# TOOL fox

The right tool for every application

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# PHOENIX CONTACT – In dialog with customers and partners worldwide

Phoenix Contact is one of the leading manufacturers of electrical connection and industrial automation technology. Founded over 80 years ago, the company now employs 9,900 people all over the world, more than 5,500 of whom are in Germany. A sales network with over 46 subsidiaries and more than 30 additional sales partners guarantees customer proximity directly on-site.

The product range comprises first class components, systems and services for a wide range of applications – the offer ranges right from modular terminal blocks to interface technology, PCB connection methods, solutions for surge protection through to hardware and software solutions for the automation of industrial systems.



#### Global player with customer proximity

Independence of the company is an integral part of the corporate policy. Phoenix Contact therefore places great importance on in-house competence and expertise: The design and development departments continuously implement innovative ideas in products to develop special solutions to meet customer requirements. Numerous patents emphasize the fact that many products are Phoenix Contact's own developments.

#### **TOOL** fox – The right tool for every case

Phoenix Contact offers the complete range of professional processing and measuring tools for all applications in electrical engineering. The tool for cutting, stripping, pressing, crimping, screwing and testing convinces with good handling and excellent quality. Automatic cutting, stripping and crimping devices are available for automation of steps. Only professional tools facilitate very good results.

Quality, precision, durability and effectiveness are the basis for our tools.

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#### Quality at the tip of your fingers

Ergonomically designed handles

- Optimal transmission of lever action reduces manual forces by 25%
- Use of high-quality materials with special hardened tool steels that ensure maximum durability

# **TOOL fox** Tool expertise

The most significant feature of a professional tool: It's fun to work with!

Good haptics and ergonomics, durability and functionality guarantee high levels of efficiency and quality. The features are united in all the tools from Phoenix Contact.

Stripping

Cutting

CUTFOX cutting tools are characterized by especially hardened blades for high durability, increased force due to optimum transmission of lever action and slip-free dual-component handles. The WIREFOX stripping tools facilitate quick stripping by means of self-adjusting blades. This avoids any damage to the conductor. The ergonomic, light-weight and glass-fiber-reinforced pliers guarantee fatigue-free work. The CRIMPFOX crimping pliers attain optimum crimping results for all connectors even for large conductor cross-sections, with minimum forces. Equipped with a pressure lock, the pliers provide uniform high quality and gas-tight crimping.

報

Crimping

#### Cutting

#### The process chain starts with the trimming or cutting of conductor or line.

A correct processing of conductors and lines of different size, shape and insulation can be achieved permanently only with quality tools. Low manual exertion of force with maximum exploitation of force in the cutting area is guaranteed by an optimal transmission of lever action. If conductors and lines are to be cut in the upper cross-section range of up to 1400 mm<sup>2</sup>, the choice is limited to cable cutters with ratchet drive. The finely stepped down drives allow the manual force required to be kept to a minimum here too.



Shear cutting

For both versions with direct and indirect power transmission, the specifically designed cutting edge geometries support smooth running and ensure a right-angled and burrfree cut. Accidental deformation of the conductor is thus counteracted. The cutting described above, also called shear cutting, is listed under the generic term "splitting" in DIN 8588. Two blades move towards each other and thus cut (shear) the material without burring.

Bite cutting means two successively moving, wedge-shaped blades cut the material. The wedge angle of the blades is deliberately



Bite cutting

large and thus stable. In addition to the hardening of the entire tool, the cutting area is later on again hardened inductively to 62 HRC. Only this way it is possible to sever even extremely hard materials, e.g. piano wire and spring steel with a tensile strength of up to 2300 N/mm<sup>2</sup> without damaging the tool. Bite cutting is suitable to a limited extent for cutting through cables and lines.

When used accordingly, the CUTFOX cutting tools from Phoenix Contact have long-term stability and achieve permanently consistent results.

# Stripping

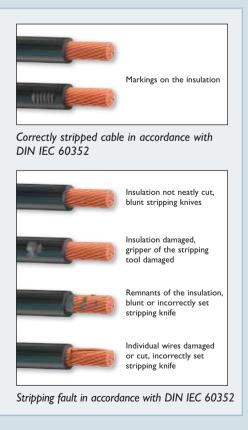
Stripping is the next step in the manufacturing process of reliable crimping. A distinction is made between stripping and dismantling.

Stripping is used both as a generic term and to mean removing the insulation of conductors up to 16 mm<sup>2</sup>. Dismantling describes the stripping process for large conductor cross-sections and multi-strand and multilayered lines and cables.

A suitable stripping and dismantling tool removes the insulation sections accurately and quickly. The terminal point or the connector determines the length of the insulation to be removed. This is set using adjustable limit stops and ensures consistent stripping lengths.

When removing the insulation, make sure that the individual inner wires or the braided shield are not damaged. The remaining insulation must not be damaged by the grip pressure, whereby pressure points and color changes on the insulation material as a result are permitted. Further faults that need to be prevented are stipulated in DIN IEC 60352. For processing special insulation materials, suitable blade geometries depending on the application are deployed. V blades are used for both hard (e.g. Teflon/Radox<sup>®</sup>) and soft ductile rubber insulations (silicone). The V blades cut the insulation all the way round unlike the straight blade geometry, thus reducing the tear-off forces.

It is advisable to use automatic stripping pliers of the WIREFOX pliers series from Phoenix Contact to meet these requirements.



## Crimping

#### Crimping also means the joining of contact and conductor mechanically.

Besides crimping, two more terms are also prevalent in the German-speaking area. The type of deformation plays a decisive role. On the basis of contact types, we distinguish between:

- Squeezing, for insulated cable lugs
- Pressing, for ferrules, non-insulated cable lugs and others

If e.g. flat connectors are processed, it is referred to as crimping.

In order to generate a reliable connection between contact and conductor, some important points must be observed

- · Correct connection of the conductor
- Conductor and contact compatible
- Correct positioning of the conductor in the contact

- Choice of suitable crimping tool
- Conductor and contact inserted in the appropriate die nest of the pliers

Professional crimping pliers are always equipped with a releasing pressure lock. It releases as soon as the required crimping pressure is applied. This eliminates the possibility of too little pressure. This guarantees the user a constant crimping result with maximum pull-out values.

If larger series of contacts are processed, automatic or semi automatic crimping machines are often implemented.

For subsequent assessment of crimping results, refer to the regulations DIN EN 60352-2 and 60999-1. In addition to a variety of electrical and mechanical tests, conductor pull-out tests are the decisive criterion. All tools of the WIREFOX pliers series from Phoenix Contact have been adjusted and tested according to valid regulations. Gas-tight crimping with long-term stability is achieved using these tools. Carefully thought-out mechanics reduce manual forces by 25%.

#### **Unique assignment**

A diagram of the connectors to be processed ensures an easy optical allocation.

#### 25% power saving Innovative mechanics red

Innovative mechanics reduce the force by 25%. Even large cross-sections can be safely crimped using little force.

#### **Ergonomic handling**

The dual-component handle ensures an optimum hold by means of a soft component with rough texture on the upper handle. The hard component on the lower handle, means that it slides without friction through the hand.

#### Manufactured precisely

Precisely manufactured dies provide a uniform and high quality during contact processing.

#### Easy to insert

The stable pliers head with optimal apex angle allows easy insertion of connectors of even larger cross-sections.

#### Toolless one-hand operation

If required, the pressure lock can be easily accessed for release yet is integrated in the handle to protect it.

### Non-slip pressure pad

A non-slip pressure pad for positioning on surfaces can assist the transmission of force.

## **Conductor pull-out test**

#### Conductor pull-out test according to DIN EN 60352-2

In practice, tractive forces can affect the crimping points during wiring or operation.

Therefore, crimped contacts must be wired correctly to offer a high degree of mechanical reliability. To test the tensile load capacity, the crimping must withstand a given tractive force relating to the crosssection for over 60 seconds. The tractive force exerts stress on the conductor at the crimping point. Crimping must hold without damage.

> The results of the tests for contacts from Phoenix Contact lie above the required minimum values stipulated in the standard.

Conductor of	cross-section	Pull-out force
mm <sup>2</sup>	AWG	N
0.14		18
	24	28
	• •	•
1.0		108
	16	135
	• •	•
6.0		360
	8	370

Minimum pull-out values for ferrules can be taken from DIN EN 60999-1.



#### Gas-tight

#### Gas tightness - test set-up based on DIN 50018

The key role of the metal parts of electrical connections becomes particularly apparent in aggressive environments. Corrosion-free contact areas are a prerequisite for low-resistance and thus powerful connections.

This testing method describes a corrosion test in condensation climates with an atmosphere that contains sulphur dioxide. Acidic compounds < Ph 7 form here and attack metal surfaces.

Two liters of distilled water and one liter of  $SO_2$  gas are introduced to the test chamber. At a testing temperature of 40°C during the course of the test, sulphurous acid is formed. After eight hours of testing, the test objects dry for 16 hours with an open door. At the end of the test, a visual inspection of the test objects is conducted. The contact resistance of the contacts is recorded in accordance with DIN EN 60512-2-1:2002 before and after the corrosion test and checked for changes caused by the effect of corrosion.

When used correctly, crimping tools and connectors from Phoenix Contact create a permanent, gas-tight connection at the contact points that cannot even be impaired by aggressive media.



The voltage drop must not exceed 3.2 mV before or after the test nor must it exceed 1.5 times the value measured at the start of the test.

# **CUTFOX/UNIFOX** Cutting and universal tools

Phoenix Contact has the perfect CUTFOX cable cutter for every application. There are different designs for processing cables with a diameter up to 100 mm. All parts of the cable cutters that are under particular strain are tempered or especially hardened.

An extensive range of UNIFOX combination tools is available for universal use. The safety tools equipped with non-slip dual-component handles are VDE-tested and marked.



**Maximum force transfer** With the ratchet machanism, the force required in the case of large conductor cross-sections up to 100 mm diameter is extremely low.



**Ergonomically designed** 

An innovative construction and non-slip handles with good grip ensure fatigue-free work.



**VDE tested safety** An extensive range of VDE tested combination tools is available for universal use.

# **CUTFOX** cutting tools

#### Front cable cutter

The front cable cutter ensures optimal cutting results in the cross-section range of a 35 mm diameter (300 mm<sup>2</sup>) by special cutting tool geometries. Handles with ergonomic grip support fatigue-free work.







Туре	Order no.	CUTFOX 12	1212128	CUTFOX 16 VDE	1212126	CUTFOX 18	1212129
Cross-section		up to 12 mm Ø (up to 35 m	m²)	up to 16 mm Ø (up to 50 mm <sup>2</sup> )		up to 18 mm $Ø$ (up to 50 mm <sup>2</sup> )	
		İ	DE 1000 VAC/ 1500 VDC				
Туре	Order no.	CUTFOX 25 VDE	1212127	CUTFOX 25	1212130	CUTFOX 35	1212131
Cross-section		up to 25 mm Ø (up to 70 m	m²)	up to 25 mm Ø (up to 185 mm <sup>2</sup> )		up to 35 mm Ø (up to 300 mm <sup>2</sup> )	

#### **Ring cable cutter**

One and two-hand ring cable cutters with force-saving ratchet function, unlockable, cutting of copper and aluminum up to 100 mm diameter (1400 mm<sup>2</sup>) without crushing.







