

# **CONTENTS**

| JDN Company Portrait                          | 4     | JDN Hydraulic Hoists and Monorail Hoists    | 38    |
|---|-------|---|-------|
| The Company                                   | 4     | Hydraulic Hoists PROFI 3 TI-H up to 20 TI-H | 39    |
| Environmental Protection and Quality          | 5     | Hydraulic Hoists PROFI 25 TI-H              |       |
|   |       | up to 100 TI-H                              | 40    |
| JDN Air Hoists Mini                           | 6     | Hydraulic Monorail Hoists EH 20-H           |       |
| The Mini series at a glance                   | 6-9   | up to EH 100-H                              | 41    |
| Mini 125 – Mini 1000                          | 10-11 |   |       |
|   |       | JDN Crane Systems & Crane Kits              | 42    |
| JDN Air Hoists Profi                          | 12    |   |       |
| The modular system at a glance                | 14    | JDN Accesssories                            | 42    |
| PROFI 025 Tl up to 2 Tl                       | 15    |   |       |
| PROFI 1,5 TI up to 3 TI/2                     | 16    | JDN Explosion Protection                    | 43    |
| PROFI 3 Tl up to 20 Tl                        | 17    |   |       |
| PROFI 25 Tl up to 100 Tl                      | 18    | JDN Controls                                | 44-45 |
| JDN Air Hoists M Series                       | 19    | JDN Energy Supplies                         | 46-48 |
| JDN Trolleys                                  | 20-21 | JDN Service                                 | 49-50 |
| PROFI in Manual Trolley (LN)                  | 22    |   |       |
| PROFI in Reel Chain Trolley (LH)              | 23    |   |       |
| PROFI in Motor Trolley (LM)                   | 24    |   |       |
| JDN Low Headroom Trolleys                     | 25-26 |   |       |
| JDN Big Bag Handling Air Hoists               | 27-29 |   |       |
| JDN Monorail Air Hoists                       | 30-33 |   |       |
| JDN Ultra-Low Monorail Hoists                 | 34-35 |   |       |
| JDN BOP Handling Systems                      | 36    |   |       |
| JDN Hoists for use in the toughest conditions | 37    |   |       |
| JDN Subsea Hoists                             | 37    |   |       |
| JDN Cryogenic Hoists                          | 37    |   |       |

## **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.

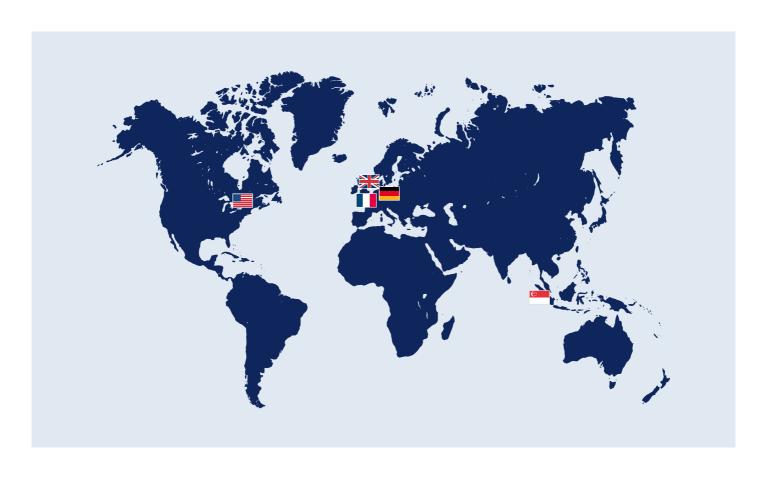
J.D. Neuhaus air hoists and hydraulic

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 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 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

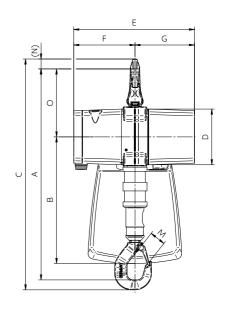
| Туре   |        | mini 125   | mini 250                    | mini 500                    | mini 1000  |
|--|--------|------------|-----------------------------|-----------------------------|------------|
| Air pressure                                     | psi    | 87         | 87                          | 87                          | 87         |
|  | bar    | 6          | 6                           | 6                           | 6          |
| Carrying capacity                                | lbs    | 275        | 550                         | 1100                        | 2160       |
|  | kg     | 125        | 250                         | 500                         | 980        |
| Number of chain strands                          |        | 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 – lowering <sup>1</sup> | 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   |

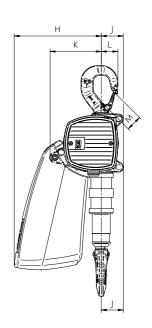


<sup>&</sup>lt;sup>1</sup>Measured in 1 m distance acc. to DIN 45635 part 20. Performance data at room temperature. Alterations reserved.

## **DIMENSIONS**

| Туре | mini 125 | mini 250 | mini 500 | mini 1000 |
|------|----------|----------|----------|-----------|
| А    | 14.6     | 14.6     | x.x      | x.x       |
|      | 370      | 370      | 509      | 509       |
| В    | x.x      | x.x      | x.x      | x.x       |
|      | 236      | 236      | 306      | 306       |
| C    | x.x      | x.x      | 21.9     | 21.9      |
|      | 400      | 400      | 557      | 557       |
| D    | 3.9      | 3.9      | 5.3      | 5.3       |
|      | 100      | 100      | 135      | 135       |
| E    | 8.7      | 8.7      | 11.5     | 11.5      |
|      | 220      | 220      | 292      | 292       |
| F    | 4.4      | 4.4      | 5.8      | 5.8       |
|      | 112      | 112      | 148      | 148       |
| G    | 4.3      | 4.3      | 5.7      | 5.7       |
|      | 108      | 108      | 144      | 144       |
| Н    | x.x      | x.x      | x.x      | x.x       |
|      | 159      | 159      | 210      | 210       |
| J    | x.x      | x.x      | x.x      | x.x       |
|      | 43       | 43       | 53       | 53        |
| K    | x.x      | x.x      | x.x      | x.x       |
|      | 93       | 93       | 125      | 125       |
| L    | 1.1      | 1.1      | x.x      | x.x       |
|      | 28       | 28       | 40       | 40        |
| М    | 0.7      | 0.7      | 1.1      | 1.1       |
|      | 19       | 19       | 28       | 28        |
| (N)  | x.x      | x.x      | x.x      | x.x       |
|      | 15       | 15       | 24       | 24        |
| 0    | x.x      | x.x      | x.x      | x.x       |
|      | 118      | 118      | 164      | 164       |



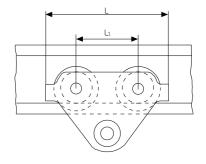


**#10** Alterations reserved.

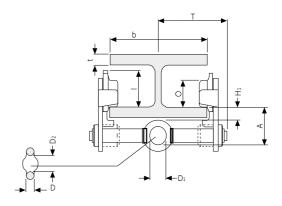
# MANUAL TROLLEYS FOR JDN AIR HOISTS MINI

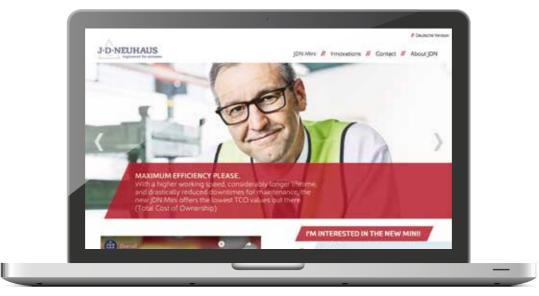
### TECHNICAL DATA

| 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    |



| Туре |      | LN 250 | LN 1000 |
|------|------|--------|---------|
| А    | 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     |





# **JDN AIR HOISTS PROFI**





## 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
  As standard:

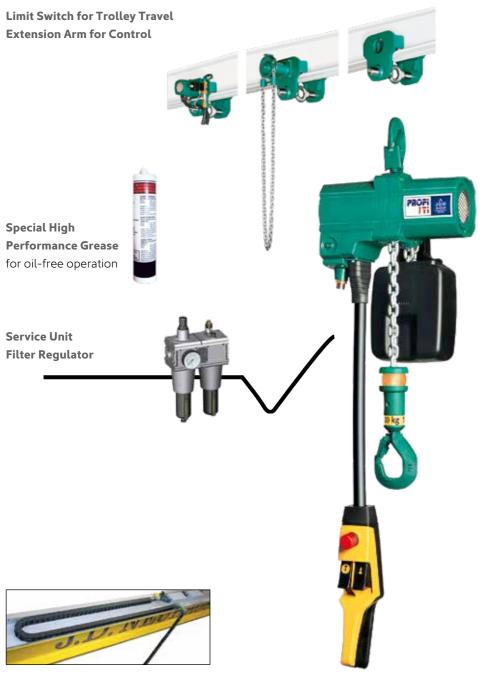
II 2G Ex h IIA T4 Gb X
II 2D Ex h IIIA T130°C Db X

