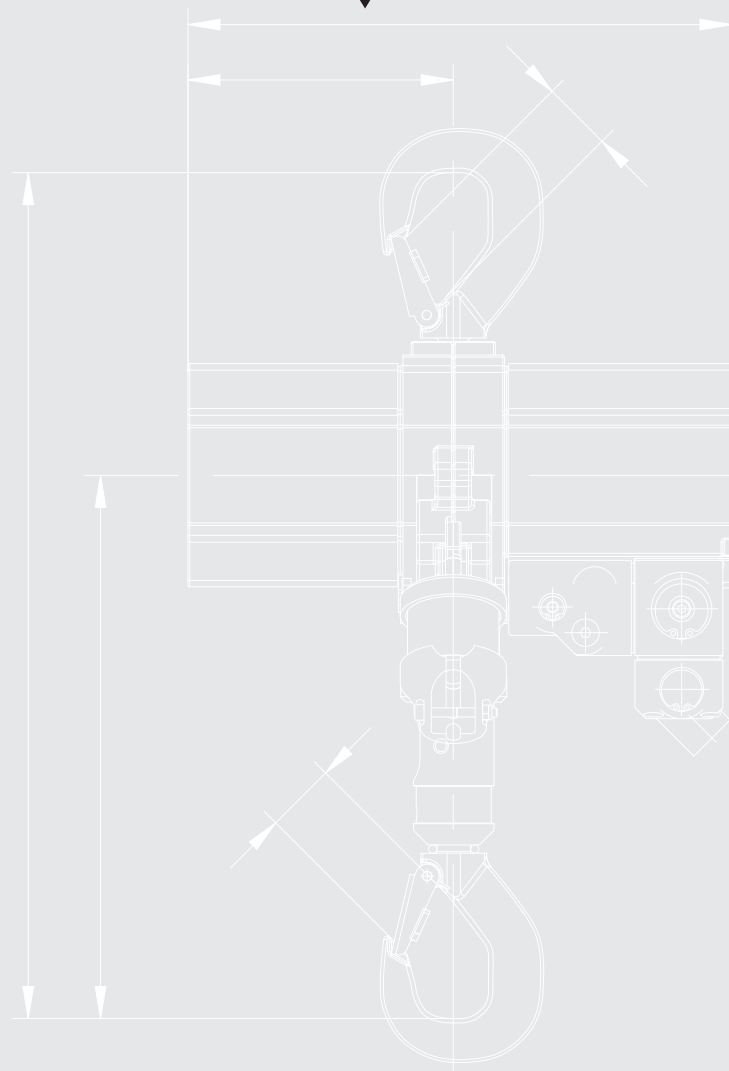


GENERAL CATALOGUE



J.D. NEUHAUS
powered by air!



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J.D. NEUHAUS
powered by air!

JDN AIR HOISTS mini

The JDN mini Series for General Duty

Carrying capacities:


125 kg, 250 kg, 500 kg, 980 kg

Air pressure: 6 bar

The **mini** widens the range of applications in the light duty sector as a handy, flexible and universally deployable hoist making it an ideal tool for a wide range of light/medium manufacturing applications. For heavier duty industrial applications we recommend the JDN PROFI series.

mini Manipulator

With the mini Manipulator loads can be lifted, lowered, manually traversed and positioned with only one hand. Further information on request.

Explosion Classification:  II 3 GD IIA T4(X)



mini 125

mini 1000
in manual trolley

mini
Manipulator

TECHNICAL DATA

Type		mini 125	mini 250	mini 500	mini 1000
Capacity	lbs kg	275 125	550 250	1100 500	2160 980
Number of chain strands		1	1	1	1
Motor output	kW	0.4	0.4	1	1
Air pressure	PSI bar	85 6	85 6	85 6	85 6
Lifting speed without load ¹	ft/min m/min	130 40	65 20	65 20	33 10
Lifting speed at full load ¹	ft/min m/min	49.5 15	26 8	33 10	16 5
Lowering speed at full load	ft/min m/min	99 30	52 16	59 18	33 10
Lowering speed without load	ft/min m/min	78.7 24	39.4 12	39.4 12	19.7 6
Air consumption at full load – lifting	cfm m ³ /min	17.5 0.5	17.5 0.5	42.5 1.2	42.5 1.2
Air consumption at full load – lowering	cfm m ³ /min	24.7 0.7	24.7 0.7	56.5 1.6	56.5 1.6
Air connection		G 3/8	G 3/8	G 1/2	G 1/2
Hose dimension (Ø inside)	inch. mm	0.35 9	0.35 9	0.5 13	0.5 13
Weight with 10 ft / 3 m lift	lbs kg	21 9.5	23.1 10.5	46.2 21	50.6 23
Chain dimension	mm	4 x 12	4 x 12	7 x 21	7 x 21
Weight of chain	lbs/ft kg/m	0.23 0.35	0.23 0.35	0.67 1.1	0.67 1.1
Height of lift	ft m	10 / 16 / 26 3 / 5 / 8			
Length of control at standard lift	ft m	6.5 / 13 / 20 2 / 4 / 6			
Noise level at full load ² – lifting	dB(A)	79	79	77	77
Noise level at full load ² – lowering	dB(A)	80	80	83	83

Group mechanism: M3 (1 Bm)

¹ Lifting speed at 2 m length of control. Longer control hoses decrease the lifting speeds.

² Measured at 1 m distance acc. to DIN 45635 part 20

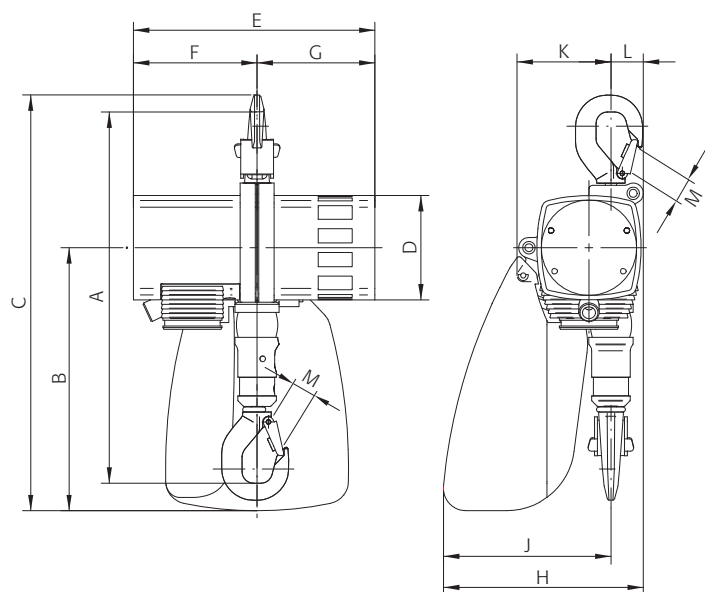
THE ADVANTAGES AT A GLANCE

- Price competitive alternative when compared to other types of powered hoists.
- Suitable for lube-free operation.
- Suitable for application in hazardous areas.
- Minimum components for ease of maintenance.
- Wear resistant motor braking system.
- Lightweight for easy handling.
- Also suitable for horizontal pulling.
- Extremely sensitive lever control with emergency shut-off valve, max. control length 6 m.
- Available lifting heights: 3 m, 5 m, 8 m.
- With chain box as standard.
- With manual trolley as option.



DIMENSIONS

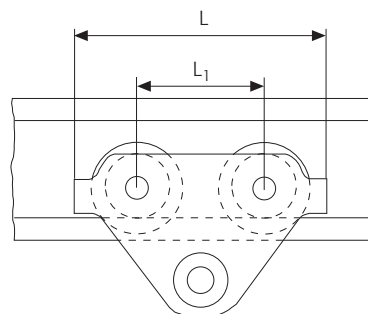
Type		mini 125	mini 250	mini 500	mini 1000
A	inch. mm	12.9 328	12.9 328	18.0 458	18.0 458
B	inch. mm	9.1 232	9.1 232	12.4 316	12.4 316
C	inch. mm	14.4 367	14.4 367	19.9 505	19.9 505
D	inch. mm	3.6 92	3.6 92	4.8 122	4.8 122
E	inch. mm	8.4 213	8.4 213	11.5 292	11.5 292
F	inch. mm	4.3 109	4.3 109	5.8 148	5.8 148
G	inch. mm	4.1 104	4.1 104	5.6 144	5.6 144
H	inch. mm	7 177	7 177	9.2 234	9.2 234
J	inch. mm	5.8 148	5.8 148	7.6 194	7.6 194
K	inch. mm	3.3 83	3.3 83	4.7 119	4.7 119
L	inch. mm	1.1 29	1.1 29	1.6 40	1.6 40
M	inch. mm	0.7 19	0.7 19	1.1 28	1.1 28



MANUAL TROLLEYS FOR JDN AIR HOISTS mini

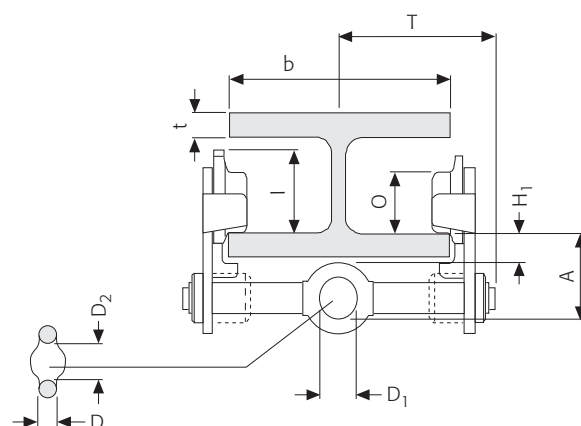
TECHNICAL DATA

Type		LN 500	LN 1000
For use with:		mini 125 mini 250	mini 500 mini 1000
Beam flange width b	inch. mm	2 - 8 50 - 220	2 - 8 58 - 220
max. flange thickness t	inch. mm	1.3 34	1.2 30
min. curve radius	inch. m	35.4 0.9	39.4 1.0
Weight	lbs kg	17 7.7	21 10.5



DIMENSIONS

Type		LN 500	LN 1000
A	inch. mm	3.1 79.5	3.1 79
D	inch. mm	0.7 17	0.7 17
D ₁	inch. mm	1 25	1.2 30
D ₂	inch. mm	1.2 30	1.4 35
H ₁	inch. mm	1.2 30	1 25
I	inch. mm	2.7 67.5	3.2 81.5
L	inch. mm	10.2 260	10.2 260
L ₁	inch. mm	5.1 130	5.1 130
O	inch. mm	2.2 55	2.7 68
T	inch. mm	5.7 144	5.9 151



Carrying capacities: 250 kg up to 100 t

Air pressure: 4 bar or 6 bar

Proven in practice: JDN Air Hoists **PROFI** Series are superior in all places where safety has priority. Unlike electric current, the compressed air power driving medium does not produce any ignition risk. This important advantage ensures JDN Air Hoists are especially suitable for applications in hazardous areas.

JDN Air Hoists **PROFI** Series are very robust and therefore suitable for tough industrial applications even in continuous working processes. According to your requirements there are various control systems available. For traversing loads there are also different trolley designs to meet your particular demands.

Where the JDN PROFI excellence has been proven

Aircraft construction, assembly lines, chemical industry, dairies, electro plating, explosives and pyrotechnics industry, food industry, foundries, furniture industry, glass industry, lacquer and varnish factories, match industry, mechanical engineering, auto industry, oil storage plants, on- and offshore, paint shops, paper industry, power plants, refineries, sawmills, shipyards, space industry, tempering plants, textile industry.

STANDARD FEATURES

- Suitable for application in hazardous areas
- Sensitive infinitely variable speed control for the precise positioning of loads
- Easy operation
- Suitable for lube-free operation
- Frequent switching and extended duty cycles
- Low maintenance
- Low headroom, lightweight
- Sound absorption
- Insensitive to dust, humidity and temperatures ranging from -20°C up to +70°C
- From 1 t upwards with overload protection (EC-version)
- Low sound emissions

TECHNICAL DETAILS

- Fail-safe starting, low maintenance vane motor
- Chain sprocket in the mid section runs in dust-proof maintenance-free ball bearings
- Planetary gear box with long-life grease lubrication, all gears made of tempered or hardened high-grade steel
- Load chain and hooks manufactured from high quality tempered steels with a breaking strength of five times the nominal load

THE ADVANTAGES AT A GLANCE

Strong – Fast – Silent

High performance with more efficiency by reliability plus high lifting and lowering speeds. Low sound emissions.

High Level of Safety

Integrated emergency stop switch in the main air supply*
From 1 t upwards with overload protection.

Oil-Free Operation

Patented, permanent motor lubrication during operation, using a high-performance grease. No additional motor lubrication required.

Patented Motor-Brake System

For operation with low maintenance and little wear. Based on the proven design of the JDN Mini Series.

Modern Design – Compact Size


Features no protruding control hoses or parts susceptible to damage, making the new PROFI also suitable for horizontal pulling.

100 % Duty Rating – No Downtime

Suited For Application In Hazardous Areas

According to EC Directive on Hazardous Locations 94/9/EEC

As standard:  II 2 GD IIA T4(X) / II 3 GD IIB T4(X)

With increased spark protection:  II 2 GD IIC T4(X)

*Up to PROFI 20 TI



The modular system at a glance

- Limit Switch for Trolley Travel
- Extension Arm for Control

Special High Performance Grease
for oil-free operation

- Service Unit
- Filter Regulator

Supply

- Spiral Hose
- Energy Chain
- C-rail
- Square Bar

Limit Switch for Lift

Trolleys

- Manual Trolley
- Reel Chain Trolley
- Motor Trolley

Housing Finish

- Standard JDN Green
- 4-coat offshore paint system
- Nickel plated

Filter Silencer

Chain Container

- Chain Box
- Chain Bag

Hook

- Standard
- Copper-plated
- Stainless Steel

Controls

- Rope Control
- FI Control (sensitive)
- E Control (single speed)
- F Control (multi-function)
- Remote Control
- Electropneumatic Interface

Ex Classification

Standard:

⊕ II 2 GD IIA T4(X) / II 3 GD IIB T4(X)

With increased spark protection:

⊕ II 2 GD IIB T4(X)

With increased spark protection
for explosion group IIC:

⊕ II 2 GD IIC T4(X)



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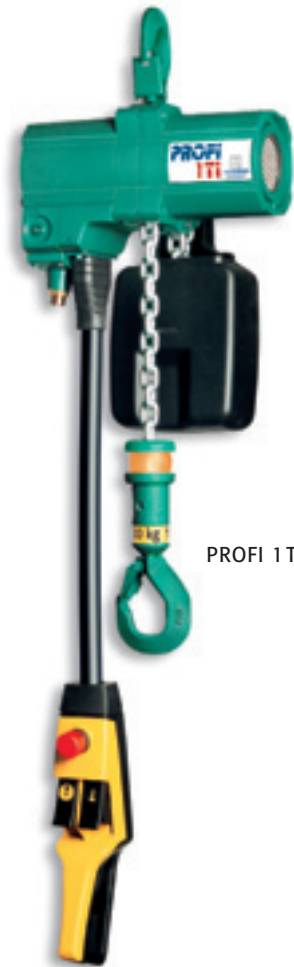
PROFI 025 TI - 2 TI

TECHNICAL DATA

Type		025 TI		05 TI		1 TI		2 TI	
Air pressure	PSI bar	65 4	85 6	65 4	85 6	65 4	85 6	65 4	85 6
Carrying capacity	mt	0.16	0.25	0.32	0.5	0.63	1	1.25	2
Number of chain strands		1		1		1		2	
Motor output	kW	0.6	1	0.6	1	0.6	1	0.6	1
Lifting speed at full load	ft/min m/min	65.6 20		32.8 10	36.1 11	16.4 5	18 5.5	8.2 2.5	8.9 2.7
Lifting speed without load	ft/min m/min	123 37.5	137.8 42	52.5 16	62.3 19	32.8 10	36.1 11	16.4 5	18 5.5
Lowering speed at full load	ft/min m/min	124.7 38		55.8 17		32.8 10	36.1 11	16.4 5	18 5.5
Air consumption at full load - lifting	cfm m³/min	24.7 0.7	42.4 1.2	24.7 0.7	42.4 1.2	24.7 0.7	42.4 1.2	24.7 0.7	42.4 1.2
Air consumption at full load - lowering	cfm m³/min	28.3 0.8	53 1.5	28.3 0.8	53 1.5	28.3 0.8	53 1.5	28.3 0.8	53 1.5
Air connection		G 1/2		G 1/2		G 1/2		G 1/2	
Hose dimension (ø inside)	inch. mm	0.5 13		0.5 13		0.5 13		0.5 13	
Weight with standard lift height and control length	lbs kg	59.5 27		59.5 27		61.6 27.5	61.7¹ 28¹	75¹ 34¹	
Chain dimension	mm	7 x 21		7 x 21		7 x 21		7 x 21	
Weight of 1 m chain	lbs kg	2.2 1		2.2 1		2.2 1		2.2 1	
Standard lift	ft m	10 3		10 3		10 3		10 3	
Length of control at standard lift	ft m	6.5 2		6.5 2		6.5 2		6.5 2	
Noise level at full load² - lifting	dB(A)	73	74	74	75	74	76	74	76
Noise level at full load² - lowering	dB(A)	77	78	77	78	77	78	77	78

Group mechanism at 6 bar: PROFI 025 TI M5 (2m), PROFI 05 TI - PROFI 2 TI M4 (1Am)

¹ With overload protection ² Measured at 1 m distance acc. to DIN 45635 part 20

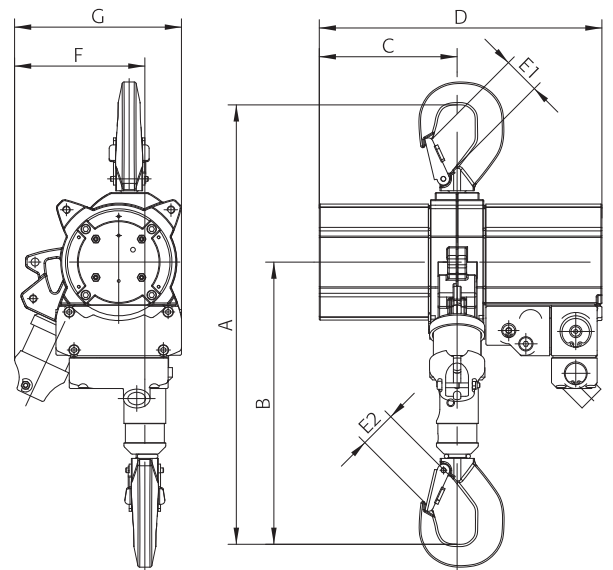


PROFI 1 TI

DIMENSIONS

Type		025 TI	05 TI	1 TI	2 TI
A min. headroom¹	inch. mm	17.7 450	17.7 450	17.7 450	19.6 498
B	inch. mm	11.3 288	11.3 288	11.3 288	13.2 336
C	inch. mm	5.7 145	5.7 145	5.7 145	5.7 145
D	inch. mm	11.7 297	11.7 297	11.7 297	11.7 297
E1	inch. mm	1.1 28	1.1 28	1.1 28	1.1 28
E2	inch. mm	1.1 28	1.1 28	1.1 28	1.1 28
F up to hook centre	inch. mm	5.4 137	5.4 137	5.4 137	5.4 137
G maximum width	inch. mm	6.9 176	6.9 176	6.9 176	7.2 183

¹ Chain containers increase the hoist headroom



PROFI 3 TI - 20 TI

TECHNICAL DATA

Type		3 TI		6 TI		10 TI		16 TI		20 TI	
Air pressure	PSI bar	65 4	85 6	65 4	85 6	65 4	85 6	65 4	85 6	65 4	85 6
Capacity	mt	3.2		6.3		10		16		20	
Number of chain standards		1		2		2		3		4	
Motor output	kW	1.8	3.5	1.8	3.5	1.8	3.5	1.8	3.5	1.8	3.5
Lifting speed without load	ft/min m/min	19.7 6	32.8 10	9.8 3	16.4 5	6.6 2	10.5 3.2	4.3 1.3	6.6 2	3.3 1	4.6 1.4
Lifting speed at full load	ft/min m/min	8.2 2.5	16.4 5	3.9 1.2	8.2 2.5	2.6 0.8	5.2 1.6	1.6 0.5	3.3 1	1.3 0.4	2.3 0.7
Lowering speed at full load	ft/min m/min	24.6 7.5	35.4 10.8	11.8 3.6	17.7 5.4	8.2 2.5	11.2 3.4	5.3 1.6	6.9 2.1	3.9 1.2	5.3 1.6
Air consumption at full load – lifting	cfm m ³ /min	71 2	142 4	71 2	142 4	71 2	142 4	71 2	142 4	71 2	142 4
Air consumption at full load – lowering	cfm m ³ /min	124 3.5	195 5.5	124 3.5	195 5.5	124 3.5	195 5.5	124 3.5	195 5.5	124 3.5	195 5.5
Air connection		G 3/4		G 3/4		G 3/4		G 3/4		G 3/4	
Hose dimension (Ø inside)	inch. mm	0.7 19		0.7 19		0.7 19		0.7 19		0.7 19	
Weight with standard lift height and control length	lbs kg	189.6 86		242.5 110		343.9 156		529.1 240		627 285	
Chain dimension	mm	13 x 36		13 x 36		16 x 45		16 x 45		16 x 45	
Weight of chain	lbs/ft kg/m	2.6 3.8		2.6 3.8		3.9 5.8		3.9 5.8		3.9 5.8	
Standard lift	ft m	10 3		10 3		10 3		10 3		10 3	
Length of control at standard lift	ft m	6.5 2		6.5 2		6.5 2		6.5 2		6.5 2	
Noise level at full load ¹ - lifting	dB(A)	74	78	74	78	74	78	74	78	74	78
Noise level at full load ¹ - lowering	dB(A)	79	80	79	80	79	80	79	80	79	80

