PULL LINE BLOWER



by zeitler.swiss

OPERATING INSTRUCTIONS



Production and Distribution ZEITLER AG

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Dear Customer

Thank you for choosing a quality engineered ZEITLER product.

Our machines are built using modern production techniques and comprehensive quality assurance. Every effort has been made to ensure your satisfaction and trouble free use of the machine.

Please contact either your dealer or us for any queries concerning your EZ50.

ZFITLER AG Markus Zeitler







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1. Important Instructions

Congratulations on your purchase of an EZ50 Pull Line Blower which is a product of the highest quality. The following instructions must be observed without fail and relevant regulations complied with, in order to guarantee the product remains functionally efficient and has a long service life.

As with all electrical equipment, when using this Pull Line Blower, particular care must be taken to avoid personal injury and damage to equipment.

2. Safety Precautions and Working Techniques



Special safety precautions must be observed when working with an electrical tool.



It is important you read and understand the operating instructions before using your machine for the first time. Always keep the Operating Instructions with the EZ50 for future reference. Non-observance of the safety precautions may result in serious or even fatal injury.

Observe all application such as local safety regulations, standards and ordinances of for example Government, Insurances, Associations etc.

If you have not used this machine before: Have your dealer or another experienced user show you how to operate your machine properly.

Minors should never be allowed to use this machine except for minors of more than 16 years and being trained under supervision during their apprentice.

Do not lend or rent your machine without the operating instructions. Be sure that anyone using the EZ50 understands the information contained in the operating instructions.

Bystanders, especially children, and animals should not be allowed in the area where the machine is in use.

Inform all people present on possible dangers.

When the machine is not in use, disconnect the mains plug and place it so that it does not endanger others. Secure it against unauthorized use.

The power tool user is responsible for avoiding injury to third parties or damage to their property.

Do not blow towards people, animals or objects!

In some countries, the operation of noise emitting electrical tools is restricted by local regulations. Observe country specific requirements and regulations.

Special Safety Regulations

The Pull Line Blower requires electricity for it to operate, which is supplied via the mains plug. The device must never be used with an extension cable. The required power supply depends on the country of operation – please check the type plate on the unit for the minimum prescribed fuse value in the socket. Use socket with an earth leakage circuit breaker!

Arrange the mains cable in such a way that it does not create a tripping hazard.

Safety equipment

The EZ50 Pull Line Blower is equipped with an integrated thermal safety switch.

Accessories and Spare Parts

Only use genuine replacement parts and accessories that are explicitly approved for the EZ50 by ZEITLER AG. These parts are specifically designed to match your machine model and meet your performance requirements and also to avoid the risk of accidents and damage to the machine. If you have any question in this respect, consult an authorized servicing dealer.

Never attempt to modify your tool in any way since this will increase the risk of personal injury. ZEITLER AG excludes all liability for personal injury and damage to property caused while using unauthorized attachments.

You will find an updated list of all accessories and spare parts in our online shop (www.zeitler.swiss/en/shop).

Engineering improvement

ZEITLER's philosophy is to continually improve all of their products. For this reason we may modify the design, engineering and appearance of our products periodically.

Therefore, some changes, modifications and improvements may not be covered in the operating instructions.

Physical Condition

To operate this unit, you must be rested, in good physical condition and mental health. If you have any condition that might be aggravated by strenuous work, check with your doctor before operating this electrical tool.

Do not operate this machine if you are under the influence of any substance (alcohol, drugs) which might impair visions, dexterity of judgement.

Applications

The EZ50 Pull Line Blower is intended exclusively for blowing in or sucking out special pull lines in pipe work that has already been laid. Then, cables or extra strong pull lines can be fixed to the pull line in order to pull them through the pipe work.

It must not be used for any other purpose because of the increased risk of accidents and damage to the machine. Never attempt to modify your electrical tool in any way since this may result in accidents or damage to the machine.

Disposal of lines

Used lines can also be used for other purposes or must be properly disposed of. All relevant regulations and laws of the particular country must be complied with when disposing of old lines. Lines that have already been used must not be used again in the cylinder for pull line of the Pull Line Blower.

Personal protective equipment

Wear proper protective clothing and equipment



Clothing must be sturdy but allow complete freedom of movement. Wear snug-fitting clothing, an overall and jacket combination, do not wear a work coat.



Avoid any clothing, scarves, neckties, jewellery or anything that could get into the air intake.



Tie up and confine long hair (e.g. with a hair net, cap, hard hat, etc.)