Туре	Order no.	CUTFOX 45	1212132	CUTFOX 52	1212133	CUTFOX 62	1212134
Cross-section		up to 45 mm Ø (up to 300 mm <sup>2</sup> )		up to 52 mm Ø (up to 300 mm <sup>2</sup> )		up to 62 mm Ø (up to 750 mm <sup>2</sup> )	
		Ô					
Туре	Order no.	CUTFOX 100	1212135				
Cross-section		up to 100 mm Ø (up to 1400 mm <sup>2</sup> )	)				

#### **VDE** diagonal cutter



# **CUTFOX** cutting tools

#### **Special cutting tools**

The CUTFOX FBD cutting to for removing individual bars o plug-in bridges from the CLIP modular terminal block range. FB screw bridges are cut wi with the CUTFOX FB.	f the FBD LINE complete	ľ				
Туре	Order no.	CUTFOX-FBS	1212124	CUTFOX FB	1205985	
Cutting capacity		FBD plug-in bridges 4 to	8 and	FBI fixed bridges 10-6		
		Insertion bridges EB		FBI 10 - 12 mm <sup>2</sup>		

# **UNIFOX** universal tools

#### VDE combination pliers, pipe wrench



#### VDE needle-nose pliers, flat and round-nose pliers



#### **Blind rivet pliers**



# **CUTFOX** cutting tools

#### **Cable duct cutter/scissors**

The PPS CD M cable duct cutter cuts channels and covers up to a width of 125 mm and a wall thickness of 2.5 mm burr-free and non-cutting in seconds. A spring-mounted blade protection provides the necessary safety.

The scissors enable a cutting length of 75 mm and have a limit stop of  $45^{\circ}$ .





Туре	Order no.	PPS CD M	1207569	CUTFOX-CD	1212474	
Accessories						
Spare knife		PPS CD BLADE	1207572			
Spare counter support		PPS CD M COHO	1208995			
Workbench		PPS TABLE	1206285			
with plywood panel 700 x 1200 x 50 mm						

#### **Profile cutting tool**

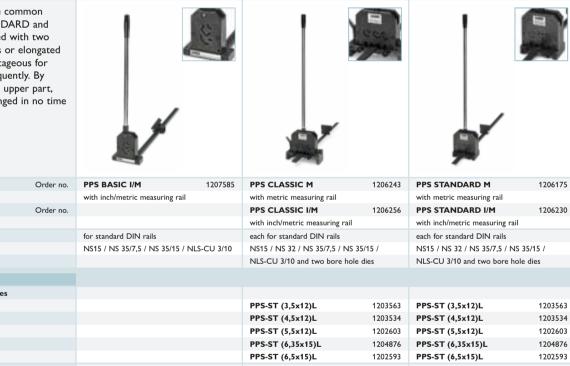
Туре

Туре

Description

Accessories

PPS BASIC I/M processes the common EN DIN rails. The PPS STANDARD and PPS CLASSIC can be equipped with two stamping bits for round holes or elongated holes. PPS CLASSIC is advantageous for hole formats that change frequently. By simply folding open the PPS... upper part, the stamping bits can be changed in no time at all.



Stamping insert for elongated holes						
3.5 x 12 mm			PPS-ST (3,5x12)L	1203563	PPS-ST (3,5x12)L	1203563
4.5 x 12 mm			PPS-ST (4,5x12)L	1203534	PPS-ST (4,5x12)L	1203534
5.5 x 12 mm			PPS-ST (5,5x12)L	1202603	PPS-ST (5,5x12)L	1202603
6.35 x 15 mm			PPS-ST (6,35x15)L	1204876	PPS-ST (6,35x15)L	1204876
6.5 x 15 mm			PPS-ST (6,5x15)L	1202593	PPS-ST (6,5x15)L	1202593
Stamping bit for cross hole						
3.5 x 12 mm			PPS-ST (3,5x12)Q	1203550	PPS-ST (3,5x12)Q	1203550
4.5 x 12 mm			PPS-ST (4,5x12)Q	1203547	PPS-ST (4,5x12)Q	1203547
5.5 x 12 mm			PPS-ST (5,5x12)Q	1203411	PPS-ST (5,5x12)Q	1203411
6.5 x 15 mm			PPS-ST (6,5x15)Q	1203408	PPS-ST (6,5x15)Q	1203408
Stamping insert for bore holes						
3.8 mm Ø			PPS-ST (3,8)	1204892	PPS-ST (3,8)	1204892
4.3 mm Ø			PPS-ST (4,3)	1202616	PPS-ST (4,3)	1202616
5.3 mm Ø			PPS-ST (5,3)	1202629	PPS-ST (5,3)	1202629
6.4 mm Ø			PPS-ST (6,4)	1202632	PPS-ST (6,4)	1202632
7.0 mm Ø			PPS-ST (7,0)	1204889	PPS-ST (7,0)	1204889
8.4 mm Ø			PPS-ST (8,4)	1202726	PPS-ST (8,4)	1202726
Hydraulic cylinder						
for connection to an existing hydraulic system					PPS HYDRAULIC CYL	1208924
Operating pressure 160 – 220 bar					only for PPS standard	
Workbench						
with plywood panel 700 x 1200 x 50 mm	PPS TABLE	1206285	PPS TABLE	1206285	PPS TABLE	1206285

# **MICROFOX** Electronic pliers

MICROFOX – The pliers program for all activities in the electronics and electromechanics field. It is ideal for processing difficult-to-access areas such as PCB components.

Like all manual tools from Phoenix Contact, even the micro-pliers are equipped with specially shaped two-component handles. They ensure safe grip and fatigue-free operation. We recommend that you use the ESD versions with special handles in order to safeguard sensitive electronic components. They discharge the electrostatic loads in a controlled manner as per the prevalent standards and regulations.





The tools are made of special tool steel C 60, hardened and ground to precision. They thus attain high cutting efficiency and are extremely durable.

#### Sensitive

The integrated double sheet spring and the ergonomic, non-slip handle enables accurate and delicate processing of electronic components.



Protective

The handles of the MICROFOX... ESD electronic pliers are made of conductive plastic. Electrostatic energy is thus discharged slowly and in a controlled manner.

# **MICROFOX** electronic pliers

#### **Electronic pliers**

The MICROFOX electronic pliers have a box joint for constant stability and an optimum force path. The surfaces are finely polished and oiled.







Туре	Order no.	MICROFOX -SB	1212489	MICROFOX E	1212494	MICROFOX-P	1212491
Description		Diagonal cutters		Front cutter		Needle-nose pliers	
		Round head with bevel		Without bevel		Gripping surface smooth	
Туре	Order no.	MICROFOX-SP	1212488	MICROFOX-EO	1212495		
Description		Needle-nose pliers		Flat-nose pliers			
		Pointed head with bevel		Angled, 20°, without bevel			



#### **ESD** electronic pliers

Type Description

The ESD MICROFOX electronic pliers correspond to the common standards and regulations such as DIN EN 61340-5. The screwed precision joint enables optimum work results. The finely polished and phosphated surfaces ensure dazzle-free operation.







Or	rder no.	MICROFOX-S ESD	1212480	MICROFOX-E ESD	1212485	MICROFOX-P ESD	1212482
		Diagonal cutters		Front cutter		Needle-nose pliers	
		Round head, without bevel		Without bevel			

		Å	ESD	Å	( ESD	Å	( ESD
Туре	Order no.	MICROFOX-PC ESD	1212483	MICROFOX-F ESD	1212484	MICROFOX-R ESD	1212481
Description		Needle-nose pliers		Flat-nose pliers		Round-nose pliers	
		Gripping surface smooth, cur	ved 45°	Gripping surface smooth		Gripping surface smooth	

# WIREFOX Stripping tools

The WIREFOX product range provides the perfect tool for every stripping task. The WIREFOX precision stripping tools from Phoenix Contact convince with their ergonomics and the special geometries of the hardened knives.

With maximum durability, you will always achieve consistent best results and are excellently prepared for the subsequent crimping procedure.



**Precise and safe stripping** WIREFOX stripping pliers strip off all types of conductors and cables quickly, precisely and reliably. The relevant conductor crosssection is set automatically.



Creating conductor pick-off WIREFOX-D-SHIELD stripping pliers allow

cable cutouts and wire pick-offs to be created easily. These pliers are suitable for stripping shielded cables.



Multiple-stage stripping

CUTFOX-D CX stripping tools allow multiple-stage stripping of data and round cables in one step. The central fine setting for the stripping knife ensures that the cable is not damaged.

# WIREFOX stripping tools

#### Stripping pliers for conductors and lines

	onductors						
The WIREFOX stripping pliers characterized by a mechanism automatically to different kinds and conductor diameters. Parti useful are the integrated wire of the flexibly adjustable stop for length.	that adjusts of insulation icularly cutter and	T					
Туре	Order no.	WIREFOX 2.5	1212368				
Conductor / cable	[mm <sup>2</sup> ] / AWG	0.08 - 2.5 / 28 - 12					
Stripping length up to	[mm]	15					
Insulation type		Standard					
Wire cutter solid // stranded	[mm <sup>2</sup> ] / AWG	2.5 / 14 // 6 / 10					
Accessories							
Spare knife		WIREFOX 2,5/WS	1212370				
		R		X		X	
Туре	Order no.	WIREFOX 4	1212156	WIREFOX 6SC	1212158	WIREFOX 10	1212150
Conductor / cable	[mm <sup>2</sup> ] / AWG	0.1 - 4 / 28 - 12		1.5 – 6 / 16 – 10		0.02 - 10 / 34 - 8	
Stripping length up to	[mm]	18		18		18	
Insulation type		Standard and special insulation. e	.g. PTFE	Standard and short-circuit-proof		Standard	
Wire cutter solid // stranded	[mm <sup>2</sup> ] / AWG	1.5 / 16 // 10 / 8		1.5 / 6 // 16 / 8		1.5 / 16 // 10 / 8	
Accessories							
Spare knife		WIREFOX 4/SB	1212151	WIREFOX 6SC/SB	1212314	WIREFOX 10/SB	1212152
		R		X			
Туре	Order no.	WIREFOX 16	1212155	WIREFOX 16-1	1212157		
Type Conductor / cable	Order no. [mm²] / AWG	4 – 16 / 12 – 5	1212155	WIREFOX 16-1           6 - 16 / 10 - 5	1212157		
			1212155		1212157		
Conductor / cable Stripping length up to Insulation type	[mm²] / AWG [mm]	4 - 16 / 12 - 5 18 Standard	1212155	6 - 16 / 10 - 5 Any Standard	1212157		
Conductor / cable Stripping length up to	[mm <sup>2</sup> ] / AVVG	4 - 16 / 12 - 5 18	1212155	6 – 16 / 10 – 5 Any	1212157		
Conductor / cable Stripping length up to Insulation type	[mm²] / AWG [mm]	4 - 16 / 12 - 5 18 Standard	1212155	6 - 16 / 10 - 5 Any Standard	1212157		
Conductor / cable Stripping length up to Insulation type Wire cutter solid // stranded	[mm²] / AWG [mm]	4 - 16 / 12 - 5 18 Standard	1212155	6 - 16 / 10 - 5 Any Standard	1212157		

#### **VDE** stripping pliers

Туре

Insulation type

The VDE protection-insulated stripping pliers facilitate stripping of conductors up to 10 mm<sup>2</sup>. The adjusting screw with locking nut guarantees a consistent stripping quality for standard production.



