

Mould Plug with Memory

Description

The Cavity Eye Mould Plug with Memory (MPM) socket was developed for the Injection 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 wiring of the sensors takes place in this device, and it is also the counterpart of the Cavity Eye Smart Measuring Plug (SMP).

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 are easy, it is pronouncedly made for industrial applications.

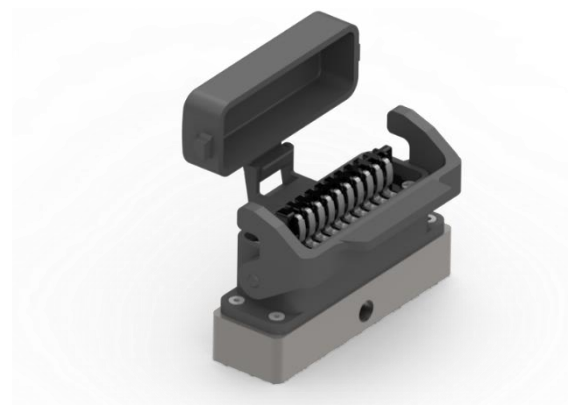
How does it work

The socket is responsible for the wired connection of the sensors (pressure and temperature); furthermore, the device stores the data of the sensors and the mould in the integrated memory. The Cavity Eye Smart Measuring Plug (SMP) is connected to the MPM, which is fixed on the mould, thus disconnecting it from the system makes it mobile together with the mould.

The memory module is connected to the first two pins of the insert. 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 MPM from the power .

Data Sheet

MPM8-B
MPM32-A



Technical data

MPM8-B		
Weight	g	152
Main Dimensions	mm	96x93x45
Operating temperature range	°C	0 - +80
Power Supply	V	5
Protection rating	IEC 60529:1989	IP64
Number of channels	pcs	8
Number of pins	pcs	20

MPM32-A		
Weight	g	548
Main Dimensions	mm	127x140x57
Operating temperature range	°C	0 - +80
Power Supply	V	5
Protection rating	IEC60529:1989	IP64
Number of channels	pcs	32
Number of pins	pcs	76

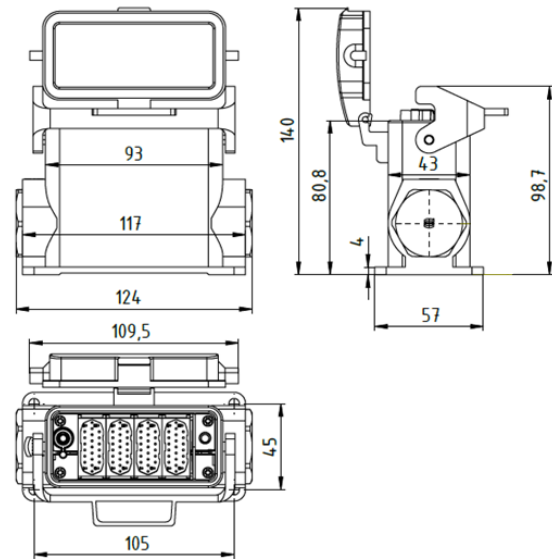
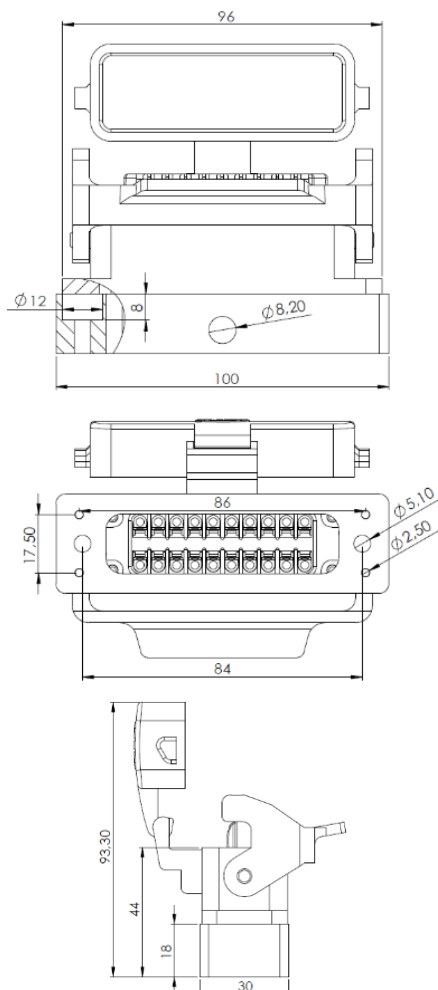
Types

There are two types of Mould Plugs you can choose from, depending on how much sensors' signal is required to handle. MPM8-B type can be used up to 8 sensors with the corresponding counterpart connected, the SMP8. Over 8 sensors, more MPM8-B device can be applied – adjusted to the number of sensors – each with an SMP8 plug. (up to 16 sensors: 2 pieces of MPM8-B; up to 24 sensors: 3 pieces of MPM8-B; etc.)