With increased spark protection:

II 2G Ex h 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:

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

With increased spark protection:

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                                    | TI          | 1 TI         |                                      | 2 TI                               |                                    |
|--|-----------------|-------------|---------------------|---------------------------------------|-------------|--------------|--------------------------------------|------------------------------------|------------------------------------|
| Capacity   | mt              | 0.16        | 0.25                | 0.32                                  | 0.5         | 0.63         | 1                                    | 1.25                               | 2                                  |
| Air pressure                                     | psi<br>bar      | 60<br>4     | 87<br>6             | 60<br>4                               | 87<br>6     | 60<br>4      | 87<br>6                              | 60<br>4                            | 87<br>6                            |
| Number of chain strands                          |                 | :           | 1                   |                                       | 1           |              | 1                                    | 2                                  | 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<br>m/min | 65.6<br>20  | 65.6<br>20          | 32.8<br>10                            | 36.1<br>11  | 16.4<br>5    | 18<br>5.5                            | 8.2<br>2.5                         | 8.9<br>2.7                         |
| Lifting speed without load                       | ft/min<br>m/min | 123<br>37.5 | 137.8<br>42         | 52.5<br>16                            | 62.3<br>19  | 32.8<br>10   | 36.1<br>11                           | 16.4<br>5                          | 18<br>5.5                          |
| Lowering speed at full load                      | ft/min<br>m/min | 124.7<br>38 | 124.7<br>38         | 55.8<br>17                            | 55.8<br>17  | 32.8<br>10   | 36.1<br>11                           | 16.4<br>5                          | 18<br>5.5                          |
| Air consumption at full load – lifting           | cfm<br>m³/min   | 24.7<br>0.7 | 42.4<br>1.2         | 24.7<br>0.7                           | 42.4<br>1.2 | 24.7<br>0.7  | 42.4<br>1.2                          | 24.7<br>0.7                        | 42.4<br>1.2                        |
| Air consumption at full load – lowering          | cfm<br>m³/min   | 28.3<br>0.8 | 53<br>1.5           | 28.3<br>0.8                           | 53<br>1.5   | 28.3<br>0.8  | 53<br>1.5                            | 28.3<br>0.8                        | 53<br>1.5                          |
| Air connection                                   |                 | G 1/2       |                     | G 1/2                                 |             | G 1/2        |                                      | G ⅓2                               |                                    |
| Hose dimension (ø inside)                        | inch<br>mm      |             | / <sub>2</sub><br>3 | 1/ <sub>2</sub> 1/ <sub>2</sub> 13 13 |             |              |                                      | ⁄2<br>3                            |                                    |
| Weight with standard lift, rope control          | lbs<br>kg       | 59.5<br>27  | 59.5<br>27          | 59.5<br>27                            | 59.5<br>27  | 61.6<br>27.5 | 61.7 <sup>1</sup><br>28 <sup>1</sup> | 75 <sup>1</sup><br>34 <sup>1</sup> | 75 <sup>1</sup><br>34 <sup>1</sup> |
| Chain dimension                                  | mm              | 7 ×         | 21                  | 7 x                                   | 21          | 7 x          | 21                                   | 7 x                                | 21                                 |
| Weight of chain                                  | lbs/ft<br>kg/m  |             | 67<br>.0            | 0.<br>1.                              | 67<br>0     |              | 67<br>.0                             | 0.0                                | 67<br>0                            |
| Standard lift                                    | ft<br>m         | 10<br>3     |                     |                                       | 0<br>3      |              | 0<br>3                               |                                    | 0                                  |
| Length of control at standard lift               | ft<br>m         | 6.5<br>2    |                     | 6.5<br>2                              |             | 6.5<br>2     |                                      | 6.5<br>2                           |                                    |
| 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                                 |



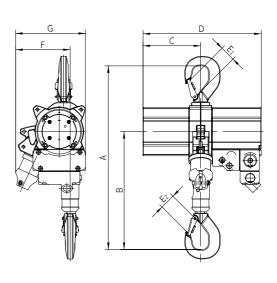
 $<sup>^2\</sup>mbox{Measured}$  at 1 m distance acc. to DIN 45635 part 20

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       | 1TI         | 2 TI |
|------------------------------|------|--------|-------------|-------------|------|
| A min. headroom <sup>1</sup> | 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. <i>7</i> | 5. <i>7</i> | 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  |

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



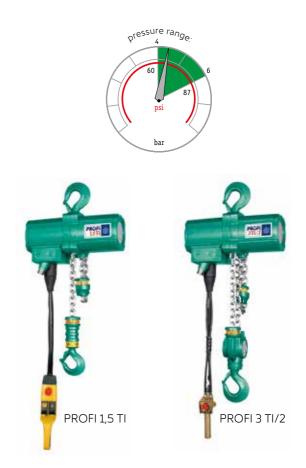
# **JDN AIR HOISTS PROFI**

## 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                         |

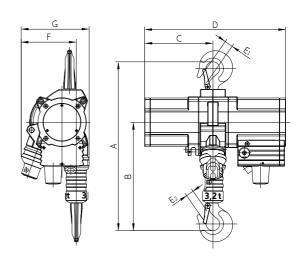
 $^1\mbox{Measured}$  at 1 m distance acc. to DIN 45635 part 20 Group mechanism: M3 (1 Bm)



### **DIMENSIONS**

| Туре                |      | 1.5 TI | 3 TI/2 |
|---------------------|------|--------|--------|
| A min. headroom¹    | inch | 18.9   | 21.4   |
|                     | mm   | 480    | 544    |
| В                   | inch | 11.5   | 14.0   |
|                     | mm   | 293    | 356    |
| C                   | inch | 7.9    | 7.9    |
|                     | mm   | 200    | 200    |
| D                   | inch | 16.2   | 16.2   |
|                     | mm   | 412    | 412    |
| E <sub>1</sub>      | 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>1</sup>Chain containers increase the hoist headroom



