Position Marker for Touchless Rotary Sensors

**Z-RFC-P01**
Position marker for frontal fixation with 2 cylinder head screws M4x20 (with microencapsulation) or with locking pin (both included in delivery).
*Not recommended for new designs.*
- max. permitted radial offset ±1.5 mm
- packaging unit:
  - 1 pc. P/N 400005660
  - 25 pcs. P/N 400056079

**Z-RFC-P02**
Position marker for frontal fixation with 2 cylinder head screws M4x20 (with microencapsulation) or with locking pin (both included in delivery).
- max. permitted radial offset ±3 mm
- packaging unit:
  - 1 pc. P/N 400105037
  - 25 pcs. P/N 400105038

**Z-RFC-P07**
Position marker for fixation with threaded pin M5 (included in delivery).
*Not recommended for new designs.*
- max. permitted radial offset ±1.5 mm
- packaging unit:
  - 1 pc. P/N 400056069
  - 25 pcs. P/N 400056083
Z-RFC-P23
Position marker for fixation with threaded pin M4 (included in delivery).
• max. permitted radial offset ±3 mm
• packaging unit:
  1 pc. P/N 400056074
  25 pcs. P/N 400056084

Z-RFC-P08
Position marker for fixation with threaded pin M5 (included in delivery).
• max. permitted radial offset ±3 mm
• packaging unit:
  1 pc. P/N 400105039
  25 pcs. P/N 400105040

Z-RFC-P43
Position marker for fixation with threaded pin M5 (included in delivery).
• max. permitted radial offset ±3 mm
• packaging unit:
  1 pc. P/N 400105041
  25 pcs. P/N 400105042

Z-RFC-P47
Position marker for fixation with threaded pin M5 (included in delivery).
• max. permitted radial offset ±3 mm
• packaging unit:
  1 pc. P/N 400056070
  25 pcs. P/N 400056084

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recommended shaft Ø

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**Z-RFC-P18**
Screw position marker
M10 x 25 mm, similar DIN 933, aluminum anodized, magnet potted
- max. permitted radial offset ±3 mm
- packaging unit:
  - 1 pc. P/N 400104758
  - 25 pcs. P/N 400104759

**Z-RFC-P19**
Screw position marker
M8 x 25 mm, similar DIN 933 / ISO 4017, aluminum anodized, magnet potted
- max. permitted radial offset ±1.5 mm
- packaging unit:
  - 1 pc. P/N 400104754
  - 25 pcs. P/N 400104755

**Z-RFC-P20**
Screw position marker
M10 x 25 mm, similar DIN 933, aluminum, anodized,
- max. permitted radial offset ±3 mm
- packaging unit:
  - 1 pc. P/N 400104756
  - 25 pcs. P/N 400104757

**Z-RFC-P30**
Position marker for frontal fixation with 2 fillet screws M3x8 (included in delivery)
- max. permitted radial offset ±1.5 mm
- packaging unit:
  - 1 pc. P/N 400056086
  - 25 pcs. P/N 400056087
**Z-RFC-P03**
Magnet for direct application onto customer’s shaft
- max. permitted radial offset ±1,5 mm
- packaging unit:
  - 1 pc. P/N 400005658
  - 50 pcs. P/N 400056081

**Z-RFC-P04**
Magnet for direct application onto customer’s shaft
- max. permitted radial offset ±3 mm
- packaging unit:
  - 1 pc. P/N 400005659
  - 50 pcs. P/N 400056082

**Mounting instructions Z-RFC-P03 / Z-RFC-P04**
- In general, we recommend mounting on not magnetizable materials, otherwise the stated working distances can change
- If the shaft is magnetizable please keep sufficient distance
- When the magnet is mounted in the shaft, the shaft may not be magnetizable
- If the magnet is axially fixed on a magnetizable shaft the working distances reduces by approximately 20 %

**Shaft adapter for Z-RFC-P01 / P02 / P41**
Fixation at position marker with locking pin
- Z-RFC-S01: Ø 6 mm, P/N 400056206
- Z-RFC-S02: Ø 8 mm, P/N 400056207
- Z-RFC-S03: Ø 10 mm, P/N 400056208
### Working distances (mm)

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<tbody>
<tr>
<td>RFC-4801/4802</td>
<td>analog single / redundant</td>
<td>0.3 ... 1.8</td>
<td>1.9... 4.5</td>
<td>0.3 ... 1.8</td>
<td>1.9... 4.5</td>
<td>0 ... 1.7</td>
<td>1.9... 4.5</td>
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### Addition linearity error (*) at radial displacement

<table>
<thead>
<tr>
<th>Series</th>
<th>Interface</th>
<th>Z-RFC-P02 / P04 / P08 / P20 / P23</th>
<th>Z-RFC-P41 / P43 / P47</th>
<th>Z-RFC-P01 / P03 / P07 / P30</th>
<th>Z-RFC-P18</th>
<th>Z-RFC-P19</th>
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<td>2.2</td>
<td>0.4</td>
<td>0.7</td>
</tr>
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(*) except RFX

Lateral magnet offset (will cause additional linearity error)

The angle error, which is caused by radial displacement of sensor and position marker depends on the used position marker or magnet.