



## Type 2509

Cable plug

Conduit Connection, UL approved

Operating Instructions



### Address

Germany / Deutschland / Allemagne

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### SYMBOLS

↓ designates a procedure which you must carry out.

Warning of serious or fatal injuries:

**DANGER!**  
In case of imminent danger.

**WARNING!**  
In case of potential danger.

## SYSTEM DESCRIPTION

### 1 General description

The cable plug Type 2509 with UL certification consists of a polyamide housing without integrated electronics. The connector is in accordance with DIN EN 175301-803 (previously DIN 43650 Form A).

### 1.2 Functions

The cable plug Type 2509 is used for joining conduit connections to solenoid coils.

### 1.3 Inteded use

This connector is intended for use in ordinary (non-Ex) locations.

Additionally this connector is intended for use in hazardous (Ex) locations if combination of this connector with the appropriate coil is declared permitted for use in hazardous (Ex) locations in the manual of the coil.

## 2 TECHNICAL DATA

### 2.1 Conformity

The cable plug Type 2509 conforms to the EU directives according to the EU Declaration of Conformity (where applicable).

### 2.2 Standards

UL 2238 and C22.2 No. 182.3M-1987

The applied standards, which are used to demonstrate conformity with the EU Directives, are listed in the EU type test certificate and/or the EU Declaration of Conformity (where applicable).

### 2.3 Operating conditions

Certification UL file no. E238288

Self-Declared Operating Conditions

Operating temperature  $-40\text{ °C}...+90\text{ °C}$   
( $-40\text{ °F}...+194\text{ °F}$ )

Degree of protection NEMA 4X (IP65)

### 2.4 Mechanical data

Dimensions see data sheet  
(approx. 33 x 33 x 59 mm)

Materials  
Housing Polyamide  
Seal NBR or Silicone  
Contacts Copper alloy, silvered

Cable outlet Contact insert can be rotated by 4 x 90° after removal

Poles 2-pole + protective conductor / 3-pole + protective conductor

Electrical connection 3 or 4 terminals in the contact insert Wire diameter AWG18

Thread of the conduit screw connection 1/2" NPT

Approved conduit connections

- for use with flexible conduit only as permitted by NEC; CEC or other applicable local code.
- Install in accordance with the National Electrical Code (NEC) or Canadian Electrical Code (CEC), and any applicable local codes, based on the installation location.

### 2.5 Electrical data

Power supply 0 ... 250V AC/DC

Max. electrical current 6A

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## 2.6 Pin assignment

Details of the pin assignment can be found in the data sheet for the corresponding valve.

## 3 ASSEMBLY

### 3.1 Safety instructions

#### **WARNING!**

Risk of injury from improper assembly.

- ▶ Assembly may only be carried out by authorized technicians and with the appropriate tools.

Risk of injury from unintentional activation of the system and uncontrolled restart.

- ▶ Secure system against unintentional activation.
- ▶ Following assembly, ensure a controlled restart.

### 3.2 Electrical connection

#### **DANGER!**

Risk of electric shock.

Before reaching into the device, switch off the power supply and secure to prevent reactivation.

Observe applicable accident prevention and safety regulations for electrical equipment.

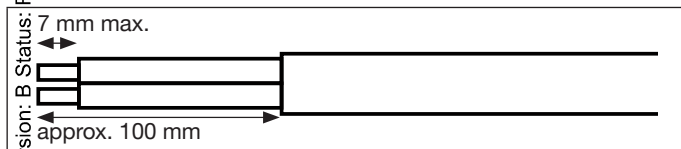


Figure 1: Remove cable insulation

Remove cable insulation to a length of approx. 100 mm (see „Figure 1“).

Remove contact insert from housing (see „Figure 2“).

Feed wire conductors under the strain relief through the housing.

Remove the insulation from the wire conductors to a max. length of 7 mm (1/4“) (see „Figure 1“).

Connect the cable plug in accordance with the pin assignment of the valve. Tighten the screws on the terminals to max. 0.5 Nm (4.4 in-lb).

Re-fit the contact insert into the housing.

Lay the wire conductors beside one another under the strain relief. Tighten the screws on the strain relief to max. 0.5 Nm (4.4 in-lb).

Fit the cover and screw onto the housing.

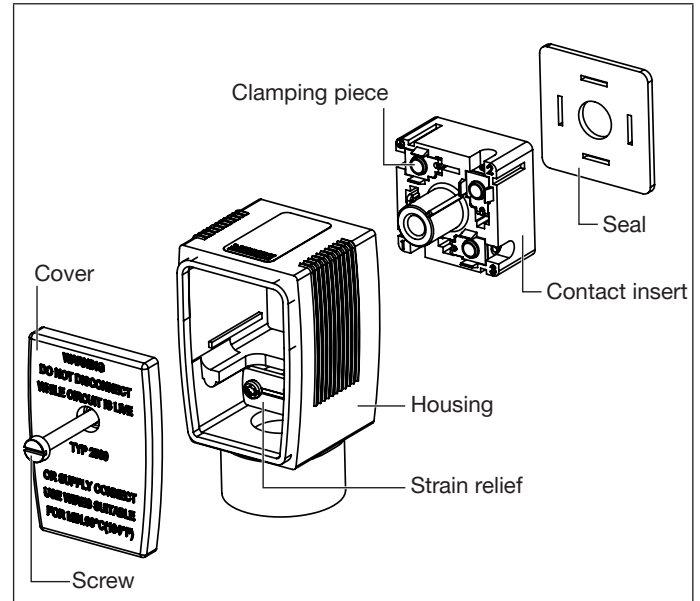


Figure 2: Exploded view of cable plug Type 2509

### 3.3 Installing the cable plug

#### **WARNING!**

Risk of short circuit if the screw connection is not sealed.

- ▶ Ensure that the seal is fitted correctly.
- ▶ Carefully attach the cable plug.

**!** The cable outlet can be rotated by 4 x 90°.

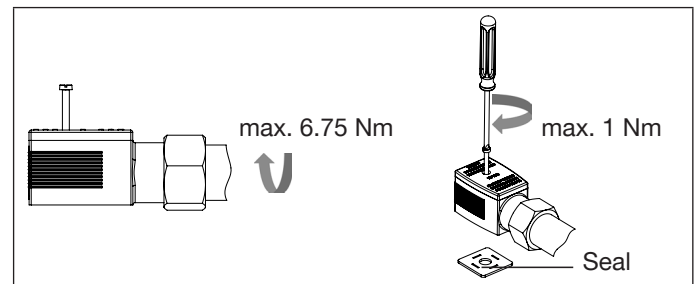


Figure 3: Installing the cable plug

Fit the conduit connection and tighten the screw connection. Observe tightening torque of max. 6.75 Nm (60 in-lb).

Use screw to attach the cable plug to the coil. Observe tightening torque of max. 1.0 Nm (8.8 in-lb).