## PROFI 3 TI UP TO 20 TI

## TECHNICAL DATA

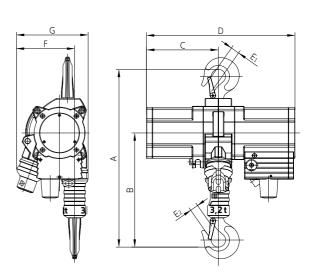
|   |                 |             | _            | _           | _           | _                             | _           |            | _          | _          | _          |
|---|-----------------|-------------|--------------|-------------|-------------|-------------------------------|-------------|------------|------------|------------|------------|
| Туре                                    |                 | 3           | TI           | 6           | TI          | 10                            | TI          | 16         | TI         | 20         | TI         |
| Capacity                                | mt              | 3           | .2           | 6           | .3          | 1                             | 10 16       |            | 20         |            |            |
| Air pressure                            | psi<br>bar      | 60<br>4     | 87<br>6      | 60<br>4     | 87<br>6     | 60<br>4                       | 87<br>6     | 60<br>4    | 87<br>6    | 60<br>4    | 87<br>6    |
| Number of chain strands                 |                 |             | 1            |             | 2           | 2                             | 2           |            | 3          | 4          |            |
| Motor output                            | kW              | 1.8         | 3.5          | 1.8         | 3.5         | 1.8                           | 3.5         | 1.8        | 3.5        | 1.8        | 3.5        |
| Lifting speed at full load              | ft/min<br>m/min | 8.2<br>2.5  | 16.4<br>5    | 3.9<br>1.2  | 8.2<br>2.5  | 2.6<br>0.8                    | 5.2<br>1.6  | 1.6<br>0.5 | 3.3<br>1   | 1.3<br>0.4 | 2.3<br>0.7 |
| Lifting speed without load              | ft/min<br>m/min | 19.7<br>6   | 32.8<br>10   | 9.8<br>3    | 16.4<br>5   | 6.6<br>2                      | 10.5<br>3.2 | 4.3<br>1.3 | 6.6<br>2   | 3.3<br>1   | 4.6<br>1.4 |
| Lowering speed at full load             | ft/min<br>m/min | 24.6<br>7.5 | 35.4<br>10.8 | 11.8<br>3.6 | 17.7<br>5.4 | 8.2<br>2.5                    | 11.2<br>3.4 | 5.3<br>1.6 | 6.9<br>2.1 | 3.9<br>1.2 | 5.3<br>1.6 |
| Air consumption at full load – lifting  | cfm<br>m³/min   | 71<br>2     | 142<br>4     | 71<br>2     | 142<br>4    | 71<br>2                       | 142<br>4    | 71<br>2    | 142<br>4   | 71<br>2    | 142<br>4   |
| Air consumption at full load – lowering | cfm<br>m³/min   | 124<br>3.5  | 195<br>5.5   | 124<br>3.5  | 195<br>5.5  | 124<br>3.5                    | 195<br>5.5  | 124<br>3.5 | 195<br>5.5 | 124<br>3.5 | 195<br>5.5 |
| Air connection                          |                 | G           | 3/4          | G 3/4 G 3/4 |             | G <sup>3</sup> / <sub>4</sub> |             | G3/4       |            |            |            |
| Hose dimension (Ø inside)               | inch<br>mm      |             | /4<br>9      |             | /4<br>9     |                               | /4<br>9     |            | /4<br>9    | 3,<br>1    | /4<br>9    |
| Weight with standard lift, rope control | lbs<br>kg       |             | 9.6<br>16    |             | 2.5<br>10   | 34<br>15                      | 3.9<br>56   |            | 9.1<br>40  |            | 27<br>35   |
| Chain dimension                         | mm              | 13 >        | k 36         | 13 >        | k 36        | 16 >                          | < 45        | 16 >       | k 45       | 16 >       | < 45       |
| Weight of chain                         | lbs/ft<br>kg/m  |             | .6<br>.8     |             | .6<br>.8    |                               | .9<br>.8    |            | .9<br>.8   |            | .9<br>.8   |
| Standard lift                           | ft<br>m         |             | 0            |             | 0           | _                             | 0           |            | 0          |            | 0          |
| Length of control at standard lift      | ft<br>m         |             | .5<br>2      |             | .5<br>2     |                               | .5<br>2     |            | .5<br>2    |            | .5<br>2    |
| Noise level at full load¹ –<br>lifting  | dB(A)           | 74          | 78           | 74          | 78          | 74                            | 78          | 74         | 78         | 74         | 78         |
| Noise level at full load¹ –<br>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<br>bar      |             |             |             |             | 17<br>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<br>m/min | 4.1<br>1.25 | 3.3<br>1.0  | 2.5<br>0.75 | 2.3<br>0.7  | 1.8<br>0.55 | 1.5<br>0.45 | 1.7<br>0.53  | 1.3<br>0.4   |
| Lifting speed without load                      | ft/min<br>m/min | 7.9<br>2.4  | 7.9<br>2.4  | 5.6<br>1.7  | 5.6<br>1.7  | 4.3<br>1.3  | 4.3<br>1.3  | 4.4<br>1.33  | 3.3<br>1     |
| Lowering speed at full load                     | ft/min<br>m/min | 9.2<br>2.8  | 9.2<br>2.8  | 6.6<br>2.0  | 6.6<br>2.0  | 5.3<br>1.6  | 5.3<br>1.6  | 4.1<br>1.25  | 3.1<br>0.95  |
| Air consumption at full load – lifting          | cfm<br>m³/min   |             |             | 23<br>6     |             |             |             | 268.5<br>7.6 |              |
| Air consumption at full load – lowering         | cfm<br>m³/min   |             |             | 10<br>2     | )2<br>.9    |             |             | _            | 12<br>5      |
| Air connection                                  |                 |             |             |             | G 1         | L 1/2       |             |              |              |
| Hose dimension<br>(Ø inside)                    | inch<br>mm      |             |             |             |             | ½<br>5      |             |              |              |
| Weight with standard lift, rope control         | lbs<br>kg       | 1213<br>550 | 1213<br>550 | 1874<br>850 | 1874<br>850 | 2072<br>940 | 2072<br>940 | 3968<br>1800 | 4409<br>2000 |
| Chain dimension                                 | mm              |             |             | 23.5        | x 66        |             |             | 32 >         | (90          |
| Weight of chain                                 | lbs/ft<br>kg/m  |             |             | 8<br>12     | .2<br>2.2   |             |             |              | 1.3<br>1.3   |
| Standard lift                                   | ft<br>m         | 10<br>3     |             |             |             |             |             |              |              |
| Length of control at standard lift              | ft<br>m         |             |             |             |             | .5<br>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           | 2           |             |             | 8            | 3            |



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) 4 bar versions on request

| 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   |
| C                            | 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    |

G C C

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

 $<sup>^{1}</sup>$ 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

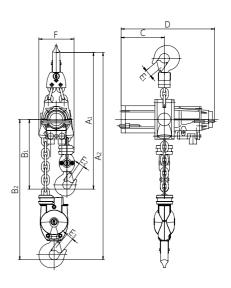


| Туре                                    |                 | M 64                     | M 63 D             |
|---|-----------------|--------------------------|--------------------|
| Capacity                                | mt              | 1/2                      | 3/6                |
| Air pressure                            | psi<br>bar      | 60<br>4                  | 60<br>4            |
| Number of chain strands                 |                 | 1/2                      | 1/2                |
| Motor output                            | kW              | 0.77                     | 1.3                |
| Lifting speed at full load              | ft/min<br>m/min | 9.8/4.9<br>3/1.5         | 7.2/3.6<br>2.2/1.1 |
| Lifting speed without load              | ft/min<br>m/min | 26.3/13.1<br>8/4         | 16.4/8.2<br>5/2.5  |
| Lowering speed at full load             | ft/min<br>m/min | 41/21.3<br>12.5/6.5      | 19.7/9.8<br>6/3    |
| Air consumption at full load – lifting  | cfm<br>m³/min   | 35.3<br>1.0              | 77.7<br>2.2        |
| Air consumption at full load – lowering | cfm<br>m³/min   | 70.6<br>2.0              | 113<br>3.2         |
| Air connection                          |                 | Rd 32 x <sup>1</sup> /8" | 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<br>kg/m  | 1.2<br>1.8               | 2.6<br>3.8         |
| Heights of lift standard lift           | ft<br>m         | 16.4/8.2<br>5/2.5        | 16.4/8.2<br>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              |



| Туре  |           | M 64       | M 63 D     |
|---|-----------|------------|------------|
| A <sub>1</sub> (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   |
| E <sub>3</sub> (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

