

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

## PR6470 Ordering Information

Part Number	Pendulum Type	Collar Size
PR6470/222-110	Type 15	Standard
PR6470/222-310	Type 15	10mm
PR6470/223-120	Type 30	Standard
PR6470/223-210	Type 30	6mm
PR6470/223-310	Type 30	10mm
PR6470/646-120	Type 60	Standard
PR6470/647-110	Type 70	Standard
PR6470/648-110	Type 85	Standard

Figure 1 – PR6470 Type 15

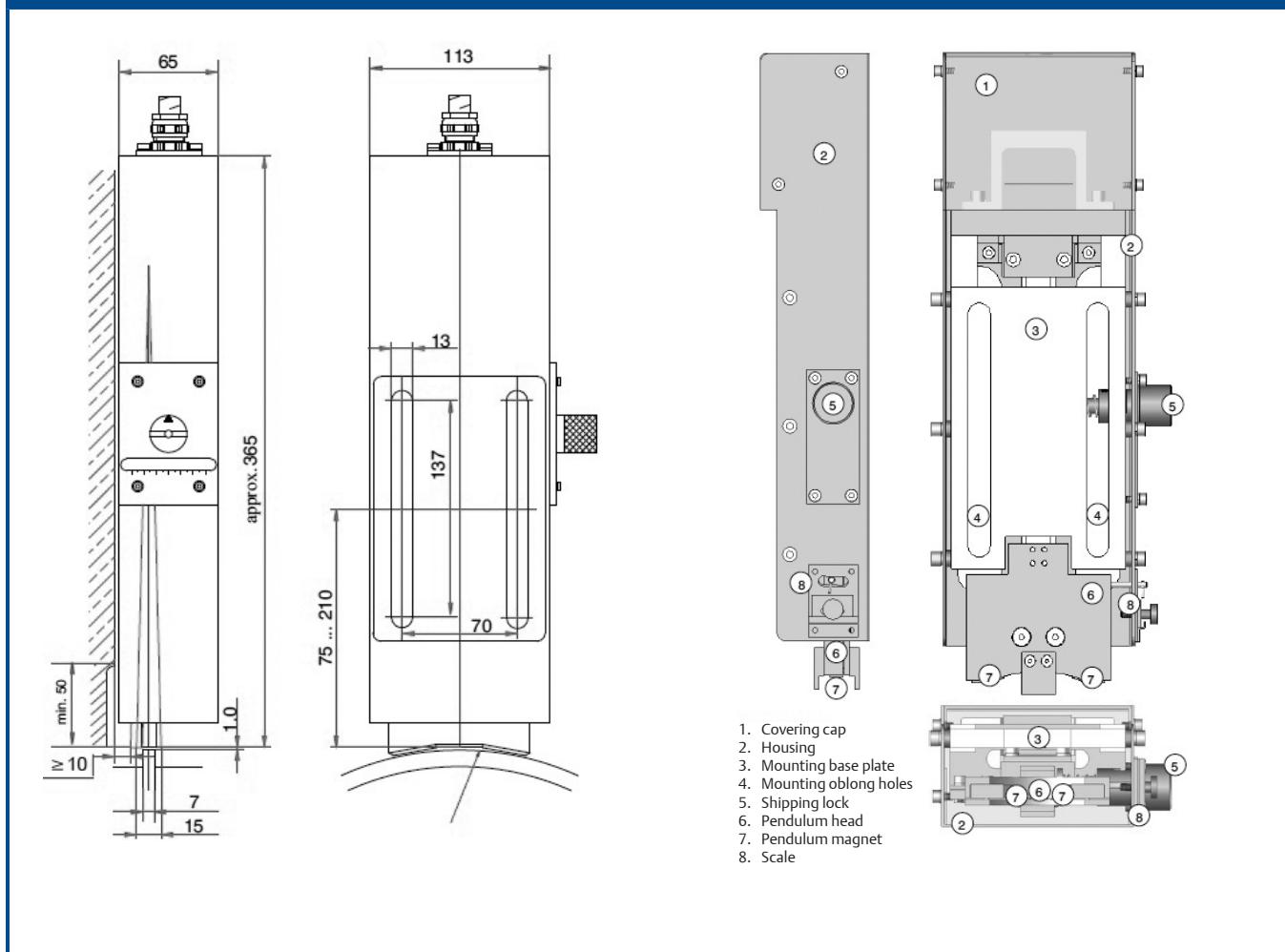


Figure 2 – PR6470 Type 30

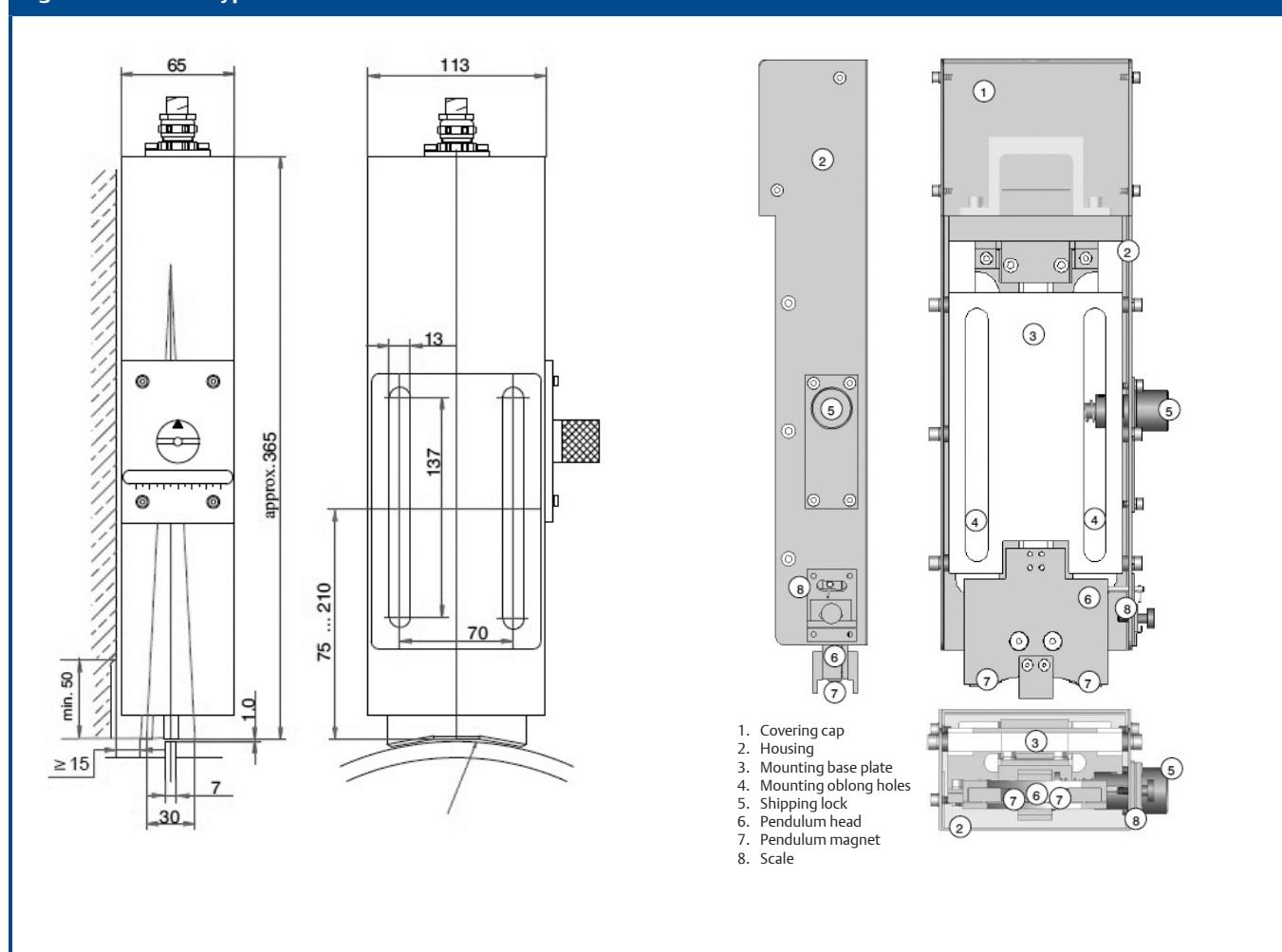


