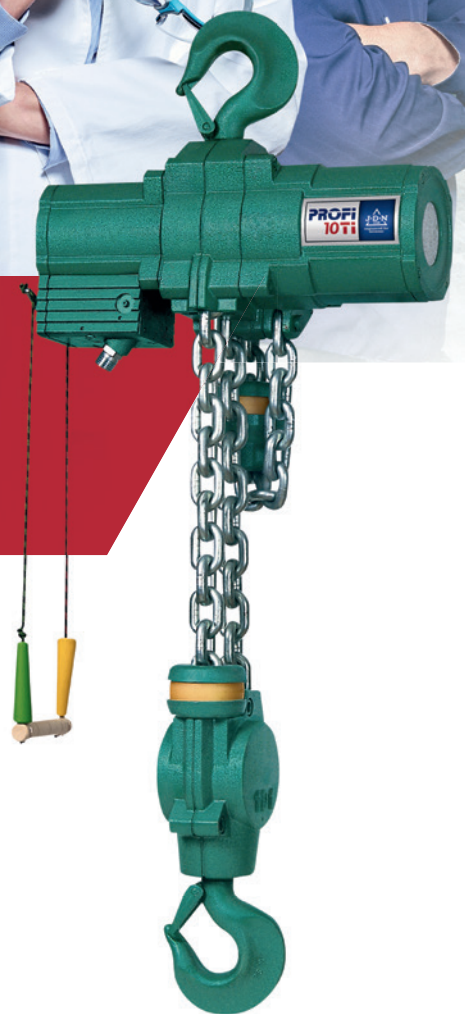




JDN AIR HOISTS PROFI

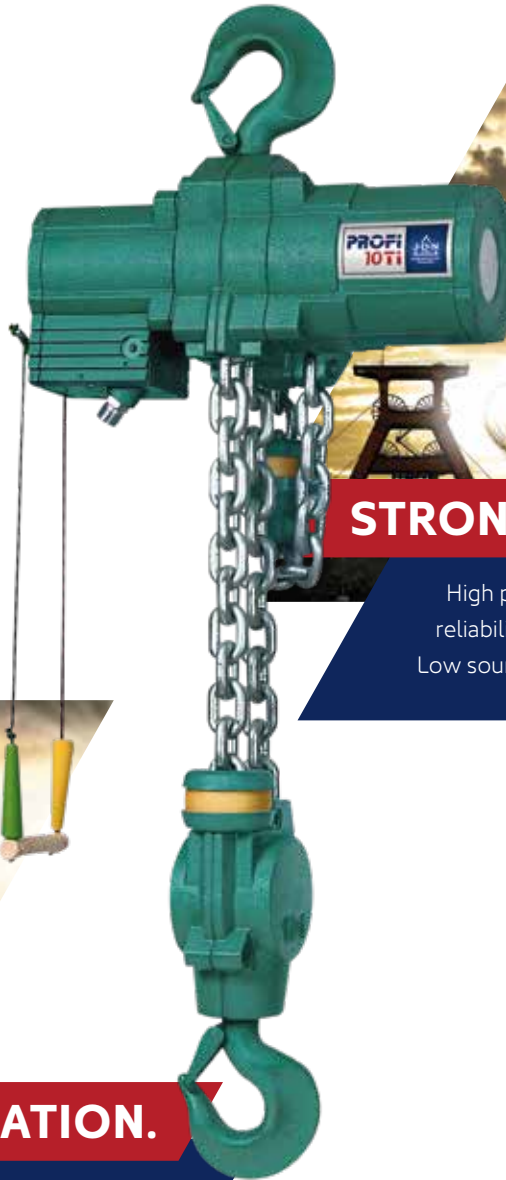


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J·D·NEUHAUS
1745 275 years of excellence

JDN AIR HOISTS PROFI



STRONG, FAST, SILENT.

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



OIL-FREE OPERATION.

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



ALWAYS FIT FOR THE JOB AND RELIABLE.

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

CAPACITIES: 250 KG UP TO 100 T AIR PRESSURE: 4 BAR OR 6 BAR

Proven in practice: JDN Air Hoists **PROFI** Series are superior in all places where safety has priority. The **PROFI** Series scores well with its 100 % duty rating and explosion protection as standard. This important advantage ensures JDN Air Hoists are especially suitable for applications in hazardous areas.

