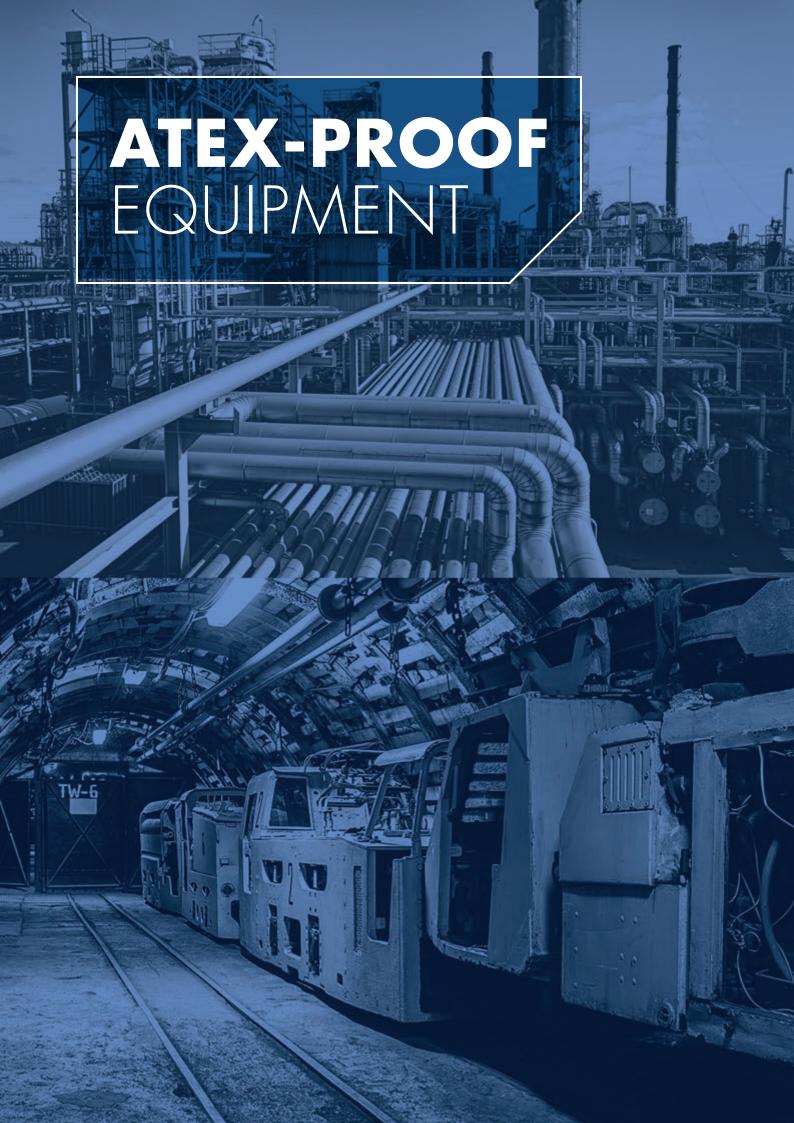


LIFTING WITHOUT LIMITS







Lever hoist PREMIUM PRO

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

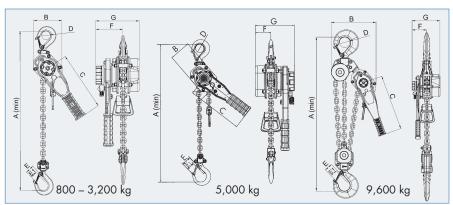
The robust chain end piece provides additional safety because it cannot be pulled through the device with the chain.

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

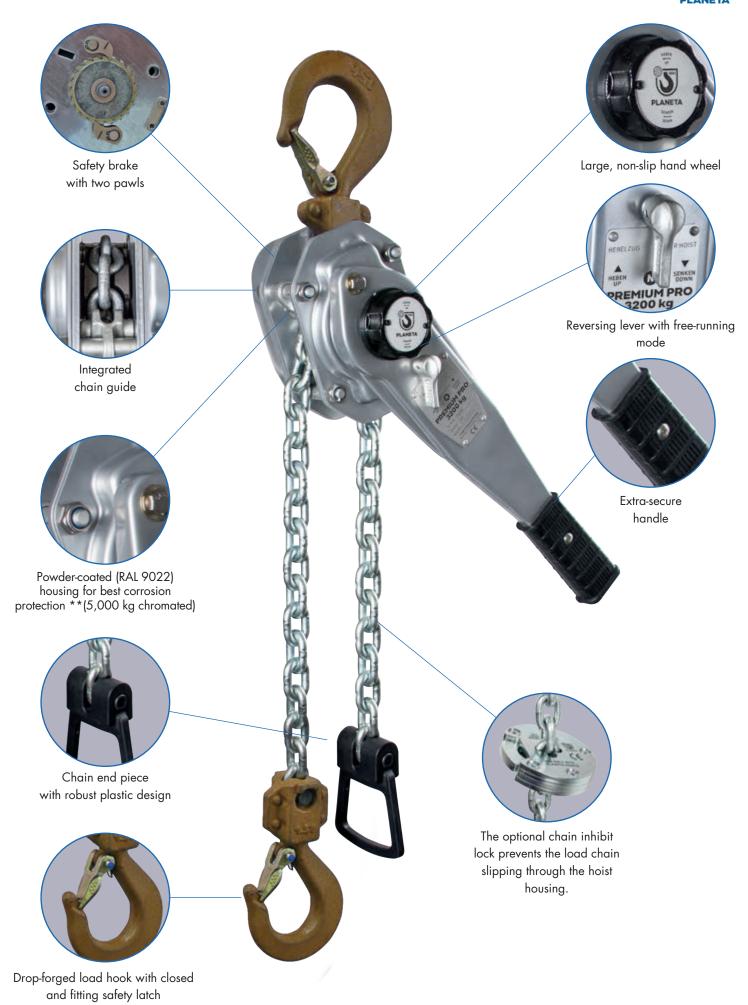
Hand lever can be used in any position thanks to the ratchet; safety automatic mechanical brake; galvanised connecting parts; cast hook clip; large, non-slip and closed hand wheel; safety chain end piece.



