

Vacuum Control Catalog 2018–2020

Vacuum Gauges, Fittings and Feedthroughs





Gauge Selection Overview

Capacitance Diaphragm Gauge

CDG: gas type independent, high accuracy corrosion resistant

Sensor Temperature [°C]	Accuracy [%]	Characteristics	Setpoints	Full scales [Torr] ...		
				10m	100m	1
Ambient	0.5	Compact Gauge	w/o			
	1					
Ambient	0.2	Standard Gauge	w/o		0.1 - 100m	0.0005 - 1
		Process Gauge	2		0.1 - 100m	0.0005 - 1
		Current Loop 4-20mA	w/o		0.1 - 100m	0.0005 - 1
		EtherCAT	2			0.0005 - 1
45	0.15	Process Gauge	2		0.1 - 100m	0.0005 - 1
		Compact Gauge, EtherCAT				0.0005 - 1
		Fast Process Gauge		0.01 - 10m	0.1 - 100m	0.0005 - 1
45	0.025	Reference Gauge	w/o		0.1 - 100m	0.0005 - 1
100	0.2	Process Gauge	2		0.1 - 100m	0.0005 - 1
		Compact Gauge, EtherCAT				0.0005 - 1
		Fast Process Gauge			0.1 - 100m	0.0005 - 1
160	0.4	Process Gauge	2			0.0005 - 1
200	0.4	Process Gauge	2			0.0005 - 1
Ambient	0.4	OEM Integration	2			

Please select part number, flange, connector, filter, field bus, etc in ordering information on website or datasheet.

...Full scales [Torr]			Product	Type	Page
10	100	1000			
0.01 - 10	0.1 - 100	1 - 1000	CDG0200	Port™	A1
0.01 - 10	0.1 - 100	1 - 1000	CDG0250	SKY™	A5
			CDG0250-S		
0.01 - 10	0.1 - 100	1 - 1000	CDG0250-XS	SKY™	A6
0.01 - 10	0.1 - 100	1 - 1000	CDG0250-XS	SKY™	A13
0.01 - 10	0.1 - 100	1 - 1000	CDG0250Z	Edge™	A17
0.01 - 10	0.1 - 100	1 - 1000	CDG0450	SKY™	Az1
0.01 - 10	0.1 - 100	1 - 1000	CDG0450Z	Edge™	Az7
0.01 - 10	0.1 - 100	1 - 1000	CDG0450ha	Stripe™	A31
0.01 - 10	0.1 - 100	1 - 1000	CDGact	Cube™	A35
0.01 - 10	0.1 - 100	1 - 1000	CDG1000	SKY™	A38
0.01 - 10	0.1 - 100	1 - 1000	CDG1000Z	Edge™	A45
0.01 - 10	0.1 - 100	1 - 1000	CDG1000ha	Stripe™	A48
0.01 - 10	0.1 - 100	1 - 1000	CDG1600	SKY™	A53
0.01 - 10	0.1 - 100	1 - 1000	CDG2000	SKY™	A53
0.01 - 10	0.1 - 100	1 - 1000	CDG3000	Spot™	on request

Active Gauge Selection Overview

- Measurement principles:**
- Hot Ion
 - Cold Cathode
 - Pirani
 - Capacitance Diaphragm

Pressure Range [mbar]



Applications

<ul style="list-style-type: none"> • Fore vacuum pressure monitoring • Safety circuits in vacuum systems • General vacuum measurement and control from atmosphere to the medium vacuum range 	
<ul style="list-style-type: none"> • Load lock control • Fore vacuum pressure monitoring • Safety circuits in vacuum systems • General vacuum measurement and control from atmosphere to the medium vacuum range 	
<ul style="list-style-type: none"> • General vacuum measurement and control in the medium to the low vacuum range • Fore vacuum pressure monitoring 	
<ul style="list-style-type: none"> • Pressure measurement in semiconductor process and transfer chambers • Industrial coating • General vacuum measurement and control from atmosphere to the ultra-high vacuum range 	
<ul style="list-style-type: none"> • Pressure measurement in Semiconductor process, transfer and loadlock chambers • Industrial coating • General vacuum measurement and control from atmosphere to the ultra-high vacuum range 	
<ul style="list-style-type: none"> • Sputer applications in Semiconductor manufacturing, electronics and media industry • Industrial coating • General vacuum measurement and control in medium to the high vacuum range 	
<ul style="list-style-type: none"> • Base pressure monitoring and control, from atmosphere to high vacuum in evaporation and sputter coating applications • General vacuum measurement - Industrial furnaces, architectural glass, semiconductor, refrigeration and air conditioning • Analytical and R&D applications - mass spectrometry, electron microscopes, medical, optical thin film, optical and high energy physics 	
<ul style="list-style-type: none"> • General vacuum measurement and control in medium and high vacuum range • High vacuum pressure monitoring • Base pressure for evaporation and sputtering systems 	
<ul style="list-style-type: none"> • General vacuum measurement and control in the high vacuum range • High vacuum pressure monitoring • Evaporation and sputtering systems 	

Corrosion resistant version	Setpoints		Display	Controller					Interface					Principle	Product	Page
	1	2		Vector	PC200	PC200	PC200	PC200	PC200	PC200	PC200	PC200	PC200			
✓	2		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	PC200	A10
✓	2		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	PC200	A10
✓	2		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	PC200	A10
	1		✓												PC200	A11
	2		✓												PC200	A11
	3		✓												PC200	A11
	2		✓												PC200	A11
	2		✓												PC200	A11
	2		✓												PC200	A11
✓															PC200	A11
✓															PC200	A11

* valid till July 2018



Passive Gauge Selection Overview

Applications	Pressure Range [mbar]						
	XIV	Ultra High Vacuum	High Vacuum	Medium Vacuum	Low Vacuum	1	ATM
<ul style="list-style-type: none"> • Fore vacuum pressure monitoring • General vacuum measurement and control from low to the high vacuum range 							
<ul style="list-style-type: none"> • Reliable and proven gauge head design • Drop in for most rads hot ion gauge heads • Available with angled/flat yttria coated Iridium and dual tungsten filament cathode assemblies 							

Corrosion resistant version	Setpoints	Display	Controller	Interfaces		Principle	Product	Page
			✓			Pirani	P0800	A130
			✓	✓		Bayard-Alpert Hot Ion	BAG00	A141
			✓	✓		Bayard-Alpert Hot Ion	BAG01 BAG02 BAG03	

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SKY® CDG025D-X3 4-20mA current loop	A13
Edge™ CDG025D2 with EtherCAT	A17

Heated capacitance diaphragm gauge

SKY® CDG045D, process gauge	A21
Edge™ CDG045D2, compact	A27
Stripe™ CDG045Dhs, high speed	A31
Cube™ CDGsci, reference	A35

SKY® CDG100D, process gauge	A39
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Bayard-Alpert Pirani Gauge

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Bayard-Alpert Pirani Capacitance Diaphragm Gauge

TripleGauge® BCG450	A90
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Pirani Standard Gauge

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