# WIREFOX stripping tools

# Stripping pliers for cable cutouts and shield connections The WIREFOX-D SHIELD is ideal for stripping wires for cable cutouts, wire pick-offs and shield connections. pick-offs and shield connections. VIREFOX-D SHIELD or cable cutouts, wire pick-offs and shield connections. VIREFOX-D SHIELD or cable cutouts, wire pick-offs and shield connections. VIREFOX-D SHIELD or cable cutouts, wire pick-offs and shield connections. VIREFOX-D SHIELD or cable cutouts, wire pick-offs and shield connections. VIREFOX-D SHIELD or cable cutouts, wire pick-offs and shield connections. VIREFOX-D SHIELD or cable cutouts, wire pick-offs and shield connections. VIREFOX-D SHIELD or cable cutouts, wire pick-offs and shield connections. VIREFOX-D SHIELD or cable cutouts, wire pick-offs and shield connections. VIREFOX-D SHIELD or cable cutouts, wire pick-offs and shield connections. VIREFOX-D SHIELD or cable cutouts, wire pick-offs and shield connections. VIREFOX-D SHIELD or cable cutouts, wire pick-offs and shield connections. VIREFOX-D SHIELD or cable cutouts, wire pick-offs and shield cutouts,

#### Stripping pliers for AS-Interface flat-ribbon conductors

The WIREFOX ASI is ideal for qu precise stripping of AS-Interface fl conductors. The stripping length of selected freely due to the shape of pliers.	at-ribbon :an be	X		
Туре	Order no.	WIREFOX ASI	1212154	
Conductor / cable		AS-Interface flat-ribbon conductor	•	
Stripping length	[mm]	Any		

# WIREFOX dismantling tools

String	ning	tools	for	dismontling	
Strip	ping	toois	IOr	dismantling	

The dismantling tool WIREFOX-D 11 strips single and multicore signal, control and glass fiber wires with diameter up to 11 mm. The handling is extremely easy and guarantees precise stripping results. The WIREFOX-D SR 6 stripping tool is particularly well suited for solar cables.       Image: Conductor cable diameter [mm] 10       Image: Conductor cable diameter [mm] 10       VIREFOX-D SR 6 1212507         Type       Order no.       VIREFOX-D 11       1212160       VIREFOX-D SR 6       1212507         Conductor / cable diameter [mm] diameter [mm] 10       2.5 - 11       2.5 - 6       1212507         Stripping length [mm] to tor [mm] diameter [mm] diameter [mm] 10       2.5 - 6       1212507         The universal stripping tool WIREFOX-D 13 offers a variety of functions: • Stripping installation wires of 8 - 13 mm diameter e, e, e, NYM 3 x 1.5 mm <sup>2</sup> up to NYM 5 x 2.5 mm <sup>2</sup> Image: Conductor in the set of the s	
Conductor / cable diameter       [mm]       2.5 - 11         Max. insulation thickness       [mm]       1.0         Conductor       [mm2]       2.5 - 6         Stripping length       [mm]       8.5         The universal stripping tool WIREFOX-D 13 offers a variety of functions:       • Stripping installation wires of 8 - 13 mm diameter, e.g. NYM 3 x 1.5 mm <sup>2</sup> up to NYM 5 x 2.5 mm <sup>2</sup> Image: Constant of the stripping installation wires of 8 - 13 mm diameter, e.g. NYM 3 x 1.5 mm <sup>2</sup> up to NYM 5 x 2.5 mm <sup>2</sup>	
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offers a variety of functions: • Stripping installation wires of 8 – 13 mm diameter, e.g. NYM 3×1.5 mm <sup>2</sup> up to NYM 5×2.5 mm <sup>2</sup>	
<ul> <li>Single-wire stripping 0.2 – 4 mm<sup>2</sup></li> <li>Integrated slitting knife</li> <li>Extendable knife</li> </ul>	
Type         Order no.         WIREFOX-D 13         1212162	
Conductor / cable diameter [mm] 8 – 13	
Max. insulation thickness [mm] -	
In addition to standard cables, fiber optic cables can also be stripped using WIREFOX-D 16. The WIREFOX-D 40 stripping tool dismantles wires with a diameter of up to 40 mm. Round, longitudinal and spiral cuts can be made with the swivel action blade.	
Type         Order no.         WIREFOX-D 16         1212173         WIREFOX-D 28         1212174         WIREFOX-D 40	
Conductor / cable diameter         [mm]         4 – 16         8 – 28         4.5 – 40	1212161
	1212161
Max. insulation thickness [mm] 4.5	1212161

## Stripping tools for multi-stage stripping of co-axial cables

For extremely simple handling, the CUTFOX-D CX stripping tools facilitate multiple-stage stripping of data and round cables in one step. The central fine setting of the stripping knife means the cable is not damaged.	P	+ 1+ 2+ 3 + 1+ 2+ 3 			
Type Order no.			Spare knife accessories		
2-stage / strip-off dimension  1 = 6.0 mm	WIREFOX-D CX-1	1212163	WIREFOX-D CX-1/SB	1212303	
2-stage / strip-off dimension  1 = 9.2 mm	WIREFOX-D CX-2	1212164	WIREFOX-D CX-2/SB	1212304	
2-stage / strip-off dimension  1 = 12 mm	WIREFOX-D CX-3	1212165	WIREFOX-D CX-3/SB	1212305	
2-stage / strip-off dimension 11 = 6.8 mm	WIREFOX-D CX-4	1212166	WIREFOX-D CX-4/SB	1212306	
3-stage / strip-off dimension 11 = 5.5 mm and 12 = 5.5 mm	WIREFOX-D CX-5	1212167	WIREFOX-D CX-5/SB	1212307	
3-stage / strip-off dimension 11 = 2.7 mm and 12 = 8.3 mm	WIREFOX-D CX-6	1212168	WIREFOX-D CX-6/SB	1212308	
3-stage / strip-off dimension 11 = 6.0 mm and 12 = 6.0 mm	WIREFOX-D CX-7	1212169	WIREFOX-D CX-7/SB	1212309	
3-stage / strip-off dimension 11 = 2.5 mm and 12 = 6.8 mm	WIREFOX-D CX-8	1212170	WIREFOX-D CX-8/SB	1212310	
3-stage / strip-off dimension $11 = 3.5$ mm and $12 = 7.5$ mm	WIREFOX-D CX-9	1212171	WIREFOX-D CX-9/SB	1212311	

The wide range of CRIMPFOX pliers represents a new generation of professional crimping pliers. A new power transmission principle reduces manual forces by 25% with maximum pressure. Optimum handle geometries support fatigue-free work. The integrated pressure lock guarantees gas-tight quality crimping with longterm stability.



#### **Professional crimping**

The comprehensive range of professional crimping pliers allows the processing of all contact types up to 120 mm<sup>2</sup>. An innovative construction and ergonomically designed handles reduce the required forces by up to 25%.



## Quality crimping

Precise die and an integrated pressure lock guarantee gas-tight quality crimping with long-term stability. The pressure lock releases automatically as soon as the required crimping pressure is attained.



#### One for all

With replaceable dies, the universal crimping pliers from the CRIMPFOX series allow processing of different contacts up to 120 mm<sup>2</sup>. The dies can be replaced without an additional tool.

# **Overview of connectors of crimping tools**

Ferrules for insulated and non-insulated contacts							
	Crimping tool designation	Order no.	Conductor cross-section [mm <sup>2</sup> ]	Conductor cross-section [AWG]	Page		
	CRIMPFOX 6	1212034	0.25 - 6	24 – 10	18		
	CRIMPFOX 6S-F	1212043	0.5 - 6	20 - 10	18		
	CRIMPFOX 6T	1212037	0.25 - 6	20 – 10	18		
	CRIMPFOX 6T-F	1212038	0.25 - 6	20 - 10	18		
M	CRIMPFOX 10S	1212045	0.14 - 10	25 – 7	18		
	CRIMPFOX 6H	1212046	0.14 – 6	25 – 10	18		
	CRIMPFOX 25R	1212039	10 - 25	8 – 4	18		
	CRIMPFOX 50R	1212041	35 – 50	2 – 1	18		

#### **Cable lugs and connectors**

Crimping tool designation		Order no.	Conductor cross-section [mm <sup>2</sup> ]	Conductor cross-section [AWG]	Page
	CRIMPFOX-RCI 1	1212055	0.14 – 1	26 – 18	19
<b>W</b>	CRIMPFOX-RCI 2,5	1212053	0.75 - 2.5	20 - 14	19
6	CRIMPFOX-RCI 6	1212057	0.75 – 6	20 - 10	19
	CRIMPFOX-RCI 6-1	1212059	0.75 – 6	20 - 10	19

#### Non-insulated cable lugs

	Crimping tool designation	Order no.	Conductor cross-section [mm <sup>2</sup> ]	Conductor cross-section [AWG]	Page
6	CRIMPFOX RC 2,5	1212063	0.75 – 2.5	20 – 14	19
	CRIMPFOX RC 10	1212061	4 – 10	12 – 8	19
	CRIMPFOX RC 25	1212065	4 – 10	12 – 8	19
	CRIMPFOX RCT 25-1 (tube lugs)	1212066	10 – 25	8 – 4	19

#### Non-insulated slip-on sleeves

•	Crimping tool designation	Order no.	Conductor cross-section [mm <sup>2</sup> ]	Conductor cross-section [AWG]	Page
	CRIMPFOX-SC 1,5	1212048	0.1 - 1.5	26 – 16	20
	CRIMPFOX-SC 6L	1212052	0.5 - 6	22 – 10	20
	CRIMPFOX-SC 6	1212050	0.5 - 6	22 – 10	20
1.00					

#### **Turned contacts**

Crimping tool designation	Order no.	Conductor cross-section [mm <sup>2</sup> ]	Conductor cross-section [AWG]	Page
CRIMPFOX-TC 4	1212113	0.5 - 4	22 – 12	20
CRIMPFOX-TC 10	1212114	4 – 10	12 – 8	20

#### **Coaxial connector / FO connector**

	Crimping tool designation	Order no.	Hexagonal wrench size [mm]	Page
4	CRIMPFOX-CX 4,52	1212094	1.69 / 3.25 / 4.52	20
	CRIMPFOX-CX 6,48	1212095	1.69 / 5.41 / 6.48	20
Pho.	CRIMPFOX-CX 9,14	1212096	1.73 / 8.23 / 9.14	20
	CRIMPFOX-CX 10,54	1212097	2.54 / 10.54	20
2.4	CRIMPFOX-CX 10,90	1212098	2.54 / 10.90	20
	CRIMPFOX-FO 5,41	1212099	3.25 / 3.84 / 4.52 / 5.0 / 5.41	21

#### **D-SUB** contacts

	Crimping tool designation	Order no.	Conductor cross-section [mm <sup>2</sup> ]	Conductor cross-section [AWG]	Page
16. 19	CRIMPFOX-DSUB 5	1212111	0.08 - 0.5	28 – 22	21
1 m					

#### Crimp-snap-in contacts

••••••••••••••••••••••••••••••••••••••					
Q 1).	Crimping tool designation	Order no.	Conductor cross-section [mm <sup>2</sup> ]	Conductor cross-section [AWG]	Page
S. W.	CRIMPFOX MT 2,5	1204038	0.5 – 2.5	20 – 12	21
6 6					
A 140					



#### **Crimping pliers for ferrules**

The CRIMPFOX pliers are fitted with a pressure lock (unlockable). An innovative construction and ergonomically designed handles reduce the required manual forces. The self-adjusting CRIMPFOX 6T die automatically adapts to the connector size.







