

Precision Optical Oxygen Analyzers - Gas or Liquid Phase

Optical Oxygen Analyzer: Measuring Range is dependent on BOSx sensor selection (see sensor specs), HMI Interface with backlit LCD, Stainless Steel NEMA 4X Housing, Wall Mounted, Programmable 4-20mA or 0-10VDC output (fail high diagnostics), Digital RS232 ASCII output, PT1000 RTD (2-wire) and oxygen sensor (SMA) analog inputs, Hazardous Area approvals (FM or ATEX / CE labeled per model selection, Operating Temp = 0 to 50C.

4401OXY	100 to 240VAC Operational Power (FM Class I, Div 2 Grps A, B, C, D, / T4)	
4401OXY-CE	100 to 240VAC Operational Power, CE Approval (ATEX II 3 G EXnA IIC 135 C (T4))	
4401OXY-DC	9 to 24VDC Operational Power (FM Class I, Div 2 Grps A, B, C, D, / T4)	
4401OXY-DC-CE	9 to 24VDC Operational Power, CE Approval (ATEX II 3 G EXnA IIC 135 C (T4))	

BOS Precision Optical Oxygen Sensors - Gas or Liquid Phase

Sensor Type	Sensor & Seals	Body Material	Process Connection	Cable Armor	Sensor Length	Lead Length	Agency Approval	
Optode								
BOS1	Gas (0 - 4.2% O ₂ , 0 - 41.4 hPa) or Liquid (0 - 1.8 ppm)							
BOS2	Gas (0 - 25% O ₂ , 0 - 250 hPa) or Liquid (0 - 22 ppm)							
BOS3	Gas only (0 - 300 ppm with 1000 ppm over-range)							
Sensor and Seals								
N	BOS FIBERSENSE 4mm wand-style sensor (no integral temperature compensation, sold separately)							
V	Viton O-ring seals (BOS FLEXSENSE & BOS SAFETAP Sensors only)							
E	EPDM O-ring seals (BOS FLEXSENSE & BOS SAFETAP Sensors only)							
K	FFKM (perfluoroelastomer) O-ring seals (BOS FLEXSENSE & BOS SAFETAP Sensors only)							
Body Material								
1	316 Stainless (all versions)							
2	Titanium Gr2 (BOS FLEXSENSE Sensors only)							
3	Hastelloy-C 276 (BOS FLEXSENSE Sensors only)							
Process Connection								
A	4mm Wand (BOS FIBERSENSE Sensors only)							
B	1" Male NPT Assembly Mounting Nut (BOS FLEXSENSE Sensors only)							
C	1/2" Male NPT Assembly Mounting Nut (BOS FLEXSENSE Sensors only)							
D	1/2" Male NPT Ball Valve 750 PSIG Max (BOS SAFETAP sensors only)							
E	1/2" Male NPT Ball Valve 29" Hg Vacuum / 250 PSIG Max. NACE MR0175 (BOS SAFETAP sensors only)							
Cable Armor								
1	Armor Jacketing Protection							
2	PVC Jacketed Fiber - BOS FIBERSENSE sensors only (Use "N" For PVC Jacket Length)							
BOS Sensor Overall Length (Refer to "4401OXY Oxygen Analyzer & BOS Sensors Datasheet")								
0.7	0.7M (2.3ft) ("N" Standard lead length only)							
2.5	2.5M (8.2ft)							
5.0	5.0M (16.4ft)							
10.	10M (32.8ft) BOS1 and BOS2 Sensors only							
XXX	Special Length (If >10M consult factory)							
PVC Jacket Length. Select "N" for BOS FIBERSENSE & SAFETAP Sensors. Options 1, 2, 5, 7 for BOS FLEXSENSE UL Dual Seals sensors ONLY. These options allow PVC jacket fiber length specified separate from the overall jacket fiber length. (Refer to "4401OXY Oxygen Analyzer & BOS Sensors Datasheet")								
N	Standard - direct connect to 4401OXY Analyzer - Required for BOS FLEXSENSE & SAFETAP Sensors							
1	PVC Jacket Fiber Length 1M (Temperature Comp separate, with certified 1/2" NPT cable gland)							
2	PVC Jacket Fiber Length 2M (Temperature Comp separate, with certified 1/2" NPT cable gland)							
5	PVC Jacket Fiber Length 5M (Temperature Comp separate, includes certified 1/2" NPT cable gland, 10M length only)							
7	PVC Jacket Fiber Length 7M (Temperature Comp separate, includes certified 1/2" NPT cable gland, 10M length only)							
X	Special PVC Jacket Fiber Length (If >10M consult factory)							
Agency Approval								
ST	Standard							
SN	Standard no integral TC (Use B1150-1005 below)							
UL	UL Dual Seal Approval (BOS FLEXSENSE only, No integral Temperature Compensation available)							
Mtl	AIP	Body	Elec	Tip	TC	Opt	Depth	
BOS3	V	1	C	1	2.5	N	SN	Typical BOSx FlexSense Configuration
BOS3	N	1	A	1	2.5	N	SN	Typical BOSx FiberSense Configuration
BOS3	V	1	C	1	2.5	N	ST	Typical BOSx SafeTap Configuration

