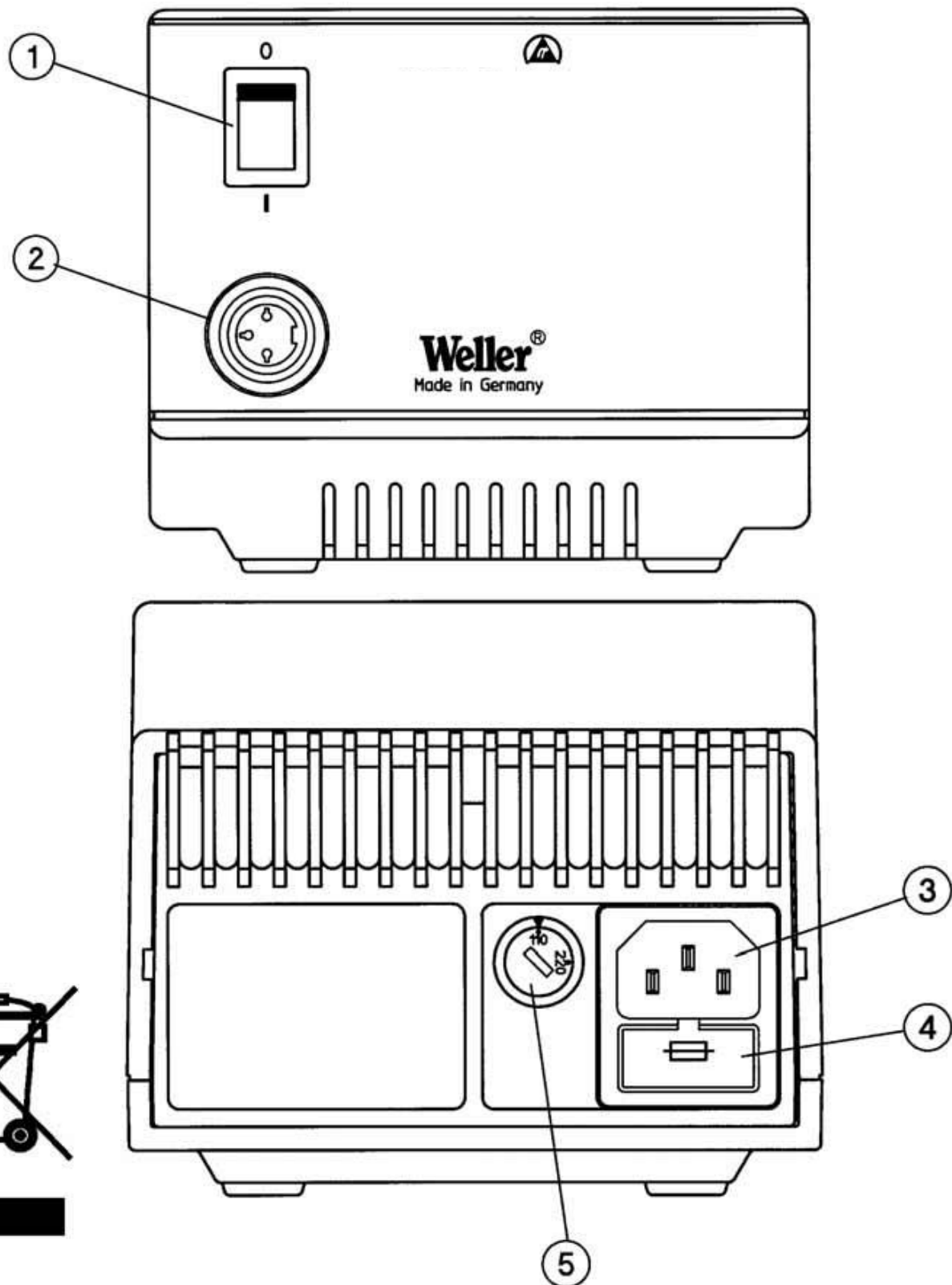


Weller®

WTCP 51



Betriebsanleitung - Operating Instructions - Mode d'emploi - Istruzioni per l'uso - Manual de uso - Manual do utilizador - Gebruiksaanwijzing - Instruktionsbok - Betjeningsvejledning - Käyttöohjeet - Οδηγίες Λειτουργίας - Kullanım kılavuzu - Návod k použití - Instrukcja obsługi - Uzemeltetési utasítás - Návod na používanie - Navodila za uporabo - Kasutusjuhend - Naudojimo instrukcija - Lietošanas instrukcija



1. Netzschalter
2. 3-pol. Anschlussbuchse für Magnastatlötkolben
3. Netzanschluss
4. Netzsicherung
5. Spannungswahlschalter (nur umschaltbare Version)

1. Interrupteur général
2. Prise trois broches pour fer à souder Magnastat
3. Raccordement secteur
4. Fusible secteur
5. Sélecteur de tension (uniquement version commutable)

1. Netschakelaar
2. 3-polige aansluitcontactdoos voor Magnastat-soldeerbout
3. Netaansluiting
4. Netzekering
5. Spanningskeuzeschakelaar (alleen omschakelbare versie)

Thank you for placing your trust in our company by purchasing the Weller Soldering Station WTCP 51. Production was based on stringent quality requirements which guarantee the perfect operation of the device.

