

BOILER SENSOR 116CP/117CP

CENTRAL HEATING BOILER APPLICATIONS

Background

Central heating boilers are a very common way of heating the house or office. In a case where a combi boiler is used, the domestic hot water is created in the same boiler. For example, wall hung boilers are energy and space efficient ways of heating rooms. Heat transfer is done by means of a hydronic liquid system that transfers heat to the radiator panels in separate rooms. One important variable in the hydronic system is the liquid (usually water or water with glycol) pressure. If the pressure is too high, there is risk of damage or leakage to the hydronic system. If the pressure is too low, there is risk of damaging the heat exchanger inside the boiler. An unreliable system will lead to higher costs (efficiency loss and maintenance/repair), poor customer satisfaction and poor brand recognition in a competitive market.

The pressure sensor converts the pressure signal into an electronic (voltage) value which can be acquired by the control unit of the boiler.

Solution

Sensata now offers a cost-efficient pressure sensor (116CP/117CP) family, which is developed according to 'automotive' standards to measure the pressure in the hydronics loop of the central heating boiler. The sensor design is patented according to US9857260B2 2018-01-02.


The pressure sensor converts the pressure signal into an electronic (voltage) value which can be acquired by the control unit of the boiler. The sensor measurement pressure value is usually presented on a display or thermostat in the living room (typically wireless).

With developing trends, customers and installers are able to be notified of the actual pressure reading by means of an application on a tablet or mobile device with a push notification. This push message notifies the end user to check the boiler application and refill if needed. This will prevent unexpected failures in the heating of the house or office.



