

# SolConex plugs and sockets our new global player







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### <u>SolConeX</u>

#### the new generation of plugs and sockets

SolConeX, the new generation of explosion protected plugs and sockets from R. STAHL, is the most up-to-date product series of its kind in the world. It is the first series of plugs and sockets with up to two optional, retrofitable auxiliary contacts. Along with the established CES series, SolConeX offers a complete range, from 16 A to 125 A, which is certified for use in Zone 1, Zone 2, Zone 21 and Zone 22. All plugs and sockets from R. STAHL are 100% compatible with one another.

The usual uncompromising safety and user-friendly installation are combined with SolConeX's unique advantages. With their high level of IP protection, and the fact that they withstand a broad range of ambient temperatures, the visually appealing devices are ideally suited for rough industrial applications. SolConeX is suited to all standard installation technologies; the coding for voltage, frequency and number of pins comply with IEC 60309. That means that these plugs and sockets can be used worldwide.



> www.solconex.info







### global

Our new global player – SolConeX. These cutting-edge plugs and sockets have been designed to be used worldwide and have been tested and certified in accordance with the most recent international standards. They can be used in Zone 1 and Zone 2 (gases) and in Zone 21 and Zone 22

- > Coding complies with IEC 60309
- For all standard international installation technologies,
   plastic cable glands 2, metallic cable glands 3,
   Conduit adaptors 4
- Switching capacity of 20 A (HP rated to UL 508, type 2 protection) with the 16 A plugs and sockets

(dusts). In every position of use, SolConeX complies with the high protection level IP 66. The plugs and sockets can withstand even the most adverse weather conditions and toughest applications. A new feature, especially important for the North American market, is the switching capacity of 20 A with the 16 A plugs and sockets.

All sockets have universal drillings which are suitable for

both metric and NPT cable glands. This means that all plugs and sockets are suited to all standard international installation technologies without additional tooling.





### <u>compatible</u>

SolConeX is 100% compatible with R. STAHL's previous plugs and sockets. The new plugs fit into earlier socket models, and the earlier plug models fit into the new sockets. The great advantage of this becomes apparant when it comes to retrofitting and buying replacement parts.

> 100% compatible with earlier plugs and sockets

The step-by-step conversion from the old to the new is simple and affordable. All SolConeX plugs also fit into

all non-explosion protected sockets that comply with IEC 60309. This means that moveable equipment designed for use in hazardous areas can also be operated outside the endangered areas. Constructive measures ensure, however, that normal industrial plugs cannot be inserted into SolConeX sockets, thus preventing hazardous mix-ups.





#### uncompromising

SolConeX combines well known uncompromising safety and user-friendly installation with important advantages. The easy-to-handle bayonet catch is a new feature of the plugs and sockets, and it ensures that the high protection level IP 66 standards are met. An important safety feature for rough

- > High protection level IP 66 in every position of use 3 6
- > High level of contact safety due to laminated contacts 2
- > Very easy to install
- The lowest possible mating and withdrawal forces, no material fatigue
- > Interior "swing-away" strain relief 4
- > Compression gland of the plug with ratchet safeguard 11
- > Ambient temperatures from -30°C to +55°C 5

industrial applications and use under the most adverse conditions is the fact that the plug meets IP 66 in every position of use. The self-cleaning laminated contacts ensure that the contact is optimal despite dirt or moisture.

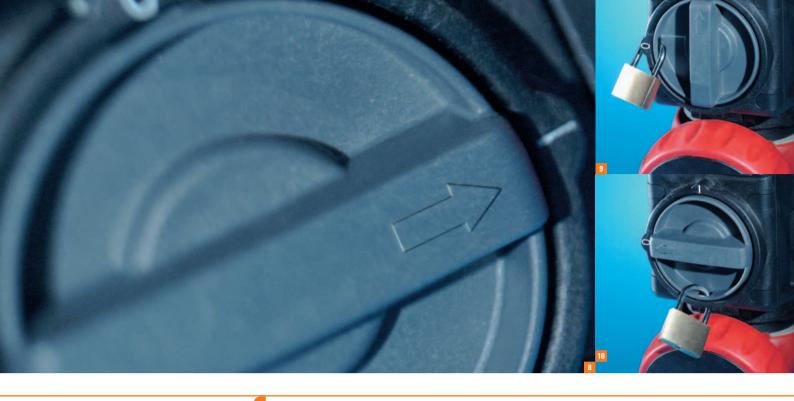
The compact plugs and sockets are designed to withstand temperatures in the  $-30^{\circ}\text{C}$  to  $+55^{\circ}\text{C}$  range. The plug's interior "swing-away" strain relief is new and unique.

When the cables are connected, a visible loop can be formed

which prevents the cable from being inadvertently pulled taut when the plug is closed; this also prevents faulty installation. Another new feature is the reliable ratchet safeguard of the plug.

This safe and quick locking technique of the gland increases the protection against self-loosening.







