



## **Yokogawa Releases the EJXC40A Digital Remote Sensor, a New DPharp EJX® Series Differential Pressure Transmitter**

**–For the measurement of liquid levels in large tanks and the differential pressure of high-pressure fluids–**

Johannesburg, South Africa – 26 May 2016 - Yokogawa announces the release of the EJXC40A digital remote sensor, a newly developed DPharp EJX® series differential pressure transmitter. Equipped with two pressure sensors that are connected with an electric cable, the EJXC40A offers superior performance in the measurement of liquid levels in large tanks and large differential pressure with high-pressure fluids. This new addition to the DPharp EJX series will meet a wide range of customer needs.

### **Development Background**

Differential pressure/pressure transmitters are widely used in the oil, petrochemical, and chemical industries in applications such as oil and gas wells. By measuring the difference in pressure at two points in a tank or pipe, these transmitters can calculate the level, flowrate, and density of liquids, gases, and steam. In applications where a tank liquid or gas or a pipe fluid cannot be introduced into the pressure-receiving unit (diaphragm) of a transmitter, diaphragm-sealed differential pressure transmitters are used. A transmitter of this type is connected to two separate pressure-receiving units by a capillary tube that is filled with silicone oil or some other fluid. Although such transmitters are capable of precisely measuring high-pressure fluids with a high resolution, they are not suitable for use with large tanks because of limitations in the allowable length of the capillary tubes. In addition, they are not ideal for fine differential pressure measurement because the fluids in the capillary tubes are susceptible to changes in the ambient temperature.

### **Product Features**

The EJXC40A consists of two separate pressure sensors that are connected to each other by an electric cable. Based on the difference in pressures measured by each sensor, the EJXC40A determines the liquid level, flow rate, and pressure of liquids, gases, and steam. The EJXC40A is ideal for the following applications.

#### 1. Liquid level measurements in large tanks

The electric cable connecting the two pressure sensors can be up to 45 meters in length, enabling the measurement of liquid levels with very large tanks and tall distillation columns.

#### 2. Fine differential pressure measurement

Since the two pressure sensors are connected only by an electric cable, their measurements are not influenced by changes in the ambient temperature. There is no need to correct for changes in temperature when performing fine differential pressure measurements with gas tanks and other applications. This ensures stable measurements.

#### 3. Measurement with high-pressure fluids having a high differential pressure

As the two pressure sensors can be set to measure different pressure ranges, the EJXC40A digital remote sensor can measure high differential pressures of up to 70 MPa, something that is difficult to do with a single sensor unit.

# Press Release



According to Yoji Saito, head of the Product Business Center in the Industrial Automation Platform Business Headquarters: “The DPharp differential pressure/pressure transmitter is a core product in Yokogawa’s field instrument lineup. Compact in size and suitable for use in a wide range of applications, over 6.5 million units of these instruments have been sold since its release in 1991. According to a Yokogawa survey, we have the second largest share of this market. Equipped with a silicon resonant sensor that uses Yokogawa’s proprietary DPharp technology, the EJXC40A delivers the high accuracy and stability needed in the petrochemical, chemical, power, oil & gas upstream, and LNG markets that Yokogawa is targeting. Yokogawa will continue developing products to satisfy its customers’ needs and expand its field device business.”

## **Yokogawa’s Approach to This Field**

In 1961, Yokogawa became the first Japanese manufacturer to release an industrial differential pressure/pressure transmitter. In 1991, the company released the DPharp EJ series, featuring the world’s first monocrystal silicon resonant sensor and a micro-electro-mechanical system (MEMS) technology for the pressure detector, the heart of the transmitter. In 1994, Yokogawa launched the DPharp EJA® series with high performance and stability. Following the release of the DPharp EJX® series as a high-end transmitter in 2004, the company added the DPharp EJX multivariable transmitter for the oil and gas upstream sector in 2013. In 2014, the low-power DPharp EJA-E series (output: 1–5 V DC HART signals) became available in overseas markets.

## **For more information**

Field Instruments: <http://www.yokogawa.com/solutions/products-platforms/field-instruments/>

## **About Yokogawa**

Yokogawa's global network of 92 companies spans 59 countries. Founded in 1915, the US\$3.7 billion company engages in cutting-edge research and innovation. Yokogawa is active in the industrial automation and control (IA), test and measurement, and aviation and other businesses segments. The IA segment plays a vital role in a wide range of industries including oil, chemicals, natural gas, power, iron and steel, pulp and paper, pharmaceuticals, and food. For more information about Yokogawa, please visit [www.yokogawa.com](http://www.yokogawa.com).

For more information about Yokogawa, please visit the company’s website [www.yokogawa.com/za](http://www.yokogawa.com/za) or contact Christie Cronje in Corporate Communications.

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