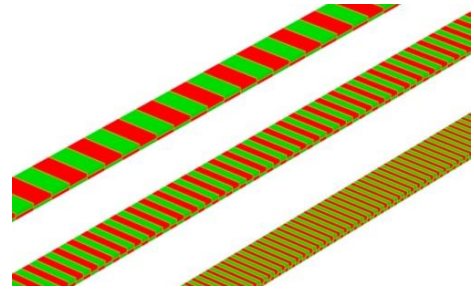


# Datasheet



- Insensitive to oil, humidity, dust and shavings
- Wear free
- Very precise
- Cost-effective solution
- Variable lengths
- Easy mounting  
(easy mounting with already attached double sided adhesive tape)



## Mechanical Data

|                         |                |                                                          |             |
|-------------------------|----------------|----------------------------------------------------------|-------------|
| Dimensions              |                |                                                          |             |
| Width                   | magnetic scale | 10 mm +0,2                                               |             |
| Thickness               | magnetic scale | 1,55 mm ±0,1                                             |             |
|                         | cover tape     | DB01: 0,15 mm / DB20: 0,15 mm / DB50: 0,45 mm            |             |
| Length                  |                | ca. < 48 m                                               |             |
| Material                |                |                                                          |             |
|                         | magnetic scale | plastic with Barium-Strontium Particles; stainless steel |             |
|                         | cover tape     | Stainless steel                                          |             |
|                         | rail           | Aluminium                                                |             |
| Weight                  |                |                                                          |             |
|                         | magnetic scale | 70 g/m                                                   |             |
|                         | cover tape     | 25 g/m                                                   |             |
| Pole Pitch [mm]         |                | 1+1                                                      | 2+2         |
| Accuracy                |                | 3; 5; 8; 10; 18 µm                                       | 30; 15 µm   |
| Cover Tape              |                | DB01 / DB20                                              | DB50 / DB20 |
| Temperature Coefficient |                | 11± µm/K                                                 |             |
| Magnetic Remanence      |                | > 240 mT                                                 |             |
| Reference Point         |                | on specification                                         |             |
| Operating Temperature   |                | -40 °C to +80 °C                                         |             |
| IP-Rating               |                | IP67                                                     |             |
| Accessories             |                |                                                          |             |
| Rail                    |                | PS1, PS5, PS6, SB                                        |             |

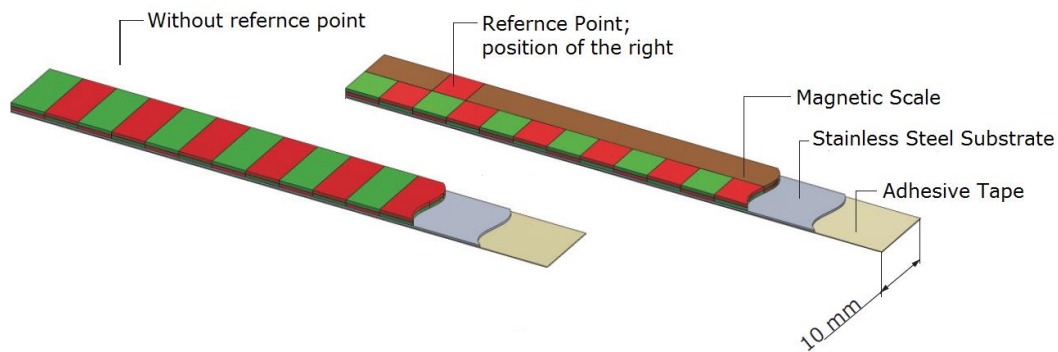
## Sample Applications

| vertical montage with Rail <b>PS1</b> | montage with rail <b>PS6</b><br>and cover tape <b>DB20</b> | montage with rail <b>SB</b> |
|---------------------------------------|------------------------------------------------------------|-----------------------------|
|                                       |                                                            |                             |

