

# JDN AIR HOISTS **PROFi Ti**

IDEAL FOR SENSITIVE AND EXACT POSITIONING OF LOADS



**J. D. NEUHAUS**  
powered by air!



**NEW**

PROFI 1 TI



PROFI 6 TI



PROFI 50 TI

## JDN AIR HOISTS PROFI TI

### ADVANTAGE WITH SAFETY

Proven in practice: in all places where safety has preference JDN Air Hoists are superior. Contrary to electric current the driving medium compressed air does not produce any sparks. This constructional advantage predestinates JDN Air Hoists especially for applications in hazardous areas. They are even resistant to high humidity, vapour or smoke as well as to extreme temperatures from - 20°C up to + 70°C. The three main components of the compact hoist - motor with brake, mid section and gear box - are easily accessible and of low maintenance.

### BIG POWER WITH ACTIVE SAFETY

The instant starting vane motor has its nominal rating at a nominal pressure of 6 bar\*. The asbestos free disc brake is automatically opened when the motor is switched on. When the motor is switched off or the air supply is interrupted, the brake closes and holds the load safely in the last position.

All parts of the planetary gear are made of tempered or hardened high grade steel and run in a permanent grease lubrication. Chain and hook consist of high quality heat treated steels. The breaking factor is five times the nominal carrying capacity. The chain is a hoisting chain according to EN 818-7.

### ADVANTAGES AS STANDARD:

- robust construction, minimum headroom
- 100 % duty rating - less downtime
- easy operation and little maintenance
- unlimited switching at continuous working
- lifting and lowering speeds sensitively controllable by special control systems
- special executions with overload safety device (standard from 1 ton onwards in the EU)



### EXPLOSION-PROOFNESS CLASSIFICATION AND MARKING

#### ■ Standard versions

⊕ II 2 GD IIA T4(X)/II 3 GD IIB T4(X)

#### ■ With increased spark protection

(bottom block and load hook are copper plated by galvanisation; brass safety catch):

⊕ II 2 GD IIB T4(X)

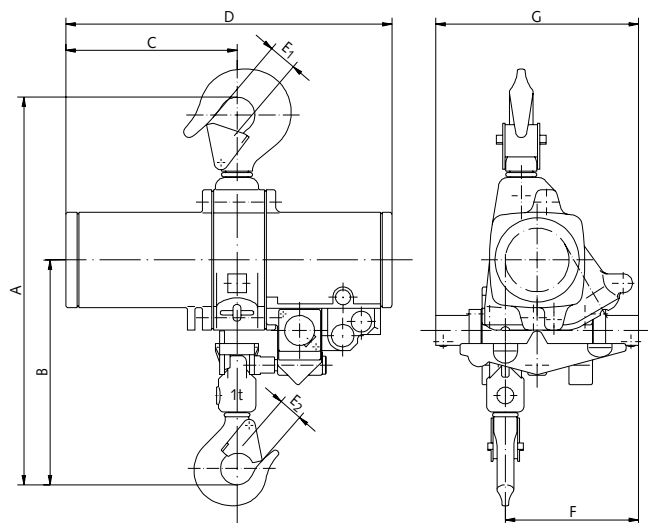
#### ■ With increased spark protection for explosion group IIC

(additionally the running wheels of trolleys and travelling gears are made of bronze):

⊕ II 2 GD IIC T4(X)

\* JDN Air Hoists PROFI 025 TI up to  
PROFI 16 TI also available for 4 bar.

