

Electronic Transmitters

FCX-AIII Series



World Top Class FCX-AIII

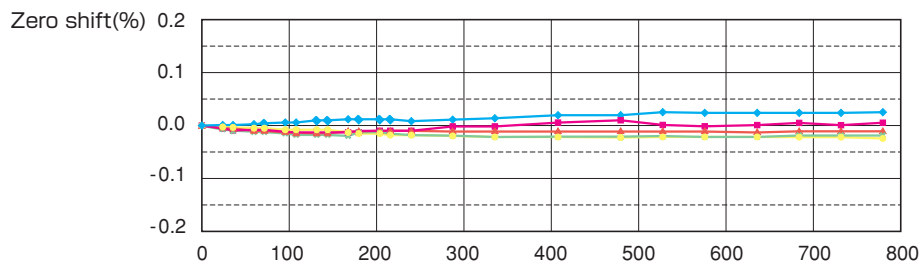
The FCX Series transmitters were introduced in 1989 and have an installed base of more than one million. The FCX-AIII Series is the latest transmitter model demonstrating improved accuracy and long-term stability. The FCX-AIII provides superior reliability, simplified user operation, expanded menu structure, and reduced size and mass.

Excellence of performance

High Accuracy

- Up to 0.04% (Option) / 0.065% (Standard*)
- (*)Applicable even on low differential pressure range (1kPa)
- (This is exceptional feature of Fuji and not available on any other transmitter manufactures.)

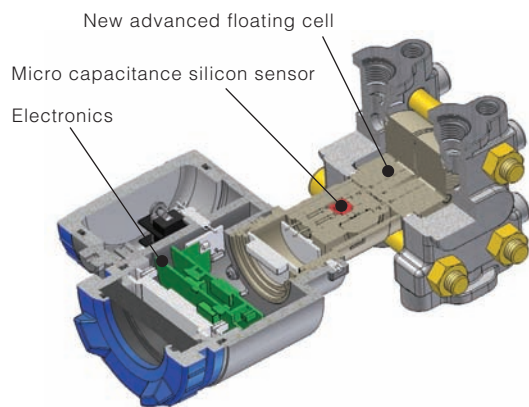
Extra Long term stability : +/- 0.1% / 10 years



Test data of long term stability

Type : FKC535V5(Maximum span 130kPa)
 Calibrated range : 0 to 130kPa,
 Temperature : Room temperature
 Quantity of tested unit : 5 units.

Reliability and stability established by abundant performance and technological innovation

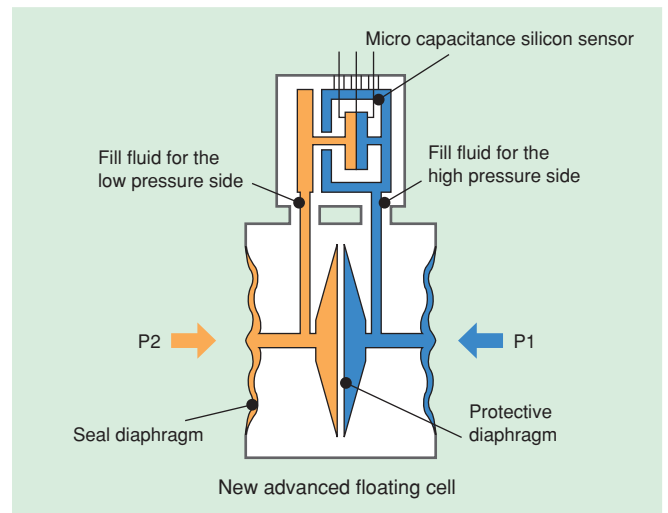
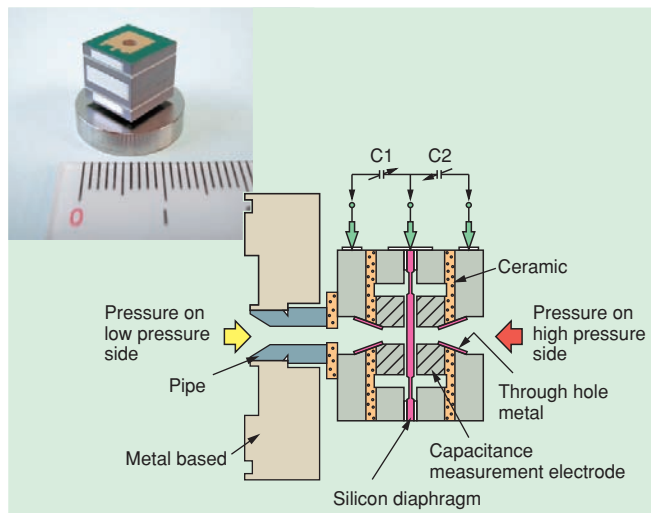


