



10920 MADISON AVENUE • CLEVELAND, OHIO 44102  
(216) 281-1100 FAX: (216) 281-0228

## MODEL 33KBX35

### DESCRIPTION

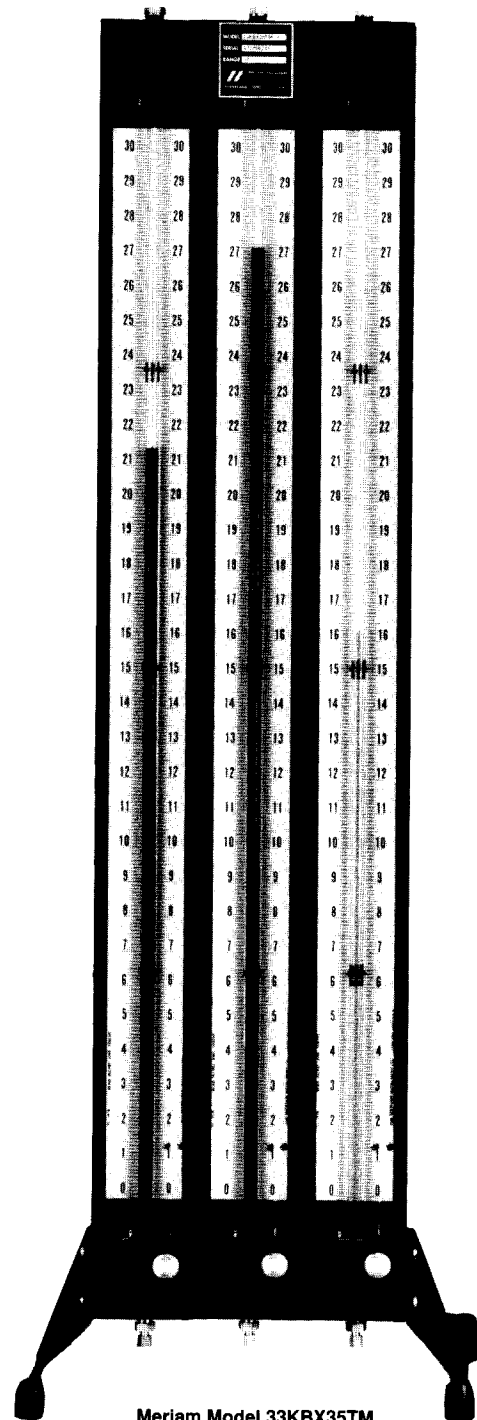
Model 33KBX35, Meriam multiple tube well type manometer, is a versatile instrument used in production testing, process measurement, and for laboratory data analysis. Up to six individual direct reading manometer systems are enclosed in individual compact cases. Each tube (system) can be used to measure pressure, vacuum, differential pressure, flow, or liquid level. Complex pressure distributions or multiple pressure relationships are easily observed and readily compared.

Different manometer fluids of various densities can be used in each tube. The scales can be graduated as required. Flexibility for various application requirements is possible by design modifications. For example, raised wells can be furnished so positive and negative pressures can be indicated without changing the pressure connections.

The multiple tube type manometer is widely used for tank liquid level measurement. Many tanks located remotely on a tank farm are connected to the level gauges in the central control instrument panel. Special scales can be graduated duplex to indicate tank liquid depth in feet and inches, as well as tank capacity in gallons or pounds.

### CONSTRUCTION

The indicating tubes are ruggedly housed in individual aluminum channels which are securely connected together. The end blocks are constructed of stainless steel. Each manometer has a large bore glass indicating tube (securely packed with leakproof seals) to give a bold, easy-to-read indicating column with any manometer fluid. Stainless steel fluid wells of large cross sectional area are fabricated to close dimensional tolerances. Individual measuring scales, with sharp black graduations on a nonglare white satin background, extend on both sides of the indicating column. Large numerals at both ends of major graduations provide at-a-glance readability. Individual scale adjustment for zero reference is conveniently made on each tube of the instrument. The framed window provides protection from dirt and moisture. Each tube has the Meriam Stream-Flow drain valve, to facilitate draining. The instrument finish is a durable black, textured urethane. In addition to the table mounting (TM) style shown here, wall mounting (WM) and flush front mounting (FF) styles are also available.