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

WHERE THE JDN PROFI EXCELLENCE HAS BEEN PROVEN

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





STANDARD FEATURES

- Suitable for application in hazardous areas
- Sensitive infinitely variable speed control for the precise positioning of loads
- Easy operation
- Suitable for lube-free operation
- 100 % duty rating and unlimited duty cycles
- Low maintenance
- Low headroom, lightweight
- Sound absorption
- Insensitive to dust, humidity and temperatures ranging from -20°C up to +70°C
- From 1 t upwards with overload protection (EC-version)

TECHNICAL DETAILS

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

THE ADVANTAGES AT A GLANCE

- **Strong – Fast – Silent**
High performance with more efficiency by reliability plus high lifting and lowering speeds. Low sound emissions.
- **High Level of Safety**
Integrated emergency stop switch from 1 t upwards with overload protection.
- **Oil-Free Operation**
Patented, permanent motor lubrication during operation, using a high-performance grease. No additional motor lubrication required.
- **Patented Motor-Brake System**
For operation with low maintenance and little wear. Based on the proven design of the JDN Mini Series.
- **Modern Design – Compact Size**
Features no protruding control hoses or parts susceptible to damage, making the PROFI also suitable for horizontal pulling.
- **100 % Duty Rating – No Downtime**
- **Ex Classification**
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

THE MODULAR SYSTEM AT A GLANCE

Limit Switch for Trolley Travel Extension Arm for Control



Special High Performance Grease for oil-free operation



Service Unit Filter Regulator



Supply

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

Ex Classification

Standard:

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

With increased spark protection:

- II 2G Ex h IIB T4 Gb X
- II 2D Ex h IIIB T130°C Db X

With increased spark protection for explosion group IIC:

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

Trolleys

- Manual Trolley
- Reel Chain Trolley
- Motor Trolley

Housing Finish

- Standard JDN Green
- 3-coat offshore paint system

Filter Silencer

Chain Container

- Chain Box
- Chain Bag

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

| Type | | 025 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 | 60 | 87 | 60 | 87 | 60 | 87 | 60 | 87 |
| | bar | 4 | 6 | 4 | 6 | 4 | 6 | 4 | 6 |
| Number of chain strands | | 1 | | 1 | | 1 | | 2 | |
| Motor output | kW | 0.6 | 1.0 | 0.6 | 1.0 | 0.6 | 1.0 | 0.6 | 1.0 |
| Lifting speed at full load | ft/min | 65.6 | 65.6 | 32.8 | 36.1 | 16.4 | 18 | 8.2 | 8.9 |
| | m/min | 20 | 20 | 10 | 11 | 5 | 5.5 | 2.5 | 2.7 |
| Lifting speed without load | ft/min | 123 | 137.8 | 52.5 | 62.3 | 32.8 | 36.1 | 16.4 | 18 |
| | m/min | 37.5 | 42 | 16 | 19 | 10 | 11 | 5 | 5.5 |
| Lowering speed at full load | ft/min | 124.7 | 124.7 | 55.8 | 55.8 | 32.8 | 36.1 | 16.4 | 18 |
| | m/min | 38 | 38 | 17 | 17 | 10 | 11 | 5 | 5.5 |
| Air consumption at full load – lifting | cfm | 24.7 | 42.4 | 24.7 | 42.4 | 24.7 | 42.4 | 24.7 | 42.4 |
| | m ³ /min | 0.7 | 1.2 | 0.7 | 1.2 | 0.7 | 1.2 | 0.7 | 1.2 |
| Air consumption at full load – lowering | cfm | 28.3 | 53 | 28.3 | 53 | 28.3 | 53 | 28.3 | 53 |
| | m ³ /min | 0.8 | 1.5 | 0.8 | 1.5 | 0.8 | 1.5 | 0.8 | 1.5 |
| Air connection | | G ½ | | G ½ | | G ½ | | G ½ | |
| Hose dimension (ø inside) | inch | ½ | | ½ | | ½ | | ½ | |
| | mm | 13 | | 13 | | 13 | | 13 | |
| Weight with standard lift, rope control | lbs | 59.5 | 59.5 | 59.5 | 59.5 | 61.6 | 61.7 ¹ | 75 ¹ | 75 ¹ |
| | kg | 27 | 27 | 27 | 27 | 27.5 | 28 ¹ | 34 ¹ | 34 ¹ |
| Chain dimension | mm | 7 x 21 | | 7 x 21 | | 7 x 21 | | 7 x 21 | |
| Weight of chain | lbs/ft | 0.67 | | 0.67 | | 0.67 | | 0.67 | |
| | kg/m | 1.0 | | 1.0 | | 1.0 | | 1.0 | |
| Standard lift | ft | 10 | | 10 | | 10 | | 10 | |
| | m | 3 | | 3 | | 3 | | 3 | |
| Length of control at standard lift | ft | 6.5 | | 6.5 | | 6.5 | | 6.5 | |
| | m | 2 | | 2 | | 2 | | 2 | |
| Noise level at full load ² – lifting | dB(A) | 73 | 74 | 74 | 75 | 74 | 76 | 74 | 76 |
| Noise level at full load ² – lowering | dB(A) | 77 | 78 | 77 | 78 | 77 | 78 | 77 | 78 |

