

# Hoists to BGV D8 Plus German safety regulation

LoadGuard

## LoadGuard - Electric Chain Hoists to BGV D8 Plus

A range of high integrity hoists to BGV D8 Plus, this is a German safety regulation (published by VPLT) for a hoist with the special characteristic of being able to hold loads at rest above people without using a secondary safety component.

These hoists allow Load holding when loads are static, i.e. when a truss is in a fixed position

The hoists do not allow (in Germany, when people are present below the load): assembly/ disassembly during set up or Staging processes involving movement.

### The following features are required on the hoist.

- 2 separate brakes
- Limit switches not required (but fitted on these hoists)
- Overload monitoring – shutdown. A friction clutch is permitted if it is not within the load path when the Electric Chain Hoist is disconnected from the power supply.
- Underload monitoring- not required
- Factor of Safety – 10:1. The lifting capacity is de-rated.

### In addition the hoists feature:

- Modern design, manufacturing and assembly; The latest in design and manufacture means long life and competitive pricing. Quiet, reliable and proven
- Lifting capacities from 200kg – 2500kg
- Low Voltage control as standard; incorporates geared electrical limit switches. Direct Control available on request
- Speeds: a range of speeds are available including standard 4 m/ min and many faster speeds, 2 speeds versions are available, these are generally used for permanent installations
- The clutch overload device is mounted outside the drive train; in the event of clutch problems the load will not be compromised. This is a requirement of many modern safety standards
- 5 or 6 pocket load chain wheel gives smoother running and quieter operation than other chain hoists
- The hoist can be used for either upright/motor up or climbing/motor down applications; The chain bag is close coupled and available in 5 sizes.
- The hoist and load chain are black in colour, ideal for entertainment applications; zinc plated chain also available
- Hoists are fitted with moveable mechanical stops as an additional safety feature
- Light in weight, small in size, a 200kg hoist weighs only 18.5kg
- Available for 400V, 3 Ph, 50Hz power supply



### Specification

#### Single Speed

Type	Lifting capacity (kg)	Lifting speed (m/min)	Motor power (kW)	No. of chain falls	Chain dimensions (mm)	Chain safety factor	Weight body only (kg)	Weight per extra metre lift (kg)
LG25/1/4	200	4	0.18	1	4 x 12.3	10.25	18	0.32
LG25/1/8	200	8	0.36	1	4 x 12.3	10.25	18	0.32
LG25/2/2	400	2	0.18	2	4 x 12.3	10.25	20.5	0.64
LG25/2/4	400	4	0.36	2	4 x 12.3	10.25	20.5	0.64
LG50/1/4	320	4	0.36	1	5 x 15.3	12.81	18.5	0.52
LG50/1/8	320	8	0.72	1	5 x 15.3	12.81	18.5	0.52
LG50/2/2	630	2	0.36	2	5 x 15.3	12.81	21.5	1.04
LG50/2/4	630	4	0.72	2	5 x 15.3	12.81	21.5	1.04
LG10/1/4	630	4	0.72	1	7 x 22	12.55	42	1.04
LG10/1/8	630	8	1.45	1	7 x 22	12.55	42	1.04
LG10/2/2	1250	2	0.72	2	7 x 22	12.55	44	2.08
LG10/2/4	1250	4	1.45	2	7 x 22	12.55	44	2.08
LG16/1/4	1000	4	1.22	1	9 x 27	10.38	58	1.75
LG16/1/8	1000	8	2.44	1	9 x 27	10.38	58	1.75
LG16/2/2	2000	2	1.22	2	9 x 27	10.38	62.5	3.50
LG16/2/4	2000	4	2.44	2	9 x 27	10.38	62.5	3.50
LG20/1/4	1250	4	1.55	1	10 x 28	10.25	58	2.25
LG20/1/8	1250	8	3.05	1	10 x 28	10.25	58	2.25
LG20/2/2	2500	2	1.55	2	10 x 28	10.25	62.5	4.50
LG20/2/4	2500	4	3.05	2	10 x 28	10.25	62.5	4.50

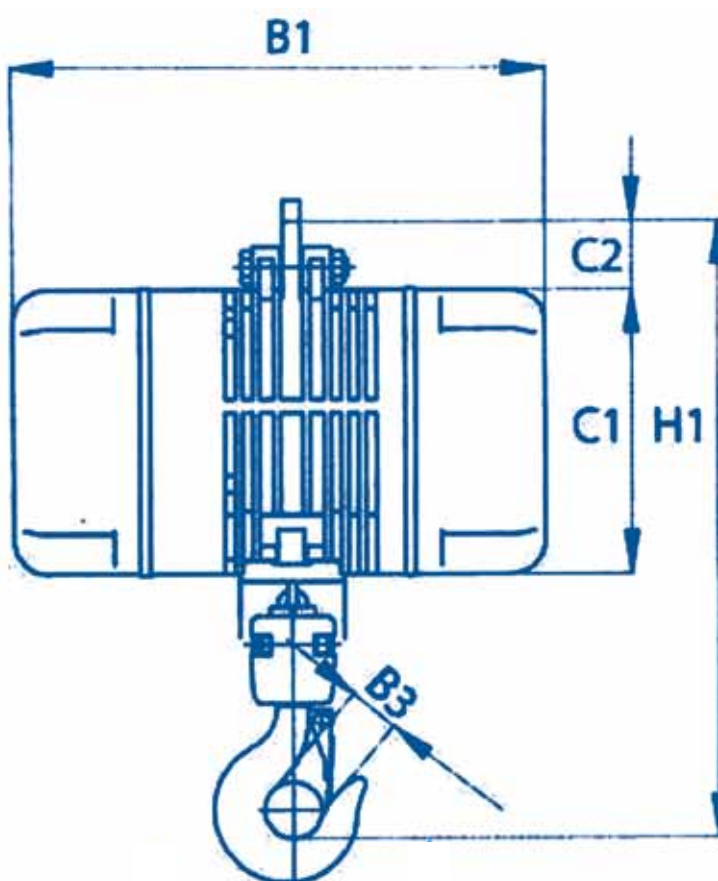
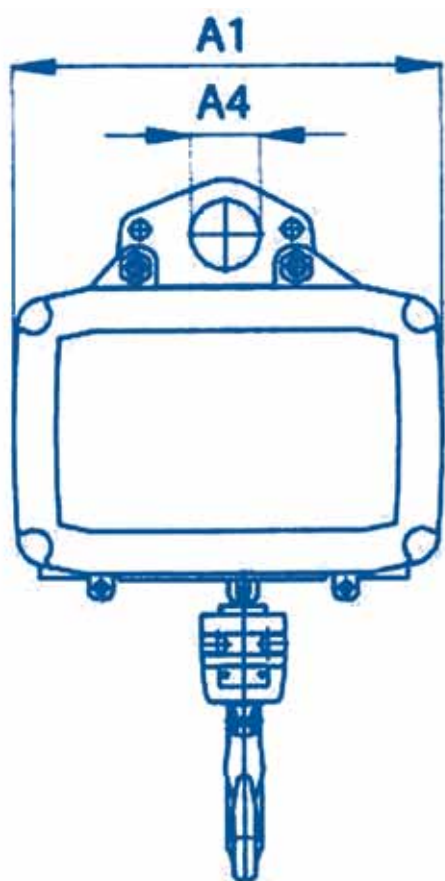
#### Dual Speed

LG25/1/8&2	200	8/2	0.36/0.09	1	4 x 12.3	10.25	21	0.32
LG25/1/12.5&3	160	12.5/3	0.36/0.09	1	4 x 12.3	10.25	21	0.32
LG25/1/20&5	100	20/5	0.36/0.09	1	4 x 12.3	10.25	21	0.32
LG25/2/4&1	400	4/1	0.36/0.09	2	4 x 12.3	10.25	21	0.64
LG25/2/6.25&1.5	320	6.25/1.5	0.36/0.09	2	4 x 12.3	10.25	21	0.64
LG50/1/8&2	320	8/2	0.72/0.18	1	5 x 15.3	12.81	21	0.52
LG50/1/12.5&3	320	12.5/3	0.72/0.18	1	5 x 15.3	12.81	21	0.52
LG50/1/20&5	200	20/5	0.72/0.18	1	5 x 15.3	12.81	21	0.52
LG50/2/4&1	630	4/1	0.72/0.18	2	5 x 15.3	12.81	22	1.04
LG50/2/6.25&1.5	630	6.25/1.5	0.72/0.18	2	5 x 15.3	12.81	22	1.04
LG10/1/8&2	630	8/2	1.45/0.36	1	7 x 22	12.55	45	1.04
LG10/1/16&4	500	16/4	1.45/0.36	1	7 x 22	12.55	45	1.04
LG10/2/4&1	1250	4/1	1.45/0.36	2	7 x 22	12.55	47	2.08
LG10/2/8&2	1000	8/2	1.45/0.36	2	7 x 22	12.55	47	2.08
LG16/1/8&2	1000	8/2	2.44/0.61	1	9 x 27	10.38	60	1.75
LG16/1/12.5&3	1000	12.5/3	2.39/0.58	1	9 x 27	10.38	60	1.75
LG16/2/4&1	2000	4/1	2.44/0.61	2	9 x 27	10.38	64.5	3.5
LG16/2/6.25&1.5	2000	6.25/1.5	2.39/0.58	2	9 x 27	10.38	64.5	3.5
LG20/1/8&2	1250	8/2	3.05/0.77	1	10 x 28	10.25	60	2.25
LG20/1/12.5&3	1250	12.5/3	2.98/0.72	1	10 x 28	10.25	60	2.25
LG20/2/4&1	2500	4/1	3.05/0.77	2	10 x 28	10.25	64.5	4.5
LG20/2/6.25&1.5	2500	6.25/1.5	2.98/0.72	2	10 x 28	10.25	64.5	4.5

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## Dimensions (mm)

Type	A1	A4	B1	B3	C1	C2	H1 Eye Suspension	H1 Hook Suspension
LG25/1	246	40	380	22	164	53	362	424
LG25/2	246	40	380	22	164	53	395	457
LG50/1	246	40	380	22	164	53	377	439
LG50/2	246	40	380	22	164	53	417	479
LG10/1	321	52	465	33	214	69	482	553
LG10/2	321	52	465	33	214	69	556	627
LG16/1	345	75	487	33	230	135	608	643
LG16/2	345	75	487	33	230	135	690	725
LG20/1	345	75	487	33	230	135	608	643
LG20/2	345	75	487	33	230	135	690	725



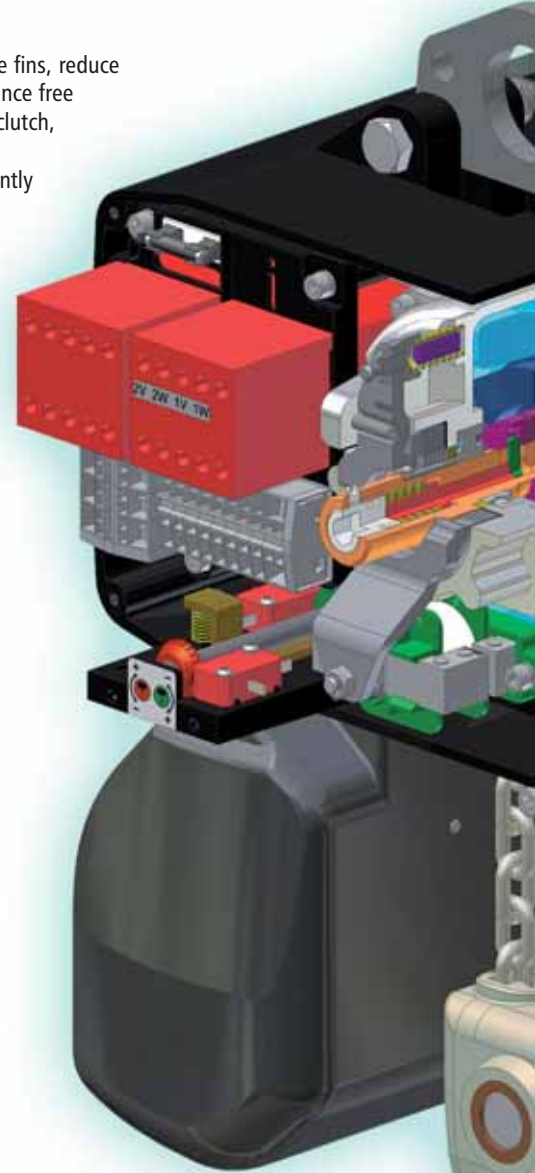


## Brake

- New advanced brake design
- Steel brake discs, guided by internal and external guidance fins, reduce brake wear and resetting requirements. Virtually maintenance free
- Maximum safety- the brake is mounted after the slipping clutch, clutch wear will not affect the integrity of the load
- Double brake assembly available; these can be independently checked for correct operation

## Contactor Control System

- Simple technology (no electronics susceptible to interference)
- Reliable construction using proven components
- Emergency stop with contactor available if required (sometimes needed in permanent installations)
- 42V control system allowing highest safety of operation, (110V or 24V available on request)



## Geared Limit Switch (standard)

- Available with 2 or 4 position limit stops
- Simple adjustment, with positioning and repeatability
- Lifting heights up to 120 m (3 drive ratios are possible)

## Transmission

- Improvements to gear designs reduce noise levels
- Helical first and second gear teeth for quieter running
- Permanent grease lubrication for wear resistant operation, no oil leaks

## Chain Wheel

- Manufactured from hardened steel
- With additional chain pockets, type 25 hoist with 6 pockets, other hoists have 5 pocket load chain wheel- quiet with improved running properties
- Double bearing support, sealed bearings available on request



## Chain Guides

- Replacement can be carried out without stripping the hoist
- 2-part construction to optimize maintenance
- Reinforced glass fibre / plastic material is highly wear resistant
- Wear plate fitted to underside of hoist to aid chain guidance and eliminate chain jamming



## Slipping clutch to prevent overloading

- Simple and precise adjustment at workshop level, no exterior adjustment
- Clutch is located in the rotor shaft, outside the drive train; clutch wear will not affect the integrity of the load
- Maintenance free and highly resistant to wear
- Clutch parts available if required - no need to buy complete assemblies
- Ease of servicing thanks to comfortable access



## Motor

- Designed for tough working conditions
- Single or 2 speeds available in a variety of speeds, normal, fast and super fast to suit your application
- Special power supplies available including some hoists for single phase power supplies
- Options- with thermal cutout device to prevent overheating and anti phase system to prevent mis-phasing



## Lifting Chain

- Calibrated especially for the hoist
- Black coated as standard or Zinc plated if required
- Surface case hardened quality class DAT (8SS) to FEM 9.671

## Housing

- Cast aluminum housing with maximum solidity
- For extreme working conditions: the body has cast cooling fins to dissipate heat caused by operation
- Easy change from 1-fall to 2-fall operation: no need to dismantle the hoist
- Latest Aluminium casting technology used- manufactured by an automotive industry supplier
- Aluminium end covers fitted- sealed to prevent water penetration

