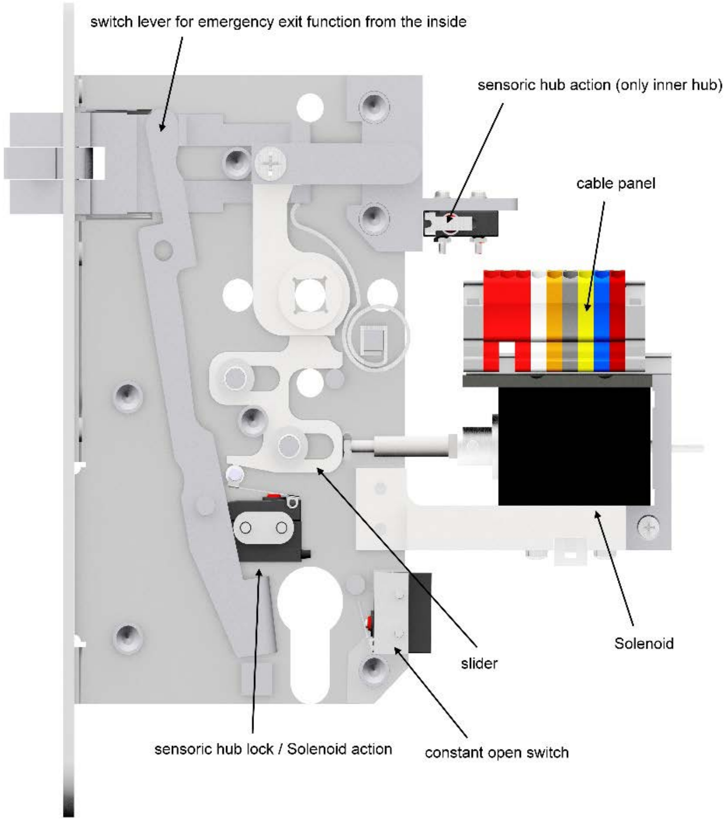
Schwepper GSV 9803 Solenoid

The reliable lock product for access control and monitoring giving you all the benefits of superior quality in combination with highest flexibility of integration

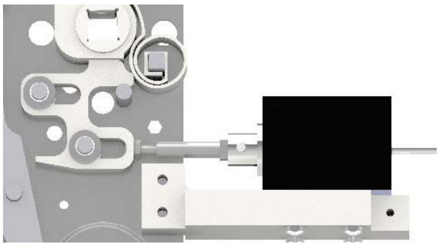
- usable in every system environment or as stand-alone
- optional sensorics for monitoring
- individual configuration of features
- complete stainless steel
- mechanical override from the outside by key
- mechanical emergency exit function from the inside

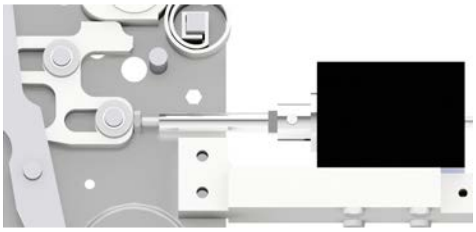
Specifications and functional descriptions for GSV 9803

General outline



Solenoid function





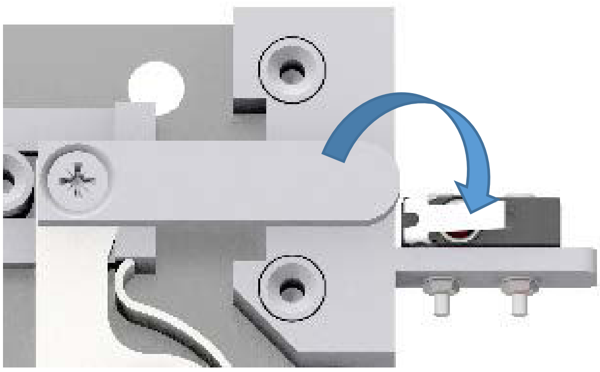
outer hub part blocked — outer hub part released

The electrical current actuates the Solenoid to pull the slider back and keeping it in its blocking position for the outer hub. The constant electrical current keeps the slider in that position.

The actuation of the Solenoid via RFID or else at the outside of the door cuts the Solenoid off electrical current. A spring force pushes the slider into the release position, so the handle is now free to operate and the door can opened. The time frame how long the Solenoid remains off electrical current can be individually programmed by the operator.

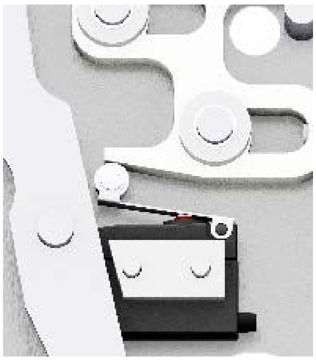
The opening of the door from the outside in emergencies can be realized with the counter clockwise turn with a key in the profile cylinder through the in-built function of the ‘switch lever’. The same can be done with a central program to take the Solenoid off electrical current. Form the inside the door can be opened at any given time, even if the handle on the outside of the door is being blocked (so called ‘divided hub function’).

sensorics hub action (only inner hub)



A circular motion of the hub shoves the on the hub mounted tongue over the actuator of the micro switch.

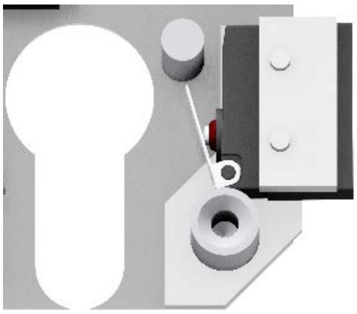
sensorics hub lock / Solenoid action



Function description:

If the Solenoid is being actuated (electric current on), the slider is being moved into the position to block the outer hub. Is the Solenoid being taken off electrical current the slider moves to the position to release the outer hub and actuates the micro switch through its tongue.

permanent open position (via cylinder)



Function description:

The actuation takes place through a turning motion of the profile cylinder cam onto the tongue of the micro switch.

Note of warning:

If knob cylinders are being used, an inadvertent constant open position might occur. Meaning that the cylinder cam keeps the tongue of the micro switch constantly pushed in. This leads to an operational error upon the opening of the door via RFID, as the programmed time frame blocks the inhibition function and no further blocking of the outside handle exists. The Solenoid in this position is off electrical current and thus the outer hub is not blocking the handle any more.

Schwepper recommends the use of a single cylinder, so the opening of the door from the outside in emergencies is assured. Thereby the constant open position can only be effected by key and a permanent bearing against the micro switch tongue by the cylinder cam is being avoided, as the cylinder cam upon removal of the key has its resting position far apart from the micro switch.

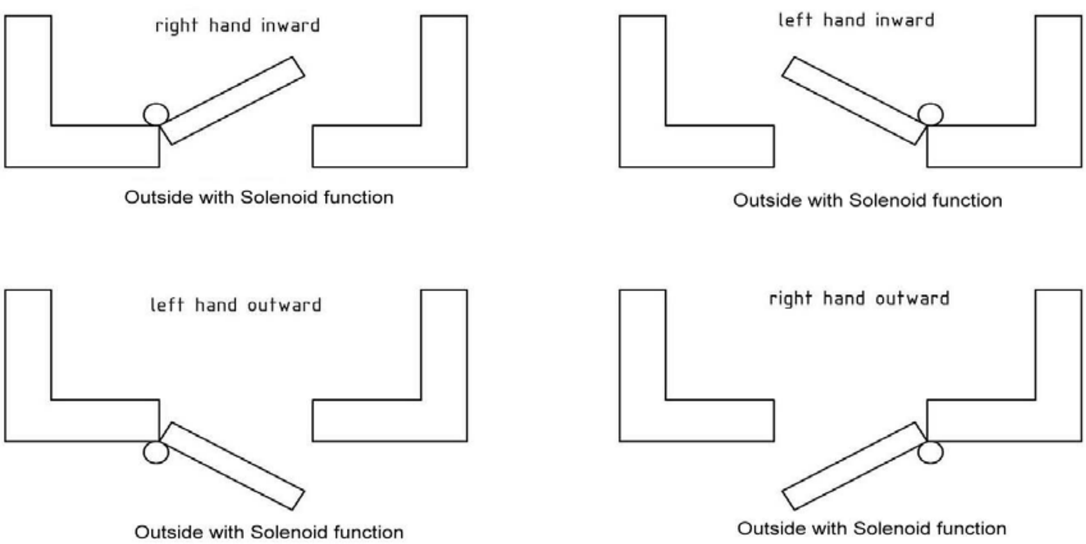
setup LED for queries constant open position / hub lock

Function description:

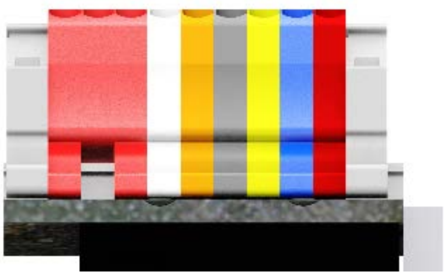
LED is for indicating the status on/off. There are two ways of setup:

- If one LED is being used: the LED can only indicate when being powered by DC. As the Solenoid is cut off from power during the locking operation, the LED is not powered as well.
- If two LED are being used: a relay provides constant power to switch from one LED to the other for the according indication. The relay can be mounted in the door or wall. Schwepper can provide a relay on request. A product recommendation can be found on the last page.

hands of door



cable panel



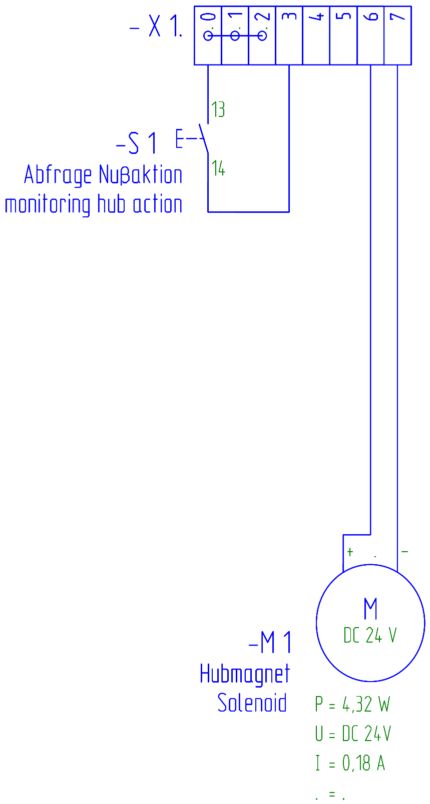
Serves the wiring of all micro switches / Solenoid and LEDs. The circuit plan is part of the delivery package.