In case of higher sensor number, the MPM32-A device can be used with the corresponding counterpart connected, the SMP32. This type can handle 32 sensors at the same time. In case of using more, than 32 sensors, more MPM32-A device can be used – adjusted to the number of sensors – each with an SMP32 plug.

Placement

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



Main dimensions of the MPM8-B (left) and the MPM32-A (right)

Optional accessories

Name	Item Number
Standard spacer	MPH8-SS
Offset spacer	MPH8-OS
L-shape mould plug holder, right	MPH8-R
L- shape mould plug holder, left	MPH8-L
T-shape plug holder	MPH8-T

Pin allocation

The MPM8-B should be fixed on the mould in assembled state. The *Cavity Eye Installation Guide* contains all the help needed in assembling, fixing and installing.

MPM8-B

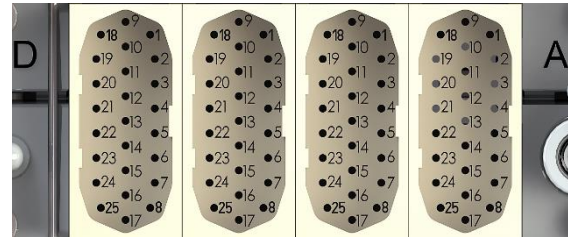


MPM8-B insert with pin numberings

Pin	Function
1	Memory GND
2	Memory Adat
3	Excitation GND
4	Excitation 5V
5	1. Sensor +
6	1. Sensor -
7	2. Sensor +
8	2. Sensor -
9	3. Sensor +
10	3. Sensor -
11	4. Sensor +
12	4. Sensor -
13	5. Sensor +
14	5. Sensor -
15	6. Sensor +
16	6. Sensor -
17	7. Sensor +
18	7. Sensor -
19	8. Sensor +
20	8. Sensor -

MPM32-A

The MPM32-A device is divided into 4 blocks in case of pin allocations. The first number of the pin marks the number of the block, the 2nd and the 3rd are the number of the pin in the block. The numbering of the blocks starts at the A side. (right side on the figure below)



Pin	Function
124	1. Sensor +
125	1. Sensor -
122	2. Sensor +
123	2. Sensor -
120	3. Sensor +
121	3. Sensor -
118	4. Sensor +
119	4. Sensor -
101	5. Sensor +
102	5. Sensor -
103	6. Sensor +
104	6. Sensor -
105	7. Sensor +
106	7. Sensor -
107	8. Sensor +
108	8. Sensor -
109	Memory
116	Memory and excitation GND
117	Excitation 5V
224	9. Sensor +
225	9. Sensor -
222	10. Sensor +
223	10. Sensor -
220	11. Sensor +
221	11. Sensor -
218	12. Sensor +
219	12. Sensor -

201	13. Sensor +
202	13. Sensor -
203	14. Sensor +
204	14. Sensor -
205	15. Sensor +
206	15. Sensor -
207	16. Sensor +
208	16. Sensor -
216	Excitation GND
217	Excitation 5V
324	17. Sensor +
325	17. Sensor -
322	18. Sensor +
323	18. Sensor -
320	19. Sensor +
321	19. Sensor -
318	20. Sensor +
319	20. Sensor -
301	21. Sensor +
302	21. Sensor -
303	22. Sensor +
304	22. Sensor -
305	23. Sensor +
306	23. Sensor -
307	24. Sensor +
308	24. Sensor -
316	Excitation GND
317	Excitation 5V
424	25. Sensor +
425	25. Sensor -
422	26. Sensor +
423	26. Sensor -
420	27. Sensor +
421	27. Sensor -
418	28. Sensor +
419	28. Sensor -
401	29. Sensor +
402	29. Sensor -
403	30. Sensor +
404	30. Sensor -

405	31. Sensor +
406	31. Sensor -
407	32. Sensor +
408	32. Sensor -
416	Excitation GND
417	Excitation 5V