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# **JDN COMPANY PORTRAIT**

#### THE COMPANY

At its Witten location, J.D. Neuhaus with 160 employees produces hoists and crane systems which are mainly driven by compressed air.

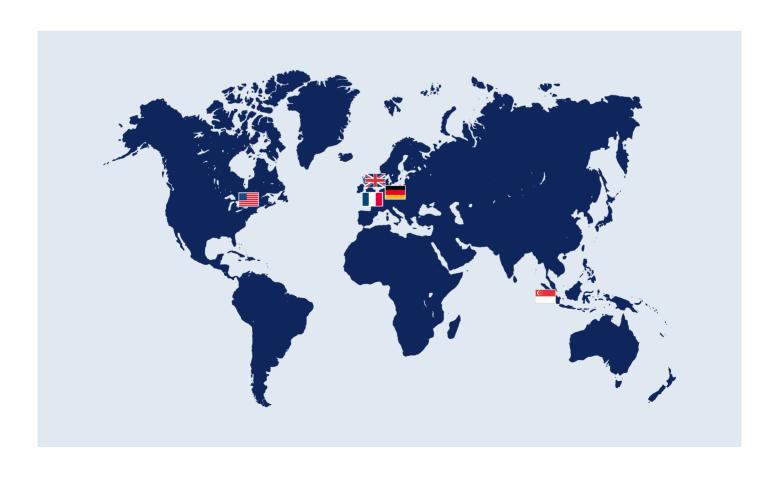
Thanks to this globally unique specialisation and our more than 50-years of expertise with compressed air as a drive medium, we have become a recognised expert in the field. Today, our share of exports is 80 %. In total, we export to more than 90 countries around the globe. Our sales companies in the USA, Great Britain, France and Singapore support our customers at local level.

J.D. Neuhaus air hoists and hydraulic hoists are now used in more than 70 different industries. Demand for our products is particularly high in the oil and gas exploration and processing sectors, in the food industry, the chemical industry and heavy plant construction.

The complete JDN production range includes a total of 12 product lines, which are precisely adapted to their respective areas of application and requirements in terms of load capacity. Moreover, we consistently set new standards with customised solutions for exceptional applications.







# ENVIRONMENTAL PROTECTION AND QUALITY

Starting with the development and production of our products, we place great value on ecological compatibility. Long service life and recyclability already make an important contribution towards relieving the environmental burden.

Furthermore, our production has been adapted to minimise energy consumption, emissions, sewage and waste; it also uses environmentally-compatible production processes and materials. Resources are used sparingly and waste is recycled wherever possible.

One of the most important commitments of the J.D. Neuhaus management is to promote awareness, openness and a sense of responsibility among employees in order to establish conditions favourable to the implementation of our environmental guidelines. We have also made environmental protection a permanent feature of our employee training courses.

In December 2009 we received ISO 14001 certification from the TÜV Rheinland Technical Control Association for our extensive environment management system.

Our quality management system covers all our processes, from planning and design through to production and customer service. It is also certified by the TÜV Rheinland according to ISO 9001.















## THE HIGHEST BENCHMARK IN HOISTING TECHNOLOGY

## THE JDN MINI

The JDN Mini is the most compact hoist, with a carrying capacity of up to 980 kg and an integrated NFC Tag with service app that makes it truly unique in the industry. Various innovations came together for the concept.

# Developed in collaboration with customers

To make the JDN Mini the best hoist on the market, we have blazed new trails in development, and it took us straight to the customer. Or rather: to many customers. We asked how the perfect hoist has to work. We studied a wide variety of different conditions of use on-site and had discussions with end-users. Our engineers took this knowledge and used it to get the ball rolling. This unique process allowed us to achieve truly exceptional results! Maximum productivity, occupational safety, and efficiency. A hoist that the customer can flexibly config-

ure as desired to meet the demands of the specific application. A hoist that is unrivalled in its comfort and ease of use. A hoist that offers extensive time savings in maintenance. A hoist that we can truly say: The highest benchmark in hoisting technology.







# THIS IS WHAT MAKES THE MINI THE HIGHEST BENCHMARK IN HO



When it comes to safety, the JDN Mini offers a new global innovation that meets the needs of a specific customer segment: A redundant optional fall support capable of holding the maximum capacity of a hoist coming free of the supporting structure. The new limit switches offer another safety bonus. They will switch off the lifting and lowering movement as soon as the bumper touches the stop valve. This slows the movement and keeps the chain from being overloaded. All of these features enhance occupational safety significantly and minimise safety hazards and wear risks.

Its intellignet construction increases the number of operating hours of the new JDN Mini through targeted optimisation to 800 hours, thus doubling the amount of time. This considerably enhances its efficiency in comparison to the previous model. Doubling the lifetime makes a significant contribution to the reduction of the total cost of ownership (TCO), since the extended service life means that new devices are purchased much less frequently to replace units that have reached the end of their service life.



#### **LONGER LIFETIME**





J.D. Neuhaus has succeeded in bringing together the advantages of direct and indirect control. So the control is now connected with the casing via a single hose with pull relief, bundling three control lines inside. This enhances operating comfort and flexibility. Added to this are the completely new precision valves, enabling even more precise dosing of the air supply and thus making it possible to lift and lower loads smoothly.

The smartest new development in the area of maintenance is the NFC Tag integrated into the service flap. The user can access the operating instructions and certificates for the hoist by getting on a smartphone and using the JDN service app. Much of the maintenance work such as lubricating the motor chamber, exchanging the chain guide, and even exchanging the motor unit can now be carried out on the JDN Mini "on the hook" – without dismounting the Mini. This also saves an incredible amount of time and increases occupational safety.







# **ISTING TECHNOLOGY.**



The JDN Mini 500 will reach a maximum lifting speed of 12 m/min at full load (500 kg). This makes it up to 20 % faster than its predecessor – even when it is in constant use and with double lifetime! It doesn't get more productive than that. The maximum speed can also be continuously preset, so reduced, without losing power at a given carrying capacity. This can protect loads even more when necessary and, at the same time, the speed can also be more finely managed.



### **CUSTOM-FIT CONFIGURATION**

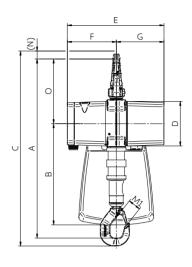
The JDN developers have also come up with some innovative ideas when it comes to flexibility: A standardised "interface" for using various types of hooks. Hooks are also available in steel and stainless steel. Together with a load sleeve and chain made of stainless steel as well as a motor housing of uncoated cast aluminium the JDN Mini is perfect for use in fields such as the food industry.



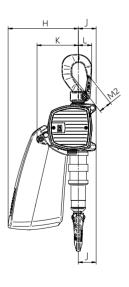
# **JDN AIR HOISTS MINI**

## TECHNICAL DATA

Туре		mini 125	mini 250	mini 500	mini 1000
Air pressure	psi	87	87	87	87
	bar	6	6	6	6
Carrying capacity	lbs	275	550	1100	2160
	kg	125	250	500	980
Number of chain strands	J	1	1	1	1
Engine output at full load	kW	0.45	0.45	1	1
Lifting speed at full load	ft/min	65.5	32.8	41	20.7
	m/min	20	10	12.5	6.3
Lifting speed without load	ft/min	131	65.5	65.5	37.7
	m/min	40	20	20	11.5
Lowering speed at full load	ft/min	131	65.5	65.5	39.4
	m/min	40	20	20	12
Lowering speed without load	ft/min	82	41	42.7	24.6
	m/min	25	12.5	13	7.5
Air consumption at full load – lifting	cfm	33.5	33.5	60	60
	m³/min	0.95	0.95	1.7	1.7
Air consumption at full load – lowering	cfm	33.5	33.5	60	60
	m³/min	0.95	0.95	1.7	1.7
Air connection		G 1/2	G 1/2	G 1/2	G 1/2
Hose dimension (ø inside)	inch	½	<sup>1</sup> / <sub>2</sub>	<sup>1</sup> / <sub>2</sub>	½
	mm	13	13	13	13
Weight at 3 m lift/2 m control length	lbs	22	22	45.2	46.3
	kg	10	10	20.5	21
Chain dimension	mm	4.7 x 14.1	4.7 x 14.1	7.4 x 22	7.4 x 22
Weight of chain	lbs	1.1	1.1	2.6	2.6
	kg/m	0.48	0.48	1.19	1.19
Height of lift	ft	10/16/26	10/16/26	10/16/26	10/16/26
	m	3/5/8	3/5/8	3/5/8	3/5/8
Length of control	ft	6.5/13/23*	6.5/13/23*	6.5/13/23*	6.5/13/23*
	m	2/4/7*	2/4/7*	2/4/7*	2/4/7*
Sound level at full load – lifting¹	dB(A)	78	78	78	78
Sound level at full load – lowering¹	dB(A)	80	80	80	80
ATEX Zone		2/22	2/22	2/22	2/22
Mechanism group/life cycle [h]		1 Am/800	1 Am/800	1 Am/800	1 Am/800



Туре		mini 125	mini 250	mini 500	mini 1000
А	inch	15.6	15.6	21.4	21.4
	mm	396	396	543	543
В	inch	9.3	9.3	12.0	12.0
	mm	236	236	306	306
C	inch	16.8	16.8	23.3	23.3
	mm	426	426	591	591
D	inch	3.9	3.9	5.3	5.3
	mm	100	100	135	135
Е	inch	8.7	8.7	11.5	11.5
	mm	220	220	292	292
F	inch	4.4	4.4	5.8	5.8
	mm	112	112	148	148
G	inch	4.3	4.3	5.7	5.7
	mm	108	108	144	144
Н	inch	6.3	6.3	8.3	8.3
	mm	159	159	210	210
J	inch	1.7	1.7	2.1	2.1
	mm	43	43	53	53
K	inch	3.6	3.6	4.9	4.9
	mm	93	93	125	125
L	inch	1.1	1.1	1.6	1.6
	mm	28	28	40	40
M1	inch	0. <i>7</i>	0.7	1.1	1.1
	mm	19	19	28	28
M2	inch	0.9	0.9	1.4	1.4
	mm	24	24	36	36
(N)	inch	0.6	0.6	0.9	0.9
	mm	15	15	24	24
0	inch	5.7	5.7	7.8	7.8
	mm	144	144	199	199



Alterations reserved.

<sup>\*</sup>Special lengths up to max. 10 m/33 ft on request.

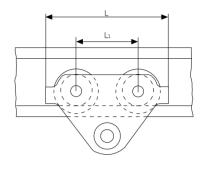
¹Measured in 1 m distance acc. to DIN 45635 part 20.
Performance data at room temperature.

Alterations reserved.

# MANUAL TROLLEYS FOR JDN AIR HOISTS MINI

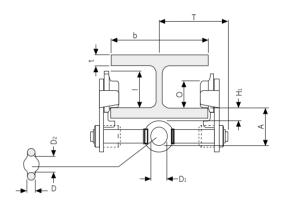
## TECHNICAL DATA

Туре		LN 250	LN 1000
Capacity	lbs	550	2200
	kg	250	1000
Beam flange width b	inch	2-8	2-8
	mm	50-220	58-220
max. flange thickness t	inch	1.2	1.0
	mm	30	25
min. curve radius	inch	35.4	39.4
	m	0.9	1.0
Weight	lbs	17	21
	kg	7.7	10.5



## **DIMENSIONS**

Туре		LN 250	LN 1000
Α	inch	3.1	3.1
	mm	79	79
D	inch	0.7	0.7
	mm	17	17
D1	inch	1	1.2
	mm	25	30
D2	inch	1.2	1.4
	mm	30	35
H1	inch	1.2	1
	mm	30	25
1	inch	2.7	3.2
	mm	67.5	81.5
L	inch	10.2	10.2
	mm	260	260
L1	inch	5.1	5.1
	mm	130	130
0	inch	2.2	2.7
	mm	55	68
Т	inch	5.7	5.9
	mm	144	151





Learn more about the benchmark in hoisting technology on newgreatmini.com

# **JDN AIR HOISTS PROFI**



100 % Duty Rating – No Downtime, Ex Classification according to EC Directive on Hazardous Locations 94/9/EEC (ATEX 100a)

## 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. The PROFI Series scores well with its 100 % duty rating and explosion protection as standard. 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
- 100 % duty rating and unlimited 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)

#### **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 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 PROFI also suitable for horizontal pulling.
- 100 % Duty Rating No Downtime
- Ex Classification according to EC **Directive on Hazardous Locations** 94/9/EEC (ATEX 100a)

As standard:



⟨Ex | II 2G Ex h IIA T4 Gb X II 2D Ex h IIIA T130°C Db X

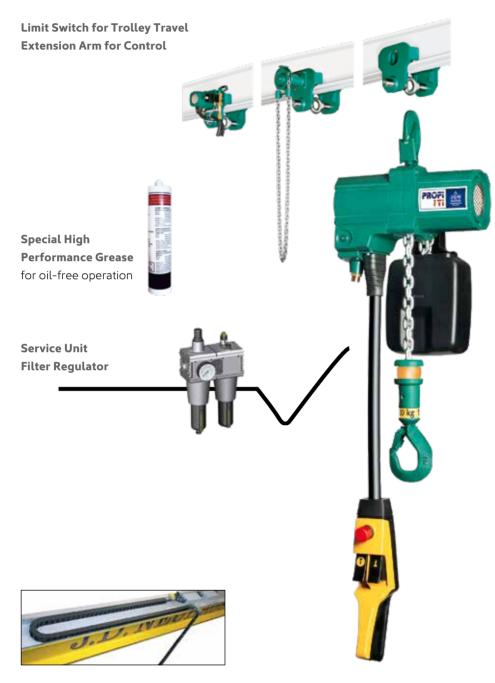
With increased spark protection:



