

sPR 33 454 517900

Pneumatic jack for steel strap



DPZ-L 365 001100 32mm

Pneumatic locking device for steel strap

Important!

Do not dispose of this manual. It is the customer"s responsibility to ensure that all operators and servicemen read and understand this manual.





1. General

These operating instructions are meant to facilitate becoming familiar with the units and their intended use. These operating instructions include important notes on how the units can be exploited safely, in a technically competent way and economically. Meeting instructions helps avoid risks, reduce repairs and downtimes and increases the reliability and life of the units.

These operating instructions must be available at the location of the units. They must be read and used by all persons working with the units. Those works especially include operation, troubleshooting and maintenance.

Apart from the operating instructions and the regulations for the prevention of accidents applicable in the user"s country and at the place of location the acknowledged rules for safety-related and technically competent working have to be observed.

Explanatory notes on the warning and instruction symbols:



Caution!

Is used in case of risks of life and health.



Attention!

Is used in case of risks which might cause damage to objects.



Note!

Is used for general notes as well as such whose disregard might occur in the operational process.

1.1. Notes on environmental protection



No substances detrimental to health, physical or chemical substances are used for the manufacture of the units. Waste disposal is subject to the applicable legal regulations.



Technical data

2.1. PR 33

Weight: 4,35 KG

Dimensions: I = 320 mm

> b = 120 mm $h = 140 \, mm$

Maximum air pressure: 6 bar

Tensioning force: 8000 N

Air consumption: 0.6 m³/min

Steel strap

Strap widths: 19, 25, 32 mm

Strap thickness: 0.8–1,0 mm

TITAN sealing sleeves: RSK, RSL





2.2. DPZ-L

Weight: 4.5 KG

Dimensions: I = 340 mm

b = 150 mm

 $h = 285 \, mm$

Maximum air pressure: 6 bar

Seal: sleeve-type seal

TITAN sealing sleeves: RSK, RSL

Steel strap

Strap widths: 32 mm

Standard quality

Strap width: 0.8-1.0 mm

Tensile strength: to approx. 900 N/mm²

High-strength quality

Strap thickness: 0.8 mm

Tensile force: to approx. 1100 N/mm²





3. Safety Regulations

Intended Use

This device is intended for strapping round packages (profile bundles, pipes, coils, etc.).

The device was designed and built for safe operation during strapping.

The device is intended for strapping with steel packaging straps.



Possible misuse

The use of plastic straps is not allowed with this device.

Applied standards and specifications:

see EU declaration of conformity

Warranty and liability

TITAN Umreifungstechnik GmbH & Co. KG guarantees all strapping tools sold by the company for a period of 6 months. The warranty covers all defects that can be demonstrated to result from faulty craftsmanship or defective materials.



Warranty and liability claims shall be excluded if they are due to one or more of the following causes:

- Misuse of the tool.
- Incorrect assembly, commissioning, operation and maintenance of the tool.
- Operation of the tool with improper safety and protective devices.
- Failure to comply with the information in the operating manual.
- Unauthorized structural modifications to the tool.
- Insufficient monitoring of tool parts that are subject to wear.
- Improper repairs.

The manufacturer reserves the right to make changes to the scope of delivery at any time for the purpose of improving the product.



Failure to comply with the following safety instructions, in addition to errors in handling the device, can result in serious injuries.



Be informed!

Read the operating manual carefully before using the device



Protect yourself!

Always wear eye, face and hand protection (cut-resistant gloves) when working.



Attention!

Strap flies outward!

When cutting the strap, hold the top part firmly and stand to the

Attention!

The lower part of the strap will fly outward.



Attention!

Strap can break!

The strap can break during tightening! Do not stand in the path of the strap. Make sure that no one else is in the working area.



Caution!

Danger of crushing!

Do not insert fingers into the pulley area.



Caution!

Strap only objects to be packed!

Make sure that no hands or other body parts are between the strap and the goods to be packaged.



Use only original TITAN replacement parts!

The use of parts other than original TITAN replacement parts will void the warranty and all liability.



Use only lifting gear that complies with the safety regulations!





