

The INVALCO Model 2100 Net Oil Computer is used to determine net oil, net water, BS&W content, and net gas produced in a well test or similar operation.

Features

- 3 Meter Inputs
- Four Line 20 Character Alpha Numeric Display
- Jumper Selectable RS485 or RS232 Communication Option
- Four 10 amp SPDT Dry Contact Relays
- One Megabyte of CMOS RAM Data Storage with Battery Backup.

Benefits

- Measure BS&W, Total Water, Total Oil, Total Gas
- Easy to Read - Even in Low Light Conditions
- Communicate Directly with SCADA System
- Control All Your Needed Accessories
- Retain All Important Data, Even if Power is Interrupted

Specifications

Enclosure

NEMA 4X fiberglass with clear hinged door.
Inner metal door allows easy access to wiring terminals and supports user interface.

Memory

Battery backed RAM memory storage of setup and data values for 10 years.

Power

110-220 VAC 50-60 Hz fused at 2 ampre
12 or 24 VDC fuse type Littlefuse @273002

Inputs

Counts

- 3 - dry contact (16Hz maximum frequency)
 - 3 - Pre-amp or photo pulser (10KHz maximum frequency)
 - 3 - pickup coil (10KHz maximum frequency)
- (Any combination of the count inputs can be configured = 3 meter inputs total)
Count Accuracy +/-0.25% of input counts per unit volume.

Temperature

- 2 - dual thermistor probe inputs standard (LEMC #5507 probes)
 - 20°F to 150°F standard
 - +/-0.15°F Accuracy
 - 1 - probe for emulsion stream temperature averaging.
 - 1 - probe for gas stream temperature averaging.
- Optional higher temperature ranges available
(32°F - 212°F or 60°F - 240°F)

Analog

- 1 - BS&W input scalable for 0-5 VDC, 1-5 VDC (0-100%)
- 1 - BS&W input scalable 4-20mA (0-100%)
- 1 - Gas pressure input 1-5 VDC or 4-20mA



Model 2100 Net Oil Computer

Discrete

- 3 - Self powered dry contact closure inputs for external monitoring using Modbus Communication.
- 1 - Self powered dry contact closure input used as system reset integral with reset switch.

Outputs

- 4 - relay NO or NC contacts 10 amp SPDT
 - 3 - relays used for volume pulse output (Net or Gross-tenths of a barrel or cubic foot)
 - 1 - relay for Alarm or Error indication/control
 - 12 or 24 VDC output
- Serial Communication RS 232 three wire, or RS 485 five wire (Modbus RTU communication protocol)

User Interface

- Screen - 4 line by 20 character vacuum Florissant display.
- 4 - touch switches used to scroll through screens and change values
- 1 - toggle switch for reset
- FWD** - (forward) - moves through displays in a forward direction.
- REV** - (reverse) - moves through displays in a reverse direction
- UP** - increases values on screens where user interface is required
- DWN** - (down) - decreases values or changes current option on screens where user interface is required.
- Reset** - resets totals.

Optional external reset with dry contact using terminal block input where Reset switch is terminated also.

Model CX-545 Capacitance Probe & Model 4528-100-IL Detector



Model CX-545 Capacitance Probe

Features

- **NACE Adaptable** - Can be modified for use in sour service.

Detector/Probe Specifications

Power Supply

12 Vdc @ 130 mA for 0-5 Vdc output.

24 Vdc required for 4-20 mA output.

S&W Range

0-100%.

Measurement Accuracy

±1.0%

Resolution/Sensitivity

±0.5%

Probe Material

A53 GrB Carbon Steel is standard.

Stainless Steel available.

Internal Probe Finish

Baked-on phenolic two-part epoxy.

Probe Sizes/Length

2" I.D. is 17" face-to-face.

3" to 12" I.D. sizes are 32" face-to-face.

Process Connections

ANSI RF or RTJ Flanges to 600# (all sizes) (others by special order).

Threaded MNPT or Grooved (2" and 3").

Pressure Ratings

As per Flange selection, 1440 psig max. (Others by special order)

NPT - 1440 psig max.

