Comparison Of Response Time For FSI In-Line and SBE 48 Temperature Sensors

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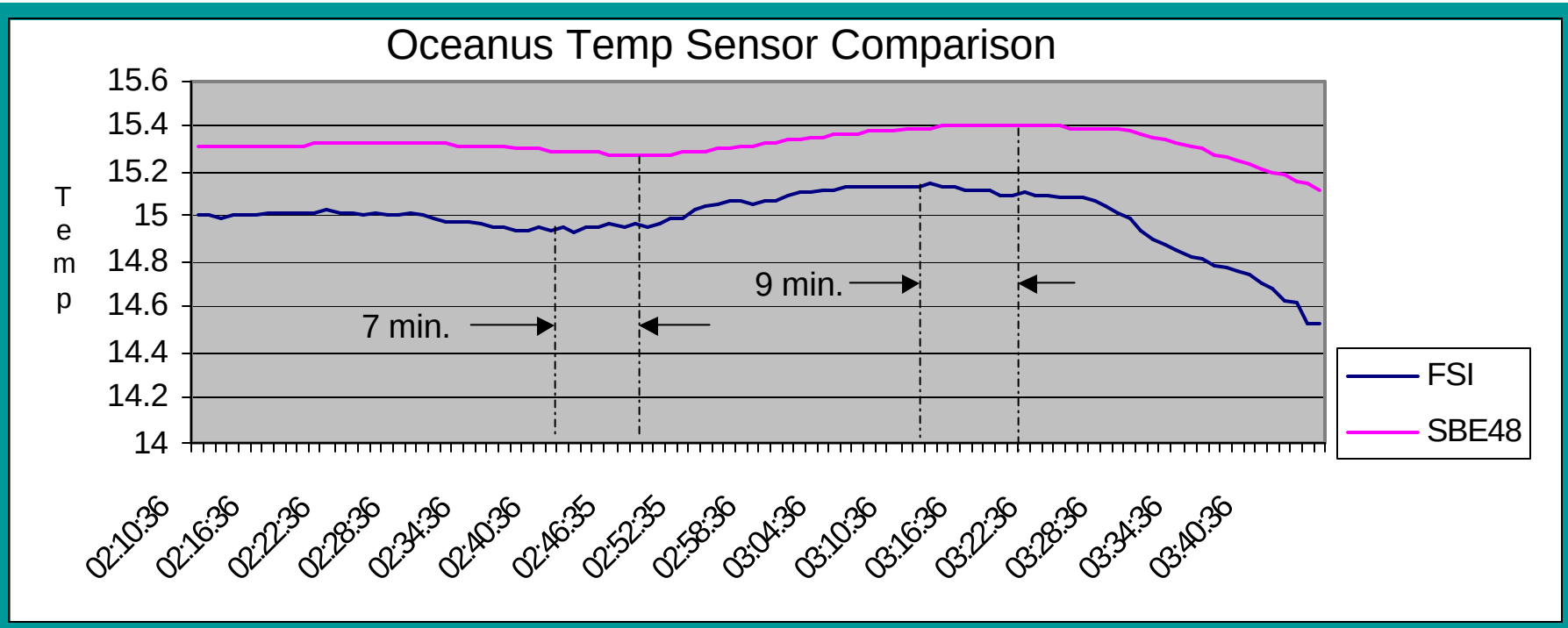
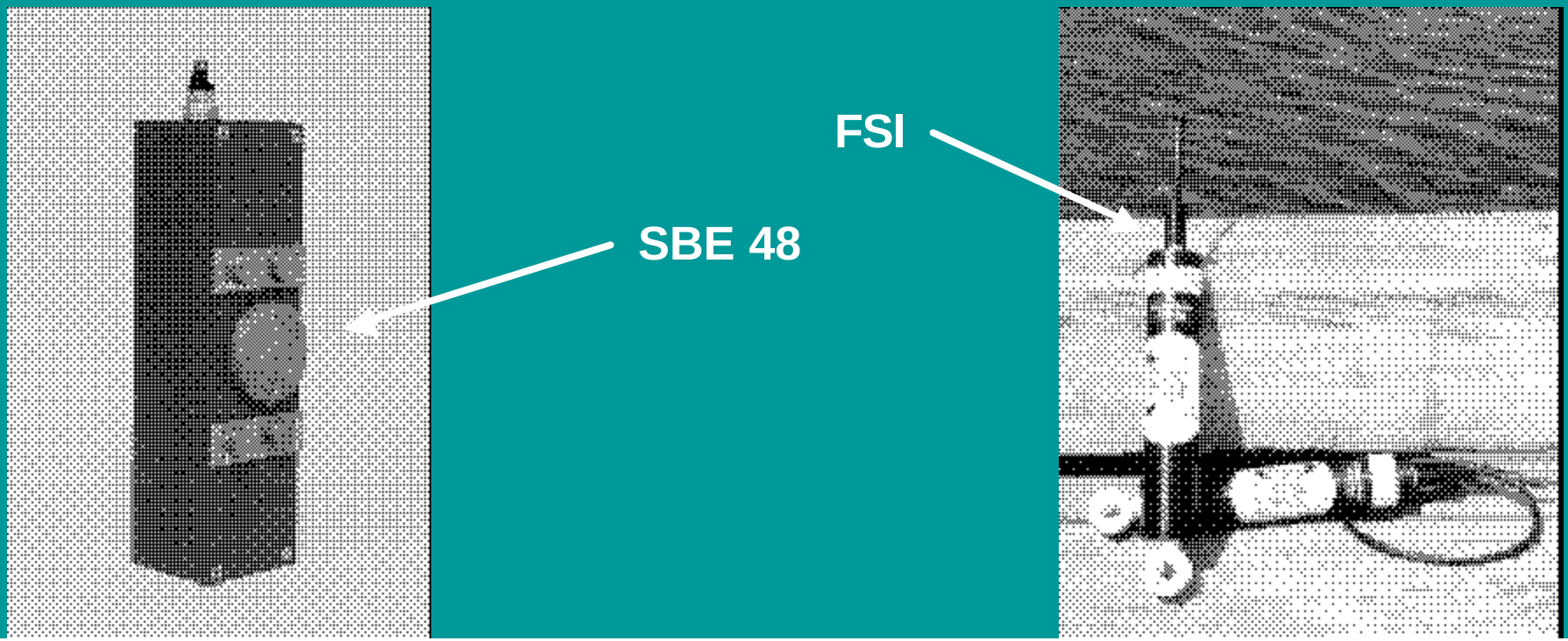