Micro capacitance silicon sensor

- Electrostatic capacitance type silicon sensor used for over a million transmitters. The crystal silicon material has reduced the size of the hysteresis, achieving excellent stability and reproducibility. Optimizing the configuration has helped realize output stability and long-term stability.

New advanced floating cell

- The advanced floating cell protects the sensor from various severe environmental conditions, assuring stability. The downsized sensor has facilitated handling in the field and has superior properties in terms of temperature, static pressure, and excessive pressure in comparison to our conventional model.

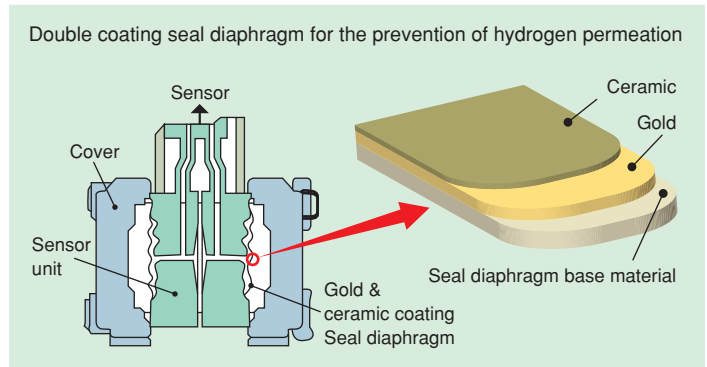


Extensive product lineup for a wide range of application requirements.

Seal diaphragm materials resist corrosion and hydrogen permeation

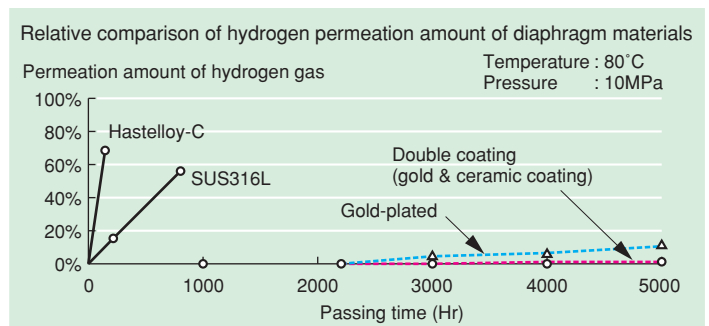
For applications requiring the prevention of hydrogen permeation : Gold & ceramic coating

The phenomenon, whereby hydrogen and hydrogen atoms in a medium being measured permeate a seal diaphragm and change into hydrogen molecules in the fill fluid, reducing measurement accuracy and a transmitter's lifetime, is known as the "permeation of hydrogen in transmitters." Since our special seal diaphragm double coated with gold and ceramic significantly suppresses the permeation of hydrogen, the transmitter is suitable for the desulfurization facility and hydrogen production unit for petroleum refining.



Anti-corrosive type : Titanium, Zirconium, Hastelloy, Monel, Tantalum

Titanium and Zirconium were added to the lineup of seal diaphragm materials in addition to conventional materials such as Hastelloy, Monel, and Tantalum. By selecting the most appropriate choice from the wide range of corrosion-resistant materials, a process known for corrosion troubles changes into one requiring no maintenance.



