

SENSOR DIMENSIONS

FIBER-OPTIC SENSORS

1 SENSOR DIMENSIONS

All dimensions stated for the following sensors are valid for all available versions of the respective oxygen sensors: full range and trace range versions, high speed and ultra-high speed versions (options **-HS** & **-UHS**), as well as optically isolated sensors (option **-OI**).

1.1 Dimensions of robust (screw cap) probes

Sensor Dimensions	OXROB3/10	OXROBSC / TPROBSC / PHROBSC-PKx	OXROBGSC-CLx
Sensor Dimensions			
Length without cable (ca.)	30 / 100 mm	100 mm	100 mm
Shaft diameter (ca.)	3 mm	3 -4 mm (tapered)	3 -4 mm (tapered)
Tip Diameter (ca.)	3 mm	3.4 mm	3.4 mm
Cable length (ca.)	2 or 4 m	2 m	5, 10 or 20 m

Tip Geometries of screw cap probes (OXROB(G)SC, PHROBSC, TPROBSC)

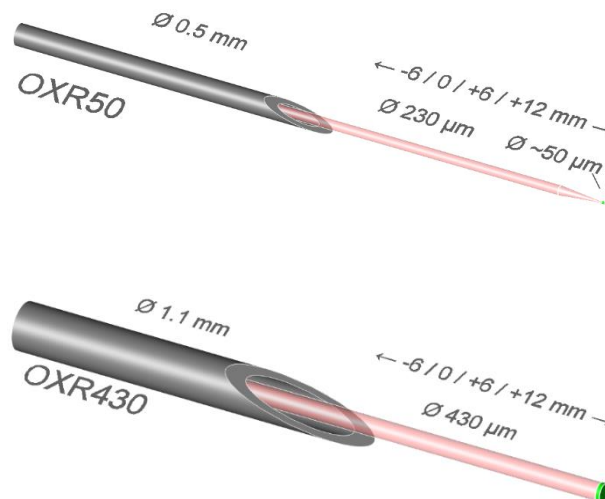


1.2 Dimensions of Retractable Needle-type Sensors (OXR50 & OXR430; TPR430)

Sensor Dimensions	OXR50	OXR430 / TPR430
Sensor Dimensions Length without cable (ca.) Shaft diameter (ca.)	230 mm 8 mm	230 mm 8 mm
Needle Dimensions Length Diameter	40 mm 0.5 mm	40 mm 1.1 mm mm
Fiber and Sensor Tip Fiber diameter Tip diameter (ca.) Sensor tip position (rel. to needle, ca.)	230 μ m 50-70 μ m -6/0/+6/+12 mm	430 μ m 430 μ m -6/0/+6/+12 mm
Cable length (ca.)	2 m or 4 m (custom versions up to 20 m)	

Tip Geometries

True to scale drawings with syringe needle (grey), optical fiber (pink) and oxygen-sensitive REDFLASH indicator (green).

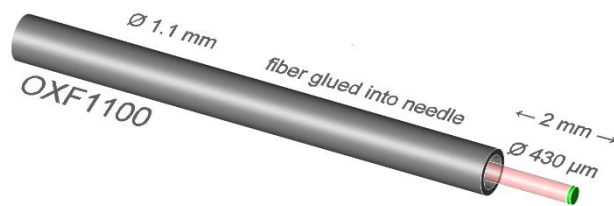


1.3 Dimensions of Fixed Needle-type Sensors (OXF50, OXF1100; TPF1100)

Sensor Dimensions	OXF50	OXF1100 / TPF1100
Sensor Dimensions Length without cable (ca.) Shaft diameter (ca.)	190 mm 8 mm	190 mm 8 mm
Needle Dimensions Length Diameter	40 mm 0.5 mm	40 mm 1.2 mm
Fiber and Sensor Tip Fiber diameter Tip diameter (ca.) Sensor tip position (rel. to needle, ca.)	230 μm 50-70 μm ca. 6 mm	430 μm 430 μm ca. 2-3 mm
Cable length (ca.)	2 m or 4 m (custom versions up to 20 m)	

Tip Geometries (exemplary)

True to scale drawings with syringe needle (grey), optical fiber (pink) and oxygen-sensitive REDFLASH indicator (green).