1. Caution!

Please read these Operating Instructions and the attached safety information carefully prior to initial operation. Failure to observe the safety regulations results in a risk to life and limb.

The manufacturer shall not be liable for damage resulting from misuse of the machine or unauthorised alterations.

The Weller Soldering Station WTCP 51 corresponds to the EC Declaration of Conformity in accordance with the basic safety requirements of Directives 2004/108/EC and 2006/95/EC.

2. Description

The soldering Station WTCP 51 is best suited for soldering electrically or thermally sensitive electronic components. Temperature regulation is carried out using the WELLER Magnastat principle.

The permanent magnet is attracted to the ferromagnetic temperature sensor when the tip is cold. This causes the switch to switch on. As the sensor approaches the Curie-point, it loses its ferromagnetic properties and can no longer hold the permanent magnet. The magnet releases causing the switch to switch off, thereby interrupting the feed to the heating element. When the tip cools, the temperature sensor attracts the permanent magnet again and restores the current feed. There is little deviation between different temperature sensors (Magnestats) and they are not subject to wear due to ageing or material fatigue. An addition feature of this arrangement is that the soldering iron is switched off when changing tips. The heating element cannot burn out from use without a soldering tip.

Picture: Weller Magnastat system, see page 41

Selection of the correct working temperature is carried out by simply selecting the temperature coded soldering tip. The WELLER "Longlife" soldering tips are available in the temperatures 260°C, 310°C, 370°C, 425°C and 480°C. The lifetime of the WELLER "Longlife" soldering tip is lengthened substantially by the electroplated finish on the copper core. There are 22 different soldering tip forms to choose from. You can choose the optimal tip from one of these.

The Magnastat soldering iron **TCP-S*** is electrically isolated from mains and operates with a protective low voltage of 24 V AC or DC. The soldering iron comes standard with a temperature resistant silicon cord and a WELLER "Longlife" PT-B7 soldering tip.

* Information contained in the Operation Manuals of any other connected WELLER tools should be observed in addition to the information contained in this Operation Manual.

Technical Data

| | |
|-----------------------|---|
| Dimensions L X W X H: | 166 X 115 X 101 |
| Mains voltage (3): | 230 V (240 V, 120 V) 50 (60) Hz |
| Heating voltage: | 24 V 50(60) Hz |
| Soldering iron power: | max. 50 W at 24 V |
| Mains fuse (4): | T0.315 A |
| Regulation: | 2-point regulation with temperature sensor |

3. Commissioning

Fasten the holder spring with funnel to the foot plate of the soldering iron holder (see exploded view) and soak the cleaning sponge with water. Place the soldering iron into the safety support rack. Insert the soldering iron plug into the 3-channel connection socket (2) of the control unit and lock it. Connect the control unit to mains (3). Be sure to check for the correct voltage. Switch on the unit at the mains switch (1). When using a tip for the first time, tin the end of the soldering tip with solder. This removes any layers of oxidation and contaminants from the soldering tip.

4. Equipotential bonding

The soldering tip is connected directly to the mains earth via the electrical cable (hard earthing).

5. Instruction for use

Always be sure that the soldering tip is properly tinned during pauses in soldering and when replacing the soldering iron into the holder. Don't use aggressive fluxing agents.

Any mechanical treatment of the soldering tip destroys the electro-plated protective coating of the soldering tip and decreases its lifetime.

Do not immediately run the heating element along iron or expose it to an alternating electrical field. This can influence the regulation system.

When soldering and desoldering, take into consideration the soldering instructions of the components, particularly their temperature limits.

6. Accessories

- T005 32 152 99 FE50M Magnastat soldering iron with device for solder fume extraction
- T005 32 099 99 Extension cord 4m
- T005 41 734 99 DIL-16-WG desoldering tip dual in line 16
- T005 13 040 99 Desoldering set DS-7

7. Scope of supply

- Power unit P 51
- Soldering iron TCP S
- Safety support rack KH 20
- Operation Manual
- Safety Information

