固定式架空及門型起重機

OVERHEAD CRANES & GANTRY CRANES

台灣：徐興機械工業股份有限公司

越南總代理：廣聯天車電梯責任有限公司

固定式架空起重機 (OVERHEAD CRANES)　大負荷、高頻度 HEAVY LOAD, HIGH FREQUENCY　耐久、安全、保養容易 DURABILITY, SAFETY, EASY MAINTENANCE

1.開放式吊機
吊機構造主要包括捲揚裝置、橫行裝置，捲揚有單一捲揚及主副捲揚兩種。
機框採結構鋼焊接。保養維修考慮吊機面空間，及護欄設計。

2.機樑
機樑係依據額定荷重、跨距尺寸、使用場合及級數，全面性考量。

3.駕駛室
依據場合使用駕駛室，一般為全密閉及半密閉二種，室內可指定排風機及冷氣機。

4.橫行集電
橫行集電方式一般採用電纜滑車式。

1.CRAB TROLLEY
It contains up/down hoisting and left/right traversing building together in the unit. Sometimes has main and secondary hoisting in the unit. Welding of crab frame is using structure steel. A layout of crab trolley is based on available space for an easier maintenance and a safety handrail is included.

2.GIRDER
Girder's design is based on major standard requirements. It takes safe working load, girder span, application surrounding and class of usage into considerations.

3.OPERATOR CAB
There are two types of cab. One is total enclosed type, the other is semi-enclosed type. Cab can be installed exhaust fan and/or air conditioner upon request.

4.ELECTRIC FEEDER FOR GIRDER
Generally, we use the flat cable festoon system.

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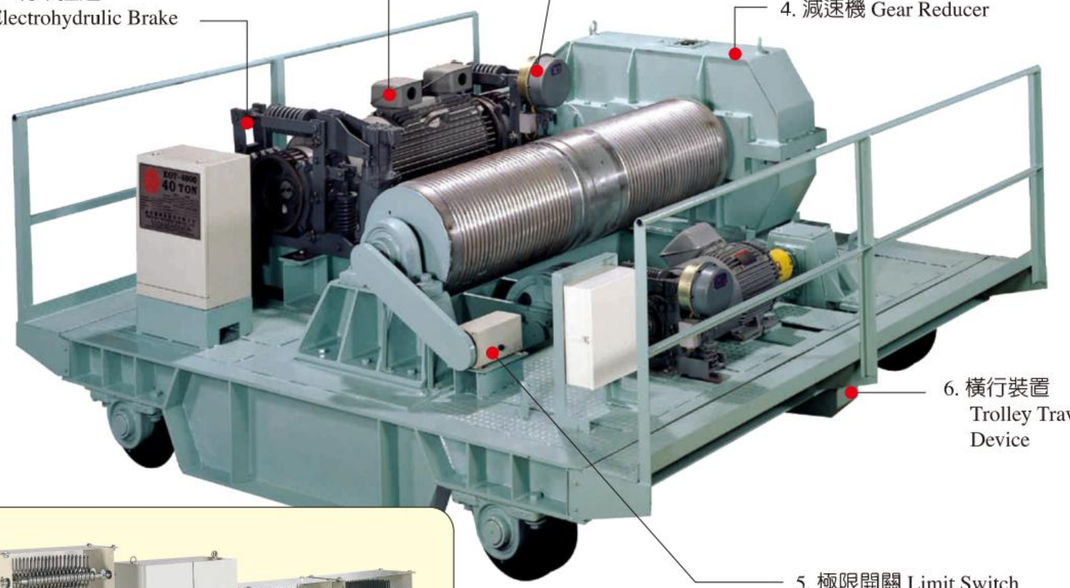
絞盤（開放）式吊機構造　CRAB TROLLEY



