

# LIFTING WITHOUT LIMITS





Note: PLANETA are constantly striving to increase and further improve the product range.

Whilst every effort has been made to ensure the accuracy of the specifications and dimensions included at the time of printing, we are unable to warrant the given information.

Designs and specifications are subject to change without notice or obligation. The inclusion of any product does not guarantee the availability of that product in the future.

Customers should check both the availability and conformance of the product to any critical parameters at the time of ordering!



## **Quality by tradition**

Stability and innovation. In truth, they are two sides of the same coin because continuous readiness for innovation enables sustainable developments.

Sustainability, reliability and responsibility are the basic values that we are committed to here at PLANETA. In all periods of the company's history, these values have been personified by our employees and their quest to always do the good things that little bit better.



PLANETA hoists from 1861 to today

## Trust is good - Control is better

PLANETA rope winches are subject to the strictest quality controls and are also designed with high functionality for the toughest operating conditions.

Only quality products that have been tested with an appropriate excess load in compliance with all standards are supplied.

## **Quality means safety**

Reliability and responsibility are the values that we are particularly committed to. This begins with work safety during production, up to certification of all processes as part of the annual TÜV DIN EN ISO 9000:2001 audit or membership in the GKS.







#### Your satisfaction is our success

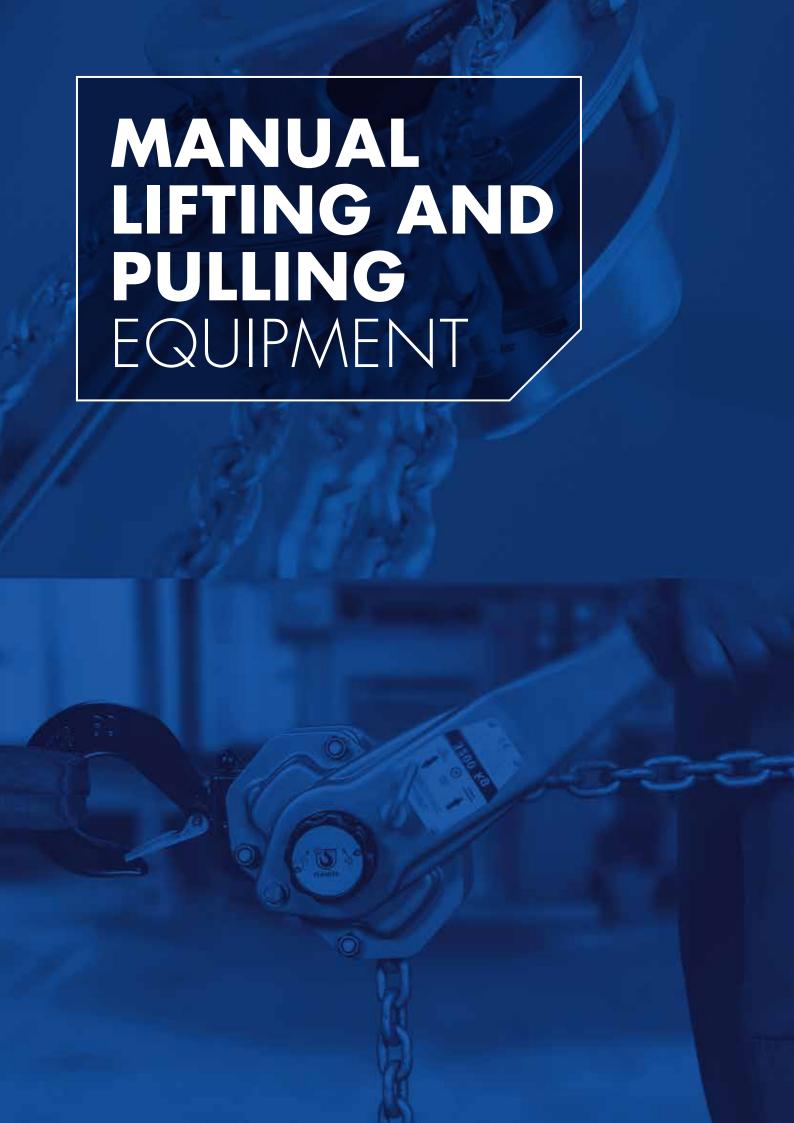
A large network of consultants, service technicians and specialist dealers trained by PLANETA is available to you.

We strive to provide you with the best solution at the best possible price, and this goes well beyond the product itself. To us, best quality means always showing you the solution which corresponds to your requirements.

As one of Germany's oldest lifting device manufacturers, we strive to do this for you each and every day.







## PLANETA - PAH aluminium ratchet lever hoist

The new PLANETA PAH aluminium ratchet lever hoist is an essential tool in industrial and service applications thanks to its very small and light design.

A closed, well-designed aluminium die-cast housing protects the inner components against dirt. Equipped with two robust hook clips, the PAH meets all safety requirements and guarantees safe work.

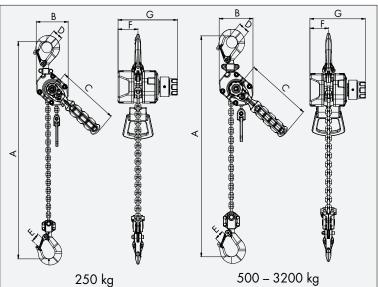
The new robust chain end piece provides additional safety because the chain cannot be pulled through the device in this way.

A release lever enables the chain to be pulled through quickly when not under load.

Usable at ambient temperatures from -20 °C to +60 °C.

Hand lever with rubber handle (only for 250 kg/500 kg load bearing capacity)

The standard lift is 1.5 m



			1			
TYPE	PAH	250	500	800	1600	3200
Capacity	kg	250	500	800	1,600	3,200
Standard lift	m	1.5	1.5	1.5	1.5	1.5
Min. headroom (A)	mm	223	282	329	355	445
Lever force	daN	17	20	22	25	34
Number of chain falls		1	1	1	1	1
Chain size	mm	3 x 9	4 x 12	5.6 x 17	7.1 x 21	9 x 27*
B (dimensions)	mm	74	90	115	140	170
С	mm	142	175	233	233	350
D	mm	30	35	39	44	60
E	mm	20	22	28	30	41
F	mm	36	40	55	70	88
G	mm	105	117	140	158	185
Weight with standard lift	kg	1.6	2.7	5.1	7.6	14.7
Weight for 1 m add. lift. h	eight kg	0.2	0.35	0.68	1.1	1.8
PAH with 1.5 m lift Or	der No.	G10460	G10461	G10462	G10463	G10464
Additional 1 m lift Or	der No.	G10465	G10007	G10086	G10087	G10249

<sup>\*</sup> grade 100







3.2 t

#### Lever hoist PLANETA - PREMIUM PRO

The next development stage of the reliable PREMIUM lever hoist is the PREMIUM PRO. Thanks to a significant weight saving, handling is improved. Despite this, the frame has been strengthened compared to the previous generation. Proven quality also ensures longevity and its design makes it very robust.

#### Free-running mode

When the selection switch is moved to the middle point, the unladen chain can easily be pulled through the device freely to the required usage length. This makes tensioning the chain easier.

#### Load chain

The tempered, galvanised load chain according to DIN EN 818-7-T is supplied with the unit. The standard lifting height is 1.5 m; any length required for higher lifting is possible.

#### New chain end piece

The robust chain end piece provides additional safety because it cannot be pulled through the device with the chain.

#### **Protected handle**

The ergonomic rubber handle on the end of the lever protects the user against injury and is also screwed in place to prevent it slipping.

#### **Technical advantages**

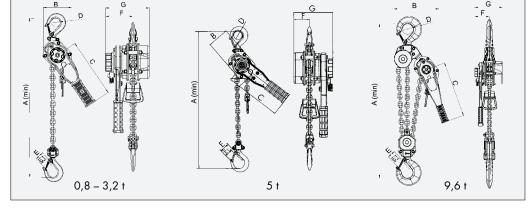
Hand lever can be used in any position thanks to the ratchet; safety automatic mechanical brake; galvanised connecting parts; cast hook clip; large, non-slip and closed hand wheel; safety chain end piece.

#### Optional:

1.6 t

- Also in 😥 -design
- With overload protection

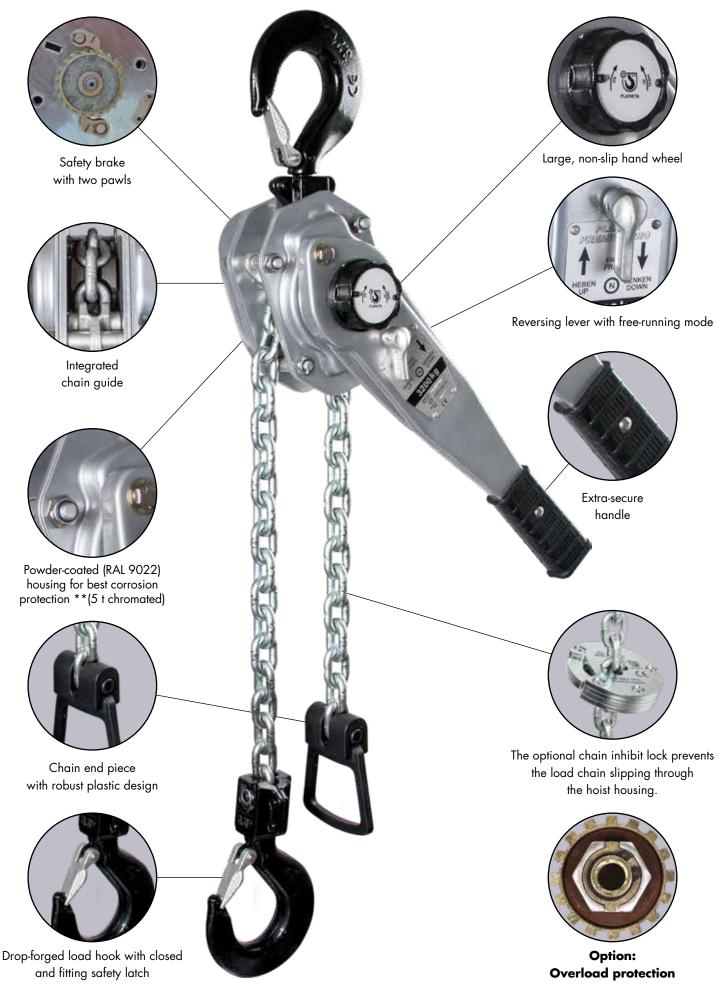




TYPE PREM	IUM PRO	0.8	1.6	3.2	5**	6.4	9.6
Capacity	kg	800	1,600	3,200	5,000	6,400	9,600
Standard lift	m	1.5	1.5	1.5	1.5	1.5	1.5
Min. headroom (A)	mm	320	360	431	655	500	635
Lever force	daN	22	24	33	37	36	38
Meters load chain movement with 1 roo	und 360° m	0,019	0,015	0,016	0,009	0,008	0,005
Number of chain falls		1	1	1	1	2	3
Chain size	mm	5.6 x 17	7.1 x 21	9 x 27*	13 x 36	9 x 27*	9 x 27*
B (Dimensions)	mm	115	137	169	180	238	300
С	mm	239	259	374	400	374	374
D	mm	35	42	48	60	60	70
E	mm	35	38	46	43	59	54
E1	mm	23	28,5	33	41	39	51
F	mm	91	67	98	104	98	98
G	mm	146	162	187	213	187	187
Weight with standard lift	kg	6.3	8.8	16.4	32.5	24.9	42.1
Weight for 1 m additional lifting height	kg	0.7	1.1	1.8	3.7	3.6	5.4
PREMIUM PRO with 1.5 m lift	Order No.	G10390	G10391	G10392	G10280	G10394	G10395
Additional 1 m lift	Order No.	G10086	G10087	G10249	G10287	G10254	G10256
Safety clutch	Order No.	G10301	G10302	G10303	G10304	G10305	G10306
Chain inhibit lock	Order No.	G10450	G10451	G10452	G10453	G10452	G10452

<sup>\*</sup> Grade 100 \*\*chromated







#### PREMIUM PRO 1 t

#### PLANETA - PREMIUM PRO

#### **Compact and light**

The new PREMIUM-PRO chain hoist is the systematic development of the established PREMIUM series and is manufactured using the latest technology. Compared to its predecessors, it is much lighter and provides better handling thanks to its compact design.

Despite the weight saving, working stability has been improved thanks to the clever construction. The chrome-plated housing for corrosion protection and overload protection as standard reinforce the high quality of the PLANETA-PREMIUM PRO product.

#### Load chain

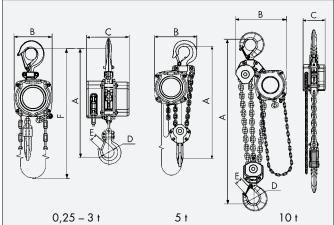
Tempered and galvanised load chain "Made in Germany" according to DIN EN 818-7-T. **Up to 3 t in a single strand.** Higher lifting on request, any length can be delivered.

#### Galvanised or powder-coated on all sides

Dirt or rain have no effect on this device. All connection and housing parts are protected against corrosion.

#### **Chain mounting**

Thanks to the easily-accessible chain mounting, any user can insert a longer chain if required.







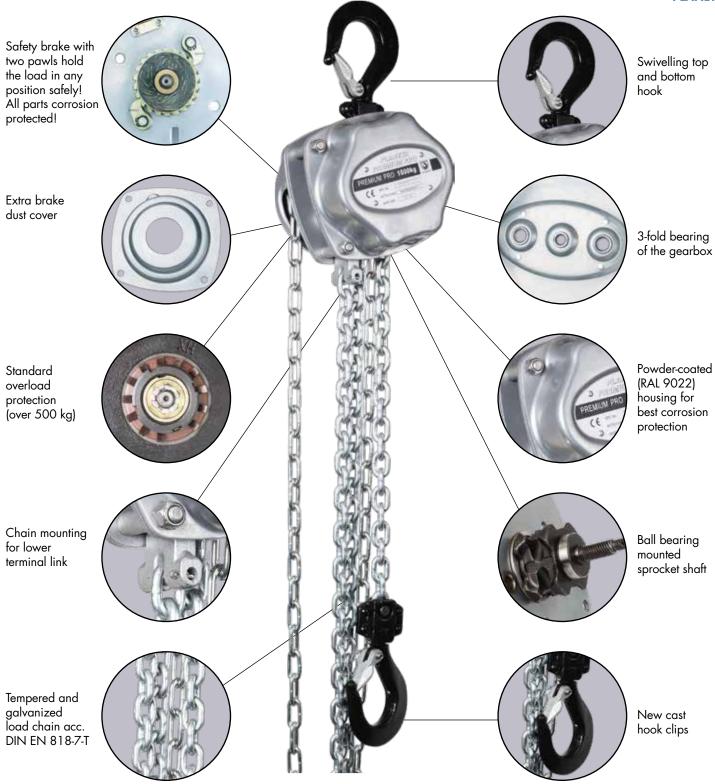
PREMIUM PRO 10 t

PREMIUM PRO 30 t

TYPE PREMIU	IM PRO	0.25	0.5	1	1.5	2	3	5	10	20	30
Capacity	kg	250	500	1,000	1,500	2,000	3,000	5,000	10,000	20,000	30,000
Standard lift	m	3	3	3	3	3	3	3	3	3	3
Min. headroom (A)	mm	259	309	373	460	460	553	630	900	1033	1320
Hand chain force	daN	22	24	30.5	36	36	37	39	39.5	40.5	47 x 2
Hand chain operation length	m	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Meters hand chain to pull to lift 1m	m	14.84	29.53	39.38	60.76	60.76	96.67	193.33	290	386.67	580
Number of chain falls		1	1	1	1	1	1	2	3	8	12
Chain size	mm	4 x 12	5 x 15	6 x 18	8 x 24	8 x 24	10 x 30	10 x 30	10 x 30*	10 x 30	10 x 30
B (Dimensions)	mm	95	114	152	190	190	240	240	391	955	690
С	mm	99.4	110	139	150	150	158	158	166	169	435
D	mm	30	33	40	52	52	62	72	85	110	106
E	mm	22	22	28	33	33	37	44	60	70	80
F	m	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Weight with Standard lift	kg	5.8	7.6	11.5	17.2	17.2	27	40.5	61.9	202.8	268.9
Weight for 1 m additional lifting height	** kg	1.2	1.4	1.6	2.2	2.2	3	5.2	14.8	19.2	28
PREMIUM PRO with 3 m lift	Order No.	G10310	G10311	G10312	G10313	G10314	G10315	G10316	G10317	G10318	G10062
Additional 1 m lift	Order No.	G10270	G10271	G10242	G10243	G10243	G10272	G10246	G10247	G10248	G10058

<sup>\*</sup> Grade 100 \*\* 1 m operating length and 1 lift





Chain bag	Chain ba	<b>g size</b> (ma	x. lift in m)	Order No.	Order No.	Order No.
(Plastic)	Size 1	Size 2	Size 3	Size 1	Size 2	Size 3
PREMIUM PRO 0.25	26	32	38	G10500	G10510	G10520
PREMIUM PRO 0.5	16	19	22	G10501	G10511	G10521
PREMIUM PRO 1	11	14	1 <i>7</i>	G10502	G10512	G10522
PREMIUM PRO 1.5	6	8	10	G10503	G10513	G10523
PREMIUM PRO 2	6	8	10	G10504	G10514	G10524
PREMIUM PRO 3	4	5	6	G10505	G10515	G10525
PREMIUM PRO 5	2	2.5	3	G10506	G10516	G10526
PREMIUM PRO 10	o. r.	o. r.	o. r.	G10507	G10517	G10527
PREMIUM PRO 20	o. r.	o. r.	o. r.	G10508	G10518	G10528
PREMIUM PRO 30	o. r.	o. r.	o. r.	G10509	G10519	G10529

#### **Options:**

- Short model as a combination of chain hoist PREMIUM PRO and trolley
- Chain bag as an accessory
- Also available with GL (Germanischer Lloyd) certification!
- For shipyards, ships and the chemical industry.
- 😥-Design





LST-H 0,5

## **LST-Trolleys**

LST-trolleys are manufactured in a higher quality for a very rough and unusual use.

The chain hoist PREMIUM PRO of the same capacity as the trolley fit easily into the lugs with their top hook, but these LST-trolleys are best combined with PREMIUM PRO. Trolleys have rubber buffers at both sides!

#### Wide adjustment for any flange width

Discs of different thicknesses are on the carrying bolts that allow to make the distance between side plates shorter or longer by exchanging them from outside to inside.

There are two main bolt lengths. The standard bolts are adjustable for normal width. Bolts of size 2 offer more possibilities up to beam flange sizes on HE-B-beams with 300 mm width. Prefer this when unclear for what kind of work you will use them.

