Smart Measuring Socket
Data Sheet

SMS8-B-OS
SMS32-A
SMS8-B-HT
SMS32-A-HT

Description

The Cavity Eye Smart Measuring Socket (SMS) was developed for the njection moulds equipped with Cavity Eye pressure sensors. This socket is equipped with a special, integrated memory, and responsible for storing the data of the moulds and the Cavity Eye sensors. The content of the memory and the signals from the sensors are processed by the Smart Measuring Plug.
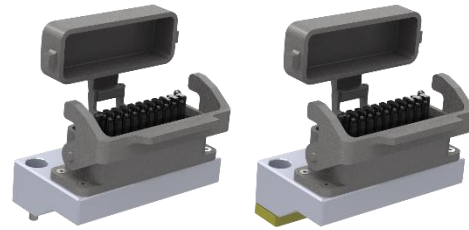
Application

The socket is used for cavity pressure measurement in injection moulds as a part of the Cavity Eye system. It is an indispensable accessory of the Cavity Eye pressure sensors.

Fulfills the industry's requirements by having a heavy-duty design with IP64 protection rating. With the help of this device, the Cavity Eye sensor installations can be done easily.

How does it work?

The socket is responsible for the wired connection of the pressure sensors; furthermore, the device stores the data of the sensors and the mould in the integrated memory. Cavity Eye's Smart Measuring Plug is connected to this socket, too. This unit is fixed to the mold, thus disconnecting it from the system makes it mobile together with the mould.
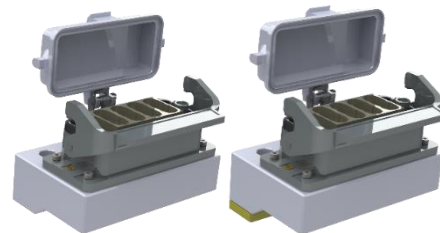
The memory works with 5 V power supply, and stores every data of the mould and the sensors. The data stored in the memory will not be lost in case of disconnecting the SMS from the power.

Technical data

SMS8-B-OS, SMS8-B-HT		
Weight	g	380
Main Dimensions	mm	100x56x75
Operating temperature range - with heat insulation plate	°C	0 - +70 70 <
Power Supply	V	5
Protection rating	IEC 60529:1989	IP64
Number of channels	pcs	8
Number of pins	pcs	20

SMS32-A, SMS32-A-HT		
Weight	g	740
Main Dimensions	mm	122x90x90
Operating temperature range - with heat insulation plate	°C	0 - +70 70 <
Power Supply	V	5
Protection rating	IEC60529:1989	IP64
Number of channels	pcs	32
Number of pins	pcs	73

Types

There are two types of Smart Sockets you can choose from, depending on how much sensors' signal is required to handle. SMS8-B-OS type can be used up to 8 sensors. Over 8 sensors,

more SMS8-B device can be applied – adjusted to the number of sensors (up to 16 sensors)

In case of higher sensor number, the SMS32-A device can be used. This type can handle 32 sensors at the same time. In case of using more than 32 sensors, more SMS32-A device can be used.
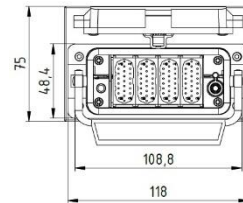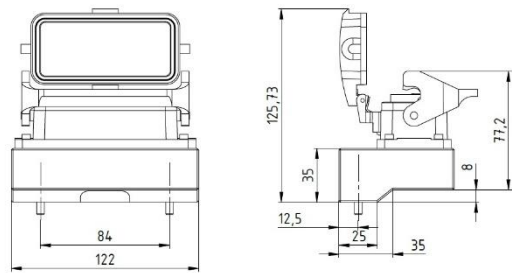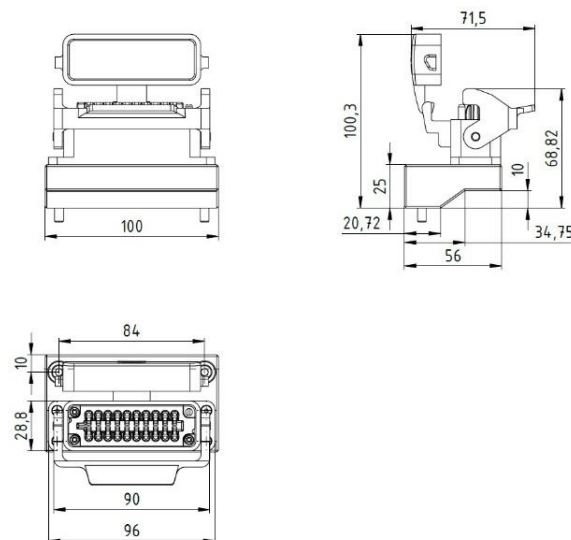
Depending on the temperature of the environment it is possible to use a heat insulated version of this instrument. If the mold's temperature is above 70°C it is recommended to use the heat insulated type.

