

Advantages

- > robust and multi-functional
- > low operating costs
- > reasonably priced
- > longterm stable
- > compact
- > measuring directly on the spot, where the process takes place (in-situ)
- > no extra gas lines or gas coolers needed
- > connectable to all standard fixing systems
- > standardized data transfer
- > real time process optimization
- > on demand available with display

Application areas

- > fermenters
- > laboratory
- > large industrial plants
- > (parallel) bioreactors
- > connection to disposables



Sensor	BCP-O₂		BCP-O₂ec	
Measuring principle	Zirconium dioxide		Galvanic cell	
Measuring range	0,1-25 Vol.%, 1-50 Vol.%*		0-100 Vol.%*	
Drift	< ± 2% value / year		< ± 2% value / year	
Accuracy	<0,2% FS** ± 3% value		<0,2% FS** ± 3% value	
Housing	Aluminium (IP65), PA		Aluminium (IP65), PA	
Dimension/Weight	100x100x130 mm WxDxH/750g (Aluminium) 80x130mm DxH/150g (PA)		100x100x130 mm WxDxH/750g (Aluminium) 80x130mm DxH/150g (PA)	
Mechanical connector	G 1¼", GL 45, Tri-Clamp SMS38, hose connection 4-12 mm etc.		G 1¼", GL 45, Tri-Clamp SMS38, hose connection 4-12 mm etc.	
Temperature range*	-25°C - +55 °C, 15 °C - +40 °C 30 °C - +55 °C	-13°F - +131°F 59 °F - +104°F 86 °F - +131°F	-25°C - +55 °C, 15 °C - +40 °C 30 °C - +55 °C	-13°F - +131°F 59 °F - +104°F 86 °F - +131°F
Temperature inside of the sensor unit	580°C Don't use in explosive atmosphere	1076°F	3°C higher than process temperature	5.4°F higher than process temperature
Storage temperature	0 °C - +60 °C	32°F - 140°F	0 °C - +60 °C	32°F - 140°F
	< 75%RH non-condensing		< 75%RH non-condensing	
Pressure range	0,8-1,3 bar	11.6 - 18.85 psi	0,8-1,3 bar	11.6 - 18.85 psi
Lifetime of sensor element	approx. 15.000 operating hours		approx. 900 000 Vol.% hours	
Power Supply	12 oder 24 V DC, 1A		12 oder 24 V DC, 1A	
Output	RS232, RS485, 4-20mA, Ethernet (with BACCom), USB		RS232, RS485, 4-20mA, Ethernet (with BACCom), USB	
Remarks	Don't use in explosive atmosphere, in anoxic atmosphere, in gases with polymers or silicon components or in gases with halogens (F, Cl, Br...), CFC or SO _x and H ₂ S		High concentration of NH ₃ or O ₃ could minimize the lifetime	

**others on request **FS full scale