125 · 150 · 175		226
DBM-5	5	6.25			3.4:1.14		2.75:0.9	3.25:1.0			1055	2000 (1000)		263
DBMB-0.25	250kg	313kg	3 or 6	2.5 or 5.5	0.5:0.17	0.4:0.1	7.8:2.6	9.3:3.1	20:5	24:6	570	75	1100 (800)	87(91)
DBMB-0.5	0.5	625kg			0.9:0.3		7.3:2.4	8.6:2.8			575	100		91(96)
DBMB-1W	1	1.25			0.9:0.3		3.6:1.2	4.3:1.4			740	125		111(119)
DBMB-1S	1	1.25			1.7:0.57		6.8:2.2	8.2:2.7			620	150		121(126)
DBMB-1.5	1.5	1.88			3.4:1.14		8.7:2.9	10.3:3.4			735	☆ 100	1500 (800)	213(220)
DBMB-2W	2	2.5			1.7:0.57		3.4:1.1	4.1:1.3			795			144(153)
DBMB-2S	2	2.5			3.4:1.14		6.9:2.3	8.1:2.7			735			125
DBMB-2.5	2.5	3.13	4	3.5	3.4:1.14	0.75:0.19	5.5:1.8	6.5:2.1			745	150	1500 (1000)	209
DBMB-3	3	3.75			3.4:1.14		4.35:1.4	5.15:1.7			990	125 · 150 · 175		226
DBMB-5	5	6.25			3.4:1.14		2.75:0.9	3.25:1.0			1055	2000 (1000)		263

1) The number bracketed in "Net weight" indicates 6m lift.

2) The length of power cord in standard is 4 core-0.5m in case of 4 push button, 7 core-0.5m in case of 6 push button.

3) When you need 6 push button for crane instead of 4 push button, "C" should be added to the end of model name.

4) We can supply the special electric trolley of which "Trolley mini radius" is the number bracketed off.

*mark-When you install more than 2.5 ton chain block to I beam width 100mm, please note that the strength of the rail may not be enough depends on the span.

DIMENSIONS

MODEL	A	B	C	*γ	D	E	F	G	I	J	K	M
DBM-0.25/DBMB-0.25	482+*2β	251+*β	231+*β	75	168	108	246	120	276	287	125	-
DBM-0.5/DBMB-0.5	482+*2β	251+*β	231+*β	75	168	108	246	120	303	287	125	-
DBM-1W/DBMB-1W	482+*2β	251+*β	231+*β	75	208	68	246	120	303	287	125	-
DBM-1S/DBMB-1S	482+*2β	251+*β	231+*β	75	174	127	246	120	321	298	125	-
DBM-1.5/DBMB-1.5	514+*2β	267+*β	247+*β	100	198	174	324	148	372	345	137	-
DBM-2W/DBMB-2W	514+*2β	267+*β	247+*β	100	219	82	324	148	321	298	137	-
DBM-2S/DBMB-2S	514+*2β	267+*β	247+*β	100	198	174	324	148	372	345	137	-
DBM-2.5/DBMB-2.5	576+*2β	324+*β	252+*β	100	198	174	316	160	372	345	182	-
DBM-3/DBMB-3	576+*2β	324+*β	252+*β	100	258	114	316	160	372	345	182	-
DBM-5/DBMB-5	610+*2β	340+*β	270+*β	125	273	102	336	170	372	345	189	-

1) The dimensions D,E depends on the lift. 2) For the dimensions β and γ, see page 16.

3) The dimension K is in case of that "Traversing I beam width" is maximum.

*The specification and dimensions may be changed without prior notice for improvement. **8**



ELECTRIC CHAIN BLOCK WITH GEARED TROLLEY

2 push button type (DA·DB)
For monorail

2 push button type (DA·DB)
For monorail

4 push button type (DA·DB)
For crane

4 push button type (DA·DB)
For crane

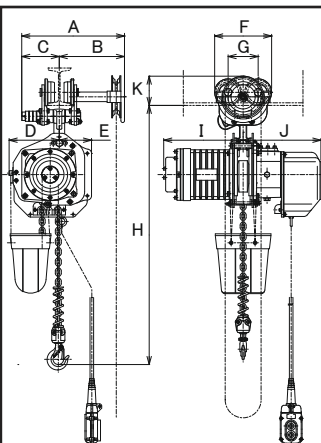


Option: Wiring box for saddle

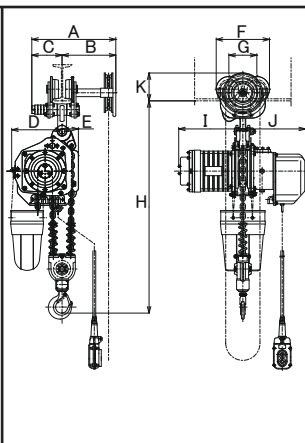
- Magnetic contactor and transformer are included.
- Operating voltage is 24V
- Power cord and operating cord are not included

Option: Wiring box for saddle

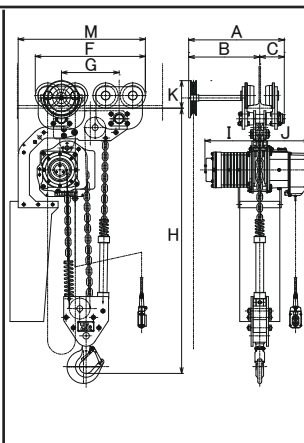
- Magnetic contactor and transformer are included.
- Operating voltage is 24V
- Power cord and operating cord are not included



