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**MODEL 30EBX25  
30EBX50  
30EFX25**  
WELL TYPE MANOMETER

## DESCRIPTION

The Meriam Model 30EBX25 and 30EFX25 well type manometer are direct reading manometers designed for process, general purpose production testing, or laboratory measurement of pressures, vacuums, or differential pressures.

Designed for a maximum operating pressure of 250 PSIG,\* these instruments can also be used to measure flow, tank level, and pressure drop or distribution across operating equipment. Raised wells can be furnished so positive and negative pressures or reversing flow can be indicated without changing the pressure connections. Various mounting styles to satisfy installation requirements are available.

\*Model for 500 psi is 30EBX50

## CONSTRUCTION

The manometer body is of aluminum channel construction. Stainless steel end blocks, for packing the glass indicating tube, are screwed to the body. The 7/16" outside diameter glass tubing is yoke packed with viton gaskets at each end block and is supported at spaced intervals to prevent tube distortion.

The welded stainless steel manometer well has a large cross section and is readily removable for greatest ease in cleaning. Two 1/4" female pipe connections are provided on the top side of the well; one outlet is normally used for the high pressure manometer connection, while the other, provided with a plug, is used as the well fill connection.

The unit scale, located directly behind the glass indicating tube, extends the full width of the instrument body and is graduated on each side of the indicating column. This scale has a white, non-glare, satin background with black graduations and figures, and is compensated for liquid level change within the manometer well. The scale is adjustable for zero indicating fluid level by means of a non-slip, flexible shaft adjustment located in the lower end block and operated from the front of the instrument.

A transparent plexiglass cover protects the unit from dust and moisture. All exterior portions of the manometer are finished in textured, black urethane paint.

Standard pressure connections in the upper end block and at the manometer well for connecting the instrument are 1/4" female pipe connections. Suitable drain, fill and vent plugs are furnished with each unit.



Meriam Model 30EFX25 TM  
Vernier Model

# CONFIGURATOR

30 XXX XX - XXX - XX - X - XX - X - XX - X - XX - X

**Well Type**

**Model**

EBX  
EFX (vernier)

**Max. Operating Pressure**

25-250 PSI  
50-500 PSI

**Range**

6\*, 12\*, 20, 30, 35, 40, 50, 60, 80, 100 inches

**Scale**

- 01 - A Inches & tenths
- 02 - H Inches & tenths of water using 175 Blue Fluid
- 03 - G Inches & tenths of water using 827 Red Oil
- 04 - B Inches of water using Mercury
- 05 - C Pounds and tenths (PSI) using Mercury
- 06 - F Centimeters & Millimeters
- 07 - I Inches & fifths using 295 Red Fluid
- 08\* - A/B Duplex - inches & tenths (left) inches of water using Mercury (right)
- 09\* - A/F Duplex - Inches & tenths (left) centimeters & millimeter (right)
- 10\* - A/C Duplex - Inches & tenths (left) pounds & tenths (PSI) using Mercury (right)
- 11\* - B/C Duplex - Inches of water using Mercury (left) pounds & tenths (PSI) using Mercury (right)
- 12 - Special
- 13 - No scale

\*not Available or Special in EFX (vernier) Model

Moisture Proof option – consult factory.

**Hand Pump**

0 – Omit  
1 – Hand Pump

**Level**

00 – Omit  
01 – Level

**Magnifier**

0 – Omit  
1 – Magnifier

**Check Valve**

00 – Omit  
01 – 942K50  
02 – 942KW50  
(mercury under water)

**Return Well**

0 – Omit  
1 – Return Well  
934H50

**Valve & Piping**

00 – Omit  
01 – Steel 943AC300  
02 – Stainless  
943AS300

**Mounting**

1 – Wall mounting  
2 – Table mounting  
3 – Pipe mounting  
4 – Flush front

## ADDITIONAL ACCESSORIES

**Scales**

- KPA Kilopascals using Mercury
- MB Centimeters of water using mercury
- MBAR Millibars using Mercury
- MC Kilograms per square centimeter using Mercury
- MI Centimeters of water using 295 Fluid