II 2G Ex h IIC T4 Gb X II 2D Ex h IIIC T130°C Db X

# **JDN AIR HOISTS PROFI**

### THE MODULAR SYSTEM AT A GLANCE



#### Supply

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

#### **Ex Classification**

Standard:

II 2G Ex h IIA T4 Gb X
II 2D Ex h IIIA T130°C Db X
With increased spark protection:

II 2G Ex h IIB T4 Gb X
II 2D Ex h IIIB T130°C Db X
With increased spark protection
for explosion group IIC:

II 2G Ex h IIC T4 Gb X
II 2D Ex h IIIC T130°C Db X

#### **Trolleys**

- Manual Trolley
- Reel Chain Trolley
- Motor Trolley

#### **Housing Finish**

- Standard JDN Green
- 3-coat offshore paint system

#### Filter Silencer

#### **Chain Container**

- Chain Box
- Chain Bagl

#### **Limit Switch for Lift**

#### Hook

- Standard
- · Copper-plated
- Stainless Steel

#### Controls

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

## PROFI 025 TI UP TO 2 TI

### TECHNICAL DATA

Туре		02	5 TI	05	05 TI 1 TI		TI	2	TI
Capacity	mt	0.16	0.25	0.32	0.5	0.63	1	1.25	2
Air pressure	psi bar	60 4	87 6	60 4	87 6	60 4	87 6	60 4	87 6
Number of chain strands			1		1		1	2	
Motor output	kW	0.6	1.0	0.6	1.0	0.6	1.0	0.6	1.0
Lifting speed at full load	ft/min m/min	65.6 20	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	124.7 38	55.8 17	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 ½ G ½		1/2	G 1/2		
Hose dimension (ø inside)	inch mm		/ <sub>2</sub> .3		1/ <sub>2</sub> 1/ <sub>2</sub> 13 13		½ 13		
Weight with standard lift, rope control	lbs kg	59.5 27	59.5 27	59.5 27	59.5 27	61.6 27.5	61.7 <sup>1</sup> 28 <sup>1</sup>	75 <sup>1</sup> 34 <sup>1</sup>	75 <sup>1</sup> 34 <sup>1</sup>
Chain dimension	mm	7 ×	21	7 x	21	7 x	21	7 x	21
Weight of chain	lbs/ft kg/m		67 .0	0. 1.	67 0		67 .0		67 0
Standard lift	ft m	10 3		_	0	10 3			0
Length of control at standard lift	ft m	6.5 2		6.5 2		6.5 2			.5 <u>2</u>
Noise level at full load <sup>2</sup> – lifting	dB(A)	73	74	74	75	74	76	74	76
Noise level at full load <sup>2</sup> – lowering	dB(A)	77	78	77	78	77	78	77	78



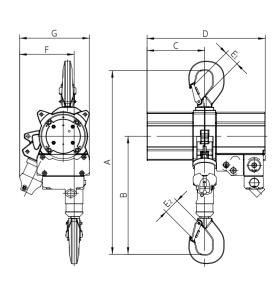
<sup>&</sup>lt;sup>2</sup>Measured at 1 m distance acc. to DIN 45635 part 20

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



Туре		025 TI	05 TI	1 TI	2 TI
A min. headroom¹	inch	17.7	17.7	17.7	19.6
	mm	450	450	450	498
В	inch	11.3	11.3	11.3	13.2
	mm	288	288	288	336
С	inch	5.7	5.7	5.7	5.7
	mm	145	145	145	145
D	inch	11.7	11.7	11.7	11.7
	mm	297	297	297	297
E <sub>1</sub>	inch	1.1	1.1	1.1	1.1
	mm	28	28	28	28
E <sub>2</sub>	inch	1.1	1.1	1.1	1.1
	mm	28	28	28	28
F up to hook centre	inch	5.4	5.4	5.4	5.4
	mm	137	137	137	137
G maximum width	inch	6.9	6.9	6.9	7.2
	mm	176	176	176	183

<sup>&</sup>lt;sup>1</sup>Chain containers increase the hoist headroom



# **JDN AIR HOISTS PROFI**

## PROFI 1,5 TI AND 3 TI/2

### TECHNICAL DATA

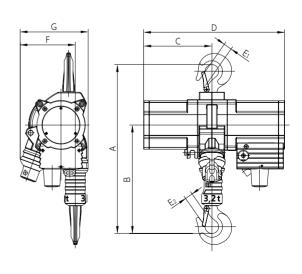
Туре		1.5TI	3 TI/2
Capacity	mt	1.6	3.2
Air pressure range	psi	60-87	60-87
	bar	4-6	4-6
Number of chain strands		1	2
Motor output	kW	1.3-2	1.3-2
Lifting speed at full load	ft/min	13.1-19.7	6.6-9.8
	m/min	4-6	2-3
Lifting speed without load	ft/min	27.6-32.8	13.8-16.4
	m/min	8.4-10	4.2-5
Lowering speed at full load	ft/min	36.1-39.4	18.0-19.7
	m/min	11-12	5.5-6
Air consumption at full load – lifting	cfm	53-92	53-92
	m³/min	1.5-2.6	1.5-2.6
Air consumption at full load – lowering	cfm	78-127	78-127
	m³/min	2.2-3.6	2.2-3.6
Air connection		G 3/4	G <sup>3</sup> / <sub>4</sub>
Hose dimension (Ø inside)	inch	3/4	3/4
	mm	19	19
Weight with standard lift, rope control	lbs	123	146
	kg	56	66
Chain dimension	mm	9 x 27	9 x 27
Weight of chain	lbs/ft	1.2	1.2
	kg/m	1.8	1.8
Standard lift	ft	10	10
	m	3	3
Length of control at standard lift	ft	6,5	6,5
	m	2	2
Noise level at full load¹ – lifting	dB(A)	73-77	73-77
Noise level at full load¹ – lowering	dB(A)	78-80	78-80

 $<sup>^1\</sup>mbox{Measured}$  at 1 m distance acc. to DIN 45635 part 20 Group mechanism: M3 (1 Bm)



Туре		1.5 TI	3 TI/2
A min. headroom <sup>1</sup>	inch	18.9	21.4
	mm	480	544
В	inch	11.5	14.0
	mm	293	356
С	inch	7.9	7.9
	mm	200	200
D	inch	16.2	16.2
	mm	412	412
E1	inch	1.1	1.1
	mm	28	28
E <sub>2</sub>	inch	1.0	1.1
	mm	26	28
F up to hook centre	inch	6.7	5.5
	mm	170	140
G maximum width	inch	8.5	8.5
	mm	215	215

<sup>&</sup>lt;sup>1</sup>Chain containers increase the hoist headroom



## PROFI 3 TI UP TO 20 TI

## TECHNICAL DATA

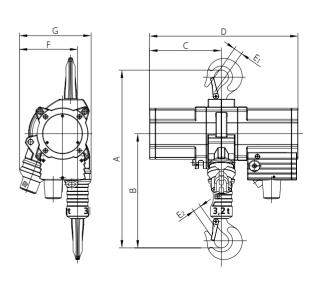
Туре		3	TI	6	TI	10	TI	16	TI	20	TI
Capacity	mt	3	.2	6	.3	1	0	16		20	
Air pressure	psi bar	60 4	87 6	60 4	87 6	60 4	87 6	60 4	87 6	60 4	87 6
Number of chain strands		:	1		2	:	2	:	3	4	4
Motor output	kW	1.8	3.5	1.8	3.5	1.8	3.5	1.8	3.5	1.8	3.5
Lifting speed at full load	ft/min m/min	8.2 2.5	16.4 5	3.9 1.2	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
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
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 m³/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 m³/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 <sup>3</sup> / <sub>4</sub>		G <sup>3</sup> / <sub>4</sub>		G	3/4
Hose dimension (Ø inside)	inch mm		/4 9	3. 1	/4 9		/4 9		/4 9	3, 1	/4 9
Weight with standard lift, rope control	lbs kg		9.6 16		2.5 LO		3.9 56		9.1 40	62 28	27 35
Chain dimension	mm	13 >	k 36	13 >	36	16 >	< 45	16 >	k 45	16 >	¢ 45
Weight of chain	lbs/ft kg/m	_	.6 .8	_	.6 .8	_	.9 .8	_	.9 .8	3. 5	.9 .8
Standard lift	ft m		0		0		0		0	1	0
Length of control at standard lift	ft m		.5 2		.5 2		.5 2		.5 2		.5 2
Noise level at full load¹ – lifting	dB(A)	74	78	74	78	74	78	74	78	74	78
Noise level at full load <sup>1</sup> – lowering	dB(A)	79	80	79	80	79	80	79	80	79	80



 $^1\mbox{Measured}$  at 1 m distance acc. to DIN 45635 part 20 Group mechanism at 6 bar: M3 (1 Bm)

Туре		3 TI	6 TI	10 TI	16 TI	20 TI
A min. headroom <sup>1</sup>	inch	23.3	26.5	32	35.4	40.6
	mm	593	674	813	898	1030
В	inch	14.7	17.9	21.6	23.5	26.4
	mm	373	454	548	598	670
С	inch	9.2	9.2	12.1	15	15
	mm	233	233	308	382	382
D	inch	19	19	22.6	27.2	27.2
	mm	483	483	575	692	692
E1	inch	1.6	1.6	1.7	2.1	2.8
	mm	40	40	44	53	70
E <sub>2</sub>	inch	1.2	1.6	1.7	2.1	2.8
	mm	30	40	44	53	70
F up to hook centre	inch	7.4	6.1	7.8	7.8	7.1
	mm	187	154	197	199	180
G maximum width	inch	9.2	9.2	12	12.1	12.4
	mm	233	233	306	308	315

 $<sup>^1\!\</sup>text{Chain}$  containers increase the hoist headroom



# **JDN AIR HOISTS PROFI**

## PROFI 25 TI UP TO 100 TI

### TECHNICAL DATA

Туре		25 TI	30 TI	37 TI	40 TI	50 TI	60 TI	75 TI	100 TI	
Capacity	mt	25	30	37.5	40	50	60	75	100	
Air pressure	psi bar				_	1 <b>7</b> 5				
Number of chain strands		2	2	3	3	4	4	3	4	
Motor output	kW			6	.3			9	9	
Lifting speed at full load	ft/min m/min	4.1 1.25	3.3 1.0	2.5 0.75	2.3 0.7	1.8 0.55	1.5 0.45	1.7 0.53	1.3 0.4	
Lifting speed without load	ft/min m/min	7.9 2.4	7.9 2.4	5.6 1.7	5.6 1.7	4.3 1.3	4.3 1.3	4.4 1.33	3.3 1	
Lowering speed at full load	ft/min m/min	9.2 2.8	9.2 2.8	6.6 2.0	6.6 2.0	5.3 1.6	5.3 1.6	4.1 1.25	3.1 0.95	
Air consumption at full load – lifting	cfm m³/min				30 .5			268.5 7.6		
Air consumption at full load – lowering	cfm m³/min				)2 .9			_	12 5	
Air connection					G 1	L 1/2				
Hose dimension (Ø inside)	inch mm					½ 5				
Weight with standard lift, rope control	lbs kg	1213 550	1213 550	1874 850	1874 850	2072 940	2072 940	3968 1800	4409 2000	
Chain dimension	mm			23.5	x 66			32 :	k 90	
Weight of chain	lbs/ft kg/m		8.2 12.2					_	1.3 1.3	
Standard lift	ft m		10 3							
Length of control at standard lift	ft m					.5 2				
Noise level at full load <sup>1</sup> – lifting	dB(A)			7	8			7	7	
Noise level at full load¹ – lowering	dB(A)			8	32			8	33	



 $Group\ mechanism\ at\ 6\ bar:\ PROFI\ 25\ TI,\ 37\ TI,\ 50\ TI,\ 75\ TI,\ 100\ TI:\ M3\ (1\ Bm),\ PROFI\ 30\ TI,\ 40\ TI,\ 60\ TI:\ M2\ (1\ Cm)$ 

Туре		25 TI	30 TI	37 TI	40 TI	50 TI	60 TI	75 TI	100 TI
A min. headroom <sup>1</sup>	inch	49.6	49.6	57.9	57.9	58.5	58.5	76	76
	mm	1260	1260	1470	1470	1485	1485	1930	1930
В	inch	32.6	32.6	36.8	36.8	37.4	37.4	49.2	49.2
	mm	827	827	935	935	950	950	1250	1250
С	inch	17.7	17.7	21.3	21.3	21.3	21.3	32.5	32.5
	mm	450	450	540	540	540	540	825	825
D	inch	35.4	35.4	42.5	42.5	42.5	42.5	60.4	60.4
	mm	900	900	1080	1080	1080	1080	1535	1535
E1	inch	2.8	2.8	3.9	3.9	3.9	3.9	4.7	4.7
	mm	70	70	100	100	100	100	120	120
E2	inch	2.8	2.8	3.9	3.9	3.9	3.9	4.7	4.7
	mm	70	70	100	100	100	100	120	120
F up to hook centre	inch	10.6	10.6	11.2	11.2	9.8	9.8	15.9	14.4
	mm	270	270	285	285	250	250	405	365
G maximum width	inch	17.5	17.5	17.7	17.7	16.9	16.9	23.6	23.6
	mm	445	445	450	450	430	430	600	600