Sample Calibration Panels for Gas (120/240VAC)



SCP-CF	Sample Calibration Panel for Gas, For BOS FLEXSENSE, SS panel includes the flowcell, pressure regulator, filters, and glass tube flow meters
SCP-CT	Sample Calibration Panel for Gas, For BOS FIBERSENSE, SS panel includes the flowcell, pressure regulator, filters, and glass tube flow meters
B5106-1018	Liquid Drain Pot Accessory for SCP panels, Provides liquid trap with visible window and drain for use in high moisture applications.

NOTE - When ordering Sample Calibration Panels the 4401OXY Oxygen Analyzer, BOS sensor, and temperature sensor must be specified separately. Consult Barben for assistance.

Portable Oxygen Analyzer for Gas PSC3-OXY

PSC3-OXY-BOS3-DC	Portable Carry Case with 4401OXY-DC (9 to 24VDC), BOS3 Sensor, PT1000, sample system, gas quick disconnects, UL rated plug / receptacle
PSC3-OXY-BOS3-AC	Portable Carry Case with 4401OXY (120/240VAC), BOS3 Sensor, PT1000, sample system, gas quick disconnects, UL rated plug / receptacle
PSC3-OXY-BOS1-DC	Portable Carry Case with 4401OXY-DC (9 to 24VDC), BOS1 Sensor, PT1000, sample system, gas quick disconnects, UL rated plug / receptacle
PSC3-OXY-BOS1-AC	Portable Carry Case with 4401OXY (120/240VAC), BOS1 Sensor, PT1000, sample system, gas quick disconnects, UL rated plug / receptacle

Accessories for BOS FLEXSENSE Optical Sensors

B4992-1001	Flow Cell Assy 316SS for 120mm Length Sensor with 1/2"NPT Thread 1/4" Compression Inlet/Outlet 150 PSIG max pressure (Drawing 2P0224)	
B4992-1005	Flow Cell Assy 316SS for 120mm Length Sensor with 1" NPT Thread 1/4" Compression Inlet/Outlet 150 PSIG max pressure (Drawing 2P0255)	
B4992-1006F	Flow Cell Assy 316SS for 120mm Length Sensor with 1/2"NPT Thread 1/4" Compression Inlet/Outlet 1000 PSIG max pressure (Drawing 2P0270)	
B4992-1007F	Flow Cell Assy Titanium for 120mm Length Sensor with 1/2"NPT Thread 1/4" Compression Inlet/Outlet 1000 PSIG max pressure (Drawing 2P0270)	
B4992-1008F	Flow Cell Assy Hastelloy C 276 for 120mm Length Sensor with 1/2"NPT Thread 1/4" Compression Inlet/Outlet 1000 PSIG max pressure (Drawing 2P0270)	