The SCHWEPPER Experience

DANGER

The following factors are to be considered, as they have a crucial influence on an immaculate functionality

- Weight of the handles and their immaculate mounting – no friction must occur that inhibits the handles to return into their horizontal position. The handles must operate friction free.
- The tolerance play of the square spindle
- Spring force regarding the resetting spring force necessary for the handles



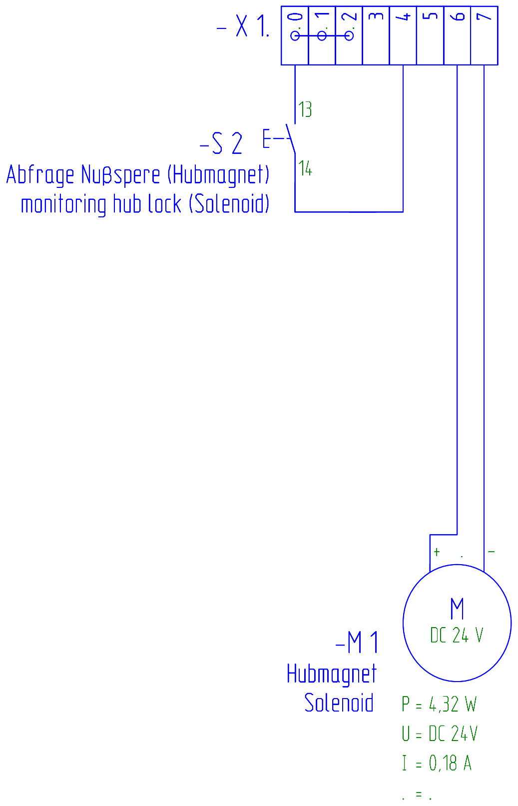
Durchgangsklemme

- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	Abfrage Nußaktion
- X 1.4	=	Weiß	-
- X 1.5	=	Gelb	-
- X 1.6	=	Grau	Hubmagnet DC + 24 V
- X 1.7	=	Blau	GND

Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	monitoring hub action
- X 1.4	=	White	-
- X 1.5	=	Yellow	-
- X 1.6	=	Grey	solenoid DC + 24 V
- X 1.7	=	Blue	GND

Schaltplan 1 - Abfrage Nußaktion
circuit diagram 1 - monitoring hub action



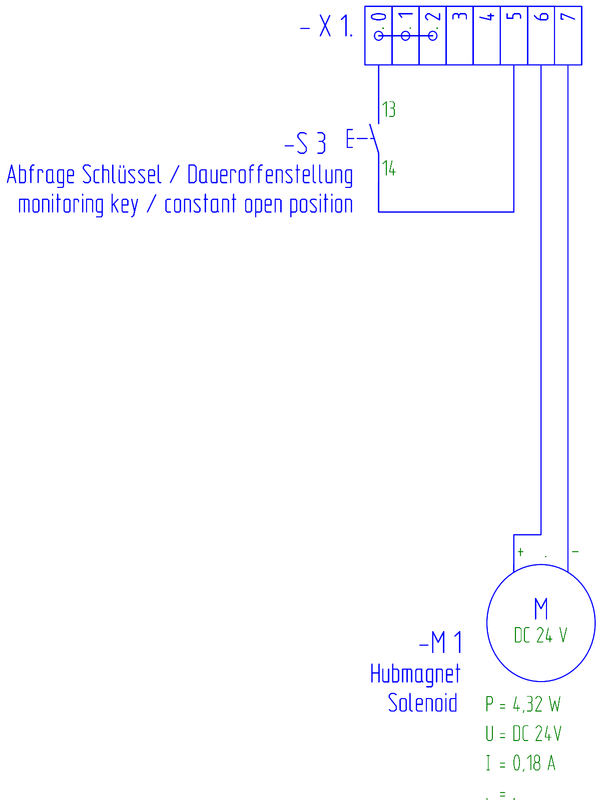
Durchgangsklemme

- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	-
- X 1.4	=	Weiß	Abfrage Hubmagnet
- X 1.5	=	Gelb	-
- X 1.6	=	Grau	Hubmagnet DC + 24 V
- X 1.7	=	Blau	GND

Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	-
- X 1.4	=	White	monitoring hub lock (Solenoid)
- X 1.5	=	Yellow	-
- X 1.6	=	Grey	solenoid DC + 24 V
- X 1.7	=	Blue	GND

Schaltplan 2 - Abfrage Nußsperre (Hubmagnet)
circuit diagram 2 - monitoring hub lock (Solenoid)



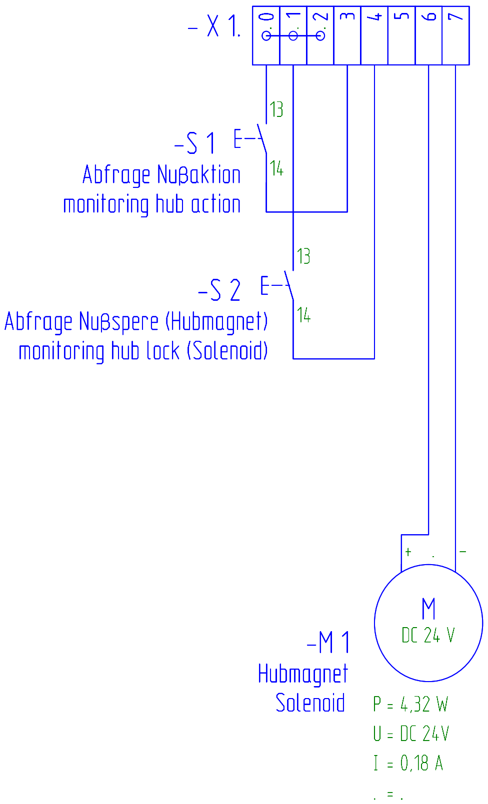
Durchgangsklemme

- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	-
- X 1.4	=	Weiß	-
- X 1.5	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.6	=	Grau	Hubmagnet DC + 24 V
- X 1.7	=	Blau	GND

Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	-
- X 1.4	=	White	-
- X 1.5	=	Yellow	monitoring key / constant open position
- X 1.6	=	Grey	solenoid DC + 24 V
- X 1.7	=	Blue	GND

Schaltplan 3 - Abfrage Schlüssel / Daueroffenstellung
circuit diagram 3 - monitoring key / constant open



Durchgangsklemme

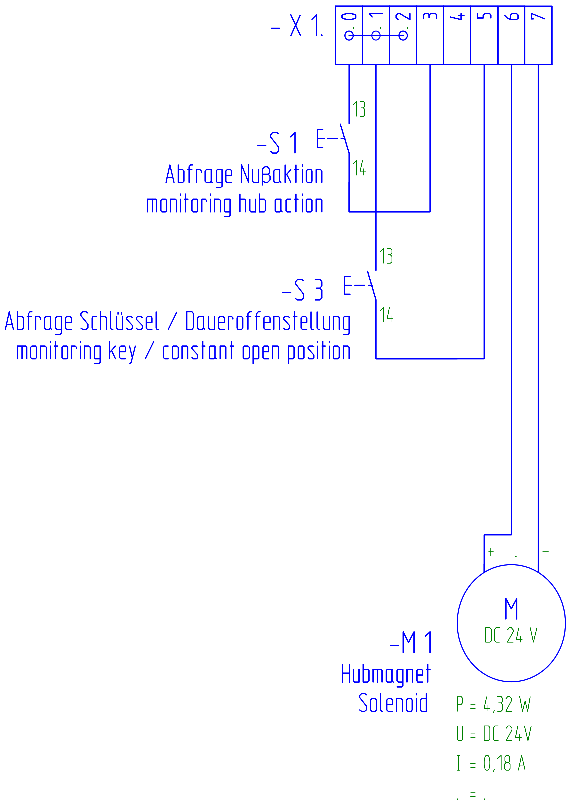
- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	Abfrage Nußaktion
- X 1.4	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.5	=	Gelb	-
- X 1.6	=	Grau	Hubmagnet DC + 24 V
- X 1.7	=	Blau	GND

Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	monitoring hub action
- X 1.4	=	White	monitoring hub lock (Solenoid)
- X 1.5	=	Yellow	-
- X 1.6	=	Grey	solenoid DC + 24 V
- X 1.7	=	Blue	GND

Schaltplan 4 - Abfrage Nußaktion & Nußsperre (Hubmagnet)
circuit diagram 4 - monitoring hub action & hub lock (Solenoid)

The SCHWEPPER Experience



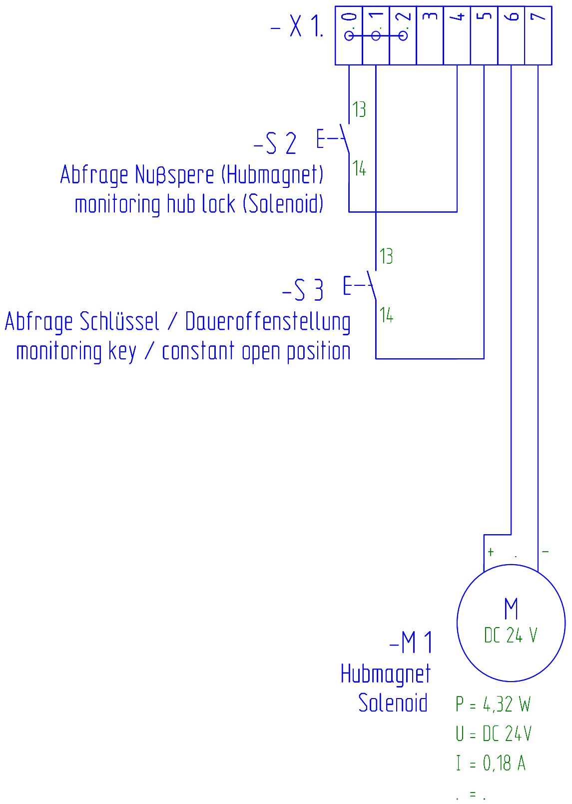
Durchgangsklemme

- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	Abfrage Nußaktion
- X 1.4	=	Weiß	-
- X 1.5	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.6	=	Grau	Hubmagnet DC + 24 V
- X 1.7	=	Blau	GND

Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	monitoring hub action
- X 1.4	=	White	-
- X 1.5	=	Yellow	monitoring key / constant open position
- X 1.6	=	Grey	solenoid DC + 24 V
- X 1.7	=	Blue	GND

Schaltplan 5 - Abfragen Nußaktion & Schlüssel / Daueroffenstellung
circuit diagram 5 - monitoring hub action & key / constant open