 $<sup>^1\</sup>mbox{Measured}$  at 1 m distance acc. to DIN 45635 part 20

<sup>4</sup> bar versions on request

 $<sup>^{1}\</sup>mbox{Chain}$  containers increase the hoist headroom

# **JDN AIR HOISTS M SERIES**

CAPACITIES: 1/2 T AND 3/6 T AIR PRESSURE: 4 BAR

JDN Air Hoists of the **M Series** are the specialists 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

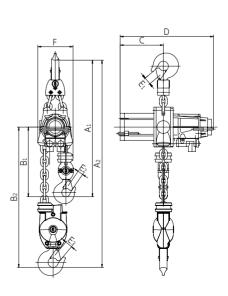
### TECHNICAL DATA

Туре		M 64	M 63 D
Capacity	mt	1/2	3/6
Air pressure	psi bar	60 4	60 4
Number of chain strands		1/2	1/2
Motor output	kW	0.77	1.3
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 m³/min	35.3 1.0	77.7 2.2
Air consumption at full load – lowering	cfm m³/min	70.6 2.0	113 3.2
Air connection		Rd 32 x <sup>1</sup> / <sub>8</sub> "	Rd 32 x 1/8"
Hose dimension (Ø inside)	inch / mm	0.75 / 19	0.75 / 19
Weight with standard lift	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 chain	lbs/ft kg/m	1.2 1.8	2.6 3.8
Heights of lift standard lift	ft m	16.4/8.2 5/2.5	16.4/8.2 5/2.5
Length of control at standard lift	ft/m	6.6 / 2	6.6 / 2
Noise level at full load¹	dB(A)	75-84	79-83

Group mechanism: M3 (1 Bm)  $\,^{1}\text{Measured}$  at 1 m distance acc. to DIN 45635 part 20

Туре		M 64	M 63 D
A1 (smallest headroom with 1/1 chain strands)	inch / mm	23.7 / 603	29.5 / 750
A <sub>2</sub> (smallest headroom with 1/2 chain strands)	inch / mm	26 / 660	34.3 / 870
B <sub>1</sub> (with 1/1 chain strands)	inch / mm	12.3 / 313	14.6 / 370
B <sub>2</sub> (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 <sub>1</sub> (Hook opening)	inch / mm	1.2 / 30	1.6 / 40
E <sub>2</sub> (Hook opening)	inch / mm	1.2 / 30	1.6 / 40
E₃ (Hook opening)	inch / mm	1.2 / 30	1.2 / 30
F (maximum width)	inch / mm	5.7 / 144	7.7 / 195





# **JDN TROLLEYS**

## CAPACITIES: 0.25 T UP TO 20 T

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

- Manual trolleys (LN) for pushing or pulling the trolleys by hand
- Reel chain trolleys (LH) for moving the trolleys by operating the reel chain mechanism
- Motorised trolley (LM) air motor powered

#### **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\*1
- Spark-resistant package\*2
- Offshore paint\*2

#### **ENERGY FEEDING SYSTEMS**

The air supply can be fed by various systems:

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



### TECHNICAL DATA

Capacity of trolley LN	JDN Air Hoist PROFI		025 TI	05 TI	1TI	1.5 TI	2 TI	3 TI/2	3 TI	6 TI	10 TI	16 TI	20 TI
reciley (14 and LM	Capacity of trolley LN	mt		1 <sup>6</sup>		2	<u>)</u>	3.2	2	6.3	10	-16	-
Weight of Manual Trolley (LM)  ***by degree of Reel Chain Trolley (LH)  **by degree of		mt			2			3.2	2	6.3	10	-16	20
Weight of Real Chain Trolley (LH)		mt	0.25	0.5	1	1.6	2	3.2	?	6.3	10	16	20
Weight of Medic Anal Trolley (LM)	Weight of Manual Trolley (LN)												-
Weight of Motor   Froley (INP)   Eg	Weight of Reel Chain Trolley (LH)												
Finds weight standard uit kg	Weight of Motor Trolley (LM)												
lift Manual Trolley         kg         37.5         37.5         37.5         37.5         37.5         37.5         37.5         37.5         37.5         37.5         37.5         37.5         37.5         37.5         37.5         37.5         37.5         37.5         37.5         38.5         74         52.2         27.1         52.2.5         62.9         101.4         125.7         12.2         12.71         52.2.5         62.9         101.4         125.7         101.4         125.7         11.5         12.2         20.6         12.2         12.2         12.0         12.2         12.2         12.2         13.5         4.60         57.0           Veight of chain         lbs/ft kg/m         1         1.8         1.8         1.8         2.8         5.3         5.8         -         2.0         1.2         5.5         4.60         57.0         1.0         5.7         1.0         5.7         1.0         5.7         1.0         5.7         1.0         5.7         1.0         5.7         1.0         5.7         1.0         5.7         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0	Hoist weight, standard lift												
Lift Reck Chain Trolley         kg         53         54         82         60         103         123         237         376         460         570           Total weight with standard light Motor Trolley         Lip (8)         1168         1168         1168         1122         2067         122         2624         319         234         376         460         570           Weight of chain         Lbs/ft         0.67         1         2         0.67         12         2         6         3.9         5.8         <													
Lift Motor Trolley         kg         53         53         54         82         60         99         119         234         376         460         570           Weight of chain         lbs/ft         0.67         12         0.67         1 1         18         3.8         3.9         3.9         1         3.9         1         1.0         3.9         1         1.0         3.9         1         1.0         3.9         1         1.0         3.9         1         1.0         3.9         3.9         4         3.0         4         3.0         4         3.0         4         3.0         4         4.6         4.6         6.0         9.0         1.0         1.0         1.0         1.0         1.0         1.0         1.0 <td></td>													
Mary Note													
Number of chain strands    1	Weight of chain												
Air pressure Motor Trolley	Chain dimension	mm		7x21		9x27	7x21	9x27	13>	κ36		16x45	
Air pressure Motor Trolley bar 6	Number of chain strands				1			2	1	2	2	3	4
(at full load)         m³/min         06         13           Air consumption hoist (at full load)         cfm m³/min         53 53-92 15-26         1942 55           Motor output Motor Trolley⁴         kW         02         07           Motor output hoist         kW         1 13-2         1 13-2         35           Travelling distance Reel (ath of the interpretation of the properties)         ft         46 46 33 63 33         33         33           Chain Trolley, chain reel off         m         14 4 5 11 10         10         11 11 10         10           Travelling speed Motor Trolley (at full load)         ft/min m/min         295*/45.9 9*/14         36 36 33 33 4 11 11 10         36 4*/39.4 5*/12         36 4*/39.4 5*/12         36 36 33 34 33 34 32 4 5*/24         36 6 62 4 5*/24         37 5*/12         37 5*/12         37 5*/12         37 5*/12         37 5*/12         37 5*/12         37 5*/12         37 5*/12         37 5*/12         37 5*/12         37 5*/12         37 5*/12         37 5*/12         38 5*/12         38 5*/12         38 5*/12         38 5*/12         38 5*/12         38 5*/12         38 5*/12         38 5*/12         38 5*/12         38 5*/12         38 5*/12         38 5*/12         38 5*/12         38 5*/12         38 5*/12         38 5*/12         38 5*/12         38 5*/12<	Air pressure Motor Trolley												
(at full load)         m³/min         15         15-26         15         15-26         5.5           Motor output Motor Trolley4         kW         1         13-2         1         1.3-2         3.5           Travelling distance Reel         ft         46         3.6         3.3           Chain Trolley, chain reel off         m         1.4         11         10           Travelling speed Motor Trolley4 (at full load)         ft/min         29.5*/45.9         3.6         3.3           Hose connection Motor Trolley         G ½         G ¾         G ½         G ¼         G ¼           Minimum radius Manual Trolley         ft m 10¹         3.3¹         3.9¹         2.6²         6.6²         -           Minimum radius Reel Chain m ft m 10²         2²         2.6²         6.6²         8.2²         2.5²           Max. bottom flange thickness t m 10°         1.0         1.1         1.6         2.6⁵         -           Max. bottom flange thickness t m 10°         1.0         1.1         1.6         2.6⁵         -           Max. bottom flange width b m 22         1.0         1.2         1.2         1.2         1.2           Max. bottom flange width b m 10°         8.7         1.2         1.2													
Motor output hoist         kW         1         1.3-2         1         13-2         3.5           Travelling distance Reel Chain Trolley, chain reel off         ft         4.6         1.4         1.0         1.0           Travelling speed Motor Trolley4 (at full load)         ft/min         29.5*/45.9         16.4*/39.4         5*/12           Hose connection Motor Trolley         G½         G¾         G½         G¾           Minimum radius Manual Trolley         ft         3.3¹         3.9¹         2.6²         6.6²         -           Minimum radius Reel Chain follogy and Motor Trolley         ft         2²         2.6²         6.6²         2.2         -           Max bottom flange thickness t manual Trolley         ft         1.0         1.1         1.6         2.6⁵         2.5²           Max bottom flange thickness t manual Trolley         ft         1.0         1.1         1.6         2.6⁵         -           Max bottom flange thickness t Reel Chain and Motor Trolley         ft         8.7         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2         1.2													
Travelling distance Reel         ft Chain Trolley, chain reel off         4.6 1.1         3.6 3.3 1.0           Travelling speed Motor Trolley4 (at full load)         ft/min m/min         29.5*/45.9 9 **** 16.4*/39.4 5***/12         16.4*/39.4 5**/12           Hose connection Motor Trolley         G½         G¾         G½         G¾         G½           Minimum radius Manual Trolley         ft 3.31 3.9¹ 2.6² 2.2 6.6² 2.2 2.2 2.5         6.6² 2.2 3.2¹ 2.5         -           Minimum radius Reel Chain Trolley         ft 0.6² 0.6² 0.8² 2.2 2.5²         2.6² 2.5² 2.5²         6.6² 2.2 3.2¹ 2.5²           Max. bottom flange thickness t inch Real Chain Trolley         1.0 1.0 1.1 1.0 1.6 2.2 2.2 3.2¹ 3.10 5.2.5         2.6⁵ 5.2 2.5²           Max. bottom flange thickness t Reel Chain and Motor Trolley         mm 25         28         40         65⁵ 5.2 2.5²           Max. bottom flange width b inch Reel Chain and Motor Trolley         mm 220         305         310         -           Max. bottom flange width b inch Reel Chain and Motor Trolley         inch Reel Chain and Motor Trolley         310         -           Min. bottom flange width b inch Reel Chain and Motor Trolley         inch Reel Chain and Motor Trolley         310         -           Min. bottom flange width b inch Reel Chain and Motor Trolley         inch Reel Chain and Motor Trolley         320         23         21         5	Motor output Motor Trolley <sup>4</sup>	kW				C	).2					0.7	
Chain Trölley, chain reel off         m         14         10         10           Travelling speed Motor Trolley <sup>4</sup> (at full load)         ft/min m/min         295*/45.9 sy*/14         16.4*/39.4 s**         16.4*/39.4 s**         16.4*/39.4 s**         5*/12         16.6*         3*/2         1.2*         1.2*         1.0*         1.1*         1.0*         1.2*         2.6°         6.6°         2.2°         2.5°         2.6°         6.6°         8.2°         2.2°         2.5°	Motor output hoist	kW		1		1.3-2	1	1.3-2			3.5		
Cat full load   Cat full loa													
Minimum radius Manual Trolley         ft m         3.3¹ 1.0¹ 1.2¹ 1.2¹ 1.2¹ 1.2¹ 1.2° 1.2° 1.2° 1.2° 1.2° 1.2° 1.2° 1.2°													
Minimum radius Manual Trolley         m         1.0¹         12¹         0.8²         2²         -           Minimum radius Reel Chain Trolley         ft 70 ley and Motor Trolley         2²         2.6²         6.6²         8.2²           Trolley and Motor Trolley         m         0.6²         0.8²         2²         2.5²           Max. bottom flange thickness t Manual Trolley         inch mm         1.0         1.1         1.6         2.6⁵         -           Max. bottom flange thickness t Reel Chain and Motor Trolley         inch mm         40         65⁵         -           Max. bottom flange width b Manual Trolley         inch mm         8.7         12         12.2         -           Max. bottom flange width b Reel Chain and Motor Trolley         mm         220         305         310         -           Min. bottom flange width b Reel Chain and Motor Trolley         mm         280         2.3         2.1         5         -           Min. bottom flange width b Reel Chain and Motor Trolley         mm         58         66         58         54         128         -           Min. bottom flange width b Reel Chain and Motor Trolley         mm         56         58         54         128         58         58	Hose connection Motor Trolley			G ½		G <sup>3</sup> / <sub>4</sub>	G 1/2			G <sup>3</sup>	3/4		
Trolley and Motor Trolley         m         0.6²         0.8²         2²         2.5²           Max. bottom flange thickness t Manual Trolley         inch mm         1.0         1.1         1.6         2.6⁵         -           Max. bottom flange thickness t Reel Chain and Motor Trolley         inch mm         1.6         2.6⁵         -           Max. bottom flange width b Manual Trolley         inch mm         8.7         12         12.2         -           Max. bottom flange width b Reel Chain and Motor Trolley         inch mm         220         305         310         -           Min. bottom flange width b Ranual Trolley         inch Manual Trolley         2.3         2.6         2.3         2.1         5         -           Min. bottom flange width b Ranual Trolley         inch Manual Trolley         58         66         58         54         128         -           Min. bottom flange width b Reel Chain and Motor Trolley         inch mm         56         58         54         128         148	Minimum radius Manual Trolley												-
Manual Trolley         mm         25         28         40         65⁵         −           Max. bottom flange thickness t Reel Chain and Motor Trolley         inch mm         1.6         2.6⁵ kg         2.6⁵ kg           Max. bottom flange width b Manual Trolley         inch mm         8.7 kg         12 kg         12.2 kg         −           Max. bottom flange width b Reel Chain and Motor Trolley         inch mm         280         11 kg         12.2 kg         12.2 kg           Min. bottom flange width b Manual Trolley         inch mm         58         66         58         54         128         −           Min. bottom flange width b Reel Chain and Motor Trolley         inch mm         2.2 kg         2.3 kg         2.1 kg         5 kg         58         54         128         148													
Reel Chain and Motor Trolley         mm         40         655           Max. bottom flange width b Manual Trolley         inch mm         8.7 12 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         2.3 2.6 2.3 2.1 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0 5.0													-
Max. bottom flange width b Manual Trolley         inch Manual Trolley         8.7													
Reel Chain and Motor Trolley         mm         280         310           Min. bottom flange width b Manual Trolley         inch Manual Trolley         2.3         2.6         2.3         2.1         5         -           Min. bottom flange width b Min. bottom flange width b Reel Chain and Motor Trolley         inch Min. bottom flange width b Min. bottom fla													-
Manual Trolley         mm         58         66         58         54         128         -           Min. bottom flange width b Reel Chain and Motor Trolley         inch mm         2.2         2.3         2.1         5         5.8           Reel Chain and Motor Trolley         56         58         54         128         148													
Min. bottom flange width b         inch         2.2         2.3         2.1         5         5.8           Reel Chain and Motor Trolley         mm         56         58         54         128         148													-
	Min. bottom flange width b												
	Noise level at Motor Trolley <sup>3,4</sup>							80					

