

Vacuum Gauge Selection Guide

Vacuum measurement is the foundation of vacuum technology.

ULVAC products place particular emphasis on fundamentals. The know-how accumulated through years of experience as a leading company in vacuum technology is fully used in the vacuum gauge product lineup.

Vacuum measurement for various fields

Pressure measurement (vacuum measurement) is a basic technology required for research, development, production technology, quality control, and manufacturing processes. ULVAC proudly produces highly reliable vacuum gauges and vacuum measurement equipment for use in a wide range of fields.



SP1/WP-01



SO1/O-14



BPR2



BO1



ISM2



ISO2

Vacuum pressure measurement ranges

Product	Model	Pa														
		10 ⁻¹¹	10 ⁻¹⁰	10 ⁻⁹	10 ⁻⁸	10 ⁻⁷	10 ⁻⁶	10 ⁻⁵	10 ⁻⁴	10 ⁻³	10 ⁻²	10 ⁻¹	10 ⁰	10 ¹	10 ²	10 ³
Wide range vacuum gauge	SO1, BO1, ISO2	1 x 10 ⁻³ 1.3 x 10 ⁵														
Capacitance manometer	CCMH (T)-1000A	0.1 x 10 ² 1.3 x 10 ⁵														
	CCMH (T)-100A	0.1 x 10 ¹ 1.3 x 10 ⁴														
	CCMH (T)-10A	0.1 x 10 ⁰ 1.3 x 10 ³														
	CCMH (T)-1A	0.1 x 10 ⁻¹ 1.3 x 10 ²														
Pirani vacuum gauge	GP Series	4 x 10 ⁻¹ 3 x 10 ³														
Cold cathode type ionization vacuum gauge	GI-PA, GI-PARY	1.3 x 10 ⁻³ 1.3														
Hot cathode type ionization vacuum gauge	GI-TL3, GI-TL3RY	1.3 x 10 ⁻⁵ 6.7 x 10 ⁻¹ (with WI-T)														
	GI-D7	1.3 x 10 ⁻⁶ 1.3 x 10 ⁻² (with WI-B)														
	GI-M2	5 x 10 ⁻⁸ 1 x 10														
	GI-N8	4 x 10 ⁻⁹ 6.6 x 10 ⁻¹														
Transducer type vacuum gauge	SW1	1 x 10 ⁻¹ 1 x 10 ⁵														
	SP1, BPR2	4 x 10 ⁻¹ 3 x 10 ³														
	BMR2	5 x 10 ⁻⁸ 1 x 10														
	SC1, BCR2	5 x 10 ⁻⁵ 1														
Extreme high vacuum gauge	AxTRAN	5 x 10 ⁻¹¹ 1 x 10 ⁻²														

Applicable sensor head

Controller Gauge head	OCTIE	GP Series	GI-PA GI-PARY	GI-TL3 GI-TL3RY GI-D7	GI-M2	GI-N8	AxTRAN	G-TRAN				Specification		
								SW1	SP1, BPR2	BMR2	SC1, BCR2	Material	Gauge head attachment parameters	Others
O-11	●											SUS	dia. 18	
O-13	●											SUS	UFC034 flange	
O-14	●											SUS	NW16	
O-17	●											SUS	1/2VCR female	
SWP-01								●				SUS	dia. 18	
SWP-02								●				SUS	dia. 15	
SWP-03								●				SUS	For R3/8	
SWP-16								●				SUS	NW16	
WP-01		●							●			BS	dia. 18	Pt filament
WP-02		●							●			BS	For both dia. 15 and dia. 18	Pt filament
WP-03		●							●			BS	For R3/8	Pt filament
WP-04		●										W glass	dia. 18	Pt filament
WP-05		●										W glass	For both dia. 15 and dia. 18	Pt filament
WP-16		●										BS	NW16	Pt filament
WPB-10-034		●							●			SUS	UFC034 flange	Pt filament
WPB-10-070		●							●			SUS	UFC070 flange	Pt filament
WI-PA		●							●			BS	For both dia. 15 and dia. 18	
WIT-G1			●									Kovar glass	dia. 15 or dia. 18	
WIT-G2				●								Kovar glass	With Kovar pipe	
WIT-G3				●								Kovar glass	With UFC034 or UFC070	
WIB-G5				●								W glass	dia. 15 or dia. 18	
WIB-G6				●								W glass	With Kovar pipe	
WIB-G7				●								W glass	With UFC034 or UFC070	
WIB-N3				●								Nude type	UFC070 flange	
M-11				●								SUS	dia. 18	
M-12					●					●		SUS	dia. 15	
M-13					●					●		SUS	UFC034 flange	
M-14					●					●		SUS	NW16	
M-15					●					●		SUS	NW25	
WIN-G5					●					●		W glass	Sealed in	
WIN-G6						●						W glass	With Kovar pipe	
WIN-G7						●						W glass	With UFC034 or UFC070	
WIN-N2						●						Nude type	UFC070 flange	
WIN-N3						●						Nude type	UFC070 flange	BNC connector
C-21						●						SUS	For both dia. 15 and dia. 18	
C-23											●	SUS	UFC034 flange	
C-24											●	SUS	NW16	
C-25											●	SUS	NW25	
X-11							●				●	SUS	UFC070 flange	

**G-TRAN Series:
Selection Guide**

The G-TRAN Series, a transducer type vacuum gauge that completely changes the concept conventional vacuum gauges, has been added to the new lineup.

Unit	Pirani gauge	Hot cathode gauge	Cold cathode gauge
Sensor unit (Single block containing measurement element and circuits) When there is no need for a display and only analog signal and set point output are required.	SP1 SW1		SC1
Box unit (Measurement element and circuits are separate) When baking is required When a serial communication is required	BPR2	BMR2	BCR2
Display unit (Connected to sensor/box unit) When pressure display is required	ISP1 ISP2	ISM1 ISM2	ISG1
Multi Display unit	IM1R1/IM2R1		