Meriam Model 33KBX35TM

**SPECIFICATION:**

Ranges: 6, 12, 20, 30, 35, 40, 50, 60, 80, 100

Pressure Rating: 350 psi

Mounting: Wall, Table, Flush Front

No. of Tubes: 2, 3, 4, 5, 6

Body Construction: Aluminum Channels

Wetted Parts: Stainless Steel, Glass, Viton

Connections: 1/4" NPTs

Scale: Aluminum, nonglare white satin finish with black graduations

Case Finish: black textured urethane

**SCALES**

A— Linear inches and tenths

B— Inches water pressure using mercury

C— Pounds and tenths using mercury (PSI)

F— Linear centimeters and millimeters

G— Inches and tenths of water pressure using Meriam 827 Red Oil

H— Inches and tenths water pressure using Meriam 175 Blue Fluid

I— Inches and fifths water pressure using Meriam 295 Red Fluid

A/C—Duplex

Left — Linear inches and tenths

Right—Pounds and tenths using mercury

B/C—Duplex

Left—Inches of water pressure using mercury

Right—Pounds and tenths using mercury

Specials

**Fluid Requirements per Tube & Instrument Weight:**

Range	6	12	20	30	35	40	50	60	80	100
Mercury lbs.	3	3	3	3	3	3	3	3	5	5
295 Fluid lbs.	.75	.75	.75	.75	.75	.75	.75	.75	1.5	1.5
Fl. Oz.	4	4	4	4	4	4	4	4	7	7
Weight lbs. x No. tubes	6	9	11	12	12.5	13	14	17	21	24

**FLUIDS**

Meriam Instrument Mercury  
 Meriam 1000 Green Concentrate  
 Meriam 827 Red Oil  
 Meriam 100 Red Unity Oil  
 Meriam 175 Blue Fluid  
 Meriam 295 Red Fluid

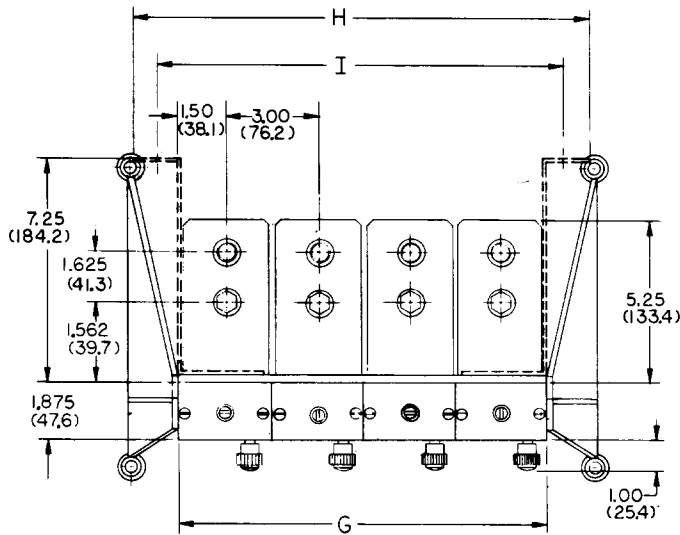
**Nominal  
Sp. Gr.**

13.54  
 1.000  
 0.827  
 1.00  
 1.75  
 2.95

**ACCESSORIES**

Return Well 934H50  
 Fluid Check Valve 942K50  
 Line Trap 932A35  
 Line Trap 932R10  
 Moisture Trap 933A10  
 Valves & Piping 943AC300 (Steel)  
 943AS300 (St. Steel)

