

Smart Control Plug Data Sheet

SCP412



1. Description

The Cavity Eye Smart Control Plug (SCP) device was developed for the Smart Moulding Control system. It is a special data processing and communication unit, with the role of ensuring the communication between the Cavity Eye pressure measuring system and the injection molding machine. The device can control bad part sorting, detect the cycle start and can stop the injection machine in case of an error.

2. Application

The device is capable of measuring the cavity pressure in moulds if it is equipped with the Cavity Eye's pressure sensors. It is a part of the Cavity Eye mould pressure measurement system and can be used for communication with the injection molding machine, mould valve control, part sorting on 8 different channels, and stopping the injection molding machine.

Fulfills the industry's requirements by having a heavy-duty design with IP64 protection rating.

3. How does it work

The device receives the signals from the injection moulding machine, processes and transmits them to the central unit. Furthermore it is responsible for transforming the signals sent by Cavity Eye system to 24V signals and forwarding them to the injection molding machine.

4. Technical Data

SCP412		
Weight	g	311
Main Dimensions	mm	110x70x36
Operating temperature range	°C	-40 - +85
Power supply	IEEE 802.3af	max. 56 V
Protection rating	IEC 60529:1989	IP64
Number of inputs	pcs	4
Number of outputs	pcs	12
Connection		RJ-45

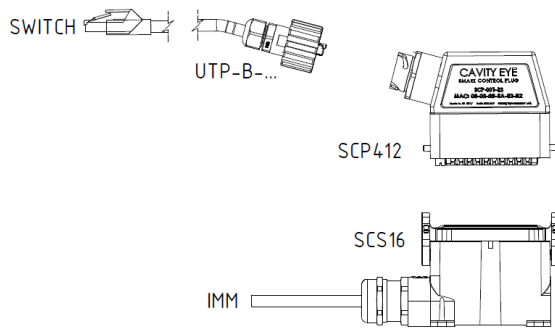
5. Placement

An injection moulding machine equipped with Cavity Eye Smart Control Socket is necessary to the SCP to operate properly. The counterpart (the SCS16) of the SCP must be placed on the injection moulding machine. Connect the SCP device on the SCS16 and secure the connection with the locking lever. (1. figure)

Connect the SCP device to the Cavity Eye data processing unit with the help of the standard RJ-45 socket. The device connects with a bayonet lockable UTP cable to the adequate socket of the Switch device. The UTP cables can be found in the Cavity Eye's catalogue in different lengths.

6. Optional Accessories

Name	Item Number
UTP cable 5 m	UTP-B-5
UTP cable 10 m	UTP-B-10
UTP cable 15 m	UTP-B-15



1. Figure: Connections of the device

7. Default pin allocation

Pin	Function
1	Memory GND
2	Memory Data
3	Injection machine GND
4	Injection machine 24V
5	Injection machine Trigger
6	Injection machine Auto cycle
7	Injection machine OK/NOK
8	In 4 (empty)
9	CE OK/NOK
10	CE V-P Switch over
11	CE Cycle Stop
12	CE Immediate Cycle Stop
13	CE ON indicator
14	Out 6 (empty)
15	Out 7 (empty)
16	Out 8 (empty)
17	Out 9 (empty)
18	Out 10 (empty)
19	Out 11 (empty)
20	Out 12 (empty)