Туре	Order no.	CRIMPFOX 6	1212034	CRIMPFOX 6T	1212037
Conductor	[mm <sup>2</sup> ] / AWG	0.25 - 6 / 24 - 10		0.25 - 6 / 20 - 10	
Accessories					
Spare die		CRIMPFOX 6/DIE	1212035	CRIMPFOX 6T/DIE	1212298

The self-adjusting die with fron entry of the crimping pliers aut adapts to the connector size ar impressive due to a fast and re- processing.	tomatically nd is					
Туре	Order no.	CRIMPFOX 6S-F	1212043	CRIMPFOX 6T-F	1212038	
Conductor	[mm <sup>2</sup> ] / AWG	0.5 - 6 / 20 - 10		0.25 - 6 / 20 - 10		
Accessories						
Spare die		CRIMPFOX 6S-F/DIE	1212285	CRIMPFOX 6T-F/DIE	1212297	

Great importance has been placed on energy-saving work with the compact crimping pliers. The way in which the handles and the die are arranged means that the ferrules can be fitted however the tool is held.	Ň	*		*	
Type Order no.	CRIMPFOX 6H	1212046	CRIMPFOX 10S	1212045	
Conductor [mm <sup>2</sup> ] / AWG	0.14 - 6 / 25 - 10		0.14 - 10 / 25 - 7		

The crimping pliers help in prod ferrules up to 50 mm <sup>2</sup> . The erg formed handles and the optimiz mechanical transmission ensure hold and reduce the force need	onomically zed optimum	ľ				
Туре	Order no.	CRIMPFOX 25R	1212039	CRIMPFOX 50R	1212041	
Conductor	[mm <sup>2</sup> ] / AWG	10 - 25 / 8 - 4		35 - 50 / 2 - 1		
Accessories						
Spare die		CRIMPFOX 25R/DIE	1212040	CRIMPFOX 50R/DIE	1212042	 



## Crimping pliers for insulated cable lugs and connectors

A color marking on the die of the cross-section of the CRI pliers. The precisely manufac provide a uniformly high qual contact processing.	MPFOX RCI tured dies	N	•		- H.	ľ	
Туре	Order no.	CRIMPFOX-RCI 1	1212055	CRIMPFOX-RCI 2,5	1212053	CRIMPFOX-RCI 6	1212057
Conductor	[mm <sup>2</sup> ] / AWG	0.14 - 1 / 26 - 18		0.75 - 2.5 / 20 - 14		0.75 - 6 / 20 - 10	
Accessories							
Spare die		CRIMPFOX-RCI 1/DIE	1212056	CRIMPFOX-RCI 2,5/DIE	1212054	CRIMPFOX-RCI 6/DIE	1212058
The CRIMPFOX-RCI 6-1 is s asymmetrical crimping of inst lugs and connectors.		N					
Туре	Order no.	CRIMPFOX-RCI 6-1	1212059				
Conductor	[mm <sup>2</sup> ] / AWG	0.75 - 6 / 20 - 10					
Accessories							
		CRIMPFOX-RCI 6-1/DIE	1212290				

Crimping pliers for non-insulated cable lugs and tube lugs

The CRIMPFOX-RC is c compact and light design entry is lateral. Three lal serve for precise process cross-sections.	n. The conductor beled die stations	N	:: ::	N	+ <b>!</b> +	N	+E+
Туре	Order no.	CRIMPFOX-RC 2,5	1212063	CRIMPFOX-RC 10	1212061	CRIMPFOX-RC 25	1212065
Conductor	[mm <sup>2</sup> ] / AWG	0.75 - 2.5 / 20 - 14		4 - 10 / 12 - 8		10 - 25 / 8 - 4	
Accessories							
Spare die		CRIMPFOX-RC 2,5/DIE	1212064	CRIMPFOX-RC 10/DIE	1212062	CRIMPFOX-RC 25/DIE	1212299
The CRIMPFOX-RCT 25 process standard tube lu		ľ	<b>+</b> ₿+				
Туре	Order no.	CRIMPFOX-RCT 25-1	1212066				
Die station	[mm]	10 - 25 / 8 - 4					
Accessories							
Spare die		CRIMPFOX-RCT 25/DIE	1212300				





#### Crimping pliers for coaxial connectors

24							
The CRIMPFOX-CX are crim for processing coaxial connector with a pressure lock, the pliers uniformly high quality crimping. See page 15 for 2 and 3-stage stripping	rs. Equipped provide	Ň	-¥-	N	.¥:		
Туре	Order no.	CRIMPFOX-CX 4,52	1212094	CRIMPFOX-CX 6,48	1212095	CRIMPFOX-CX 9,14	1212096
Hexagonal wrench width							
Die stations 1 / 2 / 3	[mm]	1.69 / 3.25 / 4.52		1.69 / 5.41 / 6.48		1.73 / 8.23 / 9.14	
Accessories							
Spare die		CRIMPFOX-CX 4,52/DIE	1212284	CRIMPFOX-CX 6,48/DIE	1212286	CRIMPFOX-CX 9,14/DIE	1212293
		Ň	( <b>1</b> - <b>1</b> )	Ň	<b>₽</b> ₽₽ ●		
Туре	Order no.	CRIMPFOX-CX 10,54	1212097	CRIMPFOX-CX 10,90	1212098		
Hexagonal wrench size							
Die stations 1 / 2	[mm]	2.54 / 10.54		2.54 / 10.90			
Accessories							
Spare die		CRIMPFOX-CX 10,54/DIE	1212291	CRIMPFOX-CX 10,90/DIE	1212292		



#### **Crimping pliers for FO connectors**

The CRIMPFOX-FO serves to connectors. The five marked facilitate precise processing of contact sizes.	die stations	Ŕ	+ <b>[</b> +	
Туре	Order no.	CRIMPFOX-FO 5,41	1212099	
Hexagonal wrench size				
Die stations 1 – 5	[mm]	3.25 / 3.84 / 4.52 / 5.0 / 5.41		
Accessories				
Spare die		CRIMPFOX-FO 5,41/DIE	1212294	
		_		



ð

#### Crimping pliers for D-SUB contacts



#### Crimping pliers for crimp snap-in contacts



#### **Crimping pliers for solar connectors**



#### Universal pliers for accommodating different crimp inserts

An excellent feature of the CRIMPFOX-M crimping pliers is the quick replacement of crimp inserts without the use of tools. The large number of inserts makes it a spacesaving universal tool for all applications. CRIMPFOX-M SET CRIMPFOX-M 1212072 1212093 Туре Order no. Basic pliers without die Contents: CRIMPFOX and dies 1212074, 1212079, 1212080, 1212081 Accessories Die, for ferrules  $0.25 - 10 \text{ mm}^2$ CRIMPFOX-M 10/DIF 1212080 CRIMPEOX-M 10/DIE 1212080 (included in the set) 16 - 25 mm<sup>2</sup> **CRIMPFOX-M 25/DIE** 1212081 CRIMPFOX-M 25/DIE 1212081 (included in the set) 35 - 50 mm<sup>2</sup> CRIMPFOX-M 50/DIE 1212082 CRIMPFOX-M 50/DIE 1212082 Die, for insulated cable lugs  $0.5 - 1.5 \text{ mm}^2$  and  $1.5 - 2.5 \text{ mm}^2$ CRIMPFOX-M RCI 2,5/DIE 1212074 CRIMPFOX-M RCI 2,5/DIE 1212074 (included in the set)  $0.1-0.4\ mm^2$  and  $4-6\ mm^2$ CRIMPFOX-M RCI 6/DIE 1212073 CRIMPFOX-M RCI 6/DIE 1212073 Die, for non-insulated cable lugs 0.75 - 2.5 mm<sup>2</sup> CRIMPFOX-M RC 2,5/DIE 1212078 CRIMPFOX-M RC 2,5/DIE 1212078 0.5 - 6 mm<sup>2</sup> CRIMPFOX-M RC 6/DIE 1212079 CRIMPFOX-M RC 6/DIE 1212079 (included in the set) CRIMPFOX-M RC 10/DIE CRIMPFOX-M RC 10/DIE  $4 - 10 \text{ mm}^2$ 1212077 1212077 Die, for non-insulated slip-on sleeves 0.1 - 1 mm<sup>2</sup> CRIMPFOX-M SC 1/DIE 1212083 CRIMPFOX-M SC 1/DIE 1212083 1212084  $0.5 - 2.5 \text{ mm}^2$ CRIMPFOX-M SC 2.5/DIE 1212084 CRIMPFOX-M SC 2.5/DIE 1212085  $0.5 - 6 \text{ mm}^2$ CRIMPFOX-M SC 6/DIE 1212085 CRIMPFOX-M SC 6/DIE Die, for turned contacts 2.5 - 4.0 mm<sup>2</sup>/ cross-section 0.14 - 4 mm<sup>2</sup> CRIMPEOX-M TC 4/DIE 1212075 CRIMPFOX-M TC 4/DIF 1212075 4.0 mm<sup>2</sup>/ cross-section  $6 - 10 \text{ mm}^2$ CRIMPFOX-M TC 10/DIE 1212076 CRIMPFOX-M TC 10/DIE 1212076