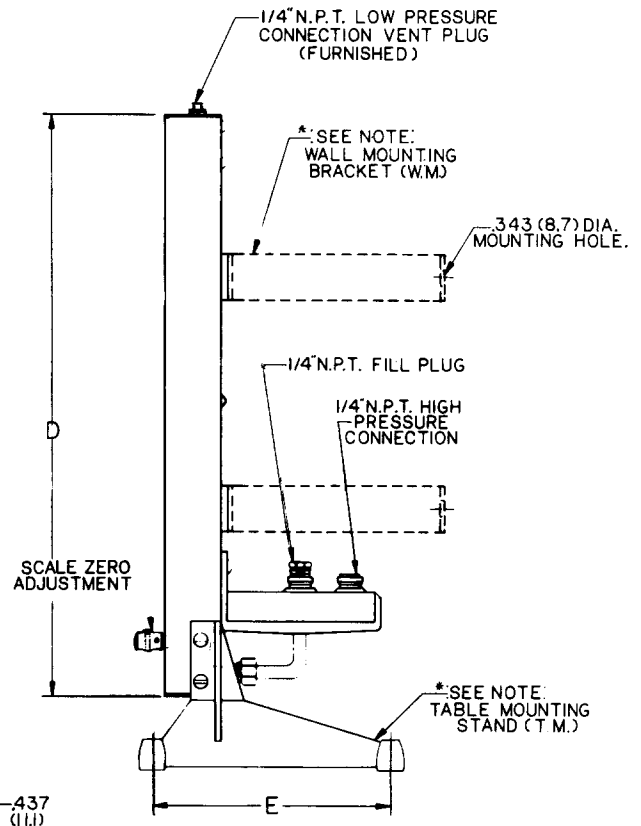
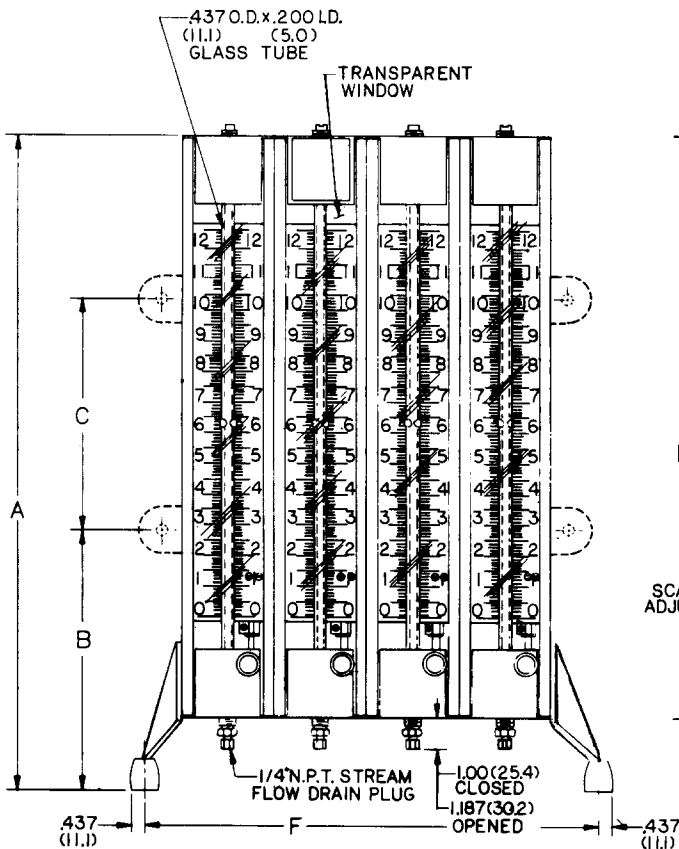
\*NOTE: THIS DRAWING SHOWS TWO OF THE AVAILABLE MOUNTING STYLES: TABLE MOUNT (T.M.), WALL MOUNT (W.M.). WHEN ORDERING THE CUSTOMER MUST SPECIFY THE TYPE OF MOUNTING REQUIRED. \*