Wear sturdy shoes with non-slip soles



Wear safety glasses and 'personal' hearing protection, e.g. earplugs or ear muffs



3. Scope of supply EZ50



Pull Line Blower EZ50 in original carrying case

- 1 x Pull Line Blower EZ50 Art. 100001 for 230 V / 50 Hz Art. 100002 for 115 V / 60 Hz
- 1 x Suction unit (Art. 100026)



- 2 x Pull line roll in foil (Art. 100132), approx 900 m length, tensile strength approx 24 kg
- 3 x Beads round Ø 11 mm in small container (Art. 100040)
- 3 x Beads round Ø 13 mm in small container (Art. 100041)
- 3 x Beads round Ø 16 mm in small container Art. 100042



- 1 x Components Set A (Art. 100036) 2 joints ½", reduction 19/12 mm nozzle orange Ø int. 9,5 mm
- 1 x Components Set B (Art. 100032) 3 joints ¾", nozzle orange Ø int. 16 mm plus nozzle orange Ø int.19 mm



1 x Special nozzle black for Ø int. of 25 to 50 mm (Art. 100031)



- 1 x Special nozzle with 90° angle (Art. 100039) (requires special nozzle black see above)
- 1 x Carrying belt (Art. 100015



1 x Operating Instructions



4. Scope of supply EZ50+ PLUS





Pull Line Blower EZ50 in original carrying case

1 x Pull Line Blower EZ50 Art. 100735 for 230 V / 50 Hz Art. 100736 for 115 V / 60 Hz



1 x Suction unit (Art. 100026)



2 x Pull line roll in foil (Art. 100132), approx 900 m length, tensile strength approx 24 kg



- 3 x Beads round Ø 11 mm in small container (Art. 100040)
- 3 x Beads round Ø 13 mm in small container (Art. 100041)
- 3 x Beads round Ø 16 mm in small container Art. 100042



1 x Components Set A (Art. 100036) 2 joints ½", reduction 19/12 mm nozzle orange Ø int. 9,5 mm



1 x Components Set B (Art. 100032) 3 joints ¾", nozzle orange Ø int. 16 mm plus nozzle orange Ø int.19 mm



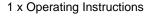
1 x Special nozzle black for Ø int. of 25 to 50 mm (Art. 100031)



1 x Special nozzle with 90° angle (Art. 100039) (requires special nozzle black see above)



1 x Carrying belt (Art. 100015





Extra + Plus:

1 x Spray nozzle (Art. 100280)



1 x Parachute for conduits (inner) ø 30 to 60 mm (Art. 100309)



1 x Shuttle complete set (Select size) (Article number see Shop)



1 x Box with shuttle assembly material (Art. 100056)



5. Consumables/Accessories/Spare Parts

Art. 100132 Pull line roll d 1 mm, approx. 900 m, Tensile strength approx. 24 kg

Box of 10 rolls



Art.100040 5 x Beads Ø 11 mm Art.100041 5 x Beads Ø 13 mm Art.100042 5 x Beads Ø 16 mm



Art. 100043 2 pieces Beads long Ø 11 mm Art. 100044 2 pieces Beads long Ø 13 mm

Art. 100316 2 pieces Beads long Ø 17 mm



Art. 100027 Container for beads



Art.100006 Handle Switch



Art. 100020 Front plate with ring



Art.100019 Cylinder for pull line



Art.100022 Line brake



Pull line blowing in conduits (ø 18-50 mm)

Art.100021 Electronic plate



Art.100003 Motor 230 V / 50 Hz Art.100004 Motor 115 V / 60 Hz



Art.100309 Parachute for conduits (internal) Ø 30 - 60 mm



Art.100056 Box with shuttle assembly material. Content:

- 20 x screws with hole
- 2 x wrench 7 mm
- 40 x washers M4
- 1 x scissors
- 10 x rings



Art. →Shop Shuttle complete set for conduits Ø 20 - 50 mm Mini case includes:

- 4 shuttle disks white (=90% conduit Ø)
- 4 shuttle disks black (=70% conduit Ø)
- 2 axles



Art. 100330 Lubriball 22 mm

Art. 100280 Spray nozzle

To blow lubricant deep into the innerduct



Art. 101340 Swivel lock to Original Case

Art. 101341 Hinge to Original Case



You will find an updated list of all accessories and spare parts in our online shop (www.zeitler.swiss/en/shop).

