## Probe Pendulum for Eddy-Current Sensors

The Probe Pendulum for eddy-current Sensors is designed for critical turbomachinery applications such as steam, gas and hydro turbines, compressors, pumps and fans to measure axial shaft dynamic displacement. It allows measurements with huge measuring ranges in unfavorable environmental conditions and at measuring collars where it is not possible to realize direct measurements with eddy-current sensors, due to the mechanical conditions.

### Material

| Probe Pendulum | Stainless steel (1.4305) |

### Environmental

| Operation Temperature Range | See sensor spec sheet |

### Physical

<table>
<thead>
<tr>
<th><strong>Pendulum Type</strong></th>
<th><strong>Type 15</strong></th>
<th><strong>Type 30</strong></th>
<th><strong>Type 60</strong></th>
<th><strong>Type 70</strong></th>
<th><strong>Type 85</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Measuring Range</strong></td>
<td>15mm (0.591in)</td>
<td>30mm (1.181in)</td>
<td>60mm (2.362in)</td>
<td>70mm (2.756in)</td>
<td>85mm (3.364in)</td>
</tr>
<tr>
<td><strong>Sensor Type</strong></td>
<td>PR6423</td>
<td>PR6424 PR6425</td>
<td>PR6424 PR6425</td>
<td>PR6424 PR6425</td>
<td>PR6424 PR6425</td>
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<tr>
<td><strong>Pendulum Head Gap at max. displacement</strong></td>
<td>≥10mm (0.40in)</td>
<td>≥15mm (0.60in)</td>
<td>≥25mm (1.00in)</td>
<td>≥25mm (1.00in)</td>
<td>≥25mm (1.00in)</td>
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<tr>
<td><strong>Distance Range Pendulum Head to Mounting Screws</strong></td>
<td>75 to 210mm (2.95 to 8.27in)</td>
<td>75 to 210mm (2.95 to 8.27in)</td>
<td>140 to 160mm (5.51 to 6.30in)</td>
<td>330 to 350mm</td>
<td>650 to 670mm</td>
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<tr>
<td><strong>Weight</strong></td>
<td>≈ 4kg (8.82lb)</td>
<td>≈ 4kg (8.82lb)</td>
<td>≈ 12kg (26.46lb)</td>
<td>≈ 12kg (26.46lb)</td>
<td>≈ 12kg (26.46lb)</td>
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<tr>
<td><strong>Shaft Collar</strong></td>
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<td>200 to 800mm (7.87 to 31.50in)</td>
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<tr>
<td><strong>Spacer for installation</strong></td>
<td>2 pcs 90mm (3.54in)</td>
<td>2 pcs 90mm (3.54in)</td>
<td>2 pcs 90 / 120mm (3.54 / 4.72in)</td>
<td>2 pcs 90 / 120mm (3.54 / 4.72in)</td>
<td>2 pcs 90 / 120mm (3.54 / 4.72in)</td>
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<tr>
<td><strong>Mounting Screws</strong></td>
<td>2 pcs M12 120mm (4.72in)</td>
<td>2 pcs M12 120mm (4.72in)</td>
<td>4 pcs M12 150mm (5.91in)</td>
<td>4 pcs M12 150mm (5.91in)</td>
<td>4 pcs M12 150mm (5.91in)</td>
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<tr>
<td><strong>Max. mounting distance between pendulum and attachment point</strong></td>
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<td>50mm (1.97in)</td>
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<td><strong>Min. mounting thread (screw)</strong></td>
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<td>15mm (0.59in)</td>
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<td><strong>Min. length of bolt spacer</strong></td>
<td>44mm (1.73in)</td>
<td>44mm (1.73in)</td>
<td>39 / 69mm (1.54 / 2.72in)</td>
<td>44 / 74mm (1.73 / 2.91in)</td>
<td>52 / 82mm (2.05 / 3.23in)</td>
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PR6470 Ordering Information

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<tr>
<th>Part Number</th>
<th>Pendulum Type</th>
<th>Collar Size</th>
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<td>PR6470/222-110</td>
<td>Type 15</td>
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<td>PR6470/222-310</td>
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<td>PR6470/223-120</td>
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<td>PR6470/223-210</td>
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<td>PR6470/647-110</td>
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<td>PR6470/648-110</td>
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<td>Standard</td>
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Figure 1 – PR6470 Type 15
Figure 2 – PR6470 Type 30

1. Covering cap
2. Housing
3. Mounting base plate
4. Mounting oblong holes
5. Shipping lock
6. Pendulum head
7. Pendulum magnet
8. Scale
Figure 3 – PR6470 Type 60

1. Covering cap
2. Housing
3. Mounting base plate
4. Mounting oblong holes
5. Shipping lock
6. Pendulum head
7. Pendulum magnet
8. Scale
9. Justage gadget
10. Justage screw
Figure 4 – PR6470 Type 70

1. Covering cap
2. Housing
3. Mounting base plate
4. Mounting oblong holes
5. Shipping lock
6. Pendulum head
7. Pendulum magnet
8. Scale
9. Justage gadget
10. Justage screw
Figure 5 – PR6470 Type 85

1. Covering cap
2. Housing
3. Mounting base plate
4. Mounting oblong holes
5. Shipping lock
6. Pendulum head
7. Pendulum magnet
8. Scale
9. Justage gadget
10. Justage screw
### Sensor Ordering Information

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<tr>
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<td><strong>Total Cable Length</strong></td>
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