

# Metal code bar

## PXV000020M-AAMG30x500-000200



- High temperature resistance
- High mechanical stability
- Easily exchangeable
- Chemically highly resistant
- 2-colored Data Matrix codes

DataMatrix metal code bars for positioning safePXV and safePGV read heads

### Function

Rugged Data Matrix metal code bars made of anodized aluminum for use on the ground in camera-based track guidance. Depending on the application, the code bars can be glued directly to the floor, or glued into special carrier profile rails. The code bars are available in modular lengths of 100, 200, and 500 mm.

### Dimensions



### Technical Data

| General specifications    |   |
|---------------------------|---|
| Total length              | 20 m  |
| Start position            | 200 m   |
| Code bar segment          |   |
| Nominal segment length    | 500 mm  |
| Width                     | 30 mm   |
| Ambient conditions        |   |
| Operating temperature     | -40 ... 80 °C (-40 ... 176 °F)                              |
| Installation temperature  | 10 ... 40 °C (50 ... 104 °F)                                |
| Environmental resistance  | UV radiation<br>Humidity                                    |
| Chemical resistance       | Oils<br>Grease<br>Fuels<br>Aliphatic solvents<br>Weak acids |
| Mechanical specifications |   |
| Material thickness        | 1 mm  |
| Material                  | Aluminum  |
| Mounting type             | adhesive  |
| Mass                      | 83 g / m  |

Release date: 2022-07-13 Date of issue: 2022-07-13 Filename: 70127564-100028\_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

**Technical Data**

|                         |          |
|-------------------------|----------|
| Manufacturing tolerance | ± 1 mm/m |
|-------------------------|----------|

**Mounting**

**Preparing the Base Surface**

1. Use clean cleaning cloths (free from lint and plasticizers) to clean the surfaces.
2. Use cleaning agents appropriate for the level of surface contamination, for example n-Heptane, ethanol, or a 50:50 mixture of isopropanol and water.
3. Clean the surface until it is completely dry and free of dust, oil, oxides, release agents, and other contaminants.
4. Ensure that the surface is dry, clean, and stable.

**Adhesive Strength**

| Metal      | Material with high-energy surfaces | Material with low-energy surfaces |
|------------|------------------------------------|-----------------------------------|
| 33 N/25 mm | 32 N/25 mm                         | 31 N/25 mm                        |

Material thickness: 1 mm code bar + 0.13 mm adhesive

**Processing Instructions**

During bonding, the pressure should be as high as possible, and the temperature should be at least +10 °C. The higher the pressure and temperature, the better the adhesive will penetrate the pores of the base surface. This allows higher adhesive strength values to be achieved. It takes approx. 72 hours for the adhesive to cure.

**Type Code**

**Structure of the type code**

|   |   |   |     |     |     |     |     |     |   |   |   |   |   |     |     |     |   |     |     |     |   |     |     |     |     |     |     |
|---|---|---|-----|-----|-----|-----|-----|-----|---|---|---|---|---|-----|-----|-----|---|-----|-----|-----|---|-----|-----|-----|-----|-----|-----|
| P | X | V | (1) | (1) | (1) | (1) | (1) | (1) | M | - | A | A | M | (2) | (3) | (3) | x | (4) | (4) | (4) | - | (5) | (5) | (5) | (5) | (5) | (5) |
|---|---|---|-----|-----|-----|-----|-----|-----|---|---|---|---|---|-----|-----|-----|---|-----|-----|-----|---|-----|-----|-----|-----|-----|-----|

| PXV | Sensor Type              |
|-----|--------------------------|
| PXV | Position Extended Vision |

| (1) (1) (1) (1) (1) (1) | Total length of the code bar   |
|-------------------------|--|
| 1 ... 100.000           | The total length of the code bar is determined by the number of individual code bar segments. The code bars can be ordered in 1 m units. |

| M | Unit  |
|---|-------|
| M | Meter |

| AAM | Code bar                            |
|-----|-------------------------------------|
| A   | Code type ECC200, symbol size 16x16 |
| A   | Absolute code                       |
| M   | Metall                              |



| (2) | Mounting Type                   |
|-----|---------------------------------|
| G   | Mounting by self-adhesive back  |
| H   | Mounted by screwing or riveting |

| (3) (3) | Code Bar Width                                  |
|---------|---|
| 30      | Width of the code bar in mm for mounting type G |
| 50      | Width of the code bar in mm for mounting type H |

| (4) (4) (4) | Nominal segment length of the code bars                  |
|-------------|--|
| 100         | Nominal segment length of the individual code bars in mm |
| 200         | Nominal segment length of the individual code bars in mm |
| 500         | Nominal segment length of the individual code bars in mm |

| (5) (5) (5) (5) (5) (5) | Start position                       |
|-------------------------|--------------------------------------|
| 1 ... 99.999            | Start position of the code bars in m |

**Accessories**

|   |                           |   |
|---|---------------------------|---|
|  | <b>PGV-PR-GM-CLOSE100</b> | Countersunk rail for mounting in a floor groove |
|  | <b>PGV-PR-GM-CLOSE200</b> | Countersunk rail for mounting in a floor groove |

Release date: 2022-07-13 Date of issue: 2022-07-13 Filename: 70127564-100028\_eng.pdf

## Accessories

|   |                           |   |
|---|---------------------------|---|
|    | <b>PGV-PR-GM-CLOSE500</b> | Countersunk rail for mounting in a floor groove       |
|    | <b>PGV-PR-GM-CONT100</b>  | Countersunk rail for realization of continuous tracks |
|    | <b>PGV-PR-GM-CONT200</b>  | Countersunk rail for realization of continuous tracks |
|    | <b>PGV-PR-GM-CONT500</b>  | Countersunk rail for realization of continuous tracks |
|    | <b>PGV-PR-GM-END</b>      | Countersunk rail to end continuous tracks             |
|    | <b>PGV-PR-GM-START</b>    | Countersunk rail for starting continuous tracks       |
|    | <b>PGV-PR-SM-CLOSE100</b> | Drive-over rail to mounting on the floor              |
|    | <b>PGV-PR-SM-CLOSE200</b> | Drive-over rail to mounting on the floor              |
|    | <b>PGV-PR-SM-CLOSE500</b> | Drive-over rail to mounting on the floor              |
|  | <b>PGV-PR-SM-CONT100</b>  | Drive-over rail to realize endless tracks             |
|  | <b>PGV-PR-SM-CONT200</b>  | Drive-over rail to realize endless tracks             |
|  | <b>PGV-PR-SM-CONT500</b>  | Drive-over rail to realize endless tracks             |
|  | <b>PGV-PR-SM-END</b>      | Drive-over rail to end continuous tracks              |
|  | <b>PGV-PR-SM-START</b>    | Drive-over rail for starting continuous tracks        |

Release date: 2022-07-13 Date of issue: 2022-07-13 Filename: 70127564-100028\_eng.pdf

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

Pepperl+Fuchs Group  
www.pepperl-fuchs.com

USA: +1 330 486 0001  
fa-info@us.pepperl-fuchs.com

Germany: +49 621 776 1111  
fa-info@de.pepperl-fuchs.com

Singapore: +65 6779 9091  
fa-info@sg.pepperl-fuchs.com

 **PEPPERL+FUCHS**