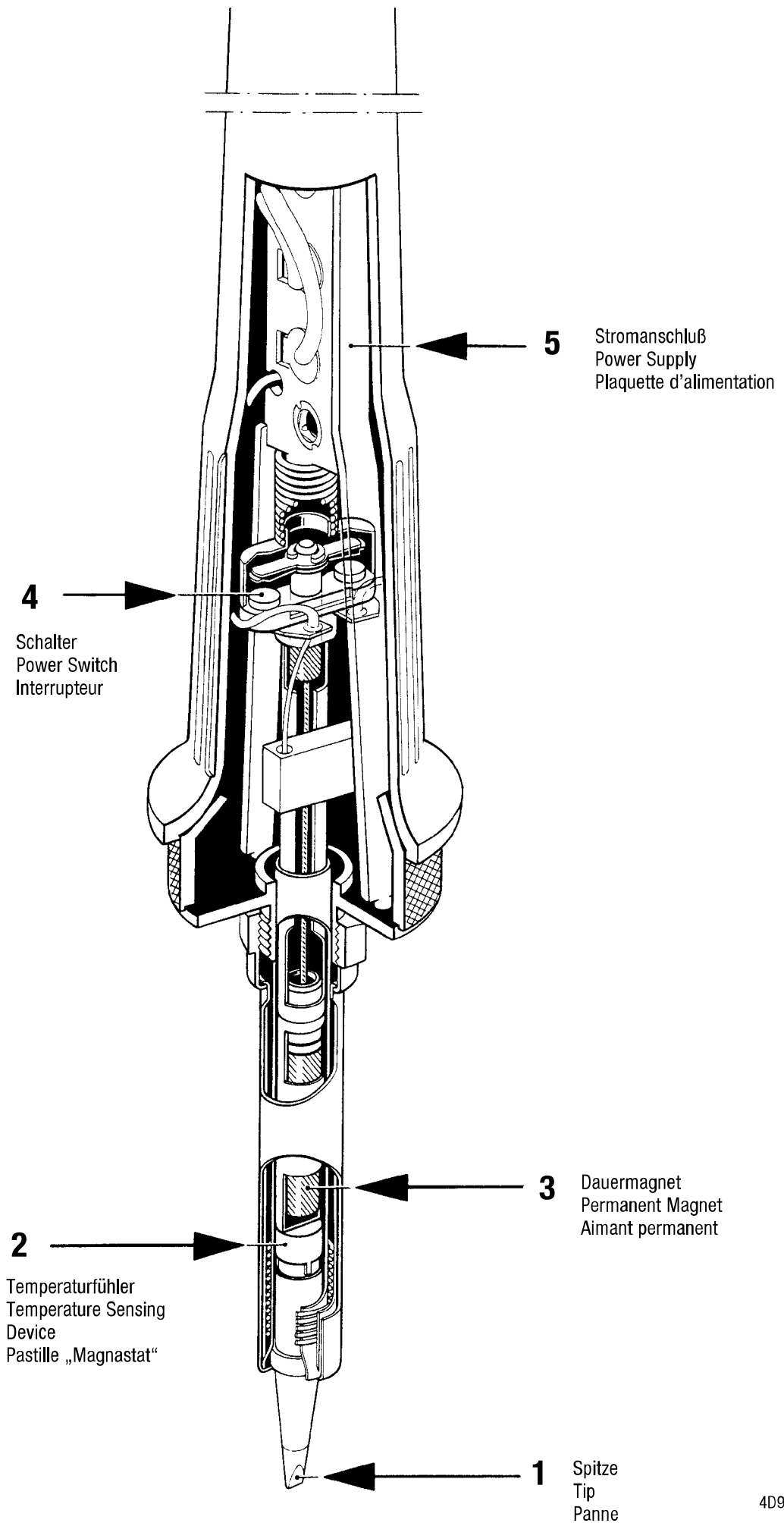
Picture: Soldering tip choices, see page 43

Picture: Circuit diagram, see page 50

Picture: Exploded view, see page 49

Subject to technical alterations and amendments!

See the updated operating instructions at www.weller-tools.com.



1. Spitze
2. Temperaturfühler
3. Dauermagnet
4. Schalter
5. Stromanschluss

1. Netkontakt
2. Netkontakt 1-polig , ikke belyst
3. Potentialudlingsbøsning
4. Magnastat-kontakt
5. Radiator

1. Csúcs
2. Hőmérsékletérzékelő
3. Állandó mágnes
4. Kapcsoló
5. Áramcsatlakozó

1. Fiche secteur
2. Interrupteur général unipolaire sans voyant
3. Plot d'équilibrage de potentiel
4. Interrupteur Magnastat
5. Élément chauffant

1. Ficha de ligação à rede
2. Interruptor de rede de um pólo, sem iluminação
3. Jaque de compensação de potencial
4. Interruptor Magnastat
5. Elemento de aquecimento

1. Hrot
2. Snímač teploty
3. Trvalý magnet
4. Spínač
5. Sieťová prípojka

1. Netstekker
2. Netschakelaar 1-polig onverlicht
3. Potentiaalcompensatiecontactdoos
4. Magnastat-schakelaar
5. Verwarmingselement

1. Verkkopistoke
2. Verkkokytkin, yksinapainen, valai sematon
3. Potentiaalitasausliitin
4. Magnastat-kytkin
5. Lämpöelementti

1. Konica
2. Temperaturni senzor
3. Trajni magnet
4. Stikalo
5. Priključek za dovod el. toka

1. Spina di rete
2. Interruttore di rete ad 1 polo non illuminato
3. Presa di compensazione di potenziale
4. Interruttore Magnastat
5. Elemento radiante

