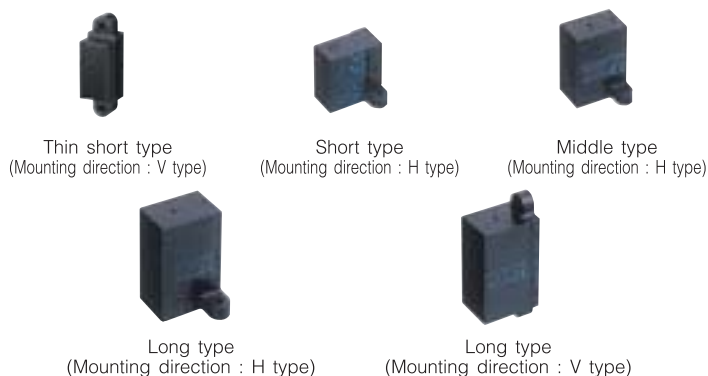


# Active infrared (area reflective) human detection sensor MA MOTION SENSOR

# Discontinued



## Features

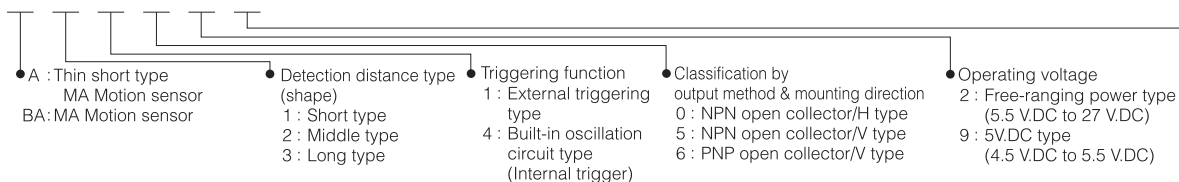
- Reliable detection hardly influenced by reflectivity of targeted objects
- Ready-to-use with DC power source (built-in oscillation circuit type)
- Capability to adjoin sensors (External triggering type)
- RoHS compliant

## Typical applications

- Equipment around water: automatic lighting of wash-units, toilets, automatic flush
- Stores and financial markets: automatic doors, lighting, ATM, visitor sensors
- Amusement equipment: seating detection for pachinko machines, game displays
- Medical equipment markets: noncontact switches

## Ordering information

### AM



• Rated detection distance

Unit : cm inch

| Part No.<br>Type | 02          | 03           | 04           | 05           | 06           | 07           | 08<br>(Middle type<br>does not<br>need 08) | 09           | 10<br>(Short type<br>does not<br>need 10) | 11            | 12            | 13            | 14            | 15            | 16            | 17            | 18            | 19            | 20<br>(Long type<br>does not<br>need 20) |
|------------------|-------------|--------------|--------------|--------------|--------------|--------------|--------------------------------------------|--------------|-------------------------------------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|------------------------------------------|
| Thin short type  | —           | —            | —            | 5<br>1.969   | —            | —            | —                                          | —            | 10<br>3.937                               | —             | —             | —             | —             | 15<br>5.906   | —             | —             | —             | —             | —                                        |
| Short type       | —           | —            | —            | 5<br>1.969   | 6<br>2.362   | 7<br>2.756   | 8<br>3.150                                 | 9<br>3.543   | 10<br>3.937                               | —             | —             | —             | —             | —             | —             | —             | —             | —             | —                                        |
| Middle type      | 20<br>7.874 | 30<br>11.811 | 40<br>15.748 | 50<br>19.685 | 60<br>23.622 | 70<br>27.559 | 80<br>31.496                               | —            | —                                         | —             | —             | —             | —             | —             | —             | —             | —             | —             | —                                        |
| Long type        | —           | 30<br>11.811 | 40<br>15.748 | 50<br>19.685 | 60<br>23.622 | 70<br>27.559 | 80<br>31.496                               | 90<br>35.443 | 100<br>39.37                              | 110<br>43.307 | 120<br>47.244 | 130<br>51.181 | 140<br>55.118 | 150<br>59.055 | 160<br>62.992 | 170<br>66.929 | 180<br>70.866 | 190<br>74.803 | 200<br>78.74                             |

## Product types

- Detection distance type (distance limited)
  - 1) Thin short type (V type)

Standard packing: Carton: 20 pcs.; Case: 200 pcs.