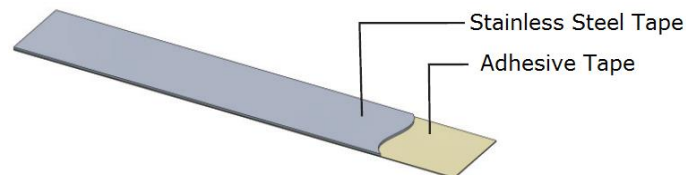
# Datasheet

## Dimensions

### Magnetic Scale

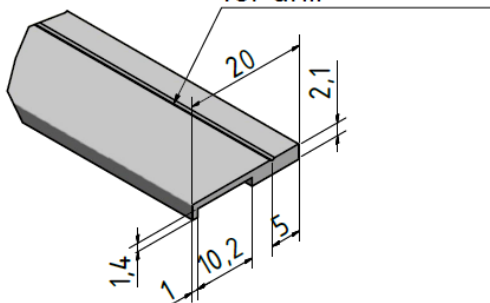


### Cover Tape

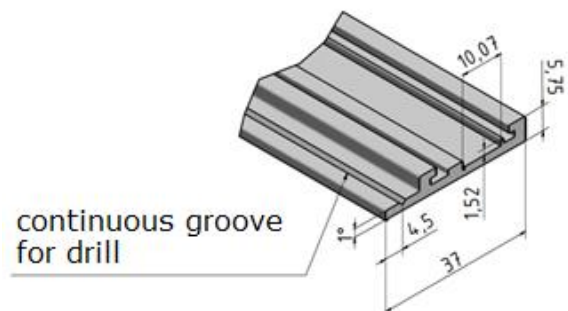


### Rail

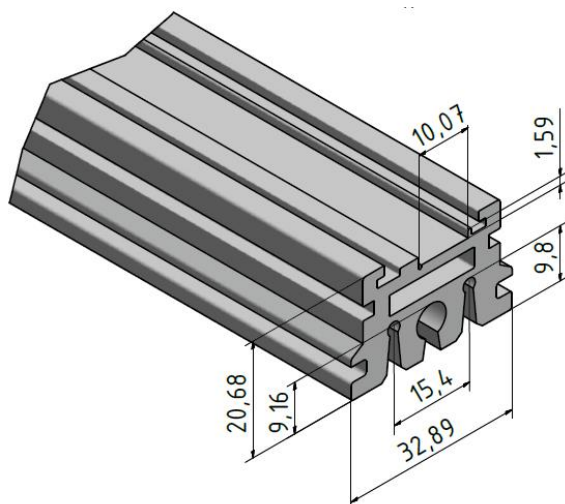
#### PS1 continuous groove for drill



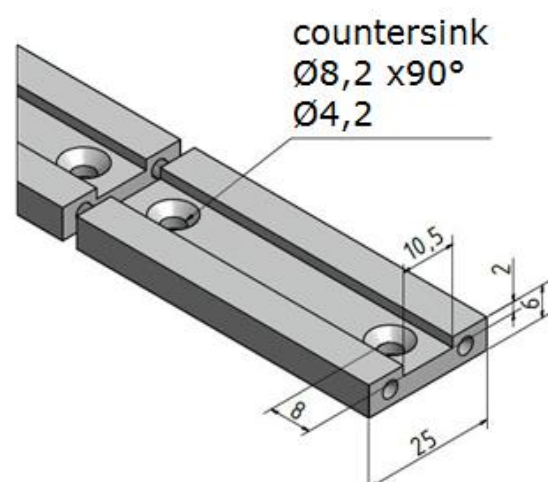
#### PS5



#### PS6



#### SB



# Datasheet

## Ordering Example

### Magnetic Scale

|                                                                                          |                                                  |   |    |   |      |   |   |   |      |
|------------------------------------------------------------------------------------------|--------------------------------------------------|---|----|---|------|---|---|---|------|
| Type                                                                                     | PM1                                              | - | 18 | - | 1000 | - | 0 | - | DB01 |
| Pole Pitch [mm]                                                                          |                                                  |   |    |   |      |   |   |   |      |
| 1; 2; 5                                                                                  |                                                  |   |    |   |      |   |   |   |      |
| Accuracy                                                                                 |                                                  |   |    |   |      |   |   |   |      |
| 3                                                                                        | = 3 µm (max. 1000 mm)                            |   |    |   |      |   |   |   |      |
| 5                                                                                        | = 5 µm                                           |   |    |   |      |   |   |   |      |
| 8                                                                                        | = 8 µm                                           |   |    |   |      |   |   |   |      |
| 10                                                                                       | = 10 µm                                          |   |    |   |      |   |   |   |      |
| 15                                                                                       | = 15 µm                                          |   |    |   |      |   |   |   |      |
| 18                                                                                       | = 18 µm                                          |   |    |   |      |   |   |   |      |
| 30                                                                                       | = 30 µm                                          |   |    |   |      |   |   |   |      |
| 36                                                                                       | = 36 µm                                          |   |    |   |      |   |   |   |      |
| Measuring Length                                                                         |                                                  |   |    |   |      |   |   |   |      |
| The entered amount should be on each side 40 mm longer than the desired measuring length |                                                  |   |    |   |      |   |   |   |      |
| Length in mm for PM1; PM2                                                                |                                                  |   |    |   |      |   |   |   |      |
| Length in m for PM5                                                                      |                                                  |   |    |   |      |   |   |   |      |
| Reference Point [mm]                                                                     |                                                  |   |    |   |      |   |   |   |      |
| 0                                                                                        | = without                                        |   |    |   |      |   |   |   |      |
| S50                                                                                      | = fix; Specifying position of the right          |   |    |   |      |   |   |   |      |
| SA50                                                                                     | = periodically; Specifying position of the right |   |    |   |      |   |   |   |      |
| Cover Tape                                                                               |                                                  |   |    |   |      |   |   |   |      |
| 0                                                                                        | = without                                        |   |    |   |      |   |   |   |      |
| DB01                                                                                     | = for PM1 and PM2                                |   |    |   |      |   |   |   |      |
| DB50                                                                                     | = for PM5                                        |   |    |   |      |   |   |   |      |
| DB20                                                                                     | = with Rail PS5; PS6                             |   |    |   |      |   |   |   |      |

### Rail

|                             |                         |   |            |
|-----------------------------|-------------------------|---|------------|
| <b>Type</b>                 | <b>PS1</b>              | - | <b>1,0</b> |
| <b>PS1</b>                  | = Pole Pitch > 5+5 mm   |   |            |
| PS5                         | = incl. cover tape DB20 |   |            |
| PS6                         | = incl. cover tape DB20 |   |            |
| SB                          | =                       |   |            |
| <b>Measuring Length</b> [m] |                         |   |            |

### Cover Tape (for a later ordering)

|                             |                   |   |            |
|-----------------------------|-------------------|---|------------|
| <b>Type</b>                 | <b>DB01</b>       | - | <b>1,0</b> |
| <b>DB01</b>                 | = for PM1 and PM2 |   |            |
| DB20                        | = for PS5 and PS6 |   |            |
| DB50                        | = for PM5         |   |            |
| <b>Measuring Length</b> [m] |                   |   |            |