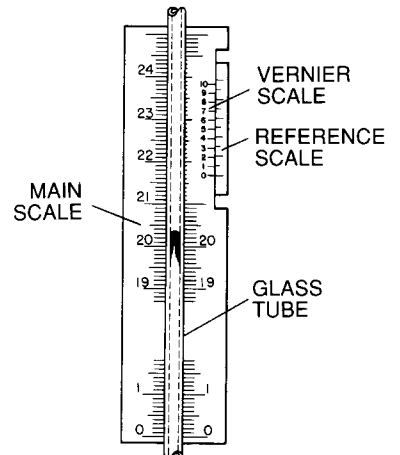
- Bubbler - model 931R or 931S
- Line Trap - model 932R or 932S
- Moisture Trap - model 933A10
- Pressure/Vacuum Variator - model 971A3
- Tank Gauge Accessories
- Pipe Saddle - model 912S
- Raised Well

## AVAILABLE FLUIDS

- 921A - Mercury
- 922WA - 1000 Green Concentrate
- 923RO - 827 Red Oil
- 923RU - 100 Red Unity Oil
- 924BB - 175 Blue Fluid
- 924BA - 295 Red Fluid

## VERNIERS

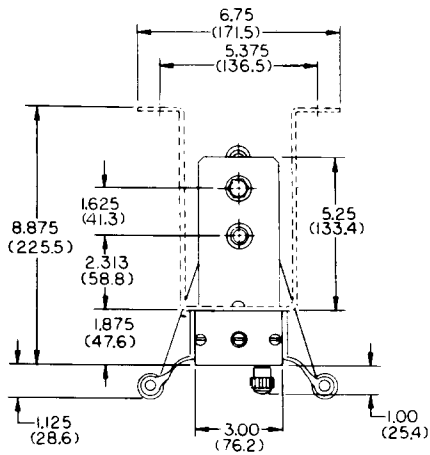
With the full scale vernier, readings can be obtained to 1/10 of the main scale subdivision. A reading is observed by aligning the fluid meniscus with the nearest lower scale division. The distance required to accomplish this is measured on the vernier scale. This is added to the main scale for the overall reading.