Use only original TITAN closure sleeves!



Do not exceed air pressure!

Never exceed the max. permissible air pressure of 6 bar.



Use original connection coupling.

Use only connection couplings that comply with the safety regulations.



Do not use gas or compressed air cylinders! Do not connect the tool to a gas or compressed air cylinder.



The use of straps other than those recommended can result in broken straps during the tightening process and insufficient strapping. Use only corresponding quality products from TITAN!



This device may be operated only by personnel who have been trained accordingly. Please consult your TITAN packing consultant if you have any questions about this.



Workplace

Always maintain an orderly workplace. A disorderly workplace can cause accidents. When operating the crimper, make sure that you are in a well-braced position in order to maintain optimum balance and prevent the risk of falling. Never operate the tool in an awkward working position!



Maintenance

In order to operate safely, the tool must be properly maintained. Check the condition of your tool regularly for defects or worn parts. Never use a tool that has defects or worn parts. Modifications to the tool are strictly prohibited. Failure to comply with this regulation can result in serious injury.



4. Description of funvtions

4.1. Compressed air port

The maximum distance between the compressed air port and the location of the strapping unit should not exceed 5 m.



In no case it is allowed to run the tool without oil being in the lubricator of the maintenance unit, as this would immediately destroy the compressed air motor.

No warranty in this case!

It is recommended that the maintenance unit comprising 2 air outputs and made by the **TITAN** company is used.

4.2. Checking machines and tools before commissioning

Before any new application it is required that the units and their attachments are checked for damage and completeness. Hoses – air supply for firm seat. Exclusively use original TITAN spare parts (also see section 3).

4.3. Commissioning

Connect hand-held units PR 33 and DPZ-L to the compressed air network (max. air pressure 6 bar).

Motor and compressed air cylinders are lubricated by the oil mist of the compressed air. Faultlessly prepared compressed air is therefore a prerequisite for a problem-free operation of the units. This can only be met by a functionally safe 3/8" maintenance unit comprising water separator, pressure reducing valve including pressure gauge and oiler.

The oiler must discharge sufficient oil, approx. 1 drop per strapping. The length of the hose should not exceed **5 m**. The inner diameter of the hose should as a minimum be 8 mm. Attention should be paid that the hose does not form loops in which oil could be collected.

Choice of the lubricating oil: resin- and acid-free lubricating oil whose viscosity is 2-4° E at 50°.

Max. operating pressure 6 bar.



Attention! Risk of tearing strap! The strap can tear when the operating pressure of 6.5 bar is exceeded. Tearing strap can result in injuries to the operator.



Operating

1

Pull steel strap out of the dispenser through the sealing sleeve and put it around the packing item. Again slip the beginning of the strap through the sealing sleeve and bend it.

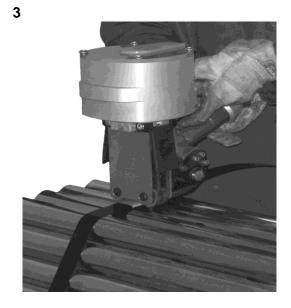


Take the jack (PR 33) in your right hand and open it by pressing the lever. Then slip it on the steel strap from the right to the left acc. to the photo. Release the lever and tension the steel strap by turning the turning valve to the left. The tension of the strap desired (max. 6 bar) is achieved by the control of the air pressure on the pressure gauge of the maintenance unit.



Position the pneumatic sealing tongs (DPZ-L) on the sealing sleeve (as shown in the photo) and notch the sealing sleeve by the actuation of the joining lever. At the same time the joining lever snaps in automatically. Releasing is done automatically after the notching of the seal and of the steel strap have been completed. Interruption of the joining process is possible at any time by pushing the STOP key.

During the sealing operation the air feed at the tensioning jack must not be stopped (tensioning jack is without self-locking device).



Upon completion of the seal deposit the locking device and tilt the jack, as shown in the photo, upwards until the steel strap breaks before the sealing sleeve.