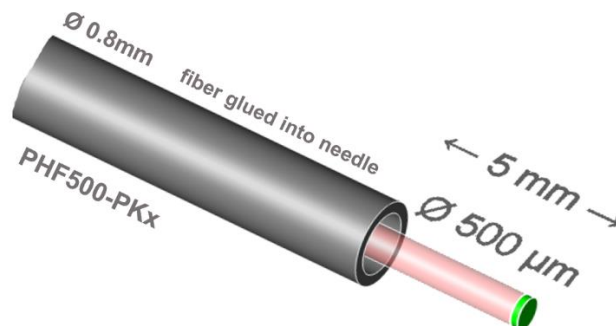


1.4 Dimensions of Fixed Fiber pH Minisensor (PHF500-PKx)

Sensor Dimensions	PHF500-PKx
Sensor Dimensions Length without cable (ca.)	100 mm
Needle Dimensions Length Diameter	50 mm 0.8 mm
Fiber and Sensor Tip Fiber diameter Tip diameter (ca.) Sensor tip position (rel. to needle, ca.)	500 μ m 500 μ m ca. 5 mm
Cable length (ca.)	2 m

Tip Geometries

Drawing with syringe needle (grey), optical fiber (pink) and pH-sensitive REDFLASH indicator (green).

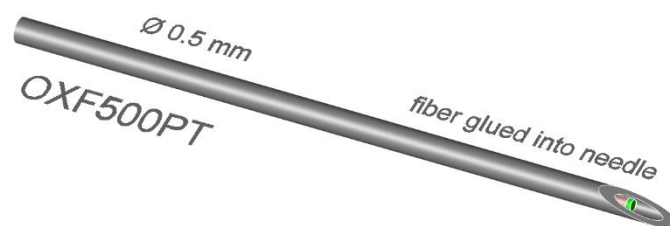


1.5 Dimensions of Fixed Needle-type Sensors with protected tip (OXF500PT & OXF900PT)

Sensor Dimensions	OXF500PT	OXF900PT
Sensor Dimensions Length without cable (ca.) Shaft diameter (ca.)	190 mm 8 mm	190 mm 8 mm
Needle Dimensions Length Diameter	40 mm 0.5 mm	40 mm 0.9 mm
Fiber and Sensor Tip Fiber diameter Tip diameter (ca.) Sensor tip position (rel. to needle)	230 μ m 230 μ m 0 mm	230 μ m 230 μ m 0 mm
Cable length (ca.)	2 m or 4 m (custom versions up to 20 m)	

Tip Geometries (exemplary)

True to scale drawings with syringe needle (grey), optical fiber (pink) and oxygen-sensitive REDFLASH indicator (green).