Oceanus Temp Sensor Comparison
15.6
15.4
15.2
15
14.8
14.6
14.4
14.2
14
Temp
7 min.
9 min.
FSI
SBE48
02:10:36
02:16:36
02:22:36
02:28:36
02:34:36
02:40:36
02:46:35
02:52:35
02:58:36
03:04:36
03:10:36
03:16:36
03:22:36
03:28:36
03:34:36
03:40:36


FSI
SBE 48

SFI Temp Sensor

Resolution: 0.001°C
Accuracy: ±0.010°C ITS-90
Power: 7 to 35 VDC; 15 mA at 7 VDC
Sample Rate: 1.8 Hz
Modes: Continuous data output on power up. Polled interval user programmable
Data Format: Conductivity in mS/cm
Temperature is degrees Celsius per ITS-90
User programmable pressure in dBars
Salinity in PSU per PSS-78
Sound Velocity in M/sec per UNESCO 44
User may select scaled 0-65536 outputs instead of floating point
Connector: SubConn 5-pin female bulkhead connector, Micro Series
Communication: RS-232, RS-485 or CMOS
Address: EEPROM 2 ASCII Characters,
:

SBE 48 Hull Temperature Sensor

Resolution 0.0001°C
Initial Accuracy ± 0.002°C
Clock Accuracy 15 seconds/month
Internal Power 9V non-hazardous lithium battery:
Runs real-time clock (5 to 10 year battery endurance).
Can power SBE 48 (up to 150,000 samples) if
external power not supplied.
External Power 8 - 16 VDC
Operating Current 0.015 amp-seconds per sample
Memory Capacity 276,000 samples (temperature and time)
(temperature=3 bytes/sample; time=4 bytes/sample)
Materials PVC housing
Weight 2.3 kg (5 lbs)