#### **Double safety**

Climb stop on both side of the beam flange hinders the trolley to climb up the beam and prevents from falling down. Right angled side plates work as wheel shaft breakage protection, falling down protection and beam flange cleaner.



#### Sturdy side plates

The load is balanced by two carrying bolts on all four wheels because the castle nuts tie only one side. This gives the bolts a bit of tolerance for movement and equalizes unproper beam flanges.

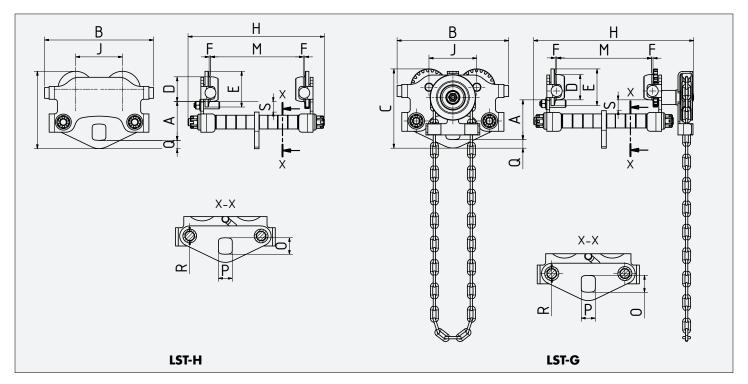
#### **MODELLE:**

**LST-H** = Push trolley

**LST-G** = Gear type trolley

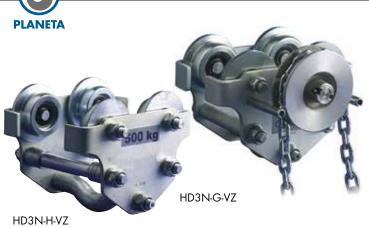
The trolleys shown are designed for use with manual hoists.





TYPE Geo	Push trolley LST-H ir type trolley LST-G	0.5 0.5	1	2 2	3 3	5 5	10 10	- 20
Capacity	kg	500	1,000	2,000	3,000	5,000	10,000	20,000
Flane width M min max.	mm	50 – 203	64 – 203	68 – 203	100 – 203	114 – 203	124 – 203	136 – 203
Min. curve radius	m	0.85	1	1.1	1.3	1.4	2	a.A.
Hand chain operation length	LST-G m	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Reel path for 1 m path LST-G	m	2.96	3.63	4.65	5.66	6.34	7.98	10.63
A (dimensions)	mm	85	103	115	125	143	187	250
В	mm	238	288	338	390	472	476	564
С	mm	169	207	237	271	307	381	514
D	mm	54	67	80	100	109	133	170
E	mm	78	96	111	133.5	145	176	228
F	mm	3	3	3	4	4	4	4
H (LST-H)	mm	298	314	325	355	381	388	-
H (LST-G)	mm	342	363	374	403	428	445	498
J	mm	102	112	131	153	168	194	234
0	mm	36	40	48	54	66	80	130
P	mm	30	36	40	46	52	64	100
Q	mm	18	22	26	29	37	40	65
R	mm	Ø 20	Ø 24	Ø 29	Ø 34	Ø 39	Ø 44	Ø 59
S	mm	23	24	28	26	28	50	55
Net weight LST-H	kg	9	14	22	36	55	86	-
Net weight LST-G	kg	11	16	24	39	59	89	190
LST-H	Order No.	G20340	G20341	G20342	G20343	G20344	G20345	-
LST-G with 2.5 m operation l	ength Order No.	G20350	G20351	G20352	G20353	G20354	G20355	G20356
Larger flange width min mo	order No.	50 – 305 <b>G20090</b>	64 – 305 <b>G20091</b>	68 – 305 <b>G20093</b>	100 – 305 <b>G20094</b>	114 – 305 <b>G20095</b>	124 – 305 <b>G20097</b>	136 – 305 <b>G20099</b>
Add. hand chain operation l	ength/m Order No.	G20017	G20017	G20017	G20017	G20017	G20017	G20017
Position lock device	Order No.	G10180	G10181	G10182	G10183	G10184	G10185	G10186
Extended handwheel shaft	Order No.	G20360	G20361	G20362	G20363	G20364	G20365	G20366

More capacities upon request.

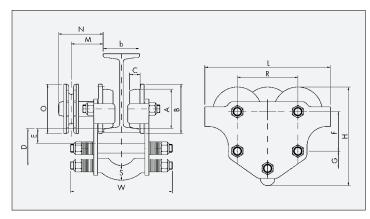


## **HD3N-Trolleys**

#### Zinc plated design

HD3N-trolleys have outstanding corrosion protection. All steel parts are electrolytically zinc plated. This is a must in wet rooms and in very aggressive environment. Larger flange width (size 2 - 4) are optional. Wheels fit flat and also tapered flanges!

Capacities up to 25 t on request.



## Many special version upon request.

- NIROSTA trolleys up to 3 t
- Bogie trolleys up to 10 t
- Rack gear trolleys up to 12.5 t
- Person transporting trolleys acc. EN 1808 up to 4 t capacity

1 m more operation length	Order No.
Standard zinc plated (2.5 m total)	G20118

	sh trolley HD3N-H-VZ pe trolley HD3N-G-VZ	0.5 -	1 1	2 2	3.2 3.2	5 5	6.3 6.3	8* 8*	10 10	12.5 12.5	20 20
Capacity	kg	500	1,000	2,000	3,200	5,000	6,300	8,000	10,000	12,500	20,000
Maximum weight of hoist	kg	100	120	250	150	300	200	550	600	150	800
Flange width b	min. / max. size 1 mm	55/102	55/102	74/127	90/143	106/156	106/156	106/166	131/195	143/222	170/212
	min. / max. size 2 mm	105/152	105/152	127/180	149/203	160/210	160/210	167/247	196/271	223/298	-
	min. / max. size 3 mm	-	156/203	190/243	203/254	210/260	210/260	248/349	272/363	299/389	-
	min. / max. size 4 mm	-	207/254	254/305	251/305	255/305	255/305	_	_	_	_
Hand chain force	daN	-	10	16	25	20	25	16	19	23	25
Hand chain operation leng	gth m	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Min. curve radius	m	1	1.5	1.6	2	2.9	2.9	3.5	3.5	3.5	5.5
A (dimensions)	mm	45	60	80	100	125	125	160	160	160	200
В	mm	60	75	100	120	150	150	190	190	190	240
С	mm	15	18	22	25	30	30	35	35	35	50
D	mm	52	60	75	90	117	11 <i>7</i>	145	145	145	165
Е	mm	15	20	27	35	40	40	45	45	45	42
F	mm	45	60	80	100	120	120	145	145	145	165
G	mm	30	30	35	40	60	60	80	80	80	100
Н	mm	125	150	195	235	295	300	365	370	375	450
L	mm	150	190	255	300	375	375	450	450	450	550
М	mm	-	65	65	70	100	100	115	115	115	135
N	mm	-	90	90	95	130	130	135	135	135	170
0	mm	-	100	100	100	135	135	270	270	270	300
W	size 1 mm	160	170	215	250	275	275				
	size 2 mm	210	220	265	310	330	330	. 150	1.150	1 . 150	1 . 105
	size 3 mm	_	270	330	360	380	380	b + 150	b + 150	b + 150	b + 185
	size 4 mm	_	325	390	410	425	425				
R	mm	75	99	123	144	174	174	220	220	220	272
S	size 1 mm	20	20	30	35	40	45	40	50	55	65
	size 2 mm	20	25	35	40	45	50	45	55	60	_
	size 3 mm	-	30	35	40	50	55	50	60	65	_
	size 4 mm	-	30	40	45	50	55	_	-	-	_
Net weight HD3N-H-VZ	kg	3	5	11	18	33	35	85	90	95	150
Net weight HD3N-G-VZ	kg	-	6	12	19	35	36	90	95	100	160
HD3N-H-VZ	Order No.	G20230	G20231	G20232	G20233	G20234	G20235	G20236	G20256	G20257	G20285
HD3N-G-VZ with 2.5 m c	peration length Order No.	-	G20237	G20238	G20239	G20240	G20241	G20242	G20258	G20259	G20286













## Combined power

## Saving headroom

The very best manual chain hoist PREMIUM PRO and a trolley LST are put together in an integrated combination to save headroom. That means the distance between load point of hook and bottom of beam flange. This is very important if rooms are low or space is narrow. Halls can be build smaller what saves costs. Or if the clearance in older buildings is too narrow for standard hoists – this is the solution!

#### Advantages of trolley hoist

- shortens downtime in ships
- enables low cost bridge cranes
- labor saving during repair and maintenance works.
- optimal space utilisation

## Low headroom trolley hoist LHT

The close combination of hoist and trolley with low headroom offers a unit that is both functional and versatile. There is less timespent messing with equipment and money is saved. The LHT-line uses the quality advantages of the PREMIUM PRO manual chain hoists. The smoothly moving and operation on ball bearings plus a perfectly finish of surface protection offers the user an uncomparable reliability. The standard equipped overload protection fulfills even the high demands on ocean going vessels.

#### **TYPES:**

**LHT-H** = Chain hoist in push trolley

**LHT-G** = Chain hoist in gear type trolley

#### Standard version:

- PREMIUM chain hoist with 3 m lift and 2.5 m hand chain operation length
- Available as manual push trolley (TYPE -H) or geared trolley (TYPE -G)
- A contour trolley wheel design provides maximum beam contact on flat or tapered beams. Tilting and climbing protection according CE-regulations are self-evident.

#### **Options** (on request):

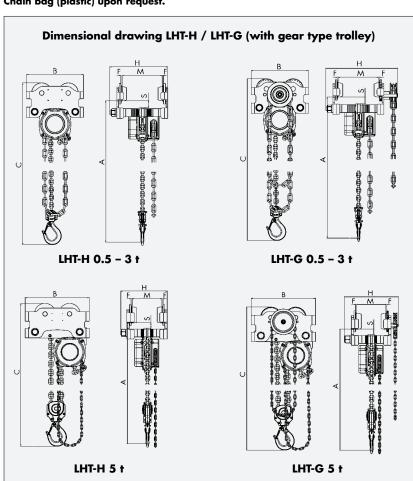
- Chain case (what is very unusual for manual chain hoists) for down-hanging loose chain that may cause trouble in some cases.
- For corrosive environments, completely zinc plated surfaces are also available for the trolley
- Special non-corrosive and non-sparking steels for chain
- Special flange widths of up to 305 mm are possible if the specified adjustment range (dimension H) is no longer sufficient.



TYPE	LHTH/-G	005L	010L	015L	020L	030L	050L	100L	200L
Capacity	kg	500	1,000	1,500	2,000	3,000	5,000	10,000	20,000
Standard lift	m	3	3	3	3	3	3	3	3
Number of chain falls		1	1	1	1	1	2	3	8
Chain size	mm	5 x 15	6 x 18	8 x 24	8 x 24	10 x 30	10 x 30	10 x 30*	10 x 30
Min. headroom (A)	mm	272	270	388	388	472	595	800	965
Flange width min. – max. (M)	mm	50 – 203	64 – 203	88 – 203	88 – 203	100 – 203	114 – 203	124 – 203	136 – 203
Min. curve radius	m	0.85	1	1.1	1.1	1.3	1.4	2	3.5
Reel path for 1 m lift	m	29.5	39.4	60.8	60.8	96.7	193.3	290	386.7
Reel path for 1 m path LHT-G	m	3	3.6	4.7	4.7	5.7	6.3	8	10.6
Dimension H min. LHT-H	mm	298	314	325	325	355	381	388	-
Dimension H min. LHT-G	mm	342	363	374	374	403	428	445	498
В	mm	238	288	338	338	390	472	476	564
С	mm	352	420	487	487	566	745	940	1165
D	mm	54	67	80	80	100	109	133	170
S	mm	23	24	28	28	26	28	50	55
Е	mm	78	96	111	111	133.5	145	176	228
F	mm	3	3	3	3	4	4	4	4
J	mm	102	112	131	131	153	168	194	234
R	mm	Ø 20	Ø 24	Ø 29	Ø 29	Ø 34	Ø 39	Ø 44	Ø 59
Weight with 3 m lift LHT-H	kg	13.5	22	42	42	56	82	143	331
Weight with 3 m lift LHT-G	kg	14.8	23.5	43.7	43.7	58	85	148	353
LHT-H with 3 m lift	Order No.	G20300	G20301	G20302	G20303	G20304	G20305	G20307	G20309
Additional lift per m (LHT-H)	Order No.	G10271	G10242	G10243	G10243	G10272	G10246	G20077	G20079
LHT-G with 3 m lift	Order No.	G20310	G20311	G20312	G20313	G20314	G20315	G20317	G20319
Additional lift per m (LHT-G)	Order No.	G20320	G20321	G20322	G20323	G20324	G20325	G20327	G20329
Position lock device	Order No.	G10180	G10181	G10182	G10182	G10183	G10184	G10185	G10186
Larger flange width (M)	min. – max. mm <b>Order No.</b>	64 – 305 <b>G20090</b>	64 – 305 <b>G20091</b>	88 – 305 <b>G20092</b>	88 – 305 <b>G20093</b>	100 – 305 <b>G20094</b>	114 – 305 <b>G20095</b>	124 – 305 <b>G20097</b>	136 – 305 <b>G20099</b>

#### Chain bag (plastic) upon request.

\*\* Grade 100

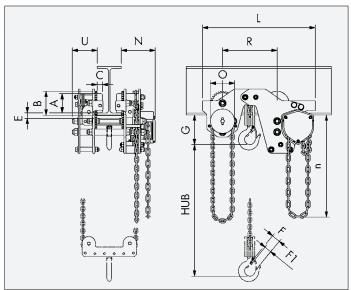




Low headroom trolley in a special construction with beam fixing device.
It keeps the trolley in position while ship rolls.







## Low headroom trolley hoist PKB

#### **Extreme short headroom**

The manual powered PKB is a very compact lifting equipment that combines an integrated chain hoist with a geared type trolley. The important fact is that the load hook can be lifted up directly under the beam flange.

#### **Properties**

- Low weight
- Extreme short headroom
- Low effort on hand chain when manouvering
- Double safety pawl
- 2-layer coating, final colour RAL 5010

#### Quality

A solid steel construction with satisfactorily hoist component. (incl. overload protection).

#### Standard version

- Contoured trolley wheels to suit flat and angled girders
- Coated and galvanized load chain to comply with DIN EN 818-7-T, Handchain galvanized
- Standard 3m height of lift and 2.5m operating height
- Extensive users and service manual with certificates and service log

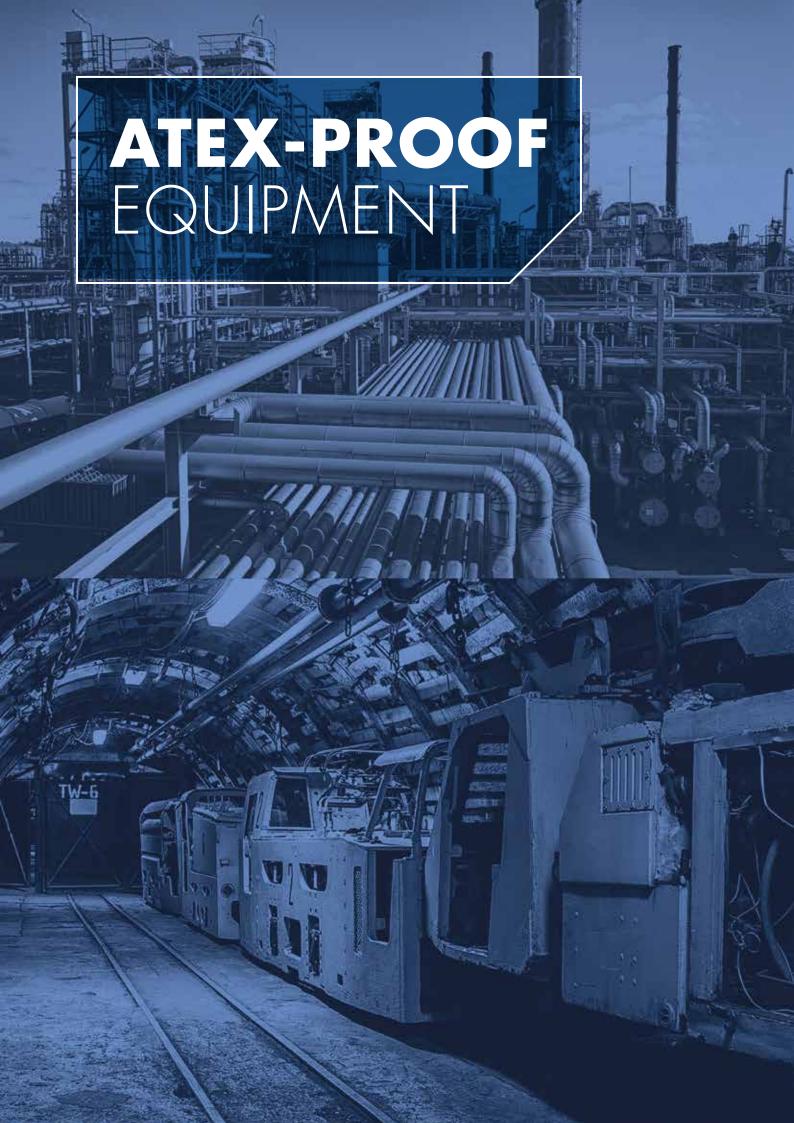
#### **Specials**

Special- • -protection with bronze parts and galvanizations, chain collector, overload limiter, beam parking brake.

						Dime	nsions					
TYPE	A mm	B mm	C mm	E mm	F mm	F1 mm	R mm	L mm	N mm	U mm	O mm	n mm
PKB 10	80	100	22	20	36	29	226	500	140	105	100	2,500
PKB 20	100	120	25	20	42	34	266	600	145	150	135	2,500
PKB 32	125	150	30	26	48	39	310	685	175	150	135	2,500
PKB 60	160	190	35	33	75	68	430	965	225	200	300	2,500
PKB100	160	220	35	35	50	43	600	1070	223	196	300	2,500
PKB120	160	220	35	35	50	43	600	1070	223	196	300	2,500

TYPE	Capacity	Hand force	Beam*	Min. headroom	Weigh	t (kg)	Order No.	Order No.
IIFE	kg	daN	mm	G mm	complete 3 m	Meter lift	with 3 m lift	Add. lift per m
PKB 10	1,000	24	74 – 300	125	40	1.7	G20260	G20264
PKB 20	2,000	33,5	90 – 300	150	120	2	G20261	G20265
PKB 32	3,200	38	106 – 300	170	150	3	G20262	G20266
PKB 60	6,000	43	119 – 300	285	300	5	G20263	G20267
PKB100	10,000	40	134 – 300	270	400	11	G20275	G20276
PKB120	12,000	40	134 – 300	270	400	11	G20278	G20279

<sup>\*</sup> Flange width to be advised with order! The flange width will be fix and is not adjustable afterwards! Data in chart show only a range of recommendation.





