

### **Heated Capacitance Diaphragm Gauge**

INFICON Stripe high-speed Capacitance Diaphragm Gauges are the fastest, highly accurate vacuum measurement instruments available. With a less than 2 ms response time combined with the EtherCAT fieldbus interface it opens up a total new field of applications. The proven temperature controlled, corrosion resistant, ultra-pure ceramic sensor provides superior span stability over many years paired with state-of-the-art zero stability. Stripe comes with the INFICON patented unique sensor shield which protects the gauge from undesired process by-products. INFICON Stripe using an innovative heating concept, which provides a cool to the touch surface, and its unique speed capabilities, enabling an unprecedented productivity increase, making it the most advanced vacuum instrument of its kind.



### **ADVANTAGES**

- High productivity faster than 2 ms response time
- Flexible integration EtherCAT fieldbus
- · Long lifetime proven ceramic sensor
- Forget recalibration 90 ppm / year full scale stability

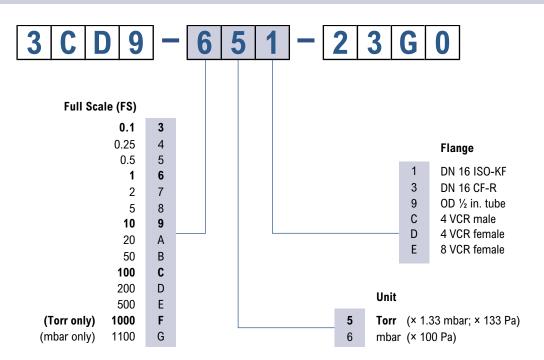
#### **APPLICATIONS**

- Atomic layer deposition
- High speed process control
- PVD, CVD, Etch
- · General high temperature vacuum applications

Stripe<sup>®</sup> CDG100Dhs



#### **ORDERING INFORMATION**



**bold** = standard products

Other flange types on request.

 $Stripe^{\circ} CDG100Dhs$ 

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### SPECIFICATIONS

Full scale (FS)	1000 Torr, 1100 mbar	500 1 Torr / mbar	0.5 0.05Torr / mbar
Accuracy	0.2 % of reading		0.4 % of reading
Temperature effect			
On zero	0.0025 % FS / °C		0.005 % FS / °C
On span	0.02 % of reading / °C		0.02 % of reading / °C
Pressure, max.	400 kPa (absolute)	260 kPa (absolute)	130 kPa (absolute)
Resolution		0.003 % FS	
Lowest reading	0.01 % FS		
Lowest suggested reading	0.05 % FS		
Lowest suggested control pressure	0.5 % FS		
Temperature			
Operation (ambient)	+10 +50 °C		
Bakeout at flange	≤110 °C		
Storage	−20 +85 °C		
Supply voltage	+14 +30 V (dc) or ±15 V (±5%)		
Power consumption			
During Heat up	≤16 W		
At operating temperature	≤11 W		
Output signal (analog)	0 +10 V (dc)		
Response time	2 ms		
Degree of protection		IP 30	
Standards			
CE conformity	EN 61000-6-2, EN 61000-6-3, EN 61010-1 and RoHS		
ETL certification	UL 61010-1, CSA 22.2 No. 61010-1		
SEMI compliance	SEMI S2		
Electrical connection	D-sub, 15-pin, male		
Setpoint			
Number of setpoints	2 (SP1, SP2)		
Relay contact	≤30 V (dc) / ≤0.5 A (dc)		
Hysteresis	1 % FS		
Diagnostic port			
Protocol	USB		
Read	pressure, status, ID		
Set	setpoints, filter, zero adjust, factory reset, DC offset		
Materials exposed to vacuum	ceramics (Al <sub>2</sub> O <sub>3</sub> ), stainless steel (AlSI 316L)		
Internal volume	≤6.8 cm <sup>3</sup>		
Weight	962 1019 g		