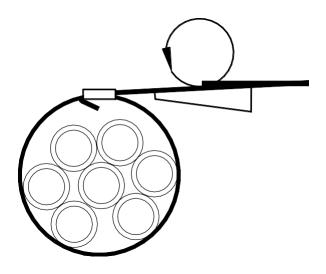
Again, the air supply must not be stopped. Then, turn off the air feed and separate the tension jack from the steel strap again by pressing the lever.



Sketch

Course of strap

5

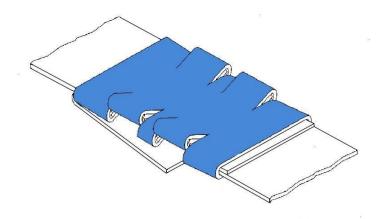


The following picture shows a correctly carved seal.

Check the seals regular

for crackings on the sleeve and

for neat cutting edges.



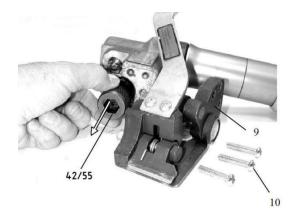


Maintenance

6.1. Change of the tensioning wheel

Loosen the 3 fastening screws (10) and remove the bearing plate (9). The tensioning wheel (42/55) can be accessed and removed from the transport shaft.

Mounting in reverse order.

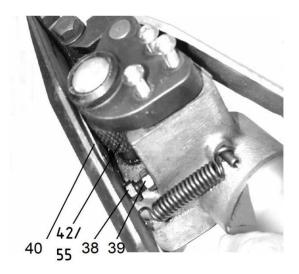


6.2. Setting the clearance

After the installation of the new tensioning wheel (42/55) the clearance between wheel and guide plate (40) must be checked and, if required, readjusted.

Setting is performed by means of the setting screw (38). For that purpose, loosen the counternut (39).

The clearance between the tensioning wheel and the guide plate should be **0,2 mm**.



6.3. Cleaning and maintenance

Dirt and abrasion impair the function of the units.

Therefore, all units should be air-cleaned with compressed air in the area of the strap guidance, notching cutters, tensioning wheel and joints after being used und, following that, be wetted with resin-free thin spray oil.

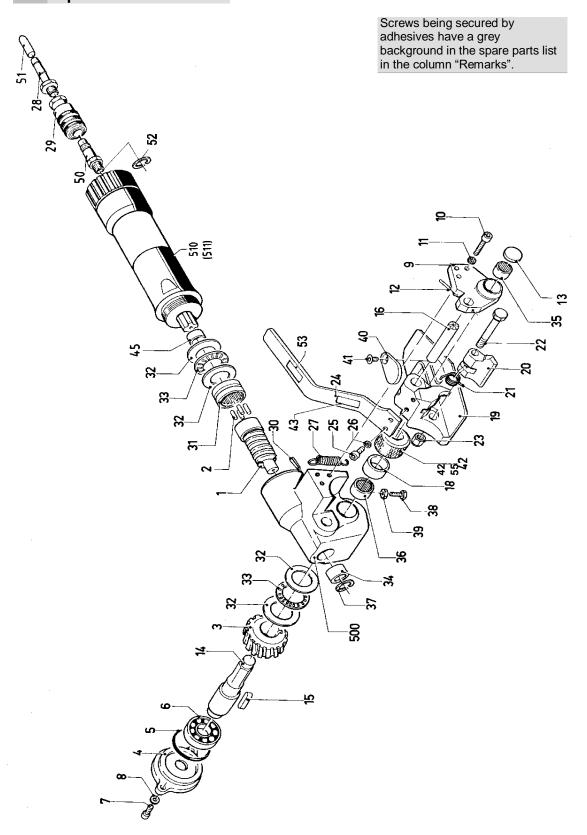
Tool inspection!

Perform a daily visual inspection of the outside of the unit. The early detection of damaged parts extends the life of the unit. Replace all damaged parts immediately with Original TITAN spare parts.