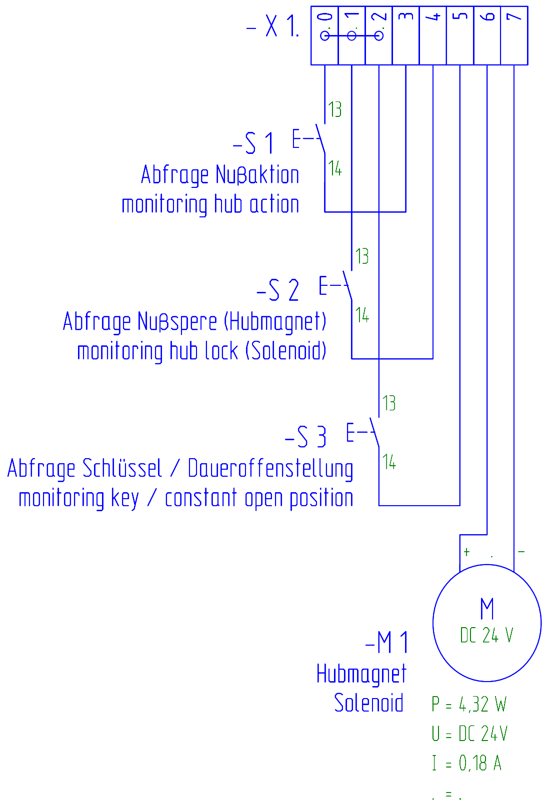
Durchgangsklemme

- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	-
- X 1.4	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.5	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.6	=	Grau	Hubmagnet DC + 24 V
- X 1.7	=	Blau	GND

Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	-
- X 1.4	=	White	monitoring hub lock (Solenoid)
- X 1.5	=	Yellow	monitoring key / constant open position
- X 1.6	=	Grey	solenoid DC + 24 V
- X 1.7	=	Blue	GND

Schaltplan 6 - Abfragen Nußsperre & Schlüssel / Daueroffenstellung
circuit diagram 6 - monitorings hub lock & key / constant open



Durchgangsklemme

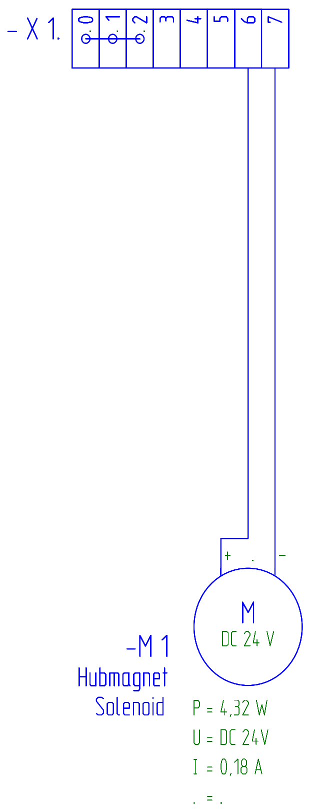
- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	Abfrage Nußaktion
- X 1.4	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.5	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.6	=	Grau	Hubmagnet DC + 24 V
- X 1.7	=	Blau	GND

Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	monitoring hub action
- X 1.4	=	White	monitoring hub lock (Solenoid)
- X 1.5	=	Yellow	monitoring key / constant open position
- X 1.6	=	Grey	solenoid DC + 24 V
- X 1.7	=	Blue	GND

Schaltplan 7 - Abfragen Nußaktion & Nußsperre (Hubmagnet) & Schlüssel / Daueroffenstellung
circuit diagram 7 - monitorings hub action & hub lock (Solenoid) & key / constant open

The SCHWEPPER Experience



Durchgangsklemme

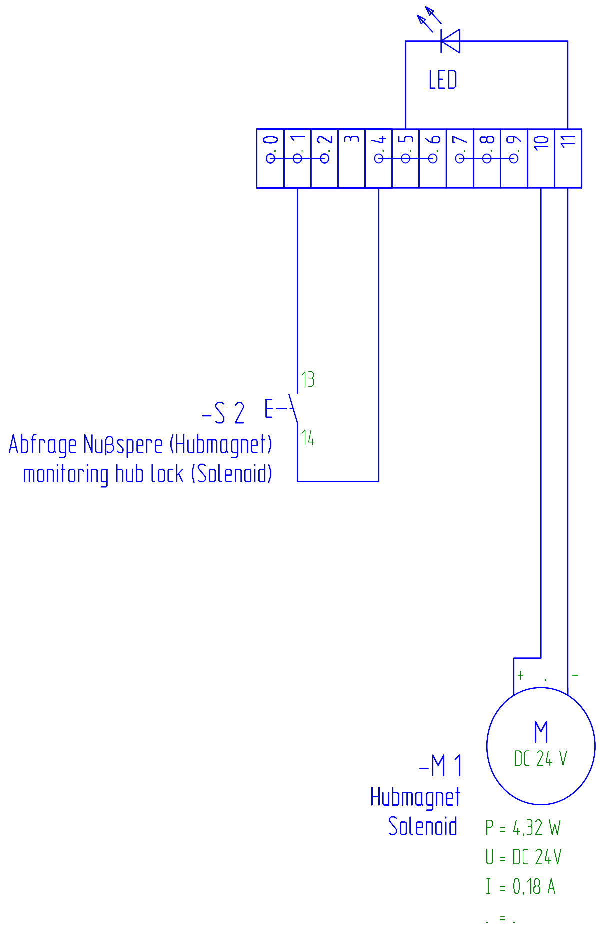
- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	-
- X 1.4	=	Weiß	-
- X 1.5	=	Gelb	-
- X 1.6	=	Grau	Hubmagnet DC + 24 V
- X 1.7	=	Blau	GND

Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	-
- X 1.4	=	White	-
- X 1.5	=	Yellow	-
- X 1.6	=	Grey	Solenoid DC + 24 V
- X 1.7	=	Blue	GND

Schaltplan 8 - ohne jede Abfrage
circuit diagram 8 - without any mointoring

The SCHWEPPER Experience



Durchgangsklemme

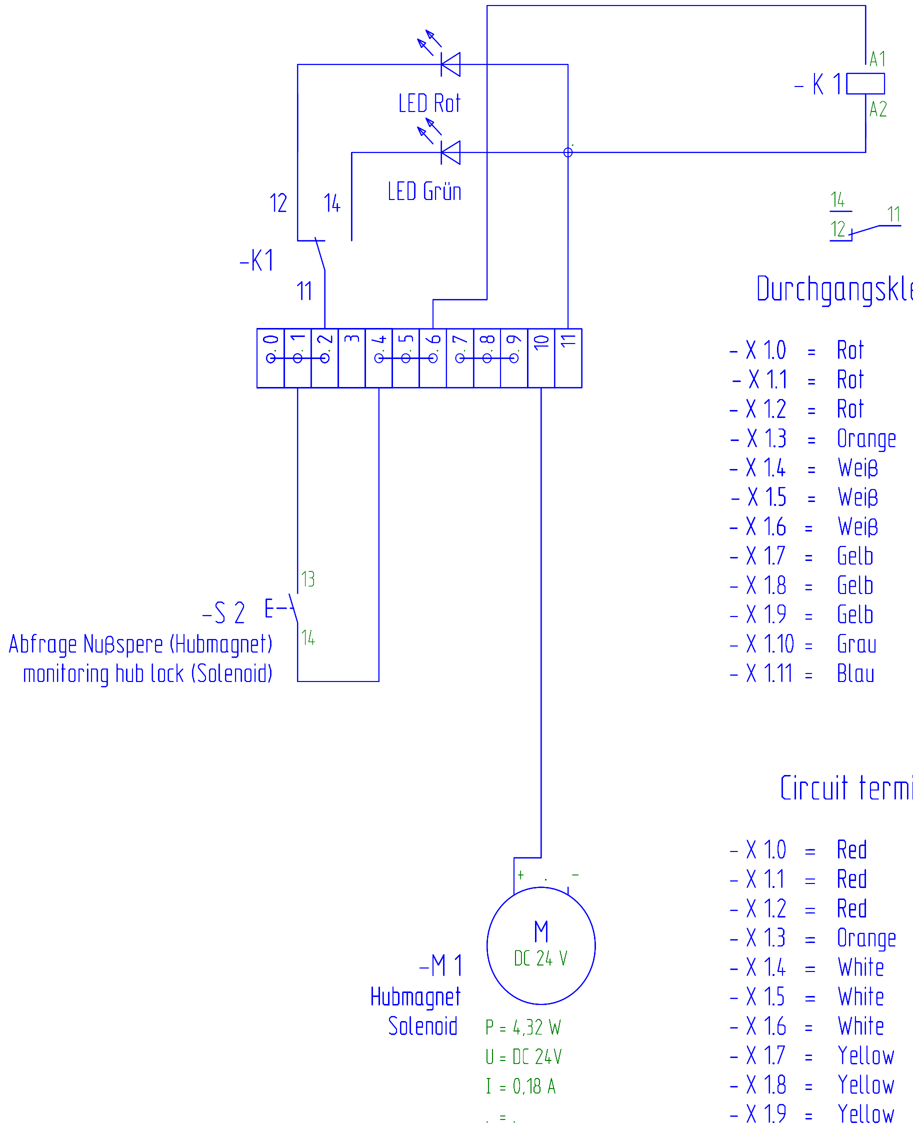
- X 1.0 = Rot DC + 24V
- X 1.1 = Rot DC + 24V
- X 1.2 = Rot DC + 24V
- X 1.3 = Orange -
- X 1.4 = Weiß Abfrage Nußspere (Hubmagnet)
- X 1.5 = Weiß Abfrage Nußspere (Hubmagnet)
- X 1.6 = Weiß Abfrage Nußspere (Hubmagnet)
- X 1.7 = Gelb -
- X 1.8 = Gelb -
- X 1.9 = Gelb -
- X 1.10 = Grau Hubmagnet DC + 24 V
- X 1.11 = Blau GND

Circuit terminal

- X 1.0 = Red DC + 24V
- X 1.1 = Red DC + 24V
- X 1.2 = Red DC + 24V
- X 1.3 = Orange -
- X 1.4 = White monitoring hub lock (Solenoid)
- X 1.5 = White monitoring hub lock (Solenoid)
- X 1.6 = White monitoring hub lock (Solenoid)
- X 1.7 = Yellow -
- X 1.8 = Yellow -
- X 1.9 = Yellow -
- X 1.10 = Grey solenoid DC + 24 V
- X 1.11 = Blue GND