1. 電磁剎車
安全式電磁剎車，馬達運轉時剎車開放，停止時剎車作用，確保安全。

2. 馬達
吊車馬達採吊車專用馬達， IEC 制定之國際標準尺寸，具國際間互換性，絕緣、耐熱、耐濕性佳，安全及信賴性高，適用於工作頻繁的環境。

3. CF 剎車控速
已由推力剎車作為捲下之控速，下放時，二段由馬達二次側控制油壓機，做為低速下放之控速，與電磁剎車做為組合，更加提高安全性及良好的操作性。

4. 減速機
齒輪依據起重機反覆額定負荷設計，強度及耐磨性高，使用於高頻度吊機使用。

5. 極限開關
防止過捲揚，及捲下時鬆索的情況。

6. 橫行裝置
橫行傳動組，包含剎車、馬達、減速機及車輪組，機構模組化，保養容易。

★ IB 控速
高速型大容量，捲下速度控制，使用渦電流控制器，獲良好的低速控制性能。渦電流控制器無摩擦部份，使用壽命長。

1.ELECTRO MAGNETIC BRAKE
By using fail safe brake system, when power on then brake off; power off then brake on at the same second.

2.MOTOR
Hoisting motor is winding exclusive for a hoisting purpose. Frames are according to IEC specifications and interchangeable. At least "F" insulation class in winding, as such, the motor is always in good insulation, good heat-resistance and proper water protection. It is reliable and safe for high frequency applications.

3.FREQUENCY CHANGING SPEED CONTROL
Using the electrohydraulic brake to control the initial lowering speed of hoist. The hydraulic action is controlled by the motor secondary winding. When power off, it works as a secondary brake to increase the brake's safety.

4.GEAR REDUCER
All the gears are designed according to hoisting / crane forward + backward rating requirements, high strength and well anti-wearing. It is good for high frequency usage.

5.LIMIT SWITCH
The up / down limit switch is available. It is screw type mechanical limit switch in harmony with drum's rotating cycle.

6.TROLLEY TRAVERSING
The driving of trolley is modularized for an easy maintenance. It contains brake, motor, reducing gear box and wheel set.

★ EDDY CURRENT SPEED CONTROL
For a long lasting, a high speed and a large capacity lifting, we utilize the eddy current speed control for a better function of initial lowering speed control. Due to eddy current is without brake lining and no touching, it is long lasting and almost trouble free.

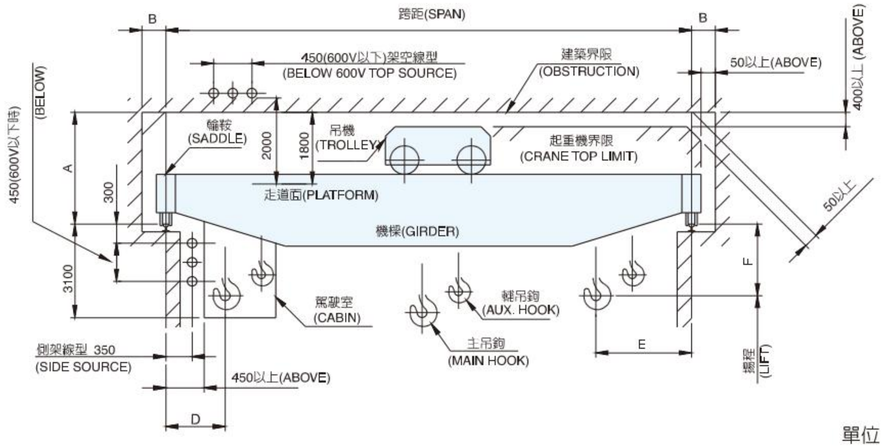
■起重機用途分類表　APPLICATION CHART

用途 Application	起重機型式 Type of cranes	低速型 Low-speed Type	普通型 General-speed Type	高速型 High-speed Type
機械安裝修理用 Machinery installation and repair.	發電廠、邦浦場合 Electric power plants Pump station	I		
一般製品搬運用 General products handling	機械工場、製紙場 Machine shops Paper mills		II	III
製鋼壓輾用 Steel manufacturing and rolling services.	發電爐 Electric furnace yards		II	III
鋼材製品搬運用 Steel products handling.	輾壓工場、鑄鍛造工場 Rolling mills Foundries and forge shops			III IV
製鋼製鐵廠用 Steel mills	厚鋼板場、鋼棒場 Slab yards Billet yards			III IV
高頻度作業用 Extra-duty work	廢鐵場、電磁鐵場合 Scrap containers carriage Lift magnet work			IV

