TURCK
Industrial I/O AS-interface® Products

AS-I Tuners

- **Extend AS-I Network Length**
- **IP65 Protection**
- **Correct AS-I Communication Problems**
- **Extended Diagnostics Available**

ASI-TUNER BW1648*
ASI-TUNER-DIAG BW1843*
ASI-TUNER-C1D2 BW1715

* Not ETL listed

Electrical
- Operating Current: <60 mA (from AS-I)

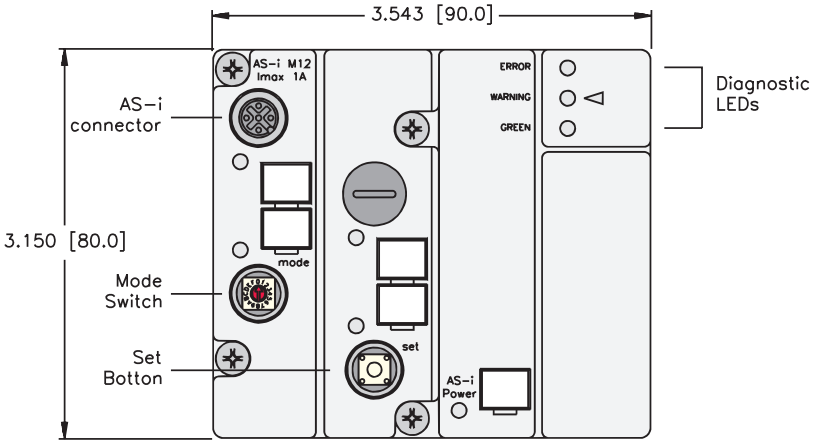
Power Distribution
- AS-I Power supply

Mechanical
- Operating Temperature: 0 to +55 °C (+32 to +131°F)
- Protection:IP65

Material
- Housing: Plastic

Diagnostics (Logical)
- BW1843 can be configured to be a slave on the AS-I network and report system and station health

Diagnostics (Physical)
- LEDs to indicate status of AS-I communication and power supply



Machine Mounted AS-interface® Tuners

The **ASI-TUNER BW1648** and **ASI-TUNER-DIAG BW1843** are IP 65 tuners for machine mounted AS-I extension solutions. Tuners are active circuits designed to affect the impedance of an AS-I network so the system can communicate without errors at lengths longer than 100 m. The tuners are configured for the system by placing them in a "teach" mode where they "listen to" AS-I network traffic. In this mode, tuners cycle through LRC impedance values to find the setting where the errors are minimized. Once this value is found, tuners operate in the "run" mode. The tuners also provide a green/yellow/red LED indicating network status, so potential errors can be found early and corrected before they become critical.

The **ASI-TUNER BW1648** does not consume an address and is invisible to all the other devices on the network. The **ASI-TUNER-DIAG BW1843** may be configured as an AS-I slave to allow more detailed diagnostic information to be available as standard I/O data, as well as mailbox information per the AS-I v3.0 specification. The status of all AS-I slaves on the system, as well as the voltage level at the tuner, can be obtained in this mode. Tuners can be used to extend the network length up to 300 m for a single segment (without the need for a repeater). Ideal placement of the tuner on the network is at the furthest point from the power supply.

Tuners connect to the network via standard AS-I base modules (ASI-BM BW1180 for flat cable and ASI-BM BW1182 for round cable with screw terminal connections).