Victualic grooved - 350 psig

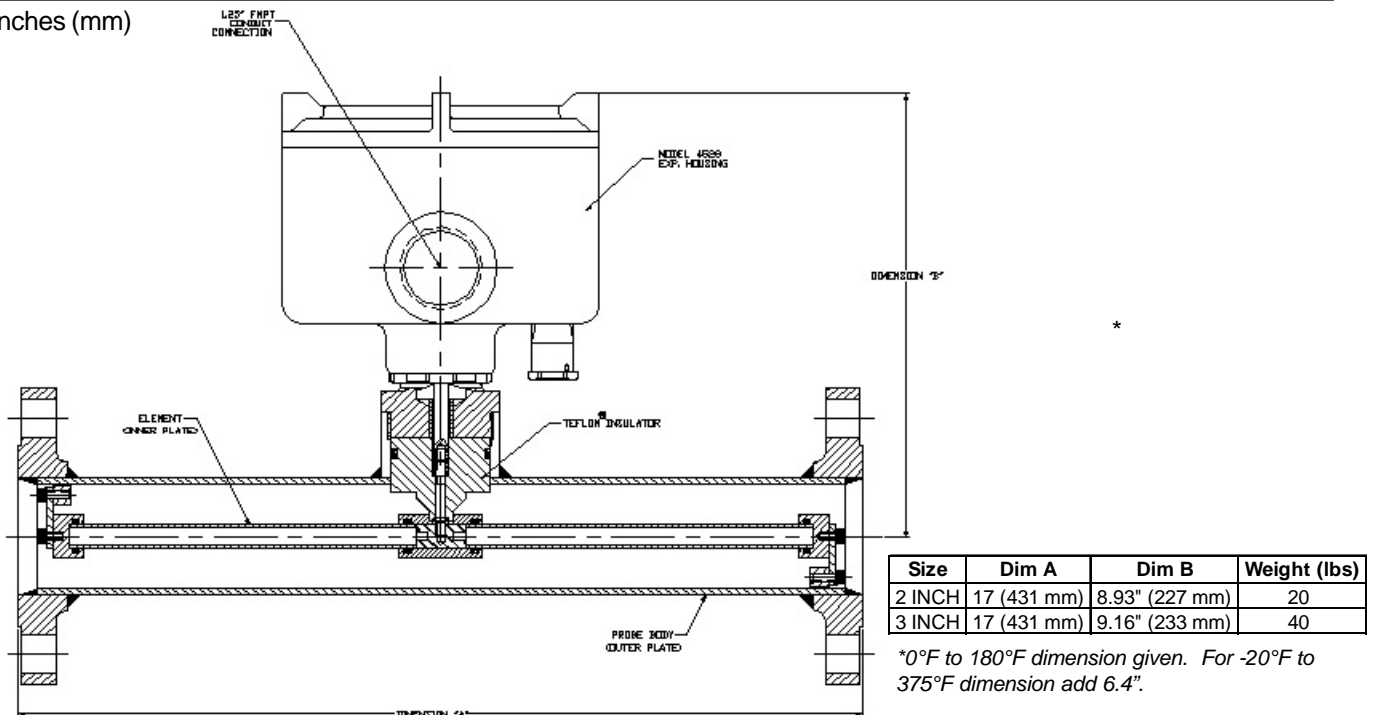
Temperature Range

-20°F to 180°F standard.

-20°F to 375°F optional.

Dimensions - CX-545 Specifications

Inches (mm)