| Operating voltage    | Output method             | Rated detection distance | Built-in oscillation circuit type | External triggering type |
|----------------------|---------------------------|--------------------------|-----------------------------------|--------------------------|
|                      |                           |                          | Part No.                          | Part No.                 |
| 4.5 V.DC to 5.5 V.DC | NPN open collector output | 5 cm 1.969 inch          | AMA145905                         | AMA115905                |
|                      |                           | 10 cm 3.937 inch         | AMA1459                           | AMA1159                  |
|                      |                           | 15 cm 5.906 inch         | AMA145915                         | AMA115915                |
|                      | PNP open collector output | 5 cm 1.969 inch          | AMA146905                         | AMA116905                |
|                      |                           | 10 cm 3.937 inch         | AMA1469                           | AMA1169                  |
|                      |                           | 15 cm 5.906 inch         | AMA146915                         | AMA116915                |

Note: If using multiple sensors adjacently or reducing power consumption, contact us for the optimal external trigger type.

## 2) Short type (H type)

Standard packing: Carton: 20 pcs.; Case: 200 pcs.

| Rated operating voltage | Rated detection distance | Mounting direction : H type       |                          |
|-------------------------|--------------------------|-----------------------------------|--------------------------|
|                         |                          | Short type                        |                          |
|                         |                          | Built-in oscillation circuit type | External triggering type |
|                         |                          | Part No.                          | Part No.                 |
| 4.5 V.DC to 5.5 V.DC    | 5 cm 1.969 inch          | AMBA140905                        | AMBA110905               |
|                         | 6 cm 2.362 inch          | AMBA140906                        | AMBA110906               |
|                         | 7 cm 2.756 inch          | AMBA140907                        | AMBA110907               |
|                         | 8 cm 3.150 inch          | AMBA140908                        | AMBA110908               |
|                         | 9 cm 3.543 inch          | AMBA140909                        | AMBA110909               |
|                         | 10 cm 3.937 inch         | AMBA1409                          | AMBA1109                 |
| 5.5 V.DC to 27 V.DC     | 5 cm 1.969 inch          | AMBA140205                        | AMBA110205               |
|                         | 6 cm 2.362 inch          | AMBA140206                        | AMBA110206               |
|                         | 7 cm 2.756 inch          | AMBA140207                        | AMBA110207               |
|                         | 8 cm 3.150 inch          | AMBA140208                        | AMBA110208               |
|                         | 9 cm 3.543 inch          | AMBA140209                        | AMBA110209               |
|                         | 10 cm 3.937 inch         | AMBA1402                          | AMBA1102                 |

Note: If using multiple sensors adjacently or reducing power consumption, contact us for the optimal external trigger type.

## 3) Middle type (H type)

Standard packing: Carton: 20 pcs.; Case: 200 pcs.

| Rated operating voltage | Rated detection distance | Mounting direction : H type       |                          |
|-------------------------|--------------------------|-----------------------------------|--------------------------|
|                         |                          | Middle type                       |                          |
|                         |                          | Built-in oscillation circuit type | External triggering type |
|                         |                          | Part No.                          | Part No.                 |
| 4.5 V.DC to 5.5 V.DC    | 20 cm 7.874 inch         | AMBA240902                        | AMBA210902               |
|                         | 30 cm 11.811 inch        | AMBA240903                        | AMBA210903               |
|                         | 40 cm 15.748 inch        | AMBA240904                        | AMBA210904               |
|                         | 50 cm 19.685 inch        | AMBA240905                        | AMBA210905               |
|                         | 60 cm 23.622 inch        | AMBA240906                        | AMBA210906               |
|                         | 70 cm 27.559 inch        | AMBA240907                        | AMBA210907               |
|                         | 80 cm 31.496 inch        | AMBA2409                          | AMBA2109                 |
| 5.5 V.DC to 27 V.DC     | 20 cm 7.874 inch         | AMBA240202                        | AMBA210202               |
|                         | 30 cm 11.811 inch        | AMBA240203                        | AMBA210203               |
|                         | 40 cm 15.748 inch        | AMBA240204                        | AMBA210204               |
|                         | 50 cm 19.685 inch        | AMBA240205                        | AMBA210205               |
|                         | 60 cm 23.622 inch        | AMBA240206                        | AMBA210206               |
|                         | 70 cm 27.559 inch        | AMBA240207                        | AMBA210207               |
|                         | 80 cm 31.496 inch        | AMBA2402                          | AMBA2102                 |

Note: If using multiple sensors adjacently or reducing power consumption, contact us for the optimal external trigger type.