Group mechanism at 6 bar: M3 (1 Bm)

¹ Measured at 1 m distance acc. to DIN 45635 part 20

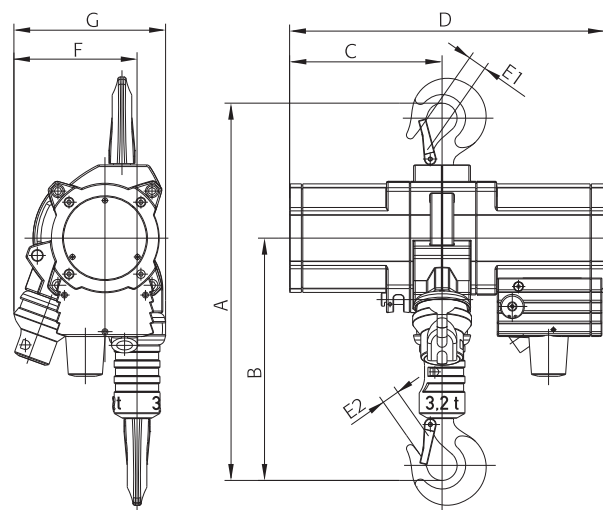


PROFI 6 TI

DIMENSIONS

Type		3 TI	6 TI	10 TI	16 TI	20 TI
A min. headroom ¹	inch. mm	23.3 593	26.5 674	32 813	35.4 898	40.6 1030
B	inch. mm	14.7 373	17.9 454	21.6 548	23.5 598	26.4 670
C	inch. mm	9.2 233	9.2 233	12.1 308	15 382	15 382
D	inch. mm	19 483	19 483	22.6 575	27.2 692	27.2 692
E1	inch. mm	1.6 40	1.6 40	1.7 44	2.1 53	3 75
E2	inch. mm	1.2 30	1.6 40	1.7 44	2.1 53	3 75
F up to hook centre	inch. mm	7.4 187	6.1 154	7.8 197	7.8 199	7.1 180
G maximum width	inch. mm	9.2 233	9.2 233	12 306	12.1 308	12.4 315

¹ Chain containers increase the hoist headroom



PROFI 25 TI - 100 TI

TECHNICAL DATA

Type		25 TI	37 TI		50 TI		100 TI
Air pressure	PSI	85	65	85	65	85	85
	bar	6	4	6	4	6	6
Capacity	mt	25	37.5		50		100
Number of chain standards		2	3		4		4
Motor output	kW	6	4	6	4	6	10
Lifting speed without load	ft/min	7.5	1.1	3.6	2.3	4.3	2.3
	m/min	2.3	1.1	1.6	0.7	1.3	0.7
Lifting speed at full load	ft/min	3.6	1.3	2.1	1.1	0.9	1.1
	m/min	1.1	0.4	0.7	0.3	0.5	0.4
Lowering speed at full load	ft/min	6.2	3.3	4.9	2.9	4.6	2.6
	m/min	1.9	1.0	1.5	0.9	1.4	0.8
Air consumption at full load - lifting	cfm	194.8	166.4	194.8	166.4	194.8	389.5
	m³/min	5.5	4.7	5.5	4.7	5.5	11
Air consumption at full load - lowering	cfm	230	194.8	230	198.2	230	424.9
	m³/min	6.5	5.5	6.5	5.6	6.5	12
Air connection		G1	G1		G1		G 1 1/2
Hose dimension (Ø inside)	inch.	1.0	1.0		1.0		1.4
	mm	25	25		25		35
Weight with standard lift height and control length	lbs	1098	1936		1885		5423
	kg	498	880		855		2460
Chain dimension	mm	23.5 x 66	23.5 x 66		23.5 x 66		32 x 90
Weight of 1 m (3.28 ft) chain	lbs/ft	8.2	8.2		8.2		14.3
	kg/m	12.2	12.2		12.2		21.3
Standard lift	ft	10	10		10		10
	m	3	3		3		3
Length of control at standard lift	ft	6.5	6.5		6.5		6.5
	m	2	2		2		2
Noise level at full load¹ - lifting	dB(A)	83	77	83	77	83	88
Noise level at full load¹ - lowering	dB(A)	83	79	83	79	83	89

Group mechanism at 6 bar: PROFI 25 TI - PROFI 50 TI M3 (1 Bm), PROFI 100 TI M2 (1 Cm)

Versions with 4 bar for PROFI 25 TI and PROFI 100 TI on request.

¹ Measured at 1 m distance acc. to DIN 45635 part 20

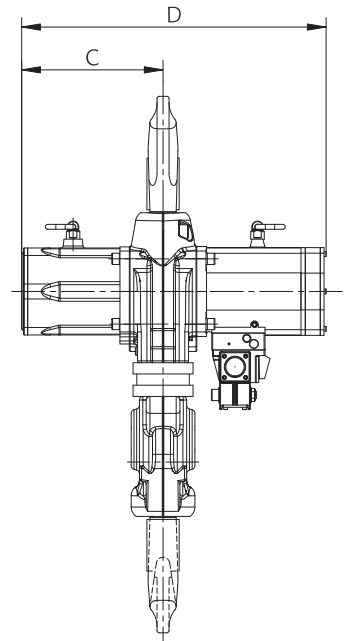
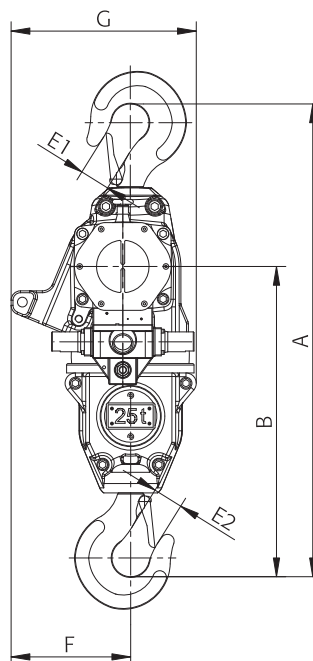


PROFI 100 TI

DIMENSIONS

Type		25 TI	37 TI	50 TI	100 TI
A min. headroom¹	inch.	49.6	55.2	67	86.6
	mm	1260	1400	1700	2200
B	inch.	32.6	34.3	45	58.1
	mm	827	869	1144	1475
C	inch.	14.8	14.8	18.2	28.9
	mm	377	377	463	734
D	inch.	32	32	38.6	59.3
	mm	812	812	980	1505
E1	inch.	2.9	4.05	4.1	4.7
	mm	75	103	103	120
E2	inch.	2.9	4.05	4.1	4.7
	mm	75	103	103	120
F up to hook centre	inch.	12.6	20.4	12.2	17.3
	mm	318	518	310	440
G maximum width	inch.	19.2	29.4	21.2	30.2
	mm	488	745	539	767

¹ Chain containers increase the hoist headroom



JDN AIR HOISTS M SERIES

Carrying capacities: 1 t up to 6 t

Air pressure: 4 bar

JDN Air Hoists of the **M series** were originally developed for underground mining operations. Due to their versatility they are nowadays also deployed in many different industrial fields. Generally they have the same features as the hoists of the PROFI series but operate with an air pressure of only 4 bar. Two different control systems are available.

FURTHER SIGNIFICANT FEATURES AS STANDARD:

- Suitable for use in hazardous areas with risk of explosion
- Two chain falls for alternate working
- Specially designed for horizontal moving of loads

TECHNICAL DATA

Type		M 64	M 63 D
Carrying capacity	mt	1/2	3/6
Number of chain strands		1/2	1/2
Motor output	kW	0.77	1.3
Air pressure	PSI bar	65 4	65 4
Lifting speed at full load*	ft/min m/min	9.8/4.9 3/1.5	7.2/3.6 2.2/1.1
Lifting speed without load*	ft/min m/min	26.3/13.1 8/4	16.4/8.2 5/2.5
Lowering speed at full load*	ft/min m/min	41/21.3 12.5/6.5	19.7/9.8 6/3
Air consumption at full load - lifting	cfm m ³ /min	35.3 1.0	77.7 2.2
Air consumption at full load - lowering	cfm m ³ /min	70.6 2.0	113 3.2
Air connection		Rd 32 x 1/8"	Rd 32 x 1/8"
Hose dimension (Ø inside)	inch. mm	0.75 19	0.75 19
Weight with standard lift height and control length	lbs kg	132.3 60	220.5 100
Weight without chain, without control	lbs kg	68.3 31	112.4 51
Chain dimension	mm	9 x 27	13 x 36
Weight of 1 m (3.28 ft) chain	lbs kg	4 1.8	8.4 3.8
Heights of lift	ft m	16.4/8.2 5/2.5	16.4/8.2 5/2.5
Length of control	ft m	6.6 2	6.6 2
Noise level at full load ¹	dB(A)	75 - 84	79 - 83

Group mechanism: M3 (1 Bm)

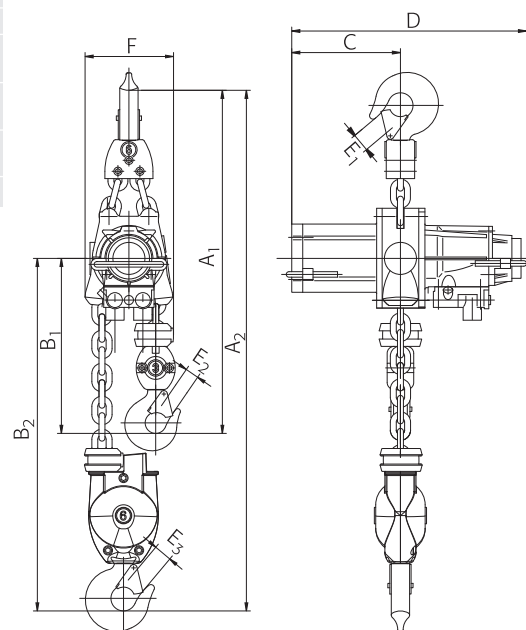
¹ Measured at 1 m distance acc. to DIN 45635 part 20

DIMENSIONS

Type		M 64	M 63 D
A ₁ (smallest headroom with 1/1 chain strands)	inch. mm	23.7 603	29.5 750
A ₂ (smallest headroom with 1/2 chain strands)	inch. mm	26 660	34.3 870
B ₁ (with 1/1 chain strands)	inch. mm	12.3 313	14.6 370
B ₂ (with 1/2 chain strands)	inch. mm	14.6 370	19.3 490
C	inch. mm	6.9 175	9.33 237
D	inch. mm	14.8 375	20 507
E ₁ (Hook opening)	inch. mm	1.2 30	1.6 40
E ₂ (Hook opening)	inch. mm	1.2 30	1.6 40
E ₃ (Hook opening)	inch. mm	1.2 30	1.2 30
F (maximum width)	inch. mm	5.7 144	7.7 195



M 63 D



Carrying capacities: up to 20 t

JDN Trolleys are available for all hoists of the PROFI and M series:

- As manual trolleys (LN) for pushing or pulling the trolleys by hand
- As reel chain trolleys (LH) for moving the trolleys by operating the reel chain mechanism
- As motorised trolley (LM) powered by an air motor

STANDARD FEATURES

- Easy to install
- With anti-climb and anti-drop devices
- Robust manufacture requiring little maintenance
- Able to negotiate curves

OPTIONS

- Rack and pinion drive
- Spark-resistant package
- Offshore paint

ENERGY FEEDING SYSTEMS

The air supply can be fed by various systems:

- Energy chain
- C-rail
- Square rail
- Spiral hose
- Hose trolleys

TECHNICAL DATA

The designation of the trolley is composed of the short code (LN, LH, LM) and the carrying capacity acc. to table, as for example LN 1 t.

JDN Air Hoist PROFI	Type	025 TI	05 TI	1 TI	2 TI	3 TI	6 TI	10 TI	16 TI	20 TI
Carrying capacity of trolley LN	mt	0.5		1	2	3.2	6.3	10-16		–
Carrying capacity of trolley LH and LM	mt		2			3.2	6.3	10-16		20
Carrying capacity of hoist with trolley	mt	0.25	0.5	1	2	3.2	6.3	10	16	20
Weight of Manual Trolley (LN)	lbs kg	17 7.7		23.1 10.5	39.6 18	57.2 26	257.4 117	264 120		– –
Weight of Reel Chain Trolley (LH)	lbs kg		57.2 26			81.4 37	279.4 127	418.9 190		573.2 260
Weight of Motor Trolley (LM)	lbs kg		70.4 32			72.6 33	272.8 124	418.9 190		573.2 260
Hoist weight, standard lift	lbs kg	59.5 27	59.5 27	61.7 28	75 34	189.2 86	242 110	343.2 156	528 240	628.3 285
Total weight with standard lift Manual Trolley	lbs kg	76.5 34.7	76.5 34.7	84.9 38.5	114.6 52	246.4 112	499.2 227	607.2 276	792 360	– –
Total weight with standard lift Reel Chain Trolley	lbs kg	130.1 59	130.1 59	132.3 60	145.5 66	270.6 123	521.4 237	762.8 346	948 430	1201.5 545
Total weight with standard lift Motor Trolley	lbs kg	116.8 53	116.8 53	119.1 54	132.3 60	261.8 119	514.8 234	762.8 346	948 430	1201.5 545
Weight of 1 m (3.28 ft) chain	lbs kg		0.7 1			2.6 3.8		3.9 5.8		
Number of chain strands			1		2	1	2	2	3	4
Chain dimension	mm		7 x 21			13 x 36		16 x 45		
Air pressure Motor Trolley	PSI bar					85 6				
Air consumption Motor Trolley (at full load)	cfm m ³ /min			21.3 0.6				46.1 1.3		
Air consumption hoist (at full load)	cfm m ³ /min		53 1.5					194.2 5.5		
Motor output Motor Trolley	kW			0.2				0.7		
Motor output hoist	kW		1					3.5		
Travelling distance Reel Chain Trolley, chain reel off	30 ft 10 m			4.6 1.4				3.6 1.1	3.3 1.0	
Travelling speed Motor Trolley (at full load)	ft/min m/min			29.5* / 14 9* / 14				16.4* / 12 5* / 12		
Hose connection Motor Trolley			G 1/2					G 3/4		
Minimum radius Manual Trolley	ft m	3 ¹ 0.9 ¹	3.3 ¹ 1.0 ¹	3.9 ¹ 1.2 ¹	1.6 ² 0.5 ²			3.3 ² 1 ²		– –
Minimum radius Reel Chain Trolley and Motor Trolley	ft m		1.6 ² 0.5 ²					3.3 ² 1 ²		4.9 ² 1.5 ²
Max. bottom flange thickness t Manual Trolley	inch. mm	1.2 30	1.0 25	1.1 28	1.6 40			2.6 65		– –
Max. bottom flange thickness t Reel Chain and Motor Trolley	inch. mm		1.6 40					2.6 65		
Max. bottom flange width b Manual Trolley	inch. mm	8.7 220		12 305			12.2 310			– –
Max. bottom flange width b Reel Chain and Motor Trolley	inch. mm		11 280				12.2 310			
Min. bottom flange width b Manual Trolley	inch. mm	2 50	2.3 58	2.6 66	2.1 54		4.9 125			– –
Min. bottom flange width b Reel Chain and Motor Trolley	inch. mm		2 50		2.1 54		4.9 125			5.8 148
Noise level at Motor Trolley ³	dB(A)					80				

* 1 st speed of F control with two speeds

¹ Measured at the middle of the beam

² Measured at the inner edge of the beam

³ Measured at 1 m distance acc. to DIN 45635 part 20

- Capacities over 20t see JDN Monorail Air Hoists page 32
- Versions with one and two hooks (e.g. BBH) see page 26
- Low Headroom Trolleys for restricted headrooms see page 28

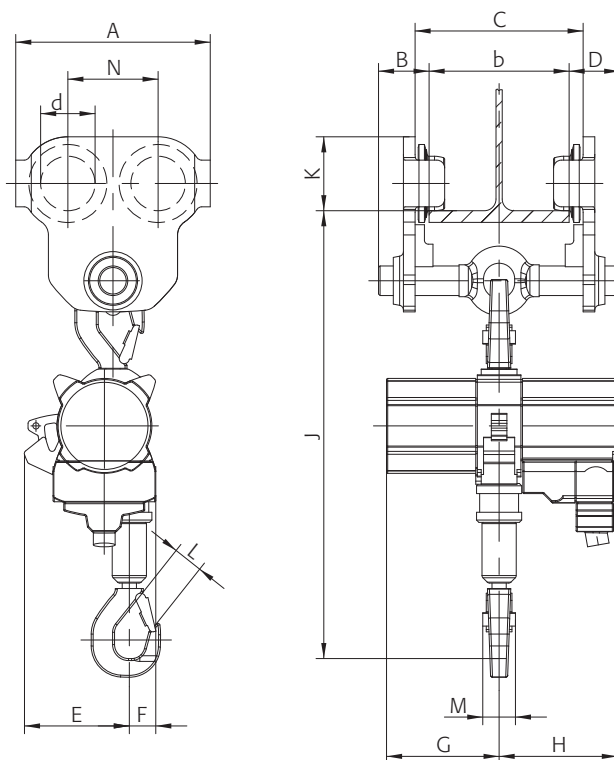


PROFI in Manual Trolley (LN)

DIMENSIONS

JDN Air Hoist PROFI		025 TI	05 TI	1 TI	2 TI	3 TI	6 TI	10 TI	16 TI
With Trolley		LN 0.5 t		LN 1 t	LN 2 t	LN 3.2 t	LN 6.3 t	LN 10-16 t	
A	inch. mm	10.2 260			12.2 310	11.5 292	19.7 500	19.3 490	
B max.	inch. mm	4.7 119		4.8 122	6.4 162	4.5 113	5.6 141	5.8 146	
C	inch. mm	b + 1.1 b + 28			b + 1 b + 26	b + 2.4 b + 60		b + 2.8 b + 70	
d	inch. mm	2.2 55		2.7 68	3.2 80	3.3 84		6.5 165	
D max.	inch. mm	4.7 119			4.8 122	4.5 113	5.6 141	5.8 146	
E	inch. mm	5.4 137				7.4 187	6.1 154	7.8 197	7.8 199
F	inch. mm	1.5 39			1.8 46		3.1 79	4.3 109	
G	inch. mm	5.7 145				9.2 233		12.1 308	15 382
H	inch. mm	6 152				9.8 250		10.5 267	12.2 310
J* (mounted)	inch. mm	—	—	—	—	25 635	30 763	37.2 944	39.3 997
J* (suspended)	inch. mm	20.9 530			23.5 597	31.4 798	36.2 919	44.5 1131	47.8 1215
K	inch. mm	2.7 67.5		3.2 81.5	3.7 94	4.2 107		7.8 198	
L	inch. mm	1.1 28				1.2 30	1.6 40	1.7 44	2.1 53
M	inch. mm	1.7 42					2 51	2.6 66	3.2 82
N	inch. mm	5.1 130			5.9 150	5.4 136		9.3 236	

* Chain containers increase the hoist headroom



PROFI 1 TI in
Manual Trolley



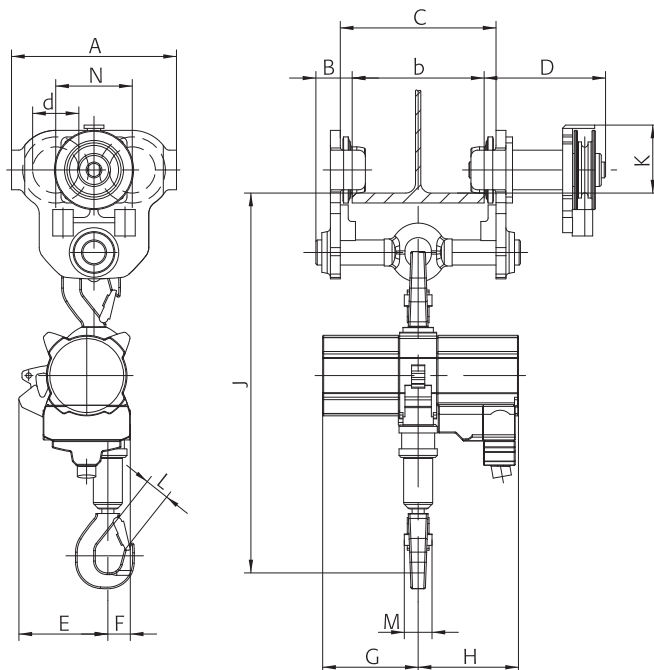
J.D. NEUHAUS
powered by air!

