SPT1-AP6X / SPT1-AN6X

Programmable timer for on-delay time or off-delay time
- Direct adaptation between sensor and connecting cable
- Teachable as on-delay time or off-delay time
- Simple setting by external teach-input
- No additional wiring required
- Time range between 1 and 65535 ms (65.535 seconds)
- Switching amplifier up to 400 mA
- Can be used as pulse stretcher

The SPT1 SmartPlug is a freely programmable timer for the direct adaptation to sensors with a standardized M12x1 connection.

The SPT1 SmartPlug is available in 2 versions:
- PNP input - PNP output SPT1-AP6X (for use with PNP sensors)
- NPN input - NPN output SPT1-AN6X (for use with NPN sensors)

Connection:
The SmartPlug is very easy to connect: it is plugged onto the M12x1 connector of a sensor and the connecting cable is connected to the other side of the SmartPlug. The sensor configuration has to meet the standards (1 +V (BN)  3 -V (BU)  4 output (BK) ).

Setting:
The setting of the delay time is made by means of the signals "Teach input" and "Input SmartPlug". A delay time of 4 seconds for example can be set as follows (the operating voltage being switched on):
1. Connect teach input with +V
2. Actuate sensor for 4 seconds
3. Disconnect teach input from +V. READY

After this setting the SmartPlug has a slow operation lasting 4 seconds.
This setting is maintained when the sensor is switched off.

When switching on the operating voltage, the timer is reset. The initial state of the preset time is 100 ms off-delay.
H = input/output active  L = input/output inactive
Technical Data

- **Operating Voltage:** 10-30 VDC, residual ripple of max. 10%
- **Own Current Consumption:** <10 mA
- **Input Resistance:** >10 kΩ
- **Max. Input Frequency:** 10 kHz
- **Min. Response Time:** 0.1 ms
- **Max. Output Current:** 400 mA short-circuit proof
- **Ambient Temperature Range:** 0° to +60°C (+32° to +140°F)
- **Storage Temperature Range:** -20° to +60°C (-4° to +140°F)
- **Display:** Red LED
- **Housing Material:** Plastic PBTP/PA
- **Protection Standard:** IP 67
- **Dimensions Inches[mm]:** See diagram
- **Connection Input:** 4-pin socket M12x1
- **Connection Output:** 4-pin connector M12x1
- **Weight:** 15 g

**To preset to factory setting 100 ms off-delay**

**SPT1-AP6X**

```
+V1
H    L
2    4
3    2
1

SmartPlug

Teach
Input

or

SPT1-AN6X

+V
H    L
2    4
3    2
1

SmartPlug

Teach
Input

NPN
```

**Dimensions:**

- M12x1
- 2.362 [60.0]
- .472 [12.0]
- .787 [20.0]