<sup>\*1.</sup> st speed of F control with two speeds

- Capacities over 20 t see JDN Monorail Air Hoists page 30
- Versions with one and two hooks (e.g. BBH) see page 27
- Low Headroom Trolleys for restricted headrooms see page 25

 $<sup>^{1}\</sup>mbox{Measured}$  at the middle of the beam

<sup>&</sup>lt;sup>2</sup>Measured at the inner edge of the beam

<sup>&</sup>lt;sup>3</sup>Measured at 1 m distance acc. to DIN 45635 part 20

<sup>&</sup>lt;sup>4</sup>At 6 bar

<sup>&</sup>lt;sup>5</sup>55 mm, if hoist is suspended

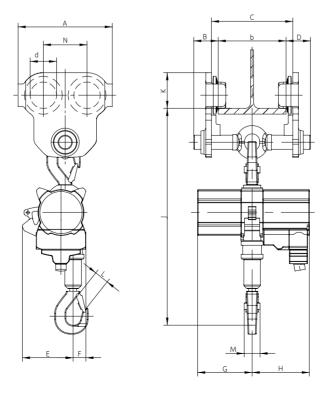
 $<sup>^{6}\</sup>mathrm{LN}\,1\,\mathrm{t}$  not available with spark-resistant package

# JDN TROLLEYS

# PROFI IN MANUAL TROLLEY (LN)

JDN Air Hoist PROFI		025 TI	05 TI	1 TI	1.5 TI	2 TI	3 TI/2	3 TI	6 TI	10 TI	16 TI
With Trolley			LN 1 t		LN	2 t	LN	3.2 t	LN 6.3 t	LN 10	)-16 t
Α	inch mm		10.2 260			2.2 10	11.5 292		19.7 500	19 49	
B max.	inch mm		4.8 122			.4 52	4 11		6.2 157	6 16	
C	inch mm			b + 1 b + 26			b + b +	2.4 60		b + 2.8 b + 70	
d	inch mm		2.7 68			.2	3. 8			6.5 165	
D max.	inch mm		4.8 122			.4 52	4 11		6.2 157	6 16	
Е	inch mm		5.4 137		5.7 170	5.4 137	5.5 140	7.4 187	6.1 154	7.8 197	7.8 199
F	inch mm		1.5 39		1.8 45	1.8 46	3.0 <i>7</i> 5	1.8 46	3.1 79	4 10	
G	inch mm		5.7 145		7.9 200	5.7 145	7.9 200		.2 33	12.1 308	15 382
Н	inch mm		6 152		3.3 212	6 152	3.3 212		.8 50	10.5 267	12.2 310
J* (mounted)	inch mm	-	-	- -	- -	- -	24.1 613	25 635	30 763	37 929	39 982
J* (suspended)	inch mm		20.9 530		23.1 588	23.5 597	-	31.4 798	36.2 919	46.3 1176	49.6 1260
K	inch mm	2. 67		3.2 81.5		.7 94	4 10			7.4 188	
L	inch mm		1.1 28		1.0 26	1 2		1.2 30	1.6 40	1.7 44	2.1 53
М	inch mm		1.7 42		1.6 40		1.7 42		2 51	2.6 66	3.2 82
N	inch mm		5.1 130			.9 50	5 13			9.3 236	

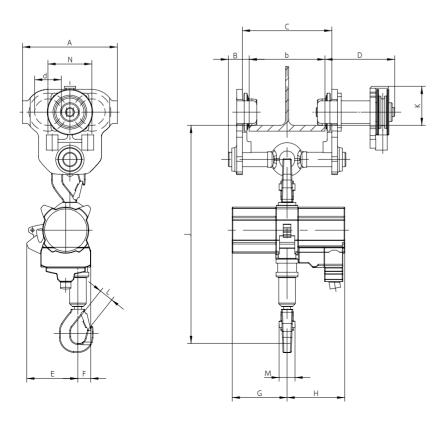
<sup>\*</sup>Chain containers increase the hoist headroom



# PROFI IN REEL CHAIN TROLLEY (LH)

JDN Air Hoist PROFI		025 TI	05 TI	1 TI	1.5 TI	2 TI	3 TI/2	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
А	inch mm			9.8 250			11 29		19.7 500	19 49		23.6 600
B max.	inch mm			5.1 130			4 11		6.2 157	6 16		5.2 132
С	inch mm			b + 1.4 b + 36			b + b +			b + 2.8 b + 70		b + 2.7 b + 68
d	inch mm			2.8 70			3. 8			6.5 165		7.3 185
D	inch mm		7.2 184		11.2 284	7.2 184	11.6 294	11.6 294	12.1 307	12 32		12.6 320
Е	inch mm		5.4 137		6.7 170	5.4 137	5.5 140	7.4 187	6.1 154	7.8 197	7.8 199	7.1 180
F	inch mm		1.5 39		1.7 45	1.8 46	3.0 <i>7</i> 5	1.8 46	3.1 79	4 10		5.3 135
G	inch mm		5.7 145		7.9 200	5.7 145	7.9 200	9 23		12.1 308		.5 82
Н	inch mm		6 152		3.3 212	6 152	3.3 212	9. 25		10.5 267		2.2 10
J* (mounted)	inch mm	-	- -	- -	- -	- -	24.1 613	25 635	30 763	37 929	39 982	44.3 1125
J* (suspended)	inch mm		22.2 563		23.7 602	24.1 611	- -	31.4 798	36.2 919	46.3 1176	46.1 1171	58.1 1475
K	inch mm			4.1 103			4 11			8.5 215		8.9 226
L	inch mm		1.1 28		1.0 26		.1 8	1.2 30	1.6 40	1.7 44	2.1 53	2.9 75
М	inch mm		1.7 42		1.6 40		1.7 42		2 51	2.6 66	3.2 82	3.4 86
N	inch mm			4.6 116			5 13			9.3 236		10.8 274

<sup>\*</sup>Chain containers increase the hoist headroom

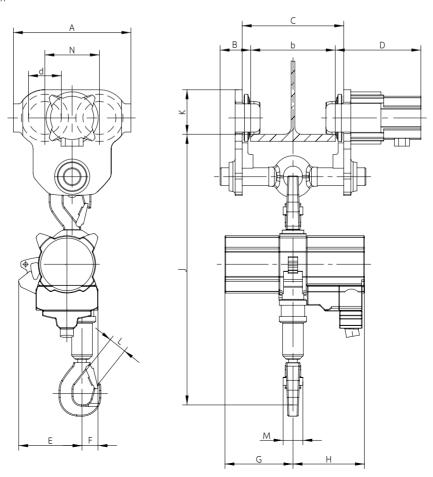


# JDN TROLLEYS

# PROFI IN MOTOR TROLLEY (LM)

JDN Air Hoist PROFI		025 TI	05 TI	1 TI	1.5 TI	2 TI	3 TI/2	3 TI	6 TI	10 TI	16 TI	20 TI
With Trolley				LM 2 t			LM	3.2 t	LM 6.3 t	LM 1	0-16 t	LM 20 t
А	inch mm			9.8 250				11.5 292		19.3 490		23.6 600
B max.	inch mm			5.1 130			4.		6.2 157		i.4 52	5.3 134
С	inch mm			b + 1.4 b + 36			b + b +			b + 2.8 b + 70		b + 2.7 b + 68
d	inch mm			2.8 70			3.			6.5 165		7.3 185
D	inch mm		7.3 185		7.3 185	7.3 185	7. 19		8.1 205		2.5 18	12.9 328
E	inch mm		5.4 137		6.7 170	5.4 137	5.5 140	7.4 187	6.1 154	7.8 197	7.8 199	7.1 180
F	inch mm		1.5 39		1.7 45	1.8 46	3.0 <i>7</i> 5	1.8 46	3.1 79		.3 09	5.3 135
G	inch mm		5.7 145		7.9 200	5.7 145	7.9 200		9.2 :33	12.1 308	1	5 32
Н	inch mm		6 152		3.3 212	6 152	3.3 212		9.8 50	10.5 267		2.2 10
J* (mounted)	inch mm	-	-	-	- -	-	24.1 613	25 635	30 763	37 929	39 982	44.3 1125
J* (suspended)	inch mm		22.2 563		23.7 602	24.1 611	-	31.4 798	36.2 919	46.3 1176	46.1 1171	58.1 1475
K	inch mm			3.7 95			4			7.4 188		8.6 218
L	inch mm		1.1 28		1.0 26		l.1 28	1.2 30	1.6 40	1.7 42	2.1 55	2.9 <i>7</i> 5
М	inch mm		1.7 42		1.6 40		1.7 42		2 51	2.6 66	3.2 82	3.4 86
N	inch mm			4.6 116			5 13			9.3 236		10.8 274

<sup>\*</sup>Chain containers increase the hoist headroom



# JDN LOW HEADROOM TROLLEYS

# THE TROLLEY SOLUTION FOR RESTRICTED HEADROOM AREAS. CAPACITIES: 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 mounted horizontally. When only very low headroom is available we recommend JDN Ultra-Low Monorail Hoist design.

#### **STANDARD FEATURES**

- Small number of maintenance/ wear free moving parts
- No additional motor lubrication required
- 2-step travelling speed
- Adjustable trolley widths to suit your requirements

#### **SPECIAL FEATURES**

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

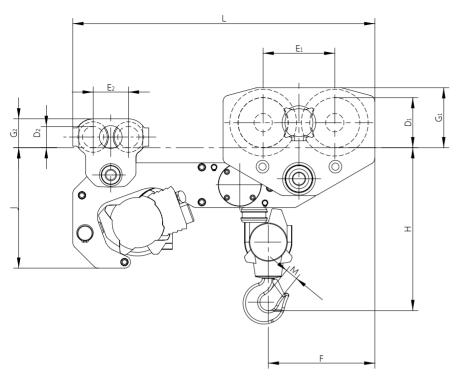


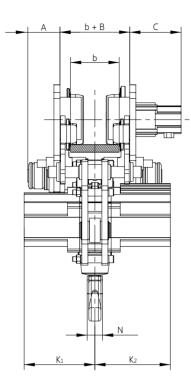
#### TECHNICAL DATA

Hoist Type		PROFI 05 TI	PROFI1TI	PROFI 2 TI	PROFI 3 TI	PROFI 6 TI
Trolley Type		LMF 05-2 t	LMF 05-2 t	LMF 05-2 t	LMF 3.2 t	LMF 6.3 t
Capacity	mt	0.5	1	2	3.2	6.3
Air pressure	psi	87	87	87	87	87
	bar	6	6	6	6	6
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
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
	m³/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
	m³/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
	m³/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	½	½	½	<sup>3</sup> / <sub>4</sub>	<sup>3</sup> / <sub>4</sub>
	mm	13	13	13	19	19
Weight with standard lift and control	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/ft	0.67	0.67	0.67	2.6	2.6
	kg/m	1	1	1	3.8	3.8
Standard lift	ft	10	10	10	10	10
	m	3	3	3	3	3
Length of control at standard lift	ft	6.5	6.5	6.5	6.5	6.5
	m	2	2	2	2	2
Max. bottom flange	inch	0.98	0.98	0.98	1.38	1.38
thickness t	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 load¹ – lifting	dB(A)	75	76	76	78	78
Noise level at full load <sup>1</sup> – lowering	dB(A)	78	78	78	80	80

<sup>\*1</sup>st step at F-control with 2-step travelling speed,  ${}^{1}$ Measured at 1 m distance acc. to DIN 45635 part 20