Pull line blowing in conduits (ø 18-50 mm)

6. Putting into Operation

- 1. Before any unit is put into operation, firstly ensure that the device is in perfect and clean condition and the front plate is clicked on correctly.
- Do not work in the vicinity of flammable or explosive materials, fluids, gases or open flames
- In the event of any faults or the suspicion of a fault, disconnect the mains plug immediately and have the device checked over by the importer or the manufacturer
- 4. Do not blow towards people, animals or objects
- 5. If working on a platform or ladder, always carry the unit with the shoulder strap
- 6. First blow through the conduit without any line (to clear any water, impurities or the like in the conduit)
- 7. Use protective eyewear (beware of dust, water etc.)
- 8. If any residual water is actually left in the ducting, never work in suction mode (damage to the motor)
- Always keep the air intake opening/screen free (danger of overheating/fire). If any impurities are found in the screen, remove them immediately
- 10. Never use the device if the mains cable is damaged. Have faulty cables or plugs replaced immediately (by the manufacturer or the importer). Never pull the plug out of the mains socket by the cable if your hands are wet. Do not drag the cable across sharp edges or corners. Never place the cable on hot objects.
- 11. Caution: some of the plastic parts have limited impact resistance!

Warning!

Improper application, use, modification, operation or maintenance can lead to serious personal injury or damage to property!



To reduce the risk of personal injury from fire, never attempt to suck on hot or burning substances (e.g. smoldering ashes, glowing cigarettes).

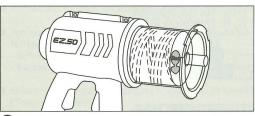


To reduce the risk of fatal injury from fire or explosion, never attempt to suck on combustible fluids (e.g. gasoline) or materials soaked in combustible fluids.

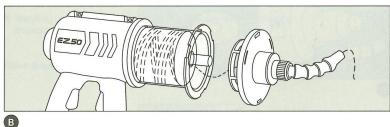


7. Inserting the pull line roll

- 1. Disconnect the main plug
- 2. Release the line brake
- 3. Open and remove front plate A
- 4. Take out any remaining pull line
- 5. Carefully remove the plastic foil from the new line roll
- 6. Insert line roll so START label is visible
- 8. Replace the front plate and close it with the bayonet catch!
- 9. The correct positioned line roll must have a little clearance all around it
- 10. Blow out approx. 5 m of line







Pull line blowing in conduits (ø 18-50 mm)

8. Blowing mode with EZ50

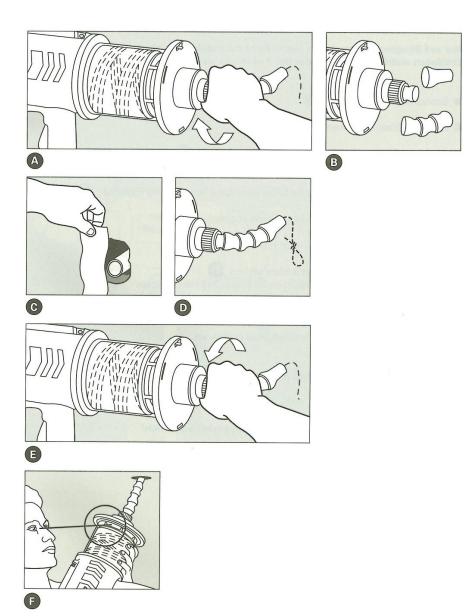
- 1. Duct ends must be cut off cleanly and evenly
- Choose the duct end on higher level to blow the pull line
- Make sure that line brake is applied (A)
- 4. Fit appropriate nozzle / joints to the conduit diameter (use a max 2 to 3 joints)
- Firstly blow the duct through with air only (max. 30 sec) to blow dirt, dust, water out
- 6. Position control person near the duct end / exit
- 7. Check quantity of air exiting (Caution: wear protective goggles/glasses)
- 8. Make a small loop at the end of the pull line (max 2 to 3 cm, shorten the overhanging end of the string) or attach the bead

 •• Output

 ••
- Release line brake
- 10. Insert the loop / bead in the duct and place the nozzle
- Start blowing without interruption during max. 30 seconds (thermal protection switch)
- 12. Observe the uncoiling procedure in the pull line cylinder
- 13. DO NOT block the air inlet / grid on the rear of the device with clothing or body!
- 14. Control person: once the pull line has come out, stop the air flow by putting your finger over the end of the duct (prevents further uncoiling of the line)
- Stop blowing and immediately stop the air flow closing the nozzle with your finger
- 16. Apply line brake
- 17. Cut off the pull line
- 18. Secure the blown pull line to the duct ends

The line brake must always be applied when device is not in use!







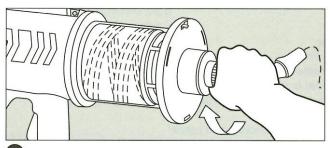
9. Suction mode with EZ50

Only start over to suction mode if the conduit has been blown through and you cannot blow the pull line in or if the conduit is hard to access.

