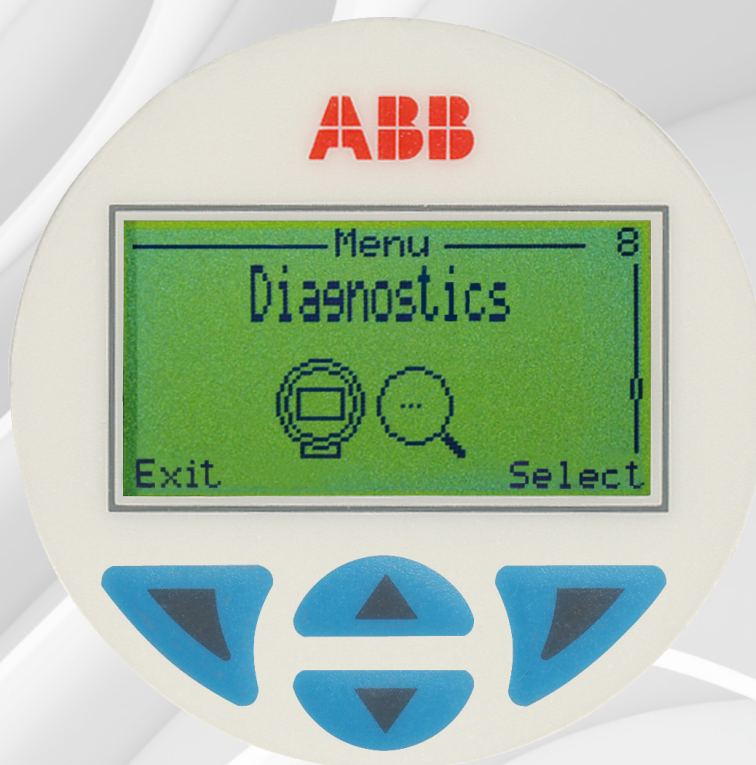


ABB MEASUREMENT & ANALYTICS

Diagnostics in the instrumentation

More than just equipment monitoring



Measurement made easy

Measuring, positioning, recording and adjusting are necessary requirements for operating a process efficiently. ABB possesses technological competence in this area and is therefore the ideal partner for the best solutions in measurement and analytics technology.

ABB is available on-site at any time, with a global network of locations for manufacturing, sales and service as well as in-house DAkkS certified calibration facilities. The safety, productivity and energy efficiency of your system is always guaranteed.

Diagnostics in the instrumentation

Take advantage of the savings potential

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01 FIM
(Field Information
Manager)

The requirements placed on production systems in the process industries have been constantly growing over the past few years. This demand will continue to grow in the future.

Production systems should produce product in a way that is more efficient, more flexible and easier to plan, while providing consistent high quality.

Needed here are precise measurements over the entire lifecycle of the measuring devices, easy and predictable service and maintenance, as well as continuous verification of the measured values. A consistent operating philosophy for all ABB devices also eliminates errors and mistakes in device setup and configuration, making maintenance and commissioning easier and safer.

These devices are also available for the process industry at an approved and type-tested level of quality to meet the NAMUR safety requirements.

To expand the possibilities for process control efficiency, you can take advantage of the diagnostic options in the ABB devices to provide you with a view of the overall condition of the system and indicate potential process optimization possibilities.

With that, process production systems can be improved for higher efficiency, reliability and safety.

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The entire system at a glance

‘Predictive Maintenance’ lowers operating costs

• Coriolis Mass Flowmeter

The FCB450 for Mass Flow measurement provides early detection of deposits or abrasion in the meter tube, thus preventing faulty measurement signals.

• The ProcessMaster electromagnetic flowmeter

The FEP630 for the flow measurement of conductive liquids detects gas bubbles in the measured media and can therefore prevent damage to pumps.

• LLT100 Laser level transmitter

Measurement signals are also monitored for plausibility when filling vessels, which eliminates any disturbances in the signal path of the measurement and prevents measurement errors.

In addition, lens contamination is detected, which monitors the signal integrity of the measurement.



and results in trouble-free operation

• SwirlMaster and VortexMaster Swirl and Vortex flowmeter

The FSV or FSS for flow measurement in accordance with the vortex principle constantly monitors the sensor for accuracy, to make sure everything is well balanced.

• Temperature transmitter series 300

The TTX300 temperature transmitter for head or field mounting works redundantly when a double sensor is used and can therefore detect the drift of a sensor to make sure that everything is just right.

• WaterMaster Electromagnetic flowmeter

The FEX100 for the flow measurement of water, continuously performs a self-test of the entire device, therefore allowing for long-term stable measurement in accordance with OIML R49-P.

• Differential pressure transmitter series 266

The 266MST transmitter for differential pressure with PILD, provides blocked or frozen impulse line detection, therefore improving the safe operation of the system.



• WirelessHART Communication / Harvester

Measurements connected via WirelessHART are ideal for extended monitoring in production systems. Additional information can optimize your processes without the need for any additional wiring, using Energy Harvesting and WirelessHART connections.

• Common HMI concept

The standardized HMI concept throughout all ABB field devices make intuitive use of all the device groups possible. Operating errors are therefore avoided and process and diagnostic data can be read out on-site without the need for additional accessories.

• SensyMaster thermal mass flowmeter

The thermal gas mass flowmeters offer top measuring accuracy even when detecting the smallest flow rates and low flow conditions. Thanks to the device fingerprint, the coating and wear levels can be determined, and precise and safe operation verified. Ability to detect low flow means optimal savings on raw materials and equipment.



Continuous gas analysis

The dynamic QR code provides you with quick access to diagnostic information. By using the QAL3 module, continuous monitoring and documentation of the condition of the analyzer is possible.

Contrac Electric Actuator

The integrated maintenance function of the actuator allows for individualized, load-dependent maintenance, relating to actual load and conditions, instead of applying standard time intervals. The remaining time between maintenance intervals can be viewed at any time. This simplifies planning for valve maintenance.

FIM (Field Information Manager) configuration software

Intuitive use prevents incorrect configuration without the need for extensive training. One tool for any device. Compact on a tablet, on-site and in the workshop.

PositionMaster EDP300 positioner

The EDP300 is a digital positioner for control valve applications which offers static and dynamic friction detection of a valve, making maintenance easy to plan and improving the availability of the system. The available performance histograms provide easy verification for correct valve selection and operation for the application.



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