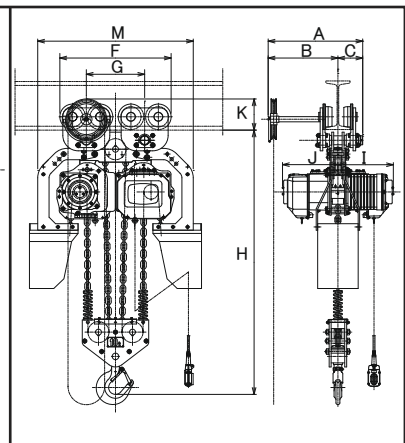
250kg ~ 2.5ton



1w ~ 5ton



7.5 t



10 t

DAG type/DBG type

SPECIFICATION

Model	Capacity (ton)	Test Load (ton)	Standard lift (m)	Standard push button cord length (m)	Lifting motor output (kW) (DB) High:Low speed	Lifting speed (m/min) (DB) High:Low speed		Trolley Traverse distance on 1m hand chain (mm)	Hand chain effort [approx.] kg (N)	Minimum distance H (mm)	Traversing I beam width (mm)	Trolley minimum radius (mm)	Net weight (kg)
						50Hz	60Hz						
DAG-0.25	250kg	313kg	3 or 6	2.5 or 5.5	0.5	7.8	9.3	139	1 (9.8)	545	75 • 100 • 125	900	64 (69)
DAG-0.5	0.5	625kg			0.9	7.3	8.6	139	2 (19.6)	550		900	68 (75)
DAG-1W	1	1.25			0.9	3.6	4.3	114	3.5 (34.3)	715		1100	81 (91)
DAG-1S	1	1.25			1.7	6.8	8.2	114	3.5 (34.3)	595		1100	89 (97)
DAG-1.5	1.5	1.88			3.4	8.7	10.3	93	4 (39.2)	725	★ 100 • 125 • 150	1200	145 (156)
DAG-2W	2	2.5			1.7	3.4	4.1	93	5.5 (54.0)	785		1200	109 (120)
DAG-2S	2	2.5			3.4	6.9	8.1	93	5.5 (54.0)	725		1200	149 (162)
DAG-2.5	2.5	3.13			3.4	5.5	6.5	97	7 (68.6)	735		1700	161
DAG-3	3	3.75	4	3.5	3.4	4.35	5.15	97	8 (78.4)	985	150 • 175	1700	178
DAG-5	5	6.25			3.4	2.75	3.25	84	11.5 (112.7)	1050		2300	214
DAG-7.5	7.5	9.38			3.4	1.8	2.1	66	15 (147.0)	1190	150 • 175	∞	374
DAG-10	10	12.5			3.4 × 2	2.7	3.2	66	19 (186.2)	1170		∞	513
DBG-0.25	250kg	313kg	3 or 6	2.5 or 5.5	0.5:0.17	7.8:2.6	9.3:3.1	139	1 (9.8)	545	75 • 100 • 125	900	69 (75)
DBG-0.5	0.5	625kg			0.9:0.3	7.3:2.4	8.6:2.8	139	2 (19.6)	550		900	75 (81)
DBG-1W	1	1.25			0.9:0.3	3.6:1.2	4.3:1.4	114	3.5 (34.3)	715		1100	87 (97)
DBG-1S	1	1.25			1.7:0.57	6.8:2.2	8.2:2.7	114	3.5 (34.3)	595		1100	96 (105)
DBG-1.5	1.5	1.88			3.4:1.14	8.7:2.9	10.3:3.4	93	4 (39.2)	725	★ 100 • 125 • 150	1200	162 (173)
DBG-2W	2	2.5			1.7:0.57	3.4:1.1	4.1:1.3	93	5.5 (54.0)	785		1200	116 (128)
DBG-2S	2	2.5			3.4:1.14	6.9:2.3	8.1:2.7	93	5.5 (54.0)	725		1200	166 (179)
DBG-2.5	2.5	3.13			3.4:1.14	5.5:1.8	6.5:2.1	97	7 (68.6)	735		1700	177
DBG-3	3	3.75	4	3.5	3.4:1.14	4.35:1.4	5.15:1.7	97	8 (78.4)	985	125 • 150 • 175	1700	194
DBG-5	5	6.25			3.4:1.14	2.75:0.9	3.25:1.0	84	11.5 (112.7)	1050		2300	231

1) The number bracketed in "Net weight" indicates 6m lift.

2) The length of power cord in standard is 4 core-5m in case of 2 push button, 7 core-5m in case of 4 push button.

3) When you need 4 push button for crane instead of 2 push button, "C" should be added to the end of model name.

4) We can supply geared trolley of which I beam width is special.

*mark—When you install more than 2.5 ton chain block to I beam width 100mm, please note that the strength of the rail may not be enough depends on the span.

DIMENSIONS

MODEL	A	B	C	*γ	D	E	F	G	I	J	K	M
DAG-0.25/DBG-0.25	345	219+*β	126-*β	75	168	108	190.4	100.4	267/276	261/287	103	—
DAG-0.5/DBG-0.5	345	219+*β	126-*β	75	168	108	190.4	100.4	267/303	261/287	103	—
DAG-1W/DBG-1W	350	224+*β	126-*β	75	208	68	221	116	267/303	261/287	121	—
DAG-1S/DBG-1S	350	224+*β	126-*β	75	174	127	221	116	290/321	274/298	121	—
DAG-1.5/DBG-1.5	381	237+*β	144-*β	100	198	174	259	136	342/372	313/345	160	—
DAG-2W/DBG-2W	381	237+*β	144-*β	100	219	82	259	136	290/321	274/298	160	—
DAG-2S/DBG-2S	462+*2β	237+*β	225+*β	100	198	174	259	136	342/372	313/345	160	—
DAG-2.5/DBG-2.5	464+*2β	237+*β	227+*β	100	198	174	288	150	342/372	313/345	164.5	—
DAG-3/DBG-3	464+*2β	237+*β	227+*β	100	258	114	288	150	342/372	313/345	164.5	—
DAG-5/DBG-5	503+*2β	255+*β	248+*β	125	273	102	327	169	342/372	313/345	180	—
DAG-7.5-DAG-10	597/584	443.5/430.5+*β	153.5-*β	150	—	—	687	360	342	313/342	179	793/960

1) The dimensions D,E depends on the lift. 2) For the dimensions β and γ, see page 16.