Schaltplan 9 - Abfrage Nußsperre (Hubmagnet) mit 1 LED
circuit diagram 9 - monitoring hub lock (Solenoid) with 1 LED

The SCHWEPPER Experience



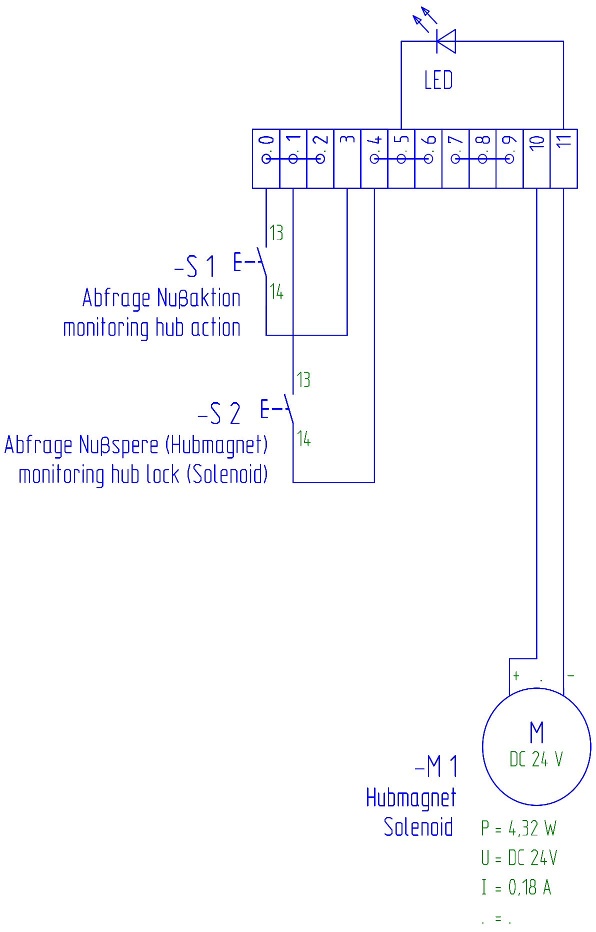
Durchgangsklemme

- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	-
- X 1.4	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.5	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.6	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.7	=	Gelb	-
- X 1.8	=	Gelb	-
- X 1.9	=	Gelb	-
- X 1.10	=	Grau	Hubmagnet DC + 24 V
- X 1.11	=	Blau	GND

Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	-
- X 1.4	=	White	monitoring hub lock (Solenoid)
- X 1.5	=	White	monitoring hub lock (Solenoid)
- X 1.6	=	White	monitoring hub lock (Solenoid)
- X 1.7	=	Yellow	-
- X 1.8	=	Yellow	-
- X 1.9	=	Yellow	-
- X 1.10	=	Grey	solenoid DC + 24 V
- X 1.11	=	Blue	GND

Schaltplan 10 - Abfrage Nußsperre (Hubmagnet) mit 2 LED
circuit diagram 10 - monitoring hub lock (Solenoid) with 2 LED



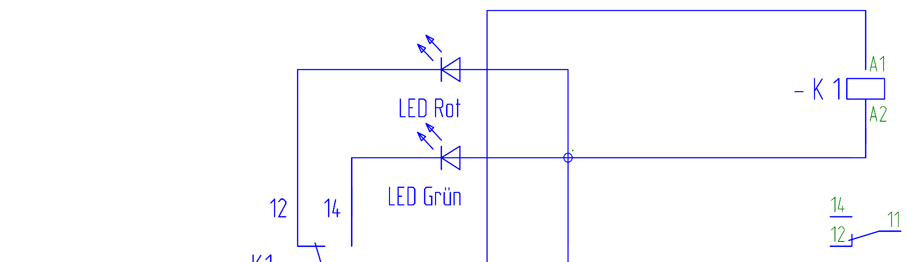
Durchgangsklemme

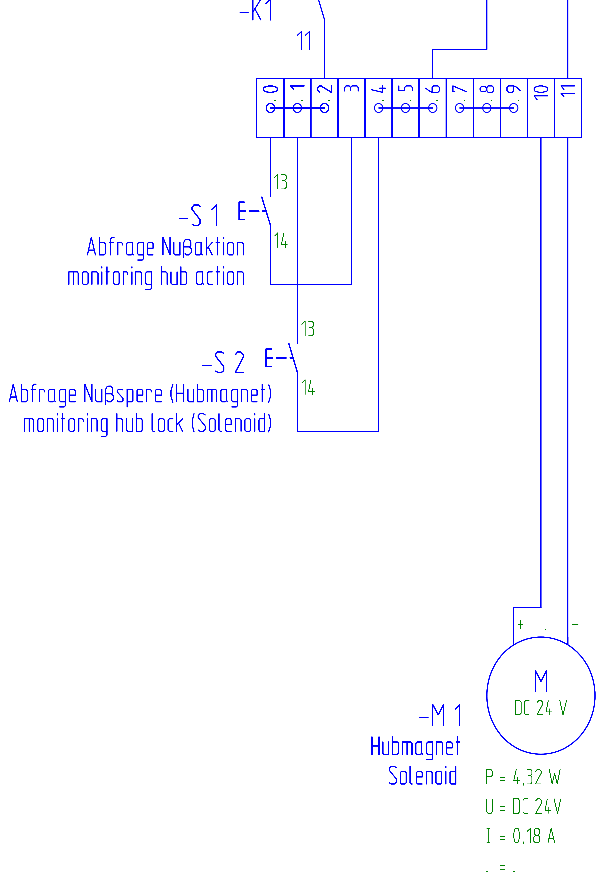
- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	Abfrage Nußaktion
- X 1.4	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.5	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.6	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.7	=	Gelb	-
- X 1.8	=	Gelb	-
- X 1.9	=	Gelb	-
- X 1.10	=	Grau	Hubmagnet DC + 24 V
- X 1.11	=	Blau	GND

Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	monitoring hub action
- X 1.4	=	White	monitoring hub lock (Solenoid)
- X 1.5	=	White	monitoring hub lock (Solenoid)
- X 1.6	=	White	monitoring hub lock (Solenoid)
- X 1.7	=	Yellow	-
- X 1.8	=	Yellow	-
- X 1.9	=	Yellow	-
- X 1.10	=	Grey	solenoid DC + 24 V
- X 1.11	=	Blue	GND

Schaltplan 11 - Abfrage Nußsperre (Hubmagnet) mit 1 LED & Nußaktion
circuit diagram 11 - monitoring hub lock (Solenoid) with 1 LED & hub action





Durchgangsklemme

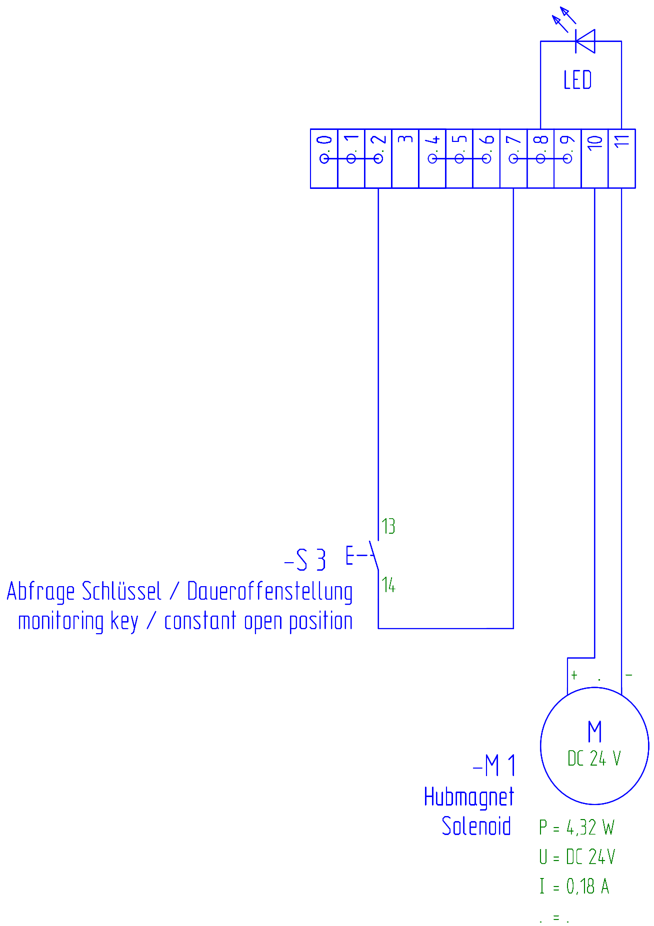
- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	Abfrage Nußaktion
- X 1.4	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.5	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.6	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.7	=	Gelb	-
- X 1.8	=	Gelb	-
- X 1.9	=	Gelb	-
- X 1.10	=	Grau	Hubmagnet DC + 24 V
- X 1.11	=	Blau	GND

Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	monitoring hub action
- X 1.4	=	White	monitoring hub lock (Solenoid)
- X 1.5	=	White	monitoring hub lock (Solenoid)
- X 1.6	=	White	monitoring hub lock (Solenoid)
- X 1.7	=	Yellow	-
- X 1.8	=	Yellow	-
- X 1.9	=	Yellow	-
- X 1.10	=	Grey	solenoid DC + 24 V
- X 1.11	=	Blue	GND

Schaltplan 12 - Abfrage Nußsperre (Hubmagnet) mit 2 LED & Nußaktion
circuit diagram 12 - monitoring hub lock (Solenoid) with 2 LED & hub action

The SCHWEPPER Experience



Durchgangsklemme

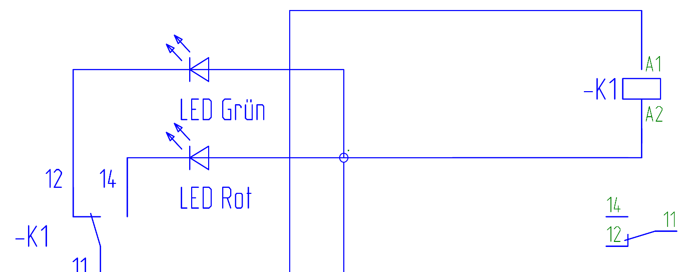
- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	-
- X 1.4	=	Weiß	-
- X 1.5	=	Weiß	-
- X 1.6	=	Weiß	-
- X 1.7	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.8	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.9	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.10	=	Grau	Hubmagnet DC + 24 V
- X 1.11	=	Blau	GND