Sample application of various diaphragms

Material name	Sample applications	Material name	Sample applications
Gold & ceramic coating	Desulfurization facility, hydrogen production and supply system, ionized gas (Hydrogen Sulfide)	Hastelloy-C	Various organic acid, inorganic acid, alkaline type
Zirconium	Hydrochloric acid, caustic soda, bleaching agent	Monel	Alkaline type, fluorinated acid
Titanium	Chloride salt, sulfated compound	Tantalum	Hydrochloric acid, sulfuric acid, nitric acid, aqua regalis

High temperature/vacuum transmitter with solid technology

High temperature/vacuum specifications based on our special treatment method

- The remote seal type transmitter designed for high temperatures/vacuum enables stable measurement, even at high temperature and in a high vacuum, via the following special methods used for treatment and assembly. The transmitters are manufactured using methods under strict quality control.
 - Deaeration of parts at high temperatures and in a high vacuum
 - High temperature and vacuum treatment of fill fluid
 - Fluid filling at high temperature and in a high vacuum
- New DP transmitter for static pressure till 1035 Bar (15 000 Psi)
 - Differential pressure ranges : 0 to 1300/5000/30 000 mBar
 - All welded construction (no gasket in contact with the process)
 - Adapted for topside and subsea applications
 - PED conformity in category IV Module H1



[The type designation] Remote seal type pressure transmitter (FKB)
Remote seal type differential pressure transmitter (FKD)
Level transmitter (FKE)






A wide variety of products

Can be mounted on both a horizontal and vertical pipe.

Lineup of L type and T type housing

- Lineup of L type housing suitable for the mounting of a vertical pipe stanchion and T type housing suitable for the mounting of a horizontal pipe. A direct mount type is also available, which is compact and lightweight and can be directly mounted on the process.

Two types of Electronics Housings

		L type Vertical piping	T type Horizontal piping
1	Differential pressure		
2	Gauge pressure		
3	Gauge pressure Direct mount	_____	

Conformity to various international standards and approvals

FCX-AIII transmitter is a world-class product which comply with all kinds of internal requirements.

- Wide array of Communication protocols
Hart/FF/Profibus/Rs-485(modbus)



Modbus

- World-wide Hazardous approvals
(FM, CSA, ATEX, TIIS, NEPSI, GOST, SAA and etc)



SAA

- IEC61508/SIL2 conformity
(Functional safety of electrical/electronic/programmable electronic safety-related systems)

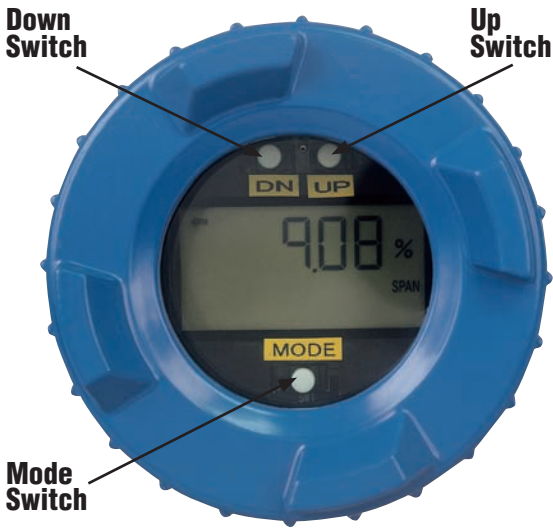
- ROHS conformity

RoHS

Enhanced Configuration & Maintenance tools

Field configuration by 3 push-buttons on LCD indicator

(All parameter settings and configurations can be supported without use of Hand Held Communicator)



Menu (Example)

1. Zero Adjustment
2. Span Adjustment
3. Constant Current Output(4-20mA)
4. 4mA Current Output Calibration
5. 20mA Current Output Calibration
6. Damping
7. Range
8. Unit
9. LCD Display Setting
10. External switch lock

PC based Maintenance tool

(Fuji Own PC tool, FDT/DTM, AMS and etc.)

- Parameter setting
- Range setting
- Process data display
- Gathering fault information, diagnosis
- Trend display, etc



AMS Intelligent Device Manager

Device management

- Device diagnosis
- Calibration
- Maintenance



Engineering

- Configuration
- Parameter setting
- Startup



Monitoring

- Operation
- Alarm report
- Monitoring