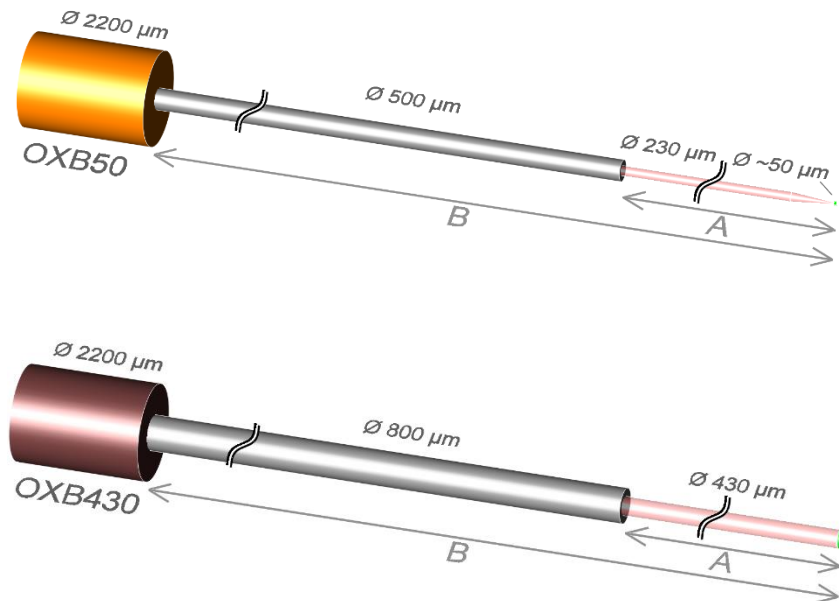


1.6 Dimensions of Bare Fiber Sensors (OXB50, OXB430; TPB430)

Sensor Dimensions	OXB50	OXB430 / TPB430
Fiber and Sensor Tip		
Fiber diameter	230 μm	430 μm
Tip diameter (ca.)	50-70 μm	430 μm
Tip geometry	see image below	
Stripping length	A = 20mm, B = 100mm (other stripping lengths optional on request: A= 5-30 mm, B= 20-500 mm (B +/-5 mm))	
Cable length (ca.)	2 m or 4 m (custom versions up to 20 m)	

Tip Geometries

True to scale drawings with outer jacket (orange), plastic coating (grey), optical fiber (pink) and oxygen-sensitive REDFLASH indicator (green).

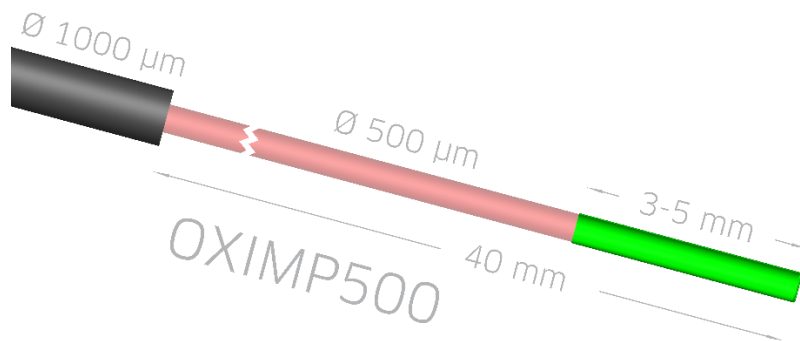


1.7 Dimensions of Insertable Oxygen Mini Probe (OXIMP250, OXIMP500, OXIMP1000)

Sensor Dimensions	OXIMP250	OXIMP500	OXIMP1000
Fiber and Sensor Tip			
Fiber diameter	0.25 mm	0.5 mm	1 mm
Cable diameter	1 mm	1 mm	2.2 mm
Stripping Length (Bare fiber tip)	40 mm	40 mm	60 mm
Length of Sensor Coating	3-5 mm	3-5 mm	3-5 mm
Cable length (ca.)	1 m (custom version up to 2 m)		2m (custom version up to 4 m)

Tip Geometries

True to scale drawings with outer jacket (black), optical fiber (pink) and oxygen-sensitive REDFLASH indicator (green).



1.8 Dimensions of Solvent-Resistant Probes (OXSOVLV & OXSOLV-PTS)

Sensor Dimensions	OXSOVLV	OXSOLV-PTS
Sensor Dimensions Length without cable (ca.) Shaft diameter (ca.)	300 mm 8 mm	190 mm 8 mm
Needle Dimensions Length Diameter	150 mm 1.5 mm	40 mm 1.5 mm
Fiber and Sensor Tip Fiber diameter Sensor tip position (rel. to needle, ca.)	3 mm 2 mm	3 mm 0 mm
Cable length (ca.)	2 m or 4 m (custom versions up to 20 m)	

Contact

PyroScience GmbH
Kackertstr. 11
52072 Aachen
Deutschland

Tel.: +49 (0)241 5183 2210
Fax: +49 (0)241 5183 2299
info@pyroscience.com
www.pyroscience.com