## Hinged safety switches, HP-HC series



2009

## Selection diagram



Code structure
Attention! The feasibility of a code number does not mean the effective availability of a product. Please contact our sales office.
article options
HP AA050C-2SN GH15

Movable part
A $100 \times 50 \mathrm{~mm}$ metal movable part
B $100 \times 75 \mathrm{~mm}$ metal movable part

| Contact block |  |
| :--- | :--- |
| $\mathbf{5 0 C}$ | $1 \mathrm{NO}+1 \mathrm{NC}$, snap action |
| $\mathbf{5 0 F}$ | $1 \mathrm{NO}+2 \mathrm{NC}$, snap action |
| $\mathbf{5 0 M}$ | $2 \mathrm{NO}+2 \mathrm{NC}$, snap action |
| $\mathbf{5 2 C}$ | $1 \mathrm{NO}+1 \mathrm{NC}$, slow action |
| $\mathbf{5 2 F}$ | $1 \mathrm{NO}+2 \mathrm{NC}$, slow action |
| $\mathbf{5 2 M}$ | $2 \mathrm{NO}+2 \mathrm{NC}$, slow action |
| $\mathbf{5 3 C}$ | 1NO+1NC, slow action overlapped |
| $\mathbf{5 3 F}$ | $\mathbf{1 N O}+2 \mathrm{NC}$, slow action overlapped |
| $\mathbf{5 3 M}$ | $\mathbf{2 N O}+2 \mathrm{NC}$, slow action overlapped |

## Movable part rotation

$0^{\circ}$ movable part rotated (standard)
H15 $15^{\circ}$ movable part rotated
H30 $30^{\circ}$ movable part rotated
H45 $45^{\circ}$ movable part rotated
H60 $60^{\circ}$ movable part rotated
H75 $75^{\circ}$ movable part rotated
H90 $90^{\circ}$ movable part rotated

## Contacts type

silver contacts (standard)
G silver contacts gold plated $1 \mu \mathrm{~m}$
Type of cable or connector

| N | cable EN 50265-1 black (standard) |
| :--- | :--- |
| G | cable CEI 20-22 II grey (contact block with 2 contacts only) |
| H | cable PUR halogen free grey (contact block with 2 contacts only) |
| M | M12 connector |

Connection output direction
S from bottom
P from back
A from top

## Main data

- Metal housing, cable output from bottom, from top or from back
- 4 integrated cable types available
- Versions with M12 connector
- Adjustable operating point
- Protection degree IP67 and IP69K
- 9 contact blocks with positive opening $\Theta$
- Complementary hinges without contacts
- Versions with variations of the activation base angle


## Operating point regulation



The switches operating point can be regulated through a simple Phillips screwdriver.
The operating point regulation allows the setting possibility (up to $4^{\circ}$ ) for large guards.
After the setting, it's always necessary to close the hole through the suitable supplied safety seal plug.

## M12 integrated connector version



Versions with connections from the top or the bottom are available with M12 integrated connector.
The application of versions with connectors allows a faster wiring when it's necessary to move guards from test line to final user.

## INNOVATION \& DESIGN AWARD

(1) INNOVATION \& DESIGN AWARD


This product has been presented at the "Innovation \& Design award 2007" which selects, among all industrial products, those that stand out for technological innovation and their particular design.
The switch has been selected by the jury in category "Innovation " during the fair "Enermotive 2007".

## Application field

Pizzato Elettrica widens its own range of products making a new series of safety switches hinge-shaped, where safety and style are melted in one single product.
The switch is completely integrated in the mechanical hinge, to result practically invisible to an inexpert eye. This guarantees a higher safety because a switch hard to identify is consequently also more difficult to defeat. The assembly without visible screws and the pleasant line, make the switch perfectly integrated also with guards of modern design machinery.
In order to complete the offer complementary hinges with purely mechanics functions are available.

## Variations of the activation base angle



New versions with the switch activation angle equal to a multiple of $15^{\circ}$ (e.g. $45^{\circ}$ or $90^{\circ}$ ) are available on request.
The different activation angle does not invalidate the possibility to adjust the operating point through the switch adjusting screws.
The variation of the operating angle does not alter the switch maximum mechanical travel.

## Opening angle up to $180^{\circ}$



The mechanical design of the switch allows the application also onto protections up to $180^{\circ}$ opening angle.

## Versions for glass or polycarbonate doors



It's available a variation of the switch shape specifically designed for glass and polycarbonate doors without frame. The wider supporting arm and the spaced fixing points facilitate the installation and prevent the cracking caused by holes too near the guard edge.
However, it is necessary to verify that the door mechanical stop is not performed by the switch.

## Dimensional drawings



HP AA version with cable from back

HP AA version with M12 connector from bottom version

HP AB / HC AB version


Versione HC LL version



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