| 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                                |
|--|-----------------|--------------|--------------------------------------|------------------------------------|-------------------------------|----------------|------------------|--------------|----------------|-------------------------------------|-------------------------------------|--------------------------------------|
| Capacity of trolley LN   | mt              |              | 1 <sup>6</sup>                       |                                    | 2                             | <u>)</u>       | 3.2              | 2            | 6.3            | 10                                  | -16                                 | -                                    |
| Capacity of trolley LH and LM                                  | mt              |              |                                      | 2                                  |                               |                | 3.2              | 2            | 6.3            | 10                                  | -16                                 | 20                                   |
| Capacity of hoist with trolley                                 | mt              | 0.25         | 0.5                                  | 1                                  | 1.6                           | 2              | 3.2              | 2            | 6.3            | 10                                  | 16                                  | 20                                   |
| Weight of Manual Trolley (LN)                                  | lbs<br>kg       |              | 23.1<br>10.5                         |                                    | 39<br>18                      |                | 57.i<br>26       |              | 257.9<br>117   | 418.9<br>190                        |                                     | -                                    |
| Weight of Reel Chain Trolley (LH)                              | lbs<br>kg       |              |                                      | 57.3<br>26                         |                               |                | 81.6<br>37       |              | 280<br>127     |                                     | 85<br>20                            | 628.3<br>285                         |
| Weight of Motor Trolley (LM)                                   | lbs<br>kg       |              |                                      | 57.3<br>26                         |                               |                | 72.8<br>33       |              | 273.4<br>124   |                                     | 85<br>20                            | 628.3<br>285                         |
| Hoist weight, standard lift                                    | lbs<br>kg       | 59.5<br>27   | 59.5<br>27                           | 61.7<br>28                         | 123.5<br>56                   | 75<br>34       | 145.5<br>66      | 189.6<br>86  | 242.5<br>110   | 344<br>156                          | 529<br>240                          | 628.3<br>285                         |
| Total weight with standard lift Manual Trolley                 | lbs<br>kg       | 82.7<br>37.5 | 82.7<br>37.5                         | 84.9<br>38.5                       | 163.1<br><i>7</i> 4           | 114.6<br>52    | 202.8<br>92      | 246.9<br>112 | 500.4<br>227   | 762.8<br>346                        | 948<br>430                          | -                                    |
| Total weight with standard lift Reel Chain Trolley             | lbs<br>kg       | 116.8<br>53  | 116.8<br>53                          | 119.1<br>54                        | 180.8<br>82                   | 132.3<br>60    | 227.1<br>103     | 271.1<br>123 | 522.5<br>237   | 829<br>376                          | 1014<br>460                         | 1257<br>570                          |
| Total weight with standard lift Motor Trolley                  | lbs<br>kg       | 116.8<br>53  | 116.8<br>53                          | 119.1<br>54                        | 180.8<br>82                   | 132.3<br>60    | 218.3<br>99      | 262.4<br>119 | 515.9<br>234   | 829<br>376                          | 1014<br>460                         | 1257<br>570                          |
| Weight of chain  | lbs/ft<br>kg/m  |              | 0.67<br>1                            |                                    | 1.2<br>1.8                    | 0.67<br>1      | 1.2<br>1.8       | 2.<br>3.     |                |                                     | 3.9<br>5.8                          |                                      |
| Chain dimension  | mm              |              | 7x21                                 |                                    | 9x27                          | 7x21           | 9x27             | 13>          | 36             |                                     | 16x45                               |                                      |
| Number of chain strands  |                 |              |                                      | 1                                  |                               |                | 2                | 1            | 2              | 2                                   | 3                                   | 4                                    |
| Air pressure Motor Trolley                                     | psi<br>bar      |              | 87<br>6                              |                                    | 60-87<br>4-6                  | 87<br>6        | 60-87<br>4-6     |              |                | 87<br>6                             |                                     |                                      |
| Air consumption Motor Trolley <sup>4</sup> (at full load)      | cfm<br>m³/min   |              |                                      |                                    |                               | 1.2<br>).6     |                  |              |                |                                     | 45.9<br>1.3                         |                                      |
| Air consumption hoist (at full load)                           | cfm<br>m³/min   |              | 53<br>1.5                            |                                    | 53-92<br>1.5-2.6              | 53<br>1.5      | 53-92<br>1.5-2.6 |              |                | 194.2<br>5.5                        |                                     |                                      |
| Motor output Motor Trolley <sup>4</sup>                        | kW              |              |                                      |                                    | C                             | ).2            |                  |              |                |                                     | 0.7                                 |                                      |
| Motor output hoist   | kW              |              | 1                                    |                                    | 1.3-2                         | 1              | 1.3-2            |              |                | 3.5                                 |                                     |                                      |
| Travelling distance Reel<br>Chain Trolley, chain reel off      | ft<br>m         |              |                                      |                                    |                               | l.6<br>4       |                  |              |                |                                     | .6<br>1                             | 3.3<br>1.0                           |
| Travelling speed Motor Trolley <sup>4</sup> (at full load)     | ft/min<br>m/min |              |                                      |                                    |                               | */45.9<br>*/14 |                  |              |                |                                     | 16.4*/39.4<br>5*/12                 |                                      |
| Hose connection Motor Trolley                                  |                 |              | G ½                                  |                                    | G <sup>3</sup> / <sub>4</sub> | G ½            |                  |              | G <sup>3</sup> | 3/4                                 |                                     |                                      |
| Minimum radius Manual Trolley                                  | ft<br>m         |              | 3.3 <sup>1</sup><br>1.0 <sup>1</sup> |                                    | 3.9<br>1.2                    |                | 2.6<br>0.8       |              |                | 6.6 <sup>2</sup><br>2 <sup>2</sup>  |                                     | -                                    |
| Minimum radius Reel Chain<br>Trolley and Motor Trolley         | ft<br>m         |              |                                      | 2 <sup>2</sup><br>0.6 <sup>2</sup> |                               |                | 2.6<br>0.8       |              |                | 6.6 <sup>2</sup><br>2 <sup>2</sup>  |                                     | 8.2 <sup>2</sup><br>2.5 <sup>2</sup> |
| Max. bottom flange thickness t<br>Manual Trolley               | inch<br>mm      |              | 1.0<br>25                            |                                    | 1.                            |                | 1.6              |              |                | 2.6 <sup>5</sup><br>65 <sup>5</sup> |                                     | -                                    |
| Max. bottom flange thickness t<br>Reel Chain and Motor Trolley | inch            |              |                                      |                                    | 1                             | 6<br>10        |                  |              |                |                                     | 2.6 <sup>5</sup><br>65 <sup>5</sup> |                                      |
| Max. bottom flange width b Manual Trolley                      | inch            |              | 8.7<br>220                           |                                    | 1:                            | 2              |                  |              | 12.2<br>310    |                                     |                                     | -                                    |
| Max. bottom flange width b Reel Chain and Motor Trolley        | inch            |              | 220                                  | 11<br>280                          | 50                            |                |                  |              | 12.<br>31      |                                     |                                     |                                      |
| Min. bottom flange width b Manual Trolley                      | inch            |              | 2.3<br>58                            |                                    | 2.                            |                | 2.3<br>58        | 2.1<br>54    |                | 5<br>128                            |                                     | -                                    |
| Min. bottom flange width b Reel Chain and Motor Trolley        | inch            |              |                                      | 2.2<br>56                          |                               |                | 2.3<br>58        | 2.1<br>54    |                | 5<br>128                            |                                     | 5.8<br>148                           |
| Noise level at Motor Trolley <sup>3,4</sup>                    | dB(A)           |              |                                      |                                    |                               |                | 80               |              |                |                                     |                                     |                                      |

\*1. st speed of F control with two speeds  $^{1}\mbox{Measured}$  at the middle of the beam

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

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

<sup>4</sup>At 6 bar

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

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

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

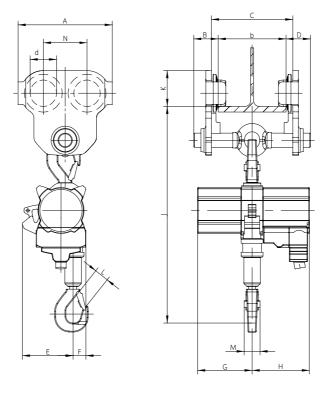
- Capacities over 20 t see JDN Monorail Air Hoists page 30
- Versions with one and two hooks (e.g. BBH) see page 27
- Low Headroom Trolleys for restricted headrooms see page 25

# 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       |
| А                   | inch<br>mm |          | 10.2<br>260 |                 |             | 2.2<br>10   | 11.5<br>292       |             | 19.7<br>500 | 19<br>49          |              |
| B max.              | inch<br>mm |          | 4.8<br>122  |                 |             | .4<br>52    | 4<br>11           |             | 6.2<br>157  | 6<br>16           |              |
| С                   | inch<br>mm |          |             | b + 1<br>b + 26 |             |             | b +<br>b +        | 2.4<br>60   |             | b + 2.8<br>b + 70 |              |
| d                   | inch<br>mm |          | 2.7<br>68   |                 |             | .2<br>80    | 3.                |             |             | 6.5<br>165        |              |
| D max.              | inch<br>mm |          | 4.8<br>122  |                 |             | .4<br>52    | 4<br>11           |             | 6.2<br>157  | 6<br>16           |              |
| E                   | inch<br>mm |          | 5.4<br>137  |                 | 5.7<br>170  | 5.4<br>137  | 5.5<br>140        | 7.4<br>187  | 6.1<br>154  | 7.8<br>197        | 7.8<br>199   |
| F                   | inch<br>mm |          | 1.5<br>39   |                 | 1.8<br>45   | 1.8<br>46   | 3.0<br><i>7</i> 5 | 1.8<br>46   | 3.1<br>79   | 4<br>10           |              |
| G                   | inch<br>mm |          | 5.7<br>145  |                 | 7.9<br>200  | 5.7<br>145  | 7.9<br>200        |             | ).2<br>33   | 12.1<br>308       | 15<br>382    |
| Н                   | inch<br>mm |          | 6<br>152    |                 | 3.3<br>212  | 6<br>152    | 3.3<br>212        |             | 1.8<br>50   | 10.5<br>267       | 12.2<br>310  |
| J* (mounted)        | inch<br>mm | -        | -           | _               | -<br>-      | -<br>-      | 24.1<br>613       | 25<br>635   | 30<br>763   | 37<br>929         | 39<br>982    |
| J* (suspended)      | inch<br>mm |          | 20.9<br>530 |                 | 23.1<br>588 | 23.5<br>597 | -<br>-            | 31.4<br>798 | 36.2<br>919 | 46.3<br>1176      | 49.6<br>1260 |
| K                   | inch<br>mm | 2.<br>67 |             | 3.2<br>81.5     |             | .7<br>14    | 4<br>10           |             |             | 7.4<br>188        |              |
| L                   | inch<br>mm |          | 1.1<br>28   |                 | 1.0<br>26   | 1<br>2      |                   | 1.2<br>30   | 1.6<br>40   | 1.7<br>44         | 2.1<br>53    |
| М                   | inch<br>mm |          | 1.7<br>42   |                 | 1.6<br>40   |             | 1.7<br>42         |             | 2<br>51     | 2.6<br>66         | 3.2<br>82    |
| N                   | inch<br>mm |          | 5.1<br>130  |                 |             | .9<br>50    | 5.4<br>136        |             | 9.3<br>236  |                   |              |

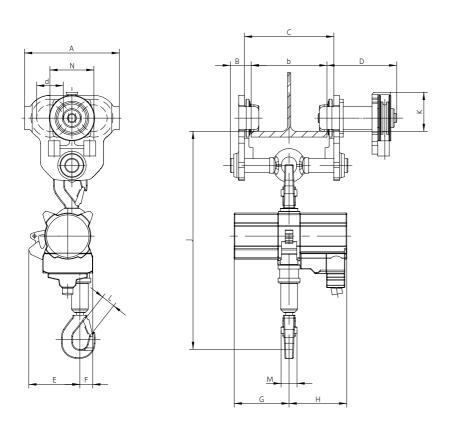
<sup>\*</sup>Chain containers increase the hoist headroom