PREMIUM 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	600	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
m	0,019	0,015	0,016	0,009	0,008	0,005
	1	1	1	1	2	3
mm	5.6 × 17	7.1×21	9 × 27*	13 × 36	9 × 27*	9 × 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
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.	_	010045	01004/	010045	010010	010040
	kg kg m mm daN m mm mm mm mm mm mm mm kg kg Order No. Order No. Order No.	kg 800 kg 600 m 1.5 mm 320 daN 22 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 800 1,600 kg 600 1,200 m 1.5 1.5 mm 320 360 daN 22 24 m 0,019 0,015 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 kg 0.7 1.1 Order No. G10326 G10327 Order No. G10386 G10387 Order No. G10386 G10387	kg 800 1,600 3,200 kg 600 1,200 1,600 m 1.5 1.5 1.5 mm 320 360 431 daN 22 24 33 m 0,019 0,015 0,016 1 1 1 1 mm 5.6 × 17 7.1 × 21 9 × 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 0.7 1.1 1.8 Order No. G10320 G10321 G10322 Order No. G10326 G10327 G10328 Order No. G10338 G10339 G10340	kg 800 1,600 3,200 5,000 kg 600 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 m 0,019 0,015 0,016 0,009 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 Order No. G10320 G10321 G10322	kg 800 1,600 3,200 5,000 6,400 kg 600 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 m 0,019 0,015 0,016 0,009 0,008 1 1 1 1 1 2 mm 5.6 × 17 7.1 × 21 9 × 27* 13 × 36 9 × 27* mm 15 137 169 180 238 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 kg 6.3<

^{*} Grade 100 **chromated







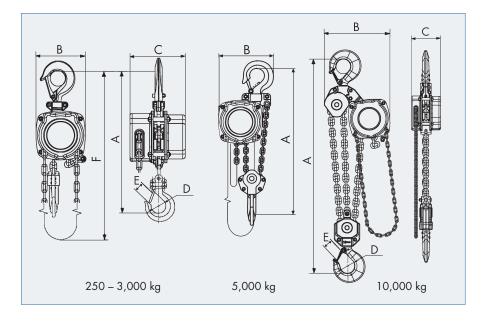
PREMIUM PRO with EX-protection

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!



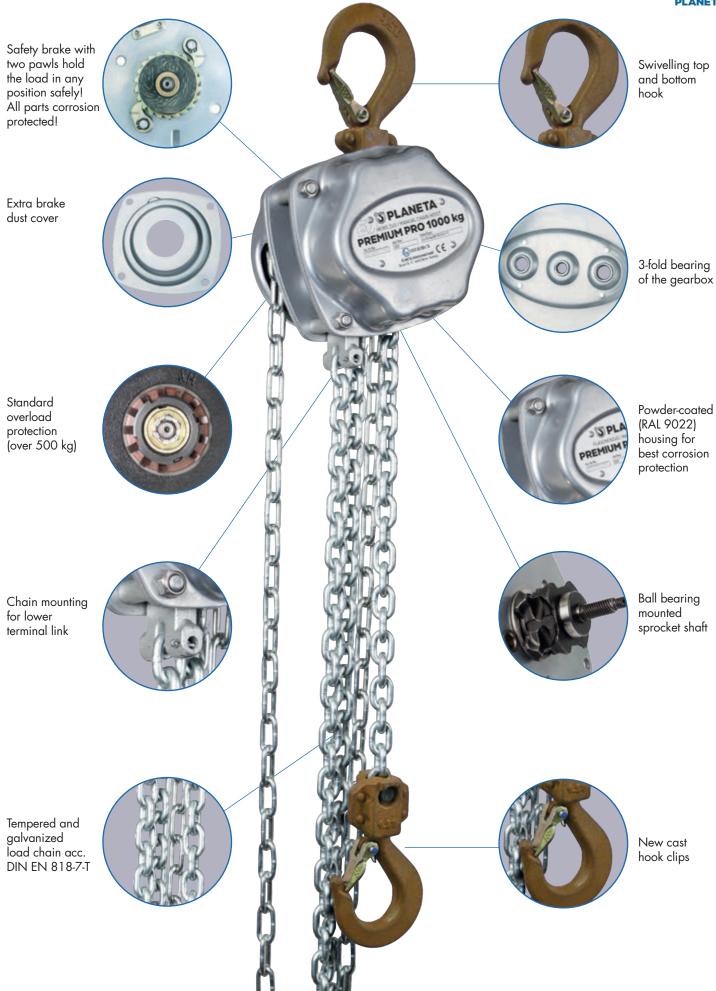
1 m more operating length	Capacity	Order No.		
Hand chain Basic/Medium	500–10,000 kg	G10178		
Hand chain High	500-10,000 kg	G10179		