PROFI in Reel Chain Trolley (LH)

DIMENSIONS

JDN Air Hoist PROFI		025 TI	05 TI	1 TI	2 TI	3 TI	6 TI	10 TI	16 TI	20 TI
With Trolley		LH 2 t				LH 3.2 t	LH 6.3 t	LH 10-16 t		LH 20 t
A	inch. mm	9.8 250				11.5 292	19.7 500	19.3 490		23.6 600
B max.	inch. mm	5.1 130				4.5 113	5.6 141	5.8 146		6.1 155
C	inch. mm	b + 1.4 b + 36				b + 2.4 b + 60		b + 2.8 b + 70		b + 2.7 b + 68
d	inch. mm	2.8 70				3.3 84		6.5 165		7.3 185
D	inch. mm	11.2 284				11.6 294	12.1 307	12.3 312		12.6 320
E	inch. mm	5.4 137				7.4 187	6.1 154	7.8 197	7.8 199	7.1 180
F	inch. mm	1.5 39				1.8 46	3.1 79	4.3 109		5.3 135
G	inch. mm	5.7 145				9.2 233		12.1 308	15 382	15 382
H	inch. mm	6 152				9.8 250		10.5 267	12.2 310	12.2 310
J* (mounted)	inch. mm	—	—	—	—	25 635	30 763	37.2 944	39.3 997	44.9 1140
J* (suspended)	inch. mm	22.2 563				24.1 611	31.4 798	36.2 919	44.5 1131	47.9 1216
K	inch. mm	4.1 103				4.3 110		7.8 198		8.9 226
L	inch. mm	1.1 28				1.2 30	1.6 40	1.7 44	2.1 53	2.9 75
M	inch. mm	1.7 42					2 51	2.6 66	3.2 82	3.4 86
N	inch. mm	4.6 116				5.4 136		9.3 236		10.8 274

* Chain containers increase the hoist headroom



PROFI 1 TI in Reel Chain Trolley

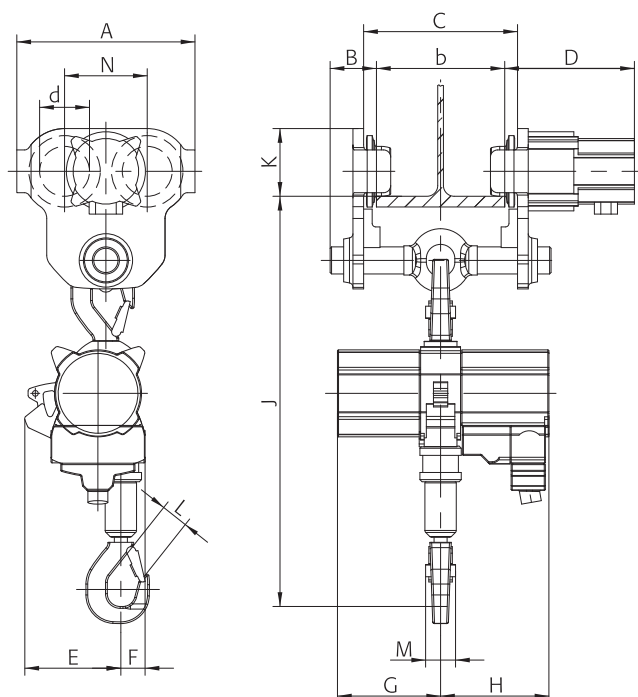


PROFI in Motor Trolley (LM)

DIMENSIONS

JDN Air Hoist PROFI		025 TI	05 TI	1 TI	2 TI	3 TI	6 TI	10 TI	16 TI	20 TI
With Trolley		LM 2 t				LM 3.2 t	LM 6.3 t	LM 10-16 t		LM 20 t
A	inch. mm		9.8 250			11.5 292	19.7 500	19.3 490		23.6 600
B max.	inch. mm		5.1 130			4.5 113	5.6 141	5.8 146		6.1 155
C	inch. mm		b + 1.4 b + 36			b + 2.4 b + 60		b + 2.8 b + 70		b + 2.7 b + 68
d	inch. mm		2.8 70			3.3 84		6.5 165		7.3 185
D	inch. mm		7.2 183			11.7 297		8.1 205		12.5 318
E	inch. mm		5.4 137			7.4 187		6.1 154	7.8 197	7.1 180
F	inch. mm		1.5 39			1.8 46		3.1 79	4.3 109	5.3 135
G	inch. mm		5.7 145			9.2 233		12.1 308	15 382	15 382
H	inch. mm		6 152			9.8 250		10.5 267	12.2 310	12.2 310
J* (mounted)	inch. mm	— —	— —	— —	— —	25 635	30 763	37.2 944	39.3 997	44.9 1140
J* (suspended)	inch. mm		22.2 563		24.1 611	31.4 798	36.2 919	44.5 1131	47.9 1216	58.7 1490
K	inch. mm		3.7 95			4.2 107		8.5 215		8.6 218
L	inch. mm		1.1 28			1.2 30		1.6 40	1.7 42	2.1 55
M	inch. mm		1.7 42			2 51		2.6 66	3.2 82	3.4 86
N	inch. mm		4.6 116			5.4 136		9.3 236		10.8 274

* Chain containers increase the hoist headroom



PROFI 2TI in Motor Trolley



Capacities: 500 kg up to 3000 kg

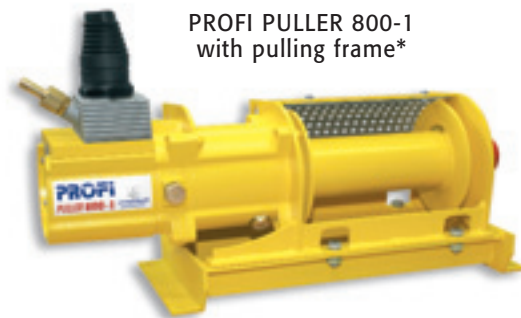
J.D.Neuhaus has been the market leader in compressed air powered lifting equipment for decades. In our latest milestone we have added a series of air winches to our product line.

PROFI LIFTER 500-1 PROFI PULLER 800-1

JDN Lifting Winches (LIFTER 500-1) with capacities of 500 kg at the 5th layer and 750 kg at the 1st layer and Pulling Winches (PULLER 800-1) with capacities of 530 kg at the 5th layer and 800 kg at the 1st layer. The low weight of under 30 kg makes this series mobile, ideal for multiple applications. The winches provide sensitive operation by direct controls (push button or lever) over the full load range.




PROFI LIFTER 500-1



PROFI PULLER 800-1
with pulling frame*

THE ADVANTAGES AT A GLANCE

- Drum integrated exhaust air cooled planetary gearbox for minimum maintenance and maximum reliability at a 100 % duty cycle.
- Compact design and low weight for mobile applications.
- Powerful pneumatic drive with sensitive control.
- High rope capacity up to 5 layers.
- Ideal for operation in hazardous areas
 II 3 GD IIA T4(X).

TECHNICAL DATA

Type		PROFI LIFTER 500-1	PROFI PULLER 800-1
Air pressure	PSI bar	85 6	
Lifting capacity in the last layer	lbs kg	1100 500	– –
Lifting capacity in the first layer	lbs kg	1650 750	– –
Pulling capacity in the last layer	lbs kg	– –	1170 530
Pulling capacity in the first layer	lbs kg	– –	1750 800
Max. number of rope layers		5	
Max. motor power	kW	1	
Air connection		G1/2	
Air consumption at nominal load - lifting/pulling	cfm m ³ /min	42.4 1.2	38.9 1.1
Air consumption at nominal load - lowering	cfm m ³ /min	53 1.5	– –
Hose size (ø inside)	inch. mm	0.6 13	
Rope drum diameter	inch. mm	33 76	
Rope diameter	inch. mm	3/16 - 1/4 5.5 - 7.0	
Minimum breaking force of rope	lbf kN	5508 24.5	5283 23.5
Weight (without rope, with control)	lbs kg	64.6 29.3	68.8 31.2
Control length (FD control)	ft m	4.9 1.5	
Noise level at nominal load - lifting/pulling ¹	dB(A)	85	87
Noise level at nominal load - lowering ¹	dB(A)	89	–

Group mechanism: M4 (1 Am)

¹ Measured at 1 m distance acc. to DIN 45635 part 20

* Option



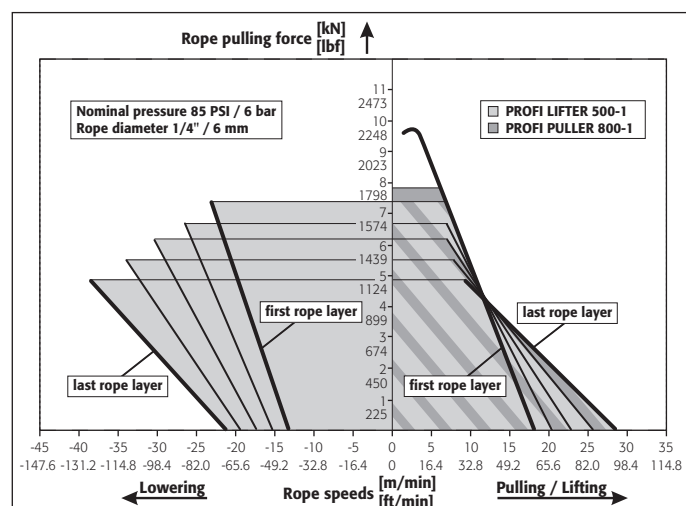
■ PERFORMANCE DATA

PROFI LIFTER 500-1					
Rope diameter 1/4" / 6 mm		Speeds [ft/min]/[m/min]			
		Lifting		Lowering	
Rope Layer		1. Layer	5. Layer	1. Layer	5. Layer
Load [lbs]/[kg]	0	58.1 / 17.7	92.6 / 28.2	43.7 / 13.3	69.6 / 21.2
	550 / 250	46.2 / 14.1	62.4 / 19.0	54.5 / 16.6	96.9 / 29.6
	1100 / 500	34.3 / 10.4	32.2 / 9.8	65.3 / 19.9	124.3 / 37.9
	1650 / 750	22.4 / 6.8	–	76 / 23.2	–

PROFI PULLER 800-1					
Rope diameter 1/4" / 6 mm		Speeds [ft/min]/[m/min]			
		Pulling		Unwinding	
Rope Layer		1. Layer	5. Layer	1. Layer	5. Layer
Load [lbs]/[kg]	0	58.1 / 17.7	92.6 / 28.2	43.7 / 13.3	69.6 / 21.2
	585 / 300	45.5 / 13.4	60.4 / 17.1	–	–
	1170 / 530	32.8 / 10.0	28.2 / 8.1	–	–
	1750 / 800	20.2 / 6.1	–	–	–

■ CHARACTERISTIC LOAD CURVES

PROFI LIFTER 500-1 / PROFIL PULLER 800-1

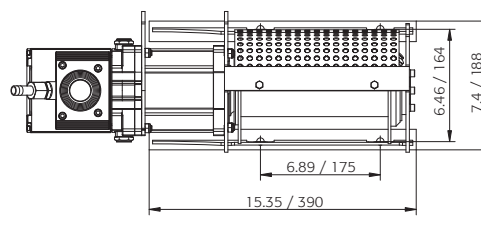
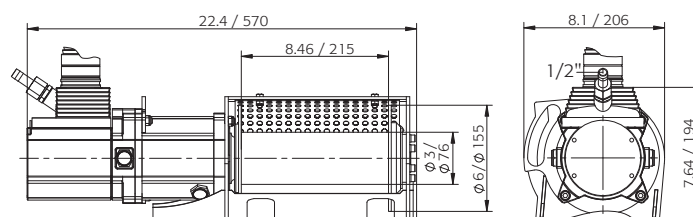
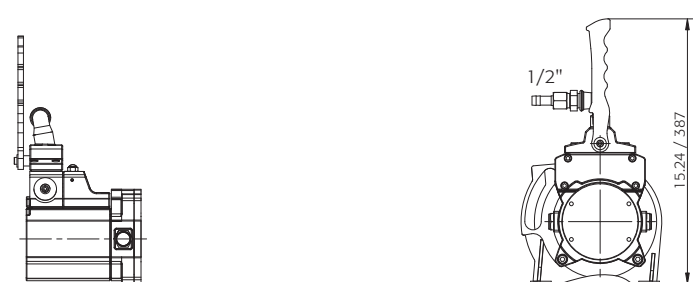


■ ROPE CAPACITIES

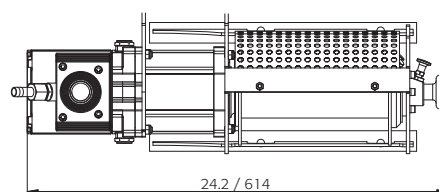
PROFI LIFTER 500-1 / PROFIL PULLER 800-1			
Max rope capacity per layer	Rope diameter		
	inch.	3/16	1/4
1st	ft / m	34.4 / 10.5	25.7 / 7.8
1st and 2nd	ft / m	75.6 / 23.1	58.3 / 17.8
1st, 2nd and 3rd	ft / m	121.4 / 37.0	95.8 / 29.1
1st, 2nd, 3rd and 4th	ft / m	171.5 / 52.3	136.8 / 41.7
1st, 2nd, 3rd, 4th and 5th	ft / m	226.1 / 68.9	–

Recommended rope diameter: 1/4" / 6 mm

■ DIMENSIONS [inch.]/[mm]



PROFI LIFTER 500-1



PROFI PULLER 800-1


PROFI LIFTER 500-2,2 / 800-2,2



PROFI LIFTER 800-2,2

JDN Air Winches with capacities of 500 and 800 kg. Lightweight aluminium castings make this series mobile, ideal for multiple applications.

THE ADVANTAGES AT A GLANCE

- Drum integrated exhaust air cooled planetary gearbox for minimum maintenance and maximum reliability at a 100 % duty cycle.
- High rope capacity.
- Ideal ratio of drum/rope diameter ($D/d=18$) ensures a long duty cycle of the rope.
- Variable speeds, easy to install, low noise level.
- Ideal for applications in hazardous areas
 II 3 GD IIA T4(X).
- Various options.

TECHNICAL DATA

Type		PROFI LIFTER	
		500-2,2	800-2,2
Nominal pressure (required static pressure)	PSI bar	85 6	
Capacity in the last layer	lbs kg	1100 500	1750 800
Max. number of rope layers		4	3
Max. motor power	kW	2.2	
Air connection		G ³ /4	
Hose size (ø inside / ø outside)	inch. mm	0.75/1.22 19/31	
Air consumption at nominal load - pulling	cfm m ³ /min	120.1 3.4	123.6 3.5
Air consumption without load - pulling	cfm m ³ /min	151.9 4.3	
Air consumption at nominal load - lowering	cfm m ³ /min	91.8 2.6	123.6 3.5
Air consumption without load - lowering	cfm m ³ /min	84.8 2.4	120.1 3.4
Max. possible rope diameter	inch. mm	5/16 7	3/8 10
Minimum breaking force of rope	lbf kN	5512 24.5	8822 39.2
Weight (without rope and additional devices)	lbs kg	176 80	187 85
Control length for pendant control	ft m	6.6 2	
Noise level without load - lifting or pulling ¹	dB(A)	85	87
Noise level without load - lowering or unwinding ¹	dB(A)	80	86
Noise level at nominal load - lifting or pulling ¹	dB(A)	83	89
Noise level at nominal load - lowering ¹	dB(A)	89	92

Group mechanism: M3 (1 Bm)

¹ Measured at 1 m distance acc. to DIN 45635 part 20

PERFORMANCE DATA

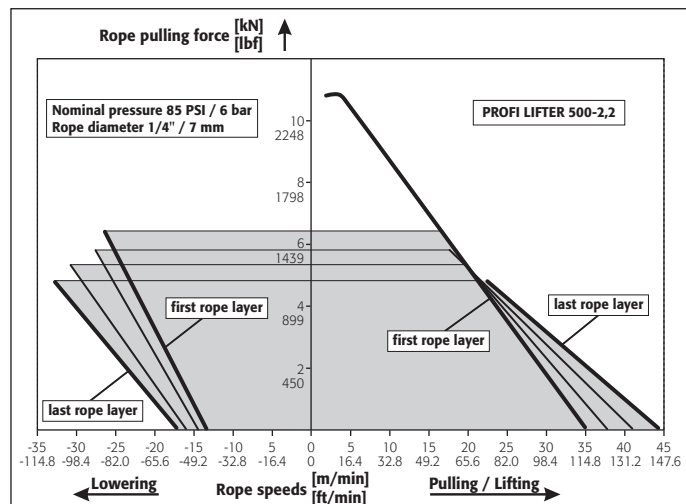
PROFI LIFTER 500-2,2					
Rope diameter 1/4" / 7 mm		Speeds [ft/min]/[m/min]			
		Lifting		Lowering	
Rope Layer		1. Layer	4. Layer	1. Layer	4. Layer
Load condition [lbs]/[kg]	0	115.0 / 35.0	145.6 / 44.4	44.4 / 13.5	56.2 / 17.1
	550 / 250	92.6 / 28.2	109.7 / 33.4	59.9 / 18.3	81.0 / 24.7
	1100 / 500	70.1 / 21.4	73.7 / 22.4	75.4 / 23.0	105.8 / 32.3
	1410 / 640	57.5 / 17.5	–	84.1 / 25.6	–

PROFI LIFTER 800-2,2					
Rope diameter 1/4" / 9 mm		Speeds [ft/min]/[m/min]			
		Lifting		Lowering	
Rope Layer		1. Layer	3. Layer	1. Layer	3. Layer
Load condition [lbs]/[kg]	0	104.1 / 31.7	128.6 / 39.2	39.8 / 12.1	49.2 / 15.0
	880 / 400	76.1 / 23.2	85.9 / 26.1	59.0 / 18.0	78.4 / 23.9
	1750 / 800	48.4 / 14.6	43.6 / 13.1	77.9 / 23.8	107.2 / 32.8
	2160 / 980	35.3 / 10.8	–	86.8 / 26.4	–

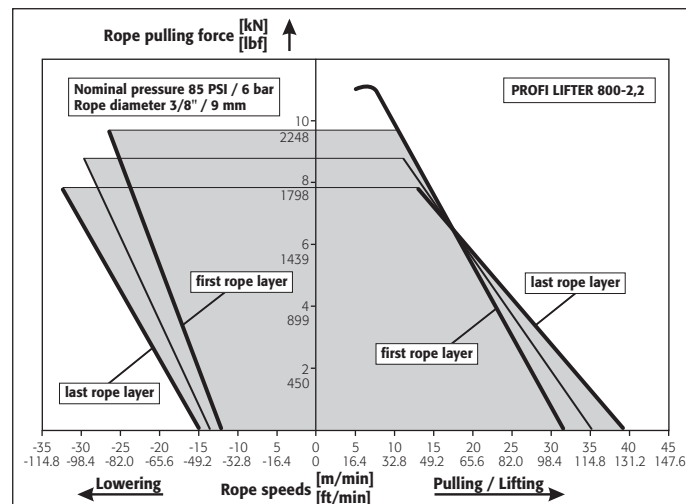


CHARACTERISTIC LOAD CURVES

PROFI LIFTER 500-2,2



PROFI LIFTER 800-2,2



ROPE CAPACITIES

PROFI LIFTER 500-2,2

Full used rope layer	Rope diameter		
	inch.	1/4	5/16
1st	ft / m	63.8 / 19.5	50.7 / 15.5
1st and 2nd	ft / m	138.2 / 42.1	112.0 / 34.1
1st, 2nd and 3rd	ft / m	218.5 / 66.6	179.3 / 54.6
1st, 2nd, 3rd and 4th	ft / m	304.8 / 92.9	252.5 / 77.0

Recommended rope diameter: 1/4" / 7 mm

Rope diameter for rope drums with grooving: 1/4" / 7 mm

PROFI LIFTER 800-2,2

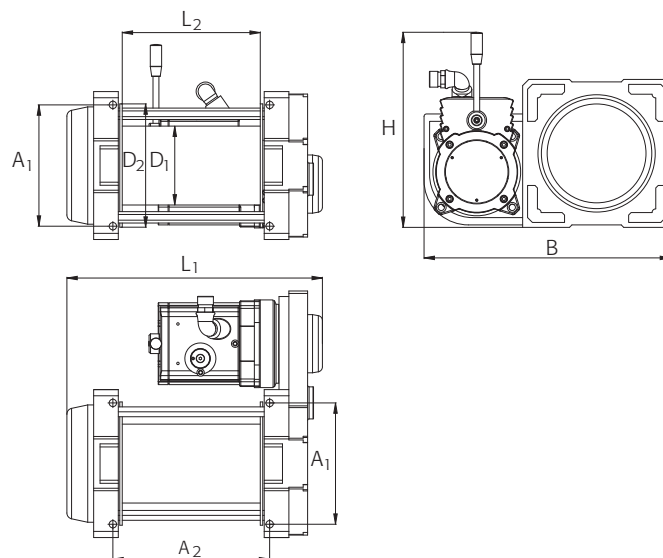
Full used rope layer	Rope diameter		
	inch.	5/16	3/8
1st	ft / m	57.6 / 17.5	47.6 / 14.5
1st and 2nd	ft / m	126.3 / 38.5	106.3 / 32.4
1st, 2nd and 3rd	ft / m	201.0 / 61.3	171.1 / 52.2
–	–	–	–

Recommended rope diameter: 3/8" / 9 mm

Rope diameter for rope drums with grooving: 5/16" / 8 mm

DIMENSIONS

Type		PROFI LIFTER	
		500-2,2	800-2,2
B	inch. / mm	21.3 / 540	
H max.	inch. / mm	16.9 / 430	
L1	inch. / mm	20.1 / 510	
L2	inch. / mm	11.4 / 290	
D1	inch. / mm	5.5 / 140	6.3 / 160
D2	inch. / mm	9.5 / 240	
A1	inch. / mm	9.7 / 246	
A2	inch. / mm	12.5 / 318	



PROFI LIFTER 1200-2,2 / 2000-2,6

PROFI PULLER 1800-2,2 / 3000-2,6



PROFI LIFTER 1200-2,2



PROFI LIFTER 2000-2,6

TECHNICAL DATA

JDN Lifting and pulling winches are manufactured with a highly durable steel structure in lifting capacities of 1200 kg and 2000 kg and pulling capacities of 1800 kg and 3000 kg.