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

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

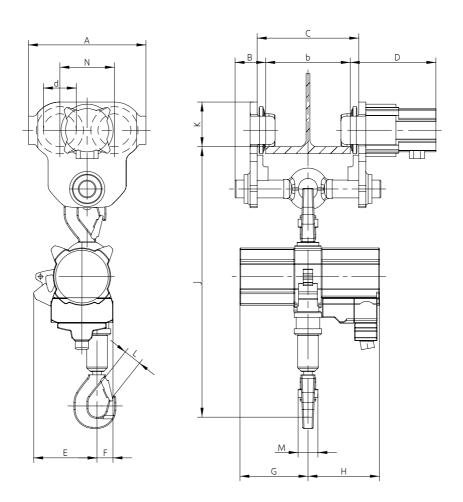


# JDN TROLLEYS

## 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<br>mm |           |             | 9.8<br>250        |             | 11.5<br>292 |                   |             |             |                   | 19.3<br>490  |                   |
| B max.              | inch<br>mm |           |             | 5.1<br>130        |             |             | 4.<br>11          |             | 6.2<br>157  |                   | i.4<br>52    | 5.3<br>134        |
| С                   | inch<br>mm |           |             | b + 1.4<br>b + 36 |             |             | b +<br>b +        |             |             | b + 2.8<br>b + 70 |              | b + 2.7<br>b + 68 |
| d                   | inch<br>mm |           |             | 2.8<br>70         |             |             | 3.<br>8           |             |             | 6.5<br>165        |              | 7.3<br>185        |
| D                   | inch<br>mm |           | 7.3<br>185  |                   | 7.3<br>185  | 7.3<br>185  | 7.<br>19          |             | 8.1<br>205  |                   | 2.5<br>18    | 12.9<br>328       |
| E                   | inch<br>mm |           | 5.4<br>137  |                   | 6.7<br>170  | 5.4<br>137  | 5.5<br>140        | 7.4<br>187  | 6.1<br>154  | 7.8<br>197        | 7.8<br>199   | 7.1<br>180        |
| F                   | inch<br>mm |           | 1.5<br>39   |                   | 1.7<br>45   | 1.8<br>46   | 3.0<br><i>7</i> 5 | 1.8<br>46   | 3.1<br>79   |                   | .3<br>09     | 5.3<br>135        |
| G                   | inch<br>mm |           | 5.7<br>145  |                   | 7.9<br>200  | 5.7<br>145  | 7.9<br>200        |             | 9.2<br>33   | 12.1<br>308       |              | .5<br>82          |
| Н                   | inch<br>mm |           | 6<br>152    |                   | 3.3<br>212  | 6<br>152    | 3.3<br>212        |             | 9.8<br>50   | 10.5<br>267       |              | 2.2<br>10         |
| J* (mounted)        | inch<br>mm | -         | -           | -                 | -<br>-      | -           | 24.1<br>613       | 25<br>635   | 30<br>763   | 37<br>929         | 39<br>982    | 44.3<br>1125      |
| J* (suspended)      | inch<br>mm |           | 22.2<br>563 |                   | 23.7<br>602 | 24.1<br>611 | -<br>-            | 31.4<br>798 | 36.2<br>919 | 46.3<br>1176      | 46.1<br>1171 | 58.1<br>1475      |
| K                   | inch<br>mm |           |             | 3.7<br>95         |             |             | 4.<br>10          |             |             | 7.4<br>188        |              | 8.6<br>218        |
| L                   | inch<br>mm |           | 1.1<br>28   |                   | 1.0<br>26   |             | 1<br>28           | 1.2<br>30   | 1.6<br>40   | 1.7<br>42         | 2.1<br>55    | 2.9<br>75         |
| М                   | inch<br>mm | 1.7<br>42 |             |                   | 1.6<br>40   |             | 1.7<br>42         |             | 2<br>51     | 2.6<br>66         | 3.2<br>82    | 3.4<br>86         |
| N                   | inch<br>mm |           |             | 4.6<br>116        |             |             | 5.<br>13          |             |             | 9.3<br>236        |              | 10.8<br>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

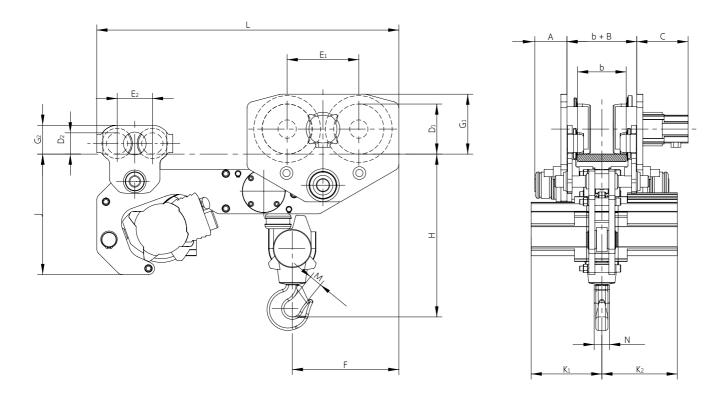


### TECHNICAL DATA

| 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> | ³/ <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 load <sup>1</sup> – lifting | dB(A)  | 75           | 76           | 76           | 78                          | 78              |
| Noise level at full load¹ – lowering            | dB(A)  | 78           | 78           | 78           | 80                          | 80              |

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

# JDN LOW HEADROOM TROLLEYS



| Hoist Type   |      | PROFI 05 TI | PROFI 1 TI | 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  |
| Δ may        | inch | 4.13        | 4.13       | 4.13       | 4.13       | 4.17       |
|              | mm   | 105         | 105        | 105        | 105        | 106        |
|              | inch | 1.42        | 1.42       | 1.42       | 1.42       | 2.76       |
|              | mm   | 36          | 36         | 36         | 36         | 70         |
|              | inch | 3.15        | 3.15       | 3.15       | 4.72       | 4.92       |
|              | mm   | 80          | 80         | 80         | 120        | 125        |
|              | inch | 6.46        | 6.46       | 6.46       | 6.46       | 6.65       |
|              | mm   | 164         | 164        | 164        | 164        | 169        |
| I 11         | inch | 2.76        | 2.76       | 2.76       | 2.76       | 6.50       |
|              | mm   | 70          | 70         | 70         | 70         | 165        |
|              | inch | 2.76        | 2.76       | 2.76       | 2.76       | 2.76       |
|              | mm   | 70          | 70         | 70         | 70         | 70         |
|              | inch | 4.57        | 4.57       | 4.57       | 4.57       | 9.29       |
|              | mm   | 116         | 116        | 116        | 116        | 236        |
|              | 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        |
|              | inch | 3.74        | 3.74       | 3.74       | 3.74       | 7.76       |
|              | mm   | 95          | 95         | 95         | 95         | 197        |
|              | inch | 3.74        | 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        |
|              | inch | 12.60       | 12.60      | 12.60      | 15.63      | 15.63      |
|              | mm   | 320         | 320        | 320        | 397        | 397        |
| K 1          | inch | 5.71        | 5.71       | 5.71       | 9.17       | 9.17       |
|              | mm   | 145         | 145        | 145        | 233        | 233        |
|              | inch | 5.98        | 5.98       | 5.98       | 9.76       | 9.76       |
|              | mm   | 152         | 152        | 152        | 248        | 248        |
|              | inch | 28.15       | 28.15      | 28.15      | 32.48      | 39.17      |
|              | mm   | 715         | 715        | 715        | 825        | 995        |
| IVI          | inch | 1.10        | 1.10       | 1.10       | 1.18       | 1.57       |
|              | mm   | 28          | 28         | 28         | 30         | 40         |
|              | inch | 1.65        | 1.65       | 1.65       | 1.65       | 2.01       |
|              | mm   | 42          | 42         | 42         | 42         | 51         |
| t may        | 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
  - ⟨ II 2G Ex h | IIB T4 Gb X | II 2D Ex h | IIIB T130°C Db X or | II 2D Ex h | IIIB T130°C Db X or | II 2D Ex h | IIIB T130°C Db X or | II 2D Ex h | II 2D Ex h
- II 2G Ex h IIC T4 Gb X
  II 2D Ex h IIIC T130°C Db X
- 100 % duty rating, and thus no downtimes.



