### Transmitter and Transducer Selection Guide

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- **Product Line**
  - OEM Transducers
  - OEM Transducers
  - OEM Transducers
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  - Military Transducers
  - Industrial Transmitters
  - Submersible Level
  - Submersible Level
  - Submersible Level
  - OEM Level Transducer
  - High-Purity
  - High-Purity
  - Pneumatic Controller

- **Features**
  - Excellent Stability, Temperature Measurement Option
  - Versatility, Accuracy, Customization
  - Amplified Output, 4-20 mA
  - Spurious Metal Sealer, Field-Adjustable
  - Rugged Design for Non-Shock, Differential Pressure Option
  - Zero and Span Adjustments
  - All Stainless Steel, Explosion-proof Design
  - Field Terminal Block, Adjustable
  - Reliable Level Measurement
  - 0.69 Diameter for Small Bore Applications
  - Shark Cage Design with Large Diaphragm
  - Ultra High-Purity With Less Than 10 ppm Finish
  - HPM Gauge/Switch Combination
  - High-Purity
  - Pressure Control for Process Variables

- **Ranges**
  - -0.1 thru 0-3000 psi
  - -0.1 thru 0-3000 psi
  - -0.1 thru 0-3000 psi
  - -0.1 thru 0-3000 psi
  - -0.1 thru 0-3000 psi

- **Gauge**
  - x x
  - x x

- **Vacuum**
  - x x

- **Compound**
  - x

- **Absolute**
  - x x

- **Sealed**
  - x x

- **Differential**
  - x x

- **Process Connection**
  - 1/8", 1/4" NPT
  - 1/8", 1/4" NPT
  - 1/8", 1/4" NPT
  - 1/8", 1/4" NPT
  - 1/8", 1/4" NPT
  - 1/8", 1/4" NPT
  - 1/8", 1/4" NPT
  - 1/8", 1/4" NPT

- **Wetted Parts**
  - 316L SS, BRASS
  - 316L SS, BRASS
  - 316L SS, BRASS
  - 316L SS, BRASS
  - 316L SS, BRASS
  - 316L SS, BRASS
  - 316L SS, BRASS
  - 316L SS, BRASS
  - 316L SS, BRASS

- **Input For mA Out**
  - 4-20 mA
  - 4-20 mA
  - 4-20 mA
  - 4-20 mA
  - 4-20 mA
  - 4-20 mA
  - 4-20 mA
  - 4-20 mA
  - 4-20 mA

- **Output Voltages (VDC)**
  - 0-10 VDC
  - 0-10 VDC
  - 0-10 VDC
  - 0-10 VDC
  - 0-10 VDC
  - 0-10 VDC
  - 0-10 VDC
  - 0-10 VDC
  - 0-10 VDC

- **Output Milliamperes (mA)**
  - 0-100 mA DC
  - 0-100 mA DC
  - 0-20 mA
  - 0-20 mA
  - 0-20 mA
  - 0-20 mA
  - 0-20 mA
  - 0-20 mA
  - 0-20 mA

- **Housing**
  - Aluminum or ULTEM®
  - Aluminum or ULTEM®
  - 316 SS
  - 316 SS
  - 316 SS
  - 316 SS
  - 316 SS
  - 316 SS

- **Calibration**
  - Full Range
  - Full Range
  - Full Range
  - Full Range
  - Full Range
  - Full Range
  - Full Range
  - Full Range
  - Full Range

- **Accuracy**
  - ±0.2% Full Scale (FS)
  - ±0.2% Full Scale (FS)
  - ±0.25% Full Scale (FS)
  - ±0.1% Full Scale (FS)
  - ±0.35% Full Scale (FS)
  - ±0.25% Full Scale (FS)
  - ±0.25% Full Scale (FS)
  - ±0.25% Full Scale (FS)
  - ±0.25% Full Scale (FS)

- **Electrical Connection**
  - Cable, Wire, Wire, Conduit
  - Cable, Wire, Wire, Conduit
  - Cable, Wire, Wire, Conduit
  - Cable, Wire, Wire, Conduit
  - Cable, Wire, Wire, Conduit
  - Cable, Wire, Wire, Conduit
  - Cable, Wire, Wire, Conduit
  - Cable, Wire, Wire, Conduit
  - Cable, Wire, Wire, Conduit

- **Agency Approvals and Standards**
  - IP-64, MIL-STD-202F
  - NEMA 4X, CE
  - MIL-T-24742, MIL-
  - MIL-T-24742, MIL-
  - MIL-T-24304B, MIL-
  - NACE

- **Intrinsically Safe**
  - CSA/ATEX/Cenelec
  - CL 1 DIV 1
  - FM/CSA/Cenelec
  - CL 1 DIV 1
  - CL 1 DIV 1

- **Explosion Proof**
  - FM/CSA
  - CL 1 DIV 1
  - FM/CSA
  - CL 1 DIV 1
  - FM/CSA

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### Additional Information

- **Submersible**
- **Industrial**
- **OEM Transducers**
- **OEM Transmitters**
- **Military Transducers**
- **Industrial Transmitters**
- **Submersible Level**
- **OEM Level Transducer**
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- **Output Milliamperes (mA)**
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- **Accuracy**
- **Electrical Connection**
- **Agency Approvals and Standards**
- **Intrinsically Safe**
- **Explosion Proof**
Model DCT

**Application**
The Model DCT is designed for general industrial and commercial requirements offering excellent performance over a wide range of applications. This model provides high reliability, long-term stability, and low cost relative to competing technologies. AMETEK - PMT has been developing and manufacturing high performance pressure sensing products for over 40 years, and the DCT brings a new level of accuracy to the PMT product portfolio.

**Solutions**
- Multiple voltage, current (mA), and ratiometric outputs
- Pressure ranges from 1 to 3000 psi
- Available in brass or stainless steel
- Temperature measurement option
- 0.20% accuracy

Model ACT

**Application**
The ACT offers premium performance and versatility of use for many applications, both for general industrial and original equipment manufacturers (OEMs). This model is offered in pressure ranges from 1 psi up to and including 3000 psi. It combines precision along with the durability to operate under difficult environmental conditions.

**Solutions**
- 0-100 mV output
- 0.20% accuracy
- SST diaphragm or brass non-isolated
- Laser trimmed analog compensation
- PSIG, PSIA, PSIS, and compound
- Multiple pressure port and electrical connection options
- 5X burst pressure ratio
- 0.25% accuracy
- Excellent stability
- Temperature compensated
- 10 standard pressure ranges up to 5000 psig

Model SPT

**Application**
The Model SPT general purpose industrial pressure transducer is designed using all 316 stainless steel wetted parts to provide excellent media compatibility. This model transducer provides a high level voltage output from an unregulated supply. Each unit is shipped fully compensated for pressure and temperature and is completely interchangeable without the need for further calibration. Superb stability, low cost and proven reliability make it an ideal choice for OEM applications.

**Solutions**
- Compact size
- ±0.25% accuracy
- Indoor or outdoor installations
- NEMA 4X available
- Approved to meet Class I, Division 1 intrinsic safety standards
- CE marked per EMC directive: 89/336/EEC

Model IND-100

**Application**
The Model IND-100 transmitter is designed for use in industrial applications such as plant process and utility pressure measurements, compressor control, and hydraulic and pneumatic manufacturing systems. EMI/RFI resistance is provided on this transmitter as protection against noise-generating variable speed motors and radio equipment common on a factory floor. This model provides exceptional reliability in industrial, as well as, outdoor environments. PMT again provides a transmitter unequaled in performance. The IND-100 model is perfectly suited for the demanding price requirements of this market.

**Solutions**
- Compact size
- ±0.25% accuracy
- Indoor or outdoor installations
- NEMA 4X available
- Approved to meet Class I, Division 1 intrinsic safety standards
- CE marked per EMC directive: 89/336/EEC

AMPLIFIED OUTPUT PRESSURE TRANSDUCERS

INDUSTRIAL PRESSURE TRANSMITTERS
Model 742

**Application**
The Model 742 Transducer accurately measures differential pressures, gauge, absolute, vacuum, and compound and transmits a fully adjustable 4-20 mA or 0-5 VDC output signal for remote display, recording, or control. The Model 742 Transducer is available in ranges up to 10,000 psig and 600 psi differential.

**Solutions**
- Designed to meet the specifications for marine and military applications
- Meets MIL-T-24742
- Grade A shock tested
- EMI per MIL-STD-461
- Vibration per MIL-STD-167
- Lightweight design
- Non-interacting zero and span adjustments for quick calibration
- Minimal maintenance

Model 89

**Application**
The Model 89 Transducer is a United States Navy approved QPL item that directly interchangeable with existing pressure transducers designed to MIL-Standards. The mounting is designed to match the footprint of existing transducers for quick and easy installation. The standard Model 89 transducer is available in gauge, compound, vacuum and absolute ranges from 30” Hg vacuum to 0-6,000 psi. The Model 89 DP Transducer is available in differential ranges from 300 inches of water to 400 psi.

**Solutions**
- QPL approved for navy shipboard use
- Meets MIL-D-24304 and MIL-P-24212
- Non-interacting zero and span adjustments for quick calibration
- Pressure connections conform to MS16142

Model 831 Series

**Application**
The Model 831 Pressure Transmitter is an all stainless steel transmitter designed for years of stable performance in the toughest environments. This model has been designed to meet FM/CSA explosion-proof ratings and meets NACE standards for offshore applications.

**Solutions**
- Straight in-line construction for a slim profile
- ±0.30% accuracy
- Designed to meet FM/CSA explosion-proof approvals
- Low power and differential pressure models available
- Pressure ranges to 0-5000 psi
- All welded 316L SS construction

Model 88

**Application**
The Model 88 Series are a high quality, full-featured pressure transmitters designed using a compact size and weight to eliminate complicated mounting hardware and mechanical supports. These transmitters mount flush against the process media and the cover is retained by a stainless steel chain, eliminating losses due to misplaced parts. A 4-20 mA output is standard. Meets NACE standards for offshore applications.

**Solutions**
- Available in NPT, flushmount or sanitary versions
- A high-quality, full featured transmitter
- ±0.25% accuracy
- 5:1 turndown capability
- FM and CSA explosion-proof and intrinsically safe
High Purity Products

Model 1535
HIGH PURITY PRESSURE GAUGES

Application
Model 1535 pressure gauges are designed and manufactured for ultra-high purity gas distribution equipment commonly used in semiconductor manufacturing. The Model 1535 is an all stainless steel gauge that is clean room produced, nitrogen purged, and double bagged in 3 ml nylon and 6 ml poly bags. This gauge is compatible with many toxic and corrosive gases. A welded face seal connection provides a threadless pressure seal and virtually eliminates a typical contamination source. The Model 1535 is available in NPT, FVCR, MVCR, and MVCRF connections.

Features
- 316L SS seamless bourdon tube with welded joints for heavy duty service
- Assembled and packaged in class 100 clean room
- Wetted surfaces are electropolished
- Available with low mount or center back connections

Model HPT-100
HIGH PURITY PRESSURE TRANSMITTERS

Application
The HPT-100 is a series of pressure transmitters specifically designed to meet the ultra-high purity requirements of the semiconductor industry. Because these units are typically used in applications measuring highly reactive and/or toxic materials, our manufacturing tolerances and operating specifications are very stringent. The HPT-100 Series transmitters are small in size and eliminate the need for bulky mounting hardware. These ultra-high purity transmitters are packaged in a Class 100 clean room and are double-bagged in a clean, dry, nitrogen environment to maintain the UHP condition.

Features
- Available in a flow-through and single-ended models
- NEMA 4x rated
- Ideal for outdoor installations
- Wetted surfaces are reduced sulphur 316L SS and Hastelloy C22
- 7-10 Ra surface finish

Model IPS-200
HIGH PURITY GAUGE/SWITCHES

Application
The AMETEK Model IPS-200 switch gauge was specially designed for use with gas handling equipment in the semiconductor manufacturing industry. Specific applications include coxial monitoring, low cylinder pressure alarm or high delivery pressure due to regulator drift. Class 100 clean room assembled. Available in a single setpoint version.

Features
- Magnetic Reed switch offers factory selectable switch action (High Alarm, Low Alarm)
- No switch input power required
- Various ranges from 30" Hg VAC to 4000 PSI, single or dual scale
- Available in low mount and center-back mount configuration
- Available with face seal fittings, tube stub or NPT connections
- Switch setpoint adjustments accessible from front of monitor
- Switch setting may be adjusted on or off-line
- Electropolished face seal, gland and socket with less than 10 Ra surface finish

Pneumatic Controllers

Model 40 Series
PRESSURE CONTROLLERS

Application
Model 40 Pneumatic Controllers automatically position a valve or other final control element to maintain process pressure at the desired set point. As receiving controllers, they can control any process variable transmitted as a pneumatic signal. As a transmitter, it is designed to sense pressure and transmit an air signal which is precisely proportional to the measured variable. This output may be fed to any remotely located monitoring, recording or control instrument.

Controller Features
- Wide selection of process measuring elements for pressure, differential pressure, flow and level
- Easy field calibration
- Large, easy-to-read black and white dial for maximum resolution
- Case and door with epoxy powdered finish for environmental protection
- Indication of measured variable
- A non-bleed, high capacity relay with excellent stability and fast response

Transmitter Features
- High accuracy and repeatability
- Stabilized pneumatic circuit
- A single transmitter can be used to actuate a number of receivers for indication, recording or control at a number of points throughout a plant.
Model 575

**SUBMERSIBLE LEVEL TRANSMITTERS**

**Application**
The Model 575 Series Level Transmitter is specially designed to provide the convenience of direct submergence in many types of liquid for quick, accurate and reliable level measurement. The simple design and rugged construction of this solid state instrument provide long-lasting service with virtually no maintenance. 4-20 mA output is standard.

**Solutions**
- A removable, non-clogging snubnose end protects sensing elements
- Vented to atmosphere through the surface end of the cable
- ±0.25% accuracy
- Reverse polarity and surge protected
- Intrinsically safe for Class 1 Division 1 Applications

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Model 675

**SUBMERSIBLE LEVEL TRANSMITTERS**

**Application**
The Model 675 Shark Cage is specifically designed for slurry and highly viscous applications where clogging of the sensor area is common. The Model 675 uses a 3.5” Diaphragm protected by a 4.75” cage to prevent unwanted clogging of the sensing area. This submersible level device is made of 316L SS which offers outstanding environmental protection and is available in depths up to 110 feet.

**Solutions**
- Oversized 3.5” diaphragm to prevent clogging
- Extremely rugged 316L SS construction
- Reverse polarity and surge protected
- Ideal technology for slurries, lift stations, and pump control
- Intrinsically safe for Class 1 Division 1 Applications

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Model SST

**SUBMERSIBLE LEVEL TRANSMITTERS**

**Application**
The Model SST is easy to install. Simply lower the transmitter into a vessel or well. It’s that easy. All the electronics are mounted in a submersible 316 stainless steel housing. The transmitter is available calibrated for any span needed: from 0 to 6 psig or 0 to 0.4 Bar (0 to 14 ft. of water) to 0 to 150 psig or 10 bar (0 to 345 ft. of water).

**Solutions**
- 0.69 inch diameter to fit in small bore systems
- Solid state semiconductor sensor for accuracy and reliability
- Rugged 316 stainless steel diaphragm and housing with excellent environmental protection
- Removable, non-clogging snubnose end protects sensing elements
- Vented to the atmosphere through the surface end of the cable
- Reverse polarity, surge, and lightning protection
- Anti-snag feature for easy probe removal

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Model SDT

**SUBMERSIBLE LEVEL TRANSMITTERS**

**Application**
The Model SDT Submersible Level Transmitter is specially designed to provide the convenience of direct submergence in many types of liquid for quick, accurate and reliable level measurement. The SDT provides a lower cost, lighter weight option for submersible level applications. The simple design and rugged construction of this solid state instrument provide long lasting service with virtually no maintenance. The transducer is available calibrated for any span needed, from 0 to 1 psig or 0 to 0.07 bar (0 to 2.31 feet or 0 to 0.7 meters of water) to 0 to 300 psig or 0 to 20 bar (0 to 690 feet or 0 to 211 meters of water).

**Solutions**
- Solid state semiconductor sensor for accuracy and reliability
- Lightweight and compact size
- Rugged 316L SS housing with excellent environmental protection
- Advanced digital compensation
- Optional temperature measurement capability
- Vented to the atmosphere through the surface end of the cable
- Reverse polarity and surge protected
- A two-wire 4 to 20 mA output is standard, 0.5 to 4.5 VDC, 1 to 5 VDC, 1 to 6 VDC, or 0 to 5 VDC output signals are optional