#### Lever hoist PLANETA - PREMIUM PRO-EX

The next development stage of the reliable PLH-PREMIUM lever hoist is the PREMIUM PRO. Thanks to a significant weight saving, handling is improved. Despite this, the frame has been strengthened compared to the previous generation. Proven quality also ensures longevity and its design makes it very robust.

#### Free-running mode

When the selection switch is moved to the middle point, the unladen chain can easily be pulled though the device freely to the required usage length. This makes tensioning the chain easier.

#### Load chain

The tempered, galvanised load chain according to DIN EN 818-7-T is supplied with the unit. The standard lifting height is 1.5 m; any length required for higher lifting is possible.

### New chain end piece

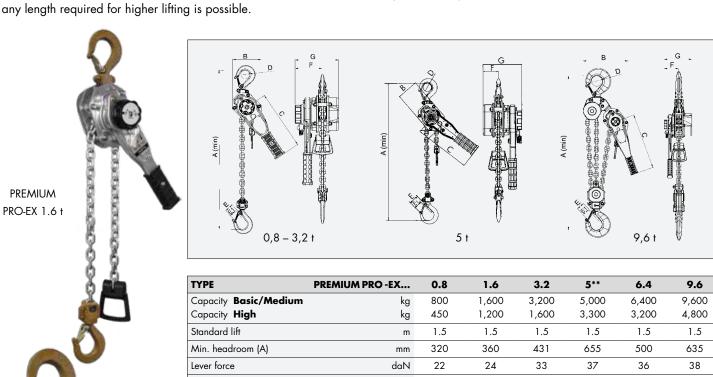
The robust chain end piece provides additional safety because it cannot be pulled through the device with the chain.

#### **Protected handle**

The ergonomic rubber handle on the end of the lever protects the user against injury and is also screwed in place to prevent it slipping.

#### Technical advantages

Hand lever can be used in any position thanks to the ratchet; safety automatic mechanical brake; galvanised connecting parts; cast hook clip; large, non-slip and closed hand wheel; safety chain end piece.



UM PRO -EX	0.8	1.6	3.2	5**	6.4	9.6	
kg	800	1,600	3,200	5,000	6,400	9,600	
kg	450	1,200	1,600	3,300	3,200	4,800	
m	1.5	1.5	1.5	1.5	1.5	1.5	
mm	320	360	431	655	500	635	
daN	22	24	33	37	36	38	
ound 360° m	0.019	0.015	0.016	0.009	0.008	0.005	
	1	1	1	1	2	3	
mm	5.6 x 17	7.1 x 21	9 x 27*	13 x 36	9 x 27*	9 x 27*	
mm	115	137	169	180	238	300	
mm	239	259	374	400	374	374	
mm	35	42	48	60	60	70	
mm	35	38	46	43	59	54	
mm	23	28.5	33	41	39	51	
mm	91	67	98	104	98	98	
mm	146	162	187	213	187	187	
kg	6.3	8.8	16.4	32.5	24.9	42.1	
t kg	0.7	1.1	1.8	3.7	3.6	5.4	
Order No.	G10320	G10321	G10322	G10323	G10324	G10325	
Order No.	G10326	G10327	G10328	G10329	G10330	G10331	
Order No.	G10086	G10087	G10249	G10287	G10254	G10256	
Order No.	G10338	G10339	G10340	G10341	G10342	G10343	
Order No.	-	G10345	G10346	G10347	G10348	G10349	
	mm daN ound 360° m  mm mm mm mm mm mm mm mm chapter No.  Order No.  Order No.  Order No.	kg 450 m 1.5 mm 320 daN 22 ound 360° m 0.019  1 mm 5.6 x 17 mm 115 mm 239 mm 35 mm 35 mm 23 mm 91 mm 146 kg 6.3 kg 0.7  Order No. G10320  Order No. G10326  Order No. G10338	kg       450       1,200         m       1.5       1.5         mm       320       360         daN       22       24         ound 360°       m       0.019       0.015         1       1       1         mm       5.6 x 17       7.1 x 21         mm       115       137         mm       239       259         mm       35       42         mm       35       38         mm       23       28.5         mm       91       67         mm       146       162         kg       6.3       8.8         t       kg       0.7       1.1         Order No.       G10320       G10321         Order No.       G10326       G10087         Order No.       G10338       G10339	kg         450         1,200         1,600           m         1.5         1.5         1.5           mm         320         360         431           daN         22         24         33           ound 360°         m         0.019         0.015         0.016           1         1         1         1           mm         5.6 x 17         7.1 x 21         9 x 27*           mm         115         137         169           mm         239         259         374           mm         35         42         48           mm         35         38         46           mm         23         28.5         33           mm         91         67         98           mm         146         162         187           kg         6.3         8.8         16.4           kg         6.3         8.8         16.4           kg         0.7         1.1         1.8           Order No.         G10320         G10321         G10322           Order No.         G10338         G10339         G10340 <td>kg         450         1,200         1,600         3,300           m         1.5         1.5         1.5         1.5           mm         320         360         431         655           daN         22         24         33         37           ound 360°         m         0.019         0.015         0.016         0.009           1         1         1         1         1         1           mm         5.6 x 17         7.1 x 21         9 x 27*         13 x 36           mm         115         137         169         180           mm         239         259         374         400           mm         35         42         48         60           mm         35         38         46         43           mm         23         28.5         33         41           mm         91         67         98         104           mm         146         162         187         213           kg         6.3         8.8         16.4         32.5           kg         0.7         1.1         1.8         3.7           <td co<="" td=""><td>kg         450         1,200         1,600         3,300         3,200           m         1.5         1.5         1.5         1.5         1.5           mm         320         360         431         655         500           daN         22         24         33         37         36           ound 360°         m         0.019         0.015         0.016         0.009         0.008           1         1         1         1         1         2           mm         5.6 x 17         7.1 x 21         9 x 27*         13 x 36         9 x 27*           mm         115         137         169         180         238           mm         239         259         374         400         374           mm         35         42         48         60         60           mm         35         38         46         43         59           mm         23         28.5         33         41         39           mm         91         67         98         104         98           mm         146         162         187         213         187     &lt;</td></td></td>	kg         450         1,200         1,600         3,300           m         1.5         1.5         1.5         1.5           mm         320         360         431         655           daN         22         24         33         37           ound 360°         m         0.019         0.015         0.016         0.009           1         1         1         1         1         1           mm         5.6 x 17         7.1 x 21         9 x 27*         13 x 36           mm         115         137         169         180           mm         239         259         374         400           mm         35         42         48         60           mm         35         38         46         43           mm         23         28.5         33         41           mm         91         67         98         104           mm         146         162         187         213           kg         6.3         8.8         16.4         32.5           kg         0.7         1.1         1.8         3.7 <td co<="" td=""><td>kg         450         1,200         1,600         3,300         3,200           m         1.5         1.5         1.5         1.5         1.5           mm         320         360         431         655         500           daN         22         24         33         37         36           ound 360°         m         0.019         0.015         0.016         0.009         0.008           1         1         1         1         1         2           mm         5.6 x 17         7.1 x 21         9 x 27*         13 x 36         9 x 27*           mm         115         137         169         180         238           mm         239         259         374         400         374           mm         35         42         48         60         60           mm         35         38         46         43         59           mm         23         28.5         33         41         39           mm         91         67         98         104         98           mm         146         162         187         213         187     &lt;</td></td>	<td>kg         450         1,200         1,600         3,300         3,200           m         1.5         1.5         1.5         1.5         1.5           mm         320         360         431         655         500           daN         22         24         33         37         36           ound 360°         m         0.019         0.015         0.016         0.009         0.008           1         1         1         1         1         2           mm         5.6 x 17         7.1 x 21         9 x 27*         13 x 36         9 x 27*           mm         115         137         169         180         238           mm         239         259         374         400         374           mm         35         42         48         60         60           mm         35         38         46         43         59           mm         23         28.5         33         41         39           mm         91         67         98         104         98           mm         146         162         187         213         187     &lt;</td>	kg         450         1,200         1,600         3,300         3,200           m         1.5         1.5         1.5         1.5         1.5           mm         320         360         431         655         500           daN         22         24         33         37         36           ound 360°         m         0.019         0.015         0.016         0.009         0.008           1         1         1         1         1         2           mm         5.6 x 17         7.1 x 21         9 x 27*         13 x 36         9 x 27*           mm         115         137         169         180         238           mm         239         259         374         400         374           mm         35         42         48         60         60           mm         35         38         46         43         59           mm         23         28.5         33         41         39           mm         91         67         98         104         98           mm         146         162         187         213         187     <

<sup>\*</sup> Grade 100 \*\*chromated

Even with 5 ton capacity only one chain fall!

> PREMIUM PRO-EX 3.2 t



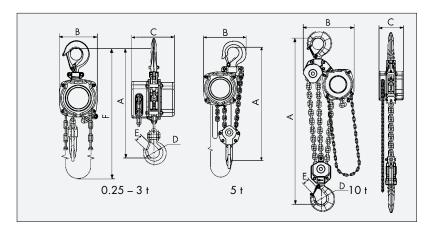
## **PREMIUM PRO with EX-protection**

The PREMIUM PRO-EX gets a very special surface treatment and has some changes in design that allows you to use the manual chain hoist in explosion hazardous areas. It accords to EC-guide lines 2014/34/EU.

Three explosion classes are specified. We offer the versions Basic, Medium and High. Please ask us for more detailed informations in case of doubts.

## All around galvanization and chromatation

Mud and dirt cannot harm this hoist! This protection begins with self-locking galvanized castle nuts, goes over bronze wheels and rustfree chains and ends with fully powder-coated housing parts. Overload protection in 0.5 t capacity hoist and bigger, supplied with ATEX-Certificate!



1 m more operation length	Capacity	Order No.
Hand chain Basic/Medium	500 – 10,000 kg	G50032
Hand chain High	500 – 10,000 kg	G50033



TYPE I	PREMIUM PRO-EX	0.25	0.5	1	1.5	2	3	5	10
Capacity Basic/Mediu	m kç	250	500	1,000	1,500	2,000	3,000	5,000	10,000
Capacity <b>High</b>	kç	250	500	1,000	1,250	1,250	2,000	3,200	6,400
Standard lift	n	3	3	3	3	3	3	3	3
Min. headroom (A)	mn	259	309	373	460	460	553	630	900
Hand chain force	daN	1 22	24	30.5	36	36	37	39	39.5
Hand chain operation le	ngth n	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Meters hand chain to pul	ll to lift 1 m m	14.8	29.5	39.4	60.8	60.8	96.7	193.3	290
Number of chain falls		1	1	1	1	1	1	2	3
Chain size	mn	4 x 12	5 x 15	6 x 18	8 x 24	8 x 24	10 x 30	10 x 30	10 x 30*
B (Dimensions)	mn	95	114	152	190	190	240	240	391
С	mn	99.4	110	139	150	150	158	158	166
D	mn	30	33	40	52	52	62	72	85
E	mn	22	22	28	33	33	37	44	60
F	n	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Weight with standard lift	kç	5.8	7.6	11.5	17.2	17.2	27	40.5	61.9
Weight per m additional	lift kç	1.2	1.4	1.6	2.2	2.2	3	5.2	14.8
<b>Version Basic:</b> PREMIUM PRO-EX with	h 3 m lift Order No	. G10360	G10361	G10362	G10363	G10364	G10365	G10366	G10367
Version Medium: PREMIUM PRO-EX with	h 3 m lift Order No	. G10368	G10369	G10370	G10371	G10372	G10373	G10374	G10375
Add. lifting height per m Basic / Medium	Order No	. G10048	G10049	G10050	G10051	G10052	G10053	G10054	G10055
Version High: PREMIUM PRO-EX with	h 3 m lift Order No	. G10376	G10377	G10378	G10379	G10380	G10381	G10382	G10383
Add. lifting height per m High	Order No	. G50024	G50025	G50026	G50027	G50028	G50029	G50030	G50031
Chain bag up to 3 m lift'	** Order No	H10164	H10164	H10165	H10165	H10166	H10166	-	-

<sup>\*</sup> Grade 100 by versions Basic and Medium.

<sup>\*\*</sup> Chain bag (plastic) up to 3 m lift. Chain bag up 6 t (steel plate) on request.





## Electric chain hoist PLANETA-PEH-EX Basic version with contactor control

#### **Equipment:**

- Lifting capacity PEH: up to 1,250 kg
- Lifting capacity GCH: up to 5,000 kg
- 3 × 400 V / 50 Hz
- 42 V low voltage control
- 3 phase motor: 2 speeds
- Control cable lenght 1,8 m
- Geared limit switches
- Ergonomic control switch with emergency-stop
- Protection class IP65
- Temperaturüberwachung durch Thermoelement (Klixon) Hubbewegung wird überwacht

## **Accessories and options:**

- Control switch in ATEX version 2 buttons or 4 buttons with emergency stop
- Other operating / control voltages on request
- Hook suspension / Safety load hook, self-closing
- Geared limit switches with high accuracy in positioning of the highest and lowest hook position
- Operating data counter
- 2nd brake
- External limit switch
- Compact design
- Manual trolleys
- Frequency control
- Corrosion-resistant design

### Classification



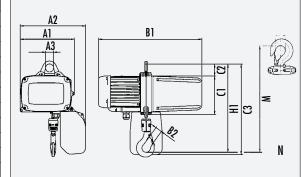
TYPE			Ŭ	. ISO (FE	•	Lifting speed with	of chain	Chain size	Motor power	3 x 400 V 50 Hz	Weight	Weight each meter	Order No.	Order No.
	M3 (1Bm)	M4 (1Am)	M5 (2m)	M6 (3m)	M7 (4m)	load m/min. 50 Hz	falls	mm	kW	Α	3 m lift kg	add. lift kg	PEH with 3 m lift	Add lift per m
PEHM 250/1NF EX	-	320	250	200	-	8/2	1	3.75 x 10.75	0.72/0.18	2.8/1.7	24	0.34	H21520	H21521
PEHM 250/1SF EX	-	-	125	100	-	16/4	1	3.75 x 10.75	0.72/0.18	2.8/1.7	24	0.34	H21522	H21521
PEH 250/1NF EX	400	320	250	200	160	8/2	1	3.75 x 10.75	0.72/0.18	2.8/1.7	24	0.34	H21524	H21521
PEH 250/1SF EX	-	160	125	100	-	16/4	1	3.75 x 10.75	0.72/0.18	2.8/1.7	24	0.34	H21526	H21521
PEH 250/1N EX	400	320	250	200	160	8	1	3.75 x 10.75	0.72	2.8/1.7	24	0.34	H21528	H21521
PEH 250/2NF EX	-	630	500	400	320	4/1	2	3.75 x 10.75	0.72/0.18	2.8/1.7	25	0.34	H21534	H21535
PEH 250/2N EX	-	630	500	400	320	4	2	3.75 x 10.75	0.72	2.8	25	0.34	H21536	H21535
PEH 500/1NF EX	800	630	500	400	320	8/2	1	5.25 x 15	0.72/0.18	2.8/1.7	26	0.69	H21542	H21543
PEH 500/1SF EX	-	320	250	200	160	16/4	1	5.25 x 15	0.72/0.18	2.8/1.7	26	0.69	H21544	H21543
PEH 500/1N EX	800	630	500	400	320	8	1	5.25 x 15	0.72	2.8	26	0.69	H21546	H21543
PEH 500/2NF EX	-	1,250	1,000	800	630	4/1	2	5.25 x 15	0.72/0.18	2.8/1.7	28	0.69	H21552	H21553
PEH 500/2N EX	-	1,250	1,000	800	630	4	2	5.25 x 15	0.72	2.8	28	0.69	H21554	H21553
PEH 1000/1NF EX	1,600	1,250	1,000	800	630	8/2	1	7.45 x 23	2.3/0.68	5.7/4.1	58	1.37	H21600	H21609
PEH 1000/1SF EX	-	630	500	400	320	16/4	1	7.45 x 23	2.3/0.68	5.7/4.1	58	1.37	H21601	H21609
PEH 1000/1N EX	1,600	1,250	1,000	800	630	8	1	7.45 x 23	2.3	6.5	57	1.37	H21602	H21609
PEH 1000/NL EX	1,600	1,250	1,000	800	630	4	1	7.45 x 23	1.5	6.5	62	1.37	H21603	H21609
PEH 1000/2NF EX	-	2,500	2,000	1,600	1250	4/1	2	7.45 x 23	2.3/0.68	5.7/4.1	62	1.37	H21604	H21610
PEH 1000/2N EX	-	2,500	2,000	1,600	1250	4	2	7.45 x 23	2.3	6.5	61	1.37	H21605	H21610
PEH 1000/2NL EX	-	2,500	2,000	1,600	1250	2	2	7.45 x 23	1.5	6.5	66	1.37	H21606	H21610

<sup>\*</sup> FEM classification:

Quantity of starts at pendant control per hour

M3 (1Bm) = 150 starts per hour, 25% duty cycle M4 (1Am) = 180 starts per hour, 30% duty cycle M5 (2m) = 240 starts per hour, 40% duty cycle M6 (3m) = 300 starts per hour, 50% duty cycle M7 (4m) = 360 starts per hour, 60% duty cycle

TYPE PEH		250/1	250/2	500/1	500/2	1000/1	1000/2
A1 (Dimensions)	mm	246	246	246	246	328	328
A2	mm	296	296	296	296	385	385
A3	mm	Ø 40	Ø 40	Ø 40	Ø 40	Ø 52	Ø 52
B1	mm	444	444	444	444	548	548
B2	mm	24	24	24	24	33	33
C1	mm	162	162	162	162	212	212
C2	mm	49	49	49	49	85	85
C3	mm	462	462	462	462	598	598
H1	mm	400	414	414	453	519	578
М	mm	475	506	488	528	592	651
N	mm	Ø 42	Ø 42	Ø 42	Ø 42	Ø 51	Ø 51





## Electric chain hoist PLANETA-GCH-EX with top hook suspension or top lug suspension with contactor control (low voltage)

#### Housing

- Cast aluminium housing with maximum solidity (no plastic material)
- For extreme working conditions: casted cooling gills

- Design for tough working conditions
- Normal, fast and super fast speed models available

#### Speed

• With one or two speeds

#### **Brake**

- Maximum safety (construction: brake after slipping clutch)
- New advanced brake design

#### Capacities

According ISO (FEM)-classes

#### **Protection**

• Isolation class F

- Standard is 3-ph-400V-50 Hz
- Other voltages available

#### Chain wheel

- Made of hardened steel
- With additional chain pockets (4 mm): hence quiet running

