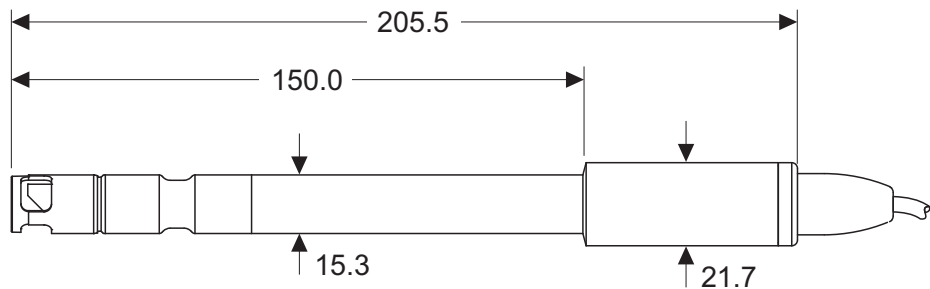


5 Technical data

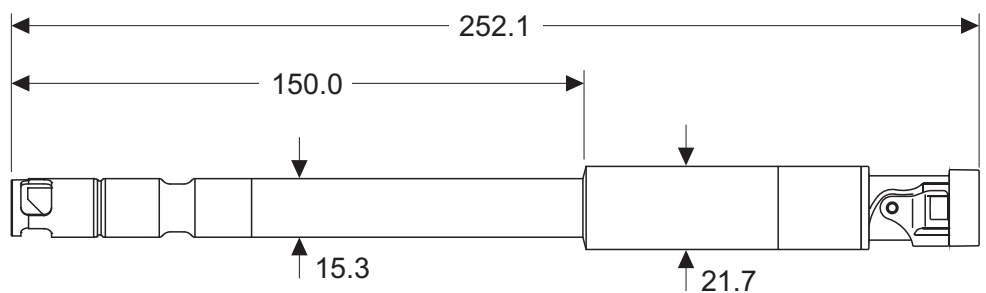
General features	Measuring principle	Optical measurement based on photoluminescence.
	Temperature sensor	Integrated NTC 30 (30 k Ω at 25 °C / 77 °F)

Dimensions (in mm)

FDO 4410



FDO 4410W



Weights	FDO 4410	180 g (with 3 m cable)
	FDO 4410W	107 g
	FDO Check	58 g
Materials	Shaft	POM
	Connection head	POM
	Sensor cap	PVC, silicone and PMMA
	Sensor head	POM, PV and PMMA
	Sensor head - sensor cap contacts	Brass, gold-plated
	Thermistor housing	VA steel 1.4571
	Protective hood	VA steel 1.4571
	Seals	FPM (Viton)

Connection cable (FDO 4410)	Lengths	FDO 4410: 1,5 / 3 m FDO 4410W: 1,5 / 3 m
	Diameter	4.3 mm
	Smallest allowed bend radius	Fixed installation: 20 mm Flexible use: 60 mm
	Plug type	Socket, 4 pins

IDS plug (FDO 4410W)	Connection type	4-pole, watertight plug connection with lock, reverse polarity protected
	Materials	<ul style="list-style-type: none"> ● Synthetic materials: Glass fiber reinforced Noryl, TPU, TPC-ET, POM, PEEK, PBT ● O-ring: FPM ● Contacts gold-plated

Pressure resistance	Sensor with connection cable	IP 68 (1 x 10 ⁶ Pa or 10 bar)
	Cable plug (FDO 4410)	IP 67 (when plugged in)

The FDO 4410(W) meets the requirements according to article 3(3) of the 97/23/EC directive ("Pressure equipment directive").

Measurement conditions	Measuring ranges at 20 °C (68 °F)	0 ... 20 mg/l D.O. 0 ... 200 % D.O. saturation 0 ... 400 mbar D.O. partial pressure
	Temperature range	0 ... 50 °C (32 ... 122 °F)
	Max. admissible overpressure	1 x 10 ⁶ Pa (10 bar)
	Immersion depth	min. 6 cm max. 100 m (depending on the cable length)
	Operating position	any
	Approach flow	not required

Storage conditions	Recommended storing method	in the check and storage vessel, FDO Check
	Storage temperature	0 ... 50 °C (32 ... 122 °F)

Characteristic data on delivery	Accuracy of D.O. measurement at 20 °C (68 °F) in air-saturated water	± 1.5 %
	Zero signal	$\leq 0.02 \text{ mg/l O}_2$ $\leq 0.2 \% \text{ O}_2 \text{ saturation}$ $\leq 0.4 \text{ mbar O}_2 \text{ partial pressure}$
	Response time at 20 °C (68 °F) in stirred solution	t_{90} (90 % of the final value display after) < 30 s t_{95} (95 % of the final value display after) < 45 s t_{99} (99 % of the final value display after) < 60 s
	Response time of temperature measurement	t_{99} (99 % of the final value display after) < 60 s
	Precision of temperature measurement	± 0.2 K
	Working life of the sensor cap	Min. 1 year with authorized use