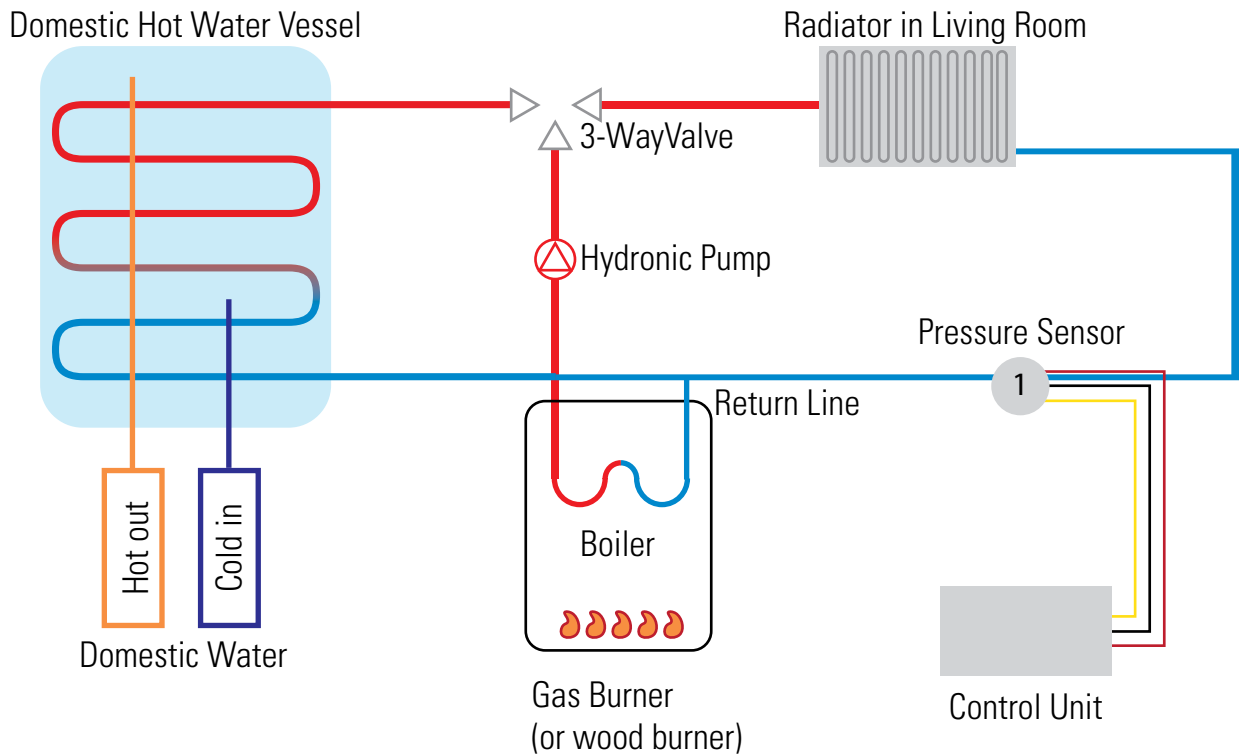


RECOMMENDED PRODUCTS

Reference on Diagram	Product	Features	Function	Brand
1	 116CP/117CP	<ul style="list-style-type: none"> Operating pressure range: 0-60 to 0-230 PSI (0-4 to 0-16 Bar) Supply voltage: 5VDC ratiometric or 8-30VDC voltage regulated Output: 0-3.5VDC, 0-4.5VDC, or 4-20mA Pressure port: Quick Connect, G1/4, G3/8 Electrical connection: RAST 2.5 	Hydronic Pressure Measurement	Sensata Technologies



DIAGRAM



Sensata Technologies, Inc. ("Sensata") data sheets are solely intended to assist designers ("Buyers") who are developing systems that incorporate Sensata products (also referred to herein as "components"). Buyer understands and agrees that Buyer remains responsible for using its independent analysis, evaluation and judgment in designing Buyer's systems and products. Sensata data sheets have been created using standard laboratory conditions and engineering practices. Sensata has not conducted any testing other than that specifically described in the published documentation for a particular data sheet. Sensata may make corrections, enhancements, improvements and other changes to its data sheets or components without notice.

Buyers are authorized to use Sensata data sheets with the Sensata component(s) identified in each particular data sheet. HOWEVER, NO OTHER LICENSE, EXPRESS OR IMPLIED, BY ESTOPPEL OR OTHERWISE TO ANY OTHER SENSATA INTELLECTUAL PROPERTY RIGHT, AND NO LICENSE TO ANY THIRD PARTY TECHNOLOGY OR INTELLECTUAL PROPERTY RIGHT, IS GRANTED HEREIN. SENSATA DATA SHEETS ARE PROVIDED "AS IS". SENSATA MAKES NO WARRANTIES OR REPRESENTATIONS WITH REGARD TO THE DATA SHEETS OR USE OF THE DATA SHEETS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ACCURACY OR COMPLETENESS. SENSATA DISCLAIMS ANY WARRANTY OF TITLE AND ANY IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, QUIET ENJOYMENT, QUIET POSSESSION, AND NON-INFRINGEMENT OF ANY THIRD PARTY INTELLECTUAL PROPERTY RIGHTS WITH REGARD TO SENSATA DATA SHEETS OR USE THEREOF.

All products are sold subject to Sensata's terms and conditions of sale supplied at www.sensata.com. SENSATA ASSUMES NO LIABILITY FOR APPLICATIONS ASSISTANCE OR THE DESIGN OF BUYERS' PRODUCTS. BUYER ACKNOWLEDGES AND AGREES THAT IT IS SOLELY RESPONSIBLE FOR COMPLIANCE WITH ALL LEGAL, REGULATORY AND SAFETY-RELATED REQUIREMENTS CONCERNING ITS PRODUCTS, AND ANY USE OF SENSATA COMPONENTS IN ITS APPLICATIONS, NOTWITHSTANDING ANY APPLICATIONS-RELATED INFORMATION OR SUPPORT THAT MAY BE PROVIDED BY SENSATA.

Mailing Address: Sensata Technologies, Inc., 529 Pleasant Street, Attleboro, MA 02703, USA.

CONTACT US

Americas

+1 (800) 350 2727
 sensors@sensata.com
 switches@sensata.com

Europe, Middle East & Africa

+359 (2) 809 1826
 pressure-info.eu@sensata.com

Asia Pacific

sales.isasia@list.sensata.com
 China +86 (21) 2306 1500
 Japan +81 (45) 277 7117
 Korea +82 (31) 601 2004
 India +91 (80) 67920890
 Rest of Asia +886 (2) 27602006
 ext 2808