

NEW

## THE ULTIMATE XTRA!

THE NEW POWERTOP XTRA FAMILY FROM 16 TO 125 A





## The ultimate Xtra The PowerTOP Xtra family

As a specialist for plugs and sockets MENNEKES is known worldwide for setting standards. With the PowerTOP Xtra it was always our claim to deliver the highest quality products for practical application. Previously available in 63 A and 125 A, the family has now been expanded to include 16 A and 32 A versions.

#### A family – with all the Xtras

All of our CEE plugs and connectors have now been completely redefined. In the future there will be ONE PowerTOP Xtra family.

#### One family – from 16 A to 125 A

We have drawn upon our entire CEE know-how to create a structured product family. Together with the proven PowerTOP Xtra in 63 A and 125 A the new PowerTOP Xtra family sets THE CEE standard from 16 A to 125 A – complete with X-CONTACT inside.



## **Experience the CEEvolution** The four success factors

#### Innovative new Xtras from 16 A to 32 A

PowerTOP Xtra is now a complete product family with solutions for every application area. In this regard plugs and connectors have been completely reworked and optimized in every detail.

The new members of the PowerTOP Xtra family bring four success factors from professionals for professionals:

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| All PowerTOP Xtra will<br>have X-CONTACT inside | р. 10 |





## **Ergonomically optimized design** in the handling

The PowerTOP Xtra family embraces the highest quality. They fit perfectly in the hand and are shaped so that their design supports every hand motion in practical use. This not only feels good – it also offers a real safety advantage.

The new ergonomic enclosure shape of the PowerTOP Xtra family is supported through non-slip surfaces. This considerably eases handling and installation. Here application convenience and protection against injury are optimally combined.







Under the harshest conditions an optimal ergonomic fit is a must in terms of convenience and safety. Therefore ergonomic perfection is the principle idea behind the PowerTOP Xtra design.



## **Ergonomically optimized design** in every detail



The service life of a MENNEKES plug is many years. Our plugs and connectors are designed to be connected and disconnected many thousands of times. Thus handling is a definitive characteristic for a good plug and socket system.

The new PowerTOP Xtra design takes this into account with many new functions. The ergonomically curved shape ensures that the plug rests comfortably and securely in the hand. In practice our devices are often used in damp and demanding environments. As soon as the plug is damp, conventional plugs and sockets are not so easy to handle. This is where the PowerTOP Xtra sets a new standard. The rubberized cable gland and the non-slip grip zones enable secure handling.

There is an innovation in every detail of the PowerTOP Xtra family, each PowerTOP Xtra has an area that is intended for individual device identification. E.g. through self-adhesive labels.

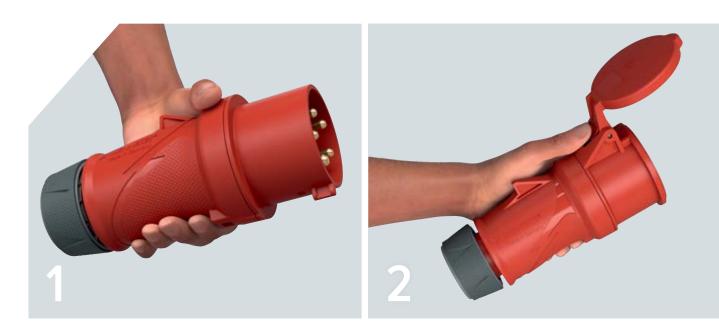
#### Ergonomic shape and non-slip grip zone

The ergonomic enclosure shape, the non-slip grip zone and the rubberized cable gland guarantee secure handling under all application conditions.



disconnection.

#### **Connectors with hinged lid opening aid** All connectors have an opening aid that can be handled with one hand to ease connection and



## **Simplified assembly** minimized tool use



The assembly process has been further perfected in the detailed optimization of the PowerTOP Xtra family. The result: significantly shorter assembly times, simple handling and minimized tool use. Improved features, such as the self-finding thread of the enclosure, the locking slider as well as the new cable gland add to the assembly convenience.