1. Ακροδέκτης-Ρευματοληπτής
2. φύσα
3. Διακόπτης λειτουργίας μονοπολικός μη φωτιζόμενος
4. Υποδοχή-φύσα εξίσωσης δυναμικού
5. θερμαντικό στοιχείο

1. Otsik
2. Temperatuurindur
3. Püsimagnet
4. Lüliti
5. Võrguühendus

1. Mains plug
2. Mains switch 1-pole not illuminated
3. Potential equalisation socket
4. Magnastat switch
5. Heating element

1. Elektrik kablosu
2. 1 uçlu şıksız elektrik şalteri
3. Potansiyel denkleme girişi
4. Magnastat şalteri
5. Isıtıcı eleman

1. Smaigalys
2. Temperatūros jutiklis
3. Nuolatinis magnetas
4. Jungiklis
5. Elektros tinklo prijungimo lizdas

1. Nätstickpropp
2. Nätstömbrytare 1-polig obelyst
3. Potentialanpassningshylsa
4. Magnastat-brytare
5. Värmeelement

1. Hrot
2. Snímač teploty
3. Trvalý magnet
4. Spínač
5. Proudová přípojka

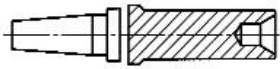
1. Galva
2. Temperatūru pievads
3. Ilgdarbības magnēts
4. Slēdzis
5. Strāvas pieslēgums

1. Enchufe a la red
2. Interruptor general unipolar (sin iluminación)
3. Conector de balance de potencial
4. Interruptor Magnastat
5. Elemento calefactor

1. Grot
2. Czujnik temperatury
3. Magnes trwały
4. Włącznik
5. Przewłaczce prądowe

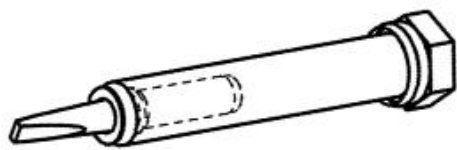
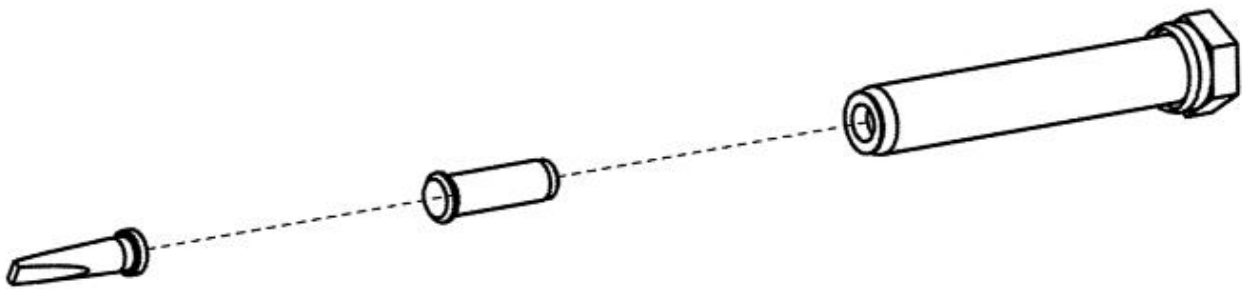
Beschreibung / Modell
Description / Model

Bestell-Nr.
Order-No.



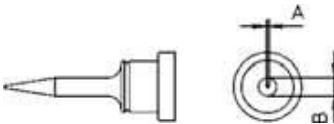
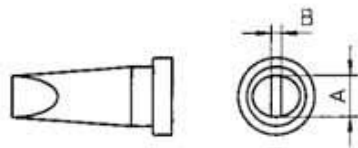
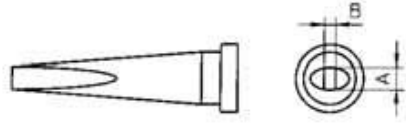
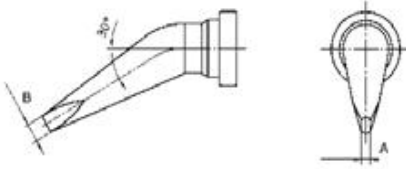
PT-LT-Adapter with barrel
 PT5-LT
 PT6-LT
 PT7-LT
 PT8-LT
 PT9-LT

T005 87 207 85
 T005 87 207 86
 T005 87 207 87
 T005 87 207 88
 T005 87 207 89



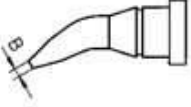


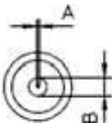
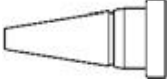

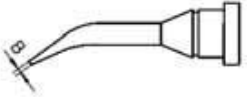
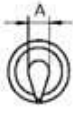
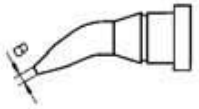