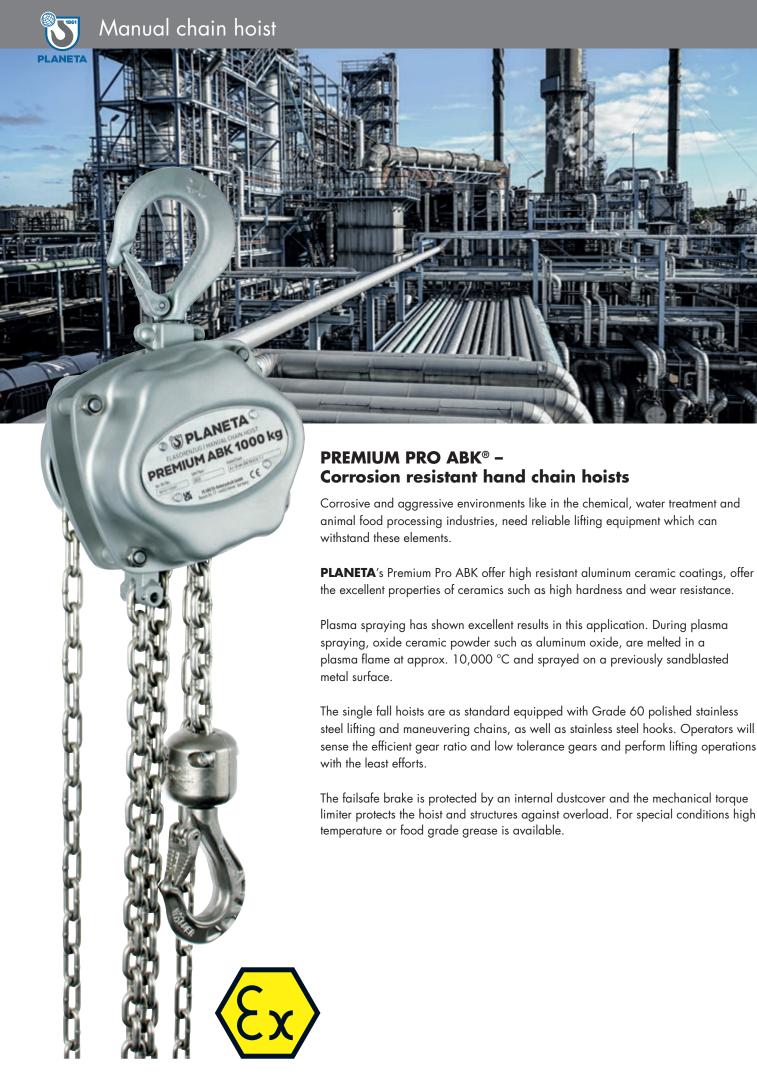
TYPE	PREMIUM PRO-EX	0.25	0.5	1	1.5	2	3	5	10
Capacity Basic/Medium	kg	250	500	1,000	1,500	2,000	3,000	5,000	10,000
Capacity High	kg	250	500	900	1,250	1,250	2,000	3,200	6,400
Standard lift	m	3	3	3	3	3	3	3	3
Min. headroom (A)	mm	259	309	373	460	460	553	630	900
Hand chain force	daN	22	24	30.5	36	36	37	39	39.5
Hand chain operation length	m	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	14.8	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	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*
B (Dimensions)	mm	95	114	152	190	190	240	240	391
С	mm	99.4	110	139	150	150	158	158	166
D	mm	30	33	40	52	52	62	72	85
E	mm	22	22	28	33	33	37	44	60
F	m	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
Weight per m additional lift **	kg	1.2	1.4	1.6	2.2	2.2	3.0	5.2	14.8
Version Basic: PREMIUM PRO-EX with 3 m lift	Order No.	G10360	G10361	G10362	G10363	G10364	G10365	G10366	G10367
Version Medium: PREMIUM PRO-EX with 3 m lift	Order No.	G10368	G10369	G10370	G10371	G10372	G10373	G10374	G10375
Add. lifting height per m Basic / Medium	Order No.	G10270	G10271	G10242	G10243	G10243	G10272	G10246	G10247
Version High: PREMIUM PRO-EX with 3 m lift	Order No.	G10376	G10377	G10378	G10379	G10380	G10381	G10382	G10383
Add. lifting height per m High	Order No.	G10170	G10171	G10172	G10173	G10174	G10175	G10176	G10177

^{*} Grade 100 by versions Basic and Medium.

PREMIUM PRO 1

^{** 1} m operating length and 1 m lift











LST-EX trolleys

The undercarriages are manufactured to a high quality and are designed for hard and long-lasting operation.

The PREMIUM PRO-EX block and tackle hoists of the same load capacity can be easily attached and detached with the hook in and out

The trolleys have rubber buffers on both sides!

Large adjustment range

Due to the simple change of spacers, the trolleys offer the trolleys adjustability to many carriers.

There are two flange adjustment ranges. The standard bolts are adjustable for normal widths, the size 2 bolts offer an extended adjustment range up to large HE-B beams with 300 mm flange width.

Double safety

Double anti-tippers on both sides of all trolleys prevent the trolleys trolleys prevent the trolleys from climbing onto the girder. Angled side plates act as fall protection.

Stable side plates

Balanced load distribution on four wheels due to Self-adjustment with two carrying bolts! Slightly movable support bolts allow the side plates to automatically adjust to any unevenness of the running surface.