**1** 

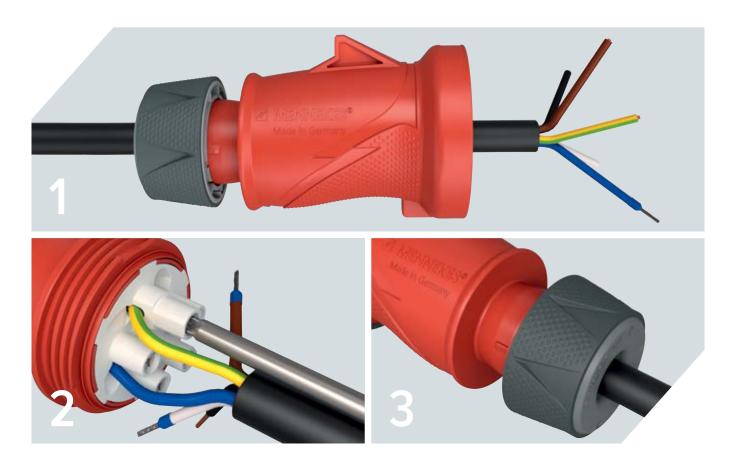
**Open the enclosure, insert and strip the cable** Unscrew the enclosure, run the cable through the cable gland and into the enclosure and strip it. Remove the insulation from the core and attach ferrules (only for the ErgoCONTACT).

#### Connect

Whether SafeCONTACT for the PowerTOP Xtra S or ErgoCONTACT for all PowerTOP Xtras in 16 A to 32 A – both connection types offer the highest level of assembly convenience.

Close the enclosure and tighten strain relief

The enclosure and the front part are screwed together and then sealed and secured with the locking slider. By tightening the rubberized cable gland the connection cable is secured and sealed at the same time.



# Easier and safer connection with ErgoCONTACT



Simple handling, ergonomically effective grip, safe installation and thus time saving assembly – in short, these are the main features with which ErgoCONTACT sets new standards in the area of installation technology.

The crucial ergonomic advantage is the fact that the screwdriver enters from the top rather than the side. Thus the screw pressure is directed into the holding grip. In this regard, the screw trajectory is additionally supported by a guide collar. Each contact has only one screw which is a captive combination head screw: Through plastic burrs on the upper end of the guide collar, the screws cannot fall out and can be operated with a Pozidriv PZ2 screwdriver.

Thus overall it is a much easier, and above all a much safer way to achieve the desired torque. In addition this connection hold is more naturally ergonomic and the danger of slipping off is reduced considerably.

#### Optimized screw activation from the rear

The ergonomic terminal position simplifies applying the required torque. The fact that only one screw per contact must be operated improves the installation and shortens the assembly time.

#### **Conductor insertion**

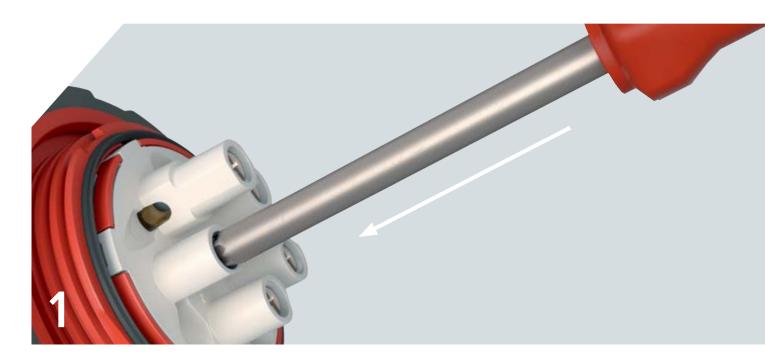
Curved conductor guidance channels easily and securely move the conductor ends into the contacts.

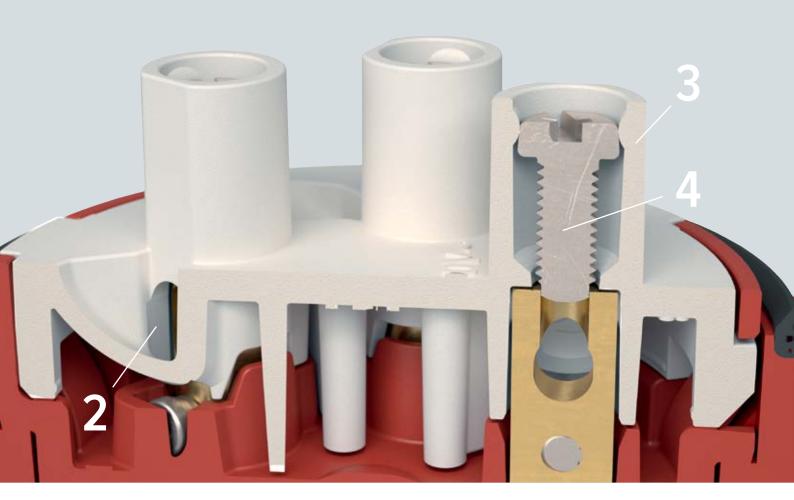
#### Guide collar

The screw trajectory is supported by a guide collar. This prevents slide-off and minimizes the danger of injury.