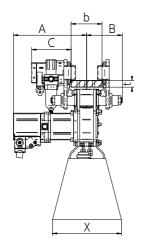
# JDN BIG BAG HANDLING AIR HOISTS

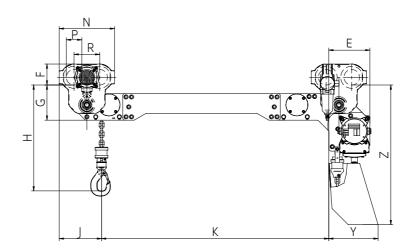
## TECHNICAL DATA

| Туре  |                 | BBH 1000-1    | BBH 2000-1          |  |
|---|-----------------|---------------|---------------------|--|
| Capacity  | mt              | 1.1           | 2.2                 |  |
| Air pressure                                    | psi<br>bar      | _             | 3 <b>7</b><br>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<br>m/min | 12.14<br>3.7  | 5.58<br>1.7         |  |
| Lifting speed without load                      | ft/min<br>m/min | 24.61<br>7.5  | 11.48<br>3.5        |  |
| Lowering speed at full load                     | ft/min<br>m/min | 32.81<br>10   | 16.40<br>5          |  |
| Air consumption at full load – lifting          | cfm<br>m³/min   |               | .44<br>.4           |  |
| Air consumption at full load – lowering         | cfm<br>m³/min   |               | .38<br>.2           |  |
| Air consumption at full load – trolley          | cfm<br>m³/min   |               | .19<br>.6           |  |
| Air connection                                  |                 | G             | 1/2                 |  |
| Hose dimension (Ø inside)                       | inch<br>mm      |               | / <sub>2</sub><br>3 |  |
| Weight at standard lift and minimum k dimension | lbs<br>kg       | 286.60<br>130 | 302.03<br>137       |  |
| Chain dimension                                 | mm              | 7 x           | : 21                |  |
| Weight of chain                                 | lbs/ft<br>kg/m  |               | 67<br>1             |  |
| Standard lift                                   | ft<br>m         |               | 0<br>3              |  |
| Length of control at standard load – lift       | ft<br>m         |               | .5<br>2             |  |
| Noise level at full load¹ – lifting             | dB(A)           | 76            |                     |  |
| 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)  $\cdot$   $^1\!$  Measured at 1 m distance acc. to DIN 45635 part 20

| Тур | oe . |            | BBH 1000-1   | BBH 2000-1   |  |  |  |  |
|-----|------|------------|--------------|--------------|--|--|--|--|
| Α   |      | inch<br>mm | 13<br>33     |              |  |  |  |  |
| В   |      | inch<br>mm | 6.4<br>163   | 8.7<br>220   |  |  |  |  |
| b   | min. | inch<br>mm | 3.5<br>9     |              |  |  |  |  |
| Б   | max. | inch<br>mm | 12.<br>31    |              |  |  |  |  |
| C   |      | inch<br>mm | 7.1<br>18    | <del>-</del> |  |  |  |  |
| E   |      | inch<br>mm | 7.6<br>19    |              |  |  |  |  |
| F   |      | inch<br>mm | 3.<br>9      |              |  |  |  |  |
| G   |      | inch<br>mm | 6.<br>15     | ~            |  |  |  |  |
| Н   |      | inch<br>mm | 15.3<br>388  | 17.24<br>438 |  |  |  |  |
| J   |      | inch<br>mm | 7.56<br>192  | 8.66<br>220  |  |  |  |  |
| K   | min. | inch<br>mm | 17.13<br>435 | 16.14<br>410 |  |  |  |  |
|     | max. | inch<br>mm | 43<br>110    |              |  |  |  |  |
| L   |      | inch<br>mm | -            |              |  |  |  |  |
| Μ   |      | inch<br>mm | 1.1<br>2     |              |  |  |  |  |
| Ν   |      | inch<br>mm | 9.8<br>25    |              |  |  |  |  |
| Р   |      | inch<br>mm | 2.76<br>70   |              |  |  |  |  |
| R   |      | inch<br>mm | 4.5<br>11    |              |  |  |  |  |
| t m | ıax. | inch<br>mm | 1.18<br>30   |              |  |  |  |  |
|     |      |            |              |              |  |  |  |  |



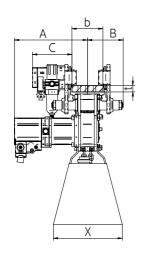


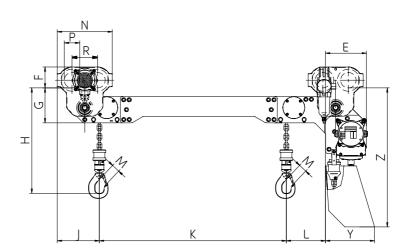
## TECHNICAL DATA

| Туре  |                 | BBH 1000-2    | BBH 2000-2          |  |  |
|---|-----------------|---------------|---------------------|--|--|
| Capacity  | mt              | 1.1           | 2.2                 |  |  |
| Air pressure                                    | psi<br>bar      |               | 37<br>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<br>m/min | 12.14<br>3.7  | 5.58<br>1.7         |  |  |
| Lifting speed without load                      | ft/min<br>m/min | 24.61<br>7.5  | 11.48<br>3.5        |  |  |
| Lowering speed at full load                     | ft/min<br>m/min | 32.81<br>10   | 16.40<br>5          |  |  |
| Air consumption at full load – lifting          | cfm<br>m³/min   | 49.44<br>1.4  |                     |  |  |
| Air consumption at full load – lowering         | cfm<br>m³/min   | 42.38<br>1.2  |                     |  |  |
| Air consumption at full load – trolley          | cfm<br>m³/min   |               | .6                  |  |  |
| Air connection                                  |                 | G ⅓2          |                     |  |  |
| Hose dimension (Ø inside)                       | inch<br>mm      |               | / <sub>2</sub><br>3 |  |  |
| Weight at standard lift and minimum k dimension | lbs<br>kg       | 302.03<br>137 | 328.49<br>149       |  |  |
| Chain dimension                                 | mm              | 7 x           | : 21                |  |  |
| Weight of chain                                 | lbs/ft<br>kg/m  |               | 67<br>1             |  |  |
| Standard lift                                   | ft<br>m         |               | 0<br>3              |  |  |
| Length of control at standard load – lift       | ft<br>m         | 6.5<br>2      |                     |  |  |
| 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)  $\cdot$   $^1\text{Measured}$  at 1 m distance acc. to DIN 45635 part 20

| Тур  | e    |            | BBH 1000-2   | BBH 2000-2   |  |  |  |  |
|------|------|------------|--------------|--------------|--|--|--|--|
| Α    |      | inch<br>mm | 3<br>33      | .1<br>32     |  |  |  |  |
| В    |      | inch<br>mm | 6.4<br>163   | 8.7<br>220   |  |  |  |  |
|      | min. | inch<br>mm | 3.!<br>9     | 54<br>0      |  |  |  |  |
| Ь    | max. | inch<br>mm | 12.<br>31    |              |  |  |  |  |
| C    |      | inch<br>mm | 7.:<br>18    | 17<br>32     |  |  |  |  |
| Е    |      | inch<br>mm | 14.69<br>373 | 13.62<br>346 |  |  |  |  |
| F    |      | inch<br>mm | 3.:<br>9     | 74<br>5      |  |  |  |  |
| G    |      | inch<br>mm | 6.:<br>15    | 26<br>59     |  |  |  |  |
| Н    |      | inch<br>mm | 15.3<br>388  | 17.24<br>438 |  |  |  |  |
| J    |      | inch<br>mm | 7.56<br>192  | 8.66<br>220  |  |  |  |  |
| K    | min. | inch<br>mm | 10.<br>26    | 24<br>50     |  |  |  |  |
| K    | max. | inch<br>mm | 51<br>130    | 18<br>00     |  |  |  |  |
| L    |      | inch<br>mm | 6.89<br>175  | 5.91<br>150  |  |  |  |  |
| М    |      | inch<br>mm | 1.10<br>28   |              |  |  |  |  |
| N    |      | inch<br>mm | 9.84<br>250  |              |  |  |  |  |
| Р    |      | inch<br>mm | 2.76<br>70   |              |  |  |  |  |
| R    |      | inch<br>mm | 4.57<br>116  |              |  |  |  |  |
| t ma | ex.  | inch<br>mm | 1.:<br>3     | 18<br>O      |  |  |  |  |
|      |      |            |              |              |  |  |  |  |





## 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 3/4                       | G <sup>3</sup> / <sub>4</sub> | G 3/4                       | 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        |