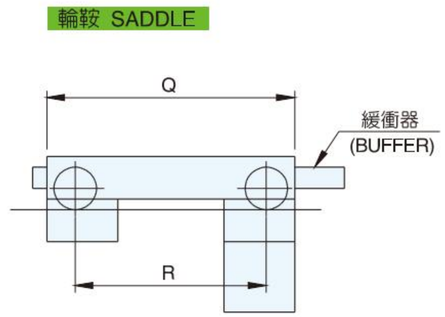
■起重機負荷率分類表　LOAD FACTOR CHART

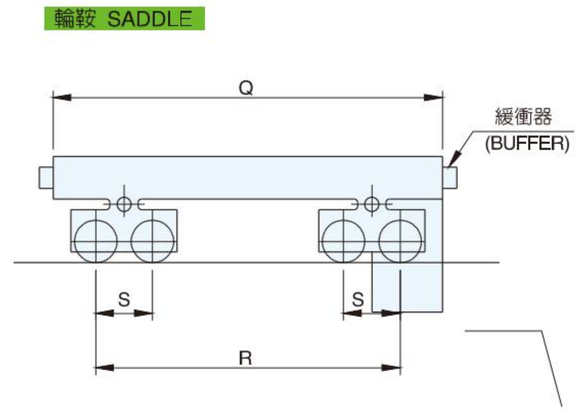
負荷率 Load factor ＼ 作業時間率 Duty factor / 負荷之次數 Load cycles		小 Light duty 長時間停用之不規則使用 Irregular occasional use followed by long idle periods 10^5 未滿 under 10^5	中 Intermittent duty 間歇性頻率之規則使用 Regular use in intermittent operation 10^5-$6x10^5$	大 Intensive duty 激烈頻率之規則使用 Regular use in continuous operation $6x10^5$-$2x10^6$	超大 Super-intensive duty 激烈頻率之連續使用 Regular use in severe continuous operation $2x10^6$ 以上 over $2x10^6$
輕 Light	較少懸吊額定負荷 通常額定負荷之 1/3 以下 Seldom lifts rated load, and normal loads of about one third of the rated load	I	I	II	III
中 Moderate	有時懸吊額定負荷 通常額定負荷之 1/3 至 2/3 Occasionally lifts load below rate load, loads between 1 / 3 and 2 / 3 of the rated load.	I	II	III	IV
重 Heavy	經常懸吊額定負荷 Constantly lifts loads close to rated load	II	III	IV	IV

低速型 (LOW SPEED TYPE)