7. Spare parts list

7.1. Exploded view PR 33





7.2. Spare parts list PR 33

Pos.	Order no.	Description	Dimensions	Pcs.	Remarks
1	4545179 - 1	Worm		1	
2	4545179 - 2	Dowel pin	4m6 x 12	4	
3	4545179 - 3	Worm wheel		1	
4	4545179 - 4	Gear cover		1	
5	4545179 - 5	O-ring seal	45 x 1.5 B	1	
6	4545179 - 6	Deep-groove ball bearing	16003	1	
7	4545179 - 7	Cheese-head screw	M6 x 16	3	Loctite 242
8	4545179 - 8	Washer	S6	3	
9	4545179 - 9	Bearing plate		1	
10	4545179 - 10	Cheese-head screw	M6 x 25	3	Loctite 242
11	4545179 - 11	Washer	S6	3	
12	4545179 - 12	Withdrawal sleeve	3 x 20	1	
13	4545179 - 13	Sealing washer	20	1	
14	4545179 - 14	Conveyance shaft	20	1	
15	4545179 - 15	Key	A6 x 6 x 20	<u>.</u> 1	
16	4545179 - 16	Pintle	70 X 0 X 20	1	
10	4343173 - 10	1 mac		•	
18	4545179 - 18	Distance sleeve		1	
19	4545179 - 19	Tension element		1	
20	4545179 - 20	Articulated rail		1	
21	4545179 - 21	Leg spring		<u> </u>	
22	4545179 - 22	Fitted bolt	M8 x 55	1	
23	4545179 - 23	Nut	M8	1	
24	4545179 - 24	Sprue	IVIO	1	
25	4545179 - 25	Cheese-head screw	M6 x 12	2	Loctite 242
26	4545179 - 26	Washer	S6	2	Locute 242
27	4545179 - 27	Tension spring	30	1	
28	4545179 - 28	Beak	G 3/8" PK 9	1	Loctite 242
29	4545179 - 29	Quick-acting coupling	ARO	1	LOCITIC 242
30	4545179 - 30	Withdrawal sleeve	5 x 24	1	
31	4545179 - 31	Needle bearings	NK 2616	 1	
32	4545179 - 32	Wave washer	WS 81104	4	
33	4545179 - 33	Axial needle collar	AXK 2035	2	
34	4545179 - 34	Needle bush	DLF 1212	1	
35	4545179 - 35	Needle bush	DL 1312	1	
36	4545179 - 36	Needle bush	DLH 1816	1	
37	4545179 - 37	Circlip	18 x 1	1	
38	4545179 - 38	Hexagon bolt	M6 x 20	1	
39	4545179 - 39	Nut	M6	1	
40	4545179 - 40	Guide plate	IVIO	1	
41	4545179 - 41	Counter-sunk screw	M6 x 10	. 1	
42	4545179 - 42	Idler	IVIO X TO	1	
43	4545179 - 43	Nameplate		1	
44	4545179 - 44	Groove pin		2	
45	4545179 - 45	Centering bush		1	
46	4545179 - 46	Turning sleeve	444392	1	
	.0.0110 70	. s.rmig oldeve	111002	•	
50	4545179 - 50	Coupling plug	ARO	1	Loctite 242
51	4545179 - 51	Cap	D - 11 x 20	1	LOUGIC Z-Z
V = Wear		•	B = If necessary	•	