 $^1\text{Measured}$  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

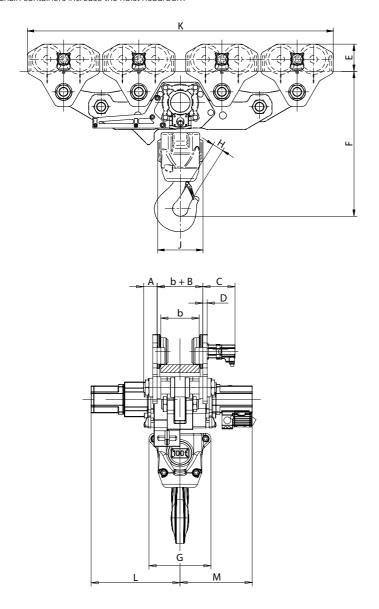
| Туре   |                 | EH 75        | EH 100        | EH 75 C              | EH 100 C      |  |  |
|--|-----------------|--------------|---------------|----------------------|---------------|--|--|
| Capacity   | mt              | 75           | 100           | 75                   | 100           |  |  |
| Air pressure                                     | psi<br>bar      |              | 37<br>6       | 87<br>6              |               |  |  |
| Number of trolleys                               |                 |              | 4             | Ĩ                    | 2             |  |  |
| Number of chain strands                          |                 | 3            | 4             | 3                    | 4             |  |  |
| Motor output trolley                             | kW              | 2            | .8            | 1.4                  | 2.8           |  |  |
| Motor output hoist                               | kW              |              | 9             | Ġ                    | 9             |  |  |
| Lifting speed at full load                       | ft/min<br>m/min | 1.7<br>0.53  | 1.3<br>0.4    | 1.7<br>0.53          | 1.3<br>0.4    |  |  |
| Lifting speed without load                       | ft/min<br>m/min | 4.4<br>1.33  | 3.3<br>1      | 4.4<br>1.33          | 3.3<br>1      |  |  |
| Lowering speed at full load                      | ft/min<br>m/min | 4.1<br>1.25  | 3.1<br>0.95   | 4.1<br>1.25          | 3.1<br>0.95   |  |  |
| Travelling speed at full load                    | ft/min<br>m/min |              | 23<br>7 7     |                      |               |  |  |
| Travelling speed without load                    | ft/min<br>m/min |              | 5.3<br>8      | 26.3<br>8            |               |  |  |
| Air consumption trolley                          | cfm<br>m³/min   |              | 184<br>5.2    |                      | 184<br>5.2    |  |  |
| Air consumption hoist – lifting                  | cfm<br>m³/min   |              | 83<br>8       | 283<br>8             |               |  |  |
| Air consumption hoist – lowering                 | cfm<br>m³/min   |              | 12<br>6       | 212<br>6             |               |  |  |
| Air connection                                   |                 | G            | 11/2          | G                    | 11/2          |  |  |
| Hose dimension (Ø inside)                        | inch<br>mm      |              | ½<br>85       | 1 3                  |               |  |  |
| Weight with standard lift                        | lbs<br>kg       | 8267<br>3750 | 11244<br>5100 | 7496<br>3400         | 10472<br>4750 |  |  |
| Chain dimension                                  | mm              | 32 :         | x 90          | 32 >                 | 90            |  |  |
| Weight of chain                                  | lbs/ft<br>kg/m  |              | 4.3<br>1.3    | 1 <sup>2</sup><br>21 |               |  |  |
| Standard lift                                    | ft<br>m         | 10<br>3      |               | 1                    | 0<br>3        |  |  |
| Length of control at standard lift               | ft<br>m         |              | .5<br>2       | 6.5<br>2             |               |  |  |
| Noise level at full load¹ – lifting              | dB(A)           | 7            | 7             | 77                   |               |  |  |
| Noise level at full load <sup>1</sup> – lowering | dB(A)           | 8            | 33            | 8                    | 83            |  |  |

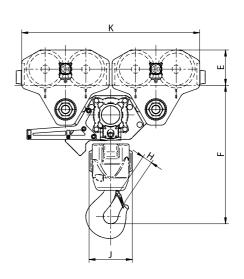
<sup>1</sup>Measured at 1 m distance acc. to DIN 45635 part 20 Group mechanism: EH 75, EH 100: M3 (1 Bm)

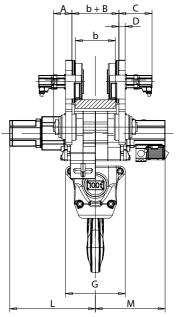
| Туре |      | EH 10 | EH 16 | EH 20 | EH 25                | EH 30 | EH 37 | EH 40 | EH 50 | EH 60 | EH 75 | EH 100 | EH 75 C | EH 100 C |
|------|------|-------|-------|-------|----------------------|-------|-------|-------|-------|-------|-------|--------|---------|----------|
| Α    | inch | 4.1   | 5.1   | 5.1   | 3.5-6.8 <sup>1</sup> |       |       | 4.9   | 4.9   | 3.9   | 4.9   | 4.9    | 6.9     |          |
|      | mm   | 105   | 130   | 130   | 90-172 <sup>1</sup>  |       |       | 125   | 125   | 100   | 125   | 125    | 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       |
| E    | 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           |
| Capacity   | psi             | 85                   | 85                   | 85           | 85           | 85           | 85                            | 85                            | 85           |
| Air pressure                                     | 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<br>m/min | 16.4<br>5            | 8.2<br>2.5           | 9.8<br>3     | 6.6<br>2     | 4.6<br>1.4   | 3<br>0.9                      | 2.1<br>0.65                   | 4.3<br>1.3   |
| Lifting speed without load                       | ft/min<br>m/min | 32.8<br>10           | 16.4<br>5            | 19.7<br>6    | 14.8<br>4.5  | 9.5<br>2.9   | 7.2<br>2.2                    | 3.9<br>1.2                    | 8.2<br>2.5   |
| Lowering speed at full load                      | ft/min<br>m/min | 32.8<br>10           | 16.4<br>5            | 24.6<br>7.5  | 17.1<br>5.2  | 11.8<br>3.6  | 8.2<br>2.5                    | 4.9<br>1.5                    | 8.2<br>2.5   |
| Air consumption at full load – lifting           | cfm<br>m³/min   | 42.3<br>1.2          | 42.3<br>1.2          | 141.3<br>4   | 141.3<br>4   | 141.3<br>4   | 141.3<br>4                    | 141.3<br>4                    | 229.7<br>6.5 |
| Air consumption at full load – lowering          | cfm<br>m³/min   | 53<br>1.5            | 53<br>1.5            | 194.3<br>5.5 | 194.3<br>5.5 | 194.3<br>5.5 | 194.3<br>5.5                  | 194.3<br>5.5                  | 102.5<br>2.9 |
| Air connection                                   |                 | G ½                  | G 1/2                | G 3/4        | G 3/4        | G 3/4        | G <sup>3</sup> / <sub>4</sub> | G <sup>3</sup> / <sub>4</sub> | G 1 ½        |
| Hose dimension (Ø inside)                        | inch<br>mm      | ½<br>13              | ½<br>13              | 3/4<br>19    | 3/4<br>19    | 3/4<br>19    | 3/4<br>19                     | 3/4<br>19                     | 1 ½<br>35    |
| Weight with standard lift                        | lbs<br>kg       | min.<br>364*<br>165* | max.<br>452*<br>205* | 1014<br>460  | 1036<br>470  | 1190<br>540  | 1213<br>550                   | 1235<br>560                   | 3307<br>1500 |
| Chain dimension                                  | mm              | 7 x 21               | 7 x 21               | 13 x 36      | 13 x 36      | 13 x 36      | 13 x 36                       | 13 x 36                       | 16 x 45      |
| Weight of chain                                  | lbs/ft<br>kg/m  | 0.67<br>1.0          | 0.67<br>1.0          | 2.6<br>3.8   | 2.6<br>3.8   | 2.6<br>3.8   | 2.6<br>3.8                    | 2.6<br>3.8                    | 3.9<br>5.8   |
| Standard lift                                    | ft<br>m         | 10<br>3              | 10<br>3              | 10<br>3      | 10<br>3      | 10<br>3      | 10<br>3                       | 10<br>3                       | 10<br>3      |
| Length of control at standard lift               | ft<br>m         | 6.5<br>2             | 6.5<br>2             | 6.5<br>2     | 6.5<br>2     | 6.5<br>2     | 6.5<br>2                      | 6.5<br>2                      | 6.5<br>2     |
| Noise level at full load <sup>1</sup> – lifting  | dB(A)           | 76                   | 76                   | 78           | 78           | 78           | 78                            | 78                            | 80           |
| Noise level at full load <sup>1</sup> – 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.

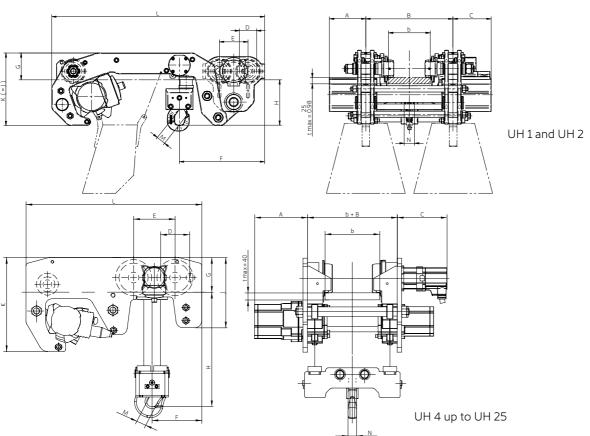
\*Depending on beam width



## 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<br>mm | 3-12.2<br>76-310    | 3-12.2<br>76-310    | -<br>-      | -<br>-      | -<br>-       |              | -<br>-       | 10.83-14<br>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<br>mm | 6.85-7.2<br>174-183 | 7.1-7.56<br>180-192 | -           | -           | -            | -            | -            | 18.5<br>470         |
| H min. 150 < = b < = 310 | inch<br>mm | -                   | -                   | 9.06<br>230 | 9.06<br>230 | -            | -            | -            | -                   |
| H min. 150 < = b < = 230 | inch<br>mm | -                   | -                   |             | -<br>-      | 11.61<br>295 | 11.61<br>295 | 13.15<br>334 | -                   |
| H min. 230 < = b < = 310 | inch<br>mm | -                   | -                   | -           | -<br>-      | 10.87<br>276 | 10.87<br>276 | 12.40<br>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.