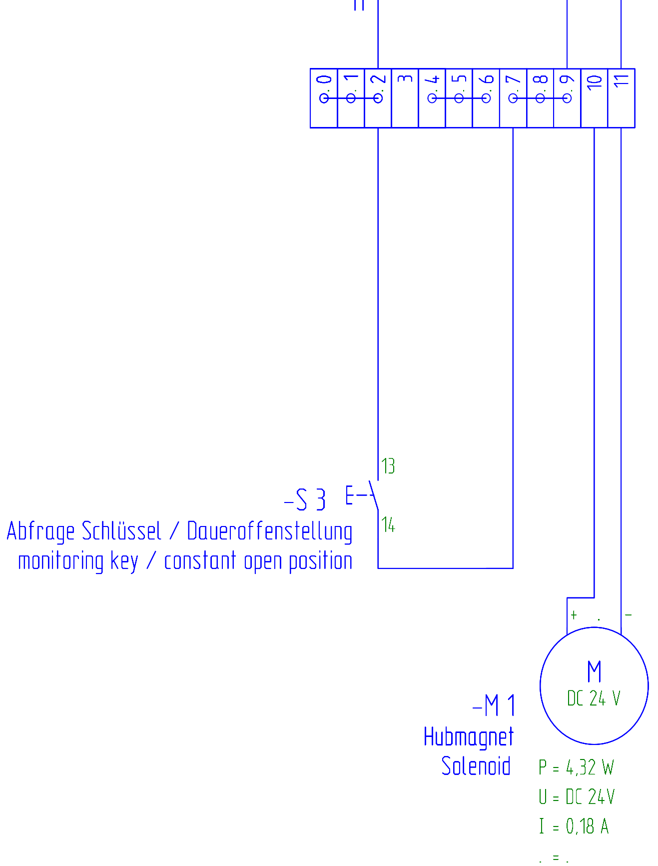
Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	-
- X 1.4	=	White	-
- X 1.5	=	White	-
- X 1.6	=	White	-
- X 1.7	=	Yellow	monitoring key / constant open position
- X 1.8	=	Yellow	monitoring key / constant open position
- X 1.9	=	Yellow	monitoring key / constant open position
- X 1.10	=	Grey	solenoid DC + 24 V
- X 1.11	=	Blue	GND

Schaltplan 13 - Abfrage Schlüssel /Daueroffenstellung mit 1 LED
circuit diagram 13 - monitoring key / constant open with 1 LED

The SCHWEPPER Experience





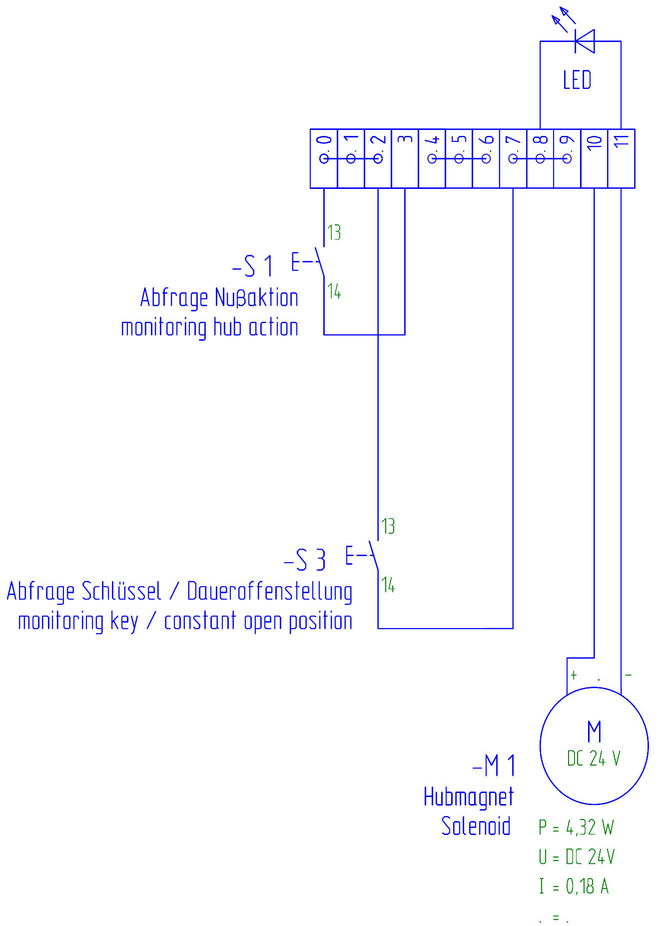
Durchgangsklemme

- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	-
- X 1.4	=	Weiß	-
- X 1.5	=	Weiß	-
- X 1.6	=	Weiß	-
- X 1.7	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.8	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.9	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.10	=	Grau	Hubmagnet DC + 24 V
- X 1.11	=	Blau	GND

Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	-
- X 1.4	=	White	-
- X 1.5	=	White	-
- X 1.6	=	White	-
- X 1.7	=	Yellow	monitoring key / constant open position
- X 1.8	=	Yellow	monitoring key / constant open position
- X 1.9	=	Yellow	monitoring key / constant open position
- X 1.10	=	Grey	solenoid DC + 24 V
- X 1.11	=	Blue	GND

Schaltplan 14 - Abfrage Schlüssel /Daueroffenstellung mit 2 LED
circuit diagram 14 - monitoring key / constant open with 2 LED



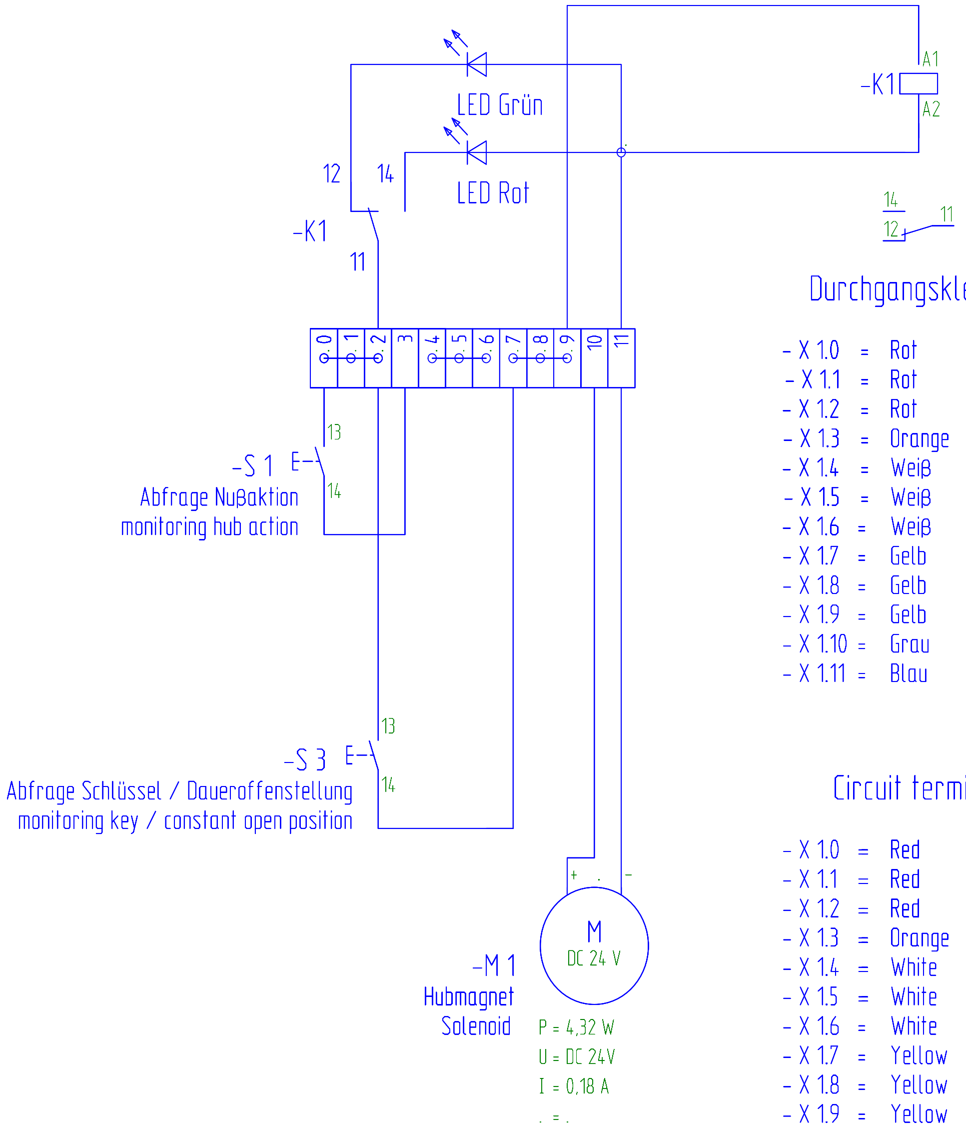
Durchgangsklemme

- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	Abfrage Nußaktion
- X 1.4	=	Weiß	-
- X 1.5	=	Weiß	-
- X 1.6	=	Weiß	-
- X 1.7	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.8	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.9	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.10	=	Grau	Hubmagnet DC + 24 V
- X 1.11	=	Blau	GND

Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	monitoring hub action
- X 1.4	=	White	-
- X 1.5	=	White	-
- X 1.6	=	White	-
- X 1.7	=	Yellow	monitoring key / constant open position
- X 1.8	=	Yellow	monitoring key / constant open position
- X 1.9	=	Yellow	monitoring key / constant open position
- X 1.10	=	Grey	solenoid DC + 24 V
- X 1.11	=	Blue	GND

Schaltplan 15 - Abfrage Schlüssel /Daueroffenstellung mit 1 LED & Nußaktion
circuit diagram 15 - monitoring key / constant open with 1 LED & hub action