3) The dimension K is in case of that "Traversing I beam width" is maximum.



ELECTRIC CHAIN BLOCK WITH PLAIN TROLLEY

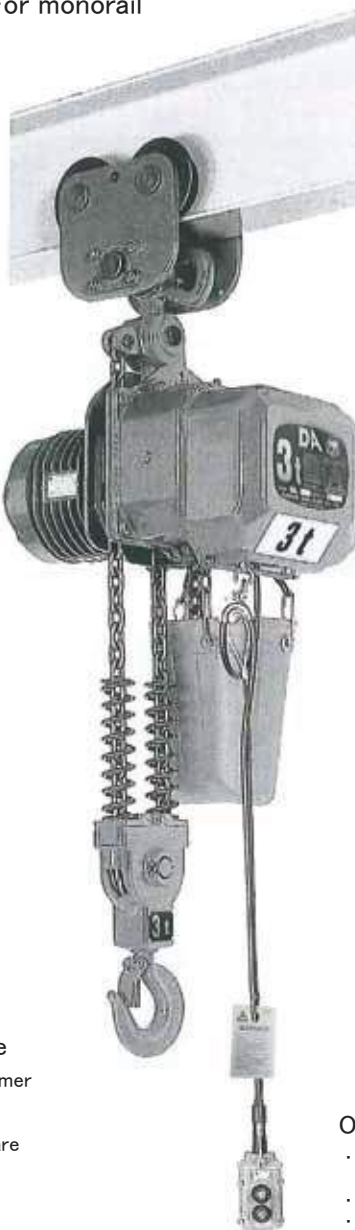
2 push button type (DA·DB)
For monorail



4 push button type
(DA·DB)
For crane



2 push button type (DA·DB)
For monorail



4 push button type
(DA·DB)
For crane

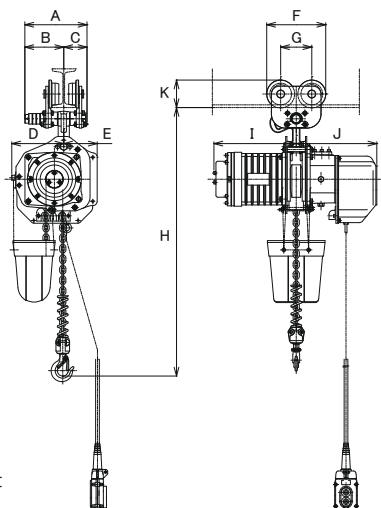


Option: Wiring box for saddle

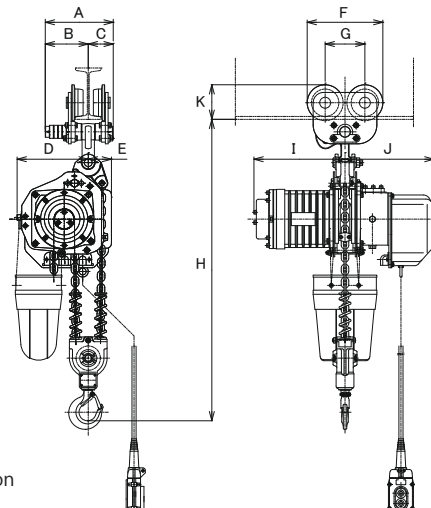
- Magnetic contactor and transformer are included.
- Operating voltage is 24V
- Power cord and operating cord are not included

Option: Wiring box for saddle

- Magnetic contactor and transformer are included.
- Operating voltage is 24V
- Power cord and operating cord are not included



250kg ~ 2.5t



1W ~ 5ton

DAP type/DBP type SPECIFICATION

Model	Capacity (ton)	Test Load (ton)	Standard lift (m)	Standard push button cord length (m)	Lifting motor output (kW) (DB) High:Low speed	Lifting speed(m/min) (DB) High:Low speed		Minimum distance H (mm)	Traversing I beam width (mm)	Trolley minimum radius (mm)	Net weight (kg)
						50Hz	60Hz				
DAP-0.25	250kg	313kg	3 or 6	2.5 or 5.5	0.5	7.8	9.3	545	75 · 100 · 125	900	58(61)
DAP-0.5	0.5	625kg			0.9	7.3	8.6	550		900	63(67)
DAP-1W	1	1.25			0.9	3.6	4.3	715		1100	73(79)
DAP-1S	1	1.25			1.7	6.8	8.2	595		1100	81(85)
DAP-1.5	1.5	1.88			3.4	8.7	10.3	725	☆ 100 · 125 · 150	1200	137(144)
DAP-2W	2	2.5			1.7	3.4	4.1	785		1200	100(108)
DAP-2S	2	2.5	4	3.5	3.4	6.9	8.1	725		1200	140(149)
DAP-2.5	2.5	3.13			3.4	5.5	6.5	735		1700	152
DAP-3	3	3.75			3.4	4.35	5.15	985		1700	169
DAP-5	5	6.25			3.4	2.75	3.25	1050	125 · 150 · 175	2300	205
DBP-0.25	250kg	313kg	3 or 6	2.5 or 5.5	0.5:0.17	7.8:2.6	9.3:3.1	545	75 · 100 · 125	900	64(67)
DBP-0.5	0.5	625kg			0.9:0.3	7.3:2.4	8.6:2.8	550		900	69(73)
DBP-1W	1	1.25			0.9:0.3	3.6:1.2	4.3:1.4	715		1100	79(86)
DBP-1S	1	1.25			1.7:0.57	6.8:2.2	8.2:2.7	595		1100	89(93)
DBP-1.5	1.5	1.88			3.4:1.14	8.7:2.9	10.3:3.4	725	☆ 100 · 125 · 150	1200	153(160)
DBP-2W	2	2.5			1.7:0.57	3.4:1.1	4.1:1.3	785		1200	108(116)
DBP-2S	2	2.5	4	3.5	3.4:1.14	6.9:2.3	8.1:2.7	725		1200	157(167)
DBP-2.5	2.5	3.13			3.4:1.14	5.5:1.8	6.5:2.1	735		1700	168
DBP-3	3	3.75			3.4:1.14	4.35:1.4	5.15:1.7	985		1700	185
DBP-5	5	6.25			3.4:1.14	2.75:0.9	3.25:1.0	1050	125 · 150 · 175	2300	221