EX-protection version

For EX-protected applications, specially treated wheels and hand treated wheels and hand chains made of stainless steel are available, which makes the trolleys suitable for EX-areas up to zone 1 II 2 G IIC T4. the trolleys. The trolleys comply with the ATEX Directive 2014/34/EU.

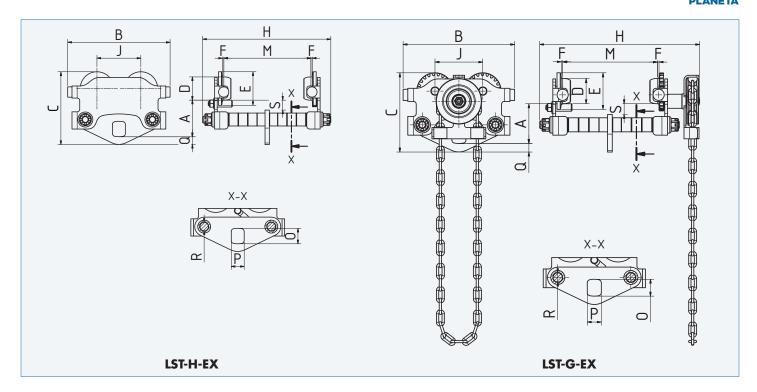
Types:

LST-H-EX = Push trolley

LST-G-EX = Gear type trolley

The trolleys shown are designed for use with manual hoists.





TYPE TYPE	LST-H-EX LST-G-EX	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
Flange width M minmax.	mm	50-203	64-203	88-203	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-EX	m	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Reel path for 1 m path LST-G-EX	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-EX)	mm	298	314	325	355	381	388	_
H (LST-G-EX)	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
Р	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-EX	kg	9	14	22	36	55	86	_
Net weight LST-G-EX	kg	11	16	24	39	59	89	190
Version Basic: LST-H-EX	Order No.	G20400	G20401	G20402	G20403	G20404	G20405	-
Version Medium: LST-H-EX	Order No.	G20410	G20411	G20412	G20413	G20414	G20415	-
Version High: LST-H-EX	Order No.	G20420	G20421	G20422	G20423	G20424	G20425	-
Version Basic: LST-G-EX with 2.5 m operation length	Order No.	G20430	G20431	G20432	G20433	G20434	G20435	G20436
Version Medium: LST-G-EX with 2.5 m operation length	Order No.	G20440	G20441	G20442	G20443	G20444	G20445	G20446
Version High: LST-G-EX with 2.5 m operation length	Order No.	G20450	G20451	G20452	G20453	G20454	G20455	G20456
Add. hand chain operation length/m (Basic/Medium)	Order No.	G20017	G20017	G20017	G20017	G20017	G20017	G20017
Add. hand chain operation length/m (High)	Order No.	G20520	G20520	G20520	G20520	G20520	G20520	G20520
Larger flange width minmax.	mm Order No.	50-305 G20090	64-305 G20091	68-305 G20093	100-305 G20094	114-305 G20095	124-305 G20097	136-305 G20099
Position lock device	Order No.	G20521	G20522	G20524	G20525	G20526	G20527	G20528
Extended handwheel shaft	Order No.	G20529	G20530	G20531	G20532	G20533	G20534	G20535

Other capacities on request!





EX-proof combined trolleys LHT-EX

By directly connecting the manual chain hoist and the trolley, the upper hook of the conventional manual chain hoist is saved and thus the overall height is significantly reduced. Here we use our proven Premium Pro manual chain block in the explosion-protected version.

The Premium Pro manual chain hoist with ball bearings is also suitable for heavy-duty use and protected against corrosion by its coated components. Additionally stainless steel components prevent sparking. The standard overload protection prevents overloading of the hoist and the supporting structure. If the Ex class Medium or High is required the load hook is additionally coated against coated against sparking.

The LHT trolley is coated on all sides to reduce sparking and the stainless steel ball bearing wheels ensure smooth running. wheels ensure smooth running.

Stainless steel load and hand chains are used depending on which Ex class is required..

Standard version:

- Premium Pro EX (BASIC, Medium, High)
 Manual chain hoist with 3 m lift and 2.5 m
 manual chain.
- Available as push trolley (TYPE: H) or as gear type trolley (TYPE: G)
- Thanks to the crowned wheel profiles, the the LHT is suitable for I-NP girders with inclined flanges as well as for all other HE girders with parallel flanges.

Special equipment (on request):

- Chain box for suspended chain
- Design for rust-prone areas with special chains
- Special flange widths up to 305 mm possible if the specified adjustment range (dimension H) is no longer sufficient.

Advantages of a combined trolley:

- Optimum utilisation of the often narrow installation space between machines and raceway supports
- Reduction of downtimes e.g. in ship engine rooms
- Less expensive bridge and jib cranes
- Labour savings during repair and maintenance work.