CRIMPFOX-M CX 1/DIE

CRIMPFOX-M CX 2/DIE

CRIMPFOX-M CX 3/DIE

CRIMPEOX-M RI45/DIE

CRIMPFOX-M RJ11/DIE

**CRIMPFOX-M HS-1/DIE** 

**CRIMPFOX M SR 6-1/DIE** 

**CRIMPFOX M SR 6-2/DIE** 

CRIMPFOX M SR 6-3/DIE

1212087

1212088

1212089

1212090

1212091

1212282

1212471

1212472

1212473

CRIMPFOX-M CX 1/DIE

CRIMPFOX-M CX 2/DIE

CRIMPFOX-M CX 3/DIE

CRIMPEOX-M RI45/DIE

CRIMPFOX-M RJ11/DIE

CRIMPFOX-M HS-1/DIE

**CRIMPFOX M SR 6-1/DIE** 

**CRIMPFOX M SR 6-2/DIE** 

CRIMPFOX M SR 6-3/DIE

1212087

1212088

1212089

1212090

1212091

1212282

1212471

1212472

1212473

**Die,** for coaxial connectors RG 174, RG 179, BNC, TNC

CATV RG 6 59

RG 58, RG 59, RG 62, RG 71, BNC, TNC

Die, for unshielded RI45 connectors

Die, for unshielded R|11 connectors

Die, for shrink butt connectors

MC4, Multi-Contact, 2.5 - 6 mm<sup>2</sup>

SOLARLOK, Tyco, 2.5 - 6 mm<sup>2</sup>

 $0.1 - 0.4 \text{ mm}^2$  and  $4 - 6 \text{ mm}^2$ 

**Die,** for solar connector MC3, Multi-Contact, 2.5 – 6 mm<sup>2</sup>

# Universal pliers for accommodating different crimp inserts

entrersal phers for accommo	0 1				
The wide variety of dies makes the CRIMPFOX-C universal crimping pliers up to 120 mm <sup>2</sup> . Easy fold back jaw holders allow quick replacement of dies. A mechanical drive system minimizes the force needed.			A		
Type Order no	CRIMPFOX-C50	1212340	CRIMPFOX-C120	1212318	
Accessories: Die combinations for ferrules	]				
Upper part of die					
50 mm², 70 mm²			CRIMPFOX-C120 AI 70/M-DIE	1212335	
95 mm <sup>2</sup>			CRIMPFOX-C120 AI 95/M-DIE	1212336	
Lower part of die					
50 mm <sup>2</sup>			CRIMPFOX-C120 AI 50/F-DIE	1212337	
70 mm <sup>2</sup>			CRIMPFOX-C120 AI 70/F-DIE	1212338	
95 mm <sup>2</sup>			CRIMPFOX-C120 AI 95/F-DIE		
Accessories: Die combinations for non-insulated cable lugs					
Upper part of die					
6 – 35 mm <sup>2</sup>	CRIMPFOX-C50 RC 35/M-DIE	1212343			
6 – 70 mm <sup>2</sup>			CRIMPFOX-C120 RC 70/M-DIE	1212331	
Lower part of die					
25 mm <sup>2</sup>	CRIMPFOX-C50 RC 25/F-DIE	1212344			
35 mm <sup>2</sup>	CRIMPFOX-C50 RC 35/F-DIE	1212345			
10, 16, 25, 35 mm <sup>2</sup>			CRIMPFOX-C120 RC 35/F-DIE	1212332	
6, 50 mm <sup>2</sup>			CRIMPFOX-C120 RC 50/F-DIE	1212333	
10, 70 mm <sup>2</sup>			CRIMPFOX-C120 RC 70/F-DIE	1212334	
Accessories: Die pair for insulated cable lugs	)				
10 mm <sup>2</sup>	CRIMPFOX-C50 RCI 10/DIE	1212346	CRIMPFOX-C120 RCI 10/DIE	1212327	
16 mm <sup>2</sup>	CRIMPFOX-C50 RCI 16/DIE	1212347	CRIMPFOX-C120 RCI 16/DIE	1212328	
25 mm <sup>2</sup>	CRIMPFOX-C50 RCI 25/DIE	1212348	CRIMPFOX-C120 RCI 25/DIE	1212329	
35 mm <sup>2</sup>		1212010		1212320	
Accessories: Die pair					
for copper tube lugs					
35 mm <sup>2</sup>	CRIMPFOX-C50 RCT 35-1/DIE	1212341			
16, 35 mm <sup>2</sup>			CRIMPFOX-C120 RCT 35-1/DIE	1212320	
50 mm <sup>2</sup>	CRIMPFOX-C50 RCT 50-1/DIE	1212342			
25, 50 mm <sup>2</sup>			CRIMPFOX-C120 RCT 50-1/DIE	1212321	
10, 70 mm <sup>2</sup>			CRIMPFOX-C120 RCT 70-1/DIE	1212319	
95 mm <sup>2</sup>			CRIMPFOX-C120 RCT 95-1/DIE	1212322	
120 mm <sup>2</sup>			CRIMPFOX-C120 RCT 120-1/DIE	1212323	
Accessories: Pre-round die pair for sector cable					
25, 35 mm <sup>2</sup>	CRIMPFOX-C50 R25-35/DIE	1212349			
35, 50 mm <sup>2</sup>	CRIMPFOX-C50 R35-50/DIE	1212350			
50, 70 mm <sup>2</sup>	CRIMPFOX-C50 R50-70/DIE	1212350			
25, 50 mm <sup>2</sup>			CRIMPFOX-C120 R25-50/DIE	1212324	
35, 70 mm <sup>2</sup>			CRIMPFOX-C120 R35-70/DIE	1212324	
95 mm <sup>2</sup>			CRIMPFOX-C120 R35-70/DIE CRIMPFOX-C120 R95/DIE	1212323	
73 mm			GIATH I GA-CIZU R75/DIE	1212320	

# **CRIMPFOX** – The right connectors for the **CRIMPFOX** series

#### Ferrules with and without insulating collar



#### Ring and fork-type cable lugs



#### Slip-on sleeves and distributors, flat connectors

- EASY ENTRY easy and safe conductor entry
- Hard-soldered crimping zone for maximum pull-out forces
- · Electrolytically tin-plated
- Halogen-free

Description

Version

Color

Flat connectors	Flat connectors	Slip-on sleeves/insulated	Slip-on sleeves/distributors
1.5 - 2.5 / 16 - 14	1.5 – 6 / 16 – 10	1 - 6 / 18 - 10	1.5 - 6 / 16 - 10

For more technical data and drawings, see www.phoenixcontact.net/catalog

various colors

various colors

#### Flat pin and pin cable lugs, butt connectors

[mm<sup>2</sup>] / AWG

silver colored



various colors

## **Tool and crimping sets**



#### TOOL DATA SET

#### Set for cutting, stripping and crimping

consisting of:

Cable cutter for copper and aluminum with a diameter up to 12 mm, CUTFOX 12

Order no. 1208856

- Stripping tool for stripping multicore signal, control and glass fiber wires of 2.5-11 mm diameter, WIREFOX-D11 • Basic pliers for accommodating dies for different contact types, CRIMPFOX-M
- Die for CRIMPFOX-M, for unshielded RJ45 connectors



#### TOOL SET ALLROUND 2 Order No 1208843

Set for cutting, stripping and crimping

consisting of:

- Cable cutter for copper and aluminum with a diameter up to 12 mm, CUTFOX 12
- Stripping tool for conductors and cables 0.02-10 mm<sup>2</sup> WIREFOX 10
- Crimping pliers for ferrules for of 0.14–10 mm<sup>2</sup>, CRIMPFOX 10S



#### TOOL SET ALLROUND 3 Order No 1208953

#### Set for stripping, crimping and screwing

#### consisting of:

- Stripping tool for conductors and cables  $0.02-10\ \text{mm}^2,\ \text{WIREFOX}\ 10$
- · Crimping pliers with integrated pressure lock for ferrules of  $0.5-6 \text{ mm}^2$ , with self-aligned die, insertion from the front, CRIMPFOX 6S-F
- · Ferrules, 50 pcs. each:
- AI 0,5-8 WH
- AI 2,5-8 BU
- · Ferrules, 100 pcs. each:
- AI 0.75-8 GY - AI 1-8 RD
- AI 1,5-8 BK
- Screwdriver for slotted-head screws SZE 1-0 6X3 5



TOOL-KIT STANDARD

#### Order no. 1212422

Set for cutting, stripping, crimping and screwing

consisting of:

- Front cable cutter for copper and aluminum with a diameter up to 18 mm (up to 50 mm<sup>2</sup>) CUTFOX 18
- Stripping tool for stripping wires of 4.5 40 mm of diameter with insulating thickness up to 4.5 mm WIREFOX-D 40
- · Stripping pliers for stripping of conductors and cables of 0.02 - 10 mm<sup>2</sup> WIREFOX 10
- · Crimping pliers for ferrules with self-aligned die, front conductor entry and unlockable pressure lock CRIMPFOX 6S-F
- Screwdriver SZF 1-0,6X3,5



Order no. 1202072

CRIMPSET 6

Assortment box, metal

consisting of:

 Ferrules in accordance with DIN 46228-4: 1990-09, CSA-certified

500 pcs. each:
– AI 0,25-6 YE
– AI 0,34-6 TQ
– AI 0,5-8 WH
– AI 0,75-8 GY
– AI 1-8 RD
– AI 1,5-8 BK
300 pcs.:

- AI 2,5-8 BU
- 200 pcs.:
- AI 4-10 GY
- 100 pcs.:
- AI 6-12 YE
- + Stripping tool for wires and conductors up to  $6\ \text{mm}^2$
- · Crimping pliers with integrated pressure lock for ferrules of  $0.5 - 6 \text{ mm}^2$ , insertion from the front



#### AI SORTI BOX RD Assortment box, red

Order no. 3202960

consisting of:

• Ferrules in accordance with DIN 46228-4, CSA-certified

50 pcs. each: - AI 0,5-8 WH, AI 2,5-8 BU

100 pcs. each: – AI 0,75-8 GY, AI 1-8 RD, AI 1,5-8 BK

For more assortment boxes, see www.phoenixcontact.net/catalog

# **Tool sets**

Universal tool sets for easy on-site use, with cutting, isolating and test tools from the TOOL fox range. The pouches are made of rugged and sturdy material.



Type Order no.	TOOL-WRAP	1212505
Tool wrap, equipped with one of the following	CUTFOX 16 VDE	Cable cutter for copper and aluminum conductors, VDE-tested
tools:	CUTFOX-S VDE	Diagonal cutter for copper and aluminum conductors, VDE-tested
	PROFIPOL	Voltage tester, for DC and AC voltages of 6 V to 400 V, IP65
	SZK PH0	Screwdriver, suitable for Phillips recess screws, size: 0
	SZK PH1	Screwdriver, suitable for Phillips recess screws, size: 1
	SZK PH2	Screwdriver, suitable for Phillips recess screws, size: 2
	SZS 0,4X2,5	Screwdriver, flat, blade: 0.4 x 2.5 x 80 mm, length: 161 mm
	SZS 0,5×3,0	Screwdriver, flat, blade: 0.5 x 3.0 x 100 mm, length: 181 mm
	SZS 1,0X4,0	Screwdriver, flat, blade: 1.0 x 4.0 x 100 mm, length: 198 mm
	SZS 1,0X6,5	Screwdriver, flat, blade: 1.0 x 6.5 x 150 mm, length: 248 mm
	UNIFOX-C VDE	Combination pliers, VDE design
	UNIFOX-P VDE	Needle-nose pliers, VDE design
	TOOL-WRAP EMPTY	Tool wrap
Tool wrap, empty	TOOL-WRAP EMPTY	1212501

Туре О	order no. TOOL-BAG	1212504
Teel her with lesses and desument	AI SORTI BOX RD	Assortment box, with ferrules per 50 pieces: AI 0,5-8 WH, AI 2,5-8 BU, per 100 pieces: AI 0,75-8 GY, AI 1-8 RD, AI 1,5-8 BK
Tool bag, with laptop and document compartment, equipped with one of th	CRIMPFOX-M SET	Crimping pliers set
following tools:	CUTFOX 25 VDE	Cable cutter for copper and aluminum conductors, VDE-tested
	CUTFOX-S VDE	Diagonal cutter for copper and aluminum conductors, VDE-tested
	DUSPOL EXPERT	Voltage tester, for DC and AC voltages of 12 V to 690 V, /750 V DC, IP64
	SZK PH0	Screwdriver, suitable for Phillips recess screws, size: 0
	SZK PH1	Screwdriver, suitable for Phillips recess screws, size: 1
	SZK PH2	Screwdriver, suitable for Phillips recess screws, size: 2
	SZS 0,4X2,5	Screwdriver, flat, blade: 0.4 x 2.5 x 80 mm, length: 161 mm
	SZS 0,5X3,0	Screwdriver, flat, blade: 0.5 x 3.0 x 100 mm, length: 181 mm
	SZS 1,0X4,0	Screwdriver, flat, blade: 1.0 x 4.0 x 100 mm, length: 198 mm
	SZS 1,0X6,5	Screwdriver, flat, blade: 1.0 x 6.5 x 150 mm, length: 248 mm
	UNIFOX-C VDE	Combination pliers, VDE design
	UNIFOX-P VDE	Needle-nose pliers, VDE design
	UNIFOX-WP	Water pump pliers
	USS 4	Control cabinet key, made of metal, for all common control cabinets
	WIREFOX 10	Stripping tool, for lines and conductors from 4 – 16 mm², stripping length of up to 18 mm
	WIREFOX-D 40	Stripping tool, for stripping lines of 4.5 - 40 mm, insulation strength up to 4.5 mm
	TOOL-BAG EMPTY	Tool bag, with document and laptop compartment
	Cutter knife	Gray
	Tape measure 3 m	
Tool bag, empty	TOOL-BAG EMPTY	1212500