### Fluid Requirements & Instrument Weight:

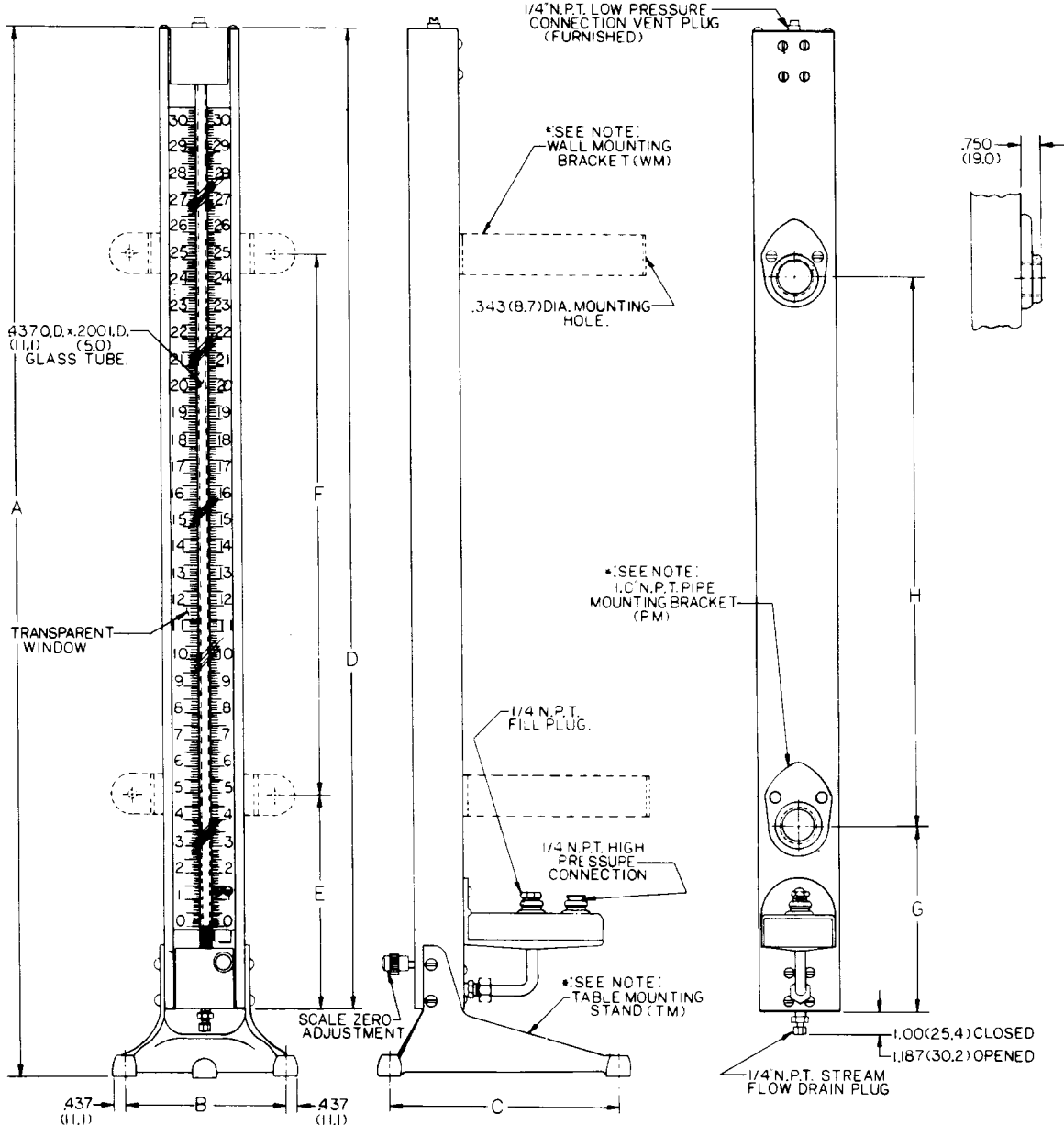
| Range         | 6   | 12  | 20  | 30  | 35  | 40  | 50  | 60  | 80  | 100 |
|---------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| Weight        | 6   | 9   | 11  | 12  | 12½ | 13  | 14  | 17  | 21  | 24  |
| Mercury Lbs.  | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 3   | 5   | 5   |
| #3 Fluid Lbs. | .75 | .75 | .75 | .75 | .75 | .75 | .75 | .75 | 1.5 | 1.5 |
| Fluid Ounces  | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 4   | 7   | 7   |

Consult Factory for special scale and fluids.