SolConeX has been designed with a focus on industrial safety. The outstanding safety feature of R. STAHL's plugs and sockets is the reliable disconnector switch with its large, convenient switching handle. The switch position display is clearly visible, even from far away. Inserting and

- > Clear switch position display
- > Large, lockable switching handle 19 10
- > Reliable disconnector switch with motor switching capacity AC 3 to 690 V

withdrawing the plug in Position 0 is simple and safe, as is the case with normal industrial plugs and sockets — no complicated rotations, no material fatigue, little wear and tear. The switch can only be turned on when the plug has been inserted. In Position 1, the plug is

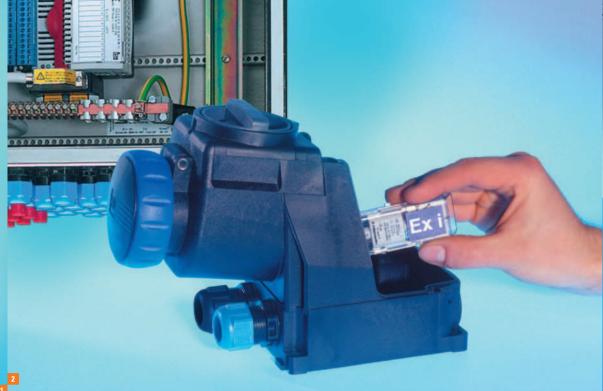
mechanically interlocked in the socket. This prevents the socket from being turned on when no plug has been inserted, and also prevents the plug from being pulled out while energised.

In both Position 0 and Position 1, a padlock can be attached to prevent unauthorised usage.

The disconnector switch, which is integrated into the flange, has a full motor switching capacity of AC 3 to 690 V, allowing the sockets to be used either as safety switches or motor switches.









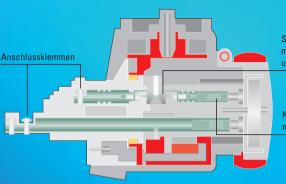
#### <u>innovative</u>

Sensational! SolConeX is the first series of plugs and sockets in the world with up to two optional, retrofitable auxiliary contacts. They are available for the use in standard control circuits as well as in versions for I.S. circuits. These cutting-edge auxiliary contacts can be mounted on the

- > Retrofitable auxiliary contacts 1
- > Auxiliary contacts for load shedding 1
- > I.S. auxiliary contacts for use in automation systems 2

flange with surprising ease, even after the installation of the socket. Maintenance-free Exe cage clamp terminals ensure reliable, undisrupted contact quality throughout the time of operation. All auxiliary contacts are pre-mating,

lead the main contacts when the power is turned off, and can be used for load shedding. The use of retrofitable auxiliary contacts for intrinsically safe electrical circuits supports the sustainable modernisation of many facilities and the use of low voltage switchgear in automation systems.



Schaltkammer Ex d mit Betätigungsstössel und Kontaktbrücke

Kontaktbuchsen Ex e mit Lamellenkontakten





### <u>flexible</u>

SolConeX has been designed entirely in modular form. The important advantages resulting from this are extremely flexible application possibilities and quick, inexpensive upgrades. The large switching handle and the disconnector switch are integrated into the socket flange. This means

- > Switching handle and disconnector switch in flange 4
- > Easy and safe installation in a spacious terminal chamber
- > Light, compact construction
- > Individual small socket panels 3
- > Through-wiring possible
- > Available with mini Clix connectors 5

that the terminal chamber is larger, thus facilitating an easy and quick installation. It also reduces the weight of the compact wall-mounting socket and makes it possible to engineer smaller socket panels. SolConeX now offers a maximum connection cross-sectional area of 6 mm² (16 A) for the installation of long supply cables with a large cross-sectional area. If desired, SolConeX can also

be delivered with mini Clix connectors from R. STAHL. Using the Ex mini Clix connectors, the user can plug-in the thermistor motor protection of transportable drives, among other applications.

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## plugs and sockets from 16 A to 125 A

- SolConeX plugs and sockets for low voltage, 16 A and 32 A
- 2 CES plugs and sockets for low voltage, 63 A and 125 A

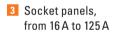
#### > Plugs and sockets for Zone 1, low voltage

Version	Nominal Current	No. of Pins	Series	Type
Plugs and sockets	16 A	3, 4, 5	SolConeX	8570
Plugs and sockets	32 A	4, 5	SolConeX	8571
Plugs and sockets	63 A	4, 5	CES	8579
Plugs and sockets	125 A	4, 5	CES	8581
Couplers	16 A	3	CES	8575
Socket panels	16 A – 125 A	3, 4, 5	_	8146/8125

#### > Plugs and sockets for Zone 1, extra-low voltage

Version	Nominal Current	No. of Pins	Series	Туре
Plugs and sockets	16 A	2, 3	CES	8575
Couplers	16 A	2, 3	CES	8575
Socket panels	16 A	2, 3	_	8146/8125





- 4 CES plugs and sockets for extra-low voltage, 16 A
- 5 CES couplers for low and extra-low voltage, 16 A

#### > Plugs and sockets for Zone 2, low voltage

Version	Nominal Current	No. of Pins	Series	Type
Plugs and sockets	16 A	3, 4, 5	SolConeX	7570
Plugs and sockets	32 A	4, 5	SolConeX	7571
Plugs and sockets	63 A	4, 5	CES	7579
Plugs and sockets	125 A	4, 5	CES	7581
Socket panels	16 A – 125 A	3, 4, 5	_	8146/8125

#### > Plugs and sockets for Zone 2, extra-low voltage

Version	Nominal Current	No. of Pins	Series	Туре
Plugs and sockets	16 A	2, 3	CES	7575
Socket panels	16 A	2, 3	_	8146/8125

The plugs and sockets are available in all current clock position and voltage varieties, in accordance with IEC 60309.

Also part of the product range:

- > Maintenance sockets
- > Cleanroom sockets
- > Transportable socket panels



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