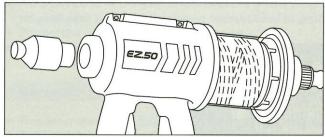
- Make sure the conduit is clean inside (water → engine damage)
- Duct ends must be cut off cleanly and evenly
- If possible, choose higher duct end
- 4. Make sure line brake is engaged A
- 5. Remove the joints / nozzle from the front panel
- 6. On the rear of the unit, screw in the suction device
- 7. Fit nozzle appropriate to duct diameter (use joints if necessary)
- 8. At the other end of the duct (where device is not in use) position the assistant with a pull line roll in foil
- 9. Put the pull line roll in foil on the floor **(D)**
- 10. Make a small loop (about 2 to 3 cm) in the beginning of the pull line
- 11. Hold loop in duct for suction flow
- 12. Place the nozzle in the beginning of the duct
- 13. Start suction mode: introduce line gradually by hand (wear gloves) until suction flow gets grip on the line
- 14. Suck the line through without interruption approx. 30 sec (thermal protection switch)
- 15. Stop suction mode once the line has come out at the duct end
- 16. Apply line brake
- 17. Cut off the line and sure it to the duct ends
- 18. Clean grid after each suction

Once you have completed the suction procedure, always remove the suction device!

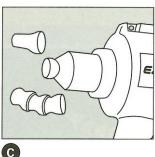


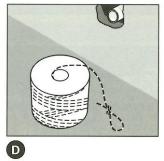






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10. Cleaning

Disconnect the main plug

Clean the unit with a damp cloth

- Do not use solvents
- Never immerse in water
- Never poke objects of any kind into the device
- Do not open the housing
- Remove any residues from the screen

11. Storage

- If the device is not in use, disconnect the mains plug
- Store the unit in its original case to protect it from damage (with the Operating Instructions)
- · Protect the unit from moisture and dust
- Temperature range: 0 40°C, relative air humidity 40 to.90 %

12. Transport

- Transport the unit in its original carrying case, making sure it is correctly closed
- If the unit is dispatched by any mode of transport, it must be in original carrying case, correctly closed and secured (closures secured with cable ties)



13. Troubleshooting

Motor not working

- check power supply and cable
- Thermal circuit breaker triggered (wait approx. 30 min for cool down)

Insufficient air exiting from end of conduit

- · Cap on conduit outlet?
- Conduit badly kinked? ► try from the other end or try suction mode
- Air intake screen blocked?
- Correct nozzle diameter?

Line not uncoiling

- Line brake released?
- Line roll has necessary clearance?
- · Grid (air inlet) blocked by clothing/object?
- Grid (air inlet) dirty?
- Too many joints connected?
- Cap on conduit outlet?

Blow out approx. 5 m of line to check uncoiling (you may pull manually if necessary)
Still blocked? → insert new line roll



Pull line blowing in conduits (ø 18-50 mm)

14. Support			
First Name:	Company:		
Last Name:	Phone:		
e-mail:	Webside:		
tube outside Ø: m	nm tube length: m		
Rohrinnen Ø: mm			
Does air go through the tube? O yes O no Pression compressor? bar Volume compressor? m³/min Is there water in the tube? O yes O no O don't know			
Have you tried to blow from opposite?	yes O no		
Tube occupied? O yes O no			
How far did you blow the pull line?	meter		
Is the tube diameter identical along the way? O yes O no			
More useful information			



15. Service and Maintenance

ZEITLER AG recommends that you have servicing and repair work carried out exclusively by an authorized servicing dealer for EZ50. Service dealers are regularly given the opportunity to attend training courses and are supplied with the necessary technical information.

Only use genuine replacement parts and accessories that are explicitly approved for the EZ50 by ZEITLER AG. These parts are specifically designed to match your machine model and meet your performance requirements and also to avoid the risk of accidents and damage to the machine .If you have any question in this respect, consult an authorized servicing dealer.

In the absence of alternative arrangements, the manufacturer's or importer's service will include

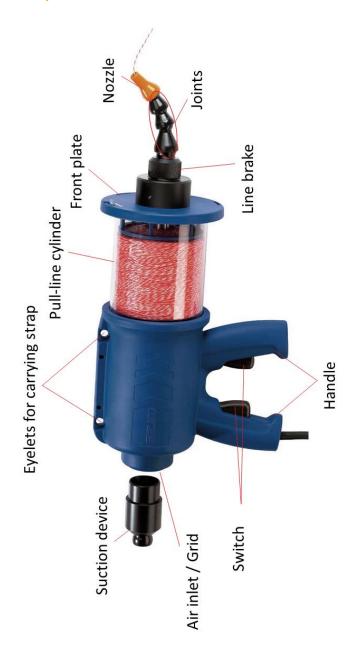
- restoration to the original as-delivered condition
- restoration to the original equipment included in the scope of supply

The user is responsible for all damage caused by non-observance of the safety precautions and operating and maintenance details in the Operating Instructions. Given the situation, all warranty rights are nil. This includes in particular:

- Alterations or modifications to the product not approved by ZEITLER AG
- Using tools or accessories which are neither approved or suitable for the product or are of a poor quality
- Using the product for purposes for which it was not designed.
- Using the product for sports or competitive events.
- Consequential damage caused by continuing to use the product with defective components.