單位 (UNIT): mm



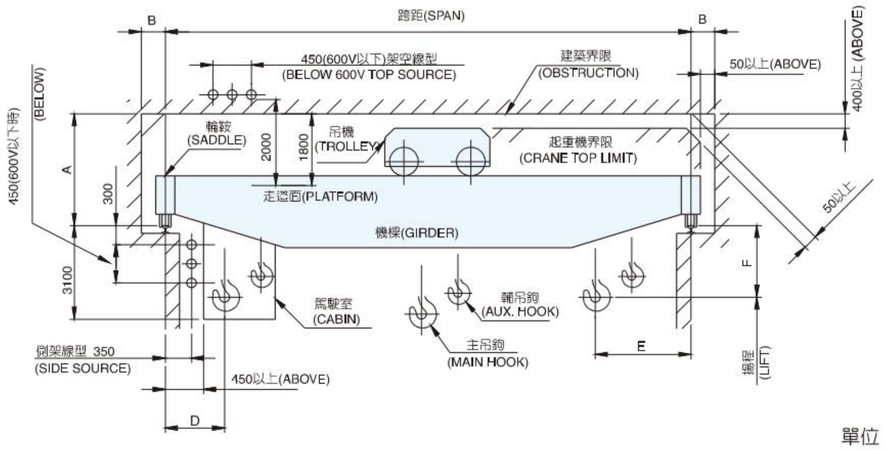


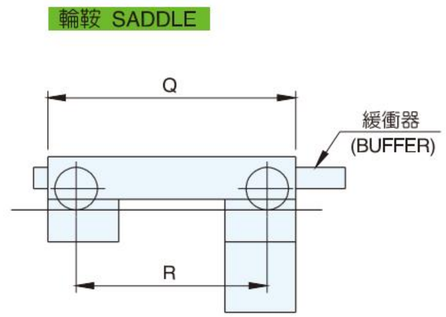
種類 SORT	額定負荷(t) CAPACITY 主捲 MAIN	額定負荷(t) CAPACITY 輔捲 AUX.	跨距 SPAN (m) 超過 ABOVE	跨距 SPAN (m) 以下 BELOW	揚程 LIFT (m)	主捲 MAIN HOISTING 速度x電動機 SPEED MOTOR (m/min)x(kw)	輔捲 AUX. HOISTING 速度x電動機 SPEED MOTOR (m/min)x(kw)	橫行 TRAVERSING 速度x電動機 SPEED MOTOR (m/min)x(kw)	直行 TRAVELLING 速度x電動機 SPEED MOTOR (m/min)x(kw)	直行軌 TRAVELLING RAIL (最小) MIN. (kg/m)
低速型 (SLOW SPEED TYPE)	3	-	5	12	6	6x3.7	-	22x1.1	40x2.2	15
			12	20					35x2.2	
	5	-	5	12	6	5x5.5	-	20x1.5	40x2.2	22
			12	20					35x2.2	
	7.5	-	6	12	6	5x7.5	-	20x2.2	40x3.7	22
			12	20					35x3.7	
	10	3	6	12	8	5x11	6x3.7	20x2.2	40x5.5	22
			12	20					35x5.5	30
	15	無或 NO OR 3	6	20	10或16	5x15	6x3.7	20x3.7	35x5.5	30
	20	無或 NO OR 5	6	20	10或16	5x22	5x5.5	20x3.7	30x7.5	30
	25	5	6	25	10或16	4x22	5x5.5	20x5.5	30x7.5	30
	30	7.5	6	25	10或16	3x22	5x7.5	20x5.5	30x11	30
	40	7.5	6	25	10或16	2.5x22	5x7.5	20x5.5	30x11	30
	50	10	8	25	16或20	2x22	5x11	10x5.5	30x15	37
	60	15	8	25	16或20	2x30	5x15	10x5.5	30x15	37
	80	15	8	25	16或20	1.5x30	5x15	10x7.5	30x22	37
	100	20	10	25	16或20	1.25x30	5x22	10x7.5	30x22	37
	125	25	10	25	16或25	1x30	4x22	10x11	20x22	73
	160	30	12.5	25	16或25	1x37	3x22	10x15	20x22	73
	200	40	12.5	25	16或25	1x45	2.5x22	10x22	20x30	73