#### **Hoisting chain**

- Zinc plated acc. DIN EN 818-7-T
- Surface-hardened

#### Geared limit switch (standard)

- Simple adjustment
- Exact positioning

#### **Contactor control system**

- Simple technology (no electronics susceptible to interference)
- 42 V control system allowing highest safety of operation

#### Classification

😉 II 3D Ex tc IIIA T130 °C Db

**GCH** with standard lug suspension and plastic chain case

TYPE GCH-EX	Cap M3	acities in	n kg acc M5	. ISO (FE	M7	Lifting speed with load	Number of chain	Chain size	Motor power	3 x 400 V 50 Hz (example)	Weight with 3 m lift	Weight each meter add. lift	Order No. GCH-EX with	Order No.
GCII-EX	(1Bm)	(1Am)	(2m)	(3m)	(4m)	m/min.	falls	mm	kW	A	kg	kg	3 m lift	per m**
1600/1N	1,600	1,250	1,000	800	630	8	1	9 x 27	2.44	6.0	63	1.75	H29700	H20095
1600/1NF	1,600	1,250	1,000	800	630	8/2	1	9 x 27	2.44/0.61	6.6/4.2	65	1.75	H29701	H20095
1600/1SF	1,000	800	630	500	400	12.5/3	1	9 x 27	2.39/0.58	6.6/4.2	65	1.75	H29702	H20095
1600/2N	3,200	2,500	2,000	1,600	1,250	4	2	9 x 27	2.44	6.0	73	3.5	H29703	H20096
1600/2NF	3,200	2,500	2,000	1,600	1,250	4/1	2	9 x 27	2.44/0.61	6.6/4.2	75	3.5	H29704	H20096
1600/2SF	2,000	1,600	1,250	1,000	800	6.25/1.5	2	9 x 27	2.39/0.58	6.6/4.2	75	3.5	H29705	H20096
2000/1N	2,000	1,600	1,250	1,000	800	8	1	10 x 28	3.05	7.3	65	2.25	H29706	H20101
2000/1NF	2,000	1,600	1,250	1,000	800	8/2	1	10 x 28	3.05/0,77	8.0/4.5	67	2.25	H29707	H20101
2000/1SF	1,250	1,000	800	630	500	12.5/3	1	10 x 28	2.98/0.72	8.0/4.5	67	2.25	H29708	H20101
2000/2N	4,000	3,200	2,500	2,000	1,600	4	2	10 x 28	3.05	7.3	76	4.5	H29709	H20102
2000/2NF	4,000	3,200	2,500	2,000	1,600	4/1	2	10 x 28	3.05/0.77	8.0/4.5	78	4.5	H29710	H20102
2000/2SF	2,500	2,000	1,600	1,250	1,000	6.25/1.5	2	10 x 28	2.98/0.72	8.0/4.5	78	4.5	H29711	H20102
2500/1N	2,500	2,000	1,600	1,250	1,000	6.4	1	10 x 28	3.05	7.7	65	2.25	H29712	H20103
2500/1NF	2,500	2,000	1,600	1,250	1,000	6.4/1.6	1	10 x 28	3.05/0.77	8.2/4.4	67	2.25	H29713	H20103
2500/1SF	1,600	1,250	1,000	800	630	10/2.5	1	10 x 28	3.05/0.77	8.2/4.4	67	2.25	H29714	H20103
2500/2N	5,000	4,000	3,200	2,500	2,000	3.2	2	10 x 28	3.05	7.7	76	4.5	H29715	H20104
2500/2NF	5,000	4,000	3,200	2,500	2,000	3.2/0.8	2	10 x 28	3.05/0.77	8.2/4.4	78	4.5	H29716	H20104
2500/2SF	3,200	2,500	2,000	1,600	1,250	5/1.25	2	10 x 28	3.05/0.77	8.2/4.4	78	4.5	H29717	H20104

FEM classification: Quantity of starts at pendant control per hour

M3 (1Bm) = 150 starts per hour, 25% duty cycle M4 (1Am) = 180 starts per hour, 30% duty cycle

M7 (4m) = 360 starts per hour,60% duty cycle

M5 (2m) = 240 starts per hour, 40% duty cycle

M6 (3m) = 300 starts per hour, 50% duty cycle

\*\* Load chain and control cable

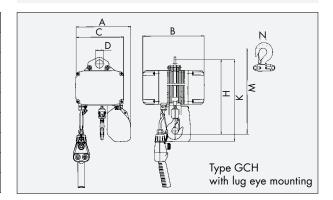
TYPE GCH		1600/1	1600/2	2000/1	2000/2	2500/1	2500/2
A (Dimensions)	mm	424	424	424	424	424	424
В	mm	389	389	389	389	389	389
С	mm	345	345	345	345	345	345
D	mm	75	75	75	75	75	75
Н	mm	608	690	608	690	608	690
K	mm	646	646	646	646	646	646
М	mm	638	720	638	720	638	720
N	mm	50	50	50	50	50	50

Version:

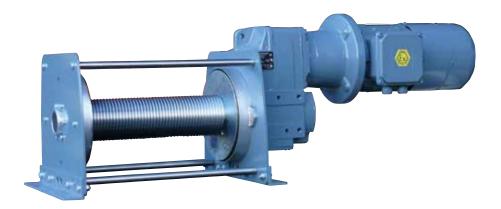
Type N = Single speed

Type NF = Two speeds
Type SF = Fast speed and slow speed

Type HF = High speed and slow speed







## **Electric rope winch PFW-EX**

With a load bearing capacity from 250 to 3,000 kg this electrical rope winch with its modular construction principle is one of the most modern devices for pulling, lifting and moving loads. With its extensive range of configuration and finishing options it can be adapted to suit almost any installation situation. The PFW-EX version is build according the CE directive 2006/42/EC and European ATEX-guidelines 2014/34/EU. With its special equipment and configuration these winches may be used in areas at risk of explosion.

#### **Made in Germany**

The PFW range combines a modern design, innovative technology and superlative components, which are produced exclusively in Germany. Prior to shipping, each winch is tested dynamically with 125% of the nominal load and leaves our factory with a 24 month guarantee.

#### **Equipment**

- Electrical control in pressure-resistant casing EX II 2 GD de IIB T4 T 135°C
- Standard Protection Classification IP55 with isolation F
- $\bullet$  Standard ambient temperature from -10 °C to +40 °C
- Standard mechanism group acc. FEM 1.001: M3 (1Bm)
- Standard supply voltage of 3 PH / 400 Volt / 50 Hz Preisvorteil
- Contactor control available for areas at risk of explosion or standard version for installation in safe areas to combine safe equipment with price advantages

 Pendant remote control and radio remote control available for areas at risk of explosion

#### **Available options**

- Grooved drum with drum length on customer demand for higher rope storage and better spooling
- Different voltage and frequency
- Adjustable speed with frequency converter
- Free spooling clutch
- Special paintings and higher protection class of electrical equipment for outdoor and offshore applications
- Drum pressure roller
- Multi rope strands or drum divider
- Drum cover
- Limit switches according to ATEX guidelines
- Overload protection
- Special ropes with bronze coated hooks or solid steel version

#### Classification

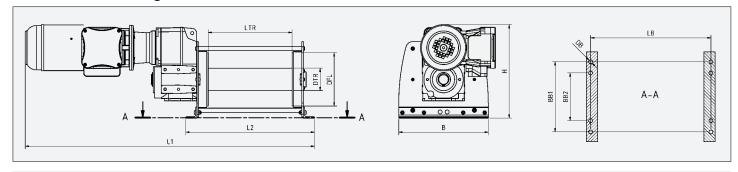
II 2 GD de IIB T4 T 135 ℃

#### **Basic design**

ТҮРЕ	PFW-1D-EX	250	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	250	500	750	1,000	1,500	2,000	3,000
Lifting capacity in 5th rope layer	kg	160	320	480	640	950	1,270	1,920
Rope diameter	mm	5	6	7	8	10	12	14
Rope length in 1st rope layer	m	11	11	11	10	10	9	9
Rope length in 5th rope layer	m	75	75	75	75	75	75	75
Expansion every 100 mm extended drum 1st/5th layer	approx. m	4/25	4/25	4/25	4/25	4/25	4/25	4/25
Rope speed in 1st rope layer	approx. m/min	8	8	8	8	8	8	8
Rope speed in 5th rope layer	approx. m/min	12	12	12	12	12	12	12
Motor power	kW	0.37	0.75	1.1	1.5	2.1	2.6	4
PFW-1D-EX with standard speed	Order No.	H62401	H62411	H62421	H62431	H62441	H62451	H62461



## Dimensions and weights - PFW-1D-EX



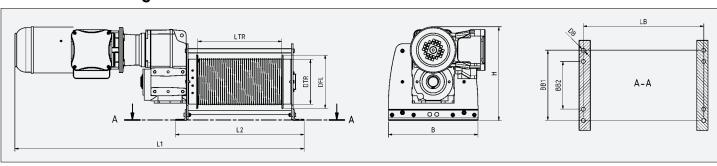
ТҮРЕ	PFW-1D-EX	250	500	750	1000	1500	2000	3000
L1*	approx. mm	1,000	1,050	1,070	1,160	1,180	1,300	1,350
L2	mm	460	460	460	500	500	570	570
В	mm	270	320	360	400	460	550	620
Н	approx. mm	310	340	420	460	550	630	690
LTR	mm	300	300	300	300	300	300	300
DTR	mm	65	80	92	105	130	155	185
DFL	mm	155	190	220	250	310	370	430
LB	mm	430	430	430	460	460	520	520
BB1	mm	220	250	310	350	410	500	560
BB2	mm	-	_	_	220	280	320	380
DB	mm	13.5	13.5	13.5	13.5	13.5	17.5	17.5
Weight without accessories	approx. kg	35	60	75	110	155	240	380

<sup>\*</sup> Length can vary according to configuration.

## **Double diameter drum**

ТҮРЕ	PFW-2D-EX	250	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	125	250	375	500	750	1,000	1,500
Rope diameter	mm	5	6	7	8	10	12	14
Rope length in 1st rope layer	m	20	20	20	20	19	18	17
Expansion every 100 mm extended drum 1st layer	approx. m	7	7	7	7	7	7	7
Rope speed in 1st rope layer	approx. m/min	15	15	15	15	15	15	15
Motor power	kW	0.37	0.75	1.1	1.5	2.1	2.6	4
PFW-2D-EX with standard speed	Order No.	H62501	H62511	H62521	H62531	H62541	H62551	H62561

## Dimensions and weights - PFW-2D-EX



TYPE	PFW-2D-EX	250	500	750	1000	1500	2000	3000
L1*	approx. mm	1,000	1,050	1,070	1,160	1,180	1,300	1,350
L2	mm	460	460	460	500	500	570	570
В	mm	270	320	360	400	460	550	620
Н	approx. mm	300	340	420	460	550	630	660
LTR	mm	300	300	300	300	300	300	300
DTR	mm	130	160	185	210	260	310	350
DFL	mm	155	190	220	250	310	370	430
LB	mm	430	430	430	460	460	520	520
BB1	mm	220	250	310	350	410	500	560
BB2	mm	-	-	200	220	280	320	380
DB	mm	13.5	13.5	13.5	13.5	13.5	1 <i>7</i> .5	17.5
Weight without accessories	approx. kg	40	65	85	120	170	280	425

 $<sup>\</sup>ensuremath{^{\star}}$  Length can vary according to configuration.



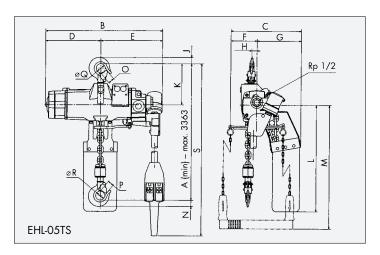
#### **PLANETA - EHL air chain hoist**

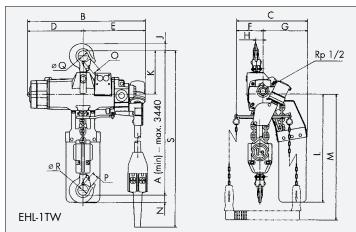
The EHL compressed air chain hoists with their small, compact aluminium housing are extremely easy to handle.

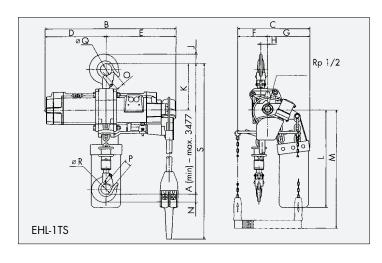
Thanks to their high speeds and compressed air operation, they are perfectly suited to explosive and aggressive areas such as chemical plants, paint shops, etc.

In the payload range from 500 kg to 980 kg, the compressed air hoists are equipped with a chain controller (EHL-TW) or an optional manual control button (EHL-TS). The maximum operating length is 8 metres when controlled by the button.



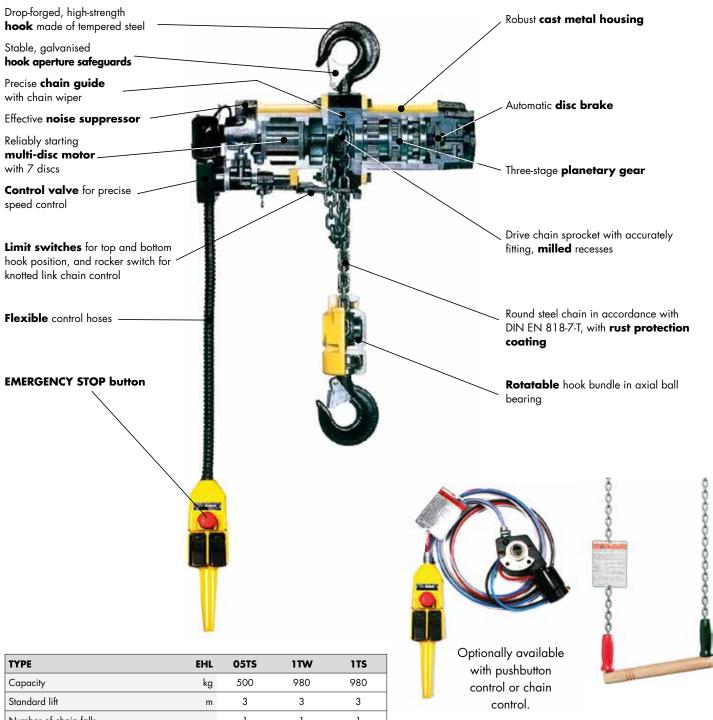






Dimensions (mm)																		
ITPE	Α	В	С	D	Е	F	G	Н	J	K	L	М	Ν	0	Р	Q	R	S
EHL-05TS	363	420	255	199	221	95	160	18.5	22	147	385	2,115	22	22	22	32	32	2,490
EHL-1TW	440	420	255	199	221	95	160	26	26	155	385	2,115	26	25	25	36	36	2,500
EHL-1TS	477	518	285	242	276	119	166	27	37	184	400	2,115	31	32	29	45	40	2,560





· · · · -				
Capacity	kg	500	980	980
Standard lift	m	3	3	3
Number of chain falls		1	1	1
Chain size	mm	6.3	6.3	7.1
Min. headroom (A)	mm	363	440	477
Lifting speed at 6 bar	m/min	10.5	5.2	6
Air consumption	l/s	1.65	1.65	1.8
Air inlet R	in	1/2"	1/2"	1/2"
Weight	kg	18. <i>7</i>	24.2	34
EHL with rope control	Order No.	H10320	H10321	H10322
EHL with pendant control	Order No.	H10326	H10327	H10328
Add. lift per meter	Order No.	H10332	H10333	H10334
Add. control length rope control / m	Order No.	H10042	H10042	H10042
Add. control pendant control / m	Order No.	H10043	H10043	H10043
Chain bag to 6 m lift	Order No.	H10315	H10315	H10315
Maintenance unit	Order No.	H10055	H10055	H10055



#### **Maintenance unit**

The multi-disc motor rotates up to 6,000 times per minute. In order to prevent dry running and faults, a maintenance unit as close to the start of the air inlet as possible is recommended.







## Air chain hoist LIFTMASTER TCR

#### The areas of application

A hoist can not just be selected for its load bearing capacity. Easy operation, the type of task, the frequency of use, the required speed and precision of the control are important factors that must be considered. The LIFTMASTER compressed air hoist can basically be used wherever electric hoists are used. Furthermore, it is particularly suitable for explosive areas and corrosive atmospheres, as its motor is innately non-sparking and extremely resistant to environmental influences. Expensive protective measures are therefore not required.

#### **Fault-free operation**

Overloads cannot damage the LIFTMASTER, as there is no overheating and torsion that burns through. To protect the bearing structures and to conform with the CE Machinery Directive, as of a load bearing capacity of 1 t, adjustable overload cut-off devices are provided, which are also available as an option for smaller devices. Whether it's being stopped and started or operated continuously: you can expect reliable performance.

#### Compact and light

Small dimensions and a light structure make the LIFTMASTER ideal for low installation conditions.

#### Variable speed

Unlimited speed changes make it possible to position loads accurately and precisely. The knotted link control can be controlled very precisely thanks to its direct connection to the control rod.

#### Soft start and stop

The LIFTMASTER provides high operational safety. A soft start-up reduces wear, as gentle operation of the compressed air hoists leads to fewer vibrations and a longer device service life.

#### Best cost effectiveness

Thanks to the low air consumption and the low procurement cost, the LIFTMASTER is very costeffective.

#### The flexibility

For loads of up to 120 kg that have to be moved frequently and precisely, the EHW compressed air hoist with a cable and a control on the device is the solution!

#### **Standard**

3 m lifting height, 2 m control length, up to -Zone IIA 3 GD c T4/T5/T6. Also see the "EX-protection information" part. Higher EX-protection upon request!

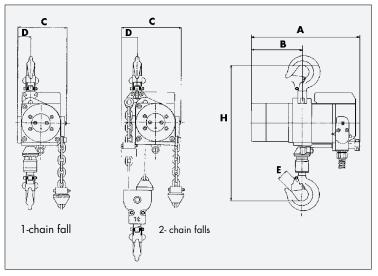
#### Air pressure

The LIFTMASTER achieves its specified performance data at 6 bar flow pressure. 4 or 5 bar is also sufficient, whereby only 70 or 85 % of the speeds are reached. The rated load is always lifted. The very comprehensive range of TCR compressed air hoists from 0.25 to 100 tonnes has a very convenient ratio of size to performance. The speeds of the hoists can be varied infinitely and they are designed for continuous use, a switch-on duration of 100 % is no problem. Smooth starts and stops prevent "shock" movements. The TCR compressed air hoists are particularly suitable for continuous and safe use thanks to their compact cast steel housing.