#### Captive combination head screws

The screws are integrated in the guide collars, are completely captive and they can be operated with Pozidriv PZ2 screwdrivers.





### **Easier and safer connection** with SafeCONTACT



PowerTOP Xtra in the PowerTOP Xtra S version is equipped with SafeCONTACT insulation displacement technology, which was already used in the StarTOP range. SafeCONTACT is the screwless and maintenance-free connection technology for plugs and connectors. Since stripping or pre-treatment of the cable is not necessary, you save more than half of the conventional installation time.



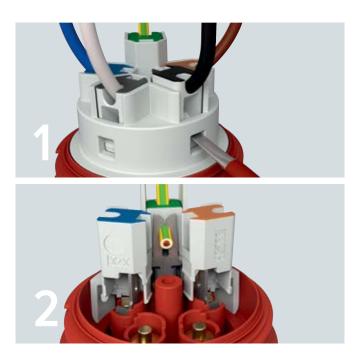
#### Safer contact

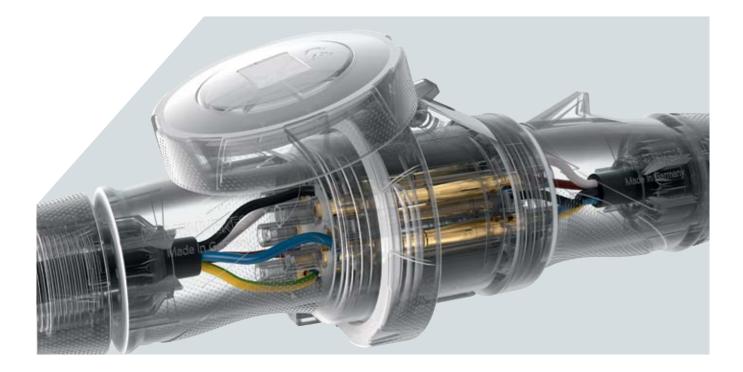
Plug in conductors without stripping, lever down the terminals with a screwdriver – that's it.



#### Interior view – SafeCONTACT

In one work process the insulation is separated and a secure contact connection established.





## X-CONTACT inside In the entire PowerTOP Xtra family



With X-CONTACT MENNEKES has developed a completely new contact sleeve solution for industrial plugs and sockets, which initially redefined the standard only for PowerTOP Xtra in 63 A and 125 A. Now, as the PowerTOP Xtra family is complete, the variants for 16 A and 32 A are also equipped with the X-CONTACT technology.

#### More contact

It is important to achieve the best possible balance between a safe contact closure and ease of insertion. We have successfully implemented this with X-CONTACT in an entirely new way.

Due to a completely new manufacturing process, the X-CONTACT sleeve has resilient properties based solely on its material characteristics, without the need to use any additional spring elements. Thanks to the shape of the X-CONTACT sleeve, a particularly safe contact closure can be achieved.

#### Less force

The special design of the X-CONTACT reduces the effort of insertion and withdrawal by up to 50%. An advantage that simplifies work processes and improves safety. With X-CONTACT, MENNEKES creates a safe contact closure and easy handling at a new, equally high level.

A glance into the opening of an X-CONTACT sleeve reveals the intelligent functional principle: the X-shaped slot and groove in the inner wall provides four advantages of the new design: innovative, simple, durable and safe. We call it the X principle.



## The X-principle Easy handling meets safe connections



#### Innovative

Due to the slotted sleeves with their resilient material properties, X-CONTACT is the simplest possible mechanical solution: the plug pin simply expands the opening of the resilient contact sleeve, which reduces the force needed to connect and disconnect the plug by up to 50%. X-CONTACT – intelligently innovative.

#### Durable

Even in cases when the plug is connected and disconnected frequently, there are no signs of wear and the sleeve material remains fatigue-proof in the long term even after rough handling. Due to the quality of the new sleeves, contamination and surface corrosion is automatically removed by connecting and disconnecting. **X-CONTACT – lasting solution.** 

#### Simple

In practice, X-CONTACT simplifies work processes. The connection is easier to handle when compared to conventional contact sleeves. X-CONTACT – simply brilliant.

#### Safe

A higher degree of safety of handling is provided by the easier connection and disconnection. The groove within the inner wall in connection with the resilient material of the contact sleeves provides for a safe contact closure.

X-CONTACT – double safety.



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