1) The number bracketed in "Net weight" indicates 6m lift.

2) The length of power cord in standard is 4 core-5m in case of 2 push button, 7 core-5m in case of 4 push button.

3) When you need 4 push button for crane instead of 2 push button, "C" should be added to the end of model name.

4) We can supply plain trolley of which I beam width is special.

*mark—When you install more than 2.5 ton chain block to I beam width 100mm, please note that the strength of the rail may not be enough depends on the span.

DIMENSIONS

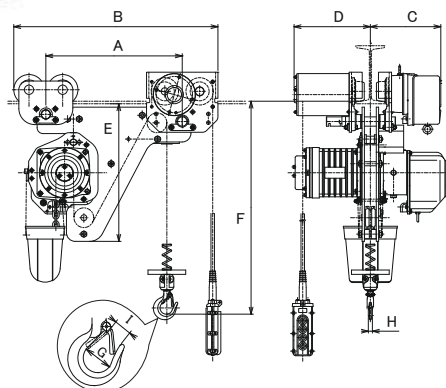
MODEL	A	B	C	*γ	D	E	F	G	I	J	K
DAP-0.25/DBP-0.25	202	76+*β	126-*β	75	168	108	190.4	100.4	267/276	261/287	94
DAP-0.5/DBP-0.5	202	76+*β	126-*β	75	168	108	190.4	100.4	267/303	261/287	94
DAP-1W/DBP-1W	200	74+*β	126-*β	75	208	68	221	116	267/303	261/287	106.5
DAP-1S/DBP-1S	200	74+*β	126-*β	75	174	127	221	116	290/321	274/298	106.5
DAP-1.5/DBP-1.5	238	94+*β	144-*β	100	198	174	259	136	342/372	313/345	135
DAP-2W/DBP-2W	238	94+*β	144-*β	100	219	82	259	136	290/321	274/298	135
DAP-2S/DBP-2S	319+*2β	94+*β	225+*β	100	198	174	259	136	342/372	313/345	135
DAP-2.5/DBP-2.5	325+*2β	98+*β	227+*β	100	198	174	288	150	342/372	313/345	150.5
DAP-3/DBP-3	325+*2β	98+*β	227+*β	100	258	114	288	150	342/372	313/345	150.5
DAP-5/DBP-5	372+*2β	124+*β	248+*β	125	273	102	327	169	342/372	313/345	167.4

1) The dimensions D,E depends on the lift. 2) For the dimensions β and γ, see page 16.

3) The dimension K is in case of that "Traversing I beam width" is maximum.

*The specification and dimensions may be changed without prior notice for improvement. **12**

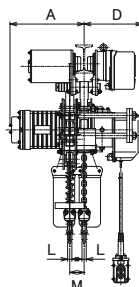
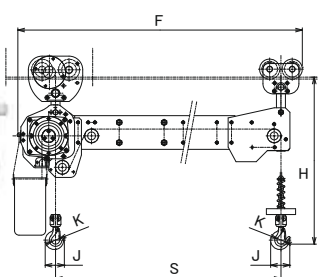
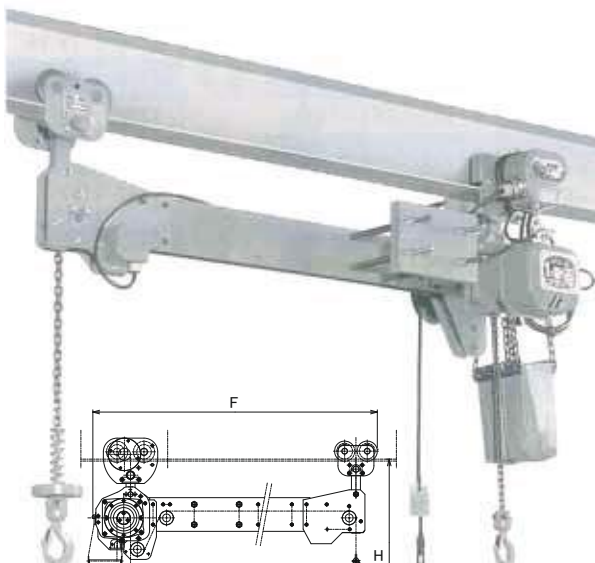
LOW HEAD ELECTRIC CHAIN HOIST



Model	Capacity (ton)	Test load (ton)	Standard lift (m)	
SDAM-0.25	250kg	313kg	3 or 6	
SDAM-0.5	0.5	625kg		
SDAM-1W	1	1.25		
SDAM-1S	1	1.25		
SDAM-1.5	1.5	1.88		
SDAM-2W	2	2.5		
SDAM-2S	2	2.5	4	
SDAM-2.5	2.5	3.13		
SDAM-3	3	3.75		
SDAM-5	5	6.25		
SDBM-0.25	250kg	313kg	3 or 6	
SDBM-0.5	0.5	625kg		
SDBM-1W	1	1.25		
SDBM-1S	1	1.25		
SDBM-1.5	1.5	1.88		
SDBM-2W	2	2.5		
SDBM-2S	2	2.5	4	
SDBM-2.5	2.5	3.13		
SDBM-3	3	3.75		
SDBM-5	5	6.25		

- 1) The standard length of power cord is 4 core-0.5m in case of 4 push button, 7 core-0.5m in case of 6 push button.
- 2) When you need 6 push button for crane instead of 4 push button, "C" should be added to the end of model name.