RANGE	A	B	C	D	E
6"	15.250 (387.4)	6.250 (158.9)	3.750 (95.3)	12.75 (323.9)	7.75 (196.9)
12"	21.250 (539.8)	8.00 (203.2)	5.50 (139.7)	18.75 (476.3)	7.75 (196.9)
20"	29.250 (743.0)	8.00 (203.2)	10.50 (266.7)	26.75 (679.5)	7.75 (196.9)
30"	39.250 (997.0)	8.00 (203.2)	20.50 (520.7)	36.75 (933.5)	7.75 (196.9)
35"	44.250 (1124.0)	8.00 (203.2)	25.50 (647.7)	41.75 (1060.5)	12.00 (304.8)
40"	49.250 (1251.0)	8.00 (203.2)	30.50 (774.7)	46.75 (1187.5)	12.00 (304.8)
50"	59.250 (1505.0)	8.00 (203.2)	40.50 (1028.7)	56.75 (1441.5)	12.00 (304.8)
60"	69.250 (1759.0)	8.00 (203.2)	50.50 (1282.7)	66.75 (1695.5)	12.00 (304.8)
80"	89.250 (2267.0)	8.00 (203.2)	70.50 (1790.7)	86.75 (2203.5)	12.00 (304.8)
100"	109.250 (2775.0)	8.00 (203.2)	90.50 (2298.7)	106.75 (2711.5)	12.00 (304.8)

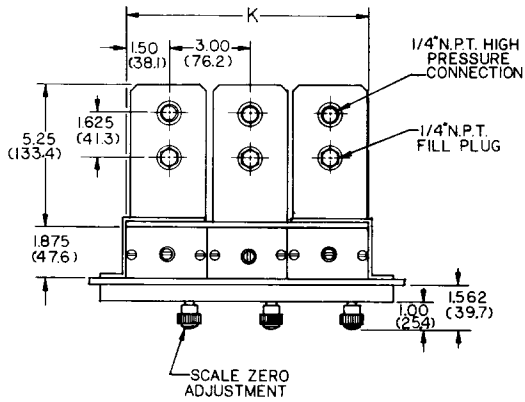
NOTE: ALL NUMBERS IN PARENTHESIS ARE IN MILLIMETERS.

TUBE QTY	RANGES 6"-30"	RANGES 35"-100"	G	H	I
2	9.125 (231.8)	10.00 (254.0)	6.00 (152.4)	8.875 (225.5)	7.375 (187.3)
3	12.125 (308.0)	13.00 (330.2)	9.00 (228.6)	11.875 (301.6)	10.375 (263.5)
4	15.125 (384.2)	16.00 (406.4)	12.00 (304.8)	14.875 (377.8)	13.375 (339.7)
5	18.125 (460.4)	19.00 (482.6)	15.00 (381.0)	17.875 (454.0)	16.375 (415.9)
6	21.125 (536.6)	22.00 (558.8)	18.00 (457.2)	20.875 (530.2)	19.375 (492.1)