1. LT- Longlife- Tip
2. LT Adapter
3. Barrel

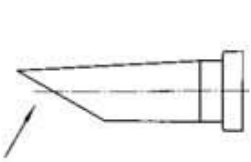



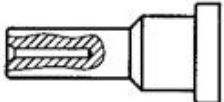
LT- Spitzen Soldering Tips

| | Bestell-Nr. Order-No | Modell Model | Beschreibung Description | Breite A Width A | Dicke B Length B | Länge C Length C |
|---|---------------------------------|-------------------------|-------------------------------------|-----------------------------|-----------------------------|-----------------------------|
|  | T005 44 494 00 | LT 1SC | Meißelform Chisel tip | 0,4 mm | 0,15 mm | 15,0 mm |
| | T005 44 497 99 | LT 1SCNW | Meißelform Chisel tip | 0,3 mm | 0,1 mm | 15,0 mm |
|  | T005 44 412 00 | LT H | Meißelform Chisel tip | 0,8 mm | 0,4 mm | 13,5 mm |
| | T005 44 403 00 | LT A | Meißelform Chisel tip | 1,6 mm | 0,7 mm | 13,5 mm |
| | T005 44 405 00 | LT B | Meißelform Chisel tip | 2,4 mm | 0,8 mm | 13,5 mm |
| | T005 44 407 00 | LT C | Meißelform Chisel tip | 3,2 mm | 0,8 mm | 13,5 mm |
| | T005 44 409 00 | LT D | Meißelform Chisel tip | 4,6 mm | 0,8 mm | 13,5 mm |
| | T005 44 448 00 | LT DLL | Meißelform Chisel tip | 4,6 mm | 0,8 mm | 13,5 mm |
| | T005 44 430 99 | LT HHPB | Meißelform* Chisel tip* | 0,8 mm | 0,4 mm | 13,5 mm |
| | T005 44 431 99 | LT AHPB | Meißelform* Chisel tip* | 1,6 mm | 0,7 mm | 13,5 mm |
| | T005 44 432 99 | LT BHPB | Meißelform* Chisel tip* | 2,4 mm | 0,8 mm | 13,5 mm |
| | T005 44 483 00 | LT DHPB | Meißelform* Chisel tip* | 4,6 mm | 0,8 mm | 13,5 mm |
|  | T005 44 413 00 | LT K | Meißelform lang Chisel long | 1,2 mm | 0,4 mm | 21,0 mm |
| | T005 44 414 00 | LT L | Meißelform lang Chisel long | 2,0 mm | 1,0 mm | 21,0 mm |
| | T005 44 415 00 | LT M | Meißelform lang Chisel long | 3,2 mm | 1,2 mm | 21,0 mm |
|  | T005 44 420 99 | LT HX | Meißelform gebogen Chisel bent | 0,8 mm | 0,4 mm | 18,0 mm |
| | T005 44 443 00 | LT ALX | Meißelform gebogen Chisel bent | 1,6 mm | 0,7 mm | 18,0 mm |
| | T005 44 442 00 | LT BX | Meißelform gebogen Chisel bent | 2,4 mm | 0,8 mm | 18,0 mm |

* HPB Lot = für Lote mit hohem Bleianteil

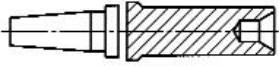
* HPB solder = for solder alloy with high lead content

| | | Bestell-Nr. Order-No | Modell Model | Beschreibung Description | Breite A Width A | Dicke B Length B | Länge C Length C |
|---|---|-------------------------|-----------------|---|---------------------|---------------------|---------------------|
|  |  | T005 44 427 00 | LT AX | Meißelform gebogen 30° Chisel bent 30° | 1,6 mm | 0,8 mm | 13,5 mm |
| | | T005 44 439 99 | LT 4X | Meißelform gebogen 30° Chisel bent 30° | ∅ 1,2 mm | 0,4 mm | 16,5 mm |
| | | T005 44 469 00 | LT MX | Meißelform gebogen 30° Chisel bent 30° | ∅ 3,2 mm | 0,8 mm | 19,3 mm |
|  |  | T005 44 436 99 | LT 1S | Rundform schlank Round slim | ∅ 0,2 mm | | 15,0 mm |
| | | T005 44 496 00 | LT 1SNW | Rundform schlank unbenetzbar Round slim unwettable | ∅ 1,0 mm | | |
| | | T005 44 488 99 | LT1SA | Rundform Round | ∅ 0,5 mm | | 16,0 mm |
|  |  | T005 44 435 99 | LT 1 | Rundform Round | ∅ 0,25 mm | | 14,0 mm |
| | | T005 44 489 99 | LT 1A | Rundform Round | ∅ 0,5 mm | | 14,0 mm |
| | | T005 44 404 00 | LT AS | Rundform Round | ∅ 1,6 mm | | 13,5 mm |
| | | T005 44 411 00 | LT CS | Rundform Round | ∅ 3,2 mm | | 13,5 mm |
|  |  | T005 44 426 99 | LT 1SLX | Rundform schlank gebogen Round slim bent | ∅ 2,0 mm | ∅ 0,4 mm | 20,5 mm |
|  |  | T005 44 425 99 | LT 1X | Rundform gebogen 30° Round bent 30° | ∅ 0,4 mm | | 12,5 mm |
|  |  | T005 44 439 99 | LT 4 | Rundform abgeschrägt 45° schlank Round sloped 45° slim | ∅ 1,2 mm | | 15,0 mm |
|  |  | T005 44 408 00 | LT F | Rundform abgeschrägt 45° Round sloped 45° | ∅ 1,2 mm | | 13,5 mm |