THE ADVANTAGES AT A GLANCE

- Drum integrated exhaust air cooled planetary gearbox for minimum maintenance and maximum reliability at a 100 % duty cycle.
- High rope capacity.
- Ideal ratio of drum/rope diameter ($D/d=21$) ensures a long duty cycle of the rope.
- Variable speeds, easy to install, low noise level.
- Ideal for applications in hazardous areas.
Standard models:
Ex II 2 GD IIA T4(X) / II 3 GD IIB T4(X)
With increased spark protection:
Ex II 2 GD IIB T4(X).
- Various options.

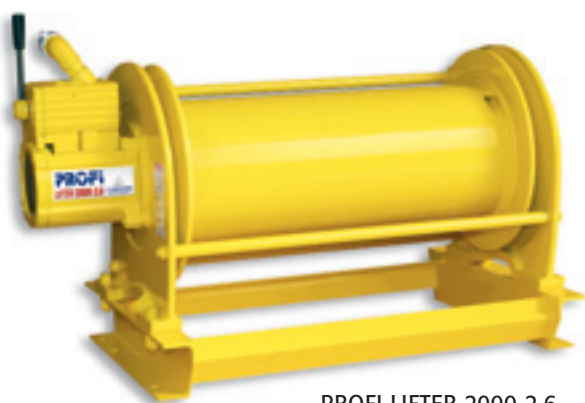
Type		PROFI LIFTER 1200-2,2	PROFI LIFTER 2000-2,6	PROFI PULLER 1800-2,2	PROFI PULLER 3000-2,6
Nominal pressure (required static pressure)	PSI bar	85 6	85 6	85 6	85 6
Capacity (nominal load for lifting winches) in the last layer	lbs kg	2600 1200	4400 2000	– –	– –
Pulling capacity (nominal load for Pulling winches) in the first layer	lbs kg	– –	– –	4000 1800	6600 3000
Max. number of rope layers		4	4	4	4
Max. motor power	kW	2.2	2.6	2.2	2.6
Lifting/pulling speed without load ¹	ft/min m/min	60.7 18.5	42.6 13.0	60.7 18.5	42.6 13.0
Lifting/pulling speed at 80 % of the nominal load ¹	ft/min m/min	43.6 13.3	28.9 8.8	32.2 9.8	19.7 6.0
Lifting/pulling speed at nominal load ¹	ft/min m/min	38.1 11.6	26.3 8.0	23.0 7.0	15.1 4.6
Lowering/unwinding speed without load ¹	ft/min m/min	53.2 16.2	41.0 12.5	53.2 16.2	41.0 12.5
Lowering speed at nominal load ¹	ft/min m/min	73.8 22.5	55.1 16.8	– –	– –
Air connection		G ³ / ₄	G1	G ³ / ₄	G1
Air consumption at nominal load - pulling	cfm m ³ /min	– –	– –	120.1 3.4	141.3 4.0
Air consumption at nominal load - lifting	cfm m ³ /min	137.7 3.9	158.9 4.5	– –	– –
Air consumption without load - pulling	cfm m ³ /min	– –	– –	162.5 4.6	176.6 5.0
Air consumption without load - lifting	cfm m ³ /min	162.5 4.6	176.6 5.0	– –	– –
Air consumption without load - lowering	cfm m ³ /min	148.3 4.2	151.9 4.3	– –	– –
Air consumption at nominal load - lowering	cfm m ³ /min	180.1 5.1	194.2 5.5	– –	– –
Hose size (ø inside)	inch. mm	0.8 19	1 25	0.8 19	1 25
Rope drum diameter	inch. mm	9.5 240	11.2 285	9.5 240	11.2 285
Max. possible rope diameter	inch. mm	7/16 11	1/2 13	7/16 11	1/2 13
Minimum breaking force of rope	lbf kN	13219 58.8	22054 98.1	11915 53.0	19851 88.3
Weight (without rope and additional devices) short drum version	lbs kg	304.2 138	518.1 235	304.2 138	518.1 235
Weight (without rope and additional devices) long drum version	lbs kg	348.3 158	683.4 310	348.3 158	683.4 310
Control length for pendant control	ft m	6.6 2	6.6 2	6.6 2	6.6 2
Noise level without load - lifting or pulling ²	dB(A)	88	87	88	87
Noise level without load - lowering or unwinding ²	dB(A)	90	88	90	88
Noise level at nominal load - lifting or pulling ²	dB(A)	86	85	82	80
Noise level at nominal load - lowering ²	dB(A)	92	88	–	–

Group mechanism: M3 (1 Bm)

¹ Measured in the first layer with max. rope diameter

² Measured at 1 m distance acc. to DIN 45635 part 20





PROFI LIFTER 2000-2,6
with long drum*
and pulling frame*



PROFI PULLER 3000-2,6
with long drum*
and free-spooling clutch

PERFORMANCE DATA

PROFI LIFTER 1200-2,2

Rope diameter 3/8" / 10 mm		Speeds [ft/min]/[m/min]			
		Lifting		Lowering	
Rope Layer		1. Layer	4. Layer	1. Layer	4. Layer
Load condition [lbs]/[kg]	0	62.1 / 18.9	77.0 / 23.5	53.4 / 16.3	66.2 / 20.2
	1300/600	47.8 / 14.5	55.0 / 16.7	65.4 / 20.0	84.7 / 25.9
	2600/1200	33.5 / 10.1	33.1 / 9.9	77.5 / 23.8	103.3 / 31.7
	3300/1500	25.9 / 7.9	–	84.0 / 25.6	–

PROFI LIFTER 2000-2,6

Rope diameter 1 1/2" / 12 mm		Speeds [ft/min]/[m/min]			
		Lifting		Lowering	
Rope Layer		1. Layer	4. Layer	1. Layer	4. Layer
Load condition [lbs]/[kg]	0	42.4 / 12.9	53.5 / 16.3	41.3 / 12.6	52.2 / 15.9
	2200/1000	33.1 / 10.1	38.6 / 11.8	49.0 / 14.9	64.4 / 19.6
	4400/2000	23.8 / 7.2	23.8 / 7.2	56.7 / 17.3	76.6 / 23.4
	5500/2500	19.1 / 5.8	–	60.5 / 18.5	–

PROFI PULLER 1800-2,2

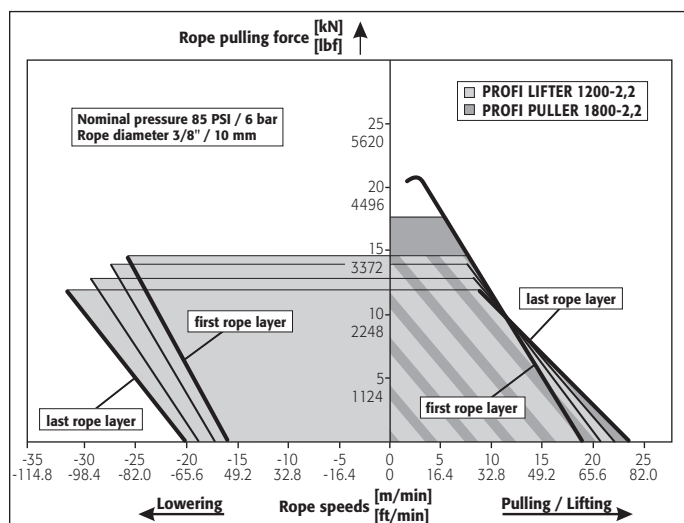
Rope diameter 3/8" / 10 mm		Speeds [ft/min]/[m/min]			
		Pulling		Unwinding	
Rope Layer		1. Layer	4. Layer	1. Layer	4. Layer
Load condition [lbs]/[kg]	0	62.1 / 18.9	77.0 / 23.5	53.4 / 16.3	66.2 / 20.2
	1300/600	47.8 / 14.5	55.0 / 16.7	–	–
	2600/1200	33.5 / 10.1	33.1 / 9.9	–	–
	4000/1800	18.2 / 5.6	–	–	–

PROFI PULLER 1800-2,2

Rope diameter 3/8" / 10 mm		Speeds [ft/min]/[m/min]			
		Pulling		Unwinding	
Rope Layer		1. Layer	4. Layer	1. Layer	4. Layer
Load condition [lbs]/[kg]	0	42.4 / 12.9	53.5 / 16.3	41.3 / 12.6	52.2 / 15.9
	2200/1000	33.1 / 10.1	38.6 / 11.8	–	–
	4400/2000	23.8 / 7.2	23.8 / 7.2	–	–
	6600/3000	14.4 / 4.4	–	–	–

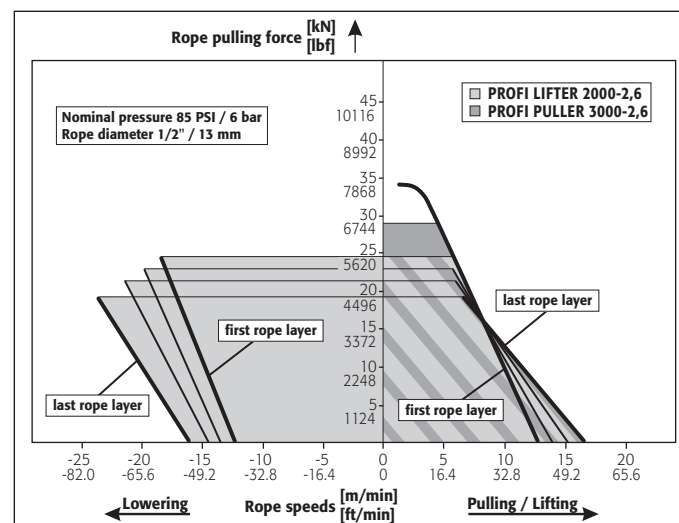
CHARACTERISTIC LOAD CURVES

PROFI LIFTER 1200-2,2 / PROFIL PULLER 1800-2,2



*Option

PROFI LIFTER 2000-2,6 / PROFIL PULLER 3000-2,6



PROFI LIFTER 1200-2,2 / 2000-2,6

PROFI PULLER 1800-2,2 / 3000-2,6

ROPE CAPACITIES

PROFI LIFTER 1200-2,2 and PROFIL PULLER 1800-2,2

Full used rope layer	Short drum			
	Rope diameter			
	inch.	5/16	3/8	7/16
1st	ft / m	57.8 / 17.6	47.2 / 14.4	40.5 / 12.3
1st and 2nd	ft / m	131.3 / 40.0	109.6 / 33.4	95.7 / 29.2
1st, 2nd and 3rd	ft / m	209.2 / 63.8	176.3 / 53.8	155.4 / 47.4
1st, 2nd, 3rd and 4th	ft / m	291.6 / 88.9	247.6 / 75.5	219.6 / 66.9

Recommended rope diameter: 3/8" / 9 up to 10 mm

Rope diameter for rope drums with grooving: 3/8" / 10 mm

PROFI LIFTER 1200-2,2 and PROFIL PULLER 1800-2,2

Full used rope layer	Long drum			
	Rope diameter			
	inch.	5/16	3/8	7/16
1st	ft / m	121.7 / 37.1	100.8 / 30.7	87.5 / 26.7
1st and 2nd	ft / m	263.2 / 80.2	220.9 / 67.3	193.9 / 59.1
1st, 2nd and 3rd	ft / m	413.3 / 126.0	349.5 / 106.5	308.9 / 94.2
1st, 2nd, 3rd and 4th	ft / m	571.9 / 174.3	486.7 / 148.3	432.5 / 131.8

PROFI LIFTER 2000-2,6 and PROFIL PULLER 3000-2,6

Full used rope layer	Short drum			
	Rope diameter			
	inch.	3/8	7/16	1/2
1st	ft / m	83.2 / 25.4	70.4 / 21.5	60.8 / 18.5
1st and 2nd	ft / m	185.7 / 56.6	159.6 / 48.6	140.0 / 42.7
1st, 2nd and 3rd	ft / m	294.4 / 89.7	255.0 / 77.7	225.4 / 68.7
1st, 2nd, 3rd and 4th	ft / m	409.3 / 124.8	356.6 / 108.7	317.1 / 96.7

Recommended rope diameter: 1/2" / 12 mm

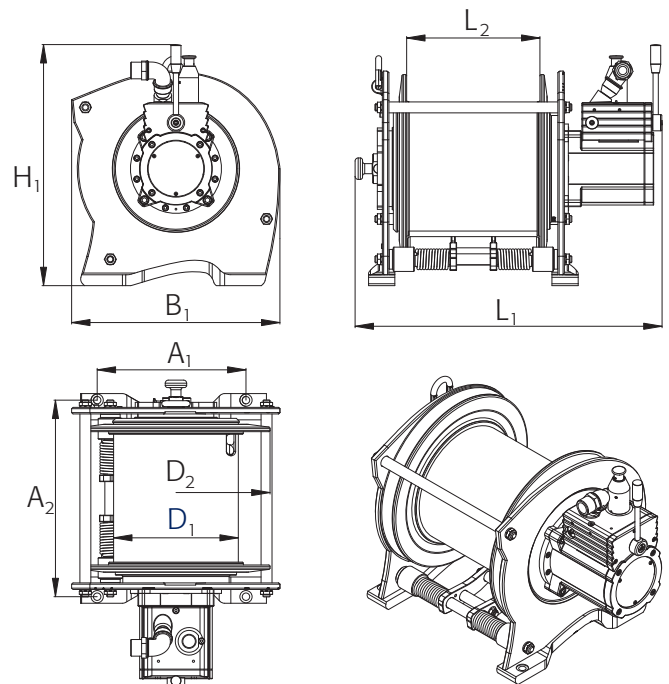
Rope diameter for rope drums with grooving: 1/2" / 13 mm

PROFI LIFTER 2000-2,6 and PROFIL PULLER 3000-2,6

Full used rope layer	Long drum			
	Rope diameter			
	inch.	3/8	7/16	1/2
1st	ft / m	209.8 / 63.9	179.5 / 54.7	156.7 / 47.8
1st and 2nd	ft / m	447.0 / 136.2	385.9 / 117.6	340.1 / 103.7
1st, 2nd and 3rd	ft / m	698.7 / 212.9	606.8 / 185.0	537.9 / 164.0
1st, 2nd, 3rd and 4th	ft / m	964.9 / 294.1	842.2 / 256.7	750.3 / 228.7

DIMENSIONS [inch.]/[mm]

Type	PROFI LIFTER 1200-2,2 PROFI PULLER 1800-2,2		PROFI LIFTER 2000-2,6 PROFI PULLER 3000-2,6	
	Short drum	Long drum	Short drum	Long drum
B ₁	15.5 / 393		18.7 / 475	
H ₁ max.	21.3 / 540		23.2 / 590	
L ₁ max.	23.0 / 585	30.9 / 785	27.6 / 700	43.3 / 1100
L ₂	8.5 / 216	16.4 / 416	12.0 / 305	27.8 / 705
D ₁	9.5 / 240		11.2 / 285	
D ₂	13.8 / 350		16.9 / 430	
A ₁	11.6 / 295		13.4 / 340	
A ₂	12.3 / 312	20.2 / 512	17.7 / 449	33.4 / 849



Special winch applications

We have prepared comprehensive information regarding this subject on our web site for your detailed information.

However this page contains an excerpt for example purposes. For the full information, including a download option, please visit

➔ www.jdn.de

Downloads
Hatch covers and loading arms
Calculation rope tensile force | Drawing geometry | Diagram | Examples | Download

Example loading arm:

Input:

L_s	m
L_G	m
B	m
H	m
m	kg
γ	Grad

Output:

Max. rope tensile force at $\gamma = 0$
 $F_{S,max} =$ N

Rope tensile force
 $F_S =$ N

Buttons: delete, calculate

Example graphics:
 - Drawing geometry
 - Example loading arm
 - Example hatch opening
 - Diagram

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Diagram labels:
 $L_s = 4,27$ m
 $L_G = 5,05$ m
 $B = 6,51$ m
 $H = 4,42$ m
 $m = 460$ kg
 $F_{S,max} = 9502$ N
 $F_S(50^\circ) = 3851$ N

Downloads
Putting of loads and moving of loads on inclined planes
Calculation rope tensile force | Fundamentals | Security | Coefficient of friction | Download

Calculation of the required rope tensile force

When loads are pulled along a horizontal surface or moved along an inclined surface, the necessary rope force F_s is determined using the coefficient of friction, the weight of the load and the coefficient of friction in relation to the surface. In the same time, one must make a distinction concerning the direction of speed, i.e. whether the load is to be moved upwards (against the action of gravity) or downwards (in the direction of gravity).

Input:

m	kg
μ	
α	Grad

Output:

Rope tensile force up to:
 $F_s =$ N

Rope tensile force down to:
 $F_s =$ N

Buttons: delete, calculate

Example graphics:
 - Drawing geometry
 - Example loading arm
 - Example hatch opening
 - Diagram

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Diagram labels:
 α
 F_G
 F_s
 $\arctan \mu$

Downloads
Hatch covers and loading arms
Calculation rope tensile force | Drawing geometry | Diagram | Examples | Download

Calculation of the required and maximum rope tensile force

When opening hatch covers or moving loading arms by means of a rope over a fixed deflection sheave, the geometry of the force application and thus the magnitude of the required rope tensile force F_s also changes with the angle γ . The main parameter affecting the rope tensile force is the relationship between width B and height H (see Diagram). The maximum rope tensile force is required in the horizontal position ($\gamma = 0$).

Input:

L_s	m
L_G	m
B	m
H	m
m	kg
γ	Grad

Output:

Max. rope tensile force at $\gamma = 0$
 $F_{S,max} =$ N

Rope tensile force
 $F_S =$ N

Buttons: delete, calculate

Example graphics:
 - Drawing geometry
 - Example loading arm
 - Example hatch opening
 - Diagram

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Calculation of the required and maximum rope tensile force - Drawing geometry

Diagram labels:
 B
 H
 γ
 F_s
 F_G
 L_G
 L_s

Legend:
 L_G = horizontal length between pivot and center of gravity
 L_s = horizontal length between pivot and rope attachment pad
 B = with between rope attachment point and sheave (distance at the horizontal)
 H = height between rope attachment point and sheave (distance at the plumb line)
 m = weight of the hatch cover or the loading arm

PROFI LIFTER 1200-6 / 2000-6

PROFI PULLER 1800-6 / 3000-6

With increased motor power (6 kW)
for high rope speeds

JDN Lifting and pulling winches are manufactured with a highly durable steel structure in lifting capacities of 1200 kg and 2000 kg and pulling capacities of 1800 kg and 3000 kg.

THE ADVANTAGES AT A GLANCE

- Increased motor power for high rope speeds.
- Drum integrated exhaust air cooled planetary gearbox for minimum maintenance and maximum reliability at a 100 % duty cycle.
- Long drum version offering increased rope capacity with 4 layer spooling.
- Ideal ratio of drum/rope diameter ($D/d=21$) ensures a long duty cycle of the rope.
- Variable speeds, easy to install, low noise level.
- Integrated overload protection.
- Ideal for applications in hazardous areas.
Standard models:
Ex II 2 GD IIA T4(X) / II 3 GD IIB T4(X)
With increased spark protection:
Ex II 2 GD IIB T4(X).
- Various options.

