### A. Measurement Range:
- Low Range (up to 20% Water in Oil) - Field A: L
- Mid Range (0% to Inversion Point Water in Oil) - Field A: M
- High Range (Inversion Point to 100% Water in Oil) - Field A: H
- Full Range (0 to 100% Water in Oil) - Field A: F
- Parts Per Million - Field A: A

### B. Measurement Section Configuration:
- Insertion - Field B: I
- Flow-Through "L" - Field B: L
- Flow-Through "U" - Field B: U
- Flow-Through "Z" - Field B: Z

### C. Process Connection:
- Raised Face (RF), Ring Type Joint (RTJ), or Flat Face (FF) Flanges:
  - ANSI Class 150# - Field CD: 1R, 1J, 1F
  - ANSI Class 300# - Field CD: 3R, 3J, 3F
  - ANSI Class 600# - Field CD: 6R, 6J
  - ANSI Class 900# - Field CD: 9R, 9J
  - ANSI Class 1500# - Field CD: 5R, 5J
- National Pipe Thread (NPT) - Field CD: TH

### E. Measurement Section Diameter:
- Flow-Through Analyzer:
  - 1 Inch - Field E: 1
  - 2 Inch - Field E: 2
  - 3 Inch - Field E: 3
  - 4 Inch - Field E: 4
- Insertion Analyzer:
  - 3 Inch ONLY - Field E: 3

### F. Measurement Section Material:
- 316/316L Stainless (Standard) - Field F: 0
- Duplex 2205 with Teflon Coated Center Rod - Field F: 1
- Hastelloy with Teflon Coated Center Rod - Field F: 3
- 316/316L Stainless with Teflon Coated Center Rod Only - Field F: 6

### G. Process Temperature Range:
- 32 - 160°F (0 - 71°C) - Field G: 1
- 32 - 220°F (0 - 104°C) - Field G: 2
- 32 - 400°F (0 - 204°C) - Field G: 4
- 32 - 600°F (0 - 315°C) - Field G: 6
- Special Temperature Range - Consult Factory - Field G: 5
### II. Measurement / Salinity Range:

For Low Range Analyzers:
- 0 to 4% Water in Oil
- 0 to 10% Water in Oil
- 0 to 20% Water in Oil

For Mid Range Analyzers:
- 0% to Inversion Point Water in Oil (Oil Continuous Phase Only)

For High and Full Range Analyzers:
- 0.1 to 8.0% Salinity
- 8.0 to 25.0% Salinity
- 0.1 to 25.0% Salinity

Special – Consult Factory

Heuristic Salinity™ - 0.1 to 8.0% Salinity  **Note:** Requires Touchscreen Electronics

Heuristic Salinity™ - 0.1 to 25.0% Salinity  **Note:** Requires Touchscreen Electronics

### IJ. Electronics and Enclosures:

#### Standard Oscillator Module:

<table>
<thead>
<tr>
<th>Field</th>
<th>In NEMA 4X Enclosure: Note: PDI or CSA Certification Only for NEMA 4X</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>With Enhanced 4-Line LCD Electronics</td>
</tr>
<tr>
<td></td>
<td>With Expanded 4-Line LCD Electronics</td>
</tr>
<tr>
<td></td>
<td>With Enhanced Touchscreen Electronics</td>
</tr>
<tr>
<td></td>
<td>With Expanded Touchscreen Electronics</td>
</tr>
<tr>
<td></td>
<td>In Standard Explosion Proof Enclosure:</td>
</tr>
<tr>
<td></td>
<td>With Enhanced 4-Line LCD Electronics in 3 or 6-hole EP Enclosure</td>
</tr>
<tr>
<td></td>
<td>With Expanded 4-Line LCD Electronics in 3 or 6-hole EP Enclosure</td>
</tr>
<tr>
<td></td>
<td>With Enhanced 4-Line LCD Electronics in 4 or 5-hole EP Enclosure</td>
</tr>
<tr>
<td></td>
<td>With Expanded 4-Line LCD Electronics in 4 or 5-hole EP Enclosure</td>
</tr>
<tr>
<td></td>
<td>With Enhanced 4-Line LCD Electronics in 8-hole EP Enclosure (CCM Only)</td>
</tr>
<tr>
<td></td>
<td>With Expanded Touchscreen Electronics in 3 or 6-hole EP Enclosure</td>
</tr>
<tr>
<td></td>
<td>With Expanded Touchscreen Electronics in 4 or 5-hole EP Enclosure</td>
</tr>
<tr>
<td></td>
<td>With Expanded Touchscreen Electronics in 6-hole EP Enclosure</td>
</tr>
<tr>
<td></td>
<td>With Expanded Touchscreen Electronics in 8-hole EP Enclosure (CCM Only)</td>
</tr>
<tr>
<td></td>
<td>Special – Consult Factory</td>
</tr>
<tr>
<td></td>
<td>In Stainless Steel Explosion Proof Enclosure:</td>
</tr>
<tr>
<td></td>
<td>With Enhanced 4-Line LCD Electronics in 3-hole EP Enclosure</td>
</tr>
<tr>
<td></td>
<td>With Expanded 4-Line LCD Electronics in 3-hole EP Enclosure</td>
</tr>
<tr>
<td></td>
<td>With Enhanced Touchscreen Electronics in 3-hole EP Enclosure</td>
</tr>
<tr>
<td></td>
<td>With Expanded Touchscreen Electronics in 3-hole EP Enclosure</td>
</tr>
</tbody>
</table>