Types:

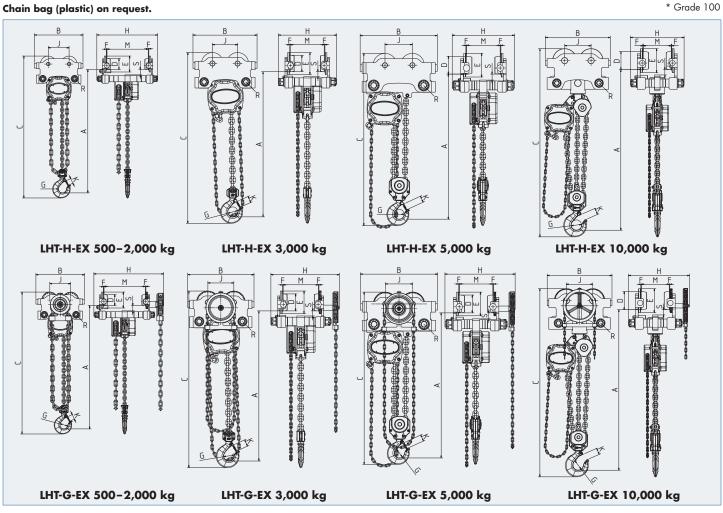
LHT-H-EX = Manual chain hoist with push trolley

LHT-G-EX = Manual chain hoist with gear type trolley



DI	Λ	M	Е	T.	٨	

ТҮРЕ	LHTH/-G-EX	005L	010L	015L	020L	030L	050L	100L
Capacity Basic/Medium	kg	500	1,000	1,500	2,000	3,000	5,000	10,000
Capacity High	kg	500	900	1,250	1,250	2,000	3,200	6,400
Standard lift	m	3	3	3	3	3	3	3
Number of chain falls		1	1	1	1	1	2	3
Chain size	mm	5 x 15	6 x 18	8 x 24	8 x 24	10 x 30	10 x 30	10 x 30*
Min. headroom (A)	mm	268	318	388	388	472	595	800
Flange width minmax. (M)	mm	50-203	64-203	88-203	88-203	100-203	114-203	124-203
Min. curve radius	m	0.85	1	1.1	1.1	1.3	1.4	2
Reel path for 1 m Hub	m	29.5	39.4	60.8	60.8	96.7	193.3	290
Reel path for 1 m path LHT-G	m	3	3.6	4.7	4.7	5.7	6.3	8
Weight with 3 m lift LHT-H	kg	13.5	22	42	42	56	82	143
Weight with 3 m lift LHT-G	kg	14.8	23.5	43.7	43.7	58	85	148
Version Basic: LHT-H-EX with 3 m lift	Order No.	G20460	G20461	G20462	G20463	G20464	G20465	G20466
Version Medium: LHT-H-EX with 3 m lift	Order No.	G20470	G20471	G20472	G20473	G20474	G20475	G20476
Additional lift per m (LHT-H-EX)	Order No.	G10271	G10242	G10243	G10243	G10272	G10246	G20077
Version High: LHT-H-EX mit 3 m Hub	Order No.	G20480	G20481	G20482	G20483	G20484	G20485	G20486
Additional lift per m (LHT-H-EX)	Order No.	G50025	G50026	G50027	G50028	G50029	G50030	G50031
Version Basic: LHT-G-EX with 3 m lift	Order No.	G20490	G20491	G20492	G20493	G20494	G20495	G20496
Version Medium: LHT-G-EX with 3 m lift	Order No.	G20500	G20501	G20502	G20503	G20504	G20505	G20506
Additional lift per m (LHT-G-EX)	Order No.	G20320	G20321	G20322	G20323	G20324	G20325	G20327
Version High: LHT-G-EX with 3 m lift	Order No.	G20510	G20511	G20512	G20513	G20514	G20515	G20516
Additional lift per m (High) (LHT-G-EX)	Order No.	G20536	G20537	G20538	G20539	G20540	G20541	G20542
Position lock device	Order No.	G20521	G20522	G20523	G20524	G20525	G20526	G20527
Larger flange width (M) minmax.	mm Order No.	64-305 G20090	64-305 G20091	88-305 G20092	88-305 G20093	100-305 G20094	114-305 G20095	124-305 G20097





SUPER-Corrosion protection (Basic/Medium)

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!

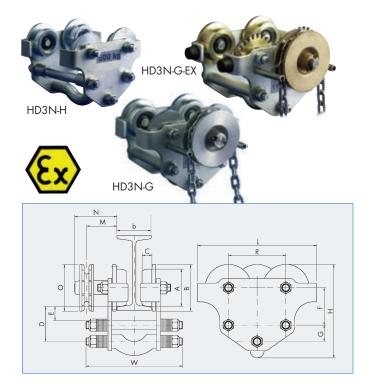
Capacities up to 25,000 kg on request.

EX-protection version (High)

Trolleys for use in environments with explosion danger (so-called exproof areas) are equipped with bronze wheels and sparkfree hand chains for EX-areas **up to (5)-Zone 1 II 2 G IIC T4.**The trolleys accord to ATEX Directive 2014/34/EU.

Many special version upon request.

- Person transporting trolleys acc. EN 1808 up to 4 t capacity
- Flame zinc plating
- NIROSTA trolleys up to 3,000 kg (non-corrosive steel)
- Bogie trolleys up to 10,000 kg
- Rack and pinion trolleys up to 12,500 kg



