**ID 200 Series**

*Interface Concentration Detector System*

**SYSTEMS:**
- ID-201 (½ Inch Shaft)
- ID-202 (1 ¼ Inch Shaft)
- ID-205 (Cable mounted)

**Description**

The **ID-200 Series Interface Detectors** are used for interface measurement and control in all types of liquid/liquid and vapor/liquid separation processes including emulsions and foam. A wide range of models, process connections, and output options are available for the control of a variety of process installations such as Tanks, Decanters, Dehydrators, Desalters, Coalescers, etc. The **ID-200 Series** advanced control capabilities can be used to automate upset responses, antifoam and demulsifier chemical feed systems, and eliminate cross-contamination of separating phases.

**Operating Range**

- **Emulsion Concentration:** 0-100% Hydrocarbon/ Water by Volume
- **Process Temperature:**
  - Standard: 32°F to 300°F (0°C to 149°C)
  - High-Temp: 32°F to 450°F (0°C to 232°C)
- **Ambient Temperature:** -40°F to 131°F
- **Pressure Rating:** Up to 3000 PSI

**Materials Of Construction**

- **Probe:**
  - Standard: 316 Stainless Steel, Teflon & Peek
  - Optional: Duplex, Hastalloy, Monel (Others available on request)
- **Seals:**
  - Standard: Aflas and Teflon
  - Optional: Viton

- NACE compliant

**Optional Process Connection**

- **SH-2”/SS:** 2” NPT Seal Housing, 316 Stainless Steel
- **SH-2”/CS:** 2” NPT Seal Housing, Carbon Steel
- **CF-3/4”/SS:** 3/4” NPT Compression Fitting, 316 Stainless Steel
- **CF-3/4”/CS:** 3/4” NPT Compression Fitting, Carbon Steel
- **Flanged Connections:** ANSI 150# to 1500#

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All Agar Corporation Instruments are covered by one or more of the following U.S. Patents: 4,503,383; 4,774,680; 5,099,697; 5,101,163; 5,101,367; 5,263,363; 5,503,004; 5,551,305; 5,589,642; 5,741,977, RE 36,597. Other patents pending in the USA and other countries.
Model Variations

ID-201: 1/2” shaft  
Standard: 48” (4 Ft.)  
Minimum: 12” (1 Ft.)  
Maximum: 120” (10 Ft.)

ID-202:  
For probe lengths greater than 10 feet, sturdier 1-1/4” shaft assemblies from five foot sections via threaded connections.

ID-205:  
Shaft replaced by cable for suspension of antenna down through the top of the tanks, wells, platform legs, caverns, etc.

Electrical Rating

ID-201, ID-202, ID-205 Probe  
Intrinsically Safe: Class 1, Div.1, Groups C & D, T3C

ATEX:  
\[ \text{Ex II 1G Ex ia IIB T4 (-40ºC<Ta<+70ºC)} \]
\[ \text{Ex II 1G Ex ia IIC T5 (-40ºC<Ta<+65ºC)} \]

Power Required:  
115/240 VAC 50-60 Hz or 12/24 VDC (±20%);  
Normal Power Consumption 3 Watts  
Maximum Power Consumption of 250 Watts (including lights)

PS-201 Enclosures:  
Weatherproof (N4X) NEMA 4X  
Explosion Proof (N4/7) NEMA 4/7 Class 1, Div. 1, Groups C&D

Flame-Proof (N4/7) NEMA 4/7 ATEX:  
\[ \text{Ex II 2G Ex d[ia] IIB T6 (-20ºC<Ta<+55ºC)} \]

Wiring Connections:  
Barrier Terminal Block #18 AWG Maximum Diameter

Standard Output Options

ID-201/420:  
Powered 4-20 mA into 400 Ohms Maximum; 4 mA = Oil, or Lowest Water Content

ID-201/RL:  
Relay Contact 1A; 115V; NO and NC; (SPDT); Fail Safe On Water or Oil;  
Adjustable Trip Point

ID-201/RL/420:  
Relay and 4-20mA Options

ID-201/RL/LI:  
Relay with Local Indicating Lights; Amber = Oil, Blue = Water

CERTIFICATIONS

CSA-US Canadian Standards Association /UL Specifications  
ATEX European Committee for Electrical Standardization  
GOST-R Russian Approval, ROSTECHNADZOR Safety  
JRIIS Japanese Research Institute of Industrial Safety