| RANGE | A                  | B                | C                | D                  | E               | F                 | G               | H                 |
|-------|--------------------|------------------|------------------|--------------------|-----------------|-------------------|-----------------|-------------------|
| 6"    | 15.25<br>(387.4)   | 5.125<br>(130.2) | 7.75<br>(196.9)  | 12.75<br>(323.9)   | 6.25<br>(158.9) | 3.75<br>(95.3)    | 9.00<br>(228.6) | —                 |
| 12"   | 21.25<br>(539.8)   | 5.125<br>(130.2) | 7.75<br>(196.9)  | 18.75<br>(476.3)   | 8.00<br>(203.2) | 5.50<br>(139.7)   | 7.00<br>(177.8) | —                 |
| 20"   | 29.25<br>(743.0)   | 5.125<br>(130.2) | 7.75<br>(196.9)  | 26.75<br>(679.5)   | 8.00<br>(203.2) | 10.50<br>(266.7)  | 7.00<br>(177.8) | —                 |
| 30"   | 39.25<br>(997.0)   | 5.125<br>(130.2) | 7.75<br>(196.9)  | 36.75<br>(933.5)   | 8.00<br>(203.2) | 20.50<br>(520.7)  | 7.00<br>(177.8) | 19.50<br>(495.3)  |
| 35"   | 44.25<br>(1124.0)  | 8.00<br>(203.2)  | 12.00<br>(304.8) | 41.75<br>(1060.5)  | 8.00<br>(203.2) | 25.50<br>(647.7)  | 7.00<br>(177.8) | 24.50<br>(622.3)  |
| 40"   | 49.25<br>(1251.0)  | 8.00<br>(203.2)  | 12.00<br>(304.8) | 46.75<br>(1187.5)  | 8.00<br>(203.2) | 30.50<br>(774.7)  | 7.00<br>(177.8) | 29.50<br>(749.3)  |
| 50"   | 59.25<br>(1505.0)  | 8.00<br>(203.2)  | 12.00<br>(304.8) | 56.75<br>(1441.5)  | 8.00<br>(203.2) | 40.50<br>(1028.7) | 7.00<br>(177.8) | 39.50<br>(1003.3) |
| 60"   | 69.25<br>(1759.0)  | 8.00<br>(203.2)  | 12.00<br>(304.8) | 66.75<br>(1695.5)  | 8.00<br>(203.2) | 50.50<br>(1282.7) | 7.00<br>(177.8) | 49.50<br>(1257.3) |
| 80"   | 89.25<br>(2267.0)  | 8.00<br>(203.2)  | 12.00<br>(304.8) | 86.75<br>(2203.5)  | 8.00<br>(203.2) | 70.50<br>(1790.7) | 7.00<br>(177.8) | 69.50<br>(1765.3) |
| 100"  | 109.25<br>(2775.0) | 8.00<br>(203.2)  | 12.00<br>(304.8) | 106.75<br>(2711.5) | 8.00<br>(203.2) | 90.50<br>(2298.7) | 7.00<br>(177.8) | 89.50<br>(2273.3) |

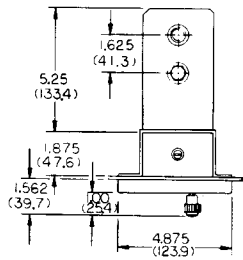
NOTE: ALL NUMBERS IN PARENTHESIS ARE IN MILLIMETERS.