16. Main parts EZ50





17. Special accessories (assembling and usage)

Shuttle

Assembling at each end of axle

2 washers

1 disk

1 screw with hole

Tighten with the two open end wrenches



Disc black - Standard operation with normal ducts and flexible pipes,

- also for deformed, dirty or dusty ducts

- diameter corresponds to 70% if inner duct diameter

Disc white - suitable to expel condensation or storm water

- possibility to calibrate duct.

- diameter corresponds to 90% if inner duct diameter

Parachute

able to pass narrowings up to ø 30 mm

- to be used at extremely dirty pipes and even in pipe systems with different diameters.
- might be used to blow into occupied ducts.

Art. 100309 Parachute for duct ID 30 - 60 mm



18. Technical Data EZ50

Standard version for internal conduit diameters from 18 to 50 mm.

Electrical data as per country

see type plate

Weight 4 kgs

Pull line approx. 900 m/roll

Dimensions



Thermal circuit breaker

Maximum air flow rate

 $\begin{array}{cccc} \text{Blowing mode} & & 4 \text{ m}^3\text{/h} \\ \text{Suction mode} & & 4 \text{ m}^3\text{/h} \end{array}$

We reserve the right to make technical modifications without notice.



19. Guarantee / Legal Details

- We guarantee to rectify free-of-charge any defects or shortages affecting the device within the guarantee period that are due to material or manufacturing faults
- 2. The guarantee period is 24 months and starts with the purchase by the first ultimate buyer. The date on the original sales voucher shall apply here.
- 3. The following are excluded from the guarantee:
 - Parts that are subject to wear and tear due to normal use or other natural causes, as well as defects in the device, which are also due to wear and tear due to normal use or other natural causes
 - Defects affecting the device which are due to the non-observance of the Operating Instructions, improper use, anomalous environmental conditions, incorrect operating conditions, overloading or a lack of proper maintenance and care
 - Device defects caused by the use of accessories and/or spare parts that do not originate from the manufacturer of the Pull Line Blower.
 - Devices that have been subjected to modifications or additions.
 - Minor deviations from reference properties which are immaterial as regards the value and suitability for use of the device.
- 4. The rectification of faults we recognise as being under guarantee will take place in such a way that we will repair the faulty device without charge or replace it with a device in perfect condition (if necessary a subsequent model), according to our choice. Any devices or parts that have been replaced automatically become our property.
- 5. Any claims under guarantee must be made within the guarantee period. The device affected is to be delivered to the seller or manufacturer in its original carrying case (if despatched by some means of transport, the closures must be secured additionally). The device must always be accompanied by the original sales voucher, as well as details of the date and purchase and product. Devices that have been opened up are no longer covered by the guarantee. All transport costs and risks will be to the account of the buyer.
- 6. Any claims other than the right to rectification of device faults nominated in these guarantee conditions are not covered by this guarantee.
- 7. Any services carried out under guarantee do not extend or renew the guarantee period for the device.

Swiss law shall apply.

The legal domicile is the location of the manufacturer's head office.

20. EC Declaration of Conformity

Manufacturer: ZEITLER AG

Sonnhalde 7

CH-6206 Neuenkirch SWITZERLAND

Certify that the new machine described below

Category: Tool to blow in or suck out special pull line inconduits

Make: Pull Line Blower

Model: EZ50

Conform to the specification of Directives

SECURITY EN 60745-1 : 2009

EMV EN 55014-1: 2006 + A1: 2009

EN 55014-2:1997 + A1: 2001 + A2:2008

EN 61000-3-2: 2006 + A1: 2009, AN 61000-3-3: 2008

EMF EN 50366 : 2003 + A1 : 2006

Following the provisions of directives:

2006/95/EC + 2004/108/EC + 2002/95/EC + 2002/96/EC

Définition: 2009

Person authorized to arrange technical information:

Markus Zeitler Zeitler AG

6206-Neuenkirch (Schweiz)

Markus Zeitler

Serial number and year of manufacture are given on the type plate of the Pull Line Blower