TYPE TYPE	HD3N-H-EX HD3N-G-EX	0.5	1	2 2	3.2 3.2	5 5	6.3 6.3	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	106/156	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	20	20	25	16	19	23	25
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
Min. curve radius	m	1	1.5	1.6	2	2.9	2.9	3.5	3.5	3.5	3.5
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	117	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
M	mm	_	65	65	70	100	100	115	115	115	135
Ν	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	1			
	Size 3 mm	_	270	330	360	380	380	b + 150 b	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	kg	3	5	11	18	33	35	85	90	95	150
Net weight HD3N-G	kg	_	6	12	19	35	36	90	95	100	160
Version Basic/Medium HD3N		G20120	G20121	G20122	G20123	G20124	G20125	G20126	G20127	G20128	G20290
Version High HD3N-H	Order No.	G20130	G20131	G20132	G20133	G20134	G20135	G20136	G20137	G20138	G20291
Version Basic/Medium HD3N-G with 2.5 m operation ler	Order No.	-	G20141	G20142	G20143	G20144	G20145	G20146	G20147	G20148	G20292
Version High HD3N-G with 2.5 m operation lea	Order No.	-	G20151	G20152	G20153	G20154	G20155	G20156	G20157	G20158	G20293
Add. hand chain operation length Standard zinc plated (2.5 m total)	^{/m} Order No.	G20118	G20118	G20118	G20118	G20118	G20118	G20118	G20118	G20118	G20118
Add. hand chain operation length V2A (EX) rustfree (2.5 m total)		G20119	G20119	G20119	G20119	G20119	G20119	G20119	G20119	G20119	G20119
Larger flange width size 2-4	Order No.	G20160	G20161	G20162	G20163	G20164	G20165	-	-	-	-



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. Use up to &-Zone IIA 3 GD c T4/T5/T6.

Very light weighted

aluminium housing





Chain case for TYPE	Size of chain case	Order No.
TCRM	up to 12 m chain	H10354
125	up to 20 m chain	H10355
TCRM	up to 12 m chain	H10354
250	up to 20 m chain	H10355
TCRM	up to 6 m chain	H10354
500	up to 10 m chain	H10355





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. <i>7</i>	11. <i>7</i>	11.7	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/TCS with 3 m lift and rope control	Order No.	H10070	H10071	H10072	H10088	H10108
TCR/TCS with 3 m lift and pendant control	Order No.	H10073	H10074	H10075	H10098	H10118
Additional lift per meter	Order No.	H10076	H10076	H10077	H10069	H10128

^{*} Equipped with chain case up to 4 m lifting height.



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!

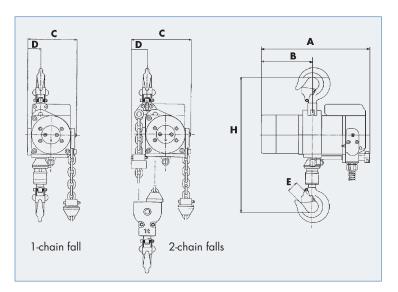
Air pressure

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 EN 418.
- Rotatable hook bundle in axial ball bearing





TYP 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	157	40	29	466
TCR 2000 C2/P2	342	156	194	50	29	580
TCR 20 C4/P4	549	247	230	200	100	1,350

ТҮРЕ	LIFTMASTER TCR	250C/P	500C/P	1000C2/P	1000C/P	2000C2/P	20-C4/P4
Capacity (Air pressure 6 bar - 1Bm)	kg	250	500	1,000	1,000	2,000	20,000
Lifting speed without load	m/min	20.5	20.5	10.3	11.3	5.7	1.2
Lifting speed with full load	m/min	10.5	10.5	5.3	6	3	0.8
Lowering speed without load	m/min	13.4	13.4	6.7	6.8	3.4	0.9
Lowering speed with full load	m/min	17.9	17.9	9	10.3	5.2	1.2
Air consumption with full load	I/sec	25	25	25	25	25	90
Number of chain falls		1	1	2	1	2	4
Air inlet R	inch	1/2″	1/2"	1/2"	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
Weight with standard lift	kg	31	31	34	35	40	470
TCR with 3 m Lift with rope control	Order No.	H10001	H10002	H10003	H10004	H10005	H10011
TCR with 3 m Lift with pendant contro	Order No.	H10015	H10016	H10017	H10018	H10019	H10025
Add. lift per meter	Order No.	H10029	H10029	H10030	H10031	H10032	H10038
Maintenance unit	Order No.	H10054	H10054	H10054	H10054	H10054	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	H10050
Add. control length rope control / m	Order No.	H10042	H10042	H10042	H10042	H10042	H10042
Add. control length pendant control / m	Order No.	H10043	H10043	H10043	H10043	H10043	H10043
Pneumatic-Special-Oil (Content: 2.5 Lite	r) Order No.	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