# Tool sets



Type Order no.	TOOL-CARRIER	1212503
	CRIMPFOX-M	Basic pliers, for accommodating dies for a wide range of contact types
Tool carrier, equipped with one of the	CRIMPFOX-M 10/DIE	Die, for Crimpfox-M, for ferrules 0.25 - 10 mm², serial storage box
following tools:	CUTFOX 18	Cable cutter for copper and aluminum conductors
	CUTFOX-S VDE	Diagonal cutter for copper and aluminum conductors, VDE-tested
	PROFIPOL	Voltage tester, for DC and AC voltages of 6 V to 400 V, IP65
	SZK PH0	Screwdriver, suitable for Phillips recess screws, size: 0
	SZK PH1	Screwdriver, suitable for Phillips recess screws, size: 1
	SZK PH2	Screwdriver, suitable for Phillips recess screws, size: 2
	SZS 0,4X2,5	Screwdriver, flat, blade: 0.4 × 2.5 × 80 mm, length: 161 mm
	SZS 0,5X3,0	Screwdriver, flat, blade: 0.5 x 3.0 x 100 mm, length: 181 mm
	SZS 1,0X4,0	Screwdriver, flat, blade: 1.0 x 4.0 x 100 mm, length: 198 mm
	SZS 1,0X6,5	Screwdriver, flat, blade: 1.0 x 6.5 x 150 mm, length: 248 mm
	UNIFOX-CE VDE	Combination pliers, angled, VDE design
	UNIFOX-P VDE	Needle-nose pliers, VDE design
	UNIFOX-WP	Water pump pliers
	USS 4	Control cabinet key, made of metal, for all common control cabinets
	WIREFOX 10 VDE	Stripping pliers, for stripping conductors of up to 10 mm <sup>2</sup>
	WIREFOX-D 13	Stripping tool, for stripping lines of 8 - 13 mm
	WIREFOX-D 28	Stripping tool, for stripping lines of 8 - 28 mm
	TOOL-CARRIER EMPTY	Tool carrier
	Cutter knife	Gray
	Tape measure 3 m	
Tool carrier, empty	TOOL-CARRIER EMPTY	1212499
Type Order no.	TOOL-BELTPOUCH	1212506
Tool belt pouch, equipped with one of the	CUTFOX 18	Cable cutter for copper and aluminum conductors
following tools:	CUTFOX-S VDE	Diagonal cutter for copper and aluminum conductors, VDE-tested
	PROFIPOL	Voltage tester, for DC and AC voltages of 6 V to 400 V, IP65
	SZK PH1	Screwdriver, suitable for Phillips recess screws, size: 1
	SZK PH2	Screwdriver, suitable for Phillips recess screws, size: 2
	SZS 0,5X3,0	Screwdriver, flat, blade: 0.5 x 3.0 x 100 mm, length: 181 mm
	SZS 1,0X4,0	Screwdriver, flat, blade: 1.0 × 4.0 × 100 mm, length: 198 mm
	SZS 1,0X5,5	Screwdriver, flat, blade: 1.0 x 5.5 x 125 mm, length: 223 mm
	UNIFOX-CE VDE	Combination pliers, angled, VDE design
	USS 4	Control cabinet key, made of metal, for all common control cabinets
	WIREFOX-D 13	Stripping tool, for stripping lines of 8 - 13 mm
	TOOL-BELTPOUCH EMPTY	Total hale a such
		Tool belt pouch
	Tape measure 3 m	for ber pouch

# **SCREWFOX** Screwdriver and torque screwdriver

The screwdrivers from Phoenix Contact are adapted optimally to the terminal block screws. This and ergonomically designed handles facilitate the transmission of the required torques with adequate force. Finely adjustable torque and batterypowered screwdrivers round off the product range.



**Maximum force transfer** Dual-component handles and handles with good grip ensure an optimum hold, thus making work fatigue-free.



**Precise torque** The finely adjustable torque allows to customize various screw sizes optimally and ensures constant torque any time.



**Battery-powered screwdriver** 

The extremely accurate battery-powered torque screwdriver, ASD 21 is the ideal one-hand tool for effectively connecting conductors to screw connections.

# **SCREWFOX** screwdriver tools

#### Screwdriver to actuate spring and quick connection terminal blocks

In addition to their standard applications, the screwdrivers of the SZF series are also suitable for actuating the modular terminal blocks of the ST... and QTC... series.

Blade: 0.4 x 2.5 x 75 mm, length: 156 mm

Blade: 0.6  $\times$  3.5  $\times$  100 mm, length: 181 mm

Blade: 0.8 x 4.0 x 100 mm, length: 198 mm

Blade: 1.0 x 5.5 x 150 mm, length: 248 mm

Туре



#### Flat-bladed screwdriver, VDE flat-bladed screwdriver

Screwdrivers from Phoenix Contact with their blades ensure a large bearing surface in the screw head. Only in this way can the required torque be achieved.	<b>●</b> ((\$334			1000 VAC/ 1500 VDC	
Type Order no					
Blade: 0.4 x 2.0 x 60 mm, length: 157 mm	SZS 0,4X2,0	1205202			
Blade: 0.6 x 3.5 x 100 mm, length: 181 mm	SZS 0,6X3,5	1205053			
Blade: 1.0 x 5.5 x 150 mm, length: 248 mm			SZS 0,4X2,5	1205037	
Blade: 0.4 x 2.5 x 75 mm, length: 156 mm			SZS 0,5X3,0	1207404	
Blade: 1.0 x 5.5 x 150 mm, length: 248 mm			SZS 0,6X2,5	1205040	
Blade: 0.4 x 2.5 x 75 mm, length: 156 mm			SZS 1,0X4,0	1205066	
Blade: 1.0 x 5.5 x 150 mm, length: 248 mm			SZS 1,0X5,5	1209114	
Blade: 0.4 x 2.5 x 75 mm, length: 156 mm			SZS 1,0X6,5	1205079	
Blade: 1.0 x 5.5 x 150 mm, length: 248 mm			SZS 1,2X8,0	1205082	

#### VDE screwdriver for test socket screws

The SZG screwdrivers are ideal for s free and safe drive of the test socket sc with 2.3 und 4 mm diameter.			
Type Ord	der no.		
Blade: 0.6 x 3.5 x 100 mm, length: 198 mm	SZG 0,6X3	<b>3,5</b> 1205121	
Blade: 0.9 x 6.5 x 175 mm, length: 287 mm	SZG 0,9X6	<b>6,5</b> 1205134	

#### **VDE** Phillips screwdrivers with Phillips and Pozidriv drive

The VDE protection-insulated screwo for Phillips screws are available in the Pozidriv / Supadriv and Phillips recess versions.	e					
Туре	Order no.					
Size: PZ0 x 80 mm, length: 161 mm		SZK PZ0	1206447			
Size: PZ1 x 80 mm, length: 161 mm		SZK PZ1	1206450			
Size: PZ2 x 100 mm, length: 205 mm		SZK PZ2	1206463			
Size: PH0 x 80 mm, length: 161 mm				SZK PH0	1205147	
Size: PH1 x 80 mm, length: 161 mm				SZK PH1	1205150	
Size: PH2 x 100 mm, length: 205 mm				SZK PH2	1205163	

# **SCREWFOX** screwdriver tools

#### Screwdriver sets

			<b>A</b>	A A		
Туре	Order no.	SZ SORTI 1	1202085	SZ SORTI 2	1202098	
Description		Screwdriver assortment		Screwdriver assortment		
		consisting of:		consisting of:		
		SZS 0,4X2,5	1205037	SZS 1,0X4,0	1205066	
		SZS 0,6X2,5	1205040	SZS 1,0X6,5	1205079	
		SZS 0,6X3,5	1205053	SZG 0,9X6,5	1205134	
		SZG 0,6X3,5	1205121			

#### Hexagonal socket wrench and BIT set for hexagon head screws

Socket wrench for tightening hexagon head screws and nuts. Dual-component handles and handles with good grip ensure an optimum hold.





Туре	Order no.			ASD BIT SETHN	1209952
Wrench size 5.5 mm		SHN 5,5	1209855	Battery-operated screwdriv	ver bit set
Wrench size 8.0 mm		SHN 8	1209868	consisting of:	
Wrench size 13 mm		SHN 13	1209923	1 attachment set each in 5.5	mm, 8 mm, 13 mm
				adapter to 1⁄4"	

#### **VDE** socket wrench for hexagonal socket-head screws

With easy-to-handle and wide T-form o the fully insulated hexagonal socket-hea Allen wrench, high tightening torques ca be achieved.	e 👔	000 VAC/ 1500 V DC	
Type Ord	er no.		
Wrench size 5 mm	VDE-ISS 5	1203343	
Wrench size 6 mm	VDE-ISS 6	1201934	
Wrench size 8 mm	VDE-ISS 8	1201947	

#### **Control cabinet key**

Universal control cabinet key with the following closures: • 6 mm square • 7 – 8 mm square • 7 – 8 mm triangle • 3 – 5 mm double			
Type Order	no. US	<b>S 4</b> 1203149	

# SCREWFOX screwdriver tools

#### Torque screw driver with hexagonal fast connection

-The extremely accurate torque screw drivers that can be set finely acoording to EN ISO 6789 are tailored to Phoenix Contact products with screw connection. - TSD-M 1.2NM 0.3-1.2 Nm - TSD-M 3NM 1.2-3.0 Nm - TSD-M 6NM 3.0-6.0 Nm Туре Order no. TSD-M 1,2NM 1212224 TSD-M 6NM 1212226 Туре Order no. TSD-M 3NM 1212225 Accessories Tool bits for slotted-head screws Blade: 0.5 x 3.0 mm, length: 50 mm, tough but flexible ASD BIT 0,5X3,0X50 1203961 ASD BIT 0,5X3,0X50 1203961 1203974 1203974 Blade: 0.6 x 3.5 mm, length: 50 mm, tough but flexible ASD BIT 0.6X3.5X50 ASD BIT 0.6X3.5X50 Blade: 0.6 x 3.5 mm, length: 70 mm, tough but flexible ASD BIT 0,6X3,5X70 1203987 ASD BIT 0,6X3,5X70 1203987 Blade: 0.8 x 4.0 mm, length: 50 mm, tough but flexible ASD BIT 0,8X4,0X50 1203990 ASD BIT 0,8X4,0X50 1203990 More tool bits ASD BIT 1,0X5,5X50 1204009 ASD BIT 1,0X5,5X50 Blade: 1.0  $\times$  5.5 mm, length: 50 mm, tough but flexible 1204009 see www.phoenixcontact.net/catalog

#### **Battery-powered torque screwdriver**

The battery-powered screwdriver has the following characteristics:

- Right/Left rotation
- 2-gear transmission
- 21-level coupling with drilling levels of up to 600 rpm
- 6.5 mm hexagon fast connection drill chuck





Туре	Order no.	ASD 21	1208526	ASD 21 SET 120V	1208542	
				ASD 21 SET 230V	1208490	
Description		Adjustable from 0.3 – 4.4 Nm		consisting of:		
		Accuracy ± 5%		Battery-powered torque scre	wdriver	
		including power pack 1.2 Ah		incl. power pack		
				Charger 120 V or 230 V		
				Bits and user manual		
				Aluminum case		
Accessories						
Tool bits for slotted-head screws						
Blade: 0.5 x 3.0 mm, length: 50 mm, tough	but flexible	ASD BIT 0,5X3,0X 50	1203961	ASD BIT 0,5X3,0X 50	1203961	
Blade: 0.6 x 3.5 mm, length: 50 mm, tough	but flexible	ASD BIT 0,6X3,5X 50	1203974	ASD BIT 0,6X3,5X 50	1203974	
Blade: 0.6 x 3.5 mm, length: 70 mm, tough	but flexible	ASD BIT 0,6X3,5X 70	1203987	ASD BIT 0,6X3,5X 70	1203987	
Blade: 0.8 x 4.0 mm, length: 50 mm, tough	but flexible	ASD BIT 0,8X4,0X 50	1203990	ASD BIT 0,8X4,0X 50	1203990	More tool bits
Blade: 1.0 x 5.5 mm, length: 50 mm, tough	but flexible	ASD BIT 1,0X5,5X 50	1204009	ASD BIT 1,0X5,5X 50	1204009	see www.phoenixcontact.net/catalog

#### Hexagonal torque screwdriver with preset torque

The preset 4 mm hexagonal torque screwdrivers are suitable especially for tightening the pressure nuts and sensor / actuator cables of distributor boxes from the PLUSCON product range.