Figure 3 – PR6470 Type 60

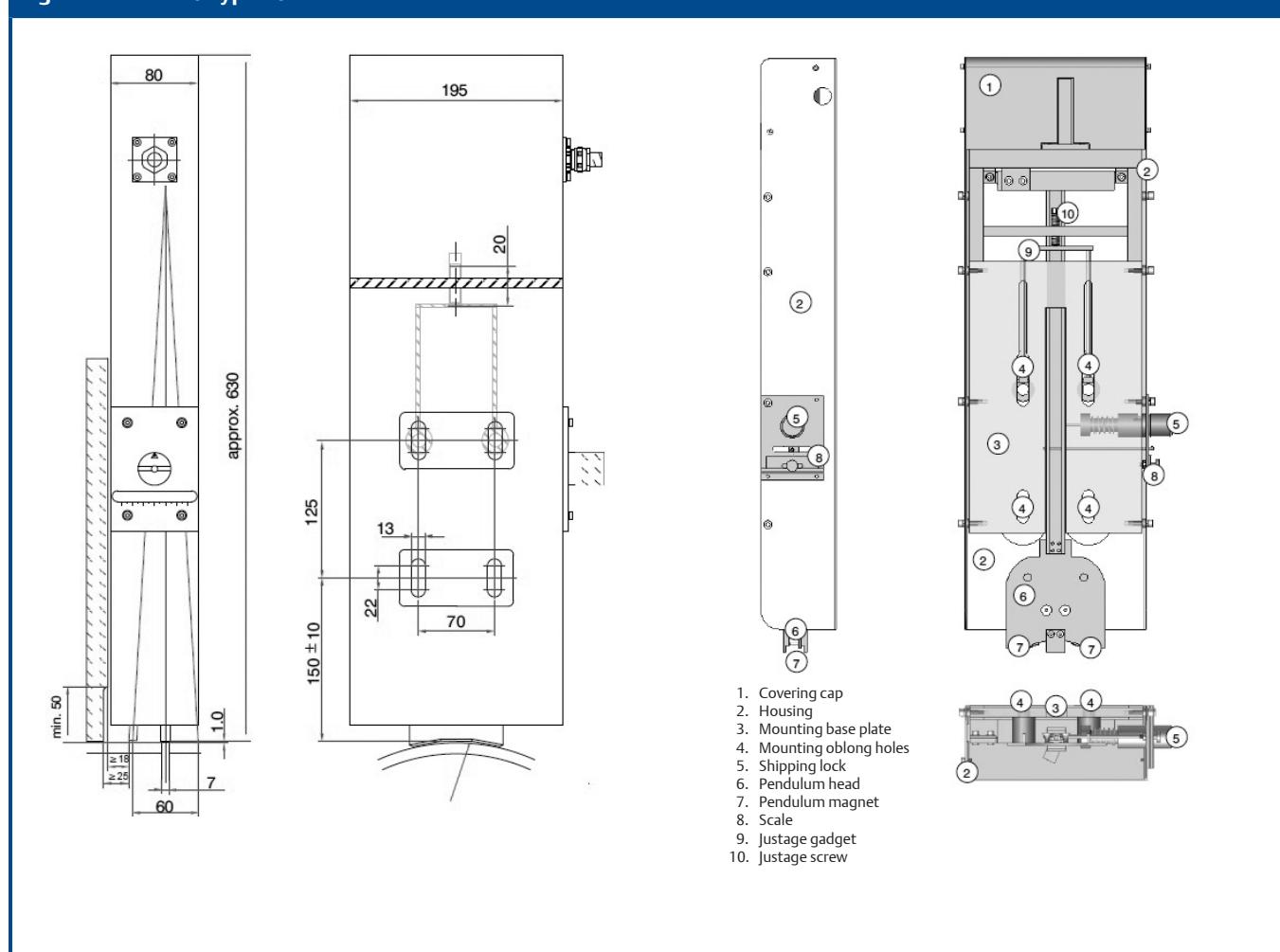


Figure 4 – PR6470 Type 70

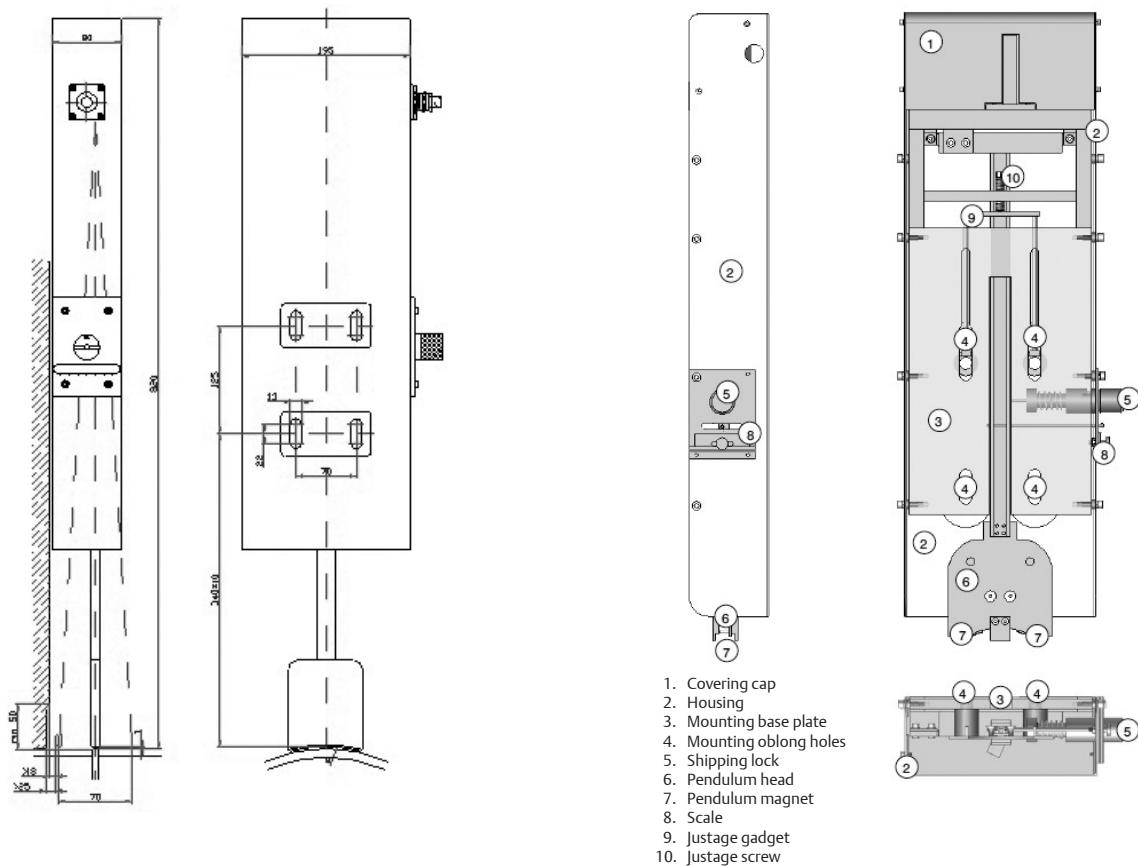
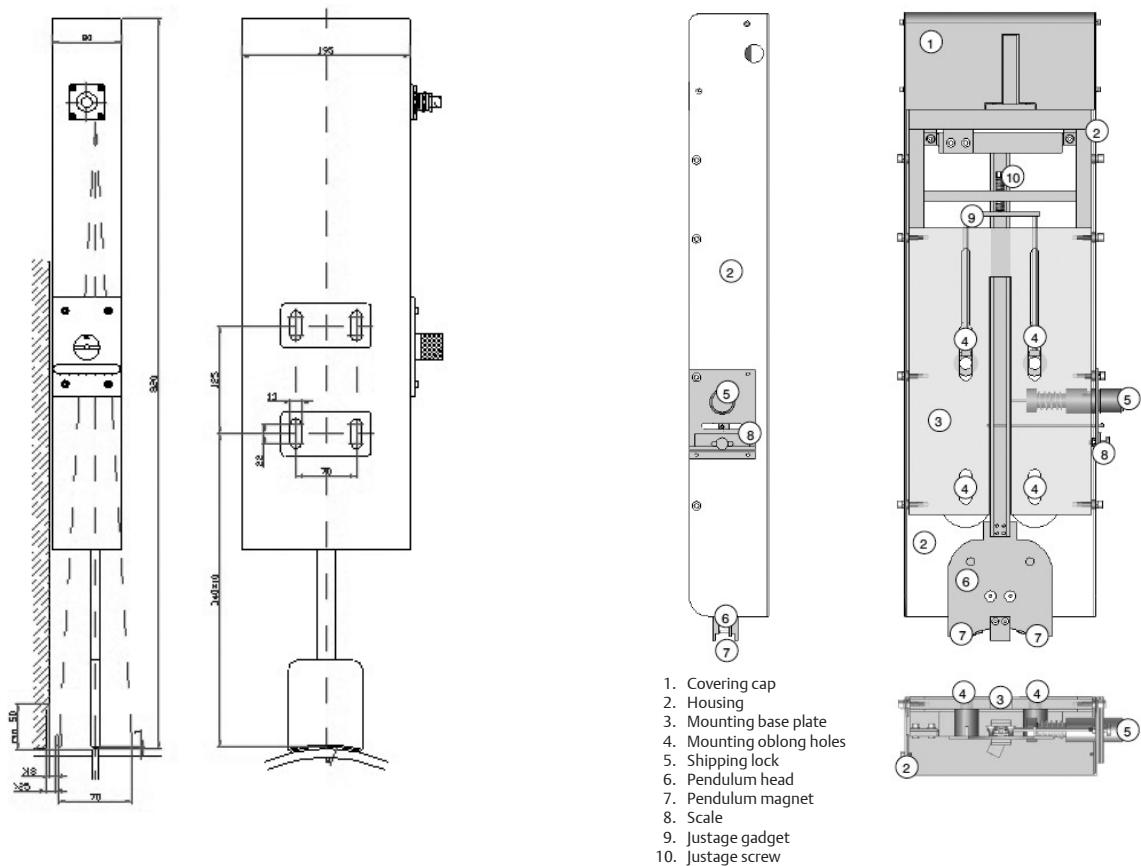