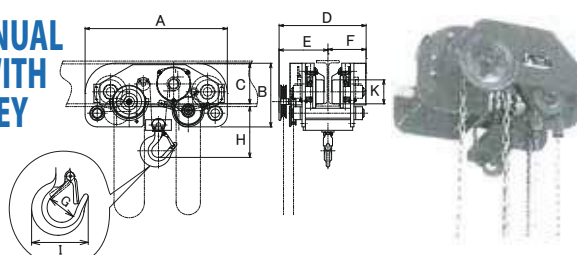
SYNCHRONIZED ELECTRIC CHAIN HOIST



Model	Capacity (ton)	Test load (ton)	Standard lift (m)	
WDAM-0.25	250kg	313kg	3 or 6	
WDAM-0.5	0.5	625kg		
WDAM-1W	1	1.25		
WDAM-1S	1	1.25		
WDAM-1.5	1.5	1.88		
WDAM-2W	2	2.5		
WDAM-2S	2	2.5	4	
WDAM-2.5	2.5	3.13		
WDAM-3	3	3.75		
WDAM-5	5	6.25		
WDBM-0.25	250kg	313kg	3 or 6	
WDBM-0.5	0.5	625kg		
WDBM-1W	1	1.25		
WDBM-1S	1	1.25		
WDBM-1.5	1.5	1.88		
WDBM-2W	2	2.5		
WDBM-2S	2	2.5	4	
WDBM-2.5	2.5	3.13		
WDBM-3	3	3.75		
WDBM-5	5	6.25		

- 1) The standard length of power cord is 4 core-0.5m in case of 4 push button, 7 core-0.5m in case of 6 push button.
- 2) When you need 6 push button for crane instead of 4 push button, "C" should be added to the end of model name.

LOW HEAD MANUAL CHAIN HOIST WITH GEARED TROLLEY



Model	Capacity (ton)	Test load (ton)	Standard lift (m)	
SHG-0.5	500kg	625kg	2.5	
SHG-1	1	1.25		
SHG-1.6	1.6	2.0		
SHG-2	2	2.5	3	
SHG-3.1	3.15	4.0		
SHG-5	5	6.3		
SHG-10	10	12.5		
SHG-20	20	25		

	Push button length (m)	Load chain Diameter × Number of falls	Lifting motor output (kW) (SDBM) High:Low	Traversing motor output (kW)	Lifting speed(m/min)		Traversing speed(m/min)		Headroom H(mm)	I beam width (mm)	A	B	C	D	E	F	G	H	I
					50Hz High : Low	60Hz High : Low	High speed (Standard) (50/60 Hz)	Low speed (50/60 Hz)											
	2.5 or 5.5	6.3×1	0.9	0.4	7.3	8.6	20/24 or 20:5/24:6	10/12	388	100·125	470	704	261	267	483	388	43	14	26
		6.3×1	0.5		4.8	5.7			388		470	704	261	303	483	388	43	14	26
		6.3×2	0.9		3.6	4.3			474		470	704	261	267	483	474	50	15	31
		7.1×1	1.1		4.5	5.4			421		500	734	273	320	524	421	50	15	31
		9.5×1	3.4		5.6	6.8			511	125·150	610	902	312	341	613	511	65	26	38
		7.1×2	1.7		3.4	4.1			508		510	802	273	290	538	508	65	26	38
		11.2×1	3.4		5.5	6.5			562		630	922	312	341	635	562	65	26	38
	3.5	11.2×1	2.5	0.75	3.6	4.3			565		630	932	312	371	639	565	65	26	38
		9.5×2	3.4		4.35	5.15			640		610	912	312	341	617	640	60	32	44
		11.2×2	3.4		2.75	3.25			745	150·175	670	1002	312	341	675	745	70	35	48

	Push button length (m)	Load chain Diameter × Number of falls	Lifting motor output (kW) (SDBM) High:Low	Traversing motor output (kW)	Lifting speed(m/min)		Traversing speed(m/min)		Headroom H(mm)	I beam width (mm)	A	D	F	G	J	K	L	M
					50Hz High : Low	60Hz High : Low	High speed (Standard) (50/60 Hz)	Low speed (50/60 Hz)										
	2.5 or 5.5	6.3×1	0.9	0.4 or 0.4:0.1	7.4	8.7	20/24 or 20:5/24:6	10/12	628	75	331	261	G+263	※ (600) 1000 4000	84	43	14	64
		6.3×1	0.9		7.3	8.6			628	100	331	261	G+263		84	43	14	64
		6.3×2	0.9		3.6	4.3			820	125	331	261	G+319		103	50	15	64
		7.1×1	1.7		6.8	8.2			691	125	361	274	G+285		103	50	15	71
		9.5×1	3.4		8.7	10.3			830	100	432	313	G+328		135.5	65	26	90
		7.1×2	1.7		3.4	4.1			870	100	361	274	G+349		135.5	65	26	71
		11.2×1	3.4		6.9	8.10			838	125	432	313	G+328		135.5	65	26	90
	3.5	11.2×1	3.4	0.75 or 0.75:0.19	5.5	6.50			845	150	432	313	G+342		135.5	65	26	90
		9.5×2	3.4		4.35	5.15			1040	150	432	313	G+402		165	60	32	90
		11.2×2	3.4		2.75	3.25			1155	150·175	432	313	G+437		183	70	35	90