Туре	Order no.			Accessories: Nuts for		
Blade: 0.4 x 2.5 x 75 mm, 0.2 Nm		TSD 02 SAC	1208487	Cable, M8 plug connector	SAC BIT M8-D10	1208461
				self assembled cable, M8 connector	SACC BIT M8-D12	1208474
Blade: 0.6 x 3.5 x 100 mm, 0.4 Nm		TSD 04 SAC	1208429	Cable, M12 connector	SAC BIT M12-D15	1208432
				Cable, M12 connector	SACC BIT M12-D20	1208445
Blade: 0.8 x 4.0 x 100 mm, 2.0 Nm		TSD 20 SAC	1212020	Pressure nuts, wrench size 13 mm	SAC BIT QUICKON-W13	1212033
Blade: 1.0 x 5.5 x 150 mm, 2.5 Nm		TSD 25 SAC	1212315	Pressure nuts, wrench size 24 mm	SAC BIT HOOD-W24	1212486

# **TESTFOX** Measuring and testing devices

High-quality measuring tools are available with the TESTFOX multimeters, current pliers and voltage testers that are tested and approved as per the nationally and internationally applicable standards. They allow measurement of all standard measurement types and serve as the ideal solution in all fields of application, electrical installation and the service.





Wide range of functions The TESTFOX M-1 offers all standard measurement types and temperature measurements in a compact housing.



Versatile use The TESTFOX CC-1 also allows measurement of low AC/DC currents above 10 mA and is ideal in the area of photovoltaics.



**Measuring without errors** A load can be connected through two pushbuttons in order to rule out erroneous measurements due to reactive voltage.

# **TESTFOX** testing and measuring devices

The DUSPOL EXPERT voltage and continuity tester has the following features:

- Single-pos. test of the phase conductor (phase)
- Measuring point lighting
- Acoustic and optical continuity test
- Load connection using a pushbutton
- Vibration alarm for safe voltage detection
   Surge voltage category CAT IV 500 V as per IEC/EN 61243-3



Туре	Order no.	PROFIPOL	1209101	DUSPOL EXPERT	1209091	
Voltage range	[V DC]	6 400		12 750		
Voltage range	[V AC]	6 400		12 690		For further technical data, see
Protection class		IP65		IP64		www.phoenixcontact.net/catalog

The current pliers can be used in the case of voltages of up to 600 V, category III. They combine the functions of a digital multimeter with those of current pliers in a compact and practical IP30 housing. All measuring ranges are overload-protected.





		_		_		
Туре	Order no.	TESTFOX CC	1212210	TESTFOX CC-1	1212211	
Display scope		2000 digits		4000 digits		
Display accuracy		1,0%		0,5%		
Voltage AC		0.1 V - 600 V		0.1 mV - 600 V		
Voltage DC		0.1 V - 600 V		0.1 mV - 600 V		
Current AC		0.1 A - 400 A		10 mA – 300 A		
Current DC		-		10 mA - 300 A		
Resistance		0,1 $\Omega-20$ M $\Omega$		0,1 $\Omega-40$ M $\Omega$		For further technical data, see
Continuity test		Acoustic (20 Ω)		Acoustic (50 Ω)		www.phoenixcontact.net/catalog

The digital multimeters with volt sensor function are impressive due to their technology and their quality. They are tested and approved as per the internationally applicable standards IEC/EN 61010. The devices can be used in the case of voltages of up to 600 V, category III or 1000 V, category II. Order no. TESTFOX M 1212208 TESTFOX M-1 1212209 Туре Display scope 2000 digits 2000 digits 0.5% 0.5% Display accuracy Volt sensor yes yes 0.1 mV – 750 V 0.1 mV – 750 V Voltage AC 0.1 mV - 1000 V 0.1 mV - 1000 V Voltage DC Current AC 1 mA – 10 A 1 A - 10 A Current DC  $0.1 \ \Omega - 20 \ M \ \Omega$ Resistance  $0.1 \ \Omega - 20 \ M \ \Omega$ Continuity test Acoustic (25 Ω) Acoustic (25  $\Omega$ ) 1 Hz – 20 MHz Frequency 1.00 pF - 2.00 mF Capacitance Temperature -20°C - 800°C For further technical data, see Diode test Yes (1.5 mA) Yes (1.5 mA) www.phoenixcontact.net/catalog

# Automatic devices Automatic cutting, stripping and crimping devices

For the automation of steps for flexible and quick processing of conductors and cables, Phoenix Contact offers a comprehensive range of innovative automatic tools. In this way, functionality, quality and quick retooling times ensure high flexibility for consistently high results.





Stripping automatically





Crimping automatically

Stripping and crimping automatically



The CUTFOX 10 automatic cutting device cuts conductors and lines up to 10 mm<sup>2</sup>. Solid and stranded conductors are cut to within a millimeter. The length and the number of sections are entered via the userfriendly display. The CUTFOX 10 adjusts automatically to the diameter when material is changed.



The automatic stripping device WF 1000 enables automatic stripping with the option of partial stripping of conductors of up to  $6 \text{ mm}^2$  or lines up to  $6 \text{ mm} \emptyset$ . The stripping dimensions are individually set via dials and are displayed on the display.



The ZAP crimping pliers are pneumatic pliers for ferrules with a cross-section of 0.25 to 10 mm<sup>2</sup>. Crimping is triggered, depending on the version, via a foot valve or manual release. Two integrated receptacles ensure quick access to the ferrules.



The CF 500 is characterized by a high compression capacity in a compact design. A simple and quick replacement option of dies makes it suitable for processing a variety of contact types of up to 50 mm<sup>2</sup>.



The automatic stripping and crimping device CF 1000 processes loose (bulk) taped ferrules with insulating collars in accordance with DIN 46228-44. Using this machine, conductors can be stripped and fitted with ferrules in one operation.



The automatic stripping and crimping device CF 3000-2,5 processes taped ferrules with insulating collars in accordance with DIN 46228-44. Using this device, conductors in the cross-section range from  $0.25 - 2.5 \text{ mm}^2$  can be stripped and fitted with ferrules in one operation. Modifying automatic devices to different cross-sections is possible within a minute.

#### **CUTFOX 10** automatic cutting device

The automatic cutting device CUTFOX 10 offers you the possiblity to cut various conductors. The desired length and number are entered via a user-friendly display and the automatic device is ready to start.

The front cover only needs to be opened to introduce the conductor ends. The drive and guide rolls are automatically set to the relevant defined diameter.

An application video can be downloaded from the Internet.



#### **CUTFOX 10**

		<b>188</b> .	
Туре	Order no.		
Automatic cutting device, 230 V, 50 Hz version		CUTFOX 10	1206829
for conductors and cables up to 8 mm Ø			
solid (up to 2.5 mm <sup>2</sup> ) and stranded (up to 10 mm <sup>2</sup> )			
Automatic cutting device, 120 V, 60 Hz version		CUTFOX 10 120 V	1206832
for conductors and cables up to 8 mm Ø			
solid (up to 2.5 mm <sup>2</sup> ) and stranded (up to 10 mm <sup>2</sup> )			
Cable roller for CUTFOX 10		CUTFOX 10 C-UN	1208393
Cable unwinders for accommodating cable rings and cable coils			
Technical data			
Dimensions, width / length / height	[mm]	195 / 295 / 230	
Weight	[kg]	11	
Power consumption	[VA]	80	
Fine strand	[mm <sup>2</sup> ]	0.25 - 10	
Single-strand	[mm <sup>2</sup> ]	0.25 - 2.5	
Max. throughput	[mm]	8	
Cross-section range		Automatic	
Maximum number of cuts	[Stck.]	99999	
Length	[mm]	2 99999	
Feed rate	[m/s]	0.5	
Unit of measurement		mm/inch	
Dialog language		German / English / French / Italian	
Automatic cutting device accessories			1007071
Spare drive wheels		CF-10 WHEEL SET	1207271
2 pcs., for CUTFOX 10			1207201
Spare knife set for CUTFOX 10		CF-10 CUTTER KNIFE SET	1207284
for COIPOX TO			
Cable unwinder accessories			
Spare turntable for cable unwinders		CUTFOX 10 R-C	1208403
for the accommodation and spring-mounted unwinding of cable rings and cable coils			
Spare holding arms for turntables		CUTFOX 10 BAR	1208416
Turntable, 4 arms for turntable			

#### WF 1000 automatic stripping device

The compact automatic stripping device WF 1000 is suitable for automatic stripping with the option of partial stripping of conductors of thicknesses of 0.08 to 6 mm<sup>2</sup> or also multi-strand lines with a diameter up to 6 mm<sup>2</sup>. Even for special isolations such as PTFE and silicone, this automatic device is particularly suitable. The clamping force is automatically set to the required withdrawal force. Unsightly pressure points on sensitive materials are thus prevented. The large and clear display on the top side of the device simplifies the correct setting.

An application video can be downloaded from the Internet.



WF 1000			
Туре	Order no.		
Automatic stripping device, 230 V version		WF 1000	1212149
Version for conductors and lines			
solid and stranded 0.08 – 6 mm² (max. Ø 6 mm)			
with integrated graphic display			
Automatic stripping device, 120 V version		WF 1000 120 V	1212258
Version for conductors and lines			
Solid and stranded 0.08 – 6 mm <sup>2</sup> (max. $Ø$ 6 mm)			
with integrated graphic display			
Technical data			
Dimensions, width / length / height	[mm]	141 / 363 / 221	
Weight	[kg]	9.5	
Power consumption	[VA]	160	
Working cycle	[s]	0.3	
Compression		trapezoidal	
Fine strand	[mm <sup>2</sup> ]	0.08 - 6	
Stripping length	[mm]	3 – 20	
Part of the stripping length	[mm]	2 – 20	
Max. throughput	[mm]	6	
Accessories			
Spare stripping knife		WF 1000/SB	1212279
char o serieburg remo		111100005	//

#### **ZAP** pneumatic crimping pliers

The ZAP crimping pliers are pneumatic pliers for ferrules with a cross-section of 0.25 to 10 mm<sup>2</sup>. The ZAP 25 has a Duo-Press die, allowing both front and lateral cable insertion.