¹With overload protection

²Measured 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)

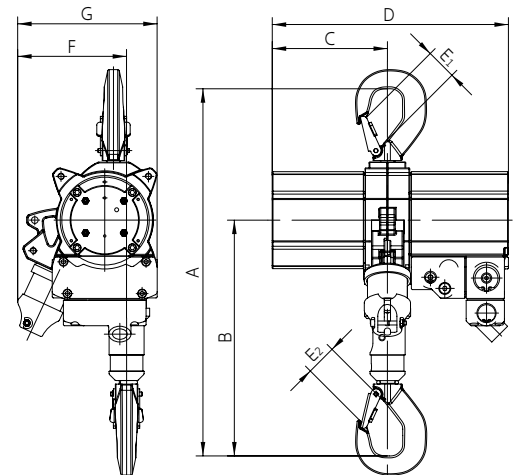


PROFI 1 TI

DIMENSIONS

| Type | | 025 TI | 05 TI | 1 TI | 2 TI |
|------------------------------|------|--------|-------|------|------|
| A min. headroom ¹ | inch | 17.7 | 17.7 | 17.7 | 19.6 |
| | mm | 450 | 450 | 450 | 498 |
| B | inch | 11.3 | 11.3 | 11.3 | 13.2 |
| | mm | 288 | 288 | 288 | 336 |
| C | inch | 5.7 | 5.7 | 5.7 | 5.7 |
| | mm | 145 | 145 | 145 | 145 |
| D | inch | 11.7 | 11.7 | 11.7 | 11.7 |
| | mm | 297 | 297 | 297 | 297 |
| E ₁ | inch | 1.1 | 1.1 | 1.1 | 1.1 |
| | mm | 28 | 28 | 28 | 28 |
| E ₂ | 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 |

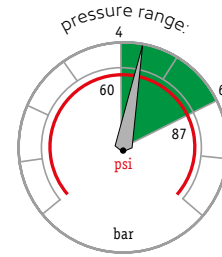
¹Chain containers increase the hoist headroom



PROFI 1,5 TI AND 3 TI/2

TECHNICAL DATA

| Type | | 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 |
| | m ³ /min | 1.5-2.6 | 1.5-2.6 |
| Air consumption at full load – lowering | cfm | 78-127 | 78-127 |
| | m ³ /min | 2.2-3.6 | 2.2-3.6 |
| Air connection | | G 3/4 | G 3/4 |
| 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 load ¹ – lifting | dB(A) | 73-77 | 73-77 |
| Noise level at full load ¹ – lowering | dB(A) | 78-80 | 78-80 |



