

Fluidless pressure transmitter for sanitary process

❑ **Application :** Tank pressure monitoring

❑ **Products :** [EJAC60E \(Fluidless Pressure Transmitter\)](#)

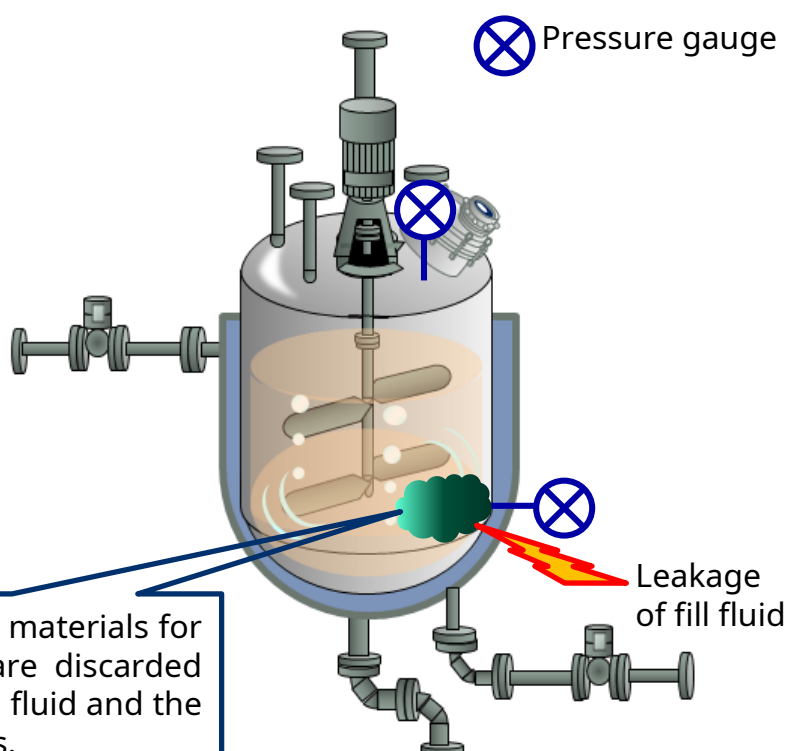
❑ Introduction

Pressure gauges are used for tank level and pressure monitoring in food and pharmaceutical manufacturing plants. Since many pressure gauges contain fill fluid, the user must be careful of any damage to diaphragms and leakage of fill fluid, especially during pressurized spray cleaning cycles.

In the event of contamination by fill fluid into the process, batches of product may have to be discarded, resulting in a huge loss. In addition, thorough cleaning is required to completely remove contaminants of the leaked liquid.

All expensive raw materials for bio-technology are discarded due to the leaked fluid and the derived chemicals.

Example: Tank Level Measurement at Bio-Chemicals Factory



❑ Proposal

YOKOGAWA's Fluidless-type Sanitary Pressure Transmitter "EJAC60E" has a reassuring structure for food, beverage and pharmaceutical industries.

- Fluidless design eliminates possibility of product contamination.
- Robust sensor design has High Pressure and High Temperature specification capable of withstanding rapid cycling of both Pressure and Temperature.
- Ideal pressure transmitter for tank level and pressure measurements at CIP and SIP lines.

EJAC60E component :

EJA560E Fluidless Pressure Transmitters

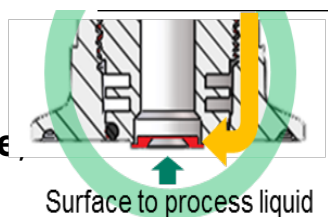
Aluminum housing (left) & Stainless housing (right)



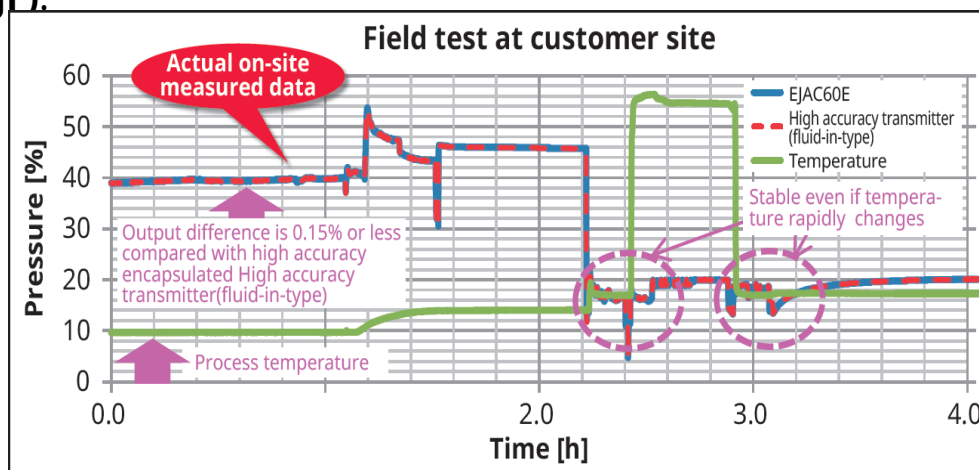
□ Features of EJAC60E

(= EJA560E + C10SA adapter)

- The sensor has a **robust diaphragm design for 25 MPa (3600psi) burst pressure**, reducing the risk of pressure transmitter failures due to diaphragm damage.
- FieldMate (Hart communicator) enables user friendly parameterization with enhanced diagnostics.
- Transmitter performance exceptionally stable for high temperature steam. Continuous operation is possible at **process temperature up to 150 degC (302 degF)**.



Strain gauge pressure element without fill fluid



Test Data:
Minimized output error and stable output regardless of rapid temperature changes during CIP

□ Other details of EJAC60E

- Plenty of process connection (C10SA)
16 hygienic seal multi-adapter structures, including ISO, union, in-line and flash
- Resistant to excessive pressure
The wetted sensor part is a reinforced type SUS 329 J 14 L.
- Resistant to condensation
High moisture resistance of special moisture-proof film + coating
More than 20 times longer than other manufacturers in dew condensation tests
- Steam resistant
The sensor is formed by a sputtering method, and there is no aging deterioration of the joint. The electrode is fused with metal to achieve 200,000 steam cycles of durability.

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