#### **Equipment features:**

- Drop-forged, high-strength hook made of tempered steel
- Stable, galvanised hook aperture safeguards
- Effective noise suppressor
- Precise **chain guide** with chain wiper
- Reliably starting multi-disc motor with 7 discs
- Control valve for precise speed control
- Robust cast metal housing
- Drive chain sprocket with accurately fitting, milled recesses
- Limit switches for top and bottom hook position, and rocker switch for knotted link chain control
- Flexible control hoses
- Round steel chain in accordance with DIN EN 818-7-T, with rust protection coating
- Three-stage planetary gear
- Automatic disc brake
- EMERGENCY STOP button, also for 4-fold button control with trolley, in accordance with FN 418.
- Rotatable hook bundle in axial ball bearing





TYPE TCR	A	В	С	D	E	н
TCR 250 C/P	342	156	149	52	29	462
TCR 500 C/P	342	156	149	52	29	462
TCR 1000 C2/P2	342	156	180	47	29	519
TCR 1000 C/P	342	156	1 <i>57</i>	40	29	466
TCR 2000 C2/P2	342	156	194	50	29	580

TYPE	TCR	A	В	С	D	E	Н
TCR 10	C2/P2	560	247	445	165	40	890
TCR 12	C4/P5	441	191	520	210	57	900
TCR 15	C5/P5	441	191	480	210	83	900
TCR 20	C4/P4	549	247	230	200	100	1,350
TCR 25	C2/P2	710	335	478	165	80	1,440

TYPE LIFTM	ASTER TCR	250C/P	500C/P	1000C2/P	1000C/P	2000C2/P	10-C2/P2	12-C4/P4	15-C5/P5	20-C4/P4
Capacity (Air pressure 6 bar - 1Bm)	kg	250	500	1,000	1,000	2,000	10,000	12,000	15,000	20,000
Lifting speed without load	m/min	20.5	20.5	10.3	11.3	5.7	2.2	1.4	1.1	1.2
Lifting speed with full load	m/min	10.5	10.5	5.3	6	3	1.5	0.7	0.6	0.8
Lowering speed without load	m/min	13.4	13.4	6.7	6.8	3.4	1.8	0.8	0.7	0.9
Lowering speed with full load	m/min	1 <i>7</i> .9	17.9	9	10.3	5.2	2.3	1.2	0.9	1.2
Air consumption with full load	l/sec	25	25	25	25	25	90	33	33	90
Number of chain falls		1	1	2	1	2	2	4	5	4
Air inlet R	inch	1/2″	1/2″	1/2″	1/2″	1/2″	1"	1/2″	1/2″	1″
Chain size (diameter)	mm	6.3 x 19.1	6.3 x 19.1	6.3 x 19.1	7.1 x 21	7.1 x 21	16 x 45	11.2 x 34	11.2 x 34	16 x 45
Weight with standard lift	kg	31	31	34	35	40	190	170	221	470
TCR with 3 m Lift with rope control	Order No.	H10001	H10002	H10003	H10004	H10005	H10008	H10009	H10010	H10011
TCR with 3 m Lift with pendant control	Order No.	H10015	H10016	H10017	H10018	H10019	H10022	H10023	H10024	H10025
Add. lift per meter	Order No.	H10029	H10029	H10030	H10031	H10032	H10035	H10036	H10037	H10038
Maintenance unit	Order No.	H10054	H10054	H10054	H10054	H10054	H10055	H10055	H10055	H10056
Chain bag (plastic)to 3 m lift	Order No.	H10340	H10341	H10342	H10343	H10344	-	-	-	-
Add. air powered trolley DLK	Order No.	H10044	H10052	H10053	H10099	H10045	H10048	H10049	H10109	H10050
Add. control length rope control / m	Order No.	H10042	H10042	H10042	H10042	H10042	H10042	H10042	H10042	H10042
Add. control length pendant control / m	Order No.	H10043	H10043	H10043	H10043	H10043	H10043	H10043	H10043	H10043
Pneumatic-Special-Oil (Content: 2.5 Liter)	Order No.	H20566	H20566	H20566	H20566	H20566	H20566	H20566	H20566	H20566

Chain bag up 10 t (steel plate) on request.

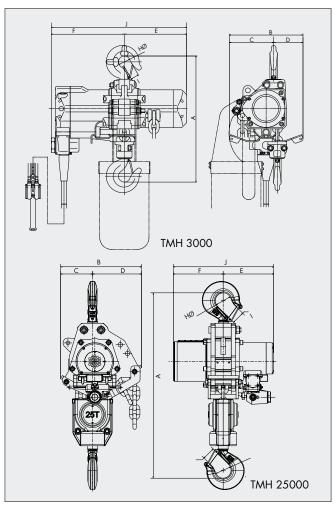
## Air power trolley DLK

Trolleys upon request!









#### LIFTMASTER TMH air chain hoist

The LIFTMASTER TMH compressed air chain hoist has the highest lifting speeds with the smallest installation height on the hoist market. With an M4 "Class of Mechanism", this new hoist has a long service life, which guarantees continuity in your work. The TMH hoists have been designed with a fastening eye on the housing for easy installation and to affix the hoist for additional safety (while working).

## **Equipment features:**

- Very accurate speed control (cable and pushbutton operation)
- Optimum checks and exact positioning of the load
- Closing valve for the main air passage
- Mechanical limit stop shut-off
- Integrated load limiter without losing the construction height
- Operational air pressure (4 6.3 bar)
- Exhaust air through the hose





Handtaststeuerung

Seilsteuerung

TYPE LIFTMA	ASTER TMH	3000	6000	25000
Capacity (Air pressure 6 bar - 1Bm)	kg	3,000	6,000	25,000
Lifting speed without load	m/min	10,8	5,4	2,7
Lifting speed with full load	m/min	5,4	2,7	1,4
Lowering speed without load	m/min	10,8	5,1	2
Lowering speed with full load	m/min	10,2	5,1	3
Air consumption with full load	l/sec	56	56	108
Number of chain falls		1	2	2
Air inlet R	inch	¾" BSPT	¾" BSPT	1½" BSPT
Chain size (diameter)	mm	13 x 36	13 x 36	23,5 x 66
A (dimensions)	mm	537	742	1,290
В	mm	314	371	566
С	mm	189	245	223
D	mm	125	126	343
Е	mm	265	265	356
F	mm	311	311	352
Н	ø mm	50	65	100
I	mm	34	42	71
J	mm	576	576	708
Weight with standard lift	kg	99	124	581
TMH with 3 m Lift with rope control	Order No.	H10360	H10362	H10366
TMH with 3 m Lift with pendant contro	Order No.	H10361	H10363	H10367
Add. lift per meter	Order No.	H10364	H10365	H10368
Maintenance unit	Order No.	H10054	H10054	H10056
Chain bag (galvanised steel) to 3 m lift	Order No.	H10345	H10345	-
Add. air powered trolley DLK	Order No.	H10046	H10047	H10051
Add. control length rope control / m	Order No.	H10042	H10042	H10042
Add. control length pendant control / n	Order No.	H10043	H10043	H10043
Pneumatic-Special-Oil (Content: 2.5 Lite	r) Order No.	H20566	H20566	H20566



## **Mini-Hoist TCRM/TCS**

If you are looking for an excellent technical, flexible and compact air hoist that works under many different situations, now here it is. The new model range TC. This series comprises the new 125 to 990 kg pneumatic chain hoists. The TC is one of the most compact and transportable air chain hoist you can get. The headroom of the TC hoist is only 305 mm (125/250 kg). Although the weight is only 7 kg with inclusive 3 m length of load chain, the air hoist can lift up to 17 meters per minute without any problem.

The new TC is available with rope or pendant control including emergency stop. The keys allow optimal control over variable speeds. Suitable up to &-Zone IIA 3 GD c T4/T5/T6.



**Light**Very light weighted aluminium housing



Fast
Lifting speed from 4.5 to 17
m/min with full load





ТҮРЕ	TCR	M125 C/DP	M250 C/DP	M500 C2/DP2	TCS-500	TCS-980
Capacity	kg	125	250	500	500	990
Number of chain falls		1	1	2	1	2
Air pressure	bar	6	6	6	6	6
Lifting speed with full load	m/min	14	9.3	4.5	17	8.5
Lifting speed without load	m/min	19	19	9.5	33	16.5
Air consumption	l/s	11.7	11. <i>7</i>	11. <i>7</i>	33	33
Chain dimensions	mm	4 x 12	4 x 12	4 x 12	6.3 x 19	6.3 x 19
Control length	m	2	2	2	2	2
Min. Headroom (H)	mm	305	305	365	414	456
A (Dimensions)	mm	230	230	230	365	365
В	mm	110	110	110	204	204
С	mm	120	120	120	161	161
D	mm	95	95	95	143	173
G	mm	130	130	130	151	173
K	mm	29	29	29	25	29
L	mm	15	15	15	15	29.5
S	mm	35	35	35	31	37
T	mm	60	60	60	112	136
Weight with standard lift	kg	7	7	8.5	15.9	16.8
Weight for 1 m additional lift	kg	0.35	0.35	0.7	0.9	1.8
TCR/TCSwith 3 m lift and rope control	Order No.	H10070	H10071	H10072	H10088	H10108
TCR/TCSwith 3 m lift and pendant control	Order No.	H10073	H10074	H10075	H10098	H10118
Additional lift per meter	Order No.	H10076	H10076	H10077	H10069	H10128



Size of chain case	Order No.
up to 12 m chain	H10354
up to 20 m chain	H10355
up to 12 m chain	H10354
up to 20 m chain	H10355
up to 6 m chain	H10354
up to 10 m chain	H10355
	up to 12 m chain up to 20 m chain up to 12 m chain up to 20 m chain up to 6 m chain





## Air rope hoist LIFTMASTER EHW

#### **Mobile application**

The pneumatic rope hoist LIFTMASTER EHW is a practical addition to the TC chain hoist program. This model is ideal for small load up to 120 KG that must be moved quite often. All hoists are equipped with a high-tensile steel rope which is spooled on a drum inside of the hoist body. Only up to 12 G D II B T 5 (X).

#### Two types of control

The EHW types are hand guided and have their control direct at the hoist body that allows one hand of operator to be free for other actions. The EHW-R hoists have a separate push key pendant control with one red emergency shut-off mushroom button that ensures safety and complies with CE-regulations.

#### **Automatic Brake**

All hoists have a fail-safe automatic disc brake which holds the load in any position even if the air supply fails.

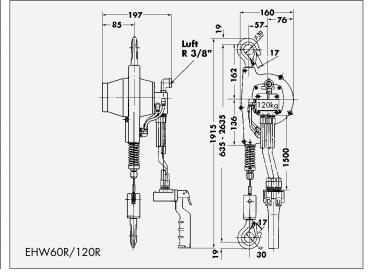
#### **Versatility of Service**

These hoist are perfectly used at pack tables, for lifting of barrels, bundles, parcels, over machine tools in slewing cranes etc.

The hoists switch off automaticaly in highest and lowest hook position. Interesting is the combination with a pneumatic vacuum lifter, whereby both units can be served through one common air line. All hoists have a standard 2-meter rope which fits onto the drum.

That is sufficient in most cases. However if you need a longer rope, perhaps to allow a higher suspension of the type EHW-R, we can extend the rope. But this additional length cannot be spooled on the drum. The control hoses can be made longer up to 10 m. The air pressure shall be max. 6.3 bar, but it can drop to 4 bar and the hoist still lifts its rated capacity, only much slower.

ТҮРЕ		EHW60R	EHW120R
Capacity	kg	60	120
Standard lift	m	2	2
Number of rope strands		1	1
Air pressure	bar	6	6
Lifting speed with full load 0 -	m/min	26	16
Air consumption	m <sup>3</sup> /min	0,9	0,9
Air inlet R	inch	3/8"	3/8"
Weight with standard lift	kg	10	10
EHW with standard rope length	Order No.	H10083	H10084
Longer control hoses per meter	Order No.	H10086	H10086



More capacities on request.

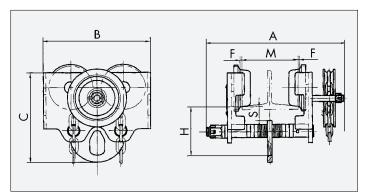


## L87-Trolleys

L87-trolleys are manufactured in a higher quality for a very rough and unusual use. The trolleys have outstanding corrosion protection. All steel parts are electrolytically zinc plated.

The chain hoists PREMIUM PRO-EX of the same capacity as the trolley fits easily into the lugs with their top hook. Trolleys have rubber buffers at both sides!





#### **Ball bearings**

There are life-time lubricated ball bearings of high quality with seals inside the cast iron wheels. Their ball shaped surfaces offer a smooth and quiet run on any beam flange construction.

#### Wide adjustment for any flange width

Discs of different thicknesses are on the carrying bolts that allow to make the distance between side plates shorter or longer by exchanging them from outside to inside.

There are two main bolt lengths. The standard bolts are adjustable for normal width. Bolts of size 2 offer more possibilities up to beam flange sizes on HE-B-beams with 300 mm width. Prefer this when unclear for what kind of work you will use them.

#### **Double safety**

Climb stop on both side of the beam flange hinders the trolley to climb up the beam and prevents from falling down.

Right angled side plates work as wheel shaft breakage protection, falling down protection and beam flange cleaner.

## Sturdy side plates

The load is balanced by two carrying bolts on all four wheels because the castle nuts tie only one side.

This gives the bolts a bit of tolerance for movement and equalizes unproper beam flanges.

#### **EX-protection version**

Trolleys for use in environments with explosion danger (so-called ex-proof areas) are equipped with special treated wheels and sparkfree hand chains for EX-areas up to •-Cone 1 II 2 G IIC T4. The trolleys accord to EC-Machine Directive 2014/34/EU (Atex-guide lines).

TYPE Gea	r type trolley L87-107-EX	0.5	1	2	3	5
Capacity	kg	500	1,000	2,000	3,000	5,000
Flange width M min max.	mm	50 – 203	64 – 203	88 – 203	100 – 203	114 – 203
Min. curve radius	m	0.8	0.9	1	1.2	1.3
Hand chain operation length	m	2.5	2.5	2.5	2.5	2.5
A (Dimensions)	mm	272	334	343	357	373
В	mm	194	236	268	322	362
С	mm	158	196	226	266	301
Н	mm	75	96	110	122	142
\$	mm	30	38	38	40	42
F	mm	2	2	2	3	3
Weight	kg	10	14	22	34.5	47
L87-107-EX with 2.5 m operation length	Order No.	G20250	G20251	G20252	G20253	G20254
Larger flange width min max.	mm	64 – 305	64 – 305	88 – 305	100 – 305	114 – 305
	Order No.	G20111	G20112	G20113	G20114	G20115
Additional hand chain operation length	/m Order No.	G20017	G20017	G20017	G20017	G20017

More capacities upon request.

















#### Basic version with contactor control

#### **Equipment:**

- Lifting capacity PEH: up to 2,500 kg
- Lifting capacity GCH: up to 5,000 kg
- 3 × 400 V / 50 Hz
- 42 V low voltage control
- 3 phase motor: 2 speeds
- 1 phase motor (1Ph): 1 speed
- Standard lifting height 3 m
- Eyebolt suspension
- Geared limit switches
- Protection class IP65
- Isolation class F (motor)
- DC spring-loaded brake
- Slipping clutch not in the fl ow of forces

#### **Accessories and options:**

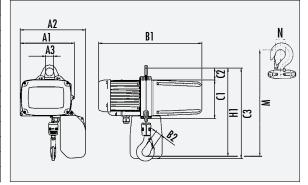
- Direct control
- Other operating / control voltages on request
- Single handed operation with controls on the handle
- Hook suspension / Safety load hook, self-closing
- Geared limit switches with high accuracy in positioning of the highest and lowest hook position
- Synchronized hoists
- Operating data counter
- Manual brake release
- Chain container for various lifting heights
- Lifting heights up to 90 m
- Manual trolleys
- Gear grease for low temperature use / food industry
- Ergonomic control switch with emergency-stop
- BGV-D8Plus model available
- UP-SIDE-DOWN model avail

TYPE	С	apacitie	es in kç	g acc. ISO	(FEM)*	Lifting speed with	Number of chain	Chain size	Motor power	3 x 400 V 50 Hz	Weight with	Weight each meter	Order No.	Order No.
IIPE	M3	M4 (1Am)	M5 (2m)	M6 (3m)	M7 (4m)	load m/min.	falls		kW		3 m lift	add. lift	PEH with	Add lift
_	(1011)		. ,	. ,	(4111)	50 Hz		mm		Α	kg	kg	3 m lift	per m
PEHM 250/1NF	-	320	250	200	-	8/2	1	3.75 x 10.75	· · · · · · ·	2.8/1.7	24	0.34	H21520	H21521
PEHM 250/1SF	-	-	125	100	-	16/4	1	3.75 x 10.75	0.72/0.18	2.8/1.7	24	0.34	H21522	H21521
PEH 250/1NF	400	320	250	200	160	8/2	1	3.75 x 10.75	0.72/0.18	2.8/1.7	24	0.34	H21524	H21521
PEH 250/1SF	-	160	125	100	-	16/4	1	3.75 x 10.75	0.72/0.18	2.8/1.7	24	0.34	H21526	H21521
PEH 250/1N	400	320	250	200	160	8	1	3.75 x 10.75	0.72	2.8/1.7	24	0.34	H21528	H21521
PEH 250/1N 1Ph	-	-	250	200	160	8	1	3.75 x 10.75	0.55	4.7 (1x 230 V)	24	0.34	H21530	H21521
PEH 250/1NL 1Ph	-	-	250	200	160	4	1	3.75 x 10.75	0.55	4.7 (1x 230 V)	24	0.34	H21532	H21521
PEH 250/2NF	-	630	500	400	320	4/1	2	3.75 x 10.75	0.72/0.18	2.8/1.7	25	0.34	H21534	H21535
PEH 250/2N	-	630	500	400	320	4	2	3.75 x 10.75	0.72	2.8	25	0.34	H21536	H21535
PEH 250/2N 1Ph	-	-	500	400 (M5)	320 (M5)	4	2	3.75 x 10.75	0.55	4.7 (1x 230 V)	25	0.34	H21538	H21535
PEH 250/2NL 1Ph	-	-	500	400 (M5)	320 (M5)	2	2	3.75 x 10.75	0.55	4.7 (1x 230 V)	25	0.34	H21540	H21535
PEH 500/1NF	800	630	500	400	320	8/2	1	5.25 x 15	0.72/0.18	2.8/1.7	26	0.69	H21542	H21543
PEH 500/1SF	-	320	250	200	160	16/4	1	5.25 x 15	0.72/0.18	2.8/1.7	26	0.69	H21544	H21543
PEH 500/1N	800	630	500	400	320	8	1	5.25 x 15	0.72	2.8	26	0.69	H21546	H21543
PEH 500/1N 1Ph	-	-	250	200 (M5)	160 (M5)	8	1	5.25 x 15	0.55	4.7 (1x 230 V)	26	0.69	H21548	H21543
PEH 500/1NL 1Ph	-	-	500	400 (M5)	320 (M5)	4	1	5.25 x 15	0.55	4.7 (1x 230 V)	26	0.69	H21550	H21543
PEH 500/2NF	-	1,250	1,000	800	630	4/1	2	5.25 x 15	0.72/0.18	2.8/1.7	28	0.69	H21552	H21553
PEH 500/2N	-	1,250	1,000	800	630	4	2	5.25 x 15	0.72	2.8	28	0.69	H21554	H21553
PEH 500/2N 1Ph	-	-	500	400 (M5)	320 (M5)	4	2	5.25 x 15	0.55	4.7 (1x 230 V)	28	0.69	H21556	H21553
PEH 500/2NL 1Ph	-	-	1,000	800 (M5)	630 (M5)	2	2	5.25 x 15	0.55	4.7 (1x 230 V)	28	0.69	H21558	H21553
PEH 1000/1NF	1,600	1,250	1,000	800	630	8/2	1	7.45 x 23	2.3/0.68	5.7/4.1	58	1.37	H21600	H21609
PEH 1000/1SF	-	630	500	400	320	16/4	1	7.45 x 23	2.3/0.68	5.7/4.1	58	1.37	H21601	H21609
PEH 1000/1N	1,600	1,250	1,000	800	630	8	1	7.45 x 23	2.3	6.5	57	1.37	H21602	H21609
PEH 1000/NL	1,600	1,250	1,000	800	630	4	1	7.45 x 23	1.5	6.5	62	1.37	H21603	H21609
PEH 1000/2NF	-	2,500	2,000	1,600	1,250	4/1	2	7.45 x 23	2.3/0.68	5.7/4.1	62	1.37	H21604	H21610
PEH 1000/2N	-	2,500	2,000	1,600	1,250	4	2	7.45 x 23	2.3	6.5	61	1.37	H21605	H21610
PEH 1000/2NL	-	2,500	2,000	1,600	1,250	2	2	7.45 x 23	1.5	6.5	66	1.37	H21606	H21610