The ZAP 25 T and ZAP 100 T have been developed especially for preassembly of conductors. The crimping process is triggered by a foot valve. Two integrated receptacles ensure quick access to the ferrules.





ZAP...

ZAP ... T

ZAP 25 / ZAP 100				Ą	
Туре	Order no.				
Pneumatic crimping pliers		ZAP 25	1203110	ZAP 100	1203259
For ferrules according to DIN 46228					
Technical data					
Conductor	[mm <sup>2</sup> ] / AWG	0.25 - 2.5 / 24 - 14		4 - 10 / 12 - 8	
Pressure range	[bar]	4 - 6		4 - 6	
Air consumption per compression	[1]	0.2		0.2	
Compression		trapezoidal		trapezoidal	

ZAP	25	Т	I	ZAP	100	т
-----	----	---	---	-----	-----	---



Туре	Order no.				
Pneumatic crimping pliers		ZAP 25 T	1203123	ZAP 100 T	1203262
For ferrules according to DIN 46228					
Technical data					
Conductor	[mm <sup>2</sup> ] / AWG	0.25 - 2.5 / 24 - 14		4 - 10 / 12 - 8	
Pressure range	[bar]	4 - 6		4 - 6	
Air consumption per compression	[1]	0.2		0.2	
Compression		trapezoidal		trapezoidal	

## CF 500 automatic crimping device

The compact automatic crimping device CF 500 is impressive due to its high press capacity and the easy replaceability of its dies. The automatic device is an all-rounder due to its large number of dies.

- Ferrules of up to 50 mm<sup>2</sup>
- TWIN ferrules of up to  $2 \times 10 \text{ mm}^2$
- Insulated cable lugs of up to 6 mm<sup>2</sup>
- Non-insulated cable lugs up to 6 mm<sup>2</sup>
- Tube lugs up to 10 mm<sup>2</sup>
- Slip-on sleeves and flat connectors of up to 6 mm<sup>2</sup>
- Turned contacts of up to 10 mm<sup>2</sup>

More dies are available on request or in the Phoenix Contact e-shop. An application video can be downloaded from the Internet.



CF 500		31		
Туре	Order no.			
Automatic crimping device, 230 V design, with foot pedal		CF 500-230 V	1208348	
Automatic crimping device, 120 V design, with foot pedal		CF 500-120 V	1208351	
Technical data				
Dimensions, width / length / height	[mm]	140 / 220 / 320		
Weight	[kg]	10		
Power consumption	[VA]	160		
Crimping pressure / working cycle	[kN] / [s]	10 / 1		
Accessories				
CF 500 die for				
Ferrules (A and Al) 0.25 – 6 mm <sup>2</sup>		CF 500/DIE AI 6	1212238	
Ferrules (A and AI) 10, 16 and 25 mm <sup>2</sup>		CF 500/DIE AI 25	1212239	
Ferrules (A and AI) 35 and 50 mm <sup>2</sup>		CF 500/DIE AI 50	1212261	
TWIN ferrules (A-TWIN) 2 x 4, 2 x 6 and 2 x 10 $mm^2$		CF 500/DIE AI-TWIN 10	1212262	
Insulated cable lugs (RCI and FCI) $0.14 - 1.5 \text{ mm}^2$		CF 500/DIE RCI 1,5	1212263	
Insulated cable lugs (RCI and FCI) 0.5 – 6 mm <sup>2</sup>		CF 500/DIE RCI 6	1212240	
Cable lugs (RC and FC) 0.5 – 10 mm <sup>2</sup>		CF 500/DIE RC 10	1212244	
Cable lugs (RC and FC) 16 mm <sup>2</sup>		CF 500/DIE RC 16	1212257	
Slip-on sleeves and flat connectors (SCF and SCM) $0.1 - 1.5 \text{ mm}^2$		CF 500/DIE SC 1,5	1212241	
Slip-on sleeves and flat connectors (SCF and SCM) $0.5 - 6 \text{ mm}^2$		CF 500/DIE SC 6	1212242	
Turned contacts with pin diameters 2.5 and 4.0 mm (CK 2,5 and CK 4	4,0) 0.14 – 4 mm²	CF 500/DIE TC 4 CF 500/DIE TC 10	1212237 1212260	
Turned contacts (CK 4,0) 6 – 10 mm <sup>2</sup> CF 500 locator (positioning help) for			1212260	
Slip-on sleeves (SCF) W: 2.8 mm, L: 5 mm		CF 500/LOC SCF 2,8/1,5	1212249	
Slip-on sleeves (SCF) W: 4.8 mm		CF 500/LOC SCF 4,8/2,5	1212248	
Slip-on sleeves (SCF) W: 0.5 – 2.5 mm <sup>2</sup>		CF 500/LOC SCF 6,3/2,5	1212264	
Slip-on sleeves (SCF) W: 6.3 mm		CF 500/LOC SCF 6,3/6	1212247	
CF 500 protective cover for				
Ferrules up to 6 mm <sup>2</sup> (AI 6)		CF 500/COV AI 6	1212254	
TWIN ferrules (AI-TWIN)		CF 500/COV AI-TWIN	1212266	
Insulated cable lugs (RCI)		CF 500/COV RCI	1212255	
Tube lugs 0.5 – 10 mm <sup>2</sup>		CF 500/COV RC 10	1212252	
Tube lugs 0.34 – 2.5 mm <sup>2</sup>		CF 500/COV RCT 2,5	1212253	
Slip-on sleeves and flat connectors SC1.5 and SC6		CF 500/COV SC	1212251	
Without recess (for all dies without assignment)		CF 500/COV	1212250	

#### **CF 1000 crimping machine**

The stripping and crimping machine CF 1000 processes loose ferrules with insulating collars as per DIN46228-4. This automatic device can process up to 1200 conductors per hour. In only one work step, the conductor is stripped and quality-crimped with a ferrule. Additional features include:

- Rugged structure
- Processing of loose ferrules (Al...)
- Fast cross-section change without additional setting measures
- Quantity counter
- Suitable for mass processing



#### **CF 1000** Туре Order no. CF 1000-1,5 230 V 1208199 Stripping and crimping machines, 230 V version Electro-pneumatic, for loose ferrules with insulating collar, $0.34-4\ \text{mm}^2$ Incl. conversion kits $0.5 - 1.5 \text{ mm}^2$ (stripping length 8 mm) CF 1000-1,5 120 V 1208209 Stripping and crimping machines, 120 V version Electro-pneumatic, for loose ferrules with insulating collar, $0.34 - 4 \text{ mm}^2$ Incl. conversion kits 0.5 - 1.5 mm<sup>2</sup> (stripping length 8 mm) CF 1000-10 1212456 Stripping and crimping machines, 230 V version Electro-pneumatic, for loose ferrules with insulating collar, 4 $mm^2,\,6$ $mm^2$ and 10 $mm^2$ Without conversion kit CF 1000-10, 120 V 1212457 Stripping and crimping machines, 120 V version Electro-pneumatic, for loose ferrules with insulating collar, 4 $mm^2,\,6\ mm^2$ and 10 $mm^2$ Without conversion kit Technical data Dimensions, width / length / height 240 / 490 / 390 [mm] Weight [kg] 29 Air consumption per compression 1.2 [1] Working cycle [s] 1.5 Crimping pressure [kN] 10 Compression trapezoidal Accessories Expansion set, complete for CF 1000, For loose ferrules with insulating collar CF 1000-TOOLKIT 0,34/6 1208212 0.25/0.34 mm<sup>2</sup>, stripping length 6 mm CF 1000-TOOLKIT 0.34/8 0.25/0.34 mm<sup>2</sup>, stripping length 8 mm 1208225 2.5 mm<sup>2</sup>, stripping length 8 mm CF 1000-TOOLKIT 2,5/8 1208241 4 mm<sup>2</sup>, stripping length 10 mm CF 1000-TOOLKIT 4,0/10 1208270 4 mm², stripping length 10 – 12 mm $\,$ CF 1000-10-TOOLKIT 4/10-12 1212458 6 mm<sup>2</sup>, stripping length 12 mm CF 1000-10-TOOLKIT 6/12 1212459 10 mm<sup>2</sup>, stripping length 12 mm CF 1000-10-TOOLKIT 10/12 1212460 Spare knife, V-form, for CF 1000 CF-FM 1205215

#### CF 3000 stripping and crimping machine

The automatic stripping and crimping device CF 3000-2,5 processes taped ferrules with insulating collars according to DIN 46228-4. The device covers the cross-section range from  $0.25 - 2.5 \text{ mm}^2$ . In just one step, the ferrule is stripped and then immediately processed. The change-over of the automatic devices to different cross-section ranges is possible within a minute.

An application video can be downloaded from the Internet.



CF 3000				
Туре	Order no.			
Automatic stripping and crimping device, 230 V version		CF 3000-2,5	1205477	
Taped ferrules 0.25 – 2.5 mm², stripping length 8 mm				
Incl. conversion kits 0.5 – 2.5 mm <sup>2</sup>				
Automatic stripping and crimping device, 120 V version		CF 3000-2,5 120V	1205516	
Taped ferrules 0.25 – 2.5 mm², stripping length 8 mm				
Incl. conversion kits 0.5 – 2.5 mm <sup>2</sup> (stripping length 8 mm)				
Technical data				
Dimensions, width / length / height	[mm]	165 / 320 / 300		
Weight	[kg]	12		
Conductor	[mm <sup>2</sup> ] / AWG	0.25 - 2.5 / 22 - 14		
Power consumption	[VA]	80		
Working cycle	[s]	1.2		
Compression		trapezoidal		
Accessories				
Expansion set, complete for CF 3000		CF 3000-TOOLKIT 0,25	1212376	
For insulated taped, 0.25/0.34 mm <sup>2</sup>				
Stripping length 8 mm				
Spare locator				
0.25/0.34 mm <sup>2</sup>		CF 3000 LOC 0,25	1212377	
0.5 mm <sup>2</sup>		CF 3000 LOC 0,5	1205639	
0.75 mm <sup>2</sup>		CF 3000 LOC 0,75	1205642	
1.0 mm <sup>2</sup>		CF 3000 LOC 1,0	1205655	
1.5 mm <sup>2</sup>		CF 3000 LOC 1,5	1205668	
2.5 mm <sup>2</sup>		CF 3000 LOC 2,5	1205671	
Spare knife		CE 2000 AD 0.05	1212200	
0.25/0.34 mm <sup>2</sup> , adjustable		CF 3000 AB 0,25	1212380	
0.5 mm <sup>2</sup>		CF 3000 AM 0,5	1205587	
0.75 mm <sup>2</sup>		CF 3000 AM 0,75	1205590	
1.0 mm <sup>2</sup>		CF 3000 AM 1,0	1205600	
1.5 mm <sup>2</sup>		CF 3000 AM 1,5	1205613	
2.5 mm <sup>2</sup>		CF 3000 AM 2,5	1205626	

Further information on the products presented here and on the world of solutions from Phoenix Contact can be found at **www.phoenixcontact.net/catalog** 









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