TECHNICAL DATA

Type		PROFI LIFTER 1200-6	PROFI LIFTER 2000-6	PROFI PULLER 1800-6	PROFI PULLER 3000-6
Nominal pressure (required static pressure)	PSI bar	85 6	85 6	85 6	85 6
Capacity (nominal load for lifting winches) in the last layer	lbs kg	2600 1200	4400 2000	– –	– –
Pulling capacity (nominal load for Pulling winches) in the first layer	lbs kg	– –	– –	4000 1800	6600 3000
Max. number of rope layers		4	4	4	4
Max. motor power	kW	5.5	5.5	6.0	6.0
Lifting/pulling speed without load ¹	ft/min m/min	98.8 30.1	63.7 19.4	98.8 30.1	63.7 19.4
Lifting/pulling speed at 80 % of the nominal load ¹	ft/min m/min	74.8 22.8	47.6 14.5	62.7 19.1	39.7 12.1
Lifting/pulling speed at nominal load ¹	ft/min m/min	68.6 20.9	43.6 13.3	53.5 16.3	33.8 10.3
Lowering/unwinding speed without load ¹	ft/min m/min	67.9 20.7	42.3 12.9	67.9 20.7	42.3 12.9
Lowering speed at nominal load ¹	ft/min m/min	91.5 27.9	58.1 17.7	– –	– –
Air connection		G1	G1	G1	G1
Air consumption at nominal load - pulling	cfm m³/min	– –	– –	229.6 6.5	229.6 6.5
Air consumption at nominal load - lifting	cfm m³/min	240.1 6.8	240.1 6.8	– –	– –
Air consumption without load - pulling	cfm m³/min	– –	– –	317.8 9.0	300.2 8.5
Air consumption without load - lifting	cfm m³/min	317.8 9.0	300.2 8.5	– –	– –
Air consumption without load - lowering	cfm m³/min	254.3 7.2	254.3 7.2	– –	– –
Air consumption at nominal load - lowering	cfm m³/min	296.6 8.4	257.8 7.3	– –	– –
Hose size (ø inside)	inch. mm	0.98 25	0.98 25	0.98 25	0.98 25
Rope drum diameter	inch. mm	9.5 240	11.2 285	9.5 240	11.2 285
Max. possible rope diameter	inch. mm	7/16 11	1/2 13	7/16 11	1/2 13
Minimum breaking force of rope	lbf kN	13219 58.8	22054 98.1	11915 53.0	19851 88.3
Weight (without rope and additional devices) ²	lbs kg	516 234	851 386	516 234	851 386
Control length for pendant control	ft m	6.6 2	6.6 2	6.6 2	6.6 2
Noise level without load - lifting or pulling ³	dB(A)	85	86	85	85
Noise level without load - lowering or unwinding ³	dB(A)	82	84	82	84
Noise level at nominal load - lifting or pulling ³	dB(A)	83	83	81	81
Noise level at nominal load - lowering ³	dB(A)	86	95	–	–

Group mechanism: M3 (1 Cm)

¹ Measured in the first layer with max. rope diameter

² Standard version with long drum

³ Measured at 1 m distance according to DIN 45635 part 20





PROFI PULLER 3000-6
with wire rope*



PROFI PULLER 3000-6
with wire rope* and drum guard**

PERFORMANCE DATA

PROFI LIFTER 1200-6

Rope diameter 3/8" / 10 mm		Speeds [ft/min]/[m/min]			
		Lifting		Lowering	
Rope Layer		1. Layer	4. Layer	1. Layer	4. Layer
Load condition [lbs]/[kg]	0	98.8 / 30.1	122.5 / 37.3	68.0 / 20.7	84.3 / 25.7
	1300/600	84.0 / 25.5	99.7 / 30.3	79.6 / 24.3	102.1 / 31.2
	2600/1200	69.1 / 20.9	76.9 / 23.2	91.2 / 27.9	120.0 / 36.8
	3300/1500	61.1 / 18.6	–	97.4 / 29.7	–

PROFI LIFTER 2000-6

Rope diameter 1/2" / 12 mm		Speeds [ft/min]/[m/min]			
		Lifting		Lowering	
Rope Layer		1. Layer	4. Layer	1. Layer	4. Layer
Load condition [lbs]/[kg]	0	63.6 / 19.4	80.3 / 24.5	42.5 / 12.9	53.6 / 16.3
	2200/1000	53.7 / 16.4	64.5 / 19.6	50.2 / 15.3	65.9 / 20.1
	4400/2000	43.8 / 13.3	48.7 / 14.8	57.9 / 17.7	78.1 / 23.8
	5500/2500	38.8 / 11.8	–	61.8 / 18.8	–

PROFI PULLER 1800-6

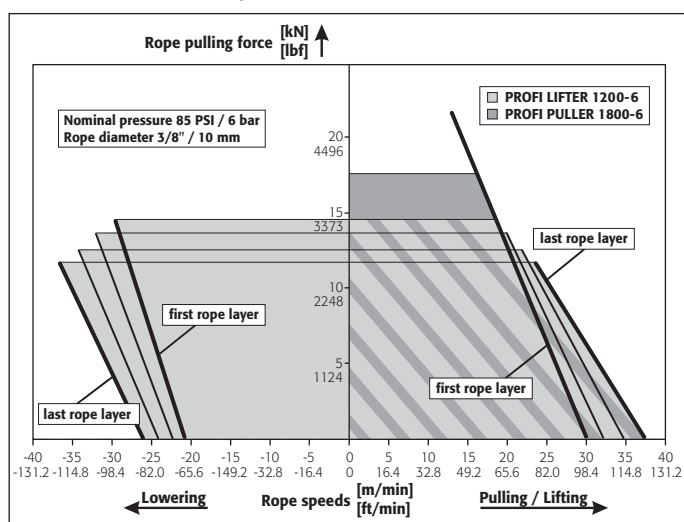
Rope diameter 3/8" / 10 mm		Speeds [ft/min]/[m/min]			
		Pulling		Unwinding	
Rope Layer		1. Layer	4. Layer	1. Layer	4. Layer
Load condition [lbs]/[kg]	0	98.8 / 30.1	122.5 / 37.3	68.0 / 20.7	84.3 / 25.7
	1300/600	84.0 / 25.5	99.7 / 30.3	–	–
	2600/1200	69.1 / 20.9	76.9 / 23.2	–	–
	4000/1800	53.2 / 16.3	–	–	–

PROFI PULLER 3000-6

Rope diameter 1/2" / 12 mm		Speeds [ft/min]/[m/min]			
		Pulling		Unwinding	
Rope Layer		1. Layer	4. Layer	1. Layer	4. Layer
Load condition [lbs]/[kg]	0	63.6 / 19.4	80.3 / 25.4	42.5 / 12.9	53.6 / 16.3
	2200/1000	53.7 / 16.4	64.5 / 19.6	–	–
	4400/2000	43.8 / 13.3	48.7 / 14.8	–	–
	6600/3000	33.9 / 10.3	–	–	–

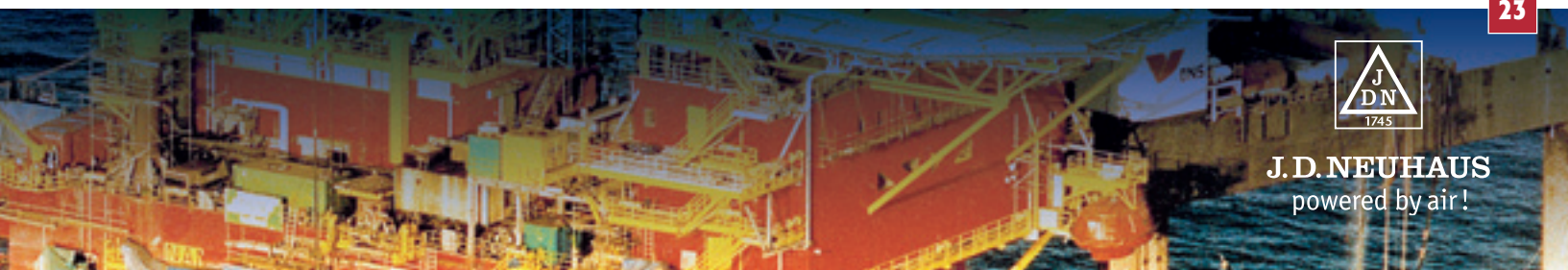
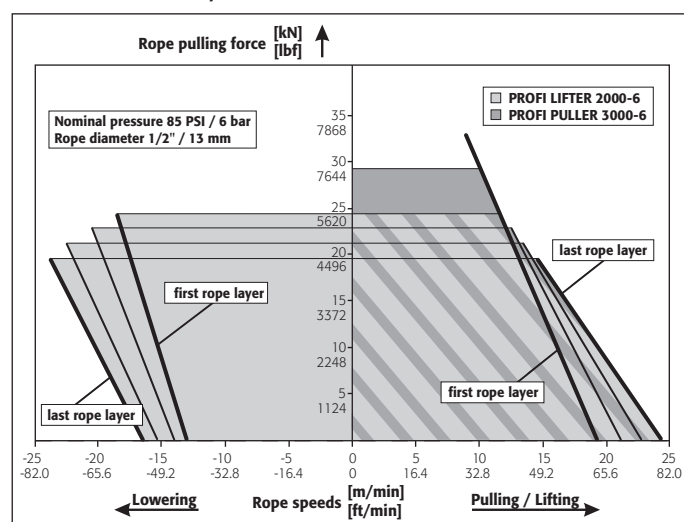
CHARACTERISTIC LOAD CURVES

PROFI LIFTER 1200-6 / PROFI PULLER 1800-6



*Option **Standard in CE version

PROFI LIFTER 2000-6 / PROFI PULLER 3000-6



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powered by air!

PROFI LIFTER 1200-6 / 2000-6

PROFI PULLER 1800-6 / 3000-6

ROPE CAPACITIES

PROFI LIFTER 1200-6 and PROFIL PULLER 1800-6

Max rope capacity per layer	Rope diameter			
	inch.	5/16	3/8	7/16
1st	ft / m	121.7 / 37.1	100.8 / 30.7	87.5 / 26.7
1st and 2nd	ft / m	263.2 / 80.2	220.9 / 67.3	193.9 / 59.1
1st, 2nd and 3rd	ft / m	413.3 / 126.0	349.5 / 106.5	308.9 / 94.2
1st, 2nd, 3rd and 4th	ft / m	571.9 / 174.3	486.7 / 148.3	432.5 / 131.8

Recommended rope diameter: 3/8" / 9 up to 10 mm

Rope diameter for rope drums with grooving: 3/8" / 10 mm

PROFI LIFTER 2000-6 and PROFIL PULLER 3000-6

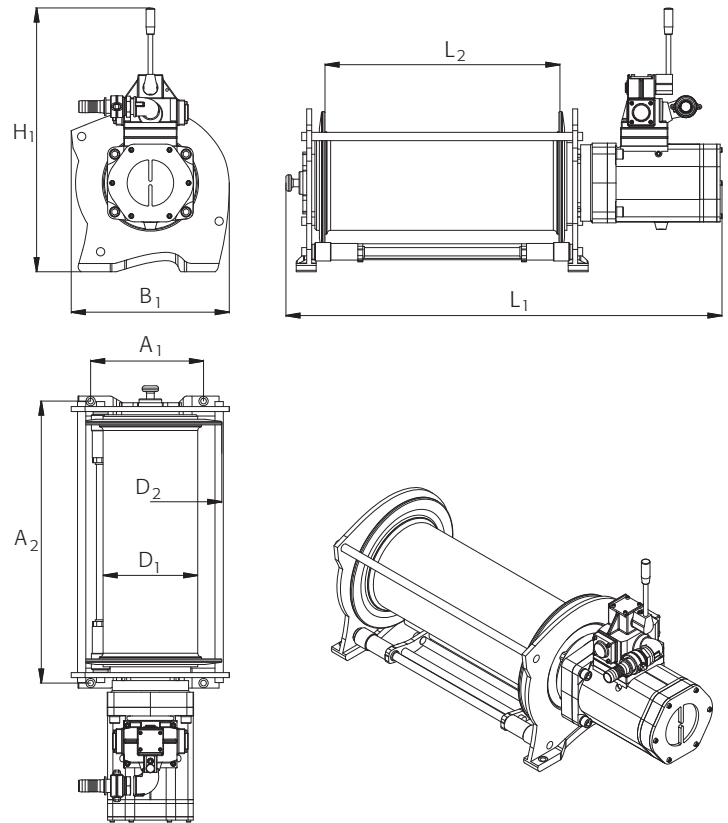
Max rope capacity per layer	Rope diameter			
	inch.	3/8	7/16	1/2
1st	ft / m	209.8 / 63.9	179.5 / 54.7	156.7 / 47.8
1st and 2nd	ft / m	447.0 / 136.2	385.9 / 117.6	340.1 / 103.7
1st, 2nd and 3rd	ft / m	698.7 / 212.9	606.8 / 185.0	537.9 / 164.0
1st, 2nd, 3rd and 4th	ft / m	964.9 / 294.1	842.2 / 256.7	750.3 / 228.7

Recommended rope diameter: 1/2" / 12 mm







Rope diameter for rope drums with grooving: 1/2" / 13 mm

DIMENSIONS [inch.]/[mm]

Type	PROFI LIFTER 1200-6 PROFI PULLER 1800-6	PROFI LIFTER 2000-6 PROFI PULLER 3000-6
B ₁	15.5 / 393	18.7 / 475
H ₁ max.	29.2 / 742	31.2 / 792
L ₁ max.	39.4 / 1000	51.8 / 1315
L ₂	16.4 / 416	27.8 / 705
D ₁	9.5 / 240	11.2 / 285
D ₂	13.8 / 350	16.9 / 430
A ₁	11.6 / 295	13.4 / 340
A ₂	20.2 / 512	33.4 / 849



Equipment, Options and Accessories

							
Equipment		LIFTER 500-1 PULLER 800-1	LIFTER 500-2,2 LIFTER 800-2,2	LIFTER 1200-2,2 PULLER 1800-2,2	LIFTER 2000-2,6 PULLER 3000-2,6	LIFTER 1200-6 PULLER 1800-6	LIFTER 2000-6 PULLER 3000-6
Controls	Lever	Standard					
	FI	–	Option				
	E	–	Option				
	FD	Standard	–				
	DS	–	–	Option		–	–
Emergency stop		Standard ¹	Standard ³			Standard ¹	
Overload protection		–		Standard			
Drum guard		Standard		Standard ⁴			
Free-spooling clutch		Standard ²	Option ²	Standard ²			
Pressure roller		–	Option				
Rope drum with grooving		–	Option				
Long drum		–	on request	Option		Standard	
Slack rope detector		–	on request				
2nd rope-end fastening		–	Option	–			
Limit switch system		–	Option			–	
Pulling frame		Option	–	Option			
Emergency lowering device		–	Option			–	
Offshore painting		–		Option			
Splitted rope drum		–		Option			

¹ Only with E-, FI- und FD control ² When operating as pulling winch ³ Option with lever control ⁴ Standard in CE version



J.D. NEUHAUS
powered by air!

BBH 1000 and BBH 2000

JDN BIG BAG HANDLING AIR HOISTS

- For big bag handling J.D. Neuhaus offers innovative design solutions to meet the special requirements of these applications.
- JDN Big Bag Handling Air Hoists** are available in carrying capacities of 1000 kg and 2000 kg with an air pressure of 6 bar.

DESIGNS WITH ONE OR TWO LOAD HOOKS

- With one load hook for standard cruciform lifting beam designs. The extended distance between the hook and the chain box is particularly advantageous. This guarantees that there is no risk of collision between the load and the chain box.
- With twin load hooks for more complex cruciform lifting beam designs or for standard lifting beam designs with two suspension points.

THE ADVANTAGES AT A GLANCE

- Particularly suited for use as big bag handling hoists and for the movement of all kinds of bulky loads due to the low headroom design.
- Compact, modern design.
- Suitable for use as a synchronised hoist in twin-hook design.
- The use of JDN standard components guarantees reliable operation and cost effective manufacture.
- No additional motor lubrication required.
- Small number of maintenance/wear free moving parts.
- Chain box included as standard.
- Suitable for a wide variety of beam sizes/profiles, with hook centres to suit your requirements.

Take advantage of compressed air as the driving medium:

- Suitable for use as standard in areas at risk of explosion. Explosion protection classification according to Directive 94/9/EG (Equipment and Protective Systems Intended for use in Potentially Explosive Areas (ATEX)).
- The hoists are available for the following explosion protection classifications:
 - II 2 GD IIA T4(X) / II 3 GD IIB T4(X),
 - II 2 GD IIB T4(X) or II 2 GD IIC T4(X).
- 100 % duty rating, and thus no downtimes.

TECHNICAL DATA

Type		BBH 1000-1	BBH 2000-1
Number of hooks		1	
Air pressure	PSI bar	85 6	
Carrying capacity	mt	1	2
Number of chain strands		1	2
Engine output hoist	kW	1	
Engine output trolley	kW	0.2	
Lifting speed at full load	ft/min m/min	13.12 4	6.56 2
Lifting speed without load	ft/min m/min	29.53 9	14.76 4.5
Lowering speed at full load	ft/min m/min	32.81 10	16.40 5
Air consumption at full load – lifting	cfm m ³ /min	49.44 1.4	
Air consumption at full load – lowering	cfm m ³ /min	42.38 1.2	
Air consumption at full load – trolley	cfm m ³ /min	21.19 0.6	
Air connection		G ¹ / ₂	
Hose dimension (Ø inside)	inch. mm	0.59 15	
Weight at standard lift and minimum k dimension	lbs kg	286.60 130	302.03 137
Chain dimension	inch. mm	0.28 x 0.83 7 x 21	
Weight of 1 m chain	lbs kg	2.20 1	
Standard lift	ft m	10 3	
Length of control at standard load ¹ – lift	ft m	6.5 2	
Noise level at full load ¹ – lifting	dB(A)	76	
Noise level at full load ¹ – lowering	dB(A)	78	
Noise level at full load ¹ – trolley	dB(A)	80	

Group mechanism: M4 (1 Am)

¹ Measured at 1 m distance acc. to DIN 45635 part 20

DIMENSIONS

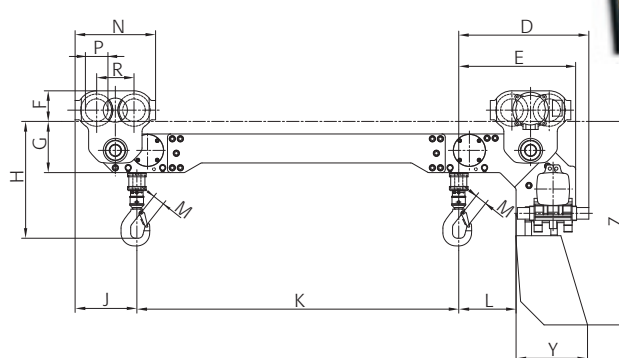
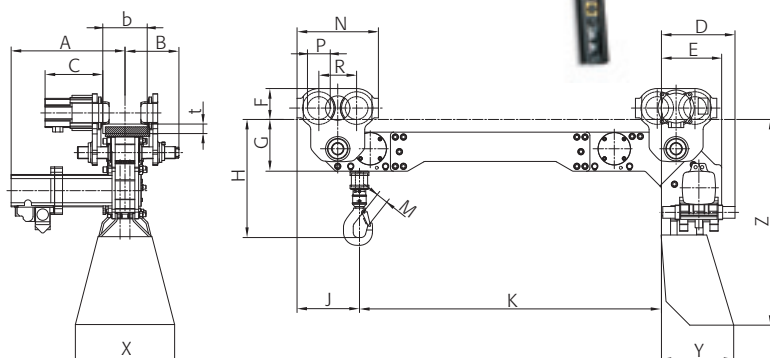
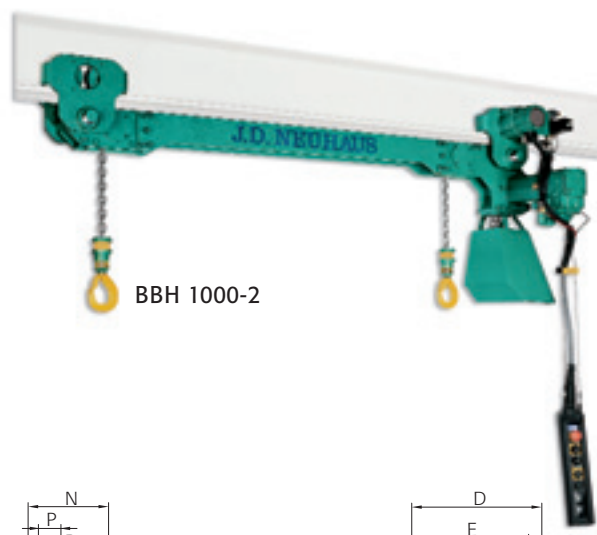
Type		BBH 1000-1	BBH 2000-1
A	inch. mm	14.17 360	
B	inch. mm	6.4/8.7 163/220	
b	min. inch. mm	3.54 90	
	max. inch. mm	12.20 310	
C	inch. mm	7.17 182	
D	inch. mm	8.94 227	
E	inch. mm	7.28 185	
F	inch. mm	3.74 95	
G	inch. mm	6.26 159	
H	inch. mm	15.3 388	16.77 426
J	inch. mm	7.56 192	8.66 220
K	min. inch. mm	17.13 435	16.14 410
	max. inch. mm	43.31 1100	
L	inch. mm	– –	
M	inch. mm	1.10 28	1.18 30
N	inch. mm	9.84 250	
P	inch. mm	2.76 70	
R	inch. mm	4.57 116	
t	max. inch. mm	1.18 30	



