



GENERAL INFORMATION

The HCWA TM700 model with 108 drive is equipped as standard with an extra safety catch integrated in the gearbox and two silent theatre brakes. The hoist allows the highest available performance for scenic applications, which means operating at high speed with exact positioning.

APPLICATIONS

Designed to effortlessly replace theatre counterweight flying set, the HCWA TM impresses with its slim design of less than 200 mm and is most suited for scenic applications such as theatres and larger venues.

REGULATIONS

- DGUV V17/18
- EN 17206
- SIL3 (if supplied with ASM control)

FEATURES

- Max travel: 21 m
- Load capacity: up to 650 kg
- Equipped with 2 x 4 kW motors
- Standard drum of 7 grooves with 6 mm ropes. If fewer are needed, extra grooves are professionally closed by ASM or an approved partner
- · Extreme compact construction of less than 200 mm
- Fully redundant, two-channel safety hoist concept with international patented double worm gearbox with an extra safety catch integrated
- International patented drive (steel band gear) of the rope drum by means of two extremely durable steel bands
- The international patented balancer evenly distributes the load transmission on both bands (50/50)
- The hoist consists of a rope drum unit and a motor unit mounted on ultrasonic vibration dampers, resulting in the elimination of noise, vibration and swing in the chassis
- Equipped with two independent silent theatre brakes

- High precision positioning of the load is achieved due to the large drum diameter
- · Equipped with two encoders
- Equipped with loadcell
- Pile wind drum inside of a particularly high-quality cast polyamide drum
- The steel frame inside the cast polyamide drum prevents drum collapse in the event of a fire
- Zero fleet hoist: no interfering rope angles
- Extremely silent and smooth-running of ropes due to cast polyamide drum (long life expectancy)
- Ropes are inserted and crimped inside the steel frame of the drum and securely fixed with quick links in the steel drum housing. This attachment of the ropes ensures full safety without extra safety turns (according to EN 17206)
- Rope pulleys and rope drum are yellow according to German regulations (black ones available on request)

TM700 108

The TM700 model with 108 drive unit is part of a wider range of HCWA TwinMaster hoists. As ASM engineered each hoist to their fullest capacity, each model has their specific composition which cannot be altered. Special models can be offered on request.

	Speed in m/s	Total capacity in kg	ELL in kg	Own weight of load bar in kg
	1	650	500	150
TM700 108	1,2	550	400	150
	1,5	450	300	150



TECHNICAL DATA

	HCWA TM700 108 SIL3	HCWA TM700 108 SIL3		
MODEL	Without PowerPack	With PowerPack		
Туре	HCWA-TM700-108-7-6-SIL3	HCWA-TM700-108-7-6-GSG-SIL3		
Operating Mode	Synchronous (ready)	Synchronous		
Regulation	DGUV 17 (before BGV C1), EN 17206			
SIL Level	SIL3 ready	SIL3		
Hoist capacity on Ropes	Up to 650 kg – see chart page 1			
Breaking Strength	23 kN, Rope Type 6 DIN 3069			
Max Travel		21 m		
Max Speed	Up to 1,5 m/s – see chart page 1			
Variable Speed	Yes, depending on control	Yes		
Duty Cycle	Up to 80% / 50 Hz			
Noise Level	Approx. 48 dBA			
No. of Drops		7		
Load Bearing Line	Rope 6 mm (not included)			
Load Carrying Equipment	Load bar (not included)			
Type of Material - Chassis	Steel			
Chassis Colour		Black		
Type of Material - Cover	Steel			
Cover Colour		Black		
Safety System	2 independent	2 independent theatre brakes (Mayr)		
Gearbox Type	AS	ASM TWE 08		
Gearbox Design	TM	TM redundant		
Gearbox Safety	2 x nominal torque/ 4	2 x nominal torque/ 400 h lifetime and safety catch		
Motor Type	2x noise reduced a	2x noise reduced asynchronous motor 4 kW		
Motor Performance	8 kW (2 x 4 kW)			
Limit Switch	4 track (Stromag) DGUV V17 (2 x	4 track (Stromag) DGUV V17 (2 x operational limits + 2 x absolute limits)		
Encoder System	2 x absolute encoders (SSI Interface) 2 x inc	2 x absolute encoders (SSI Interface) 2 x incremental encoders (TTL interface, 1 for closed loop)		



TECHNICAL DATA (CONTINUED)