PROFI 1,5 TI

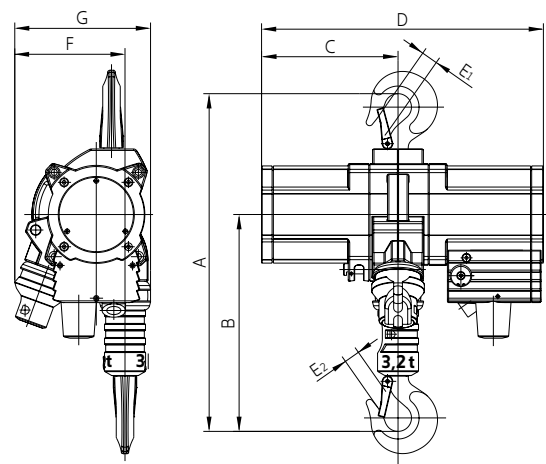


PROFI 3 TI/2

¹Measured at 1 m distance acc. to DIN 45635 part 20
Group mechanism: M3 (1 Bm)

DIMENSIONS

| Type | | 1.5 TI | 3 TI/2 |
|------------------------------|------|--------|--------|
| A min. headroom ¹ | inch | 18.9 | 21.4 |
| | mm | 480 | 544 |
| B | 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 ₁ | inch | 1.1 | 1.1 |
| | mm | 28 | 28 |
| E ₂ | 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 |



¹Chain containers increase the hoist headroom

PROFI 3 TI UP TO 20 TI

TECHNICAL DATA

| Type | | 3 TI | | 6 TI | | 10 TI | | 16 TI | | 20 TI | |
|--|----------------------------|-------------|--------------|--------------|-------------|--------------|-------------|--------------|------------|------------|------------|
| Capacity | mt | 3.2 | | 6.3 | | 10 | | 16 | | 20 | |
| Air pressure | psi bar | 60 4 | 87 6 | 60 4 | 87 6 | 60 4 | 87 6 | 60 4 | 87 6 | 60 4 | 87 6 |
| Number of chain strands | | 1 | | 2 | | 2 | | 3 | | 4 | |
| Motor output | kW | 1.8 | 3.5 | 1.8 | 3.5 | 1.8 | 3.5 | 1.8 | 3.5 | 1.8 | 3.5 |
| Lifting speed at full load | ft/min m/min | 8.2 2.5 | 16.4 5 | 3.9 1.2 | 8.2 2.5 | 2.6 0.8 | 5.2 1.6 | 1.6 0.5 | 3.3 1 | 1.3 0.4 | 2.3 0.7 |
| Lifting speed without load | ft/min m/min | 19.7 6 | 32.8 10 | 9.8 3 | 16.4 5 | 6.6 2 | 10.5 3.2 | 4.3 1.3 | 6.6 2 | 3.3 1 | 4.6 1.4 |
| Lowering speed at full load | ft/min m/min | 24.6 7.5 | 35.4 10.8 | 11.8 3.6 | 17.7 5.4 | 8.2 2.5 | 11.2 3.4 | 5.3 1.6 | 6.9 2.1 | 3.9 1.2 | 5.3 1.6 |
| Air consumption at full load – lifting | cfm m ³ /min | 71 2 | 142 4 | 71 2 | 142 4 | 71 2 | 142 4 | 71 2 | 142 4 | 71 2 | 142 4 |
| Air consumption at full load – lowering | cfm m ³ /min | 124 3.5 | 195 5.5 | 124 3.5 | 195 5.5 | 124 3.5 | 195 5.5 | 124 3.5 | 195 5.5 | 124 3.5 | 195 5.5 |
| Air connection | | G 3/4 | | G 3/4 | | G 3/4 | | G 3/4 | | G 3/4 | |
| Hose dimension (Ø inside) | inch mm | 3/4 19 | | 3/4 19 | | 3/4 19 | | 3/4 19 | | 3/4 19 | |
| Weight with standard lift, rope control | lbs kg | 189.6 86 | | 242.5 110 | | 343.9 156 | | 529.1 240 | | 627 285 | |
| Chain dimension | mm | 13 x 36 | | 13 x 36 | | 16 x 45 | | 16 x 45 | | 16 x 45 | |
| Weight of chain | lbs/ft kg/m | 2.6 3.8 | | 2.6 3.8 | | 3.9 5.8 | | 3.9 5.8 | | 3.9 5.8 | |
| Standard lift | ft m | 10 3 | | 10 3 | | 10 3 | | 10 3 | | 10 3 | |
| Length of control at standard lift | ft m | 6.5 2 | | 6.5 2 | | 6.5 2 | | 6.5 2 | | 6.5 2 | |
| Noise level at full load ¹ – lifting | dB(A) | 74 | 78 | 74 | 78 | 74 | 78 | 74 | 78 | 74 | 78 |
| Noise level at full load ¹ – lowering | dB(A) | 79 | 80 | 79 | 80 | 79 | 80 | 79 | 80 | 79 | 80 |