Placement
Every SMS is fixed with an extra, interlinking spacer. The spacer is fixed to the mould with 2 pieces of M5x25 socket head cap screw.

Optional types

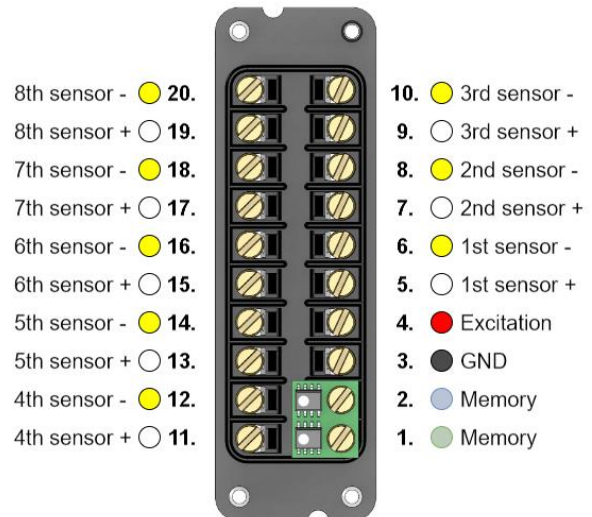| Name	Item number
Normal 8 channel type	SMS8-B-OS
Insulated 8 channel type	SMS8-B-HT
Normal 32 channel type	SMS32-A
Insulated 32 channel type	SMS32-A-HT

Main dimensions of the SMS8-B (left) and the SMS32-A (right)
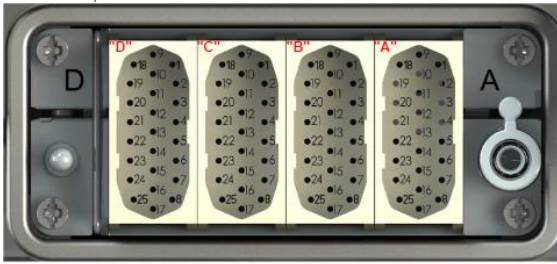
Pin allocation
The socket should be fixed on the mold in assembled state. The **Cavity Eye Sensor installation guide** and **SMS quick installation guide** contain all the help needed in assembling, fixing and installing the socket.

8 channel socket

8th sensor - ● 20.
8th sensor + ○ 19.
7th sensor - ● 18.
7th sensor + ○ 17.
6th sensor - ● 16.
6th sensor + ○ 15.
5th sensor - ● 14.
5th sensor + ○ 13.
4th sensor - ● 12.
4th sensor + ○ 11.

10. ● 3rd sensor -
9. ○ 3rd sensor +
8. ● 2nd sensor -
7. ○ 2nd sensor +
6. ● 1st sensor -
5. ○ 1st sensor +
4. ● Excitation
3. ● GND
2. ● Memory
1. ● Memory

32 channel socket

The SMS32-A device is divided into 4 blocks in case of pin allocations.

"D" Block:		"C" Block:		"B" Block:		"A" Block:	
1.	5th sensor -	1.	13th sensor -	1.	21st sensor -	1.	29th sensor -
2.	5th sensor +	2.	13th sensor +	2.	21st sensor +	2.	29th sensor +
3.	6th sensor -	3.	14th sensor -	3.	22nd sensor -	3.	30th sensor -
4.	6th sensor +	4.	14th sensor +	4.	22nd sensor +	4.	30th sensor +
5.	7th sensor -	5.	15th sensor -	5.	23rd sensor -	5.	31st sensor -
6.	7th sensor +	6.	15th sensor +	6.	23rd sensor +	6.	31st sensor +
7.	8th sensor -	7.	16th sensor -	7.	24th sensor -	7.	32nd sensor -
8.	8th sensor +	8.	16th sensor +	8.	24th sensor +	8.	32nd sensor +
9.	Memory	16.	GND	16.	GND	16.	GND
16.	GND	17.	Excitation	17.	Excitation	17.	Excitation
17.	Excitation	18.	12th sensor +	18.	20th sensor +	18.	28th sensor +
18.	4th sensor +	19.	12th sensor -	19.	20th sensor -	19.	28th sensor -
19.	4th sensor -	20.	11th sensor -	20.	19th sensor -	20.	27th sensor -
20.	3rd sensor +	21.	11th sensor +	21.	19th sensor +	21.	27th sensor +
21.	3rd sensor -	22.	10th sensor +	22.	18th sensor +	22.	26th sensor +
22.	2nd sensor +	23.	10th sensor -	23.	18th sensor -	23.	26th sensor -
23.	2nd sensor -	24.	9th sensor +	24.	17th sensor +	24.	25th sensor +
24.	1st sensor +	25.	9th sensor -	25.	17th sensor -	25.	25th sensor -
25.	1st sensor -						