| | Bestell-Nr. Order-No | Modell Model | Beschreibung Description | Breite A Width A | Dicke B Length B | Länge C Length C |
|---|-------------------------|-----------------|--|---------------------|---------------------|---------------------|
|  | T005 44 487 00 | LT AA60 | Rundform abgeschrägt 60° lang Round slopes 60° long | 1,6 mm | 4,0 mm | 13,0 mm |
| | T005 44 444 00 | LT BB60 | Rundform abgeschrägt 60° lang Round slopes 60° long | 2,4 mm | 4,0 mm | 18,0 mm |
| | T005 44 445 00 | LT CC60 | Rundform abgeschrägt 60° lang Round sloped 60° long | 3,2 mm | 6,0 mm | 18,0 mm |
|  | T005 44 423 99 | LT 1L | Konisch lang Conical long | ∅ 0,2 mm | | 26,4 mm |
| | T005 44 498 00 | LT 1LNW | Kon. lang unbenetzbar Conical long unwettable | ∅ 1,0 mm | | |
| | T005 44 406 99 | LT S | Konisch lang Conical long | ∅ 0,4 mm | | 21,0 mm |
| | T005 44 482 00 | LT T | Konisch lang Conical long | ∅ 0,6 mm | | 13,0 mm |
| | T005 44 481 00 | LT 0 | Konisch lang Conical long | ∅ 0,8 mm | | 17,0 mm |
|  | T005 44 424 99 | LT 1LX | Konisch lang gebogen Conical long bent | ∅ 0,2 mm | | 24,0 mm |
|  | T005 44 410 00 | LT GW | Lotdepotspitze 45° Gull wing 45° | ∅ 2,3 mm | 3,2 mm | 17,0 mm |
| | T005 44 479 00 | LT KN | Messerspitze Knife tip | | 6,2 mm | 16,5 mm |
|  | T005 44 416 00 | | LT Messspitze für Thermoelement ∅ 0,5 mm LT Measuring tip for thermo element ∅ 0,5 mm | | | |
| | T005 44 449 99 | | LT Einschraubspitze mit M4 Außengewinde LT Screw in tip with M4 outside thread | | | |
| | T005 44 495 99 | | LT Lötspitzenset mit 40 verschiedenen Spitzen LT tip set with 40 different LT tips | | | |

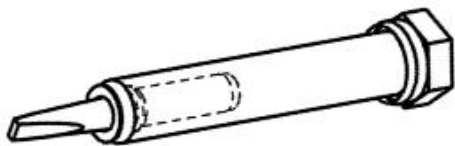
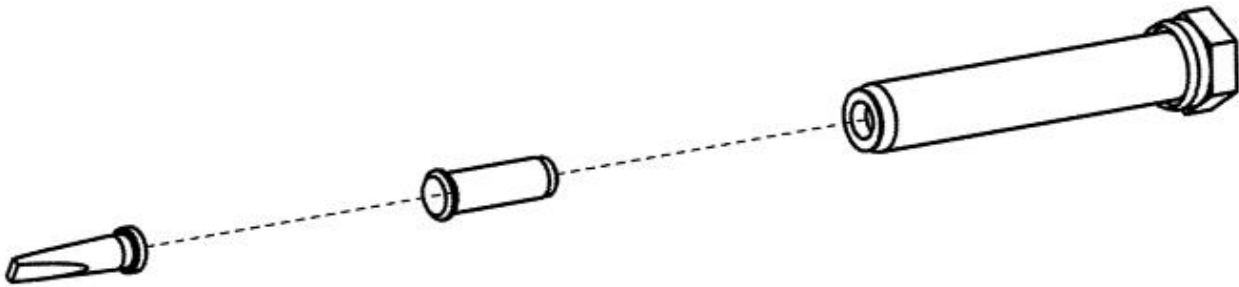
Beschreibung / Modell
Description / Model

Bestell-Nr.
Order-No.