# JDN LOW HEADROOM TROLLEYS





Hoist Type		PROFI 05 TI	PROFI1TI	PROFI 2 TI	PROFI 3 TI	PROFI 6 TI
Trolley Type		LMF 05-2 t	LMF 05-2 t	LMF 05-2 t	LMF 3.2 t	LMF 6.3 t
A max.	inch	4.13	4.13	4.13	4.13	4.17
	mm	105	105	105	105	106
В	inch	1.42	1.42	1.42	1.42	2.76
	mm	36	36	36	36	70
b min.	inch	3.15	3.15	3.15	4.72	4.92
	mm	80	80	80	120	125
С	inch	6.46	6.46	6.46	6.46	6.65
	mm	164	164	164	164	169
D <sub>1</sub>	inch	2.76	2.76	2.76	2.76	6.50
	mm	70	70	70	70	165
D <sub>2</sub>	inch	2.76	2.76	2.76	2.76	2.76
	mm	70	70	70	70	70
E1	inch	4.57	4.57	4.57	4.57	9.29
	mm	116	116	116	116	236
E <sub>2</sub>	inch	4.57	4.57	4.57	4.57	4.57
	mm	116	116	116	116	116
F	inch	6.77	6.77	7.68	8.98	13.82
	mm	172	172	195	228	351
G1	inch	3. <i>7</i> 4	3.74	3.74	3.74	7.76
	mm	95	95	95	95	197
G2	inch	3. <i>7</i> 4	3.74	3.74	3.74	3.74
	mm	95	95	95	95	95
H min.	inch	13.98	13.98	16.89	16.34	21.14
	mm	355	355	429	415	537
J	inch	12.60	12.60	12.60	15.63	15.63
	mm	320	320	320	397	397
K1	inch	5.71	5.71	5.71	9.17	9.17
	mm	145	145	145	233	233
K2	inch	5.98	5.98	5.98	9.76	9.76
	mm	152	152	152	248	248
L	inch	28.15	28.15	28.15	32.48	39.17
	mm	<i>7</i> 15	715	<i>7</i> 15	825	995
М	inch	1.10	1.10	1.10	1.18	1.57
	mm	28	28	28	30	40
N	inch	1.65	1.65	1.65	1.65	2.01
	mm	42	42	42	42	51
t max.	inch	0.98	0.98	0.98	1.38	1.38
	mm	25	25	25	35	35

# **JDN BIG BAG HANDLING AIR HOISTS**

#### 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 capacities of 1100 kg and 2200 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.

# TAKE ADVANTAGE OF THE DRIVING MEDIUM AIR:

 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 2G Ex h IIA T4 Gb X
II 2D Ex h IIIA T130°C Db X

(E) || 2G Ex h || B T4 Gb X | || 2D Ex h || B T130°C Db X or

 100 % duty rating, and thus no downtimes.



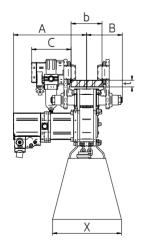
# JDN BIG BAG HANDLING AIR HOISTS

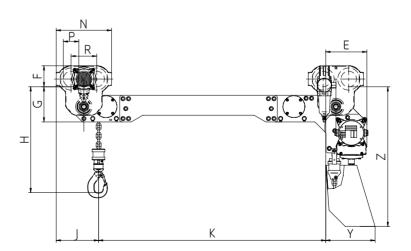
## TECHNICAL DATA

Туре		BBH 1000-1	BBH 2000-1
Capacity	mt	1.1	2.2
Air pressure	psi bar		3 <b>7</b> 5
Number of hooks			1
Number of chain strands		1	2
Motor output hoist	kW	0	.7
Motor output trolley	kW	0	.2
Lifting speed at full load	ft/min m/min	12.14 3.7	5.58 1.7
Lifting speed without load	ft/min m/min	24.61 7.5	11.48 3.5
Lowering speed at full load	ft/min m/min	32.81 10	16.40 5
Air consumption at full load – lifting	cfm m³/min	• •	.44 .4
Air consumption at full load – lowering	cfm m³/min		.38 .2
Air consumption at full load – trolley	cfm m³/min		.19 .6
Air connection		G	1/2
Hose dimension (Ø inside)	inch mm		/ <sub>2</sub> 3
Weight at standard lift and minimum k dimension	lbs kg	286.60 130	302.03 137
Chain dimension	mm	7 x	: 21
Weight of chain	lbs/ft kg/m		67 1
Standard lift	ft m		0 3
Length of control at standard load – lift	ft m		.5 2
Noise level at full load¹ – lifting	dB(A)	7	6
Noise level at full load <sup>1</sup> – lowering	dB(A)	7	8
Noise level at full load¹ – trolley	dB(A)	8	0

Group mechanism: M4 (1 Am)  $\cdot$   $^{1}\text{Measured}$  at 1 m distance acc. to DIN 45635 part 20

Тур	oe		BBH 1000-1	BBH 2000-1			
Α		inch mm	13 33				
		inch	6.4	8.7			
В		mm	163	220			
	min.	inch	3.5				
b		mm inch	9:				
	max.	mm	31				
C		inch	7.1	<del>-</del>			
		mm	18				
Ε		inch mm	7.6 19				
F		inch	3.				
		mm	9.				
G		inch mm	15				
Н		inch	15.3	17.24			
		mm	388	438			
J		inch mm	7.56 192	8.66 220			
	min.	inch	17.13	16.14			
Κ		mm	435	410			
	max.	inch mm	43. 110				
L		inch	-	-			
		mm	-	-			
Μ		inch mm	1.1 28				
N		inch	9.84 250				
		mm inch					
Р		mm	70				
R		inch mm	4.5 11				
t m	2	inch	1.18				
t m	ах.	mm	30	0			



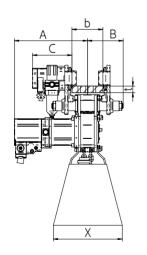


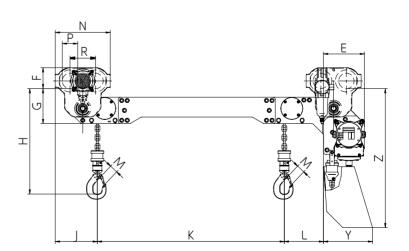
# TECHNICAL DATA

Туре		BBH 1000-2	BBH 2000-2		
Capacity	mt	1.1	2.2		
Air pressure	psi bar	_	7 5		
Number of hooks		2	2		
Number of chain strands		2	4		
Motor output hoist	kW	0	.7		
Motor output trolley	kW	0	.2		
Lifting speed at full load	ft/min m/min	12.14 3.7	5.58 1.7		
Lifting speed without load	ft/min m/min	24.61 7.5	11.48 3.5		
Lowering speed at full load	ft/min m/min	32.81 10	16.40 5		
Air consumption at full load – lifting	cfm m³/min		44 4		
Air consumption at full load – lowering	cfm m³/min	42.38 1.2			
Air consumption at full load – trolley	cfm m³/min	21. 0	19 .6		
Air connection		G	1/2		
Hose dimension (Ø inside)	inch mm	1 <sub>2</sub>			
Weight at standard lift and minimum k dimension	lbs kg	302.03 137	328.49 149		
Chain dimension	mm	7 x	21		
Weight of chain	lbs/ft kg/m		67 L		
Standard lift	ft m	1: 3	0 3		
Length of control at standard load – lift	ft m	6	.5 <u>2</u>		
Noise level at full load¹ – lifting	dB(A)	7	6		
Noise level at full load¹ – lowering	dB(A)	7	8		
Noise level at full load¹ – trolley	dB(A)	8	0		

Group mechanism: M4 (1 Am)  $\cdot$  <sup>1</sup>Measured at 1 m distance acc. to DIN 45635 part 20

Тур	e		BBH 1000-2	BBH 2000-2				
Α		inch mm	3 33	.1 32				
В		inch mm	6.4 163	8.7 220				
b	min.	inch mm	3.54 90					
D	max.	inch mm	12. 31	20 l0				
C		inch mm	7.: 18	17 32				
E		inch mm	14.69 373	13.62 346				
F		inch mm		74 5				
G		inch mm	6.: 15	26 59				
Н		inch mm	15.3 388	17.24 438				
J		inch mm	7.56 192	8.66 220				
K	min.	inch mm	10.24 260					
K	max.	inch mm	51 13					
L		inch mm	6.89 175	5.91 150				
Μ		inch mm	1.10 28					
N		inch mm	9.84 250					
P inch			2.76 70					
R inch			4.57 116					
t ma	ax.	inch mm	1.: 3	18 0				
				-				





# JDN MONORAIL AIR HOISTS

## CAPACITIES: 10 T UP TO 115 T 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 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 steel
- 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.







## TECHNICAL DATA

Туре		EH 10	EH 16	EH 20	EH 25	EH 30	EH 37	EH 40	EH 50	EH 60
Capacity	mt	10	16	20	25	30	37.5	40	50	60
Air pressure	psi	87	87	87	87	87	87	87	87	87
	bar	6	6	6	6	6	6	6	6	6
Number of chain strands		2	3	4	2	2	3	3	4	4
Motor output trolley	kW	0.7	0.7	0.7	1.4	1.4	1.4	1.4	1.4	1.4
Motor output hoist	kW	3.5	3.5	3.5	6.3	6.3	6.3	6.3	6.3	6.3
Lifting speed at full load	ft/m	5.3	3.3	2.3	4.1	3.3	2.5	2.3	1.8	1.5
	m/min	1.6	1.0	0.7	1.25	1.0	0.75	0.7	0.55	0.45
Lifting speed without load	ft/m	10.5	6.6	4.6	7.9	7.9	5.6	5.6	4.3	4.3
	m/min	3.2	2.0	1.4	2.4	2.4	1.7	1.7	1.3	1.3
Lowering speed at full load	ft/m	11.2	6.9	5.3	9.2	9.2	6.6	6.6	5.3	5.3
	m/min	3.4	2.1	1.6	2.8	2.8	2.0	2.0	1.6	1.6
Travelling speed at full load	ft/m	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4	39.4
	m/min	12	12	12	12	12	12	12	12	12
Travelling speed without load	ft/m	44.3	44.3	44.3	44.3	44.3	44.3	44.3	44.3	44.3
	m/min	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5	13.5
Air consumption – trolley	cfm	46	46	46	92	92	92	92	92	92
	m³/min	1.3	1.3	1.3	2.6	2.6	2.6	2.6	2.6	2.6
Air consumption – hoist lifting	cfm	141.5	141.5	141.5	229.6	229.6	229.6	229.6	229.6	229.6
	m³/min	4	4	4	6.5	6.5	6.5	6.5	6.5	6.5
Air connection		G <sup>3</sup> / <sub>4</sub>	G 3/4	G <sup>3</sup> / <sub>4</sub>	G 1½					
Hose dimension(Ø inside)	inch	<sup>3</sup> / <sub>4</sub>	<sup>3</sup> / <sub>4</sub>	<sup>3</sup> / <sub>4</sub>	1½	1½	1½	1½	1½	1½
	mm	19	19	19	35	35	35	35	35	35
Weight with standard lift	lbs	992.1	1267.7	1366.3	2205	2205	3307	3307	3638	3638
	kg	450	575	620	1000	1000	1500	1500	1650	1650
Chain dimension	mm	16 x 45	16 x 45	16 x 45	23.5 x 66					
Weight of chain	lbs/ft	3.9	3.9	3.9	3.9	8.2	8.2	8.2	8.2	8.2
	kg/m	5.8	5.8	5.8	12.2	12.2	12.2	12.2	12.2	12.2
Standard lift	ft	10	10	10	10	10	10	10	10	10
	m	3	3	3	3	3	3	3	3	3
Length of control at standard lift	ft	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	m	2	2	2	2	2	2	2	2	2
Noise level at full load <sup>1</sup> with standard silencer – lifting	dB(A)	78	78	80	78	78	78	78	78	78
Noise level at full load <sup>1</sup> with standard silencer – lowering	dB(A)	80	80	84	82	82	82	82	82	82

 $<sup>^1\!</sup>M$  easured at 1 m distance acc. to DIN 45635 part 20, Group mechanism: EH 10, EH 16, EH 20, EH 25, EH 37, EH 50: M3 (1 Bm), EH 30, EH 40, EH 60: M2 (1 Cm) 4 bar versions on request

# JDN MONORAIL AIR HOISTS

Two versions, for each of the 75 and 100 tonne lifting capacity products in the EH range are now available in both double trolley as well as the previously available 4 trolley traverse drive versions. The new

twin trolley drive versions, which offer more compact units for operation where limited space is available, are designated as EH 75C and EH 100C.