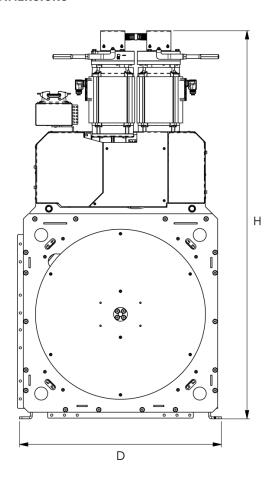
MODEL	HCWA TM700 108 SIL3 Without PowerPack	HCWA TM700 108 SIL3 With PowerPack		
Туре	HCWA-TM700-108-7-6-SIL3	HCWA-TM700-108-7-6-GSG-SIL3		
Load Sensing (total load)	Load cell 4-20 mA SIL3			
Slack Rope Detection	Yes, short circuit sensor			
Hoist Control Type	Not supplied	ASM GENESIS SIL3		
Position of Hoist Control	Not supplied	External, ASM PowerPack		
Control Equipment	None	GENESIS SIL3 PowerPack (16 kHz) with ASM TWINCORE SIL3 axis card, E-stop management and frequency inverter (15 kW), including 2m multi-pin connection cable (Harting)		
Cable Interface	ASM standard connector interface (Harting)	ASM standard connector interface (Harting) between hoist and PowerPack		
Main/Motor Supply	U1 / V1 / W1 / PE (400 V 50/60 Hz)	3 PH / N / PE (400 V 50/60 Hz) via external ASM PowerPack		
Power Cable	Not supplied	1,5 m CEE 5 PIN-32A		
Dimension HxWxD Without external PowerPack	1515 mm x 198 mm x 785 mm			
Weight Without external PowerPack	270 kg			
	Basic mounting brackets (L) and fixing equipment			
Including	Quick links for rope attachment			
		GENESIS SIL3 PowerPack		
		1,5 m power cable with CEE 32 A, 5 pin plug		
	Documentation			

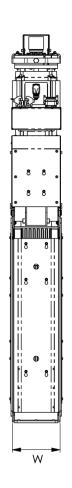
OPTIONS

- If more ropes are needed, extra grooves available
- If less ropes are needed, ASM or the approved partner is going to close the extra grooves professionally, which can abe reopened later
- 8 mm ropes available
- Faster speed possible on request, with total load capacity reduction
- · Longer travel possible
- Extra safety turn available
- Rope pulleys and rope drum are yellow according to German regulations, black ones available on request
- Tilting wall mount for maintenance
- Split pulleys available
- More options on request



DIMENSIONS

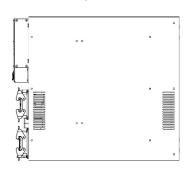


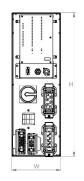


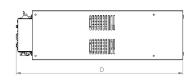
Without PowerPack	TM700 108
Height	1515 mm
Width	197 mm
Depth	785 mm
Weight	270 kg

COMPATIBLE CONTROL

TM700-108 compatible with ASM's BG5 Power Pack



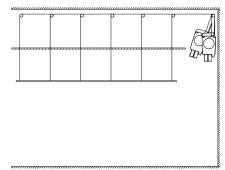




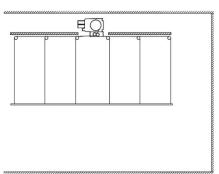
Compatible PowerPack BG5			
Height	542 mm		
Width	186 mm		
Depth	631,5 mm		
Weight	~ 42 kg		



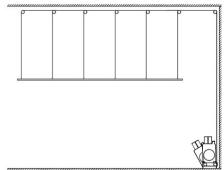
INSTALLATION METHOD



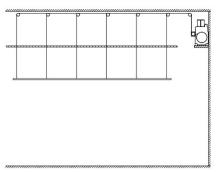
Wall installation e.g for counterweight set replacement



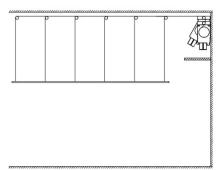
Installation between drop points with split pulley



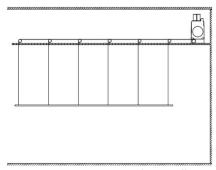
Vertical installation with tilting frame for maintenance



Mount with rope above the pulley grid



Wall installation with tilting frame for maintenance



Standing installation