TYPEE PEH		250/1	250/2	500/1	500/2	1000/1	1000/2
A1 (Dimensions)	mm	246	246	246	246	328	328
A2	mm	296	296	296	296	385	385
A3	mm	Ø 40	Ø 40	Ø 40	Ø 40	Ø 52	Ø 52
B1	mm	444	444	444	444	548	548
B2	mm	24	24	24	24	33	33
C1	mm	162	162	162	162	212	212
C2	mm	49	49	49	49	85	85
C3	mm	462	462	462	462	598	598
H1	mm	400	414	414	453	519	578
М	mm	475	506	488	528	592	651
Ν	mm	Ø 42	Ø 42	Ø 42	Ø 42	Ø 51	Ø 51

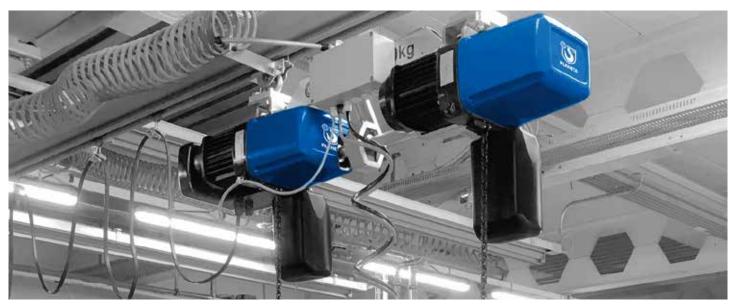
<sup>\*</sup> FEM classification: Quantity of starts at pendant control per hour

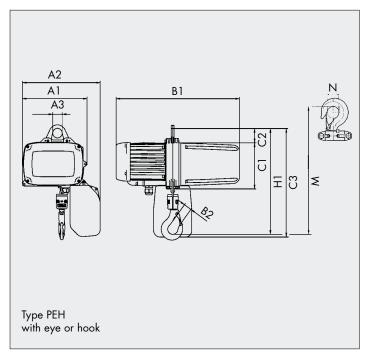
M3 (1Bm) = 150 starts per hour, 25% duty cycle M4 (1Am) = 180 starts per hour, 30% duty cycle M5 (2m) = 240 starts per hour, 40% duty cycle

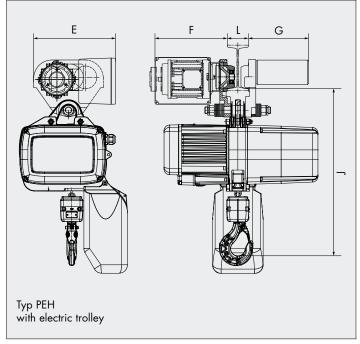


M6 (3m) = 300 starts per hour, 50% duty cycle M7 (4m) = 360 starts per hour, 60% duty cycle









TYPE (din	nensions)	PEH 250/1	PEH 250/2	PEH 500/1	PEH 500/2	PEH1000/1	PEH1000/2
A1	mm	246	246	246	246	328	328
A2	mm	296	296	296	296	385	385
A3	mm	Ø 40	Ø 40	Ø 40	Ø 40	Ø 52	Ø 52
B1	mm	444	444	444	444	548	548
B2	mm	24	24	24	24	33	33
C1	mm	162	162	162	162	212	212
C2	mm	49	49	49	49	85	85
C3	mm	462	462	462	462	598	598
E	mm	278	278	278	278	293	293
F	mm	250	250	250	250	253	253
G	mm	209	209	209	209	211	211
H1	mm	400	414	414	453	519	578
J	mm	455	481	463	502	594	654
L	mm	50 – 99	50 – 99	50 – 99	50 – 99	76 – 139	76 – 139
М	mm	475	506	488	528	592	651
N	mm	Ø 42	Ø 42	Ø 42	Ø 42	Ø 51	Ø 51





GCH with standard lug suspension

Version:
Type N =Single speed
Type NF=Two speeds
Type SF =Fast speed and slow speed
Type HF =High speed and slow speed

# Electric chain hoist PLANETA-GCH with contactor control Equipment:

- 3 m lift
- Gear limit switch for top and bottom hook position, adjustable
- Galvanised load chain according to DIN EN 818-7-T
- Eyebolt suspension
- Control panel with 1.8 m control cable
- Overload protection by slipping clutch
- Design according to ISO (F.E.M.)
- Operating voltage: 3-phase / 400 volt / 50 Hz
- 42 volt contactor control
- Protection class 55
- Isolation class F
- Certified in accordance with DIN EN ISO 9001:2008
- Including test book in accordance with CE and accident prevention regulation specifications
- Compact design with small hook dimension

ТҮРЕ	Cap M3 (1Bm)	acities in M4 (1Am)	n kg acc M5 (2m)	. ISO (FE M6 (3m)	M7	Lifting speed with load m/min	Number of chain falls	Chain size	Motor power kW	3 x 400 V 50 Hz	Weight with 3 m lift kg	Weight each meter add. lift kg	Order No. GCH with 3 m lift	Order No. Add lift per m
GCH 1600/1N	1,600	1,250	1,000	800	630	8	1	9 x 27	2.44	6.0	63	1.75	H20700	H20095
GCH 1600/1NF	1,600	1,250	1,000	800	630	8/2	1	9 x 27	2.44/0.61	6.6/4.2	65	1.75	H20701	H20095
GCH 1600/1SF	1,000	800	630	500	400	12.5/3	1	9 x 27	2.39/0.58	6.6/4.2	65	1.75	H20702	H20095
GCH 1600/2N	3,200	2,500	2,000	1,600	1,250	4	2	9 x 27	2.44	6.0	73	3.5	H20703	H20096
GCH 1600/2NF	3,200	2,500	2,000	1,600	1,250	4/1	2	9 x 27	2.44/0.61	6.6/4.2	75	3.5	H20704	H20096
GCH 1600/2SF	2,000	1,600	1,250	1,000	800	6.25/1.5	2	9 x 27	2.39/0.58	6.6/4.2	<i>7</i> 5	3.5	H20705	H20096
GCH 2000/1N	2,000	1,600	1,250	1,000	800	8	1	10 x 28	3.05	7.3	65	2.25	H20706	H20101
GCH 2000/1NF	2,000	1,600	1,250	1,000	800	8/2	1	10 x 28	3.05/0.77	8.0/4.5	67	2.25	H20707	H20101
GCH 2000/1SF	1,250	1,000	800	630	500	12.5/3	1	10 x 28	2.98/0.72	8.0/4.5	67	2.25	H20708	H20101
GCH 2000/2N	4,000	3,200	2,500	2,000	1,600	4	2	10 x 28	3.05	7.3	<i>7</i> 6	4.5	H20709	H20102
GCH 2000/2NF	4,000	3,200	2,500	2,000	1,600	4/1	2	10 x 28	3.05/0.77	8.0/4.5	78	4.5	H20710	H20102
GCH 2000/2SF	2,500	2,000	1,600	1,250	1,000	6.25/1.5	2	10 x 28	2.98/0.72	8.0/4.5	<i>7</i> 8	4.5	H20711	H20102
GCH 2500/1N	2,500	2,000	1,600	1,250	1,000	6.4	1	10 x 28	3.05	7.7	65	2.25	H20712	H20103
GCH 2500/1NF	2,500	2,000	1,600	1,250	1,000	6.4/1.6	1	10 x 28	3.05/0.77	8.2/4.4	67	2.25	H20713	H20103
GCH 2500/1SF	1,600	1,250	1,000	800	630	10/2.5	1	10 x 28	3.05/0.77	8.2/4.4	67	2.25	H20714	H20103
GCH 2500/2N	5,000	4,000	3,200	2,500	2,000	3.2	2	10 x 28	3.05	7.7	76	4.5	H20715	H20104
GCH 2500/2NF	5,000	4,000	3,200	2,500	2,000	3.2/0.8	2	10 x 28	3.05/0.77	8.2/4.4	<i>7</i> 8	4.5	H20716	H20104
GCH 2500/2SF	3,200	2,500	2,000	1,600	1,250	5/1.25	2	10 x 28	3.05/0.77	8.2/4.4	<i>7</i> 8	4.5	H20717	H20104

<sup>\*</sup> FEM classification:

Quantity of starts at pendant control per hour

M3 (1Bm) = 150 starts per hour, 25% duty cycle

M4 (1Am) = 180 starts per hour, 30% duty cycle

M5 (2m) = 240 starts per hour, 40% duty cycle

M6 (3m) = 300 starts per hour, 50% duty cycle

M7 (4m) = 360 starts per hour, 60% duty cycle

 $^{**}$  Load chain with control cable





Eleric moto for PEH/GC		Driving speed m/min	Standard flange width mm	Weight kg	Order No.
EMF 50	to 1,000 kg	12/4	50 – 99	27	H20720
EMF 150	to 2,000 kg	12/4	76 – 139	31	H20721
EMF 300	to 4,000 kg	12/4	120 – 1 <i>7</i> 9	50	H20722
EMF 500	to 5,000 kg	12/4	120 – 1 <i>7</i> 9	57	H20723
Larger flan	ge width *	_	up to 300	_	H20724

<sup>\*</sup> Only in conjunction with trolley

## Electric motor trolley EMF 50 – 500 Capacity up to 5000 kg

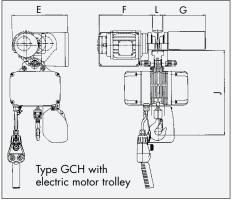
- Motor trolley for steel beam
- Long service life and low wear
- Speeds of 12, 12/4 or 20/6 m/min.
- Side plates made of cast iron with fall and climbing guard
- EMF 50/150 with 1 carrying bolt EMF 300/500 with 2 carrying bolts
- EMF 500 with 2 motors
- Galvanised carrying bolts
- Flange widths of 50 320 mm
- Protection class IP55 / **OPTION:** Protection class IP65

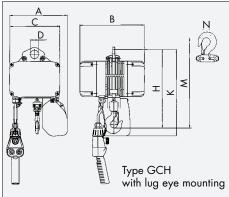


TYPE GCH		1600/1	1600/2	2000/1	2000/2	2500/1	2500/2
A (dimensions)	mm	424	424	424	424	424	424
В	mm	389	389	389	389	389	389
С	mm	345	345	345	345	345	345
D	mm	75	75	75	75	75	75
Е	mm	323	323	323	323	323	323
F	mm	259	259	259	259	259	259
G	mm	217	217	217	217	249	249
Н	mm	608	690	608	690	608	690
J	mm	637	719	637	719	637	719
K	mm	646	646	646	646	646	646
L	mm	120 – 179	120 – 179	120 – 179	120 – 179	120 – 179	120 – 179
М	mm	638	720	638	720	638	720
N	mm	50	50	50	50	50	50

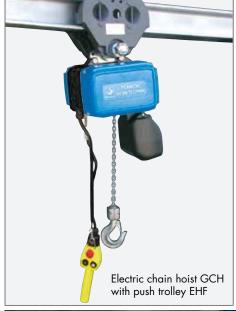






















# PLANETA-PFW electrical rope winch Load bearing capacity to 3,000 kg

The PFW electrical rope winch with its modular construction principle is one of the most modern devices for pulling, lifting and moving loads.

In addition, the PFW rope winch can be adapted to further and more specific applications through the varied fabrication capabilities and many other options and parameters.

This includes multiple rope applications and applications in explosion-proof areas and on ships, or for platforms and studios.



### **PLANETA-SB** rope winch

# Load bearing capacity to 37,000 kg in the standard

The SB type rope winch forms the basis for many designs and variants used for the lifting and pulling of loads, even for loads of more than 37,000 kg. The SB series is modular by design.

One drum side is retained by a pillow block bearing and its drive shaft penetrates the flange-mounted planetary gear, which is installed upstream of a three-phase braking motor.

Where installation length poses a problem, the SB series is also available with an angular drive on request. Selection of the rope is dependent on the pulling force on the 5th rope layer, whereby the drum diameter must be a min. 16 times the rope diameter (drive mechanism group 1Am).

However, we are only illustrating some of the options here because alternative flange and drum sizes, additional gear stages and numerous types of motor can be incorporated, in order to configure winches precisely in accordance with your requirements.



# Capacity up to 5,250 kg The FD / Flying Drum") winch has

The FD ("Flying Drum") winch has compact multi-stage planetary gear, installed inside the drum. As such, the installation length of the winch is very short. The FD is primarily used when the required rope length is short and the drum is therefore only small. This saves the second outer bearing, because all of the forces are absorbed by the transmission bearing.

The FD is available with an electric, hydraulic or compressed air motor. In special cases, special gears are also an option.



More information can you found in our catalogue "Rope winches - production program and special solutions".



# **Electric rope winch PFW**

With a load bearing capacity from 250 to 3.000 kg this electrical cable winch with its modular construction principle is one of the most modern devices for pulling, lifting and moving loads. With its extensive range of configuration and finishing options it can be adapted to suit almost any installation situation.

#### **Drive**

In standard form the spur gear transmission is equipped with a 3-phase braked motor. The standard operating voltage is 3 Ph / 400 V / 50 Hz. The duty cycle is around 60% thus enabling operation to continue almost without a break in the most difficult of conditions. For unprotected use outdoors the braked motor fulfils **protection class IP55**. Other operating voltages, alternative types of drive, higher duty cycles and protection classes are also available on request.

### **End position switch-off**

In standard configuration the end switch is installed on the drive side to save space. If desired, or when using the manual free-wheeling coupling, it can be installed on the opposite side, mounted above the drum bearing. Alongside the standard design as emergency end switch, we also offer the end switch as an option with 4 contacts as an operational end switch, in order to be sure that the emergency end switch is not

reached during normal operation, as required in the machinery directive. When operating the **PFW**,

for example, in combination with a frequency converter controller, the end switch can

be equipped with an integrated incremental sensor at the factory. **Protection class IP 65** as well as the high quality manufacturing of the end switch enables deployment in almost any environment.

#### Cable drum

In the basic version your **PFW** is delivered with a smooth drum surface. If desired we can deliver the cable drum with scoring in order to achieve a longer service life for the cable and quieter running for the cable. You can select between two cable drum diameters. The standard diameter is based on a D/d ratio of 14 and thus fulfils the requirements of drive mechanism group 1Bm. There is also a double drum diameter version available for single layer, high precision applications. The modular construction of the cable drum even enables your **PFW** drum to be retrofitted from smooth to scored by us in the factory. Special versions with multiple cable outflows, drum separators or versions in rust-free stainless steel are also available on request!

### **Base frame**

Torsionally rigid and yet flexible, it is well suited to almost any sub-structure. Many accessory parts can be retrofitted and can thus be changed throughout the course of the use of the winch. In standard form the winch has side guards that effectively prevent the cable jumping off. Alongside the facility to allow the cable to run in almost any direction from the drum, the rust-proof frame bars also enable easy handling during transportation or mounting.





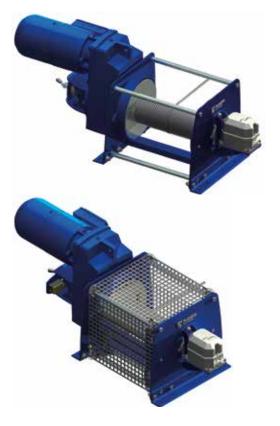


### **Options**

Thanks to the modular construction, for the first time it is possible to retrofit or change many options. Foremost of these is the manual **free-wheeling coupling**, which de-couples the cable drum from the drive and the brake for a rapid reeling off of the cable.

Simply select scored or extended drums, end switches, cable contact rollers, slack cable switches, protective drum covers, two or more cable outflows, manual brake venting, with or without emergency hand crank and various protective paint systems from our options catalogue.

Thus with our C5 painting per ISO 12944. in combination with a higher protection class for the motor and connecting elements made from rustproof stainless steel, the offshore variant of the **PFW** can also be used in salty sea-air environments or on ships. Other custom solutions are also possible on request. In standard configuration the end switch is installed on the drive side. If desired, or when using the manual free wheeling coupling, it can be installed on the opposite side, mounted above the drum bearing.



#### Versions

The cable winch can also be appropriately equipped to allow use in explosive atmospheres or for use in theatres, stages and studios where persons can be underneath the load whilst the hoist is operating. Special versions such as two or multiple cable applications and transverse winches are likewise available from the standard range.