#### Stand-Alone Oscillator Module: **Note:** Only for OEM Orders

<table>
<thead>
<tr>
<th>Field</th>
<th>With Integral Transmitter</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>With Optional Enhanced 4-Line LCD Electronics in NEMA 4X Enclosure</td>
</tr>
<tr>
<td></td>
<td>With Optional Enhanced 4-Line LCD Electronics in 3-hole EP Enclosure</td>
</tr>
</tbody>
</table>

### K. Cable Lengths:

<table>
<thead>
<tr>
<th>Field</th>
<th>30 feet</th>
<th>50 feet</th>
<th>100 feet</th>
<th>150 feet</th>
<th>7 feet</th>
<th>No Cable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>X</td>
</tr>
</tbody>
</table>

**Note:** No Cable Provided for Stand-Alone Analyzers
## PHASE DYNAMICS, INC.
### MODEL NUMBER CODE

<table>
<thead>
<tr>
<th>A B C D E F G H I J K L M N O</th>
</tr>
</thead>
</table>

### L. Certification & Inspection (Includes Cert/Spec Plates and Certificate):

**Without Documentation Package:**
- PDI – ¾”NPT Conduit Entry
- PDI – M20 Conduit Entry
- Factory Mutual – ¾”NPT Conduit Entry
- CSA – ¾”NPT Conduit Entry

**With Documentation Package (NDE Testing per ASME Section V, ASME B31.3, Table 341.3.2):**
- Factory Mutual – ¾”NPT Conduit Entry **Note:** Does Not Include NDE Report
- CSA – ¾”NPT Conduit Entry **Note:** Does Not Include NDE Report
- ATEX CE II 2 GD Ex – M20 Conduit Entry
- ATEX CE II 2 GD Ex – ¾”NPT Conduit Entry

### M. Communication Protocols:

**Standard Analyzer:**
- (4) MODBUS RTU RS-485 plus (1) 4-20mA (Enhanced) 2
- or (5) 4-20mA (Expanded) 3

**Stand-Alone Analyzer:**
- Note: Only for OEM Orders
- MODBUS RTU RS-485 only 1
- (2) MODBUS RTU RS-485 2
- MODBUS RTU RS-485 plus HART 4-20mA 3
- MODBUS RTU RS-485 plus 4-20mA 4

### N. Power Requirements:

**Standard Analyzer:**
- 120/230 VAC 50/60 Hz A
- 24 VDC B
- 120 VAC 50/60 Hz with 230 VAC Enclosure Heater C
- 120 VAC 50/60 Hz with 120 VAC Enclosure Heater G
- 120 VAC 50/60 Hz with 24 VDC Enclosure Heater D
- 24 VDC with 24 VDC Enclosure Heater F
- 24 VDC with 120 VAC Enclosure Heater H
- 24 VDC with 230 VAC Enclosure Heater I
- 230 VAC 50/60 Hz with 230 VAC Enclosure Heater E
- 230 VAC 50/60 Hz with 120 VAC Enclosure Heater L
- 230 VAC 50/60 Hz with 24 VDC Enclosure Heater K

**Stand-Alone Analyzer:**
- Note: Only for OEM Orders
- 24 VDC ONLY B

### O. Miscellaneous Items:

- Powder Coating (of enclosures only) 1
- Epoxy Painting (of enclosures only) 2
- Stainless Steel Enclosure (for Stand-Alone units) 0

### 1. Miscellaneous Items not included in Model Code:

- NDE Report per ASME Section V, ASME B31.3, Table 341.3.2 0012-00000-000
- (NDE Always Included with ATEX Certification)
- PED Compliance (For CSA or ATEX Certified Analyzers ONLY) 0020-00108-000
- 30 Feet 3/4" NPT Anaflex Conduit Assembly 8000-00109-008
- 30 Feet M20 Anaflex Conduit Assembly 8000-00109-030
- PMI Report per applicable ASME, ASTM, AWS, API Specifications 9100-00006-000
- Stainless Steel Marking Tags 2030-00062-000