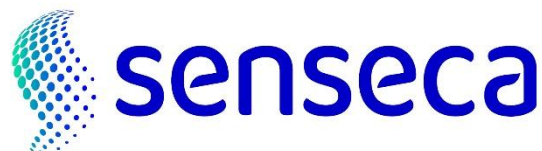


DX 532 / DX 535



Optical dissolved oxygen sensors with DX Interface



DX 532



DX 535

- 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
- Integrated pressure sensor

DESCRIPTION

The DX 532 and DX 535 sensors are state-of-the-art oxygen probes. The optical measuring principle eliminates the need for chemical substances and frequent maintenance, as well as the requirement for a minimum flow rate at the measuring membrane.

The integrated pressure sensor compensates for ambient pressure to ensure highly accurate laboratory readings; with the DX 532 field sensor, the measurement depth can be recorded simultaneously with the oxygen readings.

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.

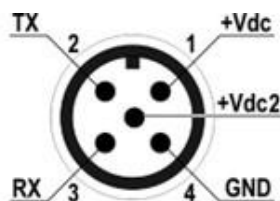
DX 532: Digital optical dissolved oxygen sensor, robust with depth measuring

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. BOD-5 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 DX sensor connection	
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	10 ppb, 0.01 mg/l	
		0.1 % O ₂ sat	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% when stored wet. When storing dry, accuracy can degrade e.g. to 2% in air.	0 ... 100%: < ± 1% 100 ... 200%: < ± 2 % Wet storage	
	Temperature	± 0.2 °C	± 0.2 °C	
	Pressure	-	± 0.2 kPa, Depth: ± 0.25 m	

Max immersion depth	10 m (max 3h per day, drying afterwards recommended)	40 m	1 m (immersion over shaft max 30 min, drying afterwards recommended)
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
Wet storage container	Not included	included	included
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

ORDERING CODES

- 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**



Sensor in wet storage bottle:
protection to be dismantled



Sensor in wet storage bottle:
protection to be kept on membrane

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 Parts

GSKA 532	Protection hat for depth measuring for DX 532, ABS	Art no. 490411
REP_CAP_DX-532	Spare membrane head for DX 532	Art no. 490412
REP_CAP_DX-535	Spare membrane head for DX 535	Art no. 490413

Other Accessories

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