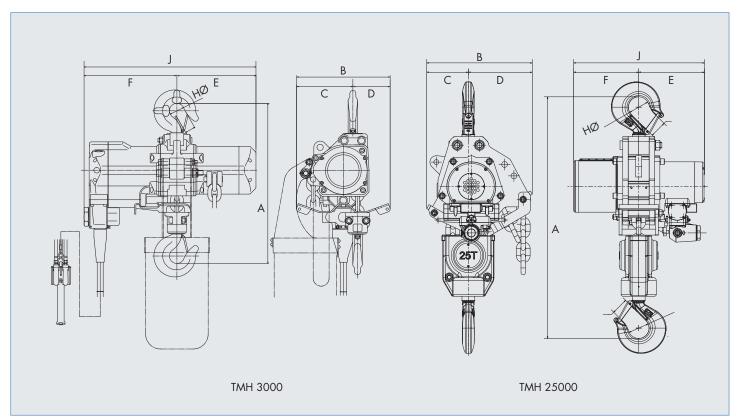
Manual push-button control



Rope control



31



ТҮРЕ	LIFTMASTER TMH	3000	6000	9000	12000	15000	25000
Capacity (Air pressure 6 bar - 1Bm)	kgt	3,000	6,000	9,000	12,000	15,000	25,000
Lifting speed without load	m/min	10.8	5.4	3.6	2.7	2.16	2.7
Lifting speed with full load	m/min	5.4	2.7	1.8	1.35	1.08	1.4
Lowering speed with full load	m/min	10.2	5.1	5.1	2.5	2.04	3
Air consumption with full load	l/sec	58.3	58.3	58.3	58.3	58.3	108
Number of chain falls		1	2	3	4	5	2
Air inlet R	Zoll	¾" BSPT	1½" BSPT				
Chain size	mm	13 x 36	23.5 x 66				
A (Dimensions)	mm	537	742	800	856	855	1,290
В	mm	314	371	455	398	466	566
С	mm	189	245	295	249	313	223
D	mm	125	126	160	149	152	343
E	mm	265	265	310	266	275	356
F	mm	311	311	265	309	300	352
Н	ø mm	50	65	53	83	84	100
I	mm	34	42	53	64	58	71
J	mm	576	576	576	575	575	708
Weight with standard lift	kg	99	124	170	190	280	581
TMH with 3 m Lift with rope control	Order No.	H10360	H10362	H10369	H10371	H10373	H10366
TMH with 3 m Lift with pendant control	Order No.	H10361	H10363	H10370	H10372	H10374	H10367
Add. lift per meter	Order No.	H10364	H10365	H10377	H10378	H10379	H10368
Maintenance unit	Order No.	H10054	H10054	H10056	H10056	H10056	H10090
Chain bag (galvanised steel) to 3 m lift)	Order No.	H10345	H10345	H10345	H10345	H10345	-
Add. air powered trolley DLK	Order No.	H10046	H10047	H10047	H10047	H10047	H10051
Add. control length rope control / m	Order No.	H10042	H10042	H10042	H10042	H10042	H10042
Add. control length pendant control / m	Order No.	H10043	H10043	H10043	H10043	H10043	H10043
Pneumatic-Special-Oil (Content: 2.5 Liter)	Order No.	H20566	H20566	H20566	H20566	H20566	H20566

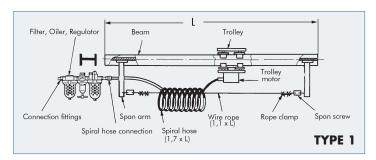
Other capacities on request!

TYPE 1: Spiral hose

Beam length up to 10 m are best to serve with a spiral hose for air supply. A rope is spanned parallel to the beam between two holding arms. The spiral hose winds around it. The plastic hose acts like a spiral spring, gets longer or shorter with the moving trolley.

Complete set for 3 meter beam drive:

Spiral hose with reserve $(1.7 \times L)$, twistable connections with male thread, 2 span arms, wire rope with reserve, 4 rope clamps and 2 span screws. The maintenance unit (filter, lubricator, regulator) should be fixed as near as possible to the trolley. Short beams may have it at the beginning of the beam.



TYPE 2: Drag hose

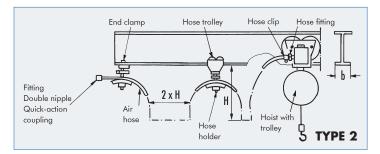
Pulling the air hose behind the trolley is the easiest way to bring air to the hoist. Small plastic trolleys carry the hose in certain distance behind the trolley. The hose hangs normally one meter down. So one hose carrier is needed each two meters. The hose is transparent with a strengthening textile inlet. It stands a pressure up to 15 bar. Water and oil cannot harm it. Since the trolleys are pushed together when the train comes into end position, the beam must be a little bit longer.

Complete set

The beside mentioned order number includes all accessory for a beam length of 3 m. In details: air hose plus 3 meter addition for leading down to the ground where a ball valve cuts air supply off. Plastic trolleys, end clamp, nipples end other fittings. If the hose shall be detachable, a quick-acting coupling shall be ordered.

ATTENTION:

Driving through curves need special equipment. Please inquire!



TYPE 3: C-track

A C-track is the most comfortable air supply. The total beam length can be used for driving. This TYPE is mostly used with slewing cranes because the complete length of swing arm is necessary to

drive on. Here the holding arm of C-rack can be fixed easily what is difficult in opposite under the ceiling in case of a double T-beam. C-tracks are available in lengths of 6 m. They are added with combiners to longer rails.

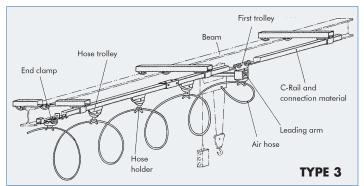
Complete set

The beside mentioned order number includes all accessory for a beam length of 3 m. In details: air hose plus 3 meter addition for leading down to the ground, where a ball valve cuts air supply off. Three holding arms, connection clamps, screws, C-rail holder, C-rails in 2 m length, C-rail connectors, first trolley leading arm, hose clamps, fittings.

All metal parts are zinc plated.

Remind when ordering that hoses have the correct diameter. Choose one size bigger in case that hoses are longer than 10 m. The longer the hose, the deeper the pressure drops.

Hoists need minimum 5 bar FLOWING pressure during operation. Each quick-acting coupling, every pipe bow, all valves etc. reduce flow pressure. Even when static pressure is 6 bar before operation, the flow pressure is a result of air friction in hoses and fittings and other users of the same ring pipe line. Keep an eye on your pressure gauge! A bad performance of air hoist is for 99% a result of wrong air supply and too low flow pressure.