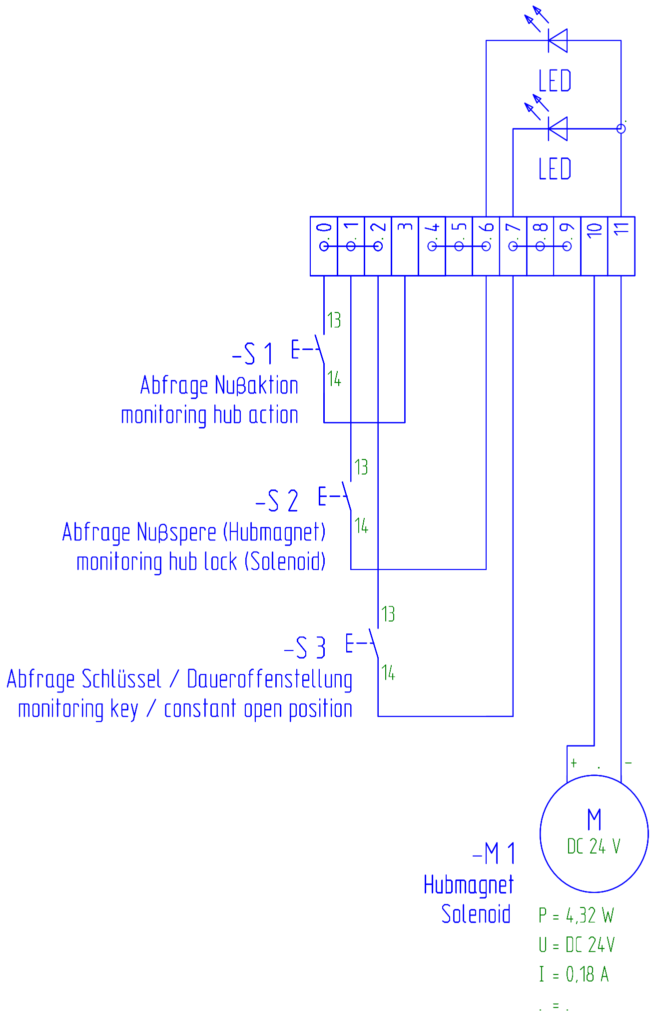
Durchgangsklemme

- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	Abfrage Nußaktion
- X 1.4	=	Weiß	-
- X 1.5	=	Weiß	-
- X 1.6	=	Weiß	-
- X 1.7	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.8	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.9	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.10	=	Grau	Hubmagnet DC + 24 V
- X 1.11	=	Blau	GND

Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	monitoring hub action
- X 1.4	=	White	-
- X 1.5	=	White	-
- X 1.6	=	White	-
- X 1.7	=	Yellow	monitoring key / constant open position
- X 1.8	=	Yellow	monitoring key / constant open position
- X 1.9	=	Yellow	monitoring key / constant open position
- X 1.10	=	Grey	solenoid DC + 24 V
- X 1.11	=	Blue	GND

Schaltplan 16 - Abfrage Schlüssel /Daueroffenstellung mit 2 LED & Nußaktion
circuit diagram 16 - monitoring key / constant open with 2 LED & hub action



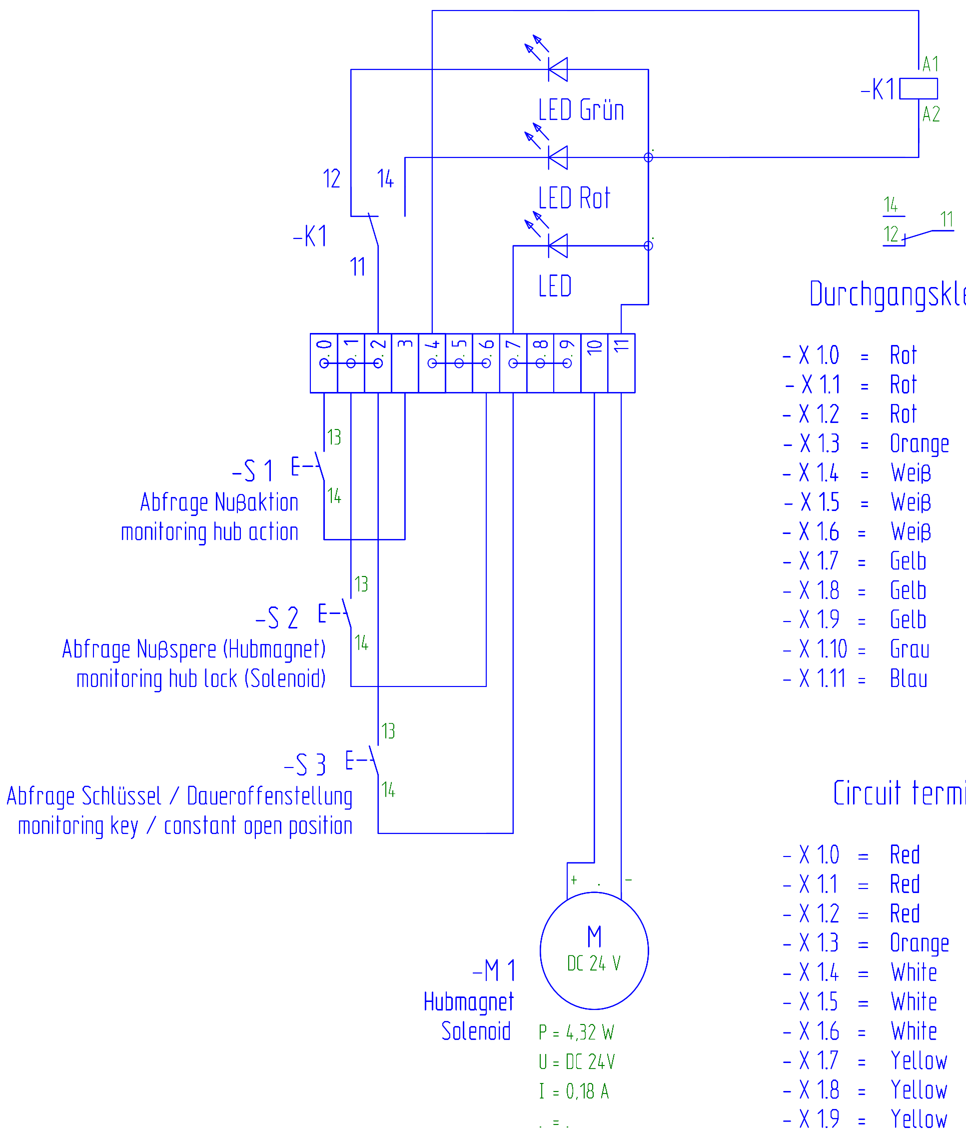
Durchgangsklemme

- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	Abfrage Nußaktion
- X 1.4	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.5	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.6	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.7	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.8	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.9	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.10	=	Grau	Hubmagnet DC + 24 V
- X 1.11	=	Blau	GND

Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	monitoring hub action
- X 1.4	=	White	monitoring hub lock (Solenoid)
- X 1.5	=	White	monitoring hub lock (Solenoid)
- X 1.6	=	White	monitoring hub lock (Solenoid)
- X 1.7	=	Yellow	monitoring key / constant open position
- X 1.8	=	Yellow	monitoring key / constant open position
- X 1.9	=	Yellow	monitoring key / constant open position
- X 1.10	=	Grey	solenoid DC + 24 V
- X 1.11	=	Blue	GND

Schaltplan 17 - Abfrage Schlüssel /Daueroffenstellung mit 1 LED & Nußsperre mit 1 LED & Nußaktion
circuit diagram 18 - monitoring key / constant open with 1 LED & hub lock (Solenoid) with 1 LED & hub action



Durchgangsklemme

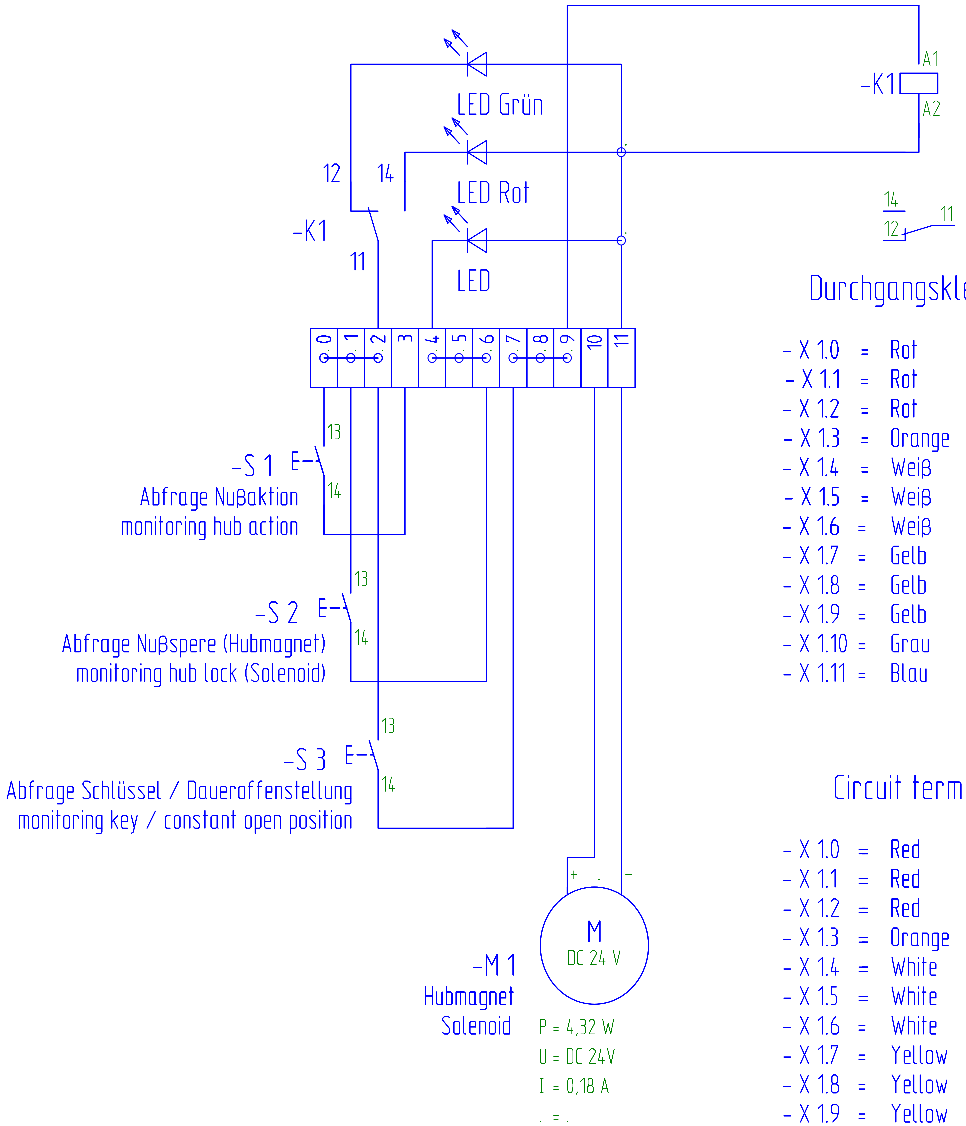
- X 1.0 = Rot DC + 24V
- X 1.1 = Rot DC + 24V
- X 1.2 = Rot DC + 24V
- X 1.3 = Orange Abfrage Nußaktion
- X 1.4 = Weiß Abfrage Nußspere (Hubmagnet)
- X 1.5 = Weiß Abfrage Nußspere (Hubmagnet)
- X 1.6 = Weiß Abfrage Nußspere (Hubmagnet)
- X 1.7 = Gelb Abfrage Schlüssel / Daueroffenstellung
- X 1.8 = Gelb Abfrage Schlüssel / Daueroffenstellung
- X 1.9 = Gelb Abfrage Schlüssel / Daueroffenstellung
- X 1.10 = Grau Hubmagnet DC + 24 V
- X 1.11 = Blau GND