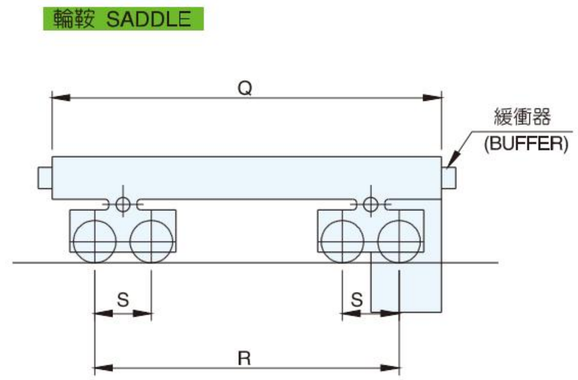
種類 SORT	額定負荷(t) CAPACITY 主捲 MAIN	額定負荷(t) CAPACITY 輔捲 AUX.	跨距 SPAN (m) 超過 ABOVE	跨距 SPAN (m) 以下 BELOW	建築界限(mm) OBSTRUCTION 軌上空間 CLEARANCE (A) UP RAIL	建築界限(mm) OBSTRUCTION 側方空間 CLEARANCE (B) SIDE RAIL	主鉤內行餘距,上行餘距 (mm) HORIZONTAL,VERTICAL CLEARANCE OF HOOK TO RAIL 駕駛室端餘距 (D) CABIN SIDE	駕駛室另端餘距 (E) OPPOSITE CABIN SIDE	上行餘距 (F) VERTICAL CLEARANCE	輪鞍(參考) SADDLE (REFERENCE) 長度 LENGTH (Q)	軸間距離 DISTANCE BETWEEN WHEELS (R)	軸間距離 DISTANCE BETWEEN WHEELS (S)	車輪總數 WHEELS (參考) REFRENCE
低速型 (SLOW SPEED TYPE)	3	-	5	12	2200	260	700	700	200	2200	1700	-	4
			12	20	2300					3400	2900		
	5	-	5	12	2200	260	800	800	300	2200	1700	-	4
			12	20	2300					3400	2900		
	7.5	-	6	12	2200	280	900	900	400	2200	1700	-	4
			12	20	2300					3500	2900		
	10	3	6	12	2250	300	1000	1000	500	2300	1700	-	4
			12	20	2350					3500	2900		
	15	無或 NO OR 3	6	20	2400	320	1100	1400 (1100)	700	4800	3600	-	4
	20	無或 NO OR 5	6	20	2500	320	1200	1500 (1200)	800	5200	3900	-	4
	25	5	6	25	2600	320	1300	1600	900	5500	4200	-	4
	30	7.5	6	25	2700	320	1400	1700	1000	5700	4400	-	4
	40	7.5	6	25	2900	340	1600	1800	1100	5800	4400	-	4
	50	10	8	25	3300	340	1700	1900	1100	6300	4900	-	4
	60	15	8	25	4100	380	1900	2000	500	6800	5500	800	8
	80	15	8	25	4200	380	2100	2200	700	7300	5700	900	8
	100	20	10	25	4400	380	2300	2400	800	7500	5900	1000	8
	125	25	10	25	4600	450	-	-	-	-	-	-	8
	160	30	12.5	25	5000	450	-	-	-	-	-	-	8
	200	40	12.5	25	5400	450	-	-	-	-	-	-	8

( ) 內尺寸表示無輔捲場合

普通型 (COMMON SPEED TYPE)







單位 (UNIT): mm

種類 SORT	額定負荷(t) CAPACITY 主捲 MAIN	額定負荷(t) CAPACITY 輔捲 AUX.	跨距 SPAN (m) 超過 ABOVE	跨距 SPAN (m) 以下 BELOW	揚程 LIFT (m)	主捲 MAIN HOISTING 速度x電動機 SPEED MOTOR (m/min)x(kw)	輔捲 AUX. HOISTING 速度x電動機 SPEED MOTOR (m/min)x(kw)	橫行 TRAVERSING 速度x電動機 SPEED MOTOR (m/min)x(kw)	直行 TRAVELLING 速度x電動機 SPEED MOTOR (m/min)x(kw)	直行軌 TRAVELLING RAIL (最小) MIN. (kg/m)
普通型 (GENERAL SPEED TYPE)	3	-	5	12	6	12x11	-	40x2.2	100x3.7	15
			12	20					80x3.7	
	5	-	5	12	9	12x15	-	40x2.2	100x5.5	22
			12	20					80x5.5	
	7.5	-	6	12	9	10x22	-	40x2.2	100x7.5	22
			12	20					80x7.5	
	10	3	6	12	10	8x22	12x11	40x2.2	100x11	30
			12	20					80x11	
	15	無或 NO OR 3	8	16	10 或 16	8x30	12x11	40x3.7	100x11	30
			16	25					80x11	
	20	無或 NO OR 5	10	20	10 或 16	6x30	12x15	40x3.7	100x15	30
			20	32					80x15	
	25	5	10	20	10 或 16	6x37	12x15	40x5.5	100x22	37
			20	32					80x22	
	30	7.5	10	20	10 或 16	5x37	10x22	40x7.5	80x22	37
			20	32					60x22	
	40	7.5	10	20	10 或 16	5x45	10x22	40x7.5	80x22	37
			20	32					60x22	
	50	10	12.5	20	10 或 16	4x45	8x22	35x7.5	80x30	37
			20	32					60x30	
	60	15	12.5	32	10 或 16	4x45	8x30	25x7.5	60x37	37
	80	15	12.5	32	10 或 16	3x55	8x30	25x7.5	60x45	73
	100	20	12.5	32	10 或 16	2.5x55	6x30	20x7.5	60x55	73
	125	25	12.5	32	10 或 16	2.5x75	6x30	20x11	50x55	73
	160	30	12.5	32	10 或 16	2x75	5x37	20x15	40x55	73
	200	40	12.5	32	10 或 16	2x90	5x45	20x15	30x55	73