	Load chain Diameter × Number of falls	Hand effort to lift full working load kg(N)	Hand effort to move geared trolley kg(N)	Headroom H(mm)	I beam width (mm)	A	B	C	D	E	F	G	I	J	K
	5×4	25(245)	5(49.0)	131	125	555	278	177	498	289	209	30	84	19	80
	5×4	28(275)	5(49.0)	155	125	555	278	177	498	289	209	50	103	15	80
	5×4	38(373)	4(39.2)	180	125	555	278	180	498	289	209	65	136	26	98
	5×4	37(363)	5.5(54.0)	180	125	555	278	180	498	289	209	65	136	26	98
	7.1×4	38(373)	8(78.4)	201	150	697	350	226.5	516	295	221	60	165	35	115
	7.1×4	38(373)	11.5(112.7)	225	150	742	405	226.5	546	307	239	70	183	35	125
	9×4	40(392)	27(265)	260	150	938	420	268	574	323	251	85	238	50	158
	9×4	50(490)	40(392)	414.5	175	1150	500	333.5	600	340	260	110	315	80	197

**Combination of Electric Trolleys with Traversing Rails (Model DAM, DBM)**

		1-600x190x16	1-600x190x13	1-450x175x13	1-450x175x11	1-400x150x12.5	1-400x150x10	1-350x150x12	1-350x150x9	1-300x150x11.5	1-300x150x10	1-300x150x8	1-250x125x10	1-250x125x7.5	1-200x150x9	1-200x100x7	1-180x100x6	1-150x125x8.5	1-150x75x5.5	1-125x75x5.5	1-100x75x5
Electric Trolley 0.25 • 0.5 • 1S • 1W	Color																				
	(a)					252	260	204	232	158	165	178	113	126	70	81	61	23	31		
	(b)					23	36	34	33	26	28	35	28	35	32	36	36	33	36		
Electric Trolley 1.5 • 2S • 2W	Color																				
	(a)			288	301	240	254	192	210	148	153	184	101	114	58	68					
	(b)			17	28	17	24	18	27	20	24	29	22	29	26	30					
Electric Trolley 2.5 • 3	Color																				
	(a)			302	314	253	267	205	223	159	166	178	115	128	71						
	(b)			13	19	13	26	14	23	16	18	25	18	24	22						
Electric Trolley 5	Color																				
	(a)	428	448	295	308	247		199		153			108								
	(b)	15	25	34	36	24		25		27			29								
Electric Trolley 7.5 • 10	Color																				
	(a)	428	448	295	308	247		199		153											
	(b)	9	19	18	24	18		19		21											

Combination of Plain/Geared Trolleys with Traversing Rails (Model DAG, DBG, DAP, DBP)

		1-600x190x16	1-600x190x13	1-450x175x13	1-450x175x11	1-400x150x12.5	1-400x150x10	1-350x150x12	1-350x150x9	1-300x150x11.5	1-300x150x10	1-300x150x8	1-250x125x10	1-250x125x7.5	1-200x150x9	1-200x100x7	1-180x100x6	1-150x125x8.5	1-150x75x5.5	1-125x75x5.5	1-100x75x5
Geared Trolley Plain Trolley 0.25 • 0.5	Color																				
	(a)					256		252		195	207		157	100	111	81	54	61	36		
	(b)					5		8		5	10		10	7	12	12	8	11	11		
Geared Trolley Plain Trolley 1S • 1W	Color																				
	(a)					267		243		186	197	134	147	91	102	81	44	51			
	(b)					5		8		5	11	4	10	8	12	12	9	11			
Geared Trolley Plain Trolley 1.5 • 2S • 2W	Color																				
	(a)			303	315	254	268	206	224	160	167	179	118	129	72	83					
	(b)			7	13	7	14	8	17	10	13	19	12	18	15	20					
Geared Trolley Plain Trolley 2.5 • 3	Color																				
	(a)			298	308	237	251	189	207	143	150	161	98	111	55						
	(b)			5	11	5	12	6	15	8	11	17	10	17	14						
Geared Trolley Plain Trolley 5	Color																				
	(a)	428	275	287	220		178		132				88								
	(b)	17	15	21	15		16		18				30								
Geared Trolley Plain Trolley 7.5 • 10	Color																				
	(a)	428	275	287	220		178		132												
	(b)	11	9	15	6		16		12												

- 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:

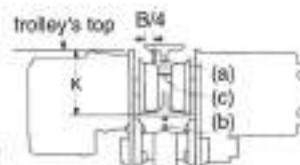
Each of the figures indicated at this row shows the distance [a] (unit:mm) of the sketch at right side.

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 (b) be as follows:

b: Moment of inertia of the longitudinal section $\geq 119.1 \times W \times L^2$

In which,

W: $W.L.L \times 1.25$ + Chain block's own weight (ton)

L: Support span (m)

※continued from page 15

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.

*The dimensions A, B, C of the trolley will vary with the change of the traversing rail's width to be used.

The figure β in the Table can be obtained from the following equation: $\beta = 1/2 \times [\text{width(mm) of the traversing rail} - \gamma]$

NOTES ON THE WIRING DIAGRAM

1. Our electric chain blocks(with the trolleys included), either DA type or DB type, are usually designed to operate on the 3-phase power source.