Circuit terminal

- X 1.0 = Red DC + 24V
- X 1.1 = Red DC + 24V
- X 1.2 = Red DC + 24V
- X 1.3 = Orange monitoring hub action
- X 1.4 = White monitoring hub lock (Solenoid)
- X 1.5 = White monitoring hub lock (Solenoid)
- X 1.6 = White monitoring hub lock (Solenoid)
- X 1.7 = Yellow monitoring key / constant open position
- X 1.8 = Yellow monitoring key / constant open position
- X 1.9 = Yellow monitoring key / constant open position
- X 1.10 = Grey solenoid DC + 24 V
- X 1.11 = Blue GND

Schaltplan 18 - Abfrage Schlüssel /Daueroffenstellung mit 1 LED & Nußsperre mit 2 LED & Nußaktion
circuit diagram 18 - monitoring key / constant open with 1 LED & hub lock (Solenoid) with 2 LED & hub action

The SCHWEPPER Experience



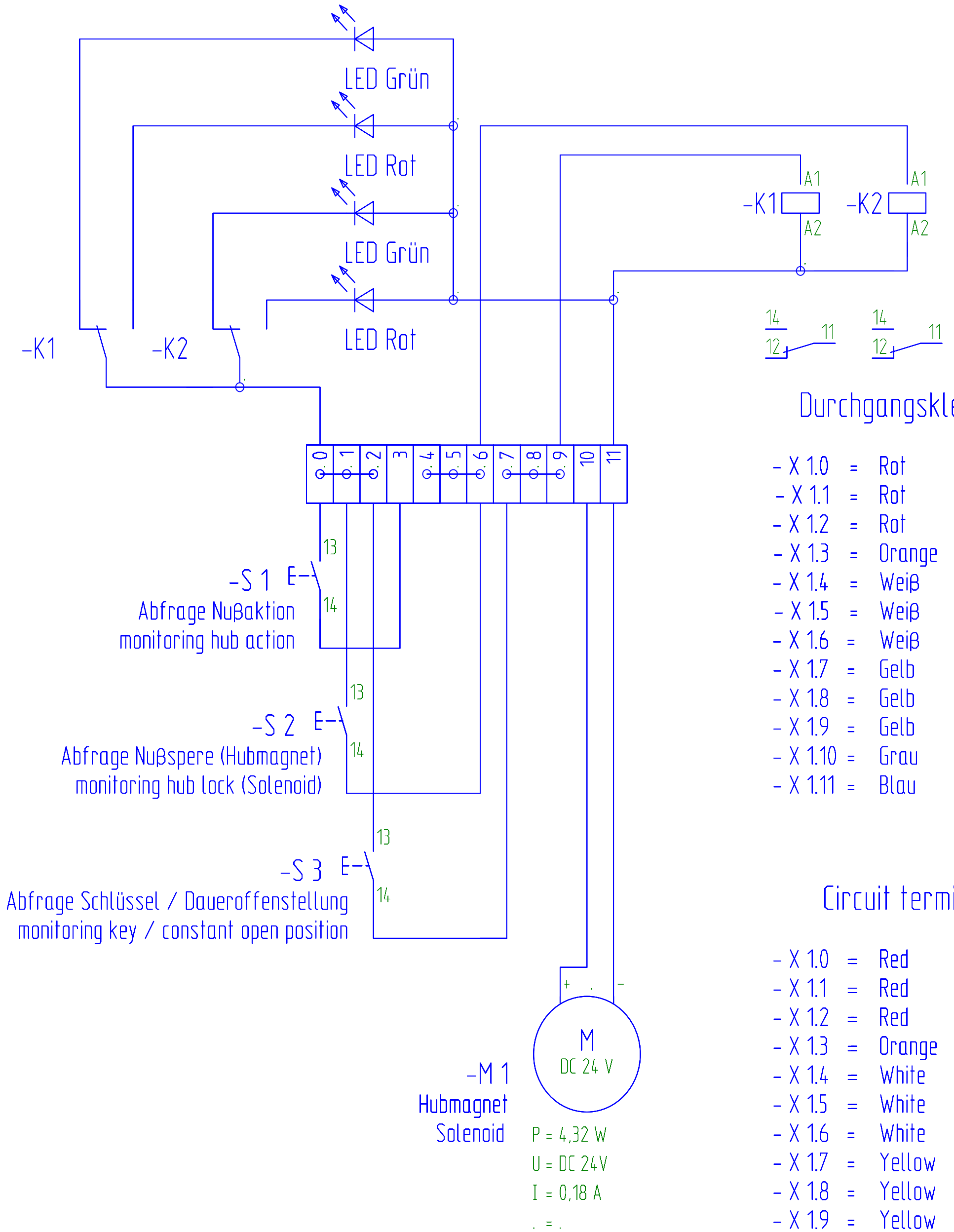
Durchgangsklemme

- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	Abfrage Nußaktion
- X 1.4	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.5	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.6	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.7	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.8	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.9	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.10	=	Grau	Hubmagnet DC + 24 V
- X 1.11	=	Blau	GND

Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	monitoring hub action
- X 1.4	=	White	monitoring hub lock (Solenoid)
- X 1.5	=	White	monitoring hub lock (Solenoid)
- X 1.6	=	White	monitoring hub lock (Solenoid)
- X 1.7	=	Yellow	monitoring key / constant open position
- X 1.8	=	Yellow	monitoring key / constant open position
- X 1.9	=	Yellow	monitoring key / constant open position
- X 1.10	=	Grey	solenoid DC + 24 V
- X 1.11	=	Blue	GND

Schaltplan 19 - Abfrage Schlüssel /Daueroffenstellung mit 2 LED & Nußsperre mit 1 LED & Nußaktion
circuit diagram 19 - monitoring key / constant open with 2 LED & hub lock (Solenoid) with 1 LED & hub action



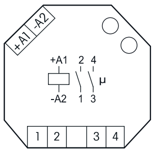
Durchgangsklemme

- X 1.0	=	Rot	DC + 24V
- X 1.1	=	Rot	DC + 24V
- X 1.2	=	Rot	DC + 24V
- X 1.3	=	Orange	Abfrage Nußaktion
- X 1.4	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.5	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.6	=	Weiß	Abfrage Nußspere (Hubmagnet)
- X 1.7	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.8	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.9	=	Gelb	Abfrage Schlüssel / Daueroffenstellung
- X 1.10	=	Grau	Hubmagnet DC + 24 V
- X 1.11	=	Blau	GND

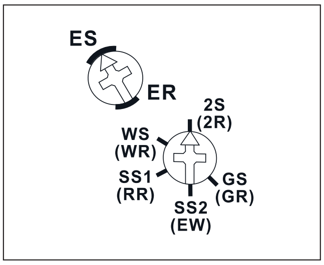
Circuit terminal

- X 1.0	=	Red	DC + 24V
- X 1.1	=	Red	DC + 24V
- X 1.2	=	Red	DC + 24V
- X 1.3	=	Orange	monitoring hub action
- X 1.4	=	White	monitoring hub lock (Solenoid)
- X 1.5	=	White	monitoring hub lock (Solenoid)
- X 1.6	=	White	monitoring hub lock (Solenoid)
- X 1.7	=	Yellow	monitoring key / constant open position
- X 1.8	=	Yellow	monitoring key / constant open position
- X 1.9	=	Yellow	monitoring key / constant open position
- X 1.10	=	Grey	solenoid DC + 24 V
- X 1.11	=	Blue	GND

Schaltplan 20 - Abfrage Schlüssel /Daueroffenstellung mit 2 LED & Nußsperre mit 2 LED & Nußaktion
circuit diagram 20 - monitoring key / constant open with 2 LED & hub lock (Solenoid) with 2 LED & hub action

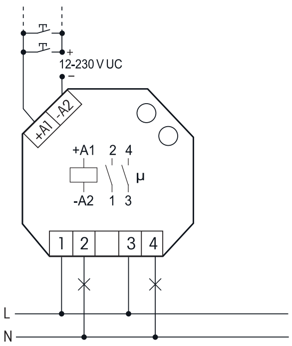


Function rotary switches



Standard setting ex works.

Typical connection



Manuals and documents in further languages:
http://eltako.com/redirect/ESR61M-UC

Technical data page 12-16.

ESR61M-UC

1+1 NO contacts potential free 10 A/250 V AC. 230 V LED lamps up to 200 W, incandescent lamp load 2000 W. No standby loss.

For installation. 45 mm long, 45 mm wide, **32 mm deep.**
State-of-the-art hybrid technology combines advantages of nonwearing electronic control with high capacity of special relays.
Universal control voltage 12 to 230 V UC.
No permanent power supply necessary, therefore no standby loss.
By using bistable relays coil power loss and heating is avoided even in the on mode.
The switched consumer may not be connected to the mains before the short automatic synchronisation after installation has terminated.
The functions of the second rotary switch are preselected using the rotary switch ES/ER.
The setting ER selects the function in brackets. 10 different functions are selectable.

2S = Impulse switch with 2 NO contacts
(2R) = Switching relay with 2 NO contacts
WS = Impulse switch with 1 NO contact and 1 NC contact
(WR) = Switching relay with 1 NO contact and 1 NC contact
SS1 = Impulse multi circuit switch 1+1 NO contacts for switching sequence 0 - contact 1(1-2) - contact 2(3-4) - contacts 1 + 2
(RR) = Switching relay (closed-circuit current relay) with 2 NC contacts
SS2 = Impulse multi circuit switch 1+1 NO contacts for switching sequence 0 - contact 1 - contacts 1 + 2 - contact 2
(EW) = Impulse relay for fleeting NO contact with 1 NO contact and 1 NC contact, wiping time 1 sec
GS = Impulse group switch 1+1 NO contacts for switching sequence 0 - contact 1 - 0 - contact 2
(GR) = Group relay 1+1 NO contacts (relay with alternating closing contacts)

This relay is not suitable to feed back the switching voltage signal of a dimmer switch.
Use only relays ESR12DDX-UC, ESR12NP-230V+UC or ESR61NP-230V+UC for this purpose.

