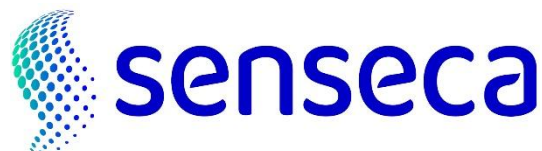


DX 53x



Optical dissolved oxygen sensors with DX Interface



- Innovative optical principle: luminescence quenching
- Nearly maintenance free
- Long life construction
- Precise without minimum flow necessary
- Fully digital DX interface
- Maximum comfort and reliability
- No chemicals

DESCRIPTION

The DX 53x sensor family includes 3 variations of state-of-the-art dissolved oxygen sensors. The optical measuring principle eliminates the need of chemical substances and frequent maintenance as well as the necessity of minimum flow at measuring membrane.

With the fully digital DX interface it can be paired to any meter of the wide range of the SENSECA PRO-line, in combination with the PRO D01/ D05 up to 3 sensors can be connected and evaluated in parallel.

DX 530: Digital optical dissolved oxygen sensor, economic field style

The best choice for field measuring in sweet water aquafarming, river monitoring, well water analysis and wastewater monitoring- combined with e.g. PRO D01 a very competitive and reliable measuring tool.

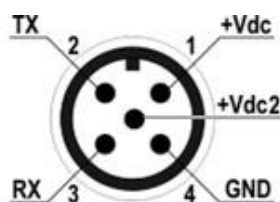
DX 532: Digital optical dissolved oxygen sensor, robust with depth measuring

The extra robust field specialist for harsh environments like wastewater and sea water aquafarming. Due to integrated hydrostatic depth measurement channel and consequent water protection oxygen saturation profiles can be recorded very comfortably, and thermoclines can easily be located down to nearly 30 m: oxygen rich Epilimnion/ oxygen lacking Hypolimnion.

DX 535: Digital optical dissolved oxygen sensor, compact lab style 12 mm

Near-surface waters, wastewater up to 1 m water depth, also ideally suited for laboratories due to small diameter Ø 12 mm, e.g. BSB determination: due to the fact, that used measurement principle is non-consuming, this ensures maximum achievable precision.

Equipped with 5-pin M12 connector:



TECHNICAL SPECIFICATIONS

General characteristics			
	DX 530 economic field probe	DX 532 heavy duty field probe up to 30 m depth	DX 535 Compact lab style probe Ø12 mm
Output	DX interface		
Connection	Jack socket for detachable cable / M12 DX sensor connection	Fixed cable ending with M12 connector	Fixed cable ending with M12 connector
Dimensions	256 mm, incl. connector and bending protection, Ø32 mm	Membrane head Ø22 mm ¾" NPT, max Ø29 mm length 225 mm incl. bending protection	Shaft: Ø12 mm x 120 mm, length 197 mm incl. bending protection
Weight	~330 g incl. 3 m cable ~405 g incl. 5 m cable	~350 g incl. 5 m cable ~1330 g incl. 29.5 m cable	~140 g incl. 2 m cable
Material	PVC housing, SS1316 membrane cap	PPS housing	Black ABS housing, SS1316 membrane cap
Cable	Standard incl. connection cable PUR 3 or 5 m	PUR cable 5 m or 29.5 m (others on request)	PUR cable 2 m

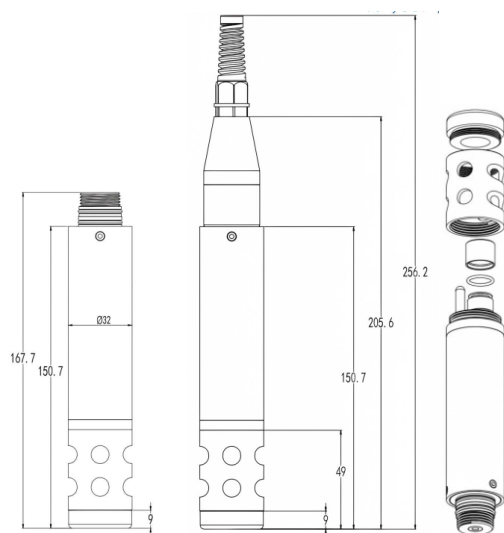
Measurement specifications

Measuring ranges				
	Oxygen saturation	0.0 ... 200.0 % O ₂ sat	0.0 ... 500.0 % O ₂ sat	
	Oxygen concentration	0.00 ... 20.00 mg/l (ppm)	0.00 ... 50.00 mg/l (ppm)	
	Temperature	0.0 ... 45.0 °C	0.0 ... +50.0 °C	0.0 ... 50.0 °C
	Pressure	-	400 ... 5000 hPa, hydrostatic depth measuring	500 ... 1150 hPa
Resolution		10 ppb, 0.01 mg/l 0.1 % O ₂ sat	10 ppb, 0.01 mg/l 0.1 % O ₂ sat	
		-	Depth: 0.01 m	-
Compensation				
	Temperature	Fully automatic		
	Salinity	Autom. with user-input (2 ... 42 ppt)	automatic with user-input (0 ... 55 ppt)	
	Atmospheric pressure		Automatic until 20 cm immersion, below: value of 1 point adjustment/calibration	
Accuracy				
	Oxygen	0 ... 100%: < ± 0.3mg/l 100 ... 200%: < ± 3%	0 ... 100%: < ± 1% 100 ... 200%: < ± 2 %	
	Temperature	± 0.2 °C	± 0.2 °C	
	Pressure	-	± 0.2 kPa Depth: ± 0.25 m	
	Max immersion depth	10 m (max 3h per day, dry afterwards recommended)	40 m	1 m

Response Time T90, rising values *)	T90: 30 s	T90: 30 s	T90: 35 s
Adjustment	1-point (100%) in air-saturated water or water-saturated air 2-point: (Zero and 100%)	1-point (100%) in air-saturated water or water-saturated air (storage bottle) 2-point: (Zero and 100%)	
Sensor cap life:	min 1.5 years with optimum treatment, user replaceable	up to 2 years with optimum treatment, user replaceable	
Membrane protection	Included	included	optionally GSKA 3600/3610
Recommended interval adjustment/calibration	6 months (depending on precision requirement and treatment)		

*) falling values, especially to very low values, may take significantly longer

Operating conditions	0 ... 45 °C	-5 ... +50 °C	0 ... 50 °C / 0...85 %RH non-condensing
Atmospheric Pressure		400 ... 1150 hPa	500 ... 1150 hPa
Max abs. pressure	2000 hPa	10.000 hPa	1250 hPa
Storage temperature	-10 ... +50 °C	-20 ... +70 °C	0 ... 50 °C
Protection degree	IP68	IP68	IP 67
Power consumption	~30 mA	~60 mA	~60 mA



Drawing DX530

ORDERING CODES

DX-530-L03	Digital optical dissolved oxygen sensor, economic field style, detachable cable 3 m. Device in carton box, incl. Quickstart	Art no. 488878
DX-530-L05	Digital optical dissolved oxygen sensor, economic field style, detachable cable 5 m. Device in carton box, incl. Quickstart	Art no. 488968
DX-532-L05	Digital optical dissolved oxygen sensor, robust with depth measuring fixed 5 m cable. Device in carton box, incl. Quickstart	Art no. 488756
DX-532-L30	Digital optical dissolved oxygen sensor, robust with depth measuring fixed 30 m cable. Device in carton box, incl. Quickstart	Art no. 488757
DX-535-L02	Digital optical dissolved oxygen sensor, compact lab style Ø12 mm, fixed cable 2 m. Device in carton box, incl. Quickstart	Art no. 488758

SUITABLE INSTRUMENTS

PRO D01	1-channel handheld meter for digital probes. Supplied with 4 x AA alkaline batteries	Art no. 486134
PRO D05.2	2-channel handheld data logger for digital probes. Supplied with 4 NiMH rechargeable batteries, USB cable and software downloadable from Senseca website.	Art no. 486136
PRO D05.3	3-channel handheld data logger for digital probes. Supplied with 4 NiMH rechargeable batteries, USB cable and software downloadable from Senseca website.	Art no. 486137
PRO 595	Portable multiparameter water analysis meter and data logger. Supplied with 4 x AA NiMH rechargeable batteries, USB cable and software ProXware downloadable from Senseca website, without sensors	Art.no. 488748

All PRO-Line measuring devices with DX measuring input can be used

ACCESSORIES

Replacement Caps

REP_CAP_DX-530	Spare membrane head for DX 530, in carton box	Art no. 489147
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Other Accessories

GSKA 3610	Protection hat for depth measuring for sensors Ø 12 mm, gunmetal	Art no. 607267
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CASE PRO-400



Case for PRO Line.
Recess for one instrument, space for accessories, carrying handle, zipper.
Dimensions: 415 x 245 x 70 mm (W x H x D).

Art. No. 486900