

Kardex Shuttle VLM Model	: SHUTTLE-01-500-3050x864x6750						
Quantity of Units	: 1						
Overall Unit Height	: 6750 mm	22 feet, 1.75 in.					
Required Room Height	: 6770 mm	22 feet, 2.52 in.					
The required room height (unit height + 20mm /0.79") is the absolute minimum measure. Possible floor / ceiling unevenness and slope must be considered therein.							
Overall Unit Width	: 3380 mm	133.07 in.					
Unit Depth	: 3073 mm	120.98 in.					
Add Extraction Table Depth	: n/a mm						
Overall Unit Depth	: 3073 mm						
1st Front MASTER access - table height (TH1)	: Floor @ 0 mm = table height 833 mm	Floor @ 0 in. = table height 32.8 in.					
2nd Front Access - table height (TH2)	: N/A						
Add Rear Access - table height (TH3)	: N/A						
Unit Weight without Trays	: 3126 kg. (6892 lbs.)	(Per unit)	TOTAL UNIT LOAD (Unit Capacity): 70000 kg. (154322 lbs.)				
Dead Weight of configured Trays	: 5928 kg. (13069 lbs.)	(Per Unit)	Unit Capacity minus Dead Weight of configured Trays: 64072 kg. (141253 lbs.)				
Unit Weight with Configured Trays (empty)	: 9054 kg. (19961 lbs.)	(Per Unit)	Payload: Max. Tray Capacity x Qty. of trays configured/unit: 21320 kg. (47002 lbs.)				
Total unit weight (w/configured Trays loaded)	: 30374 kg. (66963 lbs.)	(Maximum per Unit)	Gross Load (Payload + dead weight of trays)/unit as configured: 27248 kg. (60071 lbs.)				
Average Qty. Trays / Unit	Tray Type	Clear Width x Depth	Maximum Load/Tray kg. lbs.	Capacity/Sq.Ft. lbs.	Access Height / Lower Edge of tray bottom TH1 mm + mm = (in.)	Retrieval position /Upper edge of tray bottom TH1 mm + mm = (in.)	
0	Light	3050 mm x 863.6 mm	120.08 in. x 34 in.	120 265	9.4	833 + 21 (33.62 in.)	833 + 22.5 (33.68 in.)
104	Medium	3050 mm x 863.6 mm	120.08 in. x 34 in.	205 452	15.9	833 + 21 (33.62 in.)	833 + 23 (33.7 in.)
0	Strong	3050 mm x 863.6 mm	120.08 in. x 34 in.	265 584	20.6	833 + 21 (33.62 in.)	833 + 23.5 (33.72 in.)
0	66-1-Medium-100	3050 mm x 863.6 mm	120.08 in. x 34 in.	470 1036	36.5	833 + 21 (33.62 in.)	833 + 23 (33.7 in.)
0	75-2-Medium-100	3050 mm x 863.6 mm	120.08 in. x 34 in.	- -	-	833 + 21 (33.62 in.)	833 + 23 (33.7 in.)
0	75-3-Medium-100	3050 mm x 863.6 mm	120.08 in. x 34 in.	505 1113	39.3	833 + 21 (33.62 in.)	833 + 23 (33.7 in.)
0	100-3-Medium-100	3050 mm x 863.6 mm	120.08 in. x 34 in.	- -	-	833 + 21 (33.62 in.)	833 + 23 (33.7 in.)
0	100-3-Medium-110	3050 mm x 863.6 mm	120.08 in. x 34 in.	- -	-	833 + 21 (33.62 in.)	833 + 23 (33.7 in.)
0	100-2-Medium-100	3050 mm x 863.6 mm	120.08 in. x 34 in.	- -	-	833 + 21 (33.62 in.)	833 + 23 (33.7 in.)
0	100-2-Medium-110	3050 mm x 863.6 mm	120.08 in. x 34 in.	- -	-	833 + 21 (33.62 in.)	833 + 23 (33.7 in.)
0	100-2-Medium-130	3050 mm x 863.6 mm	120.08 in. x 34 in.	- -	-	833 + 21 (33.62 in.)	833 + 23 (33.7 in.)
0	121-4-Medium-100	3010 mm x 863.6 mm	118.5 in. x 34 in.	- -	-	833 + 66 (35.39 in.)	833 + 68 (35.47 in.)
0	121-4-Medium-110	3010 mm x 863.6 mm	118.5 in. x 34 in.	- -	-	833 + 66 (35.39 in.)	833 + 68 (35.47 in.)
0	121-4-Medium-120	3010 mm x 863.6 mm	118.5 in. x 34 in.	- -	-	833 + 66 (35.39 in.)	833 + 68 (35.47 in.)