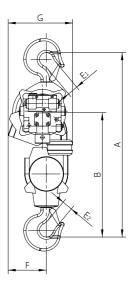
#### **ADVANTAGES**

- 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 1/2   | G 1/2   | G 1/2   | G ½     |
| 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       |

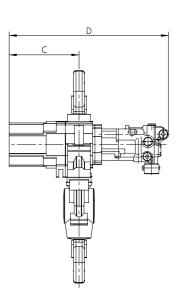


Group mechanism: M3 (1 Bm)

### **DIMENSIONS**

| Туре                                |           | 3 TI-H     | 6 TI-H     | 10 TI-H    | 16 TI-H    | 20 TI-H     |
|-------------------------------------|-----------|------------|------------|------------|------------|-------------|
| A smallest<br>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   |

 $^1\!\!$  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

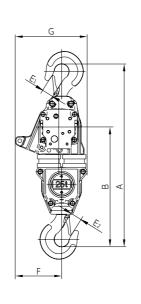
| Туре                                  |        | 25 TI-H                       | 37 TI-H                       | 50 TI-H                       | 75 TI-H | 100 TI-H                      |
|---------------------------------------|--------|-------------------------------|-------------------------------|-------------------------------|---------|-------------------------------|
| 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> | G <sup>3</sup> / <sub>4</sub> | G <sup>3</sup> / <sub>4</sub> | G 3/4   | G <sup>3</sup> / <sub>4</sub> |
| Hose dimension                        |        | DN 16                         | DN 16                         | DN 16                         | DN 16   | 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                             |

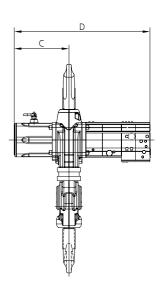
Group mechanism: PROFI 25 TI-H – PROFI 100 TI-H M3 (1 Bm)

#### **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     | <i>7</i> 45 | 539     | 600     | 600      |

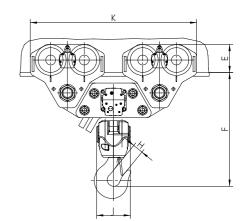
 $<sup>^1\!\!</sup>$  Chain containers increase the hoist headroom





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

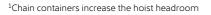
| Туре                                  |        | EH 20-H | EH 25-H   | EH 37-H                       | EH 50-H                       | EH 75-H                       | EH 100-H |
|---------------------------------------|--------|---------|-----------|-------------------------------|-------------------------------|-------------------------------|----------|
| Capacity                              | mt     | 20      | 25        | 37.5                          | 50                            | 75                            | 100      |
| 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 ½     | G 3/4     | G <sup>3</sup> / <sub>4</sub> | G <sup>3</sup> / <sub>4</sub> | G <sup>3</sup> / <sub>4</sub> | 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        |



Group mechanism: EH 20-H - EH 100-H M3 (1 Bm)

#### **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      |







### 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**

| 7                  | Minimo   | (   | )    | 1   | l    | 2   | !    |
|--------------------|----------|-----|------|-----|------|-----|------|
| Zone               | Mining   | Gas | Dust | Gas | Dust | Gas | Dust |
| Equipme<br>group   | I        | П   |      |     |      |     |      |
| Equipmo<br>categor | 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 %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"**

| Zana | 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.

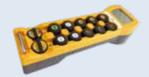




JDN transmitter RC-X



JDN transmitter RC-S



JDN transmitter RC-SP

# RADIO REMOTE CONTROLS FOR JDN HOISTS AND CRANE SYSTEMS

# THE INNOVATION: COMPACT RECEIVER JDN-RC STANDARDISES HOIST AND CRANE CONTROL.

JDN has developed a new concept for controlling hoists and crane systems. The biggest advantage of the new JDN receiver is it's solid and extreme com-pact design.

All components are accommodated in a space-saving shock-resistant GRP casing with protection class IP 65.

The well-designed construction faciliates an easy installation. Even existing JDN products can be retrofitted due to the standardised interface of the JDN-RC. The receiver can be mounted on the hoist or the trolley or at separate location side.

JDN radio controls are suitable for use up to ATEX zone 2/22.

## **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.



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



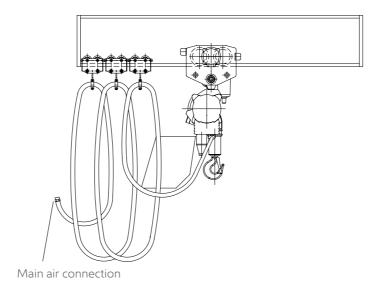
This simple and economical solution is suitable for distances of up to 10 metres. The hose rings are suspended on a plastic-coated rope that runs parallel to the track.

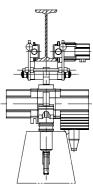
The spiral hose can be used in category 3 (zone 2) with gases in explosion group IIA and IIB. It is not suitable for applications in category 2 (zone 1) or group IIC.

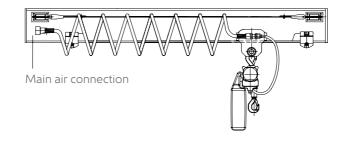
#### Practical tip:

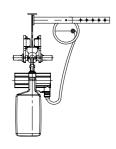
Make sure to lay the hose so that its extended length is roughly 1.5 times the required distance.

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









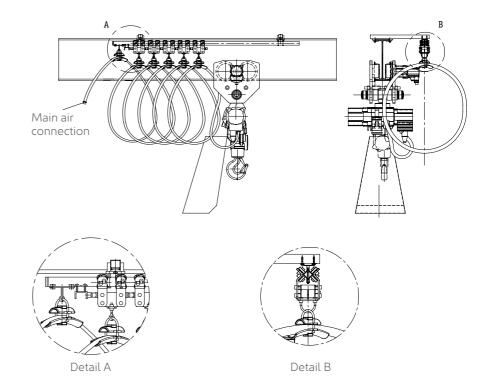
### SQUARE BAR & C RAIL

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

#### **SQUARE BAR**

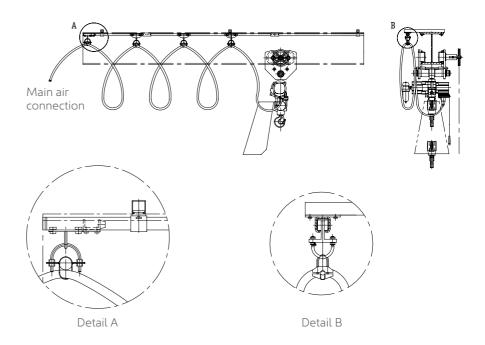
Depending on the local conditions, rails and curved tracks of different lengths are available, as well as an extensive range of installation accessories. The square bar is also suitable for curved tracks.

 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)).

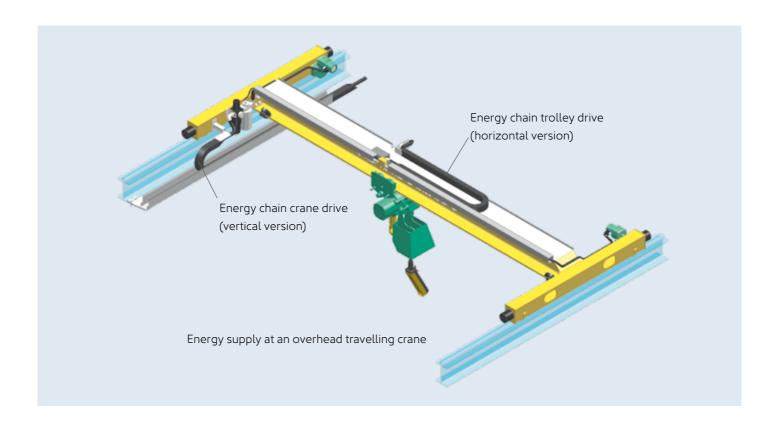
The energy chain carries air hoses inside, which supply the hoisting motor, driving motors as well as the control hoses of the crane. In addition it is possible to install further control hoses and electric cables inside the energy chain.

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 SAFFTY!"

### **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.

Our services for you:

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

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With the issue of this edition all previous versions are null and void.

Kontakt:

