

AUTROL®

Smart Transmitter for Differential /
Gauge / Absolute / HighLine
Pressure Measurement

APT3100



Function

- Flexible Sensor Input: DP, GP, AP, HP
- Various Output: 4 ~ 20mA, Digital Signals
- Setting Various Parameters: Zero/Span, Trim, Unit, Fail-mode, etc.
- Self Diagnostic Function: Sensor, Memory A/D Converter, Power, etc.
- Digital Communication with HART protocol
- Explosion-proof Approval & Intrinsic Safety Approval: KOSHA, KTL, FM, ATEX, GOST
- 5 Digit LCD: Express all pressure unit and flow unit, Use 5 digit for measured value.

Features

- **Superior Performance**
 - High Reference Accuracy: $\pm 0.075\%$ of Calibrated Span (*Specially $\pm 0.04\%$)
 - Long-Term Stability
 - High Rangeability (100 : 1)
- **Flexibility**
 - Data Configuration with HART Configurator
 - Zero Point Adjustment
- **Reliability**
 - Continuous Self-Diagnostic Function
 - Automatic Ambient Temperature Compensation
 - Fail-mode Process Function
 - EEPROM Write Protection
 - CE EMC Conformity Standards

SMART TRANSMITTER FOR PRESSURE MEASUREMENT

APT3100-D/G/A/H



TYPE and SPECIFICATION

- **APT3100-D**
Differential Pressure Measurement
Calibrated Span: Min 0.075 KPa
Max 41370 KPa
- **APT3100-G**
Gauge Pressure Measurement
Range: Lower Limit -100 KPa
Upper Limit 41370 KPa
- **APT 3100-A**
Absolute Pressure Measurement
Range: 0 KPa to 2500 KPa
- **APT 3100-H**
HighLine Pressure Measurement
Static Pressure: 31.02 MPa / 4500 psi

APT3100-MP



TYPE and SPECIFICATION

- **APT3100-MP**
Multi-Planar Pressure Transmitter
* For Differential / Gauge / Absolute Pressure Measurement
* Easy installation regardless fluid line conditions
* Vertically Installed without adaptor or various types of brackets regardless of the position of each fluid inflow line

* Please Refer to Individual Specification For Detail

APT3100L



Function

- Flexible Sensor input: Measuring hydrostatic pressure head and transmitting liquid level
- Various output: 4 ~20mA(Analog), Digital Signals
- Automatic Compensation of Ambient Temperature
- Setting Various Parameters: Zero/Span, Fail-mode, Unit, Trim, etc.
- Self Diagnostic Function: Sensor, A/D Converter, Memory, Power, etc
- Digital Communication with HART protocol
- Explosion-proof Approval & Intrinsic Safety Approval: KOSHA, KTL, FM, ATEX, GOST
- 5 Digit LCD: Express all pressure unit and flow unit, Use 5 digit for measured value.

Features

- **Superior Performance**
 - High Reference Accuracy
 - Long-Term Stability
- **Flexibility**
 - Data Configuration with HART Configurator
 - Zero Point Adjustment
- **Reliability**
 - Continuous Self-Diagnostic Function
 - Automatic Ambient Temperature Compensation
 - Fail-mode Process Function
 - EEPROM Write Protection
 - CE EMC Conformity Standards

SMART TRANSMITTER WITH DIAPHRAGM SEAL

APT3100-L Direct Mount Type



APT3100-L Capillary Type (Two Remote)



APT3100-L Capillary Type (One Remote)



TYPE and SPECIFICATION

- Flush Diaphragm Seal and Direct Mount Type Transmitter
- Extended Diaphragm Seal and Direct Mount Type Transmitter

- Flush Diaphragm Seal and Capillary Type Transmitter (Two remote Seal)
- Extended Diaphragm Seal and Capillary Type Transmitter (Two remote Seal)

- Flush Diaphragm Seal and Capillary Type Transmitter (One remote Seal)
- Extended Diaphragm Seal and Capillary Type Transmitter (One remote Seal)

AUTROL®

Smart Transmitter for Gauge /
Flush Mount Absolute Pressure
Measurement

APT3200



Function

- Flexible Sensor Input: GP, AP, Vacuum, Flush Mount
- Various Output: 4 ~ 20mA, Digital Signals
- Setting Various Parameters: Zero/Span, Trim, Unit, Fail-mode, etc.
- Self Diagnostic Function : Sensor, Memory A/D Converter, Power, etc
- Digital Communication with HART protocol
- Explosion-proof Approval & Intrinsic Safety Approval: KOSHA, KTL, FM, ATEX, GOST
- 5 Digit LCD: Express all pressure unit and flow unit, Use 5 digit for measured value

Features

- **Superior Performance**
 - High Accuracy: $\pm 0.075\%$ of Calibrated Span (*Specially $\pm 0.04\%$)
 - Long-Term Stability
 - High Rangeability (100:1)
- **Flexibility**
 - Measuring GP, AP
 - Data Configuration with HART configurator
- **Reliability**
 - Continuous Self-Diagnostic Function
 - Automatic Ambient Temperature Compensation
 - Fail-mode Process Function
 - EEPROM Write Protection
 - CE EMC Conformity Standards

* Please contact us before order for detailed certificate

SMART TRANSMITTER FOR PRESSURE MEASUREMENT

APT3200-G / ATP 3200-F

APT3200-A



TYPE and SPECIFICATION

- **APT3200-G / F**
Gauge/Flush Mount Pressure Transmitter
- **Range(Model G) / (Model F)**

Range Code	#3	-100 ~ 150 KPa
	#4	-100 ~ 1,500 KPa
	#5	0 ~ 5,000 KPa
	#6	0 ~ 25,000 KPa
	#7	0 ~ 60,000 KPa



TYPE and SPECIFICATION

- **APT3200-A**
Absolute Pressure Transmitter
- **Range(Model A)**

Range Code	#4	0 ~ 250 KPa
	#5	0 ~ 1,500 KPa
	#6	0 ~ 2,500 KPa

Smart Transmitter with Diaphragm Seal for Pressure Measurement

APT3200L

Function

- Flexible Sensor Input: GP, AP, Vacuum
- Various Output: 4 ~ 20mA, Digital Signals
- Setting Various Parameters: Zero/Span, Trim, Unit, Fail-mode, etc
- Self Diagnostic Function: Sensor, Memory A/D Converter, Power, etc
- Digital Communication with HART protocol
- Explosion-proof Approval & Intrinsic Safety Approval: KOSHA, KTL, FM, ATEX, GOST
- 5 Digit LCD: Express all pressure unit and flow unit, Use 5 digit for measured value.

Features

- **Superior Performance**
 - High Accuracy
 - Long-Term Stability
- **Flexibility**
 - Data Configuration with HART configurator
- **Reliability**
 - Continuous Self-Diagnostic Function
 - Automatic Ambient Temperature Compensation
 - Fail-mode Process Function
 - EEPROM Write Protection
 - CE EMC Conformity Standards

* Please contact us before order for detailed certificate



SMART TRANSMITTER WITH DIAPHRAGM SEAL

APT3200-L Direct Mount



APT3200-L Capillary Type



APT3200-L Triclamp Type



TYPE and SPECIFICATION

- | | | |
|--|---|---|
| • Flush Diaphragm Seal and Direct Mount Type Transmitter | • Flush Diaphragm Seal and Capillary Type Transmitter | • Flush Diaphragm Seal with Triclamp Type Transmitter |
| • Please Refer to Individual Specification For Detail | • Please Refer to Individual Specification For Detail | • Please contact us before order for detailed specification |

SPECIAL PERFORMANCE TYPE

- Available for Special Performance Type Transmitters As Order Basis
- For Paper, Beverage, Glass, Paper, Desulfuration, Petrochemistry Industry

AUTROL®

Smart Transmitter for
Nuclear Service

APT3700N - For Nuclear Service

Description of Product

The APT3700N Smart Pressure Transmitter is a micro-processor based high performance transmitter, which has flexible pressure calibration and output, automatic compensation of ambient temperature and process variable, configuration of various parameters, communication with HART protocol. The application is very various, as measuring pressure, flow and level by application method.

Performance Specifications

•Quality Assurance Program

In accordance with KEPIC-QAP & KEPIC-EN

•Nuclear Cleaning

To 1 ppm chloride content

•Hydrostatic

All Transmitters are tested for a minimum of 10minutes at 1.5 times the design pressure with no detectable leakage.

•Seismic

Accuracy within $\pm 0.25\%$ of upper range limit during and after seismic disturbance of 1 SSE and 5 OBE.

•Class 1E safety related Applications

Seismic test: IEEE Std 344-1987 at 5 OBE and 1 SSE response spectrum

Environment test: IEEE Std 323-1983 (Thermal, Radiation, Functional Aging)

EMI / RFI Test: MIL-STD-461D & 462D, RG 1.180, IEC61000-4-2 (EMC, ESD, EFT/Burst, Surge)

Function

- Flexible Sensor Input: DP, GP, AP, Vacuum
- Various Output: 4 ~ 20mA , Digital Signals
- Self Diagnostic Function: Sensor; Memory A/D Converter; Power; etc
- Qualified per IEEE Std 344-1987 and IEEE Std 323-1983, Regulatory Guide 1.180
- 5 Digit LCD: Express all pressure unit and flow unit, Use 5 digit for measured value.

Features

• Superior Performance

- High Reference Accuracy: $\pm 0.075\%$ of Calibrated Span
- Long-Term Stability: $\pm 0.25\%$ URL per 24 months
- High Rangeability (100 : 1)

• Flexibility

- Data Configuration with HART Configurator
- Zero Point Adjustment & Suppression

• Reliability

- Continuous Self-Diagnostic Function
- Automatic Ambient Temperature Compensation
- Fail-mode Process Function
- EEPROM Write Protection

• Equipment Qualifications

- Environmental Qualification
- Series Qualification and EMI / REI Test

TYPE and SPECIFICATION

- **APT3700N-D** Differential Pressure Measurement
Calibrated Span: Min 0.075 KPa Max 41370 KPa
- **APT3700N-G** Gauge Pressure Measurement
Range: Lower Limit -95 KPa Upper Limit 41370 KPa
- **APT 3700N-A** Absolute Pressure Measurement
Range: 0 KPa to 2500 KPa
- **APT 3100N-H** HighLine Pressure Measurement
Static Pressure: 31.02 MPa / 4500 psi



Manifold

Instrument Manifolds

Flange Type Manifold V/V



- VM2VT8N-F/R**
Block and Bleed
2 valve Remote Mount Manifold
Pipe to pipe female NPT
Bleed port female NPT
- VM3VT8N-F/R**
Block and Equalizer
3 valve Remote Mount Manifold
Pipe to pipe female NPT
Bleed port female NPT
- VM5VT8N-F/R**
Block, Equalizer and Bleed
5 valve Remote Mount Manifold
Pipe to pipe female NPT
Bleed port female NPT

Remote Type Manifold V/V



* Every Manifold & Gauge Root Valve is tested with the nitrogen @ 100 psig (68 bar) for leakage at the seat to a maximum allowable leak rate of 0.1 scc/min

AUTROL HAND HELD COMMUNICATOR

ACONF-312 Kit



AUTROL STT30 SOFTWARE



AHM-U1 (USB HART Modem)

OTHER AVAILABLE HART HAND HELD COMMUNICATOR

•275 Field communicator, 375 Field communicator, MFC 4100 HART communicator