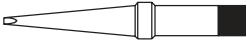
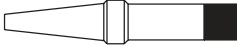
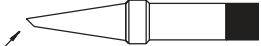




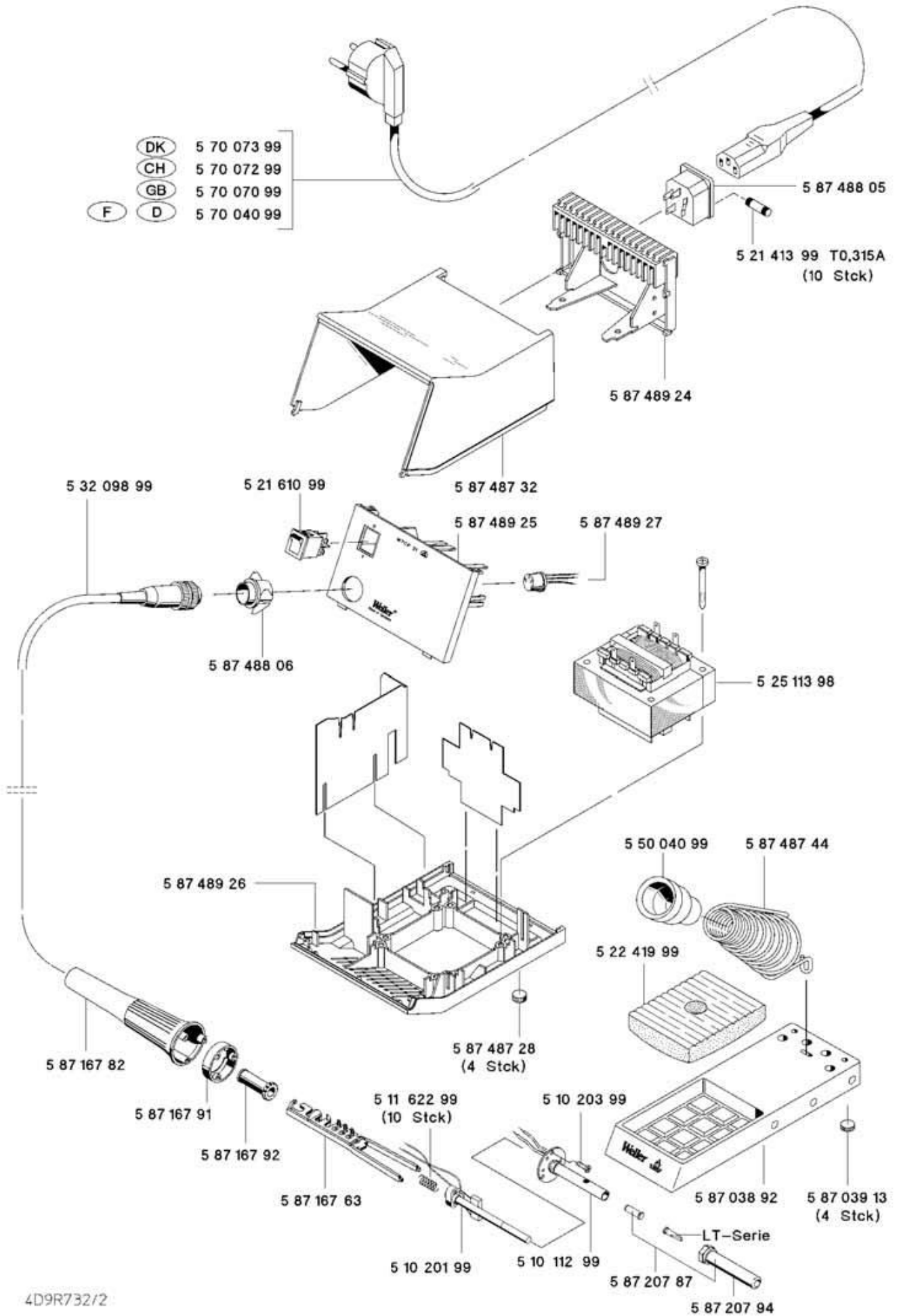
Barrel for ET, PT Tip
Barrel for LT

T005 10 311 99
T005 87 207 94

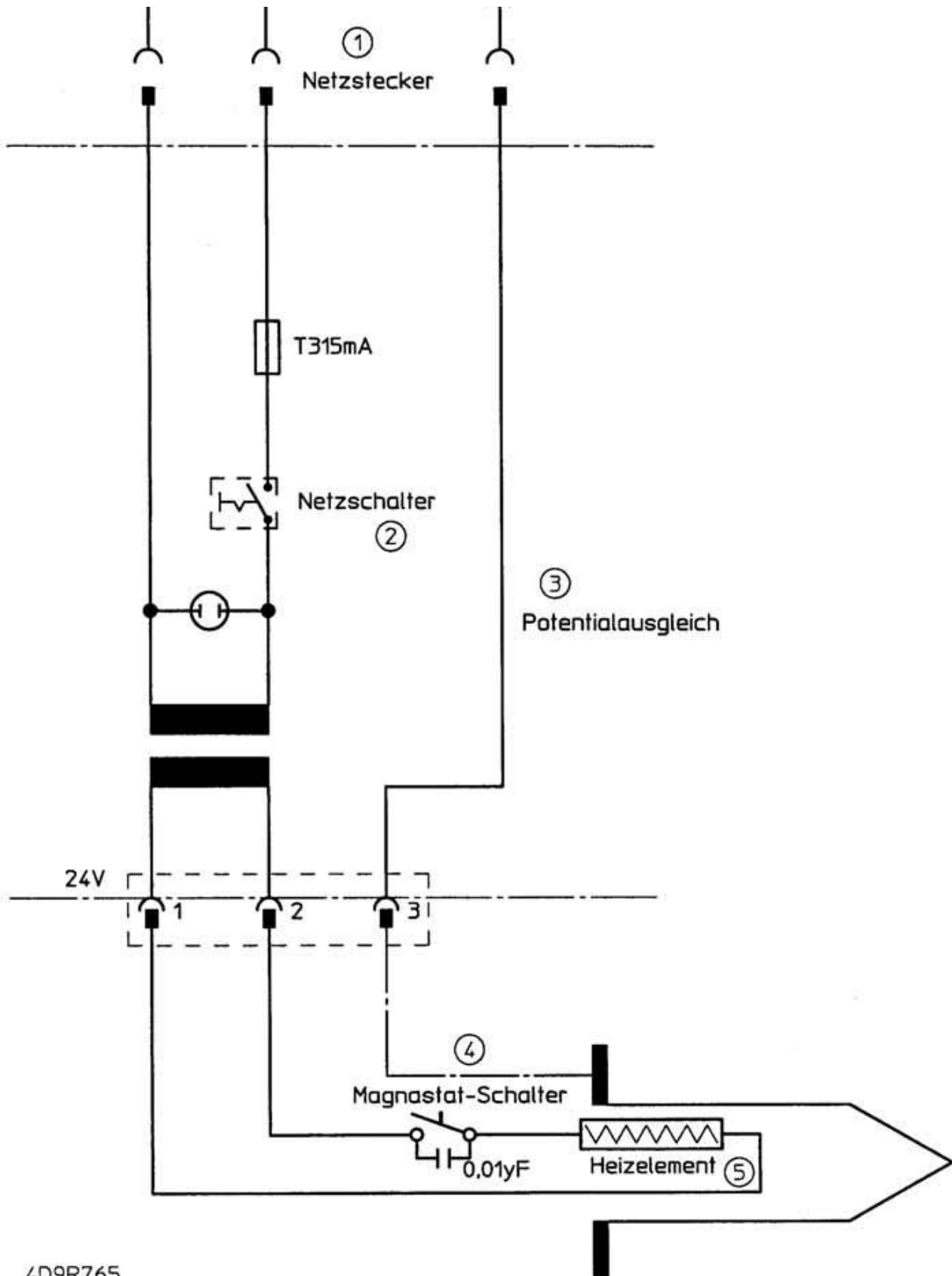


1. PT- Longlife- Tip
2. PT Adapter
3. Barrel

| Modell Model | Best-Nr. mit Standard-Temperaturbereichen Order-No. for standard temperatures of regular tips | | | | Breite A Width A | Dicke B Length B |
|---|--|----------------|-----------|--------|--|---------------------|
| | 310°C | 370°C | 425°C | 480°C | | |
| Meisselform lang Chisel long | 4PTK6 | 4PTK7 | 4PTK8 | | 1,2 mm | 0,4 mm |
|  | 4PTL6 | 4PTL7 | 4PTL8 | | 2,0 mm | 1,0 mm |
| | | 4PTM7 | 4PTM8 | 4PTM9 | 3,2 mm | 1,2 mm |
| Meisselform gebogen, eine Seite benetzbar Chisel bent, one side wettable | | T005 41 307 99 | | | 3,2 mm | 1,2 mm |
| Rundform Conical Blunt Tip | | 4PTCS7 | | | Ø 3,2 mm | |