The electrical parts used for our chain blocks are all the precision ones which can normally operate even with an accidental voltage drop (with a 10% reduction of the rated voltage)

2. As standard, our lifting motor (LM) and trolley motor (TM) are respectively assured of the following ratings.

	Insulation class	Short time duty	Intermittent duty
LM	E	30 minutes	40% ED, Number of starts : 240/h
TM	E	15 minutes	25% ED, Number of starts : 240/h

In the case of the DB type, however, its rating will be like:

Short time duty		Intermittent duty	
High speed	Low speed	High speed	Low speed
30 minutes	15 minutes	40% ED, Number of starts : 240/h	20% ED, Number of starts : 120/h

3. As to the 4-core power cord, or the 7-core cable cord used for the DAGC, DBGC, DAPC or DBPC type, they are each usually of 5m in length. The cords of other length than the above, or of special dimensions, are available upon request.

4. When connecting the power cord to the power source, take care of its correct phase so that the lifting motor can rotate in UP direction and DN direction according to the push of the UP button and DN button on the control switch. If the connection phase is reversed, the negative phase protector starts to work to prevent the lifting motor from rotating in either direction. If this occurs, exchange the connection phase of the black and red leads from each other: at the time, avoid changing the wire connections in the control switch, chain block and trolley.

5. The running direction of the electric trolley and/or the saddle has been decided at the shipment, and it may be changed, at your site, by changing the wire connection at the control switch case.

HOIST CLASSIFICATION

	JIS/ISO classification	FEM classification	ASME classification	International protection
DA	M5	2m	H3	IP54
DB	M5	2m	H3	IP54



LARGE CAPACITY CHAIN BLOCK

Electric chain block

Model No.	Capacity(ton)	Standard lift(m)	Lifting speed(m/min)		Lifting motor output(kW)	Min. hook-to hook distance(mm)	No. of load chain fall
			50Hz	60Hz			
DA-15	15	4	1.8	2.1	3.4X2	1380	11.2X6
DA-20	20	4	1.3	1.6	3.4X2	1680	11.2X8
DA-30	30	4	0.8	1.0	3.4X2	1710	11.2X12
DA-50	50	4	0.5	0.6	3.4X2	2900	11.2X22
DA-60	60	4	0.4	0.5	3.4X2	2900	11.2X26

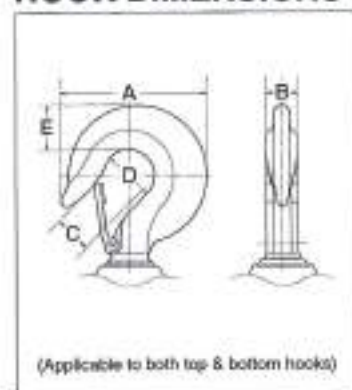
Electric chain block with electric trolley

Model No.	Capacity(ton)	Standard lift(m)	Traversing speed(m/min)		Traversing motor output(kW)	Trolley min radius(mm)	No. of load chain fall
			50Hz	60Hz			
DAM-15	15	4	10	12	1.5	∞	11.2X6
DAM-20	20	4	10	12	1.5	∞	11.2X8

Electric chain block with geared trolley

Model No.	Capacity(ton)	Standard lift(m)				Trolley min radius(mm)	No. of load chain fall
DAG-15	15	4	-	-	-	7000	11.2X6
DAG-20	20	4	-	-	-	7000	11.2X8

HOOK DIMENSIONS·BOTTOM HOOK WEIGHT·LOAD CHAIN WEIGHT



(Applicable to both top & bottom hooks)

Max working load & number of falls		0.25	0.48	0.5	1S	1W	1.5	2S	2W	2.5	3	5	7.5	10
DIMENSION (mm)	A	74	84		103		138	136	136	165	165	170	243	230
	B	15	14		19		26	28	26	32	32	35	48	48
	C	26	26		30		40	40	40	44	44	47	73	73
	D	35	43		50		65	65	60	60	60	70	85	85
	E	18	19		25		35	35	35	49	49	53	63	63
Bottom hook weight(kg)		0.8	0.83		1.4		2.8	3.5	5.8	3.55	11.1	16.7	65	80
No. of fall load chain		1	1		1		2	1	1	2	1	2	3	4
Load chain weight(kg)	Per meter	0.68	0.66		1.10		0.86	1.98	2.68	1.10	2.66	2.68	2.66	2.66
	Per lift meter						1.72			2.20	3.92	5.33	8.00	10.67

• A hook is produced by the process of hot forging, and so its dimensions may have some errors: $\pm 2\%$ for 0.25~5t hook and $\pm 3\%$ for the 7.5 and/or 10t hook.

Reading of Model/Code

DA-0.25
DBP-3
DAG-2 S
DAMC-1 W

Typical Examples

- To show the number of falls
- To show the rated load capacity(ton)
- To show the class of each model

• Class code:

It identifies the type (single speed or dual speed type), the number of buttons on the control switches and kinds of trolleys (electric, geared or plain). See the sketches at right.

• Rated load capacity:

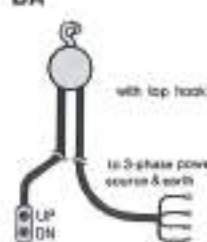
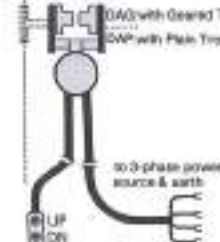
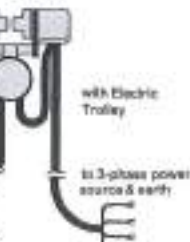
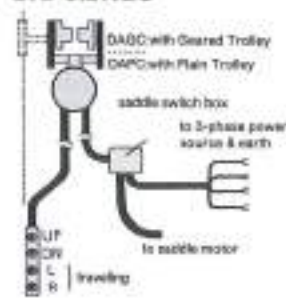
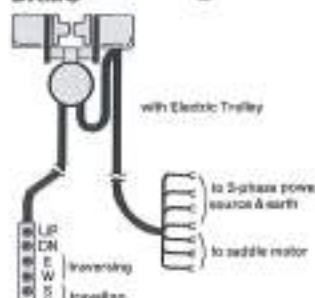
It shows the rated load capacity(ton) of the relevant chain block.