# TECHNICAL DATA JDN AIR HOISTS PROFI TI



Type		025 TI	05 TI	1 TI	2 TI	3 TI	6 TI	10 TI	16 TI	20 TI	25 TI	37 TI	50 TI	100 TI
Lifting capacity	t	0.25	0.5	1	2	3.2	6.3	10	16	20	25	37.5	50	100
Number of chain strands		1	1	1	2	1	2	2	3	4	2	3	4	4
Engine output	kW	1.0	1.0	1.0	1.0	3.5	3.5	3.5	3.5	3.5	6.0	6.0	6.0	10.0
Air pressure	bar	6	6	6	6	6	6	6	6	6	6	6	6	6
Lifting speed at full load	m/min	20	11	5.5	2.7	5	2.5	1.6	1	0.7	1.1	0.65	0.45	0.35
Lifting speed without load	m/min	42	19	11	5.5	10	5	3.2	2	1.4	2.3	1.6	1.3	0.7
Lowering speed at full load	m/min	38	17	11	5.5	10.8	5.4	3.4	2.1	1.6	1.9	1.5	1.4	0.8
Air consumption at full load - lifting	m³/min	1.2	1.2	1.2	1.2	4	4	4	4	4	5.5	5.5	5.5	11
Air consumption at full load - lowering	m³/min	1.5	1.5	1.5	1.5	5.5	5.5	5.5	5.5	5.5	6.5	6.5	6.5	12
Air connection		G 1½	G 1½	G 1½	G 1½	G ¾	G ¾	G ¾	G ¾	G ¾	G1	G1	G1	G 1½
Hose dimension (Ø inside)	mm	13	13	13	13	19	19	19	19	19	25	25	25	35
Weight at standard lift, rope control (without Δp)	kg	27	27	28 <sup>1</sup>	34 <sup>1</sup>	86	110	156	240	285	498	880	855	2460
Chain dimension	mm	7x21	7x21	7x21	7x21	13x36	13x36	16x45	16x45	16x45	22x66	22x66	22x66	31.5 x 90
Weight of 1 m chain	kg	1.0	1.0	1.0	1.0	3.8	3.8	5.8	5.8	5.8	10.8	10.8	10.8	21.3
Standard lift	m	3	3	3	3	3	3	3	3	3	3	3	3	3
Length of control at standard lift	m	2	2	2	2	2	2	2	2	2	2	2	2	2
Sound level at full load <sup>2</sup> - lifting	dB(A)	74	75	76	76	78	78	78	78	78	83	83	83	88
Sound level at full load <sup>2</sup> - lowering	dB(A)	78	78	78	78	80	80	80	80	80	83	83	83	89
Dimensions in mm		025 TI	05 TI	1 TI	2 TI	3 TI	6 TI	10 TI	16 TI	20 TI	25 TI	37 TI	50 TI	100 TI
A smallest headroom <sup>3</sup>		450	450	450	498	593	674	813	898	1030	1282	1400	1700	2200
B		288	288	288	336	373	454	548	598	670	948	869	1144	1475
C		145	145	145	145	233	233	308	382	382	377	377	445	734
D		297	297	297	297	483	483	575	692	692	812	812	980	1505
E1		28	28	28	28	40	40	44	53	75	75	100	100	120
E2		28	28	28	28	30	40	44	53	75	75	100	100	120
F up to hook center		137	137	137	137	187	154	197	199	180	466	518	310	440
G biggest width		176	176	176	183	233	233	306	308	315	494	745	539	767

<sup>1</sup> with Δp

<sup>2</sup> measured in 1 m distance acc. to DIN 45635 Teil 20

<sup>3</sup> Chain containers increase the headroom



## APPLICATIONS

### WHICH INDIVIDUAL SOLUTION DO YOU NEED?

According to your given details our specialists convert to reality even the most unusual requests. With individual control systems you can control the lifting and lowering speeds of JDN Air Hoists infinitely variable and sensitively. It makes no difference how often the hoist is switched on and off.

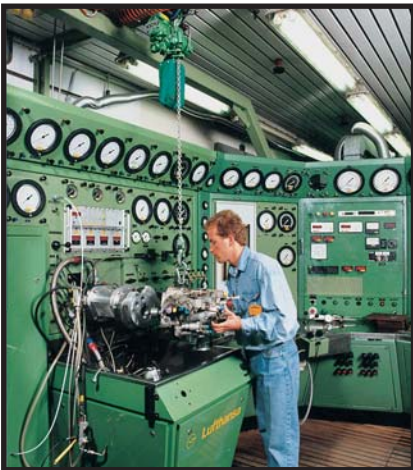
Another possibility: Installing JDN Air Hoists into trolleys which are moved by hand, reel chain or by air motor (see catalogue "Trolleys" T 232 GB), enabling individual hoisting and transporting solutions even under most difficult conditions.

### WHERE THE JDN PROFI HAS EXCELLENTLY 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, motor-car industry, oil storage stations, on- and offshore, paint shops, paper industry, power plants, refineries, sawmills, shipyards, space technique, tempering plants, textile industry.



FOUNDRY



LUFTHANSA

You will find detailed information on our new  
**JDN PROFI TI (0.25 t up to 2 t)**  
and the **JDN PROFI TI series (3.2 t up to 16 t)**  
in our brochures T 234 GB respectively T 233 GB.

**Do you have a material handling problem?**  
**Then challenge us. We will be pleased to help you.**

**PROFI TI** is a registered trademark of our company.  
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