

- Piezoelectric barometric pressure sensor
- Low power consumption
- Operating pressure:
 AB 60 (S31100) 800 ... 1100 hPa (mbar)
 AB 100 (S31200) 600 ... 1100 hPa (mbar)



Measurement principle and mounting

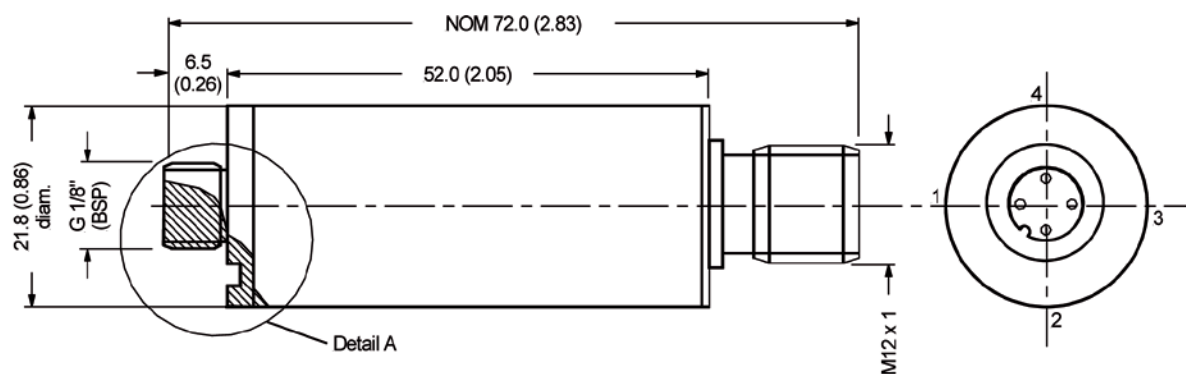
The piezoelectric pressure sensor's signal is electronically amplified to provide an output signal of 0...5 VDC. The sensor is mounted in a stainless steel housing, protection class IP64 when the connector is plugged in.

The connecting cable is included in delivery. If required it will be ready for connection in an Ammonit steel cabinet.

When mounted outside the central steel cabinet we recommend protective housing with pressure compensation.

In measurement operation the sensor needs an external supply of at least 9 VDC.

Dimensional drawing



mass: appr. 80g

dimensions in mm

Specifications

Characteristics	AB 60	AB 100
Order-No.	S31100	S31200
Operating pressure	800 ... 1100 hPa (mbar) (Altitude: ≤ 1400 m)	600...1100 hPa (mbar) (Altitude: ≤ 3700 m)
Slope	60 hPa/V	100 hPa/V
Offset	800 hPa	600 hPa
Temperature operation range	-40 ... 85 °C	
Humidity range	0 ... 98 %RH	
Accuracy		
Total accuracy (-10 ... 60 °C)	±1 % FSO* (±3 hPa; FSO is 300 hPa)	±1 % FSO* (±5 hPa; FSO is 500 hPa)
Repeatability	±0.1 % FSO*	±0.2 % FSO*
Long term stability	±0.1 % FSO*	±0.1 % FSO*
Electrical data		
Output voltage	0 ... 5 VDC	
Supply voltage	9 ... 32 V	
Current consumption	5 mA	
General		
Dimensions	Length 72 mm, diameter 22 mm	
Weight	80 g	
Housing	Stainless steel	
Connection	4-pole plug (M12)	
Protection class	IP 64 - when connector is plugged in	
Vibration (5 ... 500 Hz)	2 gRMS	
Mechanical shock	50 g	
Atmosphere	non-ionic, non-corrosive	

* FSO (Full Scale Output) describes the difference of the upper and the lower limit of the pressure range.

Sensor connection to Ammonit Meteo-40 data logger

Sensor	Plug Pin No.	Ammonit Cable Wire Colour	Meteo-40 Analog Voltage	Supply Sensor
Air Pressure Output Voltage	2	white	Ax A	
Ground	4	blue	Ax B	
Supply	1	red		9 ... 32 VDC
Ground	4	black		Main Ground

Cable type: LiYCY 4 x 0.25 mm²

Connect the shield logger-sided to Ground (GND)

Sensor connection diagram to Ammonit Meteo-40 data logger