BBH 1000-1



BBH 1000-2



DIMENSIONS

TECHNICAL DATA

Type		BBH 1000-2	BBH 2000-2
Number of hooks		2	
Air pressure	PSI bar	85 6	
Carrying capacity	mt	1	2
Number of chain strands		2	4
Engine output hoist	kW		1
Engine output trolley	kW		0.2
Lifting speed at full load	ft/min m/min	13.12 4	6.56 2
Lifting speed without load	ft/min m/min	29.53 9	14.76 4.5
Lowering speed at full load	ft/min m/min	32.81 10	16.40 5
Air consumption at full load – lifting	cfm m ³ /min		49.44 1.4
Air consumption at full load – lowering	cfm m ³ /min		42.38 1.2
Air consumption at full load – trolley	cfm m ³ /min		21.19 0.6
Air connection			G ¹ / ₂
Hose dimension (Ø inside)	inch. mm		0.59 15
Weight at standard lift and minimum k dimension	lbs kg	302.03 137	328.49 149
Chain dimension	inch. mm	0.28 x 0.83 7 x 21	
Weight of 1 m chain	lbs kg	2.20 1	
Standard lift	ft m	10 3	
Length of control at standard load ¹ – lift	ft m	6.5 2	
Noise level at full load ¹ – lifting	dB(A)	76	
Noise level at full load ¹ – lowering	dB(A)	78	
Noise level at full load ¹ – trolley	dB(A)	80	

Group mechanism: M4 (1 Am)

¹ Measured at 1 m distance acc. to DIN 45635 part 20

Type		BBH 1000-2	BBH 2000-2
A	inch. mm	14.17 360	
B	inch. mm	6.4/8.7 163/220	
b	min. inch. mm	3.54 90	
	max. inch. mm	12.20 310	
C	inch. mm	7.17 182	
D	inch. mm	15.94 405	14.9 378
E	inch. mm	14.29 363	13.2 336
F	inch. mm		3.74 95
G	inch. mm		6.26 159
H	inch. mm	15.3 388	16.77 426
J	inch. mm	7.56 192	8.66 220
K	min. inch. mm		10.24 260
	max. inch. mm		51.18 1300
L	inch. mm	6.89 175	5.91 150
M	inch. mm	1.10 28	1.18 30
N	inch. mm		9.84 250
P	inch. mm	2.76 70	
R	inch. mm	4.57 116	
t	max. inch. mm		1.18 30

JDN LOW HEADROOM TROLLEYS

The trolley solution for restricted headroom areas.

Carrying capacities: from 0.5 t up to 6.3 t

Where headroom is restricted and standard trolleys can't meet the lifting height requirements we recommend **JDN Low Headroom Trolleys** whereby our air hoists are horizontally mounted. When only very low headroom is available we recommend JDN Ultra-Low Monorail Hoist design.

STANDARD FEATURES

- State of the art design utilising JDN's new PROFI TI motor technology
- Small number of maintenance/wear free moving parts
- No additional motor lubrication required
- 2-step travelling speed
- Adjustable trolley widths to suit your requirements (please contact us for details)

SPECIAL FEATURES

- Able to negotiate curves
- Extended trolley tie bars for bulky or elongated loads

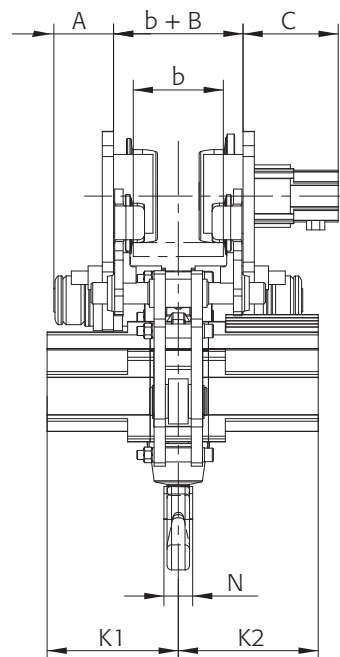
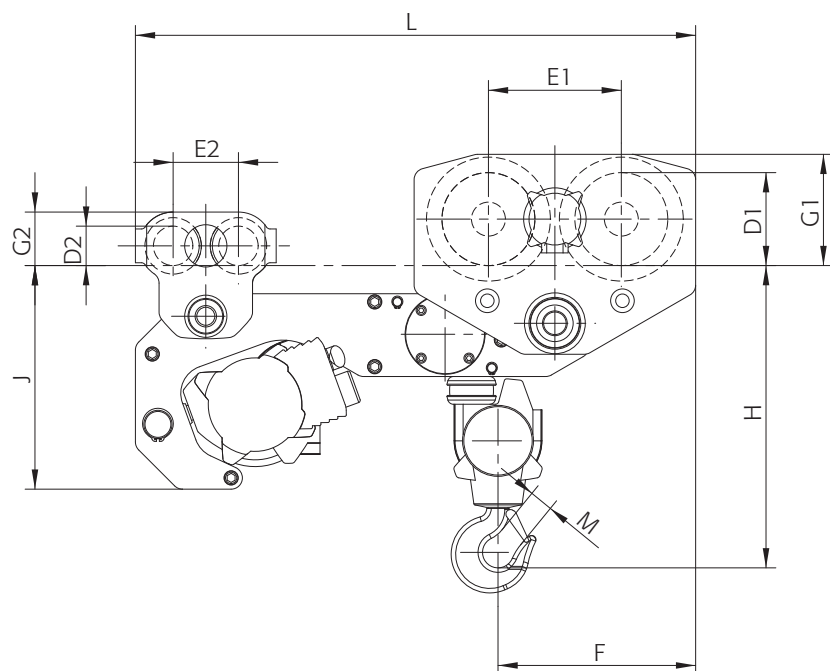
TECHNICAL DATA

Hoist Type Trolley Type		PROFI 05 TI LMF 05-2 t	PROFI 1 TI LMF 05-2 t	PROFI 2 TI LMF 05-2 t	PROFI 3 TI LMF 3.2 t	PROFI 6 TI LMF 6.3 t
Carrying capacity	mt	0.5	1	2	3.2	6.3
Number of chain strands		1	1	2	1	2
Motor output Hoist	kW	1	1	1	3.5	3.5
Motor output Trolley	kW	0.2	0.2	0.2	0.2	0.2
Air pressure	PSI	85	85	85	85	85
	bar	6	6	6	6	6
Lifting speed at full load	ft/min	32.81	16.40	8.20	14.76	7.21
	m/min	10	5	2.5	4.5	2.2
Lifting speed without load	ft/min	55.77	32.81	16.40	29.52	14.76
	m/min	17	10	5	9	4.5
Lowering speed at full load	ft/min	55.77	36.09	18.04	35.43	17.72
	m/min	17	11	5.5	10.8	5.4
Travelling speed at full load	ft/min	29.53*/45.93	29.53*/45.93	29.53*/45.93	29.53*/45.93	29.53*/45.93
	m/min	9*/14	9*/14	9*/14	9*/14	9*/14
Air consumption at full load – lifting	cfm	42.38	42.38	42.38	141.26	141.26
	m ³ /min	1.2	1.2	1.2	4	4
Air consumption at full load – lowering	cfm	52.97	52.97	52.97	194.23	194.23
	m ³ /min	1.5	1.5	1.5	5.5	5.5
Air consumption trolley motor	cfm	21.19	21.19	21.19	21.19	21.19
	m ³ /min	0.6	0.6	0.6	0.6	0.6
Air connection		G 1/2	G 1/2	G 1/2	G 3/4	G 3/4
Hose dimension (Ø inside)	inch.	0.51	0.51	0.51	0.75	0.75
	mm	13	13	13	19	19
Weight with standard lift height and control length	lbs	216.05	218.26	231.59	462.97	727.53
	kg	98	99	105	210	330
Chain dimension	inch.	0.28 x 0.83	0.28 x 0.83	0.28 x 0.83	0.51 x 1.42	0.51 x 1.42
	mm	7 x 21	7 x 21	7 x 21	13 x 36	13 x 36
Weight of chain	lbs/m	2.20	2.20	2.20	8.38	8.38
	kg/m	1	1	1	3.8	3.8
Standard lift	ft	9.84	9.84	9.84	9.84	9.84
	m	3	3	3	3	3
Length of control at standard lift	ft	6.56	6.56	6.56	6.56	6.56
	m	2	2	2	2	2
Max. bottom flange thickness t	inch.	0.98	0.98	0.98	1.38	1.38
	mm	25	25	25	35	35
Max. bottom flange width b	inch.	12.20	12.20	12.20	12.20	12.20
	mm	310	310	310	310	310
Min. bottom flange width b	inch.	3.15	3.15	3.15	4.92	4.92
	mm	80	80	80	125	125
Noise level at full load ¹ - lifting	dB(A)	75	76	76	78	78
Noise level at full load ¹ - lowering	dB(A)	78	78	78	80	80

* 1st step at F-control with 2-step travelling speed

¹ Measured at 1 m distance acc. to DIN 45635 part 20

Low Headroom Trolley LMF



DIMENSIONS

Hoist Type Trolley Type		PROFI 05 TI LMF 05-2 t	PROFI 1 TI LMF 05-2 t	PROFI 2 TI LMF 05-2 t	PROFI 3 TI LMF 3.2 t	PROFI 6 TI LMF 6.3 t
A max.	inch. mm	4.13 105	4.13 105	4.13 105	4.13 105	4.17 106
B	inch. mm	1.42 36	1.42 36	1.42 36	1.42 36	2.76 70
b min.	inch. mm	3.15 80	3.15 80	3.15 80	3.15 80	4.92 125
C	inch. mm	6.46 164	6.46 164	6.46 164	6.46 164	6.65 169
D1	inch. mm	2.76 70	2.76 70	2.76 70	2.76 70	6.50 165
D2	inch. mm	2.76 70	2.76 70	2.76 70	2.76 70	2.76 70
E1	inch. mm	4.57 116	4.57 116	4.57 116	4.57 116	9.29 236
E2	inch. mm	4.57 116	4.57 116	4.57 116	4.57 116	4.57 116
F	inch. mm	6.77 172	6.77 172	7.68 195	8.98 228	13.82 351
G1	inch. mm	3.74 95	3.74 95	3.74 95	3.74 95	7.76 197
G2	inch. mm	3.74 95	3.74 95	3.74 95	3.74 95	3.74 95
H min.	inch. mm	12.60 320	12.60 320	15.51 394	16.34 415	21.14 537
J	inch. mm	12.60 320	12.60 320	12.60 320	15.63 397	15.63 397
K1	inch. mm	5.71 145	5.71 145	5.71 145	9.17 233	9.17 233
K2	inch. mm	5.98 152	5.98 152	5.98 152	9.76 248	9.76 248
L	inch. mm	28.15 715	28.15 715	28.15 715	32.48 825	39.17 995
M	inch. mm	1.10 28	1.10 28	1.10 28	1.18 30	1.57 40
N	inch. mm	1.65 42	1.65 42	1.65 42	1.65 42	2.01 51
t max.	inch. mm	0.98 25	0.98 25	0.98 25	1.38 35	1.38 35

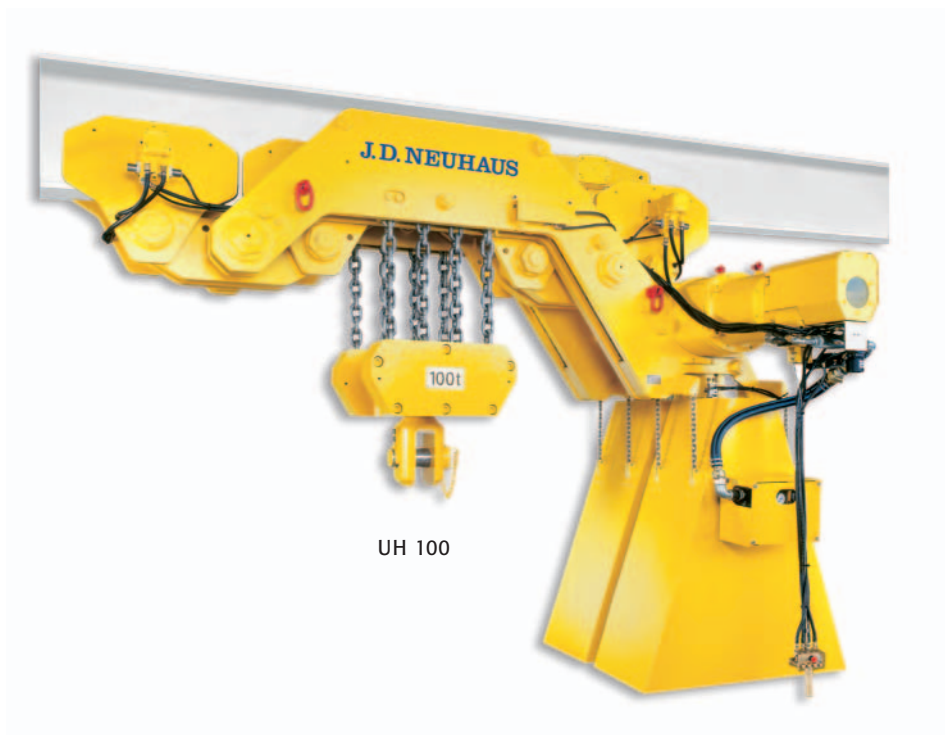
JDN ULTRA-LOW MONORAIL HOISTS

Carrying capacities: 4 t up to 100 t
Air pressure: 6 bar

Where loads have to be lifted and transported in extremely reduced spaces the **JDN Ultra-Low Monorail Hoists** provide the ideal solution. For example the Ultra-Low Monorail Hoist with a load capacity of 6 t has a headroom of only 230 mm.

STANDARD FEATURES

- Ideally suited for working in hazardous areas (explosion risk).
- JDN Ultra-Low Monorail Hoists UH are insensitive to humidity, dust and temperatures from -20°C up to +70°C.
- Extremely low headroom.
- Low air consumption.
- Available with increased spark protection.

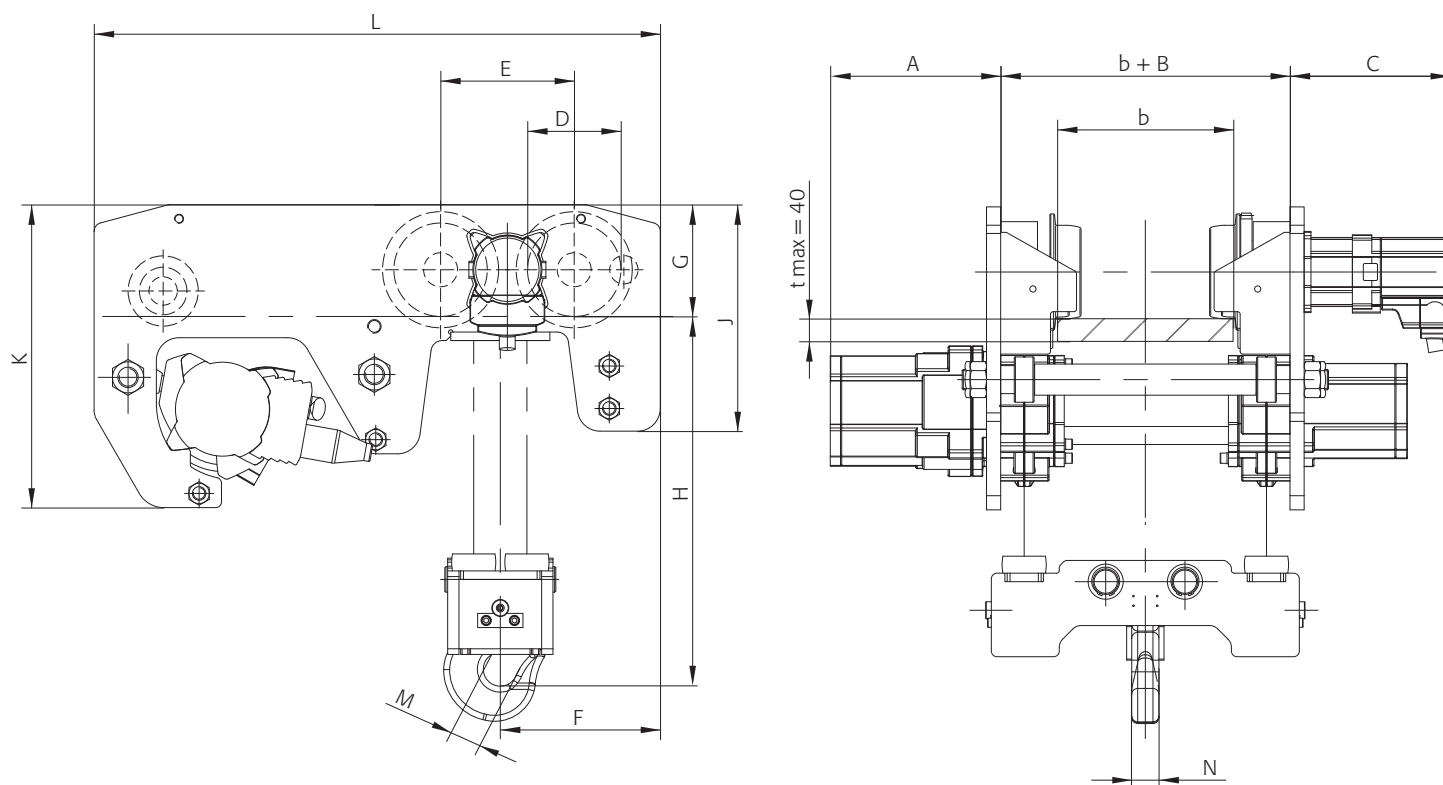


TECHNICAL DATA

Type		UH 4	UH 6	UH 8	UH 12	UH 16
Carrying capacity	mt	4	6	8	12	16
Number of chain strands		2	2	4	4	4
Motor output	kW	2.5	2.5	2.5	2.5	2.5
Air pressure	PSI bar	85 6	85 6	85 6	85 6	85 6
Lifting speed at full load	ft/min m/min	9.84 3.0	6.56 2.0	4.59 1.4	2.95 0.9	2.13 0.65
Lifting speed without load	ft/min m/min	19.69 6.0	14.76 4.5	9.51 2.9	7.22 2.2	3.94 1.2
Lowering speed at full load	ft/min m/min	24.61 7.5	17.06 5.2	11.81 3.6	8.20 2.5	4.92 1.5
Air consumption lifting – full load	cfm m ³ /min	141.26 4.0	141.26 4.0	141.26 4.0	141.26 4.0	141.26 4.0
Air consumption lowering – full load	cfm m ³ /min	194.23 5.5	194.23 5.5	194.23 5.5	194.23 5.5	194.23 5.5
Air connection		G 3/4	G 3/4	G 3/4	G 3/4	G 3/4
Hose dimension (Ø inside)	inch. mm	0.75 19	0.75 19	0.75 19	0.75 19	0.75 19
Weight with standard lift height and control length	lbs kg	1014.13 460	1036.17 470	1190.50 540	1212.54 550	1234.60 560
Chain dimension	inch. mm	0.51 x 1.42 13 x 36	0.51 x 1.42 13 x 36	0.51 x 1.42 13 x 36	0.51 x 1.42 13 x 36	0.51 x 1.42 13 x 36
Weight of 1 m chain	lbs kg	8.38 3.8	8.38 3.8	8.38 3.8	8.38 3.8	8.38 3.8
Standard lift	ft m	10 3	10 3	10 3	10 3	10 3
Length of control at standard lift	ft m	6.5 2	6.5 2	6.5 2	6.5 2	6.5 2
Noise level at full load ¹ - lifting	dB(A)	78	78	78	78	78
Noise level at full load ¹ - lowering	dB(A)	80	80	80	80	80

Group mechanism: M3 (1 Bm)
Technical data for higher capacities on request.