FINISH: BLACK TEXTURED URETHANE

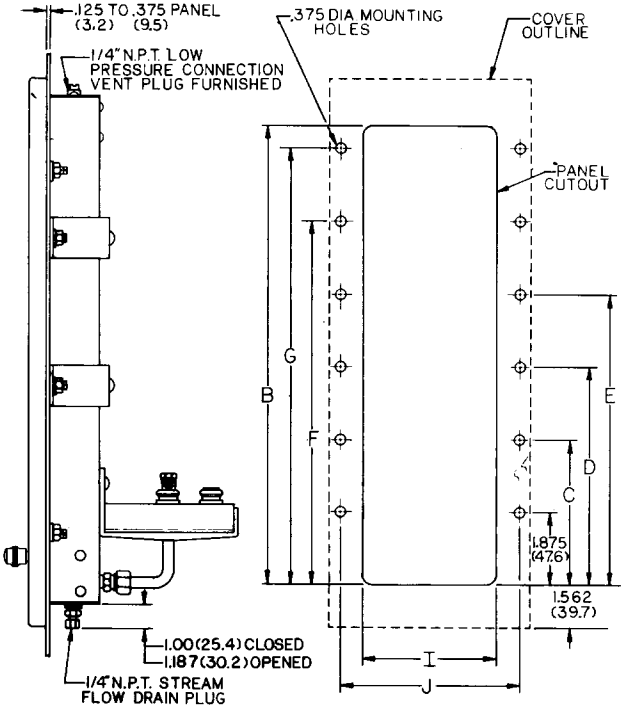
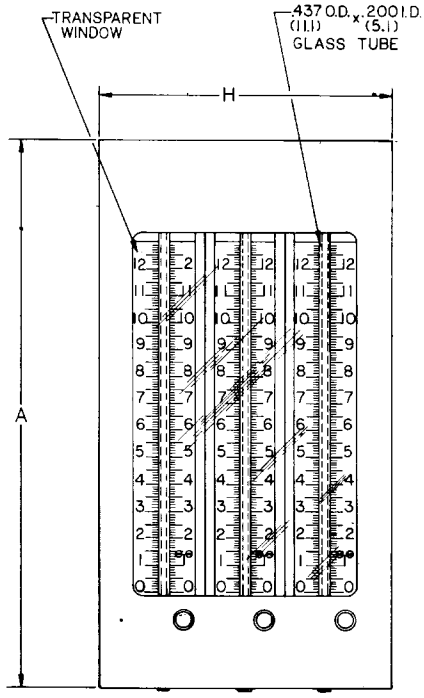
MODEL 33KBX35 WELL TYPE MANOMETER



RANGE	A	B	C	D	E	F	G
6"	14.375 (365.1)	11.250 (285.8)	5.625 (142.9)	9.375 (238.1)	—	—	—
12"	20.375 (517.5)	17.250 (438.2)	7.375 (187.4)	12.875 (327.0)	15.375 (390.5)	—	—
20"	28.375 (720.7)	25.250 (641.4)	7.375 (187.4)	17.875 (454.0)	23.375 (593.7)	—	—
30"	38.375 (974.7)	35.250 (895.4)	7.375 (187.4)	17.625 (447.7)	27.875 (708.0)	33.375 (847.7)	—
35"	43.375 (1101.7)	40.250 (1022.4)	7.375 (187.4)	20.125 (511.2)	32.875 (835.0)	38.375 (974.7)	—
40"	48.375 (1228.7)	45.250 (1149.4)	7.375 (187.4)	22.625 (574.7)	37.875 (962.0)	43.375 (1101.7)	—
50"	58.375 (1482.7)	55.250 (1403.4)	7.375 (187.4)	19.125 (485.8)	36.125 (917.6)	47.875 (1216.0)	53.375 (1355.7)
60"	68.375 (1736.7)	65.250 (1657.4)	7.375 (187.4)	23.125 (587.4)	42.125 (1070.0)	57.875 (1470.0)	63.375 (1609.7)
80"	88.375 (2244.7)	85.250 (2165.4)	7.375 (187.4)	29.125 (739.8)	56.125 (1425.6)	77.875 (1978.0)	83.375 (2117.7)
100"	108.375 (2772.7)	105.250 (2673.4)	7.375 (187.4)	36.125 (917.6)	69.125 (1755.8)	97.875 (2486.0)	103.375 (2625.7)

NOTE: ALL THE NUMBERS IN PARENTHESIS ARE IN MILLIMETERS.

TUBE QTY.	H	I	J	K
2	7.875 (200.0)	5.875 (149.2)	7.125 (181.0)	6.00 (152.4)
3	10.875 (276.2)	8.875 (225.4)	10.125 (257.2)	9.00 (228.6)
4	13.875 (352.4)	11.875 (301.6)	13.125 (333.4)	12.00 (304.8)
5	16.875 (428.6)	14.875 (377.8)	16.125 (409.6)	15.00 (381.0)
6	19.875 (504.8)	17.875 (454.0)	19.125 (485.8)	18.00 (457.2)



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