

MOVECAT VMK-S II chain hoists

for variable and fixed speeds in accordance with BGV C1 and DIN 56950



The VMK-S hoists according to BGV C1, DIN 56950:2012-05 and EN 61508 SIL 3 are notable for their innovative feature set and unusually flexible handling, whilst satisfying at all times the highest standards of safety. Particularly remarkable are the two independent, low-noise and maintenance-free brakes with air gap monitoring, a real-time load-measuring

module integrated in the eyelet that ascertains the real load and from it the overload and underload values, and a thermosensor that monitors permanently the operating temperature of the motor. A friction clutch as overload protection is not required by the VMK-S hoists so that continuous force and form closure without interruption between motor and load is at all times

guaranteed.

Furthermore, a dual-channel incremental encoder on the motor axis and a high-resolution 29-bit absolute encoder on the chain output axis are used. This allows exact positioning – better than +/- 1 mm – that can be replicated at all times and therefore precise target runs with the greatest repetition accuracy.

All components have been optimized for particularly quiet operation. These are, in detail, the acoustically insulated container and the narrowly calibrated parts and chains. In conjunction with V-Motion Powerpacks, VMK-S hoists can be controlled at variable speeds for way- and time-synchronous runs or else directly (hoists up to 10 m / min at 50 Hz) with the MPC 4IC1 controllers at a fixed speed. These high-speed hoists (from 10 m/min) in combination with a V-Motion Powerpack are capable of speeds ranging from 0 to 40 m / min whilst functioning as a closed-loop

system with full torque even during runs continuing beyond the null point („floating state“) and reversal of direction without incursion of the brakes. For optimal handling ease, the hoists are equipped with two robust handles. For the secure attachment of moving loads, rotatable and tiltable single-hole eyelets are used. VMK-S hoists are equipped with an internal status- and test-board. This illuminates the relevant operational states and implements the testing systems required by DIN 56950 for the operating and emergency limit switches, load-measuring system and brakes. With their remarkable features, VMK-S hoists represent the elite class on the world market and are recommended for all state-of-the-art applications in locations such as in TV studios, theatres and events venues demanding maximum performance and safety combined with the widest possible bandwidth of uses.

TECHNICAL DATA	VMK-S 125- 40	VMK-S 250-33	VMK-S 500-6	VMK-S 500-15	VMK-S 500-24	VMK-S 1250-10
SWL (*1 chain-fall, upgradable to 2)	125 kg	250 kg	500 kg *1	500 kg *1	500 kg *1	1250 kg *1
Hoisting speed at 50 Hz c.	24 m/min	20 m/min	5 m/min	10 m/min	16 m/min	8 m/min
Hoisting speed with V-Motion	0 - 40 m/min	0 - 33 m/min	0 - 6 m/min	0 - 15 m/min	0 - 24 m/min	0 - 10 m/min
Motor power	1.30 kW	2.60 kW	0.90 kW	2.60 kW	3.0 kW	3.00 kW
Duty cycle	25%	25%	40%	40%	40%	40%
Load chain acc. DIN 5684-8	5x15 mm	7x22 mm	7x22 mm	7x22 mm	9x27 mm	11x31 mm
Weight with 18 m hoist	53 kg	64 kg	64 kg	64 kg	110 kg	138 kg
Weight with 24 m hoist	56 kg	64 kg	64 kg	64 kg	120 kg	166 kg
Dimensions (L x W x H) w/o chain hook (mm)	460x196x275	540 x343x372	540x343x372	540 x343x372	605x486x320	640x486x382

Technical data:

- Hoisting height up to 30 m
- Number of chainfalls: 1 (2)*1
- Protection rating: IP 54 / Class F
- 2 noiseless brakes w. function monitoring
- Dynamic real-time load-measuring system
- Geared limit switch tracks: 4
- Absolute encoder 29-bit resolution
- 2-channel incremental encoder, high-res.
- Protection against thermal overload
- Status- and test-board
- Installation position: standard
- Suspension: LME single-hole suspension eyelet
- Load pickup: swivel adaptor with eyelet
- Chain container; permanently installed
- Transport / carrying handles

Options / Accessories

- V-Motion Variable Motion Powerpack
- PMC-HV hybrid cable
- Transport case

Subject to technical modifications and typographical errors.