



VACUUM MEASURING TUBES

Vacuum measuring tubes are designed to become part of an evacuated system. With suitable circuitry, the pressure in that system may be accurately determined. The Bayard-Alpert ionization gauge is used for measurement of very low pressures. The Schulz-Phelps ionization gauge measures pressures up to one atmosphere. The Pirani and thermocouple gauges

are less accurate and measure only the higher pressures, but, their associated circuitry is much simpler.

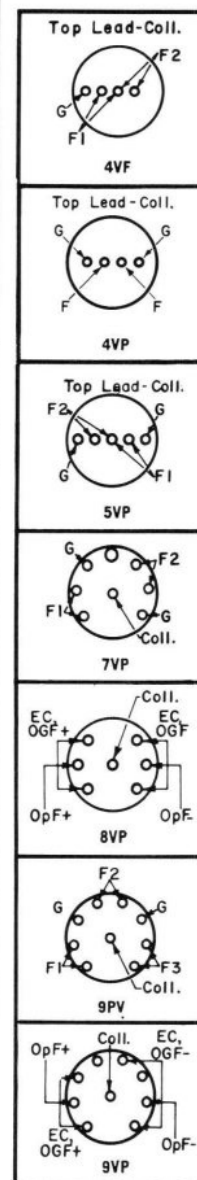
These tubes are used in electron tube and semiconductor device processing control, vacuum deposition, research and rocket altimeter applications.

Ionization Gauges

TUBE TYPE	TUBE CLASS	RANGE TORR	ELECTRICAL				MECHANICAL				
			FILAMENT		COLL. VOLTS	GRID VOLTS	TUBULATION		MAX. OAL (1)	MAX. DIAM.	BASE DWG.
			VOLTS	AMPS.			SIZE	MAT'L.			
WL-5966	Bayard-Alpert (2)	10^{-3} to 10^{-10}	7	2.5	—30	150	1/2"	Nonex	11 1/2"	3 1/8"	4VF
WL-7676	Schulz-Phelps	5×10^{-1} to 10^{-5}	2	2.25	—60	60	1/2"	Nonex	7 1/4"	1 13/16"	8VP
WL-7903	Schulz-Phelps	5×10^{-1} to 10^{-5}	1.3	2.4	—60	60	1/2"	Pyrex	7 1/4"	1 13/16"	9VP
WL-7904	Bayard-Alpert (2)	10^{-3} to 10^{-9}	4	1.5	—30	150	1/2"	Pyrex	7 1/4"	1 3/16"	9PV
WL-8057	Bayard-Alpert (3)	10^{-3} to 10^{-9}	7	2.5	—30	150	3/4"	Nonex	5 1/4"	4 9/16"	5VP
WL-22612	Bayard-Alpert (2)	10^{-3} to 10^{-9}	7	2.5	—30	150	1/2"	Pyrex	11 1/2"	3 1/8"	4VF
WL-22613	Bayard-Alpert (2)	10^{-3} to 10^{-9}	7	2.5	—30	150	3/4"	Pyrex	11 1/2"	3 1/4"	4VF
WL-22614	Bayard-Alpert (2)	10^{-3} to 10^{-9}	7	2.5	—30	150	1"	Pyrex	11 1/2"	3 3/8"	4VF
WL-22618	Bayard-Alpert (2)	10^{-3} to 10^{-9}	7	2.5	—30	150	1/2"	Pyrex	5 3/8"	5 5/16"	4VF
WL-22619	Bayard-Alpert (2)	10^{-3} to 10^{-9}	7	2.5	—30	150	3/4"	Pyrex	5 3/8"	5 5/16"	4VF
WL-22620	Bayard-Alpert (2)	10^{-3} to 10^{-9}	7	2.5	—30	150	1"	Pyrex	5 3/8"	5 5/16"	4VF
WL-22627	Bayard-Alpert (2)	10^{-3} to 10^{-10}	7	2.5	—30	150	3/4"	Pyrex	8"	2 1/8"	7VP
WL-22637	Bayard-Alpert (3)	10^{-3} to 10^{-9}	7	2.5	—30	150	3/4"	Pyrex	6 3/8"	5 5/16"	5VP
WL-22640	Bayard-Alpert (3)	10^{-3} to 10^{-9}	7	2.5	—30	150	3/4"	Kovar	6 3/8"	5 5/16"	5VP
WL-22643	Bayard-Alpert (3)	10^{-3} to 10^{-9}	7	2.5	—30	150	3/4"	Pyrex	8"	2 1/8"	7VP
WL-22754	Bayard-Alpert (4)	10^{-3} to 10^{-9}	2.5	2.5	—30	150	3/4"	Nonex	5 1/4"	4 9/16"	5VP
WL-22868	Bayard-Alpert (4)	10^{-3} to 10^{-9}	2.5	2.5	—30	150	3/4"	Pyrex	5 1/4"	4 9/16"	5VP
WL-22869	Bayard-Alpert (4)	10^{-3} to 10^{-9}	2.5	2.5	—30	150	3/4"	Kovar	5 1/4"	4 9/16"	5VP
WL-22923	Schulz-Phelps	5×10^{-1} to 10^{-5}	2	2.25	—60	60	1/2"	Kovar	7 1/4"	1 13/16"	9VP
WL-22947	Bayard-Alpert (4)	10^{-3} to 10^{-9}	2.5	2.5	—30	150	3/4"	Nonex	5 1/4"	4 9/16"	4VP
WL-22948	Bayard-Alpert (4)	10^{-3} to 10^{-9}	2.5	2.5	—30	150	3/4"	Pyrex	5 1/4"	4 9/16"	4VP
WL-22949	Bayard-Alpert (4)	10^{-3} to 10^{-9}	2.5	2.5	—30	150	3/4"	Kovar	5 1/4"	4 9/16"	4VP

Notes

1. Excluding flexible leads. Length and diameter describe space to contain tube.
2. Grid outgassed by electron bombardment.
3. Grid outgassed by a-c current conduction.
4. Non-burn-out filament and grid outgassed by a-c current conduction.



Pirani Tubes

TUBE TYPE	FILAMENT		TUBULATION		RANGE TORR	MAX. OAL	MAX. DIAM.	BASE DWG.
	MAT'L.	AMPS.	SIZE	GLASS				
WL-762	Platinum	0 to 0.3	3/8"	Nonex	1 to 5×10^{-4}	7 15/16"	1 9/16"	4A
WL-765	Platinum	0 to 0.3	5/8"	Nonex	1 to 5×10^{-4}	6 3/4"	1 9/16"	4A
WL-765A	Platinum	0 to 0.3	None	None	1 to 5×10^{-4}	5 1/4"	1 9/16"	4A