Figure 5 – PR6470 Type 85



Sensor Ordering Information		PR6423/	X	X	X	-	X	X	X
Sleeve Thread	M10x1	0							
Armored Cable	WITH WITHOUT	1 0							
Total Sensor Length C=Cx +9mm	0(Cx=25mm)			0					
Cable Termination	WITH WITHOUT					0 1			
Total Cable Length	0(4m), 1(5m), 2(6m), 3(8m), F(9m), 4(10m)						X		
Cable End	LEMO OPEN								0 1

Sensor Ordering Information		PR6424/	X	X	X	-	X	X	X
Sleeve Thread	M18x1.5	0							
Armored Cable	WITH WITHOUT		1 0						
Total Sensor Length C=Cx +12.5mm	0(Cx=40mm)			0					
Cable Termination	WITH WITHOUT					0 1			
Total Cable Length	0(4m), 1(5m), 2(6m), 3(8m), 4(10m)						X		
Cable End	LEMO OPEN								0 1

Sensor Ordering Information		PR6425/	X	X	X	-	X	X	X
Sleeve Thread	M18x1.5	0							
Armored Cable	WITH		1						
Total Sensor Length	0(69mm)			0					
Cable Termination	WITHOUT					1			
Total Cable Length	0(4m), 1(5m), 2(6m), 3(8m), 4(10m)						X		
Cable End	LEMO OPEN								0 1

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