¹ Measured at 1 m distance acc. to DIN 45635 part 20



DIMENSIONS

Type		UH 4	UH 6	UH 8	UH 12	UH 16
A	inch. mm	7.68 195	12.01 305	7.68 195	12.01 305	12.01 305
B	inch. mm	7.87 200	7.87 200	7.87 200	7.87 200	7.87 200
C	inch. mm	11.16 284	11.16 284	11.16 284	11.16 284	11.16 284
D	inch. mm	6.50 165	6.50 165	6.50 165	6.50 165	6.50 165
E	inch. mm	9.29 236	9.29 236	9.29 236	9.29 236	9.29 236
F	inch. mm	12.99 330	12.99 330	11.14 283	11.14 283	11.14 283
G	inch. mm	7.78 197.5	7.78 197.5	7.78 197.5	7.78 197.5	7.78 197.5
H min. 150 ≤ b ≤ 310	inch. mm	9.06 230	9.06 230	– –	– –	– –
H min. 150 ≤ b ≤ 230	inch. mm	– –	– –	11.61 295	11.61 295	13.15 334
H min. 230 ≤ b ≤ 310	inch. mm	– –	– –	10.87 276	10.87 276	12.40 315
J	inch. mm	15.75 400	15.75 400	15.75 400	15.75 400	15.75 400
K	inch. mm	21.06 535	21.06 535	21.06 535	21.06 535	21.06 535
L	inch. mm	39.37 1000	39.37 1000	39.37 1000	39.37 1000	39.37 1000
M	inch. mm	1.57 40	1.57 40	1.73 44	1.73 44	2.09 53
N	inch. mm	2.01 51	2.01 51	2.60 66	2.60 66	3.23 82

Technical data for higher capacities on request.



J.D. NEUHAUS
powered by air!

JDN MONORAIL AIR HOISTS

Carrying capacities:
10t up to 115t per unit

JDN Monorail Hoists are available with air or hydraulic drive for the offshore industry, or wherever heavy loads have to be moved in reduced spaces. Depending on the application **JDN Monorail Hoists** can be used in tandem.

For example: Working in parallel for handling BOP handling systems.
Working in tandem and connected by a tie bar for handling grinding rollers in the cement industry.

STANDARD FEATURES

- Ideally suited for working in hazardous areas (explosion risk).
- Insensitive to humidity, dust and temperatures from -20°C up to +70°C.
- Low headroom, compact design.
- Low air consumption.
- World wide service.

TECHNICAL DETAILS

- Instant starting vane motor requiring low maintenance
- Fail safe Disc brake immediately holds load safely in the event of interruption of air supply
- All gearbox components made of tempered or hardened high-grade steels
- Anti-climb and anti-drop devices
- Lateral guiding plates
- Pendant Control unit with emergency shut-off valve

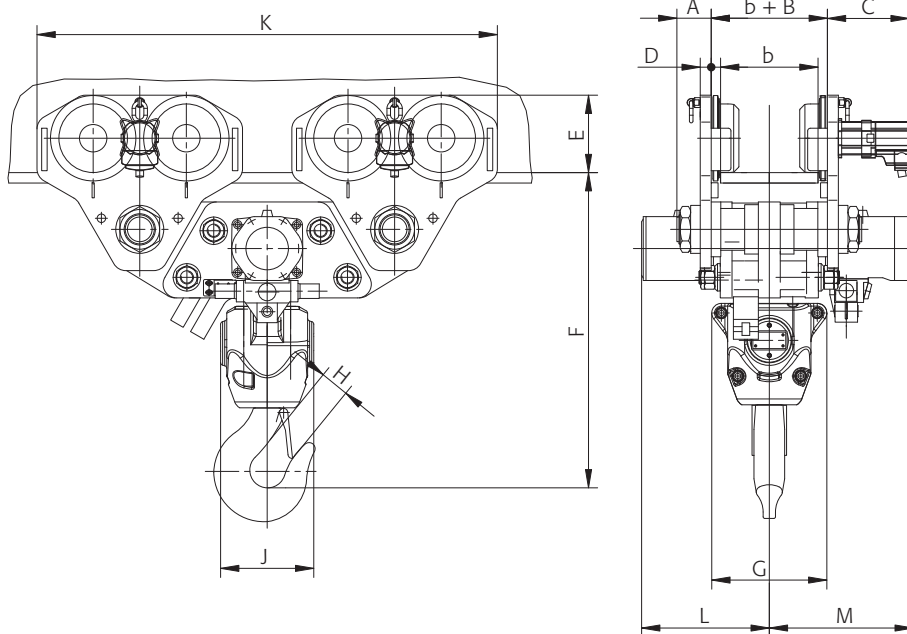
ACCESSORIES

- Increased spark protection
- Rack and pinion drive
- Overload protection
- Two speed trolley travel control
- Filter silencer

Third party acceptance by DNV, ABS or Lloyds Register of shipping etc, available on request.

SPECIAL EXECUTIONS

If you cannot find the correct hoisting system to suit your application in our standard programme then Non standard designs to suit your particular application are our speciality.



DIMENSIONS

Type		EH 10	EH 16	EH 20	EH 25	EH 37	EH 50	EH 75	EH 100
A max.	inch. mm	4.1 105	5.1 130	5.1 130	5.8 146	3.9 100	4.9 125	3.9 100	4.9 125
B	inch. mm	2.8 70	2.7 68	2.7 68	2.8 70	2.7 68	2.7 68	2.7 68	2.7 68
C	inch. mm	11.2 285	11.6 295	11.6 295	11.2 285	11.6 295	11.8 300	11.6 295	11.8 300
D	inch. mm	0.9 25	1.4 35	1.4 35	1.0 25	1.4 35	1.6 40	1.4 35	1.6 40
E	inch. mm	7.8 198	8.7 220	8.7 220	7.8 198	8.7 220	11.1 283	8.7 220	11.1 283
F*	inch. mm	27.8 705	29.5 750	32.3 820	39.3 998	42.1 1070	45.3 1150	58.3 1480	60.4 1535
G	inch. mm	5.4 138	8.4 213	7.9 200	6.7 170	7.5 190	16.5 420	11.3 286	22.6 575
H	inch. mm	1.7 44	2 53	3 75	3 75	3.9 100	3.9 100	4.7 120	4.7 120
J	inch. mm	7.6 192	7.3 185	10.5 266	13.8 350	17.9 455	13.4 340	29.1 740	18.5 470
K	inch. mm	22.8 580	23.6 600	23.6 600	46.7 1185	68.1 1730	66.1 1680	126.1 3210	123.2 3130
L	inch. mm	12.1 308	14.5 367	14.5 367	14.8 377	14.8 377	18.2 462	25.2 640	30 762
M	inch. mm	10.5 266	12.8 325	12.8 325	17.1 435	17.1 435	22.1 560	25.8 655	29.5 750

*Chain containers increase the hoist headroom





EH 20



EH 50



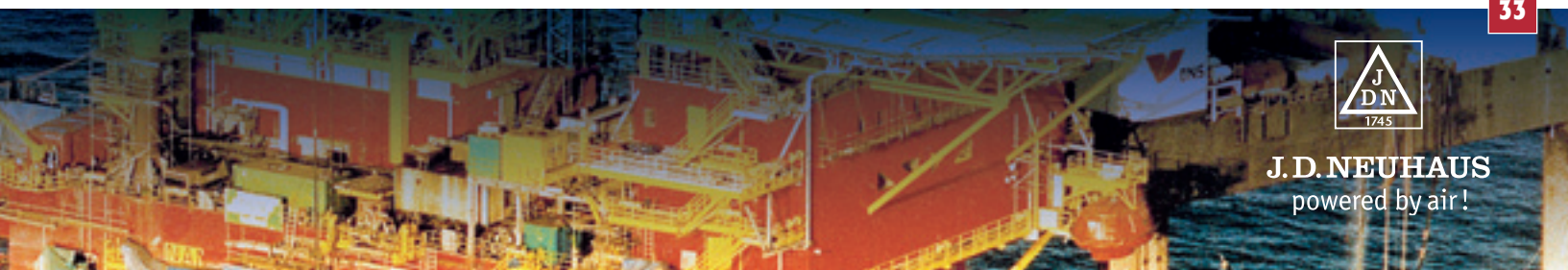
EH 100

TECHNICAL DATA

Type		EH 10	EH 16	EH 20	EH 25	EH 37	EH 50	EH 75	EH 100
Carrying capacity	mt	10	16	20	25	37.5	50	75	100
Number of chain strands		2	3	4	2	3	4	3	4
Motor output Trolley	kW	0.7	0.7	0.7	1.4	1.4	1.4	2.8	2.8
Motor output Hoist	kW	3.5	3.5	3.5	6	6	6	10	10
Air pressure	PSI bar	85 6	85 6	85 6	85 6	85 6	85 6	85 6	85 6
Lifting speed at full load	ft/m m/min	5.3 1.6	3.3 1	2.3 0.7	3.6 1.1	2.1 0.6	1.6 0.5	1.5 0.5	1.2 0.4
Lifting speed without load	ft/m m/min	10.5 3.2	6.6 2	4.6 1.4	7.6 2.3	5.3 1.6	3.6 1.1	2.8 0.6	2.1 0.7
Lowering speed at full load	ft/m m/min	11.2 3.4	6.9 2.1	5.3 1.6	6.2 1.9	4.9 1.5	3 0.9	3.3 1.0	2.5 0.8
Travelling speed at full load	ft/m m/min	39.4 12	39.4 12	39.4 12	39.4 12	39.4 12	39.4 12	39.4 12	39.4 12
Travelling speed without load	ft/m m/min	44.3 13.5	44.3 13.5	44.3 13.5	44.3 13.5	44.3 13.5	44.3 13.5	44.3 13.5	44.3 13.5
Air consumption – Trolley	cfm m³/min	46 1.3	46 1.3	46 1.3	92 2.6	92 2.6	92 2.6	184 5.2	184 5.2
Air consumption – Hoist	cfm m³/min	113.2 3.2	113.2 3.2	141.5 4	194.6 5.5	194.6 5.5	194.6 5.5	389.1 11	389.1 11
Air connection		G ³ /4	G ³ /4	G ³ /4	G1 ¹ /2	G1 ¹ /2	G1 ¹ /2	G1 ¹ /2	G1 ¹ /2
Hose dimension (Ø inside)	inch. mm	0.8 19	0.8 19	0.8 19	1.4 35	1.4 35	1.4 35	1.4 35	1.4 35
Weight with standard lift height and control length	kg	992.1 450	1267.7 575	1366.3 620	2093.5 950	3195.3 1450	3922.5 1780	8814.7 4000	12560.9 5700
Chain dimension	inch. mm	0.6 x 1.8 16 x 45	0.6 x 1.8 16 x 45	0.6 x 1.8 16 x 45	0.9 x 2.6 23.5 x 66	0.9 x 2.6 23.5 x 66	0.9 x 2.6 23.5 x 66	1.2 x 3.5 32 x 90	1.2 x 3.5 32 x 90
Weight of 1 m chain	lbs kg	12.8 5.8	12.8 5.8	12.8 5.8	26.9 12.2	26.9 12.2	6.9 12.2	46.9 21.3	46.9 21.3
Standard lift	ft m	10 3	10 3	10 3	10 3	10 3	10 3	10 3	10 3
Length of control at standard lift	ft m	6.5 2	6.5 2	6.5 2	6.5 2	6.5 2	6.5 2	6.5 2	6.5 2
Noise level at full load ¹ with standard silencer – lifting	dB(A)	78	78	80	83	83	83	88	88
Noise level at full load ¹ with standard silencer – lowering	dB(A)	80	80	84	83	83	83	89	89

Group mechanism: EH 10 - EH 50 M3 (1 Bm), EH 75 and EH 100 M2 (1 Cm)

¹ Measured at 1 m distance acc. to DIN 45635 part 20



J.D. NEUHAUS
powered by air!

HYDRAULIC HOISTS PROFI

HYDRAULIC MONORAIL HOISTS

Carrying capacities: up to 100 t



PROFI 6 TI-H

The alternative to air hoists: **JDN Hydraulic Hoists and Hydraulic Monorail Hoists** with carrying capacities up to 100 t.

Depending on motor size these hoists work with an intake pressure of 100 bar up to 180 bar. Pressure fluids: Oil or flame resistant fluids HFC.

Our Hydraulic hoists can be deployed as an alternative to air driven units in all places where hydraulic lines, central hydraulic systems or hydraulic power supplies exist.

ADVANTAGES

- Ideal for applications in explosion risk areas
- Sensitive, infinitely variable speed control of lifting/lowering and travelling motions
- Extremely low noise emissions
- Fully enclosed highly robust gear motor
- Integrated overload protection
- Only two supply connections at hoist
"P" and "T", leakage oil drained internally
- Controlled load-lowering up to 20 t carrying capacities in the event of oil supply failure

TECHNICAL DATA

Type		3 TI-H	6 TI-H	10 TI-H	16 TI-H	20 TI-H
Carrying capacity	mt	3.2	6.3	10	16	20
No. of chain strands		1	2	2	3	4
Motor type		KM 1/16	KM 1/16	KM 1/16	KM 1/16	KM 1/16
Motor output	kW	3.5	3.5	3.5	3.5	3.5
Intake pressure	PSI bar	1885 130	1885 130	1885 130	1885 130	1885 130
Intake volume	cfm l/min	1.7 48	1.7 48	1.7 48	1.7 48	1.7 48
Lifting speed - full load	ft/min m/min	13.1 4.0	6.6 2.0	5.6 1.7	3.6 1.1	2.6 0.8
Lifting speed without load	ft/min m/min	14.8 4.5	7.5 2.3	6.6 2.0	4.3 1.3	3 0.9
Lowering speed - full load	ft/min m/min	14.8 4.5	7.5 2.3	6.9 2.1	4.9 1.5	3.3 1.0
Lowering speed without load	ft/min m/min	14.8 4.5	7.5 2.3	6.7 2.0	4.3 1.3	3 0.9
Connection		G 1/2	G 1/2	G 1/2	G 1/2	G 1/2
Hose dimension		DN 12	DN 12	DN 12	DN 12	DN 12
Weight with standard lift height and control length	lbs kg	1285 583	2127 965	2072 940	2072 940	5423 2460
Chain dimension	mm	13 x 36	13 x 36	16 x 45	16 x 45	16 x 45
Weight of chain	lbs/ft kg/m	2.6 3.8	2.6 3.8	3.9 5.8	3.9 5.8	3.9 5.8
Standard lift	ft m	10 3	10 3	10 3	10 3	10 3
Length of control at standard lift	ft m	6.5 2	6.5 2	6.5 2	6.5 2	6.5 2

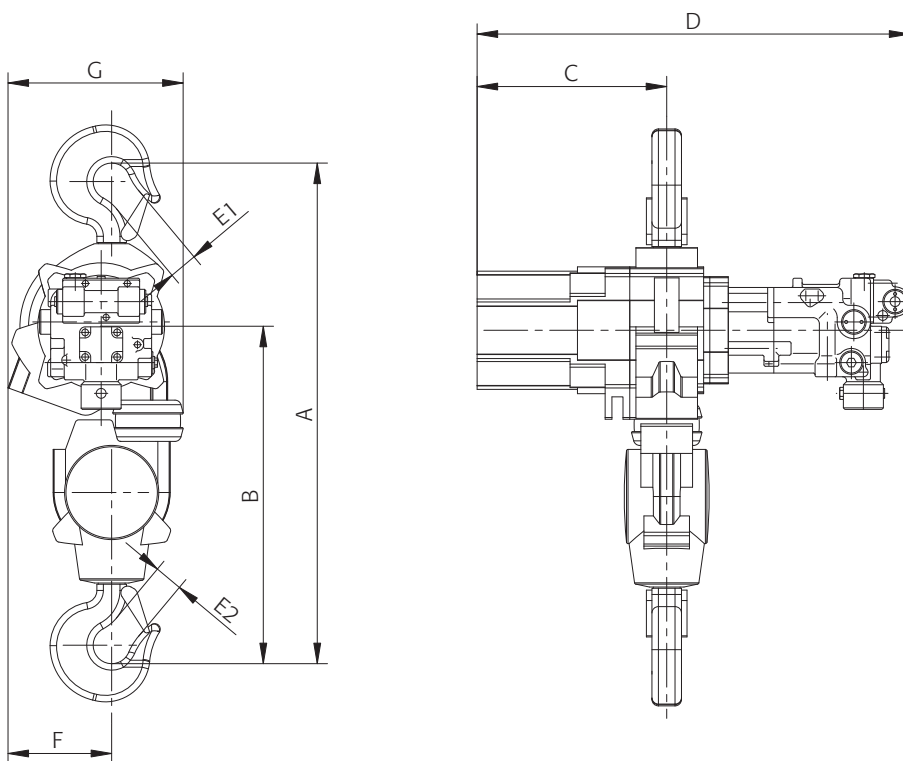
Group mechanism: M3 (1 Bm)

JDN HYDRAULIC HOISTS PROFI 3 TI-H - 20 TI-H

DIMENSIONS

Type		3 TI-H	6 TI-H	10 TI-H	16 TI-H	20 TI-H
A smallest headroom ¹	inch. mm	23.4 593	26.5 674	32 813	35.4 898	40.6 1030
B	inch. mm	14.7 373	17.9 454	21.6 548	23.5 598	26.4 670
C	inch. mm	9.2 233	9.2 233	12.2 308	15 382	15 382
D	inch. mm	21 533	21 533	24.6 625	29.2 742	29.2 742
E1	inch. mm	1.6 40	1.6 40	1.8 44	2.1 53	3 75
E2	inch. mm	1.2 30	1.6 40	1.8 44	2.1 53	3 75
F	inch. mm	7.4 187	6.1 154	7.8 197	7.8 199	7.1 180

¹ Chain containers increase the hoist headroom



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HYDRAULIC HOISTS PROFI 25 TI-H - 100 TI-H

TECHNICAL DATA

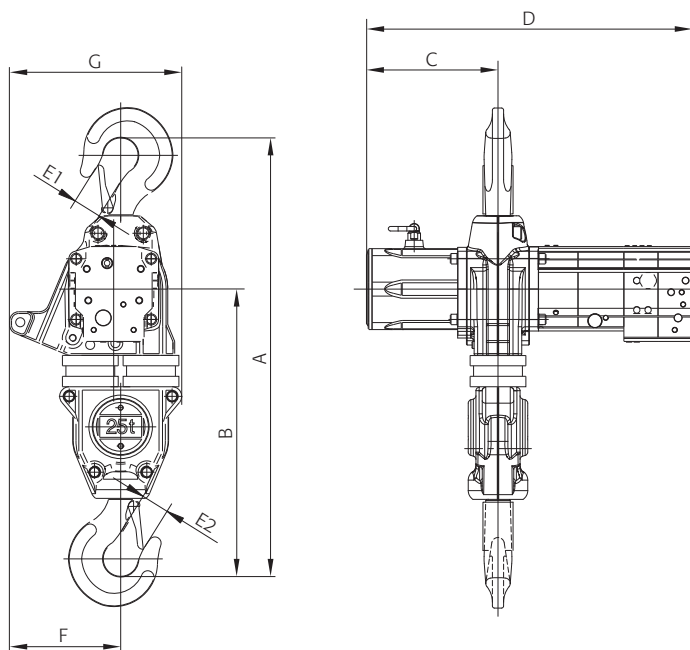
Type		25 TI-H	37 TI-H	50 TI-H	100 TI-H
Capacity	mt	25	37.5	50	100
Number of chain strands		2	3	4	4
Motor output	kW	6	6	6	10
Motor type		KM 2/32	KM 2/32	KM 2/32	KM 2/40
Intake pressure	PSI bar	2176 150	2176 150	2176 150	2611 180
Intake volume	cfm l/min	2.8 80	2.8 80	2.8 80	4.2 120
Lifting speed at rated load	ft/min m/min	3.6 1.1	2.3 0.7	1.6 0.5	1.4 0.4
Lifting speed without load	ft/min m/min	3.9 1.2	2.6 0.8	1.6 0.5	1.5 0.5
Lowering speed at rated load	ft/min m/min	3.9 1.2	2.6 0.8	1.6 0.5	1.5 0.5
Lowering speed without load	ft/min m/min	3.9 1.2	2.6 0.8	1.6 0.5	1.6 0.5
Connection		G 3/4	G 3/4	G 3/4	G 3/4
Hose dimension		DN 16	DN 16	DN 16	DN 16
Weight with standard lift height and control length	lbs kg	1282 583	2123 965	2068 940	5412 2460
Chain dimension	mm	23.5 x 66	23.5 x 66	23.5 x 66	32 x 90
Weight of chain	lbs/ft kg/m	8.2 12.2	8.2 12.2	8.2 12.2	14.3 21.3
Standard lift	ft m	10 3	10 3	10 3	10 3
Length of control with standard lift	ft m	6.5 2	6.5 2	6.5 2	6.5 2

Group mechanism: PROFI 25 TI-H - PROFI 50 TI-H M3 (1 Bm), PROFI 100 TI-H M2 (1 Cm)