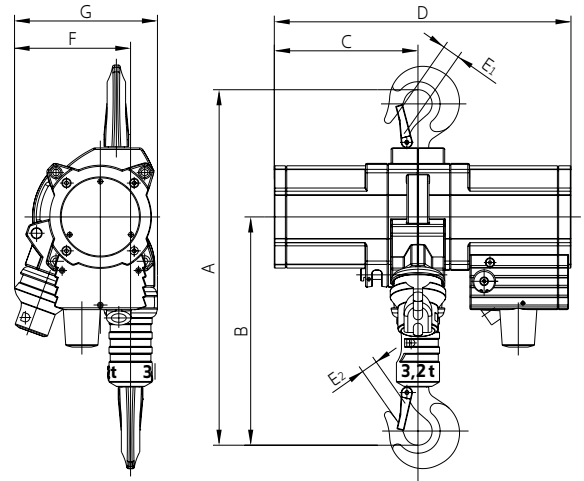


PROFI 6 TI

¹Measured at 1 m distance acc. to DIN 45635 part 20
Group mechanism at 6 bar: M3 (1 Bm)

DIMENSIONS

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



¹Chain containers increase the hoist headroom

JDN AIR HOISTS PROFI

PROFI 25 TI UP TO 100 TI

TECHNICAL DATA

| Type | | 25 TI | 30 TI | 37 TI | 40 TI | 50 TI | 60 TI | 75 TI | 100 TI |
|--|----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|--------------|
| Capacity | mt | 25 | 30 | 37.5 | 40 | 50 | 60 | 75 | 100 |
| Air pressure | psi bar | 87 6 | | | | | | | |
| Number of chain strands | | 2 | 2 | 3 | 3 | 4 | 4 | 3 | 4 |
| Motor output | kW | 6.3 | | | | | | 9 | 9 |
| Lifting speed at full load | ft/min m/min | 4.1 1.25 | 3.3 1.0 | 2.5 0.75 | 2.3 0.7 | 1.8 0.55 | 1.5 0.45 | 1.7 0.53 | 1.3 0.4 |
| Lifting speed without load | ft/min m/min | 7.9 2.4 | 7.9 2.4 | 5.6 1.7 | 5.6 1.7 | 4.3 1.3 | 4.3 1.3 | 4.4 1.33 | 3.3 1 |
| Lowering speed at full load | ft/min m/min | 9.2 2.8 | 9.2 2.8 | 6.6 2.0 | 6.6 2.0 | 5.3 1.6 | 5.3 1.6 | 4.1 1.25 | 3.1 0.95 |
| Air consumption at full load – lifting | cfm m ³ /min | 230 6.5 | | | | | | 268.5 7.6 | |
| Air consumption at full load – lowering | cfm m ³ /min | 102 2.9 | | | | | | 212 6 | |
| Air connection | | G 1 ½ | | | | | | | |
| Hose dimension (Ø inside) | inch mm | 1 ½ 35 | | | | | | | |
| Weight with standard lift, rope control | lbs kg | 1213 550 | 1213 550 | 1874 850 | 1874 850 | 2072 940 | 2072 940 | 3968 1800 | 4409 2000 |
| Chain dimension | mm | 23.5 x 66 | | | | | | 32 x 90 | |
| Weight of chain | lbs/ft kg/m | 8.2 12.2 | | | | | | 14.3 21.3 | |
| Standard lift | ft m | 10 3 | | | | | | | |
| Length of control at standard lift | ft m | 6.5 2 | | | | | | | |
| Noise level at full load ¹ – lifting | dB(A) | 78 | | | | | | 77 | |
| Noise level at full load ¹ – lowering | dB(A) | 82 | | | | | | 83 | |

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

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



PROFI 100 TI

DIMENSIONS

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

¹Chain containers increase the hoist headroom