### TECHNICAL DATA

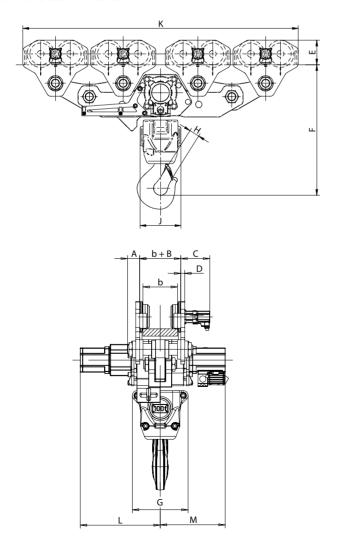
Туре		EH 75	EH 100	EH 75 C	EH 100 C		
Capacity	mt	75	100	75	100		
Air pressure	psi bar		87 6		37 6		
Number of trolleys			4		2		
Number of chain strands		3	4	3	4		
Motor output trolley	kW	2	2.8	1.4	2.8		
Motor output hoist	kW		9	!	9		
Lifting speed at full load	ft/min m/min	1.7 0.53	1.3 0.4	1.7 0.53	1.3 0.4		
Lifting speed without load	ft/min m/min	4.4 1.33	3.3 1	4.4 1.33	3.3 1		
Lowering speed at full load	ft/min m/min	4.1 1.25	3.1 0.95	4.1 1.25	3.1 0.95		
Travelling speed at full load	ft/min m/min		23 7		?3 7		
Travelling speed without load	ft/min m/min	26.3 8 26.3					
Air consumption trolley	cfm m³/min	184 5.2		92 2.6	184 5.2		
Air consumption hoist – lifting	cfm m³/min		83 8		83 8		
Air consumption hoist – lowering	cfm m³/min		212 6		212 6		
Air connection		G	11/2	G	11/2		
Hose dimension (Ø inside)	inch mm		½ 35		½ 35		
Weight with standard lift	lbs kg	8267 3750	11244 5100	7496 3400	10472 4750		
Chain dimension	mm	32	x 90	32 :	x 90		
Weight of chain	lbs/ft kg/m						
Standard lift	ft m	10 3			0		
Length of control at standard lift	ft m		5.5 2		6.5 2		
Noise level at full load¹ – lifting	dB(A)		77	77			
Noise level at full load¹ – lowering	dB(A)				33		

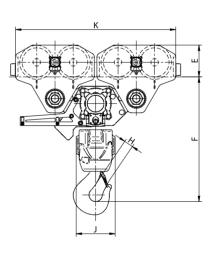
<sup>1</sup>Measured at 1 m distance acc. to DIN 45635 part 20 Group mechanism: EH 75, EH 100: M3 (1 Bm)

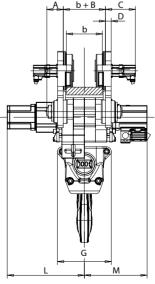
Туре		EH 10	EH 16	EH 20	EH 25	EH 30	EH 37	EH 40	EH 50	EH 60	EH 75	EH 100	EH 75 C	EH 100 C
А	inch mm	4.1 105	5.1 130	5.1 130			6.8 <sup>1</sup> 172 <sup>1</sup>		4.9 125	4.9 125	3.9 100	4.9 125	4.9 125	6.9 176
В	inch	2.8	2.7	2.7	2.8	2.8	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
	mm	70	68	68	70	70	68	68	68	68	68	68	68	68
C	inch	11.2	11.6	11.6	11.6	11.6	11.6	11.6	11.8	11.8	11.6	11.8	11.8	12.6
	mm	285	295	295	295	295	295	295	300	300	295	300	300	320
D	inch	0.9	1.4	1.4	0.9	1.4	1.4	1.4	1.6	1.6	1.4	1.6	1.6	2.4
	mm	25	35	35	25	35	35	35	40	40	35	40	40	60
Е	inch	7.8	8.7	8.7	7.4	7.4	8.6	8.6	11.1	11.1	8.6	11.1	11.1	15
	mm	198	220	220	188	188	218	218	283	283	218	282	282	382
F*	inch	27.8	29.5	32.3	39.3	39.3	43.0	43.0	44.9	44.9	59.2	59.2	59.2	59.2
	mm	705	750	820	998	998	1090	1090	1140	1140	1500	1500	1500	1500
G	inch	5.4	8.4	7.9	6.7	6.7	12.6	12.6	16.5	16.5	18.9	22.6	18.9	22.6
	mm	138	213	200	170	170	320	320	420	420	480	575	480	575
Н	inch	1.7	2	2.8	2.8	2.8	3.9	3.9	3.9	3.9	4.7	4.7	4.7	4.7
	mm	44	53	70	70	70	100	100	100	100	120	120	120	120
J	inch	7.6	7.3	10.5	13.8	13.8	13.0	13.0	13.4	13.4	17.9	18.5	17.9	18.5
	mm	192	185	266	350	350	330	330	340	340	455	470	455	470
K	inch	22.8	23.6	23.6	43.3	43.3	55.1	55.1	61.0	61.0	118.9	124.8	68.90	75.98
	mm	580	600	600	1100	1100	1400	1400	1550	1550	3020	3170	1750	1930
L	inch	12.1	14.5	14.5	17.7	17.7	21.3	21.3	21.3	21.3	32.5	32.5	32.5	32.5
	mm	308	367	367	450	450	540	540	540	540	825	825	825	825
М	inch	10.5	12.8	12.8	17.7	17.7	21.3	21.3	21.3	21.3	27.8	27.8	23.4	27.8
	mm	266	325	325	450	450	540	540	540	540	706	706	670	706

<sup>&</sup>lt;sup>1</sup>Depending on beam width

<sup>\*</sup>Chain containers increase the hoist headroom







# JDN ULTRA-LOW MONORAIL HOISTS

## CAPACITIES: 1 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)
- Insensitive to humidity, dust and temperatures from -20°C up to +70°C
- Extremely low headroom
- Low air consumption
- Available with increased spark protection

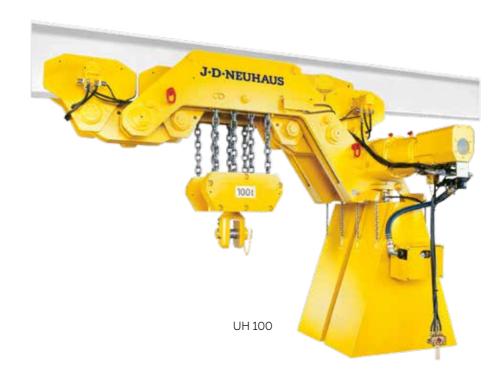
#### TECHNICAL DATA

Туре		UH 1	UH 2	UH 4	UH 6	UH 8	UH 12	UH 16	UH 25
Capacity	mt	1	2	4	6	8	12	16	25
Air pressure	psi	85	85	85	85	85	85	85	85
	bar	6	6	6	6	6	6	6	6
Number of chain strands		2 x 1	2 x 2	2	2	4	4	4	-
Motor output	kW	1	1	2.5	2.5	2.5	2.5	2.5	6.3
Lifting speed at full load	ft/min	16.4	8.2	9.8	6.6	4.6	3	2.1	4.3
	m/min	5	2.5	3	2	1.4	0.9	0.65	1.3
Lifting speed without load	ft/min	32.8	16.4	19.7	14.8	9.5	7.2	3.9	8.2
	m/min	10	5	6	4.5	2.9	2.2	1.2	2.5
Lowering speed at full load	ft/min	32.8	16.4	24.6	17.1	11.8	8.2	4.9	8.2
	m/min	10	5	7.5	5.2	3.6	2.5	1.5	2.5
Air consumption at full load – lifting	cfm	42.3	42.3	141.3	141.3	141.3	141.3	141.3	229.7
	m³/min	1.2	1.2	4	4	4	4	4	6.5
Air consumption at full load – lowering	cfm	53	53	194.3	194.3	194.3	194.3	194.3	102.5
	m³/min	1.5	1.5	5.5	5.5	5.5	5.5	5.5	2.9
Air connection		G 1/2	G 1/2	G 3/4	G 3/4	G 3/4	G 3/4	G <sup>3</sup> / <sub>4</sub>	G 1 ½
Hose dimension (Ø inside)	inch	½	½	3/4	3/4	3/4	3/4	3/4	1 ½
	mm	13	13	19	19	19	19	19	35
Weight with standard lift	lbs kg	min. 364* 165*	max. 452* 205*	1014 460	1036 470	1190 540	1213 550	1235 560	3307 1500
Chain dimension	mm	7 x 21	7 x 21	13 x 36	16 x 45				
Weight of chain	lbs/ft	0.67	0.67	2.6	2.6	2.6	2.6	2.6	3.9
	kg/m	1.0	1.0	3.8	3.8	3.8	3.8	3.8	5.8
Standard lift	ft	10	10	10	10	10	10	10	10
	m	3	3	3	3	3	3	3	3
Length of control at standard lift	ft	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	m	2	2	2	2	2	2	2	2
Noise level at full load <sup>1</sup> – lifting	dB(A)	76	76	78	78	78	78	78	80
Noise level at full load¹ – lowering	dB(A)	78	78	80	80	80	80	80	84

 $^1\mbox{Measured}$  at 1 m distance acc. to DIN 45635 part 20 Group mechanism: M3 (1 Bm)

Technical data for higher capacities on request.

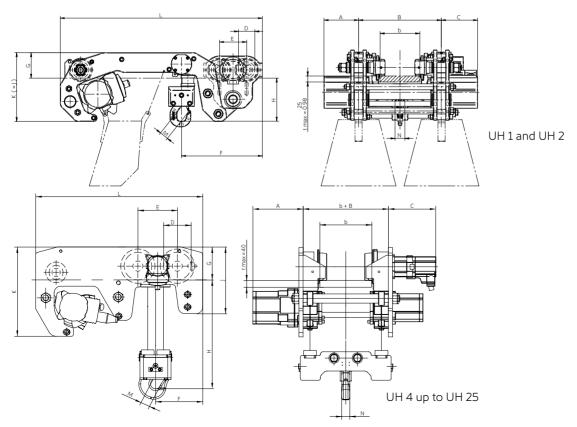
\*Depending on beam width



# DIMENSIONS

Туре		UH 1	UH 2	UH 4	UH 6	UH 8	UH 12	UH 16	UH 25
А	inch	5.7	5.7	7.68	12.01	7.68	12.01	12.01	15.04
	mm	145	145	195	305	195	305	305	382
В	inch	11.3-18.3	11.3-18.3	7.87	7.87	7.87	7.87	7.87	9.06
	mm	286-466	286-466	200	200	200	200	200	230
b	inch mm	3-12.2 76-310	3-12.2 76-310	-	-	- -		-	10.83-14 275-355
С	inch	5.98	5.98	11.16	11.16	11.16	11.16	11.16	11.81
	mm	152	152	284	284	284	284	284	300
D	inch	2.76	2.76	6.50	6.50	6.50	6.50	6.50	9.84
	mm	70	70	165	165	165	165	165	250
Е	inch	4.57	4.57	9.29	9.29	9.29	9.29	9.29	13.39
	mm	116	116	236	236	236	236	236	340
F	inch	12.48	13.58	12.99	12.99	11.14	11.14	11.14	14.96
	mm	317	345	330	330	283	283	283	380
G	inch	4.29	4.29	7.78	7.78	7.78	7.78	7.78	11.1
	mm	109	109	197.5	197.5	197.5	197.5	197.5	282
Н	inch mm	6.85-7.2 174-183	7.1-7.56 180-192	-	-	- -	-	-	18.5 470
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	11.57	11.57	15.75	15.75	15.75	15.75	15.75	25.08
	mm	294	294	400	400	400	400	400	637
K	inch	11.57	11.57	21.06	21.06	21.06	21.06	21.06	33.86
	mm	294	294	535	535	535	535	535	860
L	inch	33.94	33.94	39.37	39.37	39.37	39.37	39.37	53.15
	mm	862	862	1000	1000	1000	1000	1000	1350
М	inch	1.1	1.1	1.57	1.57	1.73	1.73	2.09	2.76
	mm	28	28	40	40	44	44	53	70
N	inch	1.61	1.61	2.01	2.01	2.60	2.60	3.23	3.15
	mm	41	41	51	51	66	66	82	80
t max.	inch	0.98	0.98	1.57	1.57	1.57	1.57	1.57	3.54
	mm	25	25	40	40	40	40	40	90

Dimensions for higher capacities on request.



# JDN-BOP HANDLING SYSTEMS

#### CAPACITIES: 20 T UP TO 200 T

BOP handling systems from J.D. Neuhaus are recognised for their reliable, robust and efficient operation on land and on jack-up and semi-submersible drilling platforms. The monorail air hoists (EH) in our BOP handling systems feature a compact design with low installation height. They can be used as double hoists in standard BOP handling systems or, when linked together with a coupling rod, can be operated as a 4-point BOP handling system. For extremely low headrooms we recommend our ultra-low hoists from the UH series. Alternatively, all BOP handling systems are available with hydraulic drives.



#### **OPTIONS**

- Offshore version for special corrosion protection under tough weather conditions (salty, moist air) on sea and land
- Offshore paint finish
- · Rack and pinion drive
- Delta-P overload protection
- Ultra-low hoists
- Pneumatic, hydraulic or electric remote control
- · Load display systems
- Radio remote control
- Articulated trolleys for limited side pulling
- Individual acceptance by the authorised companies of your choice
- Special versions according to your requirements
- Cryogenic versions down to -45°C

Ultra-Flachhubwerk BOP Handling System BHU 200

#### TECHNICAL DATA

Туре		BH 20	BH 32	BH 40	BH 50	BH 75	BH 100	BH 150	BH 200
Consisting of 2 units		EH10	EH16	EH20	EH25	EH37	EH50	EH75	EH100
Capacity	mt	20	32	40	50	75	100	150	200
Weight with standard lift	lbs	1984	2535	2734	4409	6614	7275	17637	25133
	kg	900	1150	1240	2000	3000	3300	8000	11400
Standard lift	ft	10	10	10	10	10	10	10	10
	m	3	3	3	3	3	3	3	3
Length of control at standard lift	ft	6.5	6.5	6.5	6.5	6.5	6.5	6.5	6.5
	m	2	2	2	2	2	2	2	2

# JDN HOISTS FOR USE IN THE TOUGHEST CONDITIONS

## JDN SUBSEA HOISTS



# THE ULTIMATE TOOL FOR EVERY PROFESSIONAL DIVER

The JDN PROFI Subsea series is available with air or hydraulic drives. As well as a sensitive control system, the PROFI hoists are equipped with an overload protection. PROFI subsea hoists are a versatile and indispensable tool for professional divers and are suitable for horizontal work as well as for oblique pulling.

#### **ADVANTAGES**

- · Air or hydraulic drive
- Infinitely variable speeds can be regulated sensitively
- With overload protection
- Very versatile, also suitable for horizontal and oblique pulling thanks to hook suspension

# JDN CRYOGENIC HOISTS

# NOT ONLY SUITABLE FOR BOP HANDLING IN ARCTIC AREAS:

The temperature range of standard JDN hoists is -20°C to +70°C. JDN has developed hydraulic hoists for applications at temperatures as low as minus 45°C, such as BOP handling in arctic areas. To enable these hydraulic drives to be used under such extreme temperatures, they are fitted with a device that pre-heats the drives to a temperature of -25°C before being operated. This is achieved directly by means of the standard hydraulic supply. JDN hydraulic hoists are designed to be operated with low-temperature hydraulic fluids and can be operated efficiently at temperatures from -45°C to +40°C.

### **ADVANTAGES**

- Application range -45°C to +40°C
- · Hydraulic drive
- Easy starting thanks to pre-heating device for the drives
- Operation with low-temperature hydraulic fluid
- Tested under real conditions and in use in Siberia



Do you need a hoist for toughest conditions? Then contact us.

# JDN HYDRAULIC HOISTS AND MONORAIL HOISTS

# HYDRAULIC HOISTS PROFI / HYDRAULIC MONORAIL HOISTS CAPACITIES: 3 T UP TO 100 T

JDN Hydraulic Hoists and Hydraulic Monorail Hoists are available with capacities from 3 t up to 100 t. Depending on motor size these hoists work with an intake pressure of 130 bar up to 180 bar. Pressure fluid: Oil.

## **ADVANTAGES**

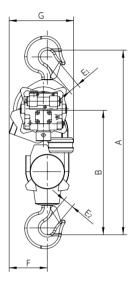
- Ideally suited for working in hazardous areas (explosion risk)
- Extremely low noise emissions
- Fully enclosed highly robust gear motor
- Integrated overload protection
- Only two supply connections at hoist "P" and "T", leakage oil drained internally
- The drive is hermetically sealed off from the environment



# HYDRAULIC HOISTS PROFI 3 TI-H UP TO 20 TI-H

# TECHNICAL DATA

Туре		3 TI-H	6 TI-H	10 TI-H	16 TI-H	20 TI-H
Capacity	mt	3.2	6.3	10	16	20
Intake pressure	psi	1885	1885	1885	1885	1885
	bar	130	130	130	130	130
Intake volume	cfm	1.7	1.7	1.7	1.7	1.7
	l/min	48	48	48	48	48
Number of chain strands		1	2	2	3	4
Motor output	kW	3.5	3.5	3.5	3.5	3.5
Motortype		KM 1/16				
Lifting speed at full load	ft/min	13.1	6.6	3.9	2.6	2.0
	m/min	4.0	2.0	1.2	0.8	0.6
Lifting speed without load	ft/min	14.8	7.6	4.1	2.7	2.0
	m/min	4.5	2.3	1.25	0.82	0.6
Lowering speed at full load	ft/min	14.8	7.6	4.3	2.8	2.1
	m/min	4.5	2.3	1.3	0.85	0.65
Lowering speed without load	ft/min	14.8	7.6	4.3	2.8	2.1
	m/min	4.5	2.3	1.3	0.85	0.65
Connection		G ½	G ⅓2	G ⅓2	G ⅓2	G ⅓2
Hose dimension		DN 12				
Weight at standard lift with control	lbs	198.4	251.3	352.7	538.0	637.1
	kg	90	114	160	244	289
Chain dimension	mm	13 x 36	13 x 36	16 x 45	16 x 45	16 x 45
Weight of chain	lbs/ft	2.6	2.6	3.9	3.9	3.9
	kg/m	3.8	3.8	5.8	5.8	5.8
Standard lift	ft	10	10	10	10	10
	m	3	3	3	3	3
Length of control at standard lift	ft	6.5	6.5	6.5	6.5	6.5
	m	2	2	2	2	2

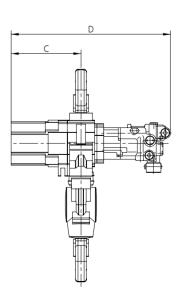


Group mechanism: M3 (1 Bm)

# DIMENSIONS

Туре		3 TI-H	6 TI-H	10 TI-H	16 TI-H	20 TI-H
A smallest headroom <sup>1</sup>	inch / mm	23.4 / 593	26.5 / 674	32 / 813	35.4 / 898	40.6 / 1030
В	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	22.8 / 578	22.8 / 578	26.4 / 670	31 / 787	31 / 787
E1	inch / mm	1.6 / 40	1.6 / 40	1.8 / 44	2.1 / 53	2.8 / 70
E2	inch / mm	1.2 / 30	1.6 / 40	1.8 / 44	2.1 / 53	2.8 / 70
F	inch / mm	7.4 / 187	6.1 / 154	7.8 / 197	7.8 / 199	7.1 / 180

 $^{1}\mbox{Chain}$  containers increase the hoist headroom



# JDN HYDRAULIC HOISTS AND MONORAIL HOISTS

# HYDRAULIC HOISTS PROFI 25 TI-H UP TO 100 TI-H

## TECHNICAL DATA

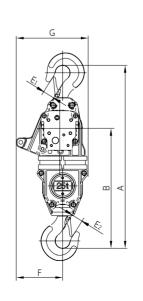
Туре		25 TI-H	37 TI-H	50 TI-H	75 TI-H	100 TI-H
Capacity	mt	25	37.5	50	75	100
Intake pressure	psi	2176	2176	2176	2611	2611
	bar	150	150	150	180	180
Intake volume	cfm	2.8	2.8	2.8	3.0	3.0
	l/min	80	80	80	85	85
Number of chain strands		2	3	4	3	4
Motor output	kW	6	6	6	9	9
Motor type		KM 2/32	KM 2/32	KM2/32	KM2/32	KM2/32
Lifting speed at full load	ft/min	3.6	2.3	1.6	1.7	1.3
	m/min	1.1	0.7	0.5	0.53	0.4
Lifting speed without load	ft/min	3.9	2.6	1.6	2.0	1.5
	m/min	1.2	0.8	0.5	0.6	0.45
Lowering speed at full load	ft/min	3.9	2.6	1.6	2.0	1.5
	m/min	1.2	0.8	0.5	0.6	0.45
Lowering speed without load	ft/min	3.9	2.6	1.6	2.0	1.5
	m/min	1.2	0.8	0.5	0.6	0.45
Connection		G <sup>3</sup> / <sub>4</sub>				
Hose dimension		DN 16				
Weight with standard lift and control	lbs	1282	2123	2068	4079	4519
	kg	583	965	940	1850	2050
Chain dimension	mm	23.5 x 66	23.5 x 66	23.5 x 66	32 x 90	32 x 90
Weight of chain	lbs/ft	8.2	8.2	8.2	14.3	14.3
	kg/m	12.2	12.2	12.2	21.3	21.3
Standard lift	ft	10	10	10	10	10
	m	3	3	3	3	3
Length of control with standard lift	ft	6.5	6.5	6.5	6.5	6.5
	m	2	2	2	2	2

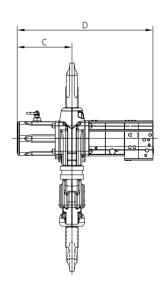
Group mechanism: PROFI 25 TI-H – PROFI 100 TI-H M3 (1 Bm)

## **DIMENSIONS**

Туре		25 TI-H	37 TI-H	50 TI-H	75 TI-H	100 TI-H
A smallest	inch	50.5	57.7	66.9	76.0	76.0
headroom <sup>1</sup>	mm	1282	1466	1700	1930	1930
В	inch	37.3	36.8	45	49.2	49.2
	mm	948	935	1144	1250	1250
С	inch	15.5	14.8	17.4	32.5	32.5
	mm	393	377	442	825	825
D	inch	42.1	40.8	48.6	64.4	64.4
	mm	1069	1037	1235	1635	1635
E <sub>1</sub>	inch	2.8	3.9	3.9	4.7	4.7
	mm	70	100	100	120	120
E <sub>2</sub>	inch	2.8	3.9	3.9	4.7	4.7
	mm	70	100	100	120	120
F	inch	18.4	20.4	12.2	15.9	14.4
	mm	466	518	310	405	365
G	inch	24	29.3	21.2	23.6	23.6
	mm	610	745	539	600	600

<sup>&</sup>lt;sup>1</sup>Chain containers increase the hoist headroom

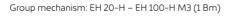




# HYDRAULIC MONORAIL HOISTS EH 20-H UP TO EH 100-H

## TECHNICAL DATA

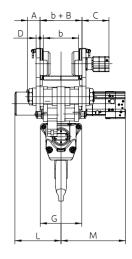
Torres		EH 20-H	EH 25-H	EH 37-H	EH 50-H	EH 75-H	EH 100-H
Туре							
Capacity	mt	20	25	37.5	50	75	100
Intake pressure	psi	1885	2176	2176	2176	2611	2611
	bar	130	150	150	150	180	180
Intake volume	cfm	1.7	2.8	2.8	2.8	3	3
	l/min	48	80	80	80	85	85
Number of chain strands		4	2	3	4	3	4
Motor output – Trolley	kW	0.7	1.4	1.4	1.4	2.8	2.8
Motor output – Hoist	kW	3.5	6	6	6	9	9
Motor type – Trolley		KM1/8	KM1/8	KM1/8	KM1/8	KM1/8	KM1/8
Motor type – Hoist		KM1/16	KM2/32	KM2/32	KM2/32	KM2/32	KM2/32
Lifting speed at full load	ft/min	2.0	3.6	2.3	1.6	1.7	1.3
	m/min	0.6	1.1	0.7	0.5	0.53	0.4
Lifting speed without load	ft/min	2.0	3.9	2.6	2	2	1.5
	m/min	0.6	1.2	0.8	0.6	0.6	0.45
Lowering speed at full load	ft/min	2.1	3.9	2.6	2	2	1.5
	m/min	0.65	1.2	0.8	0.6	0.6	0.45
Lowering speed without load	ft/min	2.1	3.9	2.6	2	2	1.5
	m/min	0.65	1.2	0.8	0.6	0.6	0.45
Travelling speed at full load	ft/min	39.4	39.4	39.4	39.4	39.4	39.4
	m/min	12	12	12	12	12	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 and control	lbs	1584	2310	3410	4136	8378	11354
	kg	720	1050	1550	1880	3800	5150
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	3.9	8.2	8.2	8.2	14.3	14.3
	kg/m	5.8	12.2	12.2	12.2	21.3	21.3
Standard lift	ft	10	10	10	10	10	10
	m	3	3	3	3	3	3
Length of control with standard lift	ft	6.5	6.5	6.5	6.5	6.5	6.5
	m	2	2	2	2	2	2

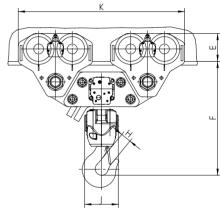


# **DIMENSIONS**

Тур	e	EH 20-H	EH 25-H	EH 37-H	EH 50-H	EH 75-H	EH 100-H
A <sup>1</sup>	inch	5.1	5.8	5.8	4.9	3.9	4.9
	mm	130	146	146	125	100	125
В	inch	2.7	2.8	2.8	2.7	2.7	2.7
	mm	68	70	70	68	68	68
C	inch	10.5	10.1	10.5	10.7	8.9	9.1
	mm	267	257	267	272	225	230
D	inch	1.4	1	1	1.6	1.4	1.6
	mm	35	25	25	40	35	40
Е	inch	8.7	7.8	8.7	11.1	8.6	11.1
	mm	220	198	220	283	218	282
F1	inch	32.3	39.3	42.1	45.3	59.1	59.1
	mm	820	998	1070	1150	1500	1500
G	inch	7.9	6.7	7.5	16.5	18.9	22.6
	mm	200	170	190	420	480	575
Н	inch	2.8	2.8	3.9	3.9	4.7	4.7
	mm	70	70	100	100	120	120
J	inch	10.5	13.8	17.9	13.4	17.9	18.5
	mm	266	350	455	340	455	470
K	inch	23.6	46.7	68.1	66.1	118.9	124.8
	mm	600	1185	1730	1680	3020	3170
L	inch	14.5	14.8	14.8	18.2	32.5	32.5
	mm	367	377	377	462	825	825
Μ	inch	16.5	22.1	22.1	27.0	31.7	31.7
	mm	420	562	562	687	805	805

<sup>&</sup>lt;sup>1</sup>Chain containers increase the hoist headroom









# JDN CRANE SYSTEMS & CRANE KITS/JDN ACCESSORIES

# 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
- Capacities up to 100 t
- Crane spans up to 36 m

Explosion-protected **JDN Crane Systems** are the right choice for the most challenging environmental conditions, whether onshore or offshore. Available in air drive or hydraulic drive versions.