V = Wearing part

B = If necessary

R = Replacement parts

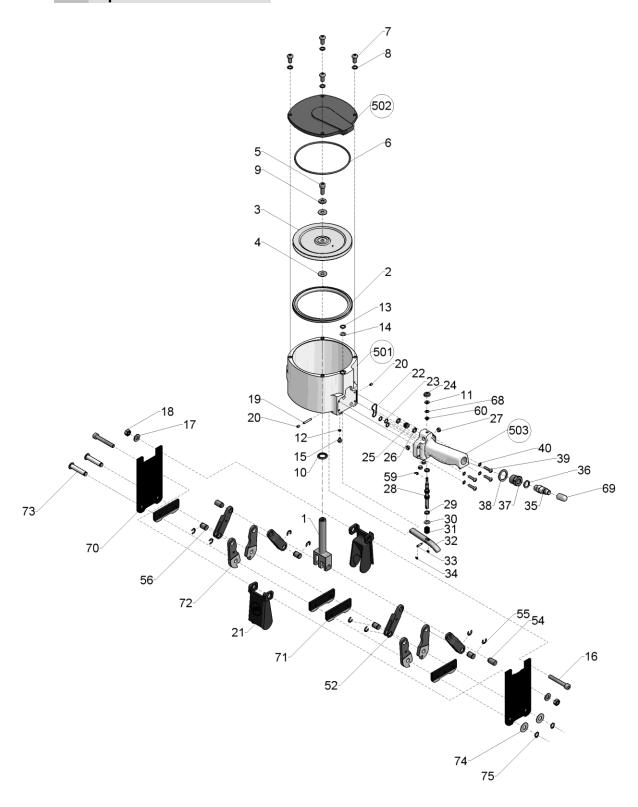
O = Option



Pos.	Order no.	Description	Dimensions	Pcs.	Remarks
52	4545179 - 52	Distance washer		1	
53	4545179 - 53	Operating pressure plate		1	
55	4545179 – 55	Tensioning Wheel (HT)		1	ı
	1010110 00	Tonoidring Trinoir (TTT)		· ·	
500	4545179 - 500	Gearbox		1	
510	4545179 - 510	Compressed air motor	520G5 RDS	1	
510	4545179 - 510	Compressed air motor	520G5 RDS 520G5 RDS	<u> </u> 1	R
311	4545179 - 511	Compressed all motor	520G5 KD5	Į.	K
V = Wearing part		B = If necessary			
R = Replacement parts			O = Option		



7.3. Exploded view DPZ-L



Screws being secured by adhesives have a grey background in the spare parts list in the column "Remarks".



7.4. Spare parts list DPZ-L

Pos.	Order no.	Description	Dimensions	Pcs.	Remarks
1	3650002 – 1	Piston rod		1	V
2	3650002 – 2	Turcon-Glyd Ring	PT 0301400	1	
3	3650002 - 3	Piston		1	
4	3650002 – 4	Axial washer	AS821	2	
5	3650002 - 5	Cylinder screw	M8 x 20	1	
6	3650002 - 6	O – Ring	125 x 3	1	
7	3650002 - 7	Oval head screw	M8 x 16	4	
8	3650002 - 8	Thrust washer	S8	4	
9	3650002 – 9	Conical spring washer	8	1	
10	3650002 - 10	Turcon-Glyd Ring	RT 0100160	1	
11	3650002 – 11	Conical Spring washer	5		
12	3650002 – 12	O - Ring	4 x 1,5	1	
13	3650002 – 13	O – Ring	9 x 2	1	
14	3650002 – 14	Shim ring	8 x 14 x 0,5	1	
15	3650002 - 15	Deactivation pin		1	V
16	3650002 – 16	Cylinder screw	M8 x 55	2	
17	3650002 – 17	Washer	8,4	2	
18	3650002 – 18	Nut	M8	2	
19	3650002 – 19	Parallel pin	4m6 x 24	1	
20	3650002 – 20	Threaded pin	M5 x 6	2	Loctite 242
21	3650002 – 21	Rubber protection		2	
22	3650002 – 22	O – Ring	25 x 2	1	
23	3650002 – 23	O – Ring	8 x 1,5	3	
24	3650002 – 24	Stop button		1	Loctite 242
25	3650002 - 25	Safety plunger		1	
26	3650002 – 26	Turcon-Glyd Ring	PT 0000120	2	
27	3650002 – 27	Silencer	SD 18 F	4	Loctite 242
28	3650002 – 28	Valve plunger	02.101	1	
29	3650002 – 29	Turcon-Glyd Ring	PT 0000120	2	
30	3650002 – 30	Shim ring	8 x 14 x 0,5	1	
31	3650002 – 31	Pressure spring	D 180 - O	1	
32	3650002 - 32	Haul-off shackle		1	
33	3650002 - 33	Parallel pin		1	
34	3650002 – 34	Locking washer	3,2	2	
35	3650002 – 35	Nipple	G 1/4"	1	
36	3650002 – 36	Sealing ring	1/4"	1	
37	3650002 – 37	Reducer	1/2" - 1/4"	1	
38	3650002 – 38	Sealing ring	1/2"	1	
39	3650002 – 39	Oval head screw	M5 x 20	4	
40	3650002 – 40	Thrust washer	S5	4	
V = We	aring part		B = If necessary		
R = Replacement parts			O = Option		