DIMENSIONS

Type		25 TI-H	37 TI-H	50 TI-H	100 TI-H
A smallest headroom ¹	inch. mm	50.5 1282	57.7 1466	66.9 1700	86.6 2200
B	inch. mm	37.3 948	36.8 935	45 1144	58.1 1475
C	inch. mm	15.5 393	14.8 377	17.4 442	27.8 705
D	inch. mm	42.1 1069	40.8 1037	48.6 1235	55.8 1417
E1	inch. mm	3 75	3.9 100	3.9 100	4.2 120
E2	inch. mm	3 75	3.9 100	3.9 100	4.2 120
F	inch. mm	18.4 466	20.4 518	12.2 310	17.3 30.2
G	inch. mm	24 610	29.3 745	21.2 539	440 767

¹ Chain containers increase the hoist headroom



HYDRAULIC MONORAIL HOISTS EH 20-H - 100-H

TECHNICAL DATA

Type		EH 20-H	EH 25-H	EH 37-H	EH 50-H	EH 75-H	EH 100-H
Capacity	mt	20	25	37.5	50	75	100
Number of chain strands		4	2	3	4	3	4
Motor output – Trolley	kW	0.7	1.4	1.4	1.4	2.8	2.8
Motor output – Hoist	kW	3.5	6	6	6	10	10
Motor type – Trolley		KM1/16	KM1/16	KM1/16	KM1/16	KM1/16	KM1/16
Motor type – Hoist		KM1/8-KM1/16	KM 2/32	KM 2/32	KM 2/32	KM 2/32	KM 2/32
Intake pressure	PSI bar	2320.6/1450 160/100	2176 150	2176 150	2176 150	2610 180	2610 180
Intake volume	cfm l/min	0.7/1.4 20/40	2.8 80	2.8 80	2.8 80	3 80	3 80
Lifting speed at rated load	ft/min m/min	2.6 0.8	3.6 1.1	2.3 0.7	1.6 0.5	2.3 0.7	1.8 0.55
Lifting speed without load	ft/min m/min	3 0.9	3.9 1.2	2.6 0.8	2 0.6	2.5 0.75	1.8 0.55
Lowering speed at rated load	ft/min m/min	3 0.9	3.9 1.2	2.6 0.8	2 0.6	2.6 0.8	2 0.6
Lowering speed without load	ft/min m/min	3 0.9	3.9 1.2	2.6 0.8	2 0.6	2.5 0.75	1.8 0.55
Travelling speed at rated load	ft/min m/min	39.4 12	39.4 12	39.4 12	39.4 12	39.4 12	39.4 12
Connection		G 1/2	G 3/4	G 3/4	G 3/4	G 3/4	G 3/4
Hose dimension		DN 12	DN 16	DN 16	DN 16	DN 16	DN 16
Weight with standard lift	lbs kg	1584 720	2310 1050	1550 3410	4136 1880	9020 4100	12760 5800
Chain dimension	mm	16 x 45	23.5 x 66	23.5 x 66	23.5 x 66	32 x 90	32 x 90
Weight of chain	lbs/ft kg/m	3.9 5.8	8.2 12.2	8.2 12.2	8.2 12.2	14.3 21.3	14.3 21.3
Standard lift	ft m	10 3	10 3	10 3	10 3	10 3	10 3
Length of control with standard lift	ft m	6.5 2	6.5 2	6.5 2	6.5 2	6.5 2	6.5 2

Group mechanism: EH 20-H - EH 50-H M3 (1 Bm), EH 75-H and EH 100-H M2 (1 Cm)

DIMENSIONS

Type		EH 20-H	EH 25-H	EH 37-H	EH 50-H	EH 75-H	EH 100-H
A	inch. mm	5.1 130	5.8 146	5.8 146	4.9 125	3.9 100	4.9 125
B	inch. mm	2.7 68	2.8 70	2.8 70	2.7 68	2.7 68	2.7 68
C	inch. mm	10.5 267	10.1 257	10.5 267	10.7 272	10.5 267	10.7 272
D	inch. mm	1.4 35	1 25	1 25	1.6 40	1.4 35	1.6 40
E	inch. mm	8.7 220	7.8 198	8.7 220	11.1 283	8.7 220	11.1 283
F ¹	inch. mm	32.3 820	39.3 998	42.1 1070	45.3 1150	58.3 1480	60.4 1535
G	inch. mm	7.9 200	6.7 170	7.5 190	16.5 420	11.3 286	22.6 575
H	inch. mm	3 75	3 75	3.9 100	3.9 100	4.7 120	4.7 120
J	inch. mm	10.5 266	13.8 350	17.9 455	13.4 340	29.1 740	18.5 470
K	inch. mm	23.6 600	46.7 1185	68.1 1730	66.1 1680	126.4 3210	123.2 3130
L	inch. mm	14.5 367	14.8 377	14.8 377	18.2 462	25.2 640	30 762
M	inch. mm	16.5 419	22.1 562	22.1 562	27.0 687	26.4 670	30.1 765

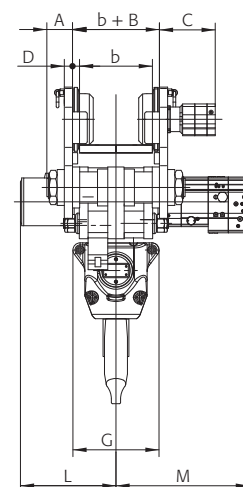
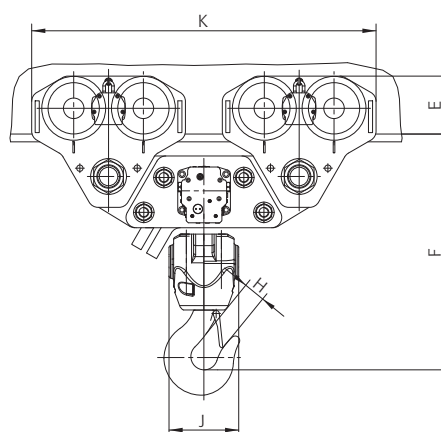
¹ Chain containers increase the hoist headroom

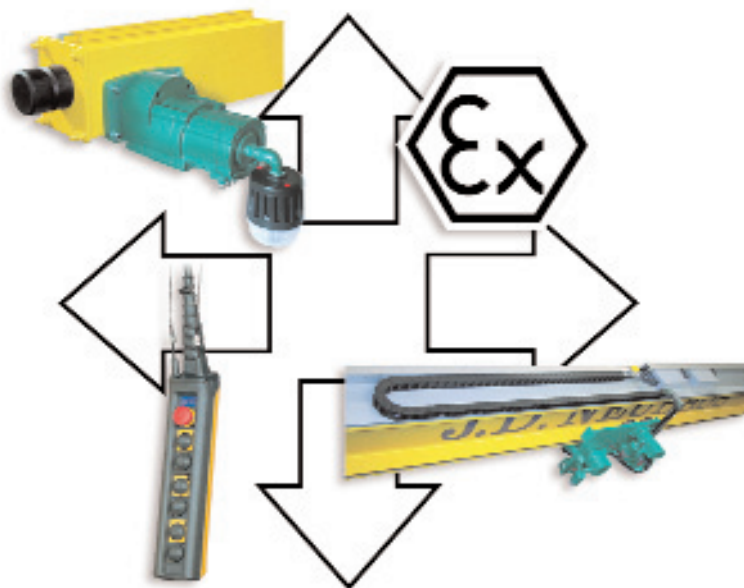


EH 20-H



EH 25-H





JDN Air Cranes in standard version are suitable for working in hazardous areas.

The delivery programme comprises explosion-proof

- Top running overhead travelling cranes
- Under hung overhead travelling cranes
- Jib cranes

which can be designed to your individual needs, customised installations are our speciality.

Depending on your requirements JDN air hoists in motor trolleys or monorail hoist systems are integrated into the crane design. An ergonomically designed pneumatic pendant control is supplied with two speed control as standard for crane and trolley travel. Infinitely variable hoist and trolley speed control is also available.

Different JDN Cranes in Detail

- Overhead cranes with single or double girder design
- Underhung cranes including low headroom design
- Jib cranes
- Cranes with in line mechanically linked synchronised hoists
- Cranes with parallel operating hoists
- Carrying capacities up to 50t
- Crane spans up to 18m

■ JDN CRANE KITS FOR EXPLOSION-PROOF AIR CRANES

Carrying capacities: up to 10 t

J.D. Neuhaus can offer crane manufacturers crane component kits complete with pneumatic crane drives. With these crane kits overhead travelling cranes up to 10t capacity can be built very simply and economically, especially for applications in hazardous areas.

The crane manufacturer provides the main girder and JDN delivers all the components that are necessary to build an air powered crane of their chosen design:

- End carriages with pneumatic drives
- Energy feeding systems
- Safety accessories
- And of course the appropriate air hoist with trolley

■ TECHNICAL DATA

Load capacity	Main travel (crane)		Cross travel (trolley)			Hoist		
	max. speed	control	max. speed	control		max. speed	control	
	[m/min]	2-steps	[m/min]	2-steps	variable	[m/min] lifting/lowering	1-step	variable
1 t	7/20	x	9/14	x		5/12	x	+
2 t	7/20	x	9/14	x		2.5/6	x	+
3 t	7/20	x	9/14	x		3.5/8.5	x	+
6 t	7/20	x	9/14	x		1.5/3.5	x	+
10 t	7/20	x	5/12	x		1.0/3.0	x	+
15 t	5/25	x	5/12	x	+	0.7/1.5	x	+
20 t	5/25	x	5/12	x	+	0.5/1.3	x	+
32 t	5/25	x	5/12	x	+	0.6/1.3	x	
40 t	5/25	x	5/12	x	+	0.7/1.2	x	
50 t	5/25	x	5/12	x	+	0.5/1.1	x	

x = Standard + = Option (speeds under standard conditions)



JDN RATCHET HOISTS WITT

Carrying capacities: 1.5 t, 2.5 t

The **WITT** is designed for for lifting, pulling, tensioning or anchoring operations under all working positions. It has a robust cast iron housing and is extremely resistant to adverse working conditions. Technically the **WITT** distinguishes itself by a totally enclosed planetary gear. All rotating parts have ball, needle or slide bearings.

The **WITT** is a proven device for moving and positioning heavy machinery, for tensioning heavy loads during transport, for positioning various heavy profiles and for many other operations.

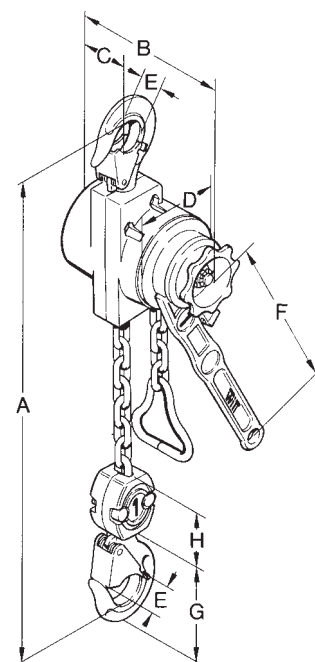


TECHNICAL DATA

Type		WITT 1,5t	WITT 2,5t
Carrying capacity	mt	1.5	2.5
Number of falls		1	
Lift per ratchet rotation	inch. mm	1.3 33	1.5 37
Lever force at full load	lbs kg	61.7 28	88.2 40
Weight without chain	lbs kg	16.5 7.5	39.7 18
Total weight	lbs kg	20.3 9.2	48.5 22
Weight of 1 m chain	lbs kg	2.2 1	6.0 2.7
Chain dimension	mm	7.1 x 21	11 x 31
Standard lift	ft m	59.1 1.5	

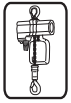
DIMENSIONS

Type		WITT 1,5t	WITT 2,5t
A smallest headroom	inch. mm	13.6 345	17.3 440
B	inch. mm	6.3 160	7.3 185
C	inch. mm	2.6 65	2.8 72
D	inch. mm	3.7 93	5.5 140
E	inch. mm	1.1 27	1.2 31.5
F	inch. mm	14.4 365	15.6 395
G	inch. mm	3.7 95	5.2 133
H	inch. mm	2.4 62	3.5 88



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The following symbols indicate the various control options available for JDN equipment



for JDN Air Hoists



for JDN Air Winches



■ ROPE CONTROL

Suitable For Any Control Length:



This control type provides infinitely speed control for hoist lifting and lowering motions and is suitable for any required control length. The rope control option is available for all PROFI series hoists up to 25 t carrying capacity. For larger capacity PROFI series hoists 37 TI, 50 TI and 100 TI the rope is replaced by a pull chain for greater strength.



■ LEVER CONTROL

For JDN Air Winches:



With the hand lever control, loads can be moved safely in a precise manner and at variable speeds. The direction of movement of the lever corresponds to the direction of rotation of the rope drum. When released, the lever returns automatically to the centre position.



■ FI-CONTROL

Sensitive control, for easy handling:



The FI-Control provides precise infinitely variable speed control and the ergonomically designed synthetic housing ensures comfortable handling for the operator. The use of corrosion resistant materials makes it suitable for use in aggressive atmospheres, with the control hoses enclosed in an outer sheath which protects them from external conditions.

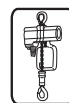




■ E-CONTROL

Low maintenance, corrosion-proof:

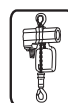
The very robust brass construction distinguishes the E-type pendant control valve. Low weight and ergonomic design ensure ease of handling. Only available in single speed control version.



■ F-CONTROL

Available For Multi-Function Use:

The F-control is manufactured from an unbreakable synthetic material, resistant to external conditions. The ergonomically designed housing ensures ease of handling. Up to 18 different control functions can be incorporated in a single pendant control e.g key switch, two stage travelling speed, klaxon or simultaneous control of two hoist motors. As an option the F-control can also be delivered with infinitely variable speed control of hoisting and trolley travelling motions.



CONTROLS FOR JDN AIR HOISTS IN MOTOR TROLLEY AND JDN MONORAIL HOISTS

For controlling JDN air hoists in motor trolleys and JDN monorail hoists we recommend the four button version of the E or F-control. The rope control option is also available.

CONTROLS FOR JDN AIR WINCHES

Our winches are easy to operate, with an infinitely variable speed lever type control at the winch or via a two button version E-control or the twin lever FI-type pendant controls. As an added safety feature the controls are available with a main air emergency shut-off valve.

CONTROLS FOR JDN AIR CRANES

For controlling JDN air cranes the F-control is the most suitable because of its multi-function capability.

OPERATING CONVENIENCE VIA RADIO CONTROL

To overcome excessive distances between operator and crane, or to use hoisting equipment in remote areas, the JDN Radio Control offers a convenient and safe alternative to other control types. The JDN radio control is also available in explosion-proof design.



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■ ACCESSORIES

- ➔ **Spiral hose up to 10 m / 30 ft trolley drive**
Not for use in category II (Zone 1)
or explosion group IIC applications
- ➔ **Energy supply by Square bar (suitable for curved beams)**
consisting of: square track with towing arm, anti-static air supply hose, hose trolley, horizontal support bracket and clamp.
The horizontal support bracket is designed to be clamped to the top flange of the runway beam.
Alternative fixing methods are available on request.
- ➔ **Energy supply by C-rail**
consisting of: C-rail with horizontal support bracket, clamp, antistatic air supply hose and hose trolley. The horizontal support bracket is designed to be clamped to the top flange of the runway beam. Alternative fixing methods are available on request.
- ➔ **Lubricator**
- ➔ **Filter silencer**
- ➔ **Filter regulator**
- ➔ **Grease cartridge for oil-free motor operation,**
250 ml, Art. No. 11901
- ➔ **Booster Valve (for use above 10m pendant control length)**
- ➔ **Pneumatic limit switch for lifting and travelling motions**
- ➔ **Extended Pendant control arm**
- ➔ **Copper plated load hook for increased non sparking protection (included as standard in Zone 1 and IIC specification)**
- ➔ **Stainless steel load hook (up to 3/4 tonne carrying capacity)**
- ➔ **Stainless steel load chain up to 6Tl (load carrying capacity is reduced, details on request)**
- ➔ **Remote control (for cranes, hoists and trolleys)**
- ➔ **Electropneumatic interface**
- ➔ **Manual emergency lowering device for PROFI hoists 3-20 Tl and LIFTER 1200 winch and above**
- ➔ **Hydraulic drives**
- ➔ **Product training**
- ➔ **Further accessories, available on request**

Note:

In the service section on our homepage under www.jdn.de you will find scaled drawings in 2D/3D format for download and linking in you CAD drawing.

■ JDN AIR HOISTS EXPLOSION-PROOFNESS CLASSIFICATION AND MARKING



JDN Air Hoists, Winches and Cranes are - as opposed to standard electrically operated products - suitable for application in hazardous areas as the driving medium air (unlike electricity) does not produce any ignition risk.

➔ JDN Air Hoists and Cranes

- Standard Versions:
 II 2 GD IIA T4(X) / II 3 GD IIB T4(X)
- With increased non sparking protection (bottom block and load hook with safety catch feature galvanised copper plated finish):
 II 2 GD IIB T4(X)
- With increased non sparking protection for explosion group IIC (additionally the running wheels and hand gear mechanism of trolleys and travelling gears are made of bronze):
 II 2 GD IIC T4(X)
- JDN General duty mini series Air Hoists:
 II 3 GD IIA T4(X)

➔ JDN Air Winches PROFI LIFTER 1200 / 2000 and PROFI PULLER 1800 / 3000

- Standard Versions:
 II 2 GD IIA T4(X) / II 3 GD IIB T4(X)
- With increased non sparking protection (For these versions harnesses with special corrosion protection are available. The rope-end fastenings for the load hook and the load hook itself are copper-plated, the rope is galvanized and compressed.):
 II 2 GD IIB T4(X)

➔ JDN Air Winches PROFI LIFTER 500 / 800 and PROFI PULLER 800

- II 3 GD IIA T4(X)



■ OUR ADVANTAGE IS OUR QUALITY

In 1991 our quality management system was originally certified to ISO 9001 by Det Norske Veritas. It is a focus of our commitment towards continuous improvement, and involves all of our processes. In our quality manual all our procedures and their systematic integration throughout the entire company are defined. In addition we have internal quality teams engaged in continuous improvement processes based on the Kaizen philosophy.

Our CAD based design system follows detailed catalogues with defined quality standards. Based on the most up to date knowledge and technology, coupled with intensive R&D, we have completely re-designed the entire Profi series of hoists and accessories over the past 10 years.

In our goods received department corresponding controls and inspection procedures have been implemented to ensure our suppliers meet agreed quality standards. Regular controls of stock levels and production planning logistics guarantee the optimum supply of materials and parts for production and consequently the achievement of agreed delivery times.

Our production processes follow defined quality plans. This ensures the smooth flow of parts through all centres of production and assembly. Where required the quality plan includes parts identification/markings to allow 100% traceability through our production system.

Our quality control procedures include all machining processes as well as regular random sample checks on the production line. Computer controlled precision measuring machines guarantee correct tolerances and continuous high quality. All measuring instruments are checked and re-calibrated periodically.

After final assembly we carry out a 100% function check and load test of each unit before delivery.

With our trained service team we offer thorough product knowledge and support to our customers. All repair and service work is carried out according to defined check lists.

Our quality ensures your safety - there is no compromise.





■ MAIN OFFICE

- ➔ **J.D. NEUHAUS GmbH & Co. KG**
Germany

■ DAUGHTER COMPANIES

- ➔ **J.D. NEUHAUS Sarl.**
France
- ➔ **J.D. NEUHAUS Pte. Ltd.**
Singapore
- ➔ **J.D. NEUHAUS Ltd.**
UK
- ➔ **J.D. NEUHAUS L.P.**
USA

■ OLD ENOUGH TO STAY YOUNG

What sounds like a contradiction bears a lot of truth. The best thing about memories is that you can create new ones every day.

In business since 1745 to the present day, with over 260 years of experience, and being family owned and managed for 7 generations we are stronger than ever before. Our philosophy has endured all economic and technological changes, all political and social upheavals. We have always emerged stronger and sure of our success.

Perhaps due to a few simple principles:

We always aim to offer what our customers require to move goods and materials easily and safely. This principle was established when our company was founded in 1745, to supply jacks of the utmost quality and reliability. Today this is still valid from our air hoists to complete explosion-proof crane systems.

Based on compressed air power we develop and offer solutions for almost any material handling challenge.

Planning, design, manufacturing, customer service - an all encompassing quality management system that is not just certified by DNV. Of equal importance is that each employee takes his responsibility with utmost seriousness and lives our quality ideal. 135 people in our main offices in Witten live and work according to this motto. The same applies to the many employees of our subsidiaries in France, Great Britain, Singapore and the USA. Our global operation with exclusive worldwide partners provides representation in over 90 countries. Our export ratio is over 60 %, reaching customers in more than 70 different industries.

JDN hoists can be found on offshore drilling rigs, in a multitude of industries on dry land and deep underground in mining operations.

In short - wherever they are needed.

Furthermore we are always mindful of the origins of our business. The history of lifting equipment from the Stone Age through to the 21st century is well documented in our on site museums.

Using air power is safe, and unlike electricity it does not create any sparks. With the exception of the spark that ignites the magic of fascinating technology and our total devotion to quality for the benefit of our customers.





J.D.NEUHAUS
powered by air!



Rätt till konstruktionsändringar förbehålles.

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