

Signet 2551 Magmeter FAQ's

Q. What is the warranty on the new Signet 2551 Magmeter?

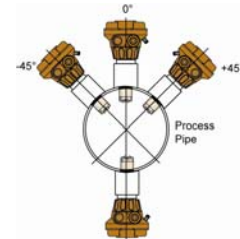
A. All Signet products, including the 2551 Magmeter, are under warranty for two years from date of purchase. [Click here for a copy of the George Fischer Signet, Inc. Warranty Statement.](#)

Q. What is the price of a 2551 Magmeter compared to other magmeters on the market?

A. A 2551 Magmeter is priced about half as much as full bore magmeters and they are competitively priced relative to other insertion magmeters.

Q. Is there a limitation to mounting angles for the 2551 Magmeter?

A. No, the 2551 will operate at any angle. Normal installation issues like air bubbles and sediments must be considered.



Q. Is the 2551 Magmeter bi-directional?

A. The 2551-XX-12 Magmeter with 4-20 mA output is bi-directional. The 4-20 mA output can be set from -10 m/s to +10m/s.

The 2551-XX-11 Digital/Frequency out Magmeter does not have bi-directional capability. Watch for the DISPLAY version of the Magmeter in 2005. It will be completely bi-directional!

Q. Is the flow range of the 2551 Magmeter better than a paddlewheel?

A. Yes, significantly better:

- Paddlewheel Flow Sensors typically have an operating range of 1 ft/s to 20 ft/s.
- The 2551 Magmeter operating range is 0.15 ft/s to 33 ft/s.

[Click here to see the full specifications of the 2551 Magmeter.](#)

Q. What is the minimum Reynolds Number for using the 2551?

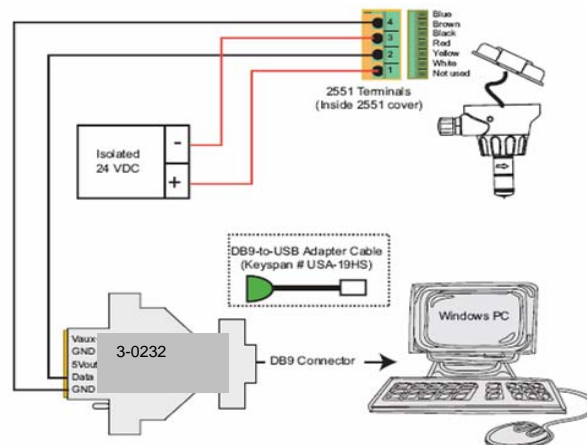
A. The 2551 requires a Reynolds value of 4500 or greater for optimum performance. This is not difficult to achieve if the basic guidelines for installation and flow rates are observed, and if the fluid is similar to water.

Q. Why does the sensor have a minimum conductivity requirement of 20 μ S?

A. Magmeter technology is based on Faradays law, which says that the movement of a conductor through a magnetic field will result in a voltage output that is proportional to the speed at which the conductor is moving. The lower the conductivity of the fluid, the more difficult the voltage is to measure. Signet has set 20 μ S as the threshold for the 2551 Magmeter.

Q. What is the Set-Up Tool and when do I need to use it for the 2551?

A. The set-up tool is a Windows-based software program. When used in conjunction with the 3-0232 Signal Converter, it allows you to customize the operational parameters of the 2551 Magmeter. [Click here for more information.](#)





Q. How does the 2551 Magmeter install into the pipe?

A. The 2551 Magmeter can be used with any 1/2 to 8 inch Signet installation fitting. These are the same fittings that are used on the Signet 515 and 2536 paddlewheel flow sensors. [Click here for a full list of fittings.](#)

Q. Can I replace a paddlewheel with a 2551 Magmeter?

A. Simply remove the paddlewheel and install the 2551 Magmeter. There are no special tools required; the 2551 uses the same fittings as the paddlewheel.

Q: Is the 2551 compatible with current Signet instruments?

A: Yes. The 2551 with FREQUENCY output is compatible with Signet's complete line of powered Flow Instruments. It is the first flow sensor from Signet that offers the serial data output (S³L) to enable using it with the 8900 MultiParameter Controller. For the first time, a Signet system can control SIX flow channels with one instrument!

Q. How many 2551 Magmeters can be used with the 8900 Multi-Parameter Controller?

A. Up to 6 Magmeter inputs (Digital S³L) can be used. See the 8900 manual for information related to cabling requirements and limitations. [Click here for more information on the 8900 power requirements.](#)



Q. Other manufacturers charge a premium for test certificates. Is there an additional cost for a 2551 test certificate and is it NIST traceable?

A. All 2551 Magmeters are packaged with an NIST certificate from the factory. There is no charge for this certificate. There is a fee for annual or periodic recertification. [Click here for a sample copy of the test certificate.](#)

Q. How does the 2551 Magmeter compare to a full bore magmeter?

A. The technical specifications are similar, although full-bore magmeters do have an inherent technical advantage, because the electrodes span the diameter of the pipe. An Insertion Magmeter like the Signet 2551 locates the electrodes close together to enable simpler installation, and to be able to install the sensor into a range of pipe sizes. When the practical advantages of insertion magmeters are compared to the technical advantages of a full-bore magmeter, the insertion technology is very attractive!

	2551	Full Bore magmeter
Initial Cost	\$\$	\$\$\$\$
Installation	Insertion	Flanged/Wafer
Pipe range	1/2 inch thru 8 inch	Specify when ordering

Q. What can interfere with the Magmeter performance?

A. Extremely dirty processes, such as oily waste streams, may coat the sensor. Air bubbles, electrical noise, improper installation (not enough up or downstream pipe runs), and low conductivity may also interfere with the performance.

Q. When the lid on the 2551 is opened, there are two blinking lights. What do they indicate?

A. The D6 light flashes only when there is a bad connection between the sensor and the output board. It indicates bad or loose wiring or that the sensor is defective.

The D7 light flashes when the unit is properly functioning. If it is not flashing, it indicates that the sensors are coated, defective, or the power supply is insufficient. It also indicates that there may be a problem with electrical noise and grounding the sensor may solve the problem and D7 may begin to flash indicating normal functioning.