|  | | 4PTDS7 | | | Ø 5,0 mm | |
| | | 4PTS7 | 4PTS8 | | Ø 0,4 mm | |
| | 4PTO6 | 4PTO7 | 4PTO8 | | Ø 0,8 mm | |
| Rundform, abgeschragt Screwdriver Tip | | 4PTF7 | 4PTF8 | | Ø 1,2 mm | |
|  | | 4PTAA7 | 4PTAA8 | 4PTAA9 | Ø 1,6 mm | |
| | | 4PTBB7 | 4PTBB8 | 4PTBB9 | Ø 2,4 mm | |
| | | 4PTCC7 | 4PTCC8 | 4PTCC9 | Ø 3,2 mm | |
| | | 4PTDD7 | 4PTDD8 | 4PTDD9 | Ø 5,0 mm | |
|  | | T005 41 735 99 | DIL 16WGN | | Entlötspitze für Dual-In-Line 310°C Desoldering tip for Dual-In-Line 310°C | |
|  | | T005 13 041 99 | DS 7N | | Entlötaufsatz 370°C Desoldering attachment 370°C | |
| | | T005 13 804 99 | | | Ersatzspitzen für Entlötaufsatz DS 7, Ø 1,53 mm Spare tipllet for desoldering attachment DS 7. Ø 1,5 mm | |



4D9R732/2



4D9R765

4D9R765
24.01.02 / Martin

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T005 56 800 10 / 10.2012
T005 56 800 09 / 05.2011

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