Ball valve

Quick-action coupling

ТҮРЕ		1	2	3
Standard driving length	r	n 3	3	3
Complete 1/2 inch	Order No	. Н10180	H10181	H10182
1 m more rail length 1/2 inch	Order No	. Н10183	H10184	H10185
Complete 3/4 inch	Order No	. Н10186	H10187	H10188
1 m more rail length 3/4 inch	Order No	. Н10189	H10190	H10191
Complete 1 inch	Order No		H10193	H10194
1 m more rail length 1 inch	Order No		H10196	H10197
Special equipment:				
Quick-action coupling 1/2 inch	Order No		H10199	H10200
Quick-action coupling 3/4 inch	Order No		H10202	H10203
Quick-action coupling 1 inch	Order No		H10205	H10206
Air hose 1/2 inch - 6 bar	Order No		H10208	H10209
Air hose 3/4 inch - 6 bar	Order No		H10211	H10212
Air hose 1 inch - 6 bar	Order No		H10214	H10215
Air hose 1 1/4 inch - 6 bar	Order No	-	H10217	H10218
Air hose 1 1/2 inch - 6 bar	Order No	-	H10220	H10221



Electric chain hoist PEH-EX Equipment:

- Lifting capacity PEH: up to 2,500 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
- Temperature monitoring by thermocouple (Klixon) Lift movement is monitored

Classification



Ex II 3D Ex to IIIA T130°C Do

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



	Сар	Capacities in kg acc. ISO (FEM)*					Number	Chain size	Motor	3 x 400 V 50 Hz	Weight with	Weight each meter	Order No.	Order No.
TYPE	M3 (1Bm)	M4 (1Am)	M5 (2m)	M6 (3m)	M7 (4m)	with load m/min. 50 Hz	of chain falls		power kW		3 m lift	add. lift	PEH with	Add lift
	(10111)	(1/411)	(2111)	, ,	(4111)			mm		A	kg	kg	3 m iiii	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	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 EX	-	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 EX	-	2,500	2,000	1,600	1,250	2	2	7.45 x 23	1.5	6.5	66	1.37	H21606	H21610

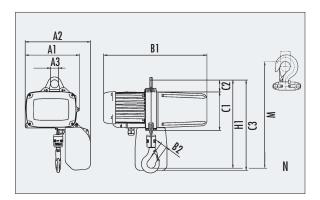
^{*} FEM classification:

Quantity of starts at pendant control per hour

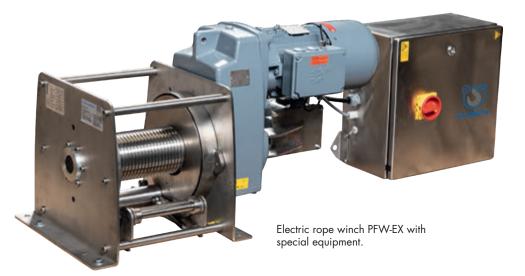
M3 (1Bm) = 150 starts per hour, 25% duty cycle M4 (1Am) = 180 starts per hour, 30% duty cycle M5 (2m) = 240 starts per hour, 40% duty cycle

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

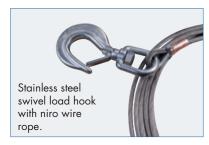
TYPE PEH		250/1	250/2	500/1	500/2	1000/1	1000/2
A1 (Dimensions)	mm	246	246	246	246	328	328
A2	mm	296	296	296	296	385	385
A3	mm	Ø 40	Ø 40	Ø 40	Ø 40	Ø 52	Ø 52
B1	mm	444	444	444	444	548	548
B2	mm	24	24	24	24	33	33
C1	mm	162	162	162	162	212	212
C2	mm	49	49	49	49	85	85
C3	mm	462	462	462	462	598	598
H1	mm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











Electric rope winch PFW-EX

With a load bearing capacity from 250 to 3000 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)
- \bullet 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

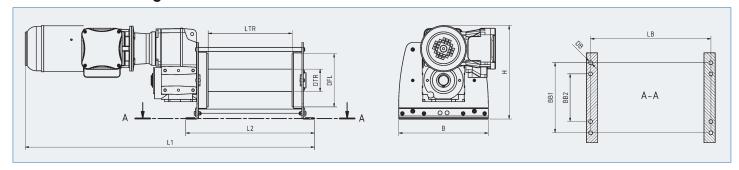
€ II 2 GD de IIB T4 T 135 °C

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 und weights - PFW-1D-EX



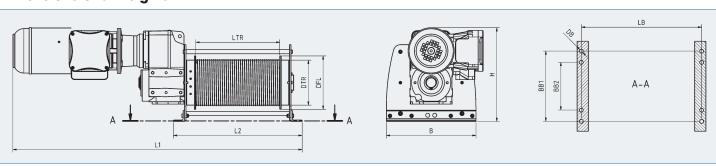
ТҮРЕ	PFW-1D-EX	250	500	750	1000	1500	2000	3000
L1*	approx. mm	1,000	1,050	1,070	1,160	1,180	1,300	1,350
L2	mm	460	460	460	500	500	570	570
В	mm	270	320	360	400	460	550	620
Н	approx. mm	310	340	420	460	550	630	690
LTR	mm	300	300	300	300	300	300	300
DTR	mm	65	80	92	105	130	155	185
DFL	mm	155	190	220	250	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

^{*} Length can vary according to configuration.

Double diameter drum

TYPE	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 und 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	17.5	17.5
Weight without accessories	approx. kg	40	65	85	120	170	280	425

 $[\]ensuremath{^{\star}}$ Length can vary according to configuration.