# JDN CRANE KITS FOR EXPLOSION-PROOF AIR CRANES

### **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 10 t 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

# JDN ACCESSORIES TAILORED TO YOUR INDIVIDUAL NEEDS

We offer a wide range of accessories designed to ensure that JDN standard products are suitable for your specific applications. This means, for example, that you can meet very specific safety requirements, adjust performance capacity or make operations even more convenient.

- Filter silencer
- Filter regulator
- Service unit
- Main air emergency-stop valve
- Chain box
- Special grease cartridge for oil-free operation, volume 250 ml
- Limit switch for lifting and travelling

- Booster valve (control lengths over 12 m)
- Extension arm for control on motorised trolley
- Additional suspension for chain box (for installation in trolley)
- Copper-plated load hook for increased spark protection
- Stainless steel load hook (up to 750 kg capacity)

- Stainless steel chain (reduced capacity) up to 6 TI
- Manual emergency lowering device for PROFI 3 TI–20 TI hoists
- Special paint finishes

# JDN EXPLOSION PROTECTION

# JDN EXPLOSION PROTECTION CLASSIFICATION AND MARKING

Hoists and cranes from J.D. Neuhaus have an unbeatable advantage over electrically-driven lifting equipment: Even the standard versions are suitable for use in explosion-hazardous areas.

If you have any questions about the topic of explosion protection, please contact our sales team. We will be happy to advise you.



## WHAT EXACTLY DO THE MARKINGS MEAN?



## **MARKING FROM ATEX**

Zone	Mining	(	)	1	L	2	2
Zone	Mining	Gas	Dust	Gas	Dust	Gas	Dust
Equipment group	Ι	II					
Equipment category	M1 or M2	1G	1D	2G	2D	3G	3D

#### **IGNITION PROTECTION TYPE**

Non-electrical explosion protection is always assigned the marking code "h" irrespective of the version. JDN uses constructive explosion protection.

#### **EXPLOSION GROUP**

Mining		Gas		Dust
	IIA	E.g. propane	IIIA	Flammable lint
-	IIB	E.g. ethylene	IIIB	Non-conductive dust
	IIC	E.g. hydrogen	IIIC	Conductive dust

## **MAXIMUM SURFACE TEMPERATURE**

Mining		Gases	Dusts
	T1	450°C	
	T2	300°C	
	T3	200°C	T 0.C
-	T4	135°C	T°C
	T5	100°C	
	T6	85°C	

For areas with a risk of dust explosion, the maximum permissible surface temperature of the device is specified explicitly; for areas with a risk of gas explosion, the maximum surface temperature is divided into a temperature class.

### **EQUIPMENT PROTECTION LEVEL "EPL"**

	Mining	0		1		2	
Zone	Mining	Gas	Dust	Gas	Dust	Gas	Dust
EPL	Ma or MB	Ga	Da	Gb	Db	Gc	Dc

## **ADDITIONAL MARKING**

# **JDN CONTROLS**

# JDN AIR HOISTS AND CRANES ARE AVAILABLE WITH VARIOUS CONTROLS TO SUIT YOUR SPECIAL NECESSITIES.



## 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 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.



## 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 CRANES**

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

# **JDN ENERGY SUPPLIES**

A series of supply systems are available for powering JDN Air Hoists in trolleys, monorail hoists and crane systems:

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



The hose is fastened to trolleys, which roll directly on the bottom flange of the beam. With each horizontal move of the hoist along the beam, the hose trolleys make the hose follow suit. The hose trolleys will be used for short distances or if there is not enough space on the side of the beam to install C or square bars.

### **YOUR ADVANTAGES:**

- · Easy to install
- Cost-efficient
- · Consisting of: Hose carriages and hose

## SPIRAL HOSE

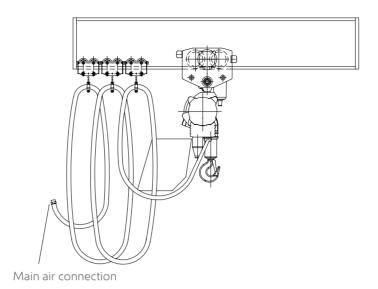
This simple and economical solution is suitable for distances of up to 10 metres. The hose rings are suspended on a plastic-coated rope that runs parallel to the track.

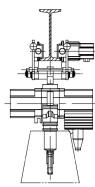
The spiral hose can be used in category 3 (zone 2) with gases in explosion group IIA and IIB. It is not suitable for applications in category 2 (zone 1) or group IIC.

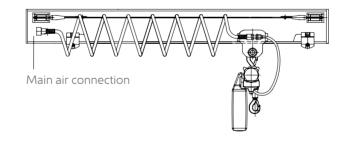
### Practical tip:

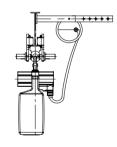
Make sure to lay the hose so that its extended length is roughly 1.5 times the required distance.

 Consisting of: Tensioning arms, rope tensioners, hose and rope









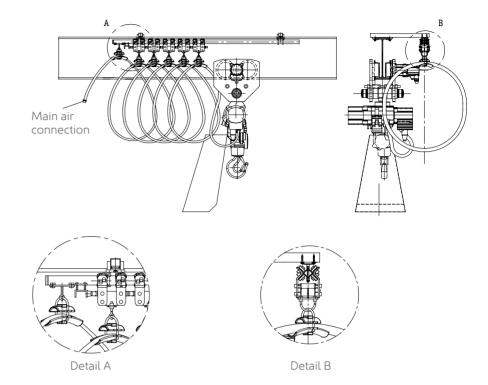
# SQUARE BAR & C RAIL

Galvanised C rails or square bars are installed along the beam to carry the energy supply lines.

## **SQUARE BAR**

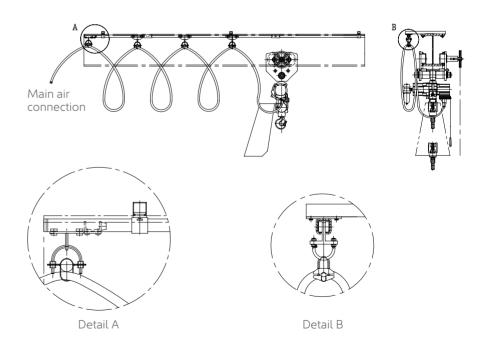
Depending on the local conditions, rails and curved tracks of different lengths are available, as well as an extensive range of installation accessories. The square bar is also suitable for curved tracks.

 Consisting of: Square bars, tensioning arms, hose, hose supports and supply line carriages



### **CRAIL**

 Consisting of: C rails with support, adapter, antistatic supply hose and hose support. The supports must be attached to the upper flange of the beam.



# **JDN ENERGY SUPPLIES**

## **ENERGY CHAIN**

## DIE ENERGY CHAIN FOR TROLLEY DRIVE OFOVERHEAD TRAVELLING CRANES

The energy supply for trolley drive in overhead travelling cranes is realised byna horizontal version of the energy chain. A guide channel is mounted on the girder with the chain gliding inside.

Air distribution and the control box are also attached to the guide channel.

Usually there are two different types of hoses inside the energy chain: The air hose, which feeds the hoisting motor and the trolley motor, and the control hose for crane control functions.

In case of low headroom requirements choose vertical installed energy chain, like the supply for trolleys in underslung cranes.

# ENERGY CHAIN FOR CRANE DRIVE OF OVERHEAD TRAVELLING CRANES

The energy supply for crane drive in overhead travelling cranes is realised by a vertical installation of the energy chain. The necessary guide channel system is mounted with clamped brackets on the bottom flange. If different profile sizes for the bottom flange are used because varying in support spacing, the brackets may be clamped to the top flange. The clamped brackets can be used for all the normal steel girder sections (with flange thickness 7-40 mm (0.28-1.57inch)).

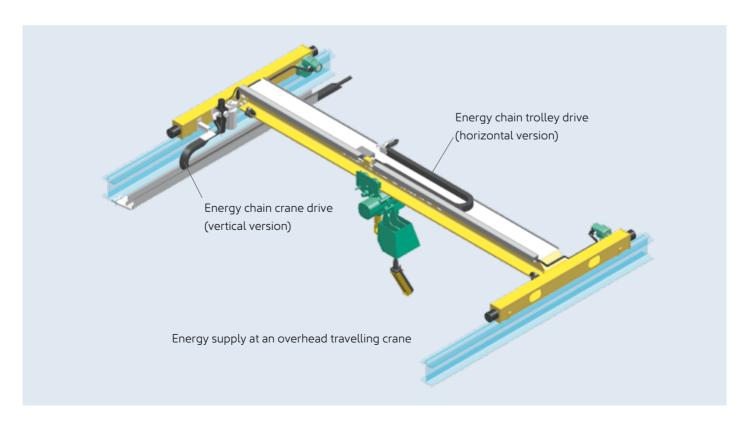
The energy chain carries air hoses inside, which supply the hoisting motor, driving motors as well as the control hoses of the crane. In addition it is possible to install further control hoses and electric cables inside the energy chain.

The main air connection of the energy supply is located midway of the crane travel distance.

# ENERGY CHAIN FOR TROLLEY AND CRANE DRIVE OF UNDERSLUNG CRANES

The energy supply for hoists with trolley and for crane drives in underslung cranes is realised by a vertical installation of the energy chain. The guide channel system is mounted with c-consoles, which are clamped by claws on the top flange of the girder. The dimensions of the c-consoles are depending on the used girder.

Supply air hoses for hoisting and travelling as well as control hoses are installed in the energy chain.



# JDN-SERVICE

## MORE SAFETY FOR YOU, AROUND THE WORLD

### JDN GLOBAL SERVICE

Maximum operating safety results in ensured productivity: That's our promise for your JDN products and systems.

As a J.D. Neuhaus hoist or crane system operator, you know thanks to your own experience that our products are exemplary when it comes to reliability and longevity.

# MAXIMISE THE POTENTIAL OF LONGEVITY

Is it possible to increase the profitability of an investment and simultaneously reduce the risk of production downtime? Yes, it is! By carefully planning ahead. With JDN Service at your side, you ensure the continuous operational availability of your JDN hoists. And: With regular maintenance, you simultaneously ensure the maximum longevity of your JDN products.

# BENEFIT FROM THE ADVANTAGES OF THE MANUFACTURER

Long downtimes and a lack of operational safety of a system are absolutely the worst case scenario for every conscientious manager. Your best defence in this case is a service partnership with J.D. Neuhaus, since nobody knows JDN products better than their designer and manufacturer, which means us. Nobody can supply you with original spare parts or replacement products quicker and cheaper than we can.

# USE THE EXPERTISE OF THE WORLD'S MARKET LEADER

So what does it mean to you to purchase products and services from a single provider, the world's market leader in pneumatic and hydraulic hoists? This means one less thing to worry about. We manage your JDN products during their entire life cycle, we are certified according to ISO 9001 and ISO 14001, and we are a master of every export routine. That's quality of service that takes away your fears and helps you relax.

# EXPERIENCE THE STRENGTH OF THE SERVICE TEAM

What if something happens? You can contact JDN Global Service to help you every day, around the clock with experienced JDN technicians, who have the best training and operate around the world. We diagnose, find a solution, and fix the problem. In any remote corner of the world. We're JDN Global Service. We're prepared for extremes.



"SECURE YOUR PRODUCTIVITY,
MAXIMISE YOUR OPERATING SAFETY!"

# **JDN SERVICE**

### **PROJECT MANAGEMENT**

We provide you support from planning to on-site installation of your project at your premises.

Our services for you:

- On-site examination to plan the construction site
- Organisation of the construction site and coordination with all participants
- · Provision of technicians
- Approval of the hoists and crane systems according to your specifications
- Approval in cooperation with external certification authorities

#### **REGULAR INSPECTION**

To ensure operational readiness, we complete regular maintenance and inspection of your JDN hoist.

Our services for you:

- Annual maintenance according to legal regulations and our specified maintenance plan
- Addition to our maintenance database and reminder about upcoming planned maintenance
- Maintenance contracts for precise cost controls

#### **TRAINING**

To ensure that smaller repairs and annual maintenance are able to be completed by your own personnel, we provide customer-specific training courses.

Our services for you:

- Training courses at the various JDN service centres
- Training courses at your premises that are especially tailored to your needs
- · On-the-job training

#### **SERVICE KITS**

For supply of spare parts on-site. With our service kits, you can rest assured that all of the required replacement parts for a particular module will be available to you.

#### **REPAIRS**

Our service technicians possess the best possible training to complete all repairs and modifications involving your JDN hoisting equipment, even in the case of off-shore applications.

Our services for you:

- Repair and modifications in our own workshops
- Repair and modifications at your premises
- Conversion work in cooperation with our R&D department
- Overload tests

#### **SPARE PARTS**

With speedy spare parts supply, we are able to ensure the operational readiness of your JDN hoisting equipment.

Our services for you:

- Support during selection of the right spare parts
- Configuration of spare parts for your own warehouse
- Worldwide delivery

#### **GENERAL OVERHAULS**

After expiry of the theoretical operating time and after 10 years at the latest, all JDN hoists must be overhauled. This enables us to ensure fault-free operation for many more years.

Our services for you:

- General overhaul in our own service centres and with authorised service partners
- Cooperation with surveyor and re-certifiers
- · Complete general overhaul kits

#### **RENTALS**

Do you need hoists for the short term? We can deliver via Preferred Partners.

Our services for you:

- · Quickly available
- · Hoists in different capacities
- Adjustment of hoisting equipment to your requirements



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Contact:

