

Type RS

In the type RS contact is made by a mechanical **reed switch** encapsulated in glass.

Direct connection with 2-pole cable, 5 m long, open ended (**Type RS-K**).

Type ES

In the type ES contact is made by an **electronic switch** – without bounce or wear and protected from pole reversal. The output is short circuit proof and insensitive to shocks and vibrations. Connection is by 3-pole connector for easy disconnection. Fitted with connection cable 100 mm long with connector.

A 5 m cable with connector and open end can be ordered separately, or use the Order No. for the complete Type ES with 5 m cable.

**Magnetic Switches
RS and ES**

**Electrical Service Life
Protective Measures**

Magnetic switches are sensitive to excessive currents and inductions. With high switching frequencies and inductive loads such as relays, solenoid valves or lifting magnets, service life will be greatly reduced.

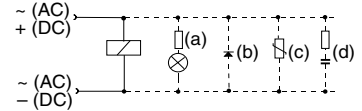
With **resistive and capacitive loads** with high switch-on current, such as light bulbs, a protective resistor should be fitted. This also applies to long cable lengths and voltages over 100 V.

In the switching of inductive loads such as relays, solenoid valves

and lifting magnets, voltage peaks (transients) are generated which must be suppressed by protective diodes, RC loops or varistors.

Connection Examples

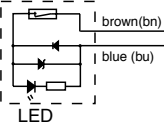
- Load with protective circuits
- (a) Protective resistor for light bulb
- (b) Freewheel diode on inductivity
- (c) Varistor on inductivity
- (d) RC element on inductivity



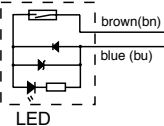
For the type ES, external protective circuits are not normally needed.

Electrical Connection, Type RS

Normally closed (NC)

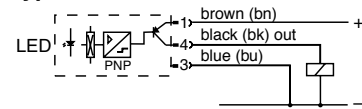


Normally open (NO)

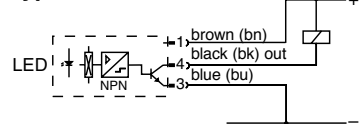


Electrical Connection, Type ES

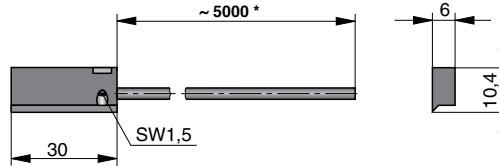
**Standard Version:
Type PNP**



**Optional Version
Type NPN**

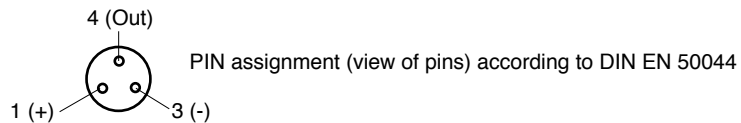
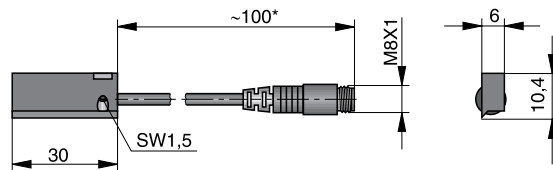


Dimensions (mm) – Type RS-K



* Length with possible minus tolerance, see chart below

Dimensions (mm) – Type ES-S



* Length with possible minus tolerance, see chart below

Length of connection cable with length tolerance

Magnetic Switch Order No.	Nominal cable length	Length tolerance
KL3045	5000 mm	-50 mm
KL3048	100 mm	-20 mm
10750	5000 mm	-50 mm
10751	145 mm	±5 mm

Type RST

In the type RST contact is made by a mechanical **reed switch** encapsulated in glass.

Type EST

In the type EST contact is made by an **electronic switch** – without bounce or wear and protected from pole reversal. The output is short circuit proof and insensitive to shocks and vibrations. Connection is by 3-pole connector for easy disconnection. Fitted with connection cable 100 mm long with connector. A 5 m cable with connector and open end can be ordered separately, or use the Order No. for the complete

Type ES with 5 m cable.

**Magnetic Switches
RST and EST**

**Electrical Service Life
Protective Measures**

Magnetic switches are sensitive to excessive currents and inductions. With high switching frequencies and inductive loads such as relays, solenoid valves or lifting magnets, service life will be greatly reduced.

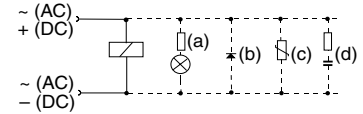
With **resistive and capacitive loads** with high switch-on current, such as light bulbs, a protective resistor should be fitted. This also applies to long cable lengths and voltages over 100 V.

In the switching of inductive loads

such as relays, solenoid valves and lifting magnets, voltage peaks (transients) are generated which must be suppressed by protective diodes, RC loops or varistors.

Connection Examples

- Load with protective circuits
- (a) Protective resistor for light bulb
- (b) Freewheel diode on inductivity
- (c) Varistor on inductivity
- (d) RC element on inductivity



For the type EST, external protective circuits are not normally needed.

**Electrical Connection
Type RST-K**

Normally closed

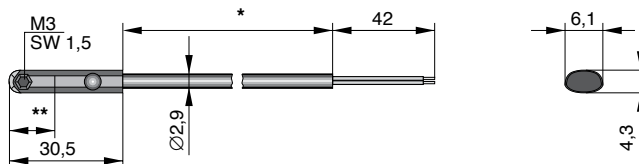
Normally open

**Electrical Connection
Type EST-K**

**Electrical Connection
Type RST-S**

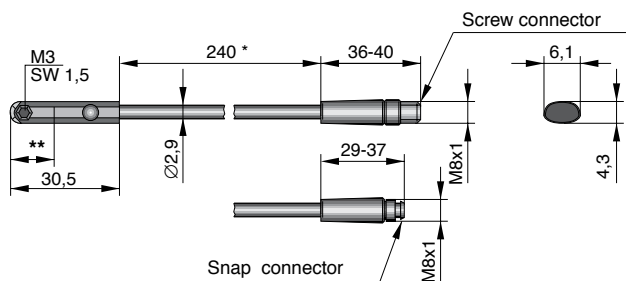
**Electrical Connection
Type EST-S**

Dimensions (mm) – Type RST-K, EST-K

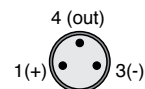


- * Cable lengths available: 5000 mm ± 75 mm
2000 mm ± 40 mm
- ** Switching point: Type RST-K Normally closed 14 mm
Type RST-K Normally open 12.3 mm
Type EST-K Normally open 8.1 mm

Dimensions (mm) – Type RST-S, EST-S

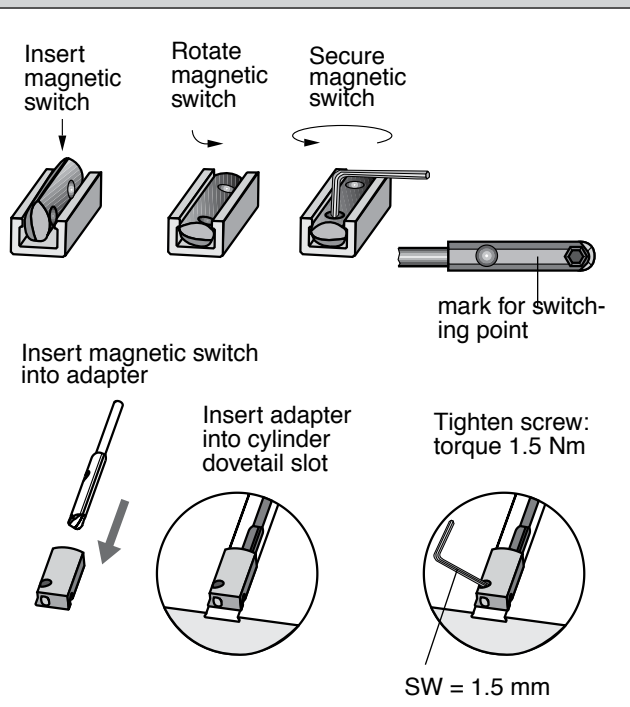


- * ± 6 mm
- ** Switching point: Type RST-K Normally closed 14 mm
Type RST-K Normally open 12.3 mm
Type EST-K Normally open 8.1 mm

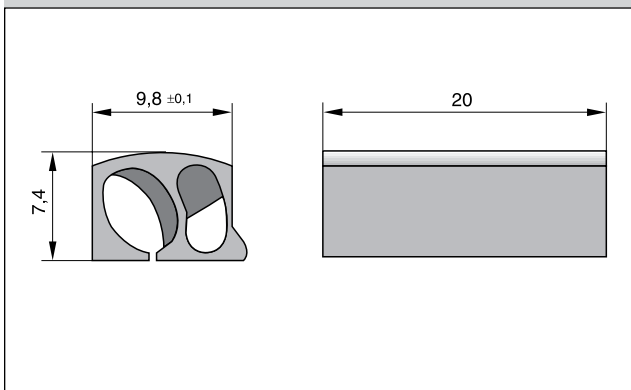


PIN assignment
(view of pins)
to DIN EN 50044

Installation



Dimensions of Adapter for Magnetic Switch



Ordering Information

Type	Voltage	Order No.
RST-K	10-30V AC/DC	KL3300
EST-S	10-30V DC	KL3312