0	121-4-Medium-130	3010 mm x 863.6 mm	118.5 in. x 34 in.	- -	-	833 + 66 (35.39 in.)	833 + 68 (35.47 in.)
Minimum Tray Spacing	: 75 mm / 2.95 in.	on 25 mm / 0.98 in. increments		Depends on unit drive and Tray Type selection			
Maximum Product Height	: 727 mm / 28.62 in.			Depends on Tray Type selection			
Clearance Required Above Product	: 20 mm / 0.78 in.						
Storage Surface Area Net Offered / Unit	: 273.92	Avg. Sq. Meters of Surface Area	2.948	Avg. Sq. Ft. of Surface Area			
Max. Useable Cube w/Trays installed Net / Unit	: 21.09	Approx. Cubic Meter	745	Approx. Cubic Feet			
Useable Cube @ 80% Tray Utilization /Unit	: 16.87	Approx. Cubic Meter	596	Approx. Cubic Feet			
Vertical Lifting Speed (@ 100% load)	: 57.61	meters/min.	189.00	ft./min.			
Vertical Lifting Speed if Extractor is w/o a Tray	: 90.01	meters/min.	295.30	ft./min.			
Horizontal Extractor (Storage/Removal) Speed	: 0.60	meters/sec.	23.62	in./sec.			
Pick Performance (Average Qty.)	: 94	Trays/hour (does not consider operator picking time)					
		Complete Cycle (Storage + Retrieval)		Single Cycle (Tray Retrieval only)			
Average Access Time	: 38	Seconds		20 Seconds			
Maximum Access Time	: 45	Seconds		23 Seconds			
Calculation of access times is based on: 1) Speed adjustment lift (vertical) at 100%; extractor (horizontal) at 100%. Note: 100% extractor speed is not recommended for some storage goods. All delivered units have a pre-defined setting of 70%. 2) Shutter door is set to "only closed during lift travel," i.e. tray positioned in access opening is in "fingerhold." Note: This setting is only possible with units equipped with 1 access opening. With the setting "always closed," the access times will increase by ~6 seconds. 3) Options chosen on POF: automatic extraction or pneumatic tray locking will affect times outlined above.				4) If "Speed and Control" Functions, including weight management, will not be used the 'Complete Cycle' times outlined can be reduced by 5 seconds ▼			
For very tall units which contain a large number of trays, the average and maximum access times can increase as a result of the required internal computing time of the controller during the return of stock. With time-critical units (e.g. high performance order picking units or robot handling with cycle times) a prior consultation with the factory is recommended.							
Power	: 480 / 3 / 60 (Volts / Phase / Hz)						
Maximum Power Consumption	: 15 kVA						
Connection Voltage - Recommended mains fuse	: 30 Amp Per Machine						
Connection Voltage - Mains current (FLA)	: 20.9 Amp Per Machine						
Typical Energy Consumption / STORAGE (5 cycles/hr)	: 0.74 KWh						
Typical Energy Consumption / ORDER PICKING (20 cycles/hr)	: 1.16 KWh						
Included with this configured Shuttle							
Color Panels and Load Profiles	: RAL 7035 Light Grey						
Color Shutter Door, Cover Under Access Opening	: RAL 230/60/15 Silver Fir Blue						
Color Access Opening Inside: cover and floor	: RAL 7035 Light Grey						
Color Shelf Rail Panels	: RAL 7035 Light Grey						
Side Service Panels	: 1 of 1 units include: One side Swing / one side Fixed (Standard Maintenance and Side Panels)						
Confirmed : Customer has no lateral access to the unit							
External Unit Support	: Self-supported						
External supports are Only for stand-alone units (not for units positioned side by side)!							
Tooth Belt Drive	: Yes						
Safety Shutter Door System	: Yes, required						
Overhead Lighting In Access	: LED Lighting 60 Hz						
Control Type	: TIC Unit Controls						
Storage Management System	: OPTIC						
Operator Panel / Mounting Location	: OPTIC / Outside (Right)/access						
Data interface / USB Port	: Yes						
Universal 15 A UL power socket (NEMA 5/15 socket)	: No						
Secure Site Control	: Yes, Virtual Site Control - without license software license required, and not selected at this time						
Hardware Handshake:	: No						
Access Ready Lights	: N/A						
Confirmation Bar	: Yes						
Display LED Navigator	: Yes (without Legacy Interface) 1st Front Access Opening						
Light Pointer	: Yes LED SPOT, 40 mm dia. 1st Front Access Opening						
Position Indicator Light Bar	: No						
Transport Cart	: No						
Crane and Support Frame	: No						
Extraction Table	: No						
Vertical Photocells to Monitor Extractor Column	: Yes						
ESD Equipped Trays	: No						
Height Measurement system MLG2	: Yes						
Not included:	: Communication Cable - Cat5 or Cat6 cable						