FINISH BLACK TEXTURED URETHANE

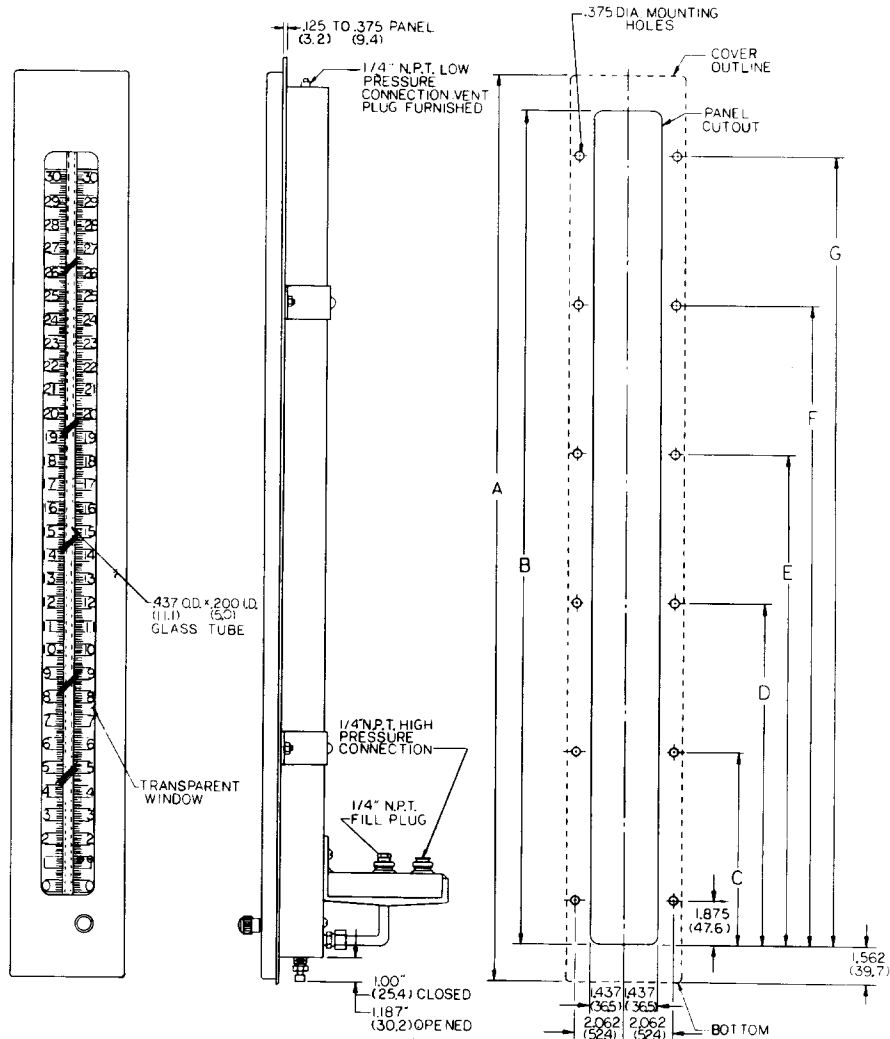
MODEL 30EBX25 WELL TYPE MANOMETER

\*NOTE: THIS DRAWING SHOWS THREE OF THE AVAILABLE MOUNTING STYLES: TABLE MOUNT (TM), WALL MOUNT (WM), AND PIPE MOUNT (PM); WHEN ORDERING THE CUSTOMER MUST SPECIFY THE TYPE OF MOUNTING REQUIRED.



| RANGE | A                   | B                   | C                | D                 | E                  | F                  | G                  |
|-------|---------------------|---------------------|------------------|-------------------|--------------------|--------------------|--------------------|
| 6"    | 14.375<br>(365.1)   | 11.250<br>(285.8)   | 5.625<br>(142.9) | 9.375<br>(238.1)  | —                  | —                  | —                  |
| 12"   | 20.375<br>(517.5)   | 17.250<br>(438.2)   | 7.375<br>(187.4) | 12.875<br>(327.0) | 15.375<br>(390.5)  | —                  | —                  |
| 20"   | 28.375<br>(720.7)   | 25.250<br>(641.4)   | 7.375<br>(187.4) | 17.875<br>(454.0) | 23.375<br>(593.7)  | —                  | —                  |
| 30"   | 38.375<br>(974.7)   | 35.250<br>(895.4)   | 7.375<br>(187.4) | 17.625<br>(447.7) | 27.875<br>(708.0)  | 33.375<br>(847.7)  | —                  |
| 35"   | 43.375<br>(1101.7)  | 40.250<br>(1022.4)  | 7.375<br>(187.4) | 20.125<br>(511.2) | 32.875<br>(835.0)  | 38.375<br>(974.7)  | —                  |
| 40"   | 48.375<br>(1228.7)  | 45.250<br>(1149.4)  | 7.375<br>(187.4) | 22.625<br>(574.7) | 37.875<br>(962.0)  | 43.375<br>(1101.7) | —                  |
| 50"   | 58.375<br>(1482.7)  | 55.250<br>(1403.4)  | 7.375<br>(187.4) | 19.125<br>(485.8) | 36.125<br>(917.6)  | 47.875<br>(1216.0) | 53.375<br>(1355.7) |
| 60"   | 68.375<br>(1736.7)  | 65.250<br>(1657.4)  | 7.375<br>(187.4) | 23.125<br>(587.4) | 42.125<br>(1070.0) | 57.875<br>(1470.0) | 63.375<br>(1609.7) |
| 80"   | 88.375<br>(2244.7)  | 85.250<br>(2165.4)  | 7.375<br>(187.4) | 29.125<br>(739.8) | 56.125<br>(1425.6) | 77.875<br>(1978.0) | 83.375<br>(2117.7) |
| 100"  | 108.375<br>(2752.7) | 105.250<br>(2673.4) | 7.375<br>(187.4) | 36.125<br>(917.6) | 69.125<br>(1755.8) | 97.875<br>(2486.0) | 103.37<br>(2625.7) |

NOTE: ALL NUMBERS IN PARENTHESIS ARE IN MILLIMETERS.



MODEL 30EBX25 FF WELL TYPE MANOMETER  
FLUSH FRONT MOUNTING



**Meriam Instrument**  
a Scott Fetzer company