種類 SORT	額定負荷(t) CAPACITY 主捲 MAIN	額定負荷(t) CAPACITY 輔捲 AUX.	跨距 SPAN (m) 超過 ABOVE	跨距 SPAN (m) 以下 BELOW	建築界限(mm) OBSTRUCTION 軌上空間 CLEARANCE (A) UP RAIL	建築界限(mm) OBSTRUCTION 側方空間 CLEARANCE (B) SIDE RAIL	主鉤內行餘距,上行餘距 (mm) HORIZONTAL,VERTICAL CLEARANCE OF HOOK TO RAIL 駕駛室端餘距 (D) CABIN SIDE	駕駛室另端餘距 (E) OPPOSITE CABIN SIDE	上行餘距 (F) VERTICAL CLEARANCE	輪鞍(參考) SADDLE (REFERENCE) 長度 LENGTH (Q)	軸間距離 DISTANCE BETWEEN WHEELS (R)	軸間距離 DISTANCE BETWEEN WHEELS (S)	車輪總數 WHEELS (參考) REFRENCE
普通型 (GENERAL SPEED TYPE)	3	-	6	16	2200	260	700	700	200	3200	2300	-	4
			16	25	2300					4500	3600		
	5	-	6	16	2200	260	800	800	300	3600	2600	-	4
			16	25	2300					4600	3600		
	7.5	-	8	16	2200	280	900	900	400	3800	2700	-	4
			16	25	2300					4700	3600		
	10	3	8	16	2250	300	1000	1000	500	4000	2800	-	4
			16	25	2350					4800	3600		
	15	無或 NO OR 3	8	16	2400	320	1300	1400 (1100)	700	4800	3600	-	4
			16	25	2500					4800	3600		
	20	無或 NO OR 5	10	20	2500	320	1400	1500 (1200)	800	5200	3900	-	4
			20	32	2600					5900	4600		
	25	5	10	20	2600	320	1500	1600	900	5500	4200	-	4
			20	32	2700					5900	4600		
	30	7.5	10	20	2700	320	1600	1700	1000	5700	4400	-	4
			20	32	2800					5900	4600		
	40	7.5	10	20	2900	340	1800	1900	1100	5800	4400	-	4
			20	32	3000					6000	4600		
	50	10	12.5	20	3300	400	1900	2000	1000	6400	5000	-	4
			20	32	3800	380			600	6400	5300	900	8
	60	15	12.5	32	4100	400	2000	2100	500	6600	5400	1000	8
	80	15	12.5	32	4200	450	2200	2300	700	6900	5600	900	8
	100	20	12.5	32	4400	450	2400	2500	800	7100	5800	1000	8
	125	25	12.5	32	4600	450	-	-	-	-	-	-	8
	160	30	12.5	32	5000	450	-	-	-	-	-	-	8
	200	40	12.5	32	5400	450	-	-	-	-	-	-	8