• Number of falls:

It identifies whether the relevant chain block is the 1-fall type or the 2-fall type block(S=1, W=2).

Note: Indication of the number of falls is omitted for certain model in the case where it has been specified according to its rated load capacity.

Class Code

DA**DAP,DAG****DAM****DAPC,DAGC****DAMC**

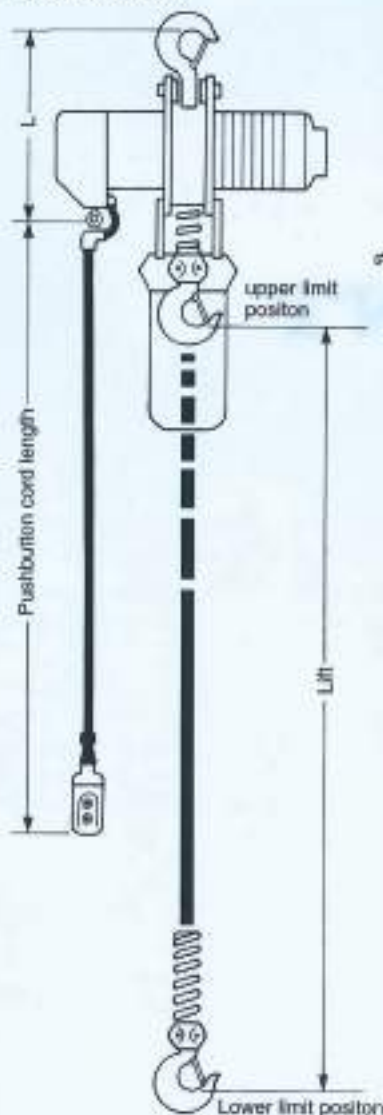
① Usually the pushbuttons located on the control switch are labeled as "UP", "DN", "L", "R", "E", "W", "S" and "N". The other types of labeling are available upon request.

② In the case of the dual speed type (DS type), the chain block can be wound UP and DOWN at either high speed or low speed. The UP 1 and Down 1 buttons are each of push-push type: at the first push, it provides low speed operation and at the second push, it provides high speed operation.

DEFINITION OF WORDS

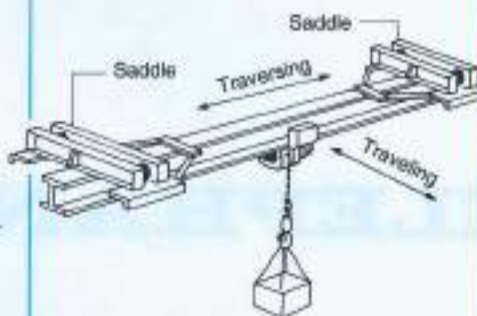
Lift and Length of Pushbutton Switch Cord

As the electric chain block is operated, its bottom hook moves up and down and the longest distance of this motion is called a "lift". In other words, the lift refers to the distance between the bottom hook's highest position (with the upper limit switch actuated) and its lowest position (with the lower limit switch actuated). The length of the pushbutton switch cord refers to the distance between the bottom of dimension L and the lower surface of the pushbutton switch case.



Traversing, Traveling with Trolley and Saddle.

The electric chain block, while hoisting any of loads, may be moved in lateral or longitudinal direction when used in combination with a trolley or saddles which is fitted on a rail. Usually, the trolley is used for a lateral motion of the electric chain block and saddles for a longitudinal motion of it. And when the chain block moves laterally, we call it as "traversing" and when it moves longitudinally, we call it "traveling". Depending on your job requirements, the ELEPHANT electric chain blocks may be combined with different types of saddles of our own; refer to our catalog "ELEPHANT Electric Saddles".

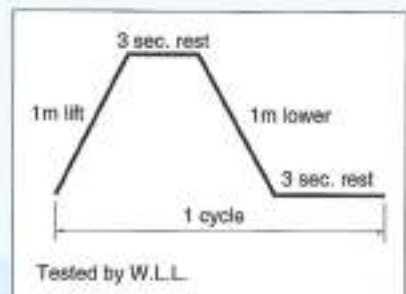


Short Time Duty Rating and Intermittent Duty Rating

As a criterion to indicate the strength and durability of our electric chain blocks, We have specified the ratings of the short time duty and intermittent duty concerning their included electric motors—see the page 12 of catalogs.

- Short Time Duty Rating

"Short time duty rating" means the limited time that the admissible temperature limit of its electric motor won't be exceeded, when the electric chain block is operated continuously on the below cycle.

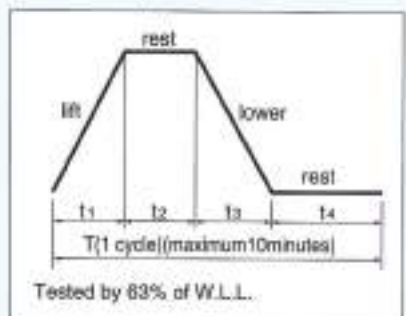


- Intermittent Duty Rating

Compared with "short time duty rating", the temperature of motor rises gradually by properly giving rests to the chain block between its operating periods (lifting and lowering). The percentage duty cycle ED is found as follows.

$$\%ED = \frac{\text{Operating periods}(t_1+t_2)}{\text{Operating + Rest periods}(T)} \times 100$$

based on the maximum cycle period of 10 minutes. The number of starts also affects the rise of temperature. Thus these two factors are specified to show the intermittent duty rating of the electric chain block under the specification of which the electric motor can be operated safely without exceeding its admissible temperature limit.



ELEPHANT



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