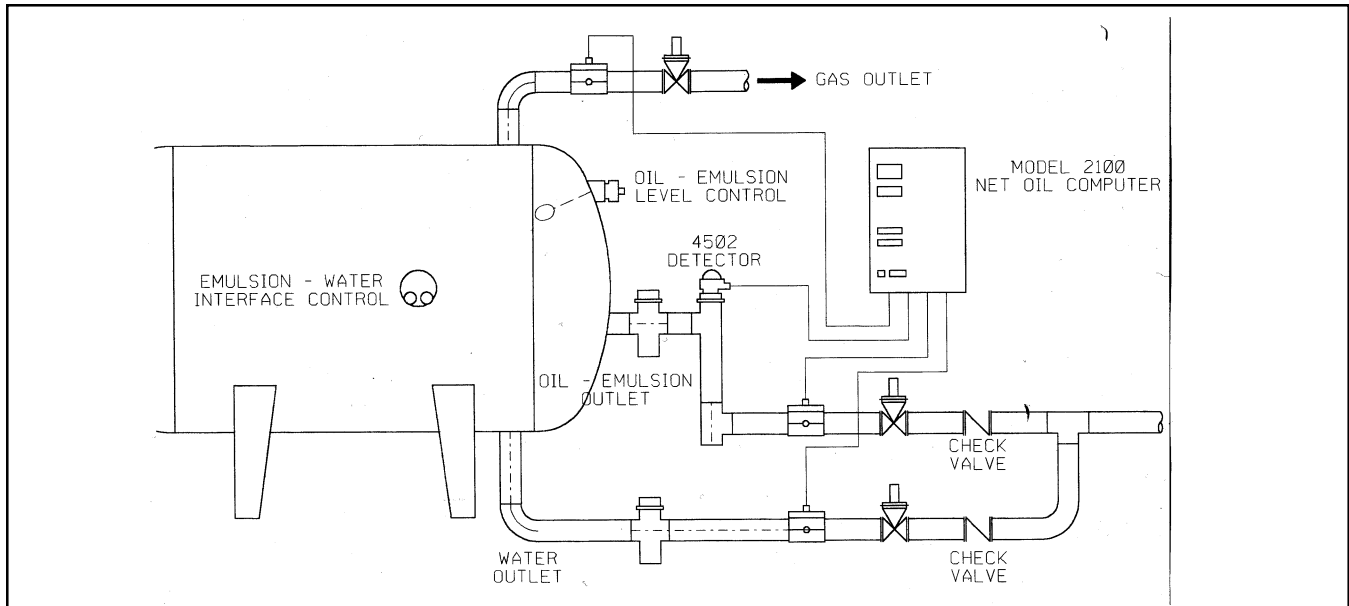


Note: Dimensions - Inches to the nearest tenth (millimeters to the nearest whole mm), each independently dimensioned from respective engineering drawings.

CX-545 Capacitance Probe Ordering Information

CX-545		PROBE MATERIAL: Carbon Steel	
		CODE	PROBE BODY SIZE - Consult Factory for larger sizes
		2	2 INCH I.D. x 17" FACE TO FACE
		3	3 INCH I.D. x 32" FACE TO FACE
		4	4 INCH I.D. X 17" FACE TO FACE
		CODE	END CONNECTIONS
		00	SCREWED ENDS (2" & 3" only)
		00	GROOVED ENDS/Victaulic (2", 3" & 4" only)
		00	150 LB ANSI RAISED FACE
		30	300 LB ANSI RAISED FACE
		60	600 LB ANSI RAISED FACE
		90	900 LB ANSI RAISED FACE(SCH 80)
		05	150 LB ANSI RTJ
		35	300 LB ANSI RTJ
		65	600 LB ANSI RTJ
		95	900 LB ANSI RTJ (SCH 80)
		115	1500 LB ANSI RTJ (SCH 160)
		CODE	MATERIAL AND TEMPERATURE OPTIONS
		B	STANDARD MATERIALS, A53B CARBON STEEL, -20 - 180° F
		H	STANDARD MATERIALS/HIGH TEMP, -20 - 375° F
		S	316 STAINLESS STEEL MATERIALS -20 - 180° F
		T	316 STAINLESS STEEL/HIGH TEMP, -20 - 375°F
		CODE	CONNECTION STYLE
		S	SCREWED CONNECTIONS, MNPT
		G	VICTAULIC CONNECTIONS (GROOVED)
		F	FLANGED CONNECTIONS
		CODE	OPEN
		P	PHENOLIC COATING (Interior)
Example:			
CX - 545 -	3	60 -	B F P = CX-545-360-BFP
Choose one code selection from each option group to build model number.			

Three-Phase System with Three Meters





www.fmcinvalco.com

The specifications contained herein are subject to change without notice and any user of said specifications should verify from the manufacturer that the specifications are currently in effect. Otherwise, the manufacturer assumes no responsibility for the use of specifications which may have been changed and are no longer in effect.

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