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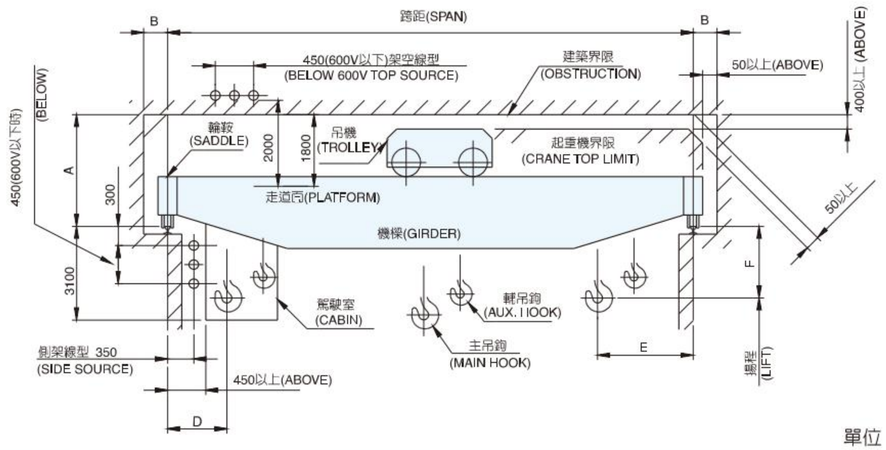
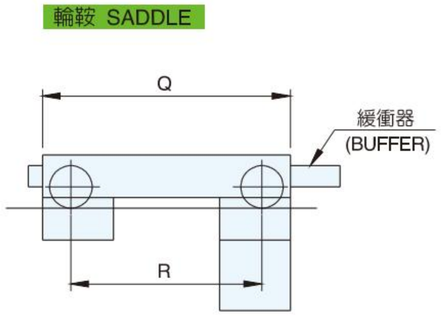
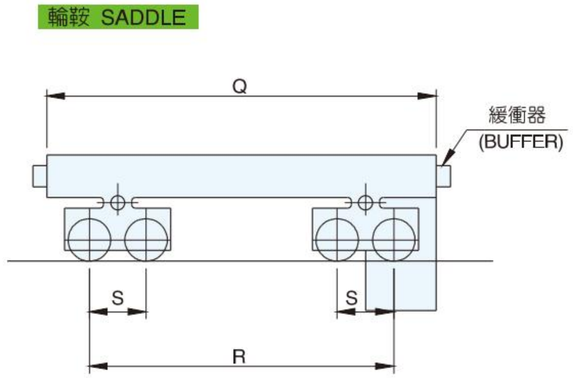
高速型 (HIGH SPEED TYPE)







單位 (UNIT): mm

種類 SORT	額定負荷(t) CAPACITY 主捲 MAIN	額定負荷(t) CAPACITY 輔捲 AUX.	跨距 SPAN (m) 超過 ABOVE	跨距 SPAN (m) 以下 BELOW	揚程 LIFT (m)	主捲 MAIN HOISTING 速度x電動機 SPEED MOTOR (m/min)x(kw)	輔捲 AUX. HOISTING 速度x電動機 SPEED MOTOR (m/min)x(kw)	橫行 TRAVERSING 速度x電動機 SPEED MOTOR (m/min)x(kw)	直行 TRAVELLING 速度x電動機 SPEED MOTOR (m/min)x(kw)	直行軌 TRAVELLING RAIL (最小) MIN. (kg/m)
高速型 (HIGH SPEED TYPE)	5	-	12.5	20	12	20x22	-	40x2.2	125x11	30
			20	25				或	125x15	
			25	32				60x2.2	125x15	
	7.5	-	12.5	20	12	16x30	-	40x2.2	125x15	30
			20	25				或	125x15	
			25	32				60x3.7	125x22	
	10	-	12.5	20	12	16x37	-	40x2.2	125x15	37
			20	25				或	125x22	
			25	32				60x3.7	125x22	
	15	無或 NO OR 5	12.5	20	10或16	12x45	20x22	40x3.7	125x22	37
			20	25				或	125x30	
			25	32				60x5.5	125x30	
	20	無或 NO OR 7.5	16	25	10或16	12x55	16x30	40x3.7 或 60x7.5	125x30	37
			25	32					125x37	
	25	無或 NO OR 7.5	16	25	10或16	12x75	16x30	40x5.5 或 60x7.5	125x37	73
			25	32					125x45	
	30	10	16	25	10或16	10x75	16x37	40x7.5 或 60x11	125x45	73
			25	32					125x45	
	40	15	16	25	10或16	10x90	12x45	40x7.5 或 60x11	125x55	73
			25	32					125x55	
	50	15	16	25	10或16	8x90	12x45	40x11	100x55	73
			25	32					100x55	
	60	20	20	32	10或16	8x110	12x55	40x11	100x55	73
	80	25	20	32	16或20	6.2x110	12x75	40x15	100x75	73
	100	30	20	32	16或20	5x110	10x75	30x15	80x75	73

種類 SORT	額定負荷(t) CAPACITY 主捲 MAIN	額定負荷(t) CAPACITY 輔捲 AUX.	跨距 SPAN (m) 超過 ABOVE	跨距 SPAN (m) 以下 BELOW	建築界限(mm) OBSTRUCTION 軌上空間 CLEARANCE (A) UP RAIL	建築界限(mm) OBSTRUCTION 側方空間 CLEARANCE (B) SIDE RAIL	主鉤內行餘距,上行餘距 (mm) HORIZONTAL,VERTICAL CLEARANCE OF HOOK TO RAIL 駕駛室端餘距 (D) CABIN SIDE	駕駛室另端餘距 (E) OPPOSITE CABIN SIDE	上行餘距 (F) VERTICAL CLEARANCE	輪鞍(參考) SADDLE (REFERENCE) 長度 LENGTH (Q)	軸間距離 DISTANCE BETWEEN WHEELS (R)	軸間距離 DISTANCE BETWEEN WHEELS (S)	車輪總數 WHEELS (參考) REFRENCE
高速型 (HIGH SPEED TYPE)	5	-	12.5	20	2500	400	900	900	300	4100	3400	-	4
			20	25	2600				200	5200	4500		
			25	32	2700				100	6100	5400		
	7.5	-	12.5	20	2600	400	1000	1000	300	4400	3800	-	4
			20	25	2700				200	5300	4500		
			25	32	2800				100	6200	5400		
	10	-	12.5	20	2700	400	1100	1200	300	5000	4100	-	4
			20	25	2800				200	5400	4500		
			25	32	2900				100	6400	5500		
	15	無或 NO OR 5	12.5	20	2800	500	1400	1600 (1300)	700	5200	4200	-	4
			20	25	2900				600	5400	4500		
			25	32	3000				500	6400	5500		
	20	無或 NO OR 7.5	16	25	2900	500	1500	1700 (1400)	800	6000	5000	-	4
			25	32	3000				700	6500	5500		
	25	無或 NO OR 7.5	16	25	3000	560	1600	1700 (1400)	900	6000	5000	-	4
			25	32	3100				800	6500	5500		
	30	10	16	25	3100	560	1900	1900	900	6200	5000	-	4
			25	32	3200				800	6500	5500		
	40	15	16	25	3200	560	1900	2000	1100	6500	5000	-	4
			25	32	3300	600			1000	6800	5800		
	50	15	16	25	3600	600	2000	2100	900	6800	5600	-	4
			25	32	4000				500	6800	5800	800	8
	60	20	20	32	4300	600	2100	2200	500	7000	6000	800	8
	80	25	20	32	4500	600	2300	2400	500	7500	6400	900	8
	100	30	20	32	4700	600	2400	2500	500	8000	6800	1000	8

( ) 內尺寸表示無輔捲場合

誠信　踏實　迅速

台灣 Black Bear 製造廠

越南廣聯工廠

台灣：徐興機械工業股份有限公司

ADD：台中市烏日區環中路八段332巷126號
TEL：+886-4-2335 3333　FAX：+886-4-2335 3031
E-mail：hoitech2222@gmail.com

越南總代理：廣聯天車電梯責任有限公司

ADD：越南胡志明市第11郡李常傑街299/15A
TEL：+84-8-3863 6666　FAX：+84-8-3864 7212
E-mail：quangliencrane@hcm.vnn.vn
WEB：www.quanglien.com

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■ 由於印刷特性之關係，製品顏色與實物略有差異，請諒察。

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