Pos.	Order no.	Description	Dimensions	Pcs.	Remarks
52	3650002 - 52	Pivot arm 32mm		4	
54	3650002 - 54	Clevis pin		2	
55	3650002 - 55	Locking washer	8	8	
56	3650002 – 56	Pivot arm pin		4	
59	3650002 – 59	Locking washer	3,2	1	
60	3650002 – 60	Floating bearing	0506-035	1	
68	3650002 – 68	Shim ring	5 x 10 x 0,5	1	
69	3650002 - 69	Cap	0 X 10 X 0,0	1	
70	3650002 - 70	End plate 32mm		2	V
71	3650002 - 71	Notching cutter 32mm		4	V
72	3650002 - 72	Screw die 32mm		4	V
73	3650002 - 73	Screw die pin		2	
74	3650002 - 74	Thrust washer	AS 1024	2	
75	3650002 – 75	Locking ring	10x1	2	
501	3650002 – 501	Cylinder complete		1	Incl. Pos. 10 u. 12
502	3650002 - 502	Cover complete		1	
503	3650002 - 503	Handhold complete		1	
V = We	aring part		B = If necessary	,	
D	lecement perte		O - Option		

R = Replacement parts

O = Option



8. **Declarations of conformity of the machinery**

EC declaration of conformity of the machinery

in terms of the directive 2006/42/EC on machinery, Annex II A

The manufacturer

TITAN Umreifungstechnik GmbH & Co.KG Berliner Straße 51-55 58332 Schwelm

herewith declares that the pneumatic locking device for steel strap described below

Type designation:

DPZ-L

Serial number:

365 001100

corresponds to the provisions of the following EC directive:

Machine directions 2006/42/EG

Used harmonised standards, published in the official journal of the EU:

EN ISO 12100-1: 2004, Safety of machinery – Basic concepts, general principles for design - Part 1:

Basic terminology, methodology

Safety of machinery – Basic concepts, general principles for design - Part 2: EN ISO 12100-2: 2004,

Technical principles and specifications

EN 1010-1:2005 Safety of machinery – Safety requirements for the design and construction

of printing and paper processing machines - Part 1: General requirements

(Final concept 02/2003)

Safety of machinery - Safety requirements for the design and construction EN 1010-3: 2002.

of printing and paper processing machines - Part 3: Cutting machines

A non-approved modification of the machinery implicates the loss of validity of this declaration.

Authorized representative for the compilation of the technical documentation:

TITAN Umreifungstechnik GmbH & Co. KG Berliner Strasse 51-55 58332 Schwelm

Schwelm, the 09.10.2012

Peter Wilhelm Lenzen

President

EC declaration of conformity of the machinery

in terms of the directive 2006/42/EC on machinery, Annex II A

The manufacturer

TITAN Umreifungstechnik GmbH & Co.KG Berliner Straße 51-55 58332 Schwelm

herewith declares that the pneumatic tensioner for steel strap described below

Type designation: PR 33 454 517900 Serial number:

corresponds to the provisions of the following EC directive:

Machine directions 2006/42/EG

Used harmonised standards, published in the official journal of the EU:

EN ISO 12100-1: 2004, Safety of machinery – Basic concepts, general principles for design - Part 1:

Basic terminology, methodology

EN ISO 12100-2: 2004, Safety of machinery – Basic concepts, general principles for design - Part 2:

Technical principles and specifications

Safety of machinery - Safety requirements for the design and construction EN 1010-1:2005

of printing and paper processing machines - Part 1: General requirements

(Final concept 02/2003)

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A non-approved modification of the machinery implicates the loss of validity of this

Authorized representative for the compilation of the technical documentation:

TITAN Umreifungstechnik GmbH & Co. KG Berliner Strasse 51-55 58332 Schwelm

Schwelm, the 26.01.2010

Peter Wilhelm Lenzen jr.

President

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