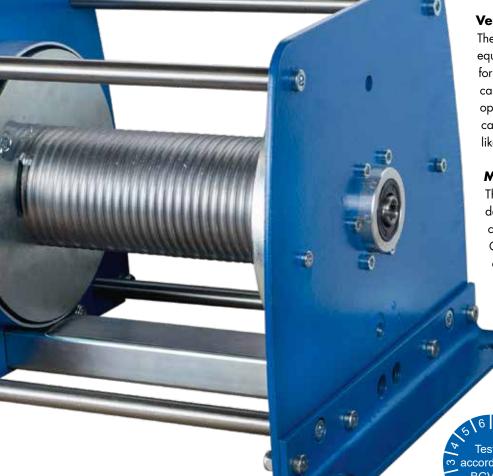
### **Made in Germany**

The **PFW** range combines a modern design, innovative technology and superlative components, which are produced exclusively in Germany. Prior to shipping, each winch is tested dynamically with 125% of the nominal load and leaves our factory with a 24 month guarantee.



Tested Tested according to 5 according to 5 BGV D8



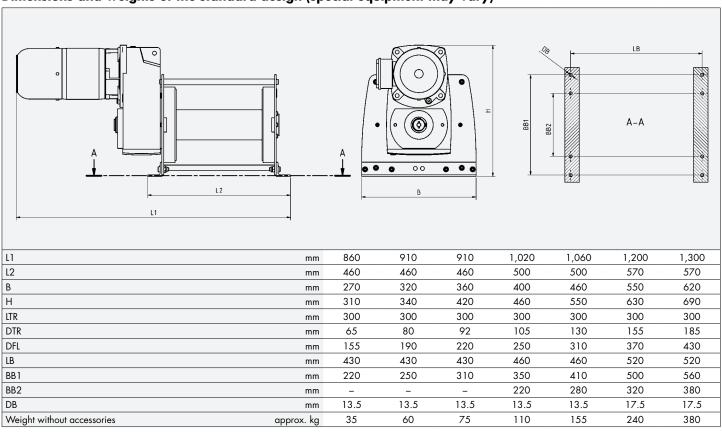




### Basic design

ТҮРЕ	PFW-1D	250	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	250	500	750	1,000	1,500	2,000	3,000
Lifting capacity in 5th rope layer	kg	160	320	480	640	950	1,270	1,920
Rope diameter	mm	5	6	7	8	10	12	14
Rope length in 1st rope layer	m	11	11	11	10	10	9	9
Rope length in 5th rope layer	m	75	75	75	75	75	75	75
Expansion every 100 mm extended drum 1st/5th layer	approx. m	4/25	4/25	4/25	4/25	4/25	4/25	4/25
Rope speed in 1st rope layer	approx. m/min	8	8	8	8	8	8	8
Rope speed in 5th rope layer	approx. m/min	12	12	12	12	12	12	12
Motor power	kW	0.37	0.75	1.1	1.5	2.1	2.6	4
PFW-1D with standard speed	Order No.	H62101	H62111	H62121	H62131	H62141	H62151	H62161
Rope speed in 1st rope layer	approx. m/min	4/8	4/8	4/8	4/8	4/8	4/8	4/8
Rope speed in 5th rope layer	approx. m/min	6/12	6/12	6/12	6/12	6/12	6/12	6/12
Motor power	kW	0.25/0.37	0.37/0.55	0.55/1.0	0.7/1.4	1.1/2.2	1.5/2.5	2.9/4.4
PFW-1D with two speeds	Order No.	H62102	H62112	H62122	H62132	H62142	H62152	H62162
Rope speed in 1st rope layer	approx. m/min	12	12	12	12	12	12	12
Rope speed in 5th rope layer	approx. m/min	19	19	19	19	19	19	19
Motor power	kW	0.55	1.1	1.5	2.1	3.2	4	5.5
PFW-1D with faster speed	Order No.	H62103	H62113	H62123	H62133	H62143	H62153	H62163
Options								
Grooved drum	Order No.	H62800	H62801	H62802	H62803	H62804	H62805	H62806
Longer drum each 100 mm	Order No.	H62810	H62810	H62811	H62811	H62812	H62812	H62813
Second rope outflow	Order No.	H62820	H62821	H62822	H62823	H62824	H62825	H62826
Manual free-wheeling coupling	Order No.	-	H62831	H62832	H62833	H62834	H62835	H62836
Protective drum cover	Order No.	H62840	H62841	H62842	H62843	H62844	H62845	H62846
Drum pressure roller	Order No.	H62850	H62851	H62852	H62853	H62854	H62855	H62856
Emergency limit switch	Order No.	H62861	H62861	H62861	H62862	H62862	H62863	H62863
Operational limit switch	Order No.	H62864	H62864	H62864	H62865	H62865	H62866	H62866
Emergency limit switch with incremental sensor	Order No.	H62867	H62867	H62867	H62868	H62868	H62869	H62869
Slack wire switch	Order No.	H62870	H62871	H62872	H62873	H62874	H62875	H62876
Manual brake release	Order No.	H62881	H62881	H62881	H62882	H62882	H62882	H62883
Manual brake release with crank	Order No.	H62884	H62884	H62884	H62885	H62885	H62885	H62886
Protective paint per ISO12944 C4 (high)	Order No.	H62891	H62891	H62892	H62892	H62893	H62893	H62894
Protective paint per ISO12944 C5 (very high / marine)	Order No.	H62895	H62895	H62896	H62896	H62897	H62897	H62898

### Dimensions and weights of the standard design (special equipment may vary)

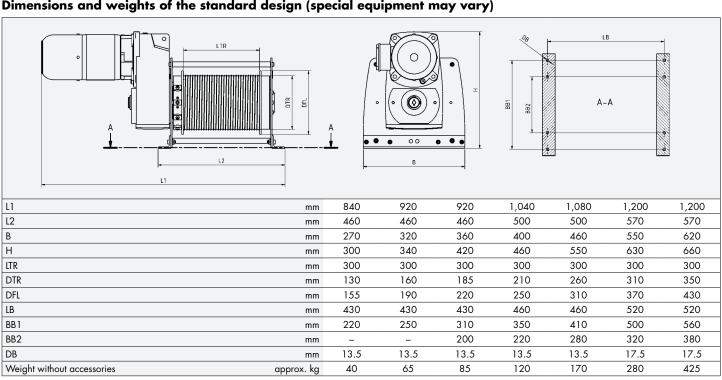




### Double diameter drum, stage & studios

TYPE	PFW-2D	250	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	125	250	375	500	750	1,000	1,500
Rope diameter	mm	5	6	7	8	10	12	14
Rope length in 1st rope layer	m	20	20	20	20	19	18	17
Expansion every 100 mm extended drum 1st layer	approx. m	7	7	7	7	7	7	7
Rope speed in 1st rope layer	approx. m/min	15	15	15	15	15	15	15
Motor power	kW	0.37	0.75	1.1	1.5	2.1	2.6	4
PFW-2D with standard speed	Order No.	H62201	H62211	H62221	H62231	H62241	H62251	H62261
Rope speed in 1st rope layer	approx. m/min	7/15	7/15	7/15	7/15	<i>7</i> /15	7/15	7/15
Motor power	kW	0.25/0.37	0.37/0.55	0.55/1.0	0.7/1.4	1.1/2.2	1.5/2.5	2.9/4.4
PFW-2D with two speeds	Order No.	H62202	H62212	H62222	H62232	H62242	H62252	H62262
Rope speed in 1st rope layer	approx. m/min	22	22	22	22	22	22	22
Motor power	kW	0.55	1.1	1.5	2.1	3.2	4	5.5
PFW-2D with faster speed	Order No.	H62203	H62213	H62223	H62233	H62243	H62253	H62263
TYPE PFW stag	ges and studios	250	500	750	1000	1500	2000	3000
Lifting capacity in 1st rope layer	kg	100	200	300	400	630	900	1,200
Rope diameter	mm	5	6	7	8	10	12	14
Rope length in 1st rope layer	m	19	19	19	19	18	17	16
Expansion every 100 mm extended drum 1st layer	approx. m	7	7	7	7	7	7	7
Rope speed in 1st rope layer	approx. m/min	7/15	7/15	7/15	7/15	7/15	7/15	7/15
Motor power	kW	0.18/0.25	0.37/0.55	0.4/0.75	0.55/1.0	1.0/1.6	1.5/2.5	2.2/3.4
	Order No.	H62301	H62311	H62321	H62331	H62341	H62351	H62361
Options								
Grooved drum	Order No.	incl.	incl.	incl.	incl.	incl.	incl.	incl.
Longer drum	Order No.	H62814	H62814	H62815	H62815	H62816	H62816	H62817
Second rope outflow	Order No.	H62820	H62821	H62822	H62823	H62824	H62825	H62826
Manual free-wheeling coupling (not for stages and studios)	Order No.	-	H62831	H62832	H62833	H62834	H62835	H62836
Protective drum cover	Order No.	H62840	H62841	H62842	H62843	H62844	H62845	H62846
Drum pressure roller	Order No.	H62850	H62851	H62852	H62853	H62854	H62855	H62856
Emergency limit switch	Order No.	H62861	H62861	H62861	H62862	H62862	H62863	H62863
Operational limit switch	Order No.	H62864	H62864	H62864	H62865	H62865	H62866	H62866
Emergency limit switch with incremental sensor	Order No.	H62867	H62867	H62867	H62868	H62868	H62869	H62869
Slack wire switch	Order No.	H62870	H62871	H62872	H62873	H62874	H62875	H62876
Manual brake release	Order No.	H62881	H62881	H62881	H62882	H62882	H62882	H62883
Manual brake release with crank	Order No.	H62884	H62884	H62884	H62885	H62885	H62885	H62886
Protective paint per ISO12944 C4 (high)	Order No.	H62891	H62891	H62892	H62892	H62893	H62893	H62894

### Dimensions and weights of the standard design (special equipment may vary)





# Electric rope winch PLANETA - PFW-C

With a load bearing capacity from 250 to 3.000 kg this electrical rope winch with its



modular construction principle is one of the most modern devices for pulling, lifting and moving loads. With its extensive range of configuration and finishing options it can be adapted to suit almost any installation situation.



### Standard equipment

- Disk brake and spur gear motor
- Grooved drum
- Safety contactor control with low control voltages
- Electric overload protection (over 1.000 kg load capacity)
- Pendant remote control with 3 m cable
- Power supply cable with 3 m cable
- Documentation in German or English
- Test certificate and EC installation declaration

#### **Technical data**

- Operating voltage 3 Phases / 400 Volt / 50 Hz or 1 Phases / 230 Volt / 50 Hz (alternating current)
- Duty cycle 60% (reference cycle 10 min.)
- Up to 150 starts per hour
- Protection class: IP 55 (jet-water from all sides)
- FEM classification: M3 (1Bm)
   (e.g. 10 years one hour daily with medium loads)
- Ambient temperature during operation: -10°C to +40°C

### Winch control system

Out standard contactor control with control voltage of 42 V combines a lot of security features in a compact housing. By using low control voltage the operator is protected in a case of possible damages like a contact with a broken cable isolation. Generally the control will be delivered with a separate control of the brake. Because of that down sliding of the load will be prevented in a case of emergency stop.

### **Additional versions**

Thanks to the modular construction, for the first time it is possible to retrofit or change many options.

Foremost of these is the manual free-wheeling coupling, which de-couples the rope drum from the drive and the brake for a rapid reeling off of the rope.



### **Optional equipment**

- Lifting- or pulling rope with security hook
- Operational limit switch
- Protective drum cover
- Drum pressure roller
- CE-Label by full equipment

### Spindle limit switch

The spindle limit switch is coupled directly to the rope drum and determines the drum's revolutions. You can determine the rope winch's shut-off positions as required by adjusting the switching cam inside the switch. As standard, our spindle limit switches have two contacts, in order to limit the top and bottom hook position for example.

### **Drum protection**

Covering the rope drum prevents objects or items of the operator's clothing entering the rope drive. This reduces the risk of accidents and damage to the winch.

### **Drum pressure roller**

The rope keeps tight on the drum as long as it is under tension. But if it becomes slack, e.g. during shunting applications, when the waggon runs faster than the winch is able to store, a drum pressure roller can help. It presses the rope onto the drum core and maintains it in a tidy condition. The drum pressure roller is

also recommended if a free spooling clutch is used.

For further executions please see PLANETA rope winch catalogue.



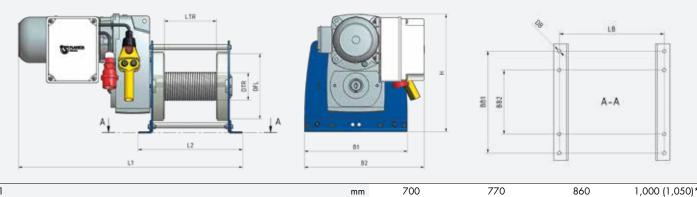
### **Made in Germany**

The PFW range combines a modern design, innovative technology and superlative components, which are produced exclusively in Germany. Prior to shipping, each winch is tested dynamically with 125% of the nominal load and leaves our factory with a 24 month guarantee.



### Basic design

TYPE	PFW-C	250	500	1000	2000
Lifting capacity in 1st rope layer to max. hoisting-/pulling distance	kg/m	250/7	500/7	990/6	2,000/5
Lifting capacity in 2nd rope layer to max. hoisting-/pulling distance	kg/m	220/16	440/16	865/16	1,750/14
Lifting capacity in 3rd rope layer to max. hoisting-/pulling distance	kg/m	195/27	390/27	770/26	1,550/24
Lifting capacity in 4th rope layer to max. hoisting-/pulling distance	kg/m	175/38	350/39	695/39	1,400/35
Lifting capacity in 5th rope layer to max. hoisting-/pulling distance	kg/m	160/51	320/52	630/51	1,270/48
Lifting capacity in 6th rope layer to max. hoisting-/pulling distance	kg/m	145/65	295/65	580/65	1,165/61
Lifting capacity in 7th rope layer to max. hoisting-/pulling distance	kg/m	135/81	270/81	535/80	1,075/75
Rope diameter	mm	5	6	8	12
Required rope length remaining on drum	m	1.0	1.2	1.6	2.4
Rope speed 1st rope layer	approx. m/min	8	8	8	8 (4)*
Rope speed 2nd rope layer	approx. m/min	9	9	9	9 (4)*
Rope speed 3rd rope layer	approx. m/min	10	10	10	10 (5)*
Rope speed 4th rope layer	approx. m/min	11	11	11	11 (5)*
Rope speed 5th rope layer	approx. m/min	12	12	12	12 (6)*
Rope speed 6th rope layer	approx. m/min	13	13	13	13 (6)*
Rope speed 7th rope layer	approx. m/min	14	14	14	14 (7)*
Motor power	kW	0.37	0.75	1.5	2.6 (1.5)
PFW-C with 3PH /400 V	Order-No.	H62100	H62110	H62130	H62150
PFW-C with 1PH / 230 V (*)	Order-No.	H62109	H62119	H62139	H62159
Options					
Protective drum cover	Order-No.	H62840	H62841	H62843	H62845
Operational limit switch	Order-No.	H62864	H62864	H62865	H62866
Drum pressure roller	Order-No.	H62850	H62851	H62853	H62855
Pulling rope not rotation-resistant with eye hook 8 m *	Order-No.	C62101	C62111	C62131	C62151
Additional pulling rope per m	Order-No.	C05619	C06619	C08619	C12636
Hoisting rope rotation resistant with swivel hook 8 m **	Order-No.	C62102	C62112	C62132	C62152
Additional hoisting rope per m	Order-No.	C05177	C06177	C08177	C12177



L1 m	m 700	770	860	1,000 (1,050)*
L2 m	m 360	360	400	470
B1 m	m 270	320	400	550
B2 m	m 380	420	470	550
H	m 300	335	460	620
LTR m	m 200	200	200	200
DTR m	m 65	80	105	155
DFL m	m 155	190	250	370
LB m	m 330	330	360	420
BB1 m	m 220	250	350	500
BB2 m	m –	_	220	320
DB m	m 11	12	12	16
Weight without accessories approx k	g 40	65	110	240 (250)*

<sup>\*\*</sup> Rope supplied loose as a coil

More capacities and options on request.





SB-310-E

### **SB-Series**

The standard build SB type winch provides the basis of the solution to many pulling and lifting winch applications. The winch is constructed in the conventional manner with motor, gearbox and drum in line. When it comes to the need of a shorter design the SB winch is available with a angular gearbox. The choice of the rope complies with the pulling force in the 5th rope layer. The drum is build according classification 1Am. The drum diameter is at least 16-times bigger than the diameter of the indicated rope diameter. Although the name of this winch indicates different, these winches are very suitable to fit to your specific winch application and can be equipped with different drums, other gearboxes or motors. Many options can be offered on these highly versatile winches. The standard version comes without a rope and control.

### Standard winch features:

- Heavy duty planetary gearbox
- SB E; IP 54 aluminium braked motor 400 VAC/ 3 phase / 50 Hz
- SB H; orbit or radial piston type hydraulic motor complete with brake valve
- SB LPR; radial piston type air motor complete with hand control valve and mufflers
- SB LG; gear type air motor complete with hand or remote control valve and mufflers
- Steel drum with cable fixing point at flange
- Two drum supports
- Double layer 2 component conversation, colour RAL 5010

### **Available winch options**

- IP 56 TENV cast iron motor for marine applications
- Alternative drum dimensions / split drums /additional rope anchors /etc.
- Explosion proof motors
- Protective steel motor cover
- Drum pressure roller, spooling gears, grooved drums
- Band brakes (manual or failsafe automatic)
- Manual disengaging clutch
- Alternative speeds
- Alternative supply voltages
- Drum guards
- Manual emergency crank
- Slip ring mounting
- Warping head
- Angular gear

### **Available control options**

- Control box IP 55 with pushbuttons and emergency stop
- Control box IP 55 with low voltage IP 65 remote control
- Load limiter (required by CE for applications exceeding 1000 kg W.L.L.)
- Frequency inverter for variable speed control
- Wireless radio remote control systems
- Limit switches (electric, pneumatic)
- Slack wire switches (electric, pneumatic)
- Proportional local or remote control valve (pneumatic or hydraulic)
- Motor overheating protection

### Classification

€ II 2 GD c T4 135°C



### **TYPE SB-Series electric**

TYPE	Max. capacity 1 st layer kg	Max. capacity 5th layer kg	Recomm. rope diam. mm	Rope speed 1 st layer m/min.	Rope speed 5th layer m/min.	Drum storage 1 st layer m	Drum storage 5th layer m	Motor power 3-ph kW	Order No.
SB 300-E	1,250	875	9	8.5	12.5	24	155	2.2	H50091
SB 301-E	2,000	1,400	11	8.5	12.5	24	155	3	H50092
SB 304-E	3,000	2,100	14	8.5	12.5	24	155	5.5	H50175
SB 305-E	4,000	2,800	16	8	11.5	24	155	5.5	H50071
SB 306-E	5,500	3,800	19	8	11.5	24	155	7.5	H50072
SB 307-E	7,000	4,900	22	8	11.5	24	155	11	H50073
SB 309-E	9,000	6,300	24	10	14	24	155	15	H50074
SB 310-E	12,000	8,400	28	8	11.5	24	155	18.5	H50093
SB 311-E	15,000	10,400	32	7.5	11	23	154	22	H50075
SB 313-E	18,000	12,400	34	6	9	22	153	22	H50076
SB 314-E	23,000	16,000	38	6	9	22	153	30	H50177
SB 315-E	30,000	20,400	44	6	9	20	145	30	H50094
SB 316-E	37,000	24,500	48	6	9	18	137	45	H50095

# Planetary standard build winches SB-Series



# **TYPE SB-Series pneumatic**

TYPE	Max. capacity 1st layer	Max. capacity 5th layer	Recomm. rope diam. mm	Rope speed 1 st layer m/min.	Rope speed 5th layer m/min.	Drum storage 1 st layer m	Drum storage 5th layer m	Air pressure drop in bar	Air flow in I/min.	Order No.
	kg	kg								
SB 300-LPR2	1,200	845	10	11	16	26	168	7	90	H50119
SB 301-LPR2	2,100	1,435	12	7	10	24	1 <i>57</i>	7	90	H50121
SB 303-LPR2	2,500	1,740	14	6	9	26	165	7	90	H50084
SB 303-LPR3	2500	1,740	14	12	1 <i>7</i>	26	165	7	140	H50122
SB 305-LPR3	4,000	2,770	16	9	13	25	161	7	150	H50085
SB 305-LPR4	4,000	2,770	16	15	21	25	161	7	240	H50123
SB 306-LPR4	5,500	3,970	18	10	14	28	181	7	240	H50086
SB 307-LPR4	7,000	4,960	22	8	11	26	1 <i>7</i> 1	7	240	H50087
SB 307-LG6	7,000	4,960	22	13	18	26	1 <i>7</i> 1	7	350	H50124
SB 309-LPR4	9,000	6,285	26	6	9	24	163	7	220	H50125
SB 309-LG6	9,000	6,285	26	10	14	24	163	7	350	H50088
SB 310-LG6	12,000	8,460	28	7	10	24	168	7	350	H50126
SB 311-LG6	16,000	10,655	34	5	7,5	19	144	7	350	H50089
SB 313-LG6	20,000	13,610	38	4	6	19	151	7	350	H50090

# **TYPE SB-Series hydraulic**

ТҮРЕ	Max. capacity 1 st layer	Max. capacity 5th layer	Recomm. rope diam.	Rope speed 1 st layer	Rope speed 5th layer	Drum storage 1st layer	Drum storage 5th layer	Oil pressure drop in	Oil flow in	Order No.
	kg	kg	mm	m/min.	m/min.	m	m	bar	l/min.	
SB 303-H	2,500	1,740	14	18	26	26	165	140	60	H50077
SB 305-H	4,000	2,770	16	18	26	25	161	160	80	H50078
SB 306-H	5,500	3,970	18	25	35	28	181	225	95	H50079
SB 307-H	7,000	4,960	22	20	28	26	171	230	100	H50080
SB 309-H	9,000	6,285	26	13	18	24	163	190	100	H50081
SB 310-H	12,000	8,460	28	11	16	24	168	230	95	H50096
SB 311-H	16,000	10,655	34	10	15	19	144	230	110	H50082
SB 313-H	20,000	13,610	38	8	12	19	151	210	120	H50083
SB 315-H	30,500	20,800	44	8	12	19	151	235	165	H50097
SB 316-H	37,000	24,570	48	6	9	1 <i>7</i>	141	225	160	H50098

# **Options**

						Electric rope winch SB-E	
T	TYPE	Grooved drum	Cable tensioning device with scored cable drum	Longer cable drum, up to 500 mm	3-layer paint coating*	Drum cover	Spindle limit switch (as an operating limit switch)
SB 300	Order No.	H50206	H50208	H50231	Н50450	H50454	H50210
SB 301	Order No.	H50207	H50209	H50232	H50450	H50454	H50210
SB 303	Order No.	H50219	H50217	H50212	Н50450	H50454	H50210
SB 305	Order No.	H50219	H50217	H50238	H50450	H50454	H50210
SB 306	Order No.	H50220	H50217	H50213	H50451	H50455	H50210
SB 307	Order No.	H50220	H50218	H50239	H50451	H50455	H50210
SB 309	Order No.	H50221	H50218	H50214	H50452	H50456	H50210
SB 310	Order No.	H50222	H50218	H50215	H50452	H50456	H50210
SB 311	Order No.	H50222	H50218	H50247	H50452	H50456	H50210
SB 313	Order No.	H50223	Н50392	H50216	H50452	H50456	H50210
SB 315	Order No.	Н50390	Н50233	Н50393	Н50453	H50457	H50210
SB 316	Order No.	H50391	H50233	H50394	H50453	H50457	H50210

We can offer an adapted control for the SB winches according to your directions!

<sup>\*</sup> Acc. ISO 12944 C4 (high) – System C5-M-Marine (very high), quoted price x 2 according to your directions!











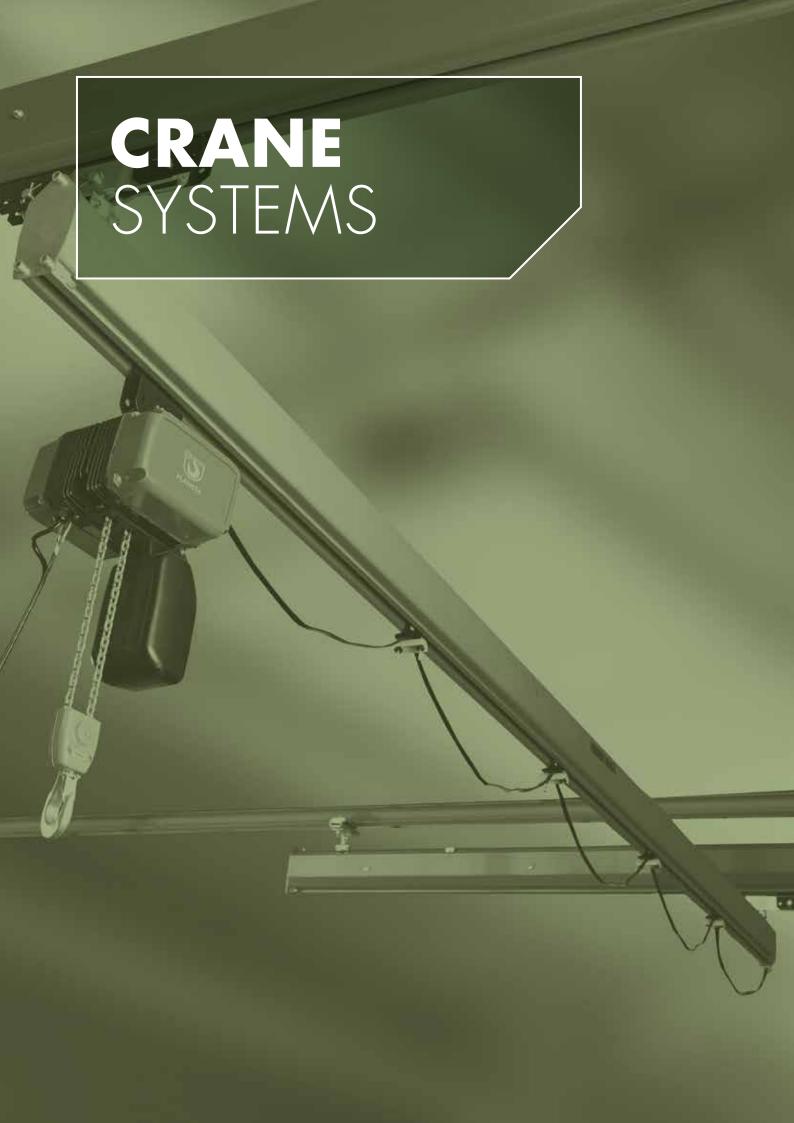














# **PLANETA-EMXKB** system

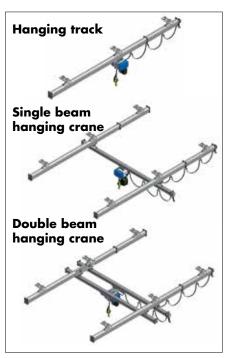
The flexible modular small crane system offers you an ideal solution for open hall transportation of your goods. Solid hollow profiles in four different sizes guarantee light, nearly frictionless movement. Rolling devices featuring lateral guide rollers prevent all tilting. The profiles are produced in the rolling process and enable low-noise transport of loads up to 1,600 kg. Especially high strength properties enables clamping widths of up to 7.5 m. Standard profiles enable any hanging tracks and hanging cranes to be planned and implemented. Together with PLANETA electric chain hoists (pages 32 - 35), three-dimensional movement of your goods becomes child's play.

Choose a single or double beam hanging crane according to your needs. Goods may be moved across all surfaces using both crane systems.

For line transportation, these are operated best of all using a hanging track. Flexibly combinable EMXKB profiles ensure that your system can be expanded or converted at any time.

A sophisticated hanging concept enables simple assembly of the crane system tailored to your existing ceiling and supporting structure.

Loads may be transported manually or electrically.



### Optimal profile size

The following table is used for determining the optimal profile size, which depends on the load, P, and the clamping width, W. The calculations in the tables below are based on a permissible deflection of W/400.

The crane systems are classified according to EN 13001: HC4; U2-U3; Q0-Q4; S0-S2 and in accordance with EN 15018: H2/H3; B3/B4.

Capaci-				EMXKB	span (m)							EMXKB I	II span (m	)			Capaci-
ty kg	$\nabla$		INP V	120	INP V_	160 □ ▽	INP V	180 □ ▽	$\nabla$		INP V	120 □ ▽	INP V	160 □ ▽	INP V	180 □∇	ty kg
80	5,1	6.3	7.8	7.8	7.8	7.8	7.8	7.8	7.6	7.8	7.8	7.8	7.8	7.8	7.8	7.8	80
100	4,8	6.0	7.8	7.8	7.8	7.8	7.8	7.8	7.2	7.8	7.8	7.8	7.8	7.8	7.8	7.8	100
125	4.5	5.7	7.8	7.8	7.8	7.8	7.8	7.8	6.9	7.8	7.8	7.8	7.8	7.8	7.8	7.8	125
160	4.1	5.4	7.8	7.8	7.8	7.8	7.8	7.8	6.4	7.8	7.8	7.8	7.8	7.8	7.8	7.8	160
200	3.8	5.0	7.6	7.8	7.8	7.8	7.8	7.8	6.0	7.4	7.8	7.8	7.8	7.8	7.8	7.8	200
250	3.5	4.7	7.2	7.8	7.8	7.8	7.8	7.8	5.6	<i>7</i> .1	7.8	7.8	7.8	7.8	7.8	7.8	250
320	3.1	4.3	6.7	7.8	7.8	7.8	7.8	7.8	5.1	6.6	7.8	7.8	7.8	7.8	7.8	7.8	320
400	2.8	3.9	6.3	7.7	7.7	7.8	7.8	7.8	4.7	6.1	7.5	7.8	7.8	7.8	7.8	7.8	400
500	2.6	3.6	5.8	7.3	7.3	7.8	7.8	7.8	4.3	5.7	7.0	7.8	7.8	7.8	7.8	7.8	500
630	2.2	3.2	5.0	6.8	6.5	7.8	7.3	7.8	3.8	5.2	6.4	7.8	7.8	7.8	7.3	7.8	630
800	1.6	2.9	4.0	6.3	5.0	7.8	5.7	7.8	2.9	4.7	5.1	7.5	6.2	7.8	6.9	7.8	800
1,000	-	2.6	-	5.8	-	7.3	-	7.8	2.8	4.3	5.4	7.0	6.7	7.8	7.3	7.8	1,000
1,250	-	2.3	_	5.3	_	6.7	_	7.4	2.3	3.9	4.1	6.5	5.2	7.8	5.6	7.8	1,250
1,600	_	1.7	_	3.9	_	5.2	_	5.8	1.7	3.4	3.0	5.9	3.7	7.3	4.2	7.8	1,600
Single	crane be	eam	Double cr	ane beam	$\nabla$	V = wi	thout reinfa	rcement 5	V 🗆 '	$\sqrt{}$ = with	reinforcer	nent	-				

### Single beam hanging crane with clamping width W (m)

Capacity (kg)	EMXKB III	EMXKB IV
80	10.2	11.8
100	9.8	11.8
125	9.4	11.8
160	9.0	11.8
200	8.5	11,2
250	8.0	10.7
320	7.3	10.0
400	6.8	9.4
500	6.2	8.7
630	5.6	7.9
800	4.1	5.8
1,000	4.6	6.5
1,250	3.5	4.9
1,600	2.4	3.4
2,000	-	-

### Double beam hanging crane with clamping width W (m)

		()
Capacity (kg)	EMXKB III	EMXKB IV
80	11.3	11.8
100	11.1	11.8
125	10.8	11.8
160	10.5	11.8
200	10.1	11.8
250	9.7	11.8
320	9.2	11.8
400	8.6	11.4
500	8.1	10.9
630	7.4	10.1
800	6.8	9.4
1,000	6.3	8.7
1,250	5.7	8.0
1,600	5.1	7.2
2,000	4.6	6.6



# **Hanging fixtures**

### Short, rigid (fig. 4)

- The rigid hanging fixture is available as a short model
- Small structural dimensions

### Short, swinging and adjustable (fig. 1)

- Ball pins and ball nut screw-fastened directly together
- Swinging movement of max. 10°
- Height adjustable ± 7.5 mm

### Distanced, swinging and adjustable (fig. 2)

- Hanging distance, variable length
- Height differences adjustable by ±15 mm

# Distanced, swinging, adjustable, anchored (fig. 3)

- > 0.5 m distance: Anchoring required
- Lengthwise anchoring: both track ends
- Cross-wise anchoring: one-sided, every 2nd hanging fixture

### Lateral hanging fixture

• Lateral assembly on wooden or concrete beam

# Steel profiles EMXKB 1 + 2

Maximum profile length of 8 m EMXKB 1: max. 800 kg capacity EMXKB 2: max. 1,600 kg capacity



# **EMXKB 3 + 4**

Maximum profile length of 12 m EMXKB 3: max. 2,000 kg capacity EMXKB 4: max. 2,000 kg capacity

# **Trolleys**

- Galvanised steel structure
- Use for lengthwise and cross-wise travel ensured
- Load distribution ensured by 2 trolleys
- 4 trolleys in use for the yoke of the double crane support
- Drive: manual or electrical

#### Your benefits:

- Maximum running silence thanks to plastic rollers
- Ideal for tricky, critical loads
- Convertible from manual to electrical
- Gentle start-up and braking thanks to frequency inverter

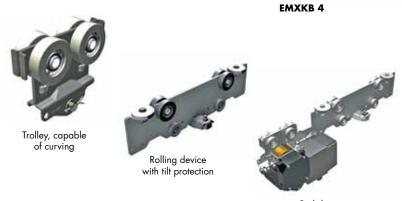


Electric drive









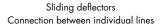
Rail drive, infinitely mobile



4 trolleys with yoke









Spider 90° direction change

# **Curves and deflectors**

#### **Curves**

- Available with 30° and 45° angles
- Radius: 1m
- End plate on both ends
- Hanging fixture on 2 points
- Conductor rail curve available in identical angles as the profile curve

# Sliding deflectors/spiders

- Manual or electrical movement of profiles
- Manually: via pull cable
- Electrically: via 2-button control switch
- Hanging fixture on 2 points
- Optional: Delivery including conductor rails



Trailing cable



Conventional conductor rail

### **Electrics**

### **Power types**

- 3-phase, 380/400 V 50 Hz
- or tailored to your company's electrical system

### **EMXKB** complete power supplies

- Cable trolley, travel limiter, connector, rail stopper, ...
- ... and around 30 additional elements

### 4 types of length and power supply

- Trailing cable
- C-rail
- Conventional conductor rail
- Profile-interior conductor rail





# The elegant solution EMXKB II ST interior power rail

- Flexible, universal
- Attractive design
- Universally usable
- Load 25 A at max. 100 m profile length

### **Example**

Including ceiling attachments, power supply and PEH-O electric hoist, trailing cable, 3 m lift (without assembly).

Hanging track					
Capacity Length	kg m	500 8			
Order No.		J00190			

Single beam hanging crane				
Capacity	kg	500		
Capacity Length Width	m	8		
Width	m	6		
Order No. J00191				

Double beam hanging crane					
Capacity	kg	1000			
Length	m	7			
Width	m	6			
Order No.		J00192			



Customer data				
Company:		Date:		
Street:		Client number:		
Zip code:		Phone:		
Location:		Fax:		
Contact person:		Position:		
KB crane system	Single beam hanging crane	Double beam hanging crane	Hanging track	
Capacity:	· ·			
Beam length B:		k length T:		
Span W: Required lifting height:		n height: ch: see right side	mm	
	IIIII OKER	cii. see rigiii side		
Hanging fixture Hanging type:	Short, swinging	Distanced, swinging:	mm	Rigid
Ceiling construction:	Concrete ceiling	Steel beam		Wooden trus
Hanging gap:	variabel			VVOOdell lius
rialiging gap.	Variabei	actual:	mm	
Movements				
Trolley movement (diagonal):	manual	electrically		
	1 speed	2 speeds	<u> </u>	m/min
Crane movement (longitudinal):	<u> </u>	electrically	_	
	1 speed	2 speeds	<u> </u>	m/min
Hoist				
Eletric chain hoist	Manual chain hoist			
_		Capacity:		kg
Lifting speed:	1 speed	2 speeds		•
Lift (standard 3 m):	_ :	Period of use/day	_	
		• ,		
Control / electric		. 1		
Control:	Operating the electric hoist's			
D	<del>_</del>	s can be pushed independently)		
Power type:	3-phase 400V, 50Hz	1-phase 230V, 50Hz		
Longitudinal power supply:	without	Trailing cable	C-rail	
D'acceptance and a	Conductor rail	T. T. Tall	□ c1	
Diagonal power supply:	without	Trailing cable	C-rail	
	Conductor rail			
Crane location				
Factory	Outdoors	Close to acids/bases		
Installation				
By PLANETA	By the customer	Forklift available on-site		
A .  . :::  ::::::::				
Additional technical specific	cations/customer requests			
				•••••
Powerfordt-				
Requested quote	Dudant mis	Overto ha	L.,	
Quick quote	Budget price	Quote by	•	
Detailed quote	Ime of implementation or de	elivery date		
Attachments		_		
		Plot/draft version		
Sketch				