The electronics does not have an internal power supply and therefore no power is consumed in any contact position. A control current flows only during a short control impulse of 0.2 seconds. This activates the microcontroller, reads the last switching state from the non-voltage memory, switches the bistable relay to its opposite state accordingly and rewrites the new switching state to memory

ESR61M-UC	Multifunction Impulse Switch with integr. relay function, 1+1 NO contacts 10 A	**Art. No. 61200301**	**71,90 €/pc.**

TECHNICAL DATA ELECTRONIC SWITCHING RELAYS, CONTROL RELAYS AND COUPLING RELAYS

Type	ESR12NP-230V+UC	ESR12DDX-UC [b)] ER12DX-UC [a)] ER12-200-UC [a)] ER12-110-UC [a)] ER12-001-UC [a)] ER12-002-UC [a)]	ESR61NP-230V+UC [b)] ESR61M-UC [a)] ETR61-230V ETR61NP-230V ER61-UC [a)]	ER12SSR-UC ESR61SSR-230V	KR09 -12V UC, -24V UC, -230V	KRW12DX-UC [a)]
Contacts						
Contact material/contact gap	$AgSnO_2$/0.5mm			Opto Triac	$AgSnO_2$/0.5mm	W+$AgSnO_2$/0.5mm
Spacing of control connections/contact	3mm	6mm	6mm, ER61: 3mm		6mm	6mm
Spacing of control connections C1-C2 or A1-A2/contact	6mm	6mm	ESR61NP+M: 6mm	–	–	-
Test voltage contact/contact	-	ESR12DDX, ER12-200/110: 2000V	ESR61M: 2000V	–	-	-
Test voltage control connections/contact Test voltage C1-C2 or A1-A2/contact	2000V 4000V	4000V –	2000V ESR61NP+M+ETR61NP: 4000V	–	4000V –	4000V –
Rated switching capacity	16A/250V AC	16A/250V AC [4)]	10A/250V AC ETR61: 5A/250V AC	–	6A/250V AC	16A/250V AC
230V LED lamps	up to 600W [5)] I on ≤ 30A/20ms	up to 200W [5)] with DX up to 600W [5)] I on ≤ 120A/5ms	up to 200W [5)] ESR61NP: up to 600W [5)] I on ≤ 120A/5ms	up to 400W [5)] I on ≤ 120A/20ms	up to 50W [5)] I on ≤ 10A/10ms	up to 600W [5)] I on ≤ 500A/2ms
Incandescent lamp and halogen lamp load [1)] 230V, I on ≤ 70A/10ms	2300W	2000W	2000W ETR61: 1000W	up to 400W	500W	3300W
Fluorescent lamp load with KVG* in lead-lag circuit or non compensated	1000VA	1000VA	1000VA	–	600VA	1000VA
Fluorescent lamp load with KVG* shunt-compensated or with EVG*	500VA	500VA	500VA	up to 400VA [5)]	300VA	500VA
Compact fluorescent lamps with EVG* and energy saving lamps ESL	15x7W 10x20W [5)]	I on ≤ 70A/10ms [2)] When using DX types: 15x7W 10x20W [3)5)]	I on ≤ 70A/10ms [2)] ESR61NP: 15x7W, 10x20W [5)]	up to 400W [5)]	52W	I on ≤ 500A/2ms [2)]
Max. switching current DC1: 12V/24V DC	-	8A	8A (not ESR)	–	6A	-
Life at rated load, cos φ = 1 or for incandescent lamps 1000W at 100/h	>10^5	>10^5	>10^5	∞	>10^5	>10^5
Life at rated load, cos φ = 0.6 at 100/h	>4x10^4	>4x10^4	>4x10^4	–	–	>4x10^4
Max. operating cycles	10^3/h	10^3/h	10^3/h	10^3/h	10^4/h	10^3/h
Contact position indication	LED (not series 61)					
Maximum conductor cross-section	series 12: 6mm² (3-fold terminal 4mm²), series 61: 4mm²					
Two conductors of same cross-section	series 12: 2.5mm² (3-fold terminal 1.5mm²), series 61: 1.5mm²					
Screw head	series 12: slotted/crosshead, pozidriv, series 61: slotted/crosshead					
Type of enclosure/terminals	series 12: IP50/IP20, series 61: IP30/IP20					
Electronics						
Time on	100%	100%	100%	100%	100%	100%
Max./min. temperature at mounting location	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C	+50°C/-20°C
Stand by loss (active power)	0.5W	– ESR12DDX: 0.4W	– ESR61NP: 0.7W, ETR61+ ETR61NP: 0.5W	– ESR61SSR: 0.3W	-	-
Control current 230V control input local ±20%	10mA	-	10mA, ER61 and ESR61M: -	1mA	-	-
Control current universal control voltage all control voltages mA ± 20%	-	4 (not ESR12DDX)	ER61: 2, ESR61M: 4	4	-	4
Control current at 8/12/24/230V (<10s) mA ± 20%	2/4/9/5(100)	only ESR12DDX: 2/3/7/3(50)mA	only ESR61NP: 2/4/9/5(100) only ETR61+ ETR61 NP: 10mA/24V DC	-	-/15/10/11	-
Max. parallel capacitance (approx. length) of control lead at 230V AC	ES: 0.3µF (1000m) ER: 3nF (10m) C1-C2: 15nF (50m)	0.06µF (200m) ESR12DDX: 0.3µF (1000m)	0.06µF (200m)	30nF (100m)	0.06µF (200m)	0.06µF (200m)

* EVG = electronic ballast units; KVG = conventional ballast units [a)] Bistable relay as relay contact. The relay contact can be open or closed when putting into operation. It will be synchronised at first operation. [b)] Bistable relay as relay contact. The switched consumer may not be connected to the mains before the short automatic synchronisation after installation has terminated. [1)] For lamps with 150W max. [2)] A 40-fold inrush current must be expected for electronic ballast devices. For steady loads of 1200W or 600W use the currentlimiting relay SBR12 or SBR61. See chapter 14, page 14-8. [3)] When using DX types close attention must be paid that zero passage switching is activated! [4)] For ER12-200 maximum current across both contacts 16A for 230V. [5)] Usually applies for dimmable 230V LED lamps and dimmable energy saving lamps. Due to different lamp electronics and depending on the manufacturer, the maximum number of lamps may be limited, especially if the wattage of the individual lamps is very low (e.g. with 2W LEDs). [6)] Up to 2x10^4 switching cycles at 1s on & 9s off.

To comply with DIN VDE 0100-443 and DIN VDE 0100-534, a Type 2 or Type 3 surge protection device (SPD) must be installed.

Compliance with: EN 61000-6-3, EN 61000-6-1 and EN 60 669

GB CE

Eltako

61 200 301 - **1**

Multifunction impulse switch with integrated relay function

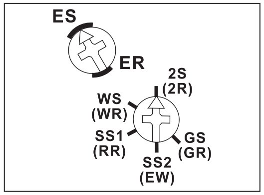
ESR61M-UC

Only skilled electricians may install this electrical equipment otherwise there is the risk of fire or electric shock!

Temperature at mounting location: -20°C up to +50°C.
Storage temperature: -25°C up to +70°C.
Relative humidity:
annual average value <75%.

1+1 NO contacts potential free 10A/250V AC, incandescent lamps 2000 W.
No standby loss.
For installation. 45 mm long, 45 mm wide, **32 mm deep.**
State-of-the-art hybrid technology combines advantages of nonwearing electronic control with high switching capacity of special relays.
Universal control voltage 12..230V UC.
No permanent power supply necessary, therefore no standby loss. By using a bistable relay causing coil power loss and heating is avoided even in the on mode.
The relay contact can be open or closed when putting into operation. It will be synchronised at first operation.
With the rotary switch ES/ER the functions of the second rotary switch will be preselected. The setting ER selects the function in brackets.

Rotary switches

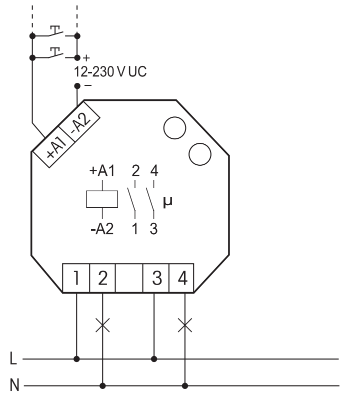


10 different functions are selectable:

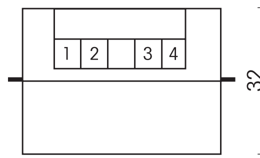
2S = Impulse switch with 2 NO contacts
(2R) = Switching relay with 2 NO contacts
WS = Impulse switch with 1 NO contact and 1 NC contact
(WR) = Switching relay with 1 NO contact and 1 NC contact
SS1 = Impulse multi circuit switch 1+1 NO contacts for switching sequence 0 - contact 1 (1-2) - contact 2 (3-4) - contacts 1 + 2
(RR) = Switching relay (closed-circuit current relay) with 2 NC contacts
SS2 = Impulse multi circuit switch 1+1 NO for switching sequence 0 - contact 1 - contacts 1 + 2 - contact 2
(EW) = Impulse group switch 1+1 NO for switching sequence 0 - contact 1 - 0 - contact 2
GS = Gruppenschalter 1+1 Schließer mit Schaltfolge 0 - Kontakt 1 - 0 - Kontakt 2
(GR) = Group relay 1+1 NO contacts (relay with alternating closing contacts)

This relay is not suitable to feed back the switching voltage signal of a dimmer switch. Use only relays ESR12DDX-UC, ESR12NP-230V+UC or ESR61NP-230V+UC for this purpose.

Typical connection



Side view



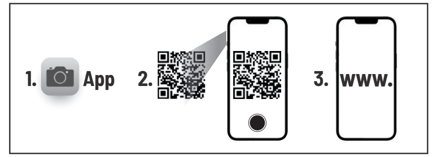
Technical Data

Control voltage UC	12..230V
Rated switching capacity	10 A/250 V AC
Incandescent lamp load and halogen lamp load[1] 230 V	2000 W
Fluorescent lamp load with KVG in lead-lag circuit or non compensated	1000 VA
Fluorescent lamps with KVG shunt-compensated or wih EVG	500 VA
Compact fluorescent lamp with EVG and energy saving lamps	I on ≤ 70A/ 10ms[2]
Standby loss (activ power)	-

[1] For lamps with 150W max.
[2] For electronic ballast gears a 40fold inrush current has to be calculated. For steady loads of 600W use the current-limiting relay SBR61.

Manuals and documents in further languages:

http://eltako.com/redirect/ESR61M-UC



Must be kept for later use!
We recommend the housing for operating instructions GBA14.

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21/2023 Subject to change without notice.