BOS FLEXSENSE Replacement Window Cap Assemblies

Part #	Optode	Body Material (Wetted)	O-Ring Seals (Wetted)
B3907-1051	BOS1	316 Stainless	Viton
B3907-1052	BOS1	Titanium Gr2	Viton
B3907-1086	BOS1	Hastelloy-C 276	Viton
B3907-1087	BOS1	316 Stainless	EPDM
B3907-1074	BOS1	Titanium Gr2	EPDM
B3907-1082	BOS1	Hastelloy-C 276	EPDM
B3907-1088	BOS1	316 Stainless	FFKM (perfluoroelastomer)
B3907-1080	BOS1	Titanium Gr2	FFKM (perfluoroelastomer)
B3907-1084	BOS1	Hastelloy-C 276	FFKM (perfluoroelastomer)
B3907-1053	BOS2	316 Stainless	Viton
B3907-1054	BOS2	Titanium Gr2	Viton
B3907-1089	BOS2	Hastelloy-C 276	Viton
B3907-1090	BOS2	316 Stainless	EPDM
B3907-1075	BOS2	Titanium Gr2	EPDM
B3907-1083	BOS2	Hastelloy-C 276	EPDM
B3907-1091	BOS2	316 Stainless	FFKM (perfluoroelastomer)
B3907-1081	BOS2	Titanium Gr2	FFKM (perfluoroelastomer)
B3907-1085	BOS2	Hastelloy-C 276	FFKM (perfluoroelastomer)
B3907-1041	BOS3	316 Stainless	Viton
B3907-1058	BOS3	Titanium Gr2	Viton
B3907-1072	BOS3	Hastelloy-C 276	Viton
B3907-1040	BOS3	316 Stainless	EPDM
B3907-1057	BOS3	Titanium Gr2	EPDM
B3907-1071	BOS3	Hastelloy-C 276	EPDM
B3907-1042	BOS3	316 Stainless	FFKM (perfluoroelastomer)
B3907-1070	BOS3	Titanium Gr2	FFKM (perfluoroelastomer)
B3907-1073	BOS3	Hastelloy-C 276	FFKM (perfluoroelastomer)

Accessories for BOS FIBERSENSE Optical Sensors

B4992-0013	Flow Cell Compression Cross SS316 for 1/4" Slip Stream - 4mm and 1/4" Ports for Oxygen & Temp Sensor (Drawing 2P0194)
B4954-1004	Wand Compression Fitting SS316 for 1/4" Slip Stream - Use with 1/4" tubing fittings (customer supplied)

General Accessories for Optical Sensors

B1150-1001	External Temperature Compensation - PT1000 Sensor - 1/4" Dia x 4" 316SSS Body - 8ft Cable NO Armor
B1150-1000	External Temperature Compensation - PT1000 Sensor - 1/4" Dia x 4" 316SSS Body - 15ft Cable NO Armor
B1150-1002	External Temperature Compensation - PT1000 Sensor - 1/4" Dia x 4" 316SSS Body - 15ft Cable with Armor
B1150-1005	External Temperature Compensation - PT1000 Sensor - 1/8" Dia x 4" 316SSS Body - 2ft (0.7m) Cable with Armor
B1150-1012	External Temperature Compensation - PT1000 Sensor - 1/8" Dia x 4" 316SSS Body - 6ft (2.5m) Cable with Armor
B1150-1013	External Temperature Compensation - PT1000 Sensor - 1/8" Dia x 4" 316SSS Body - 16ft (5m) Cable with Armor
B1150-1014	External Temperature Compensation - PT1000 Sensor - 1/8" Dia x 4" 316SSS Body - 33ft (10m) Cable with Armor
B4965-1000	Flowmeter 0.2 - 2.5 LPM w/SS Valve
B4980-1046	Coalescing Filter, 0.3 um filter
B4954-1052	1/8" T * 1/4" MNPT adapter, used to mount RTD into Flowcell (B4992-1006F)
B4954-1013BT	1/8" T * 1/4" T adapter bored, used to mount RTD into 1/4" Tube Fitting
B4952-1012	Teflon Ferrule, 1/8" for RTD to prevent Swage and increase thermal isolation
B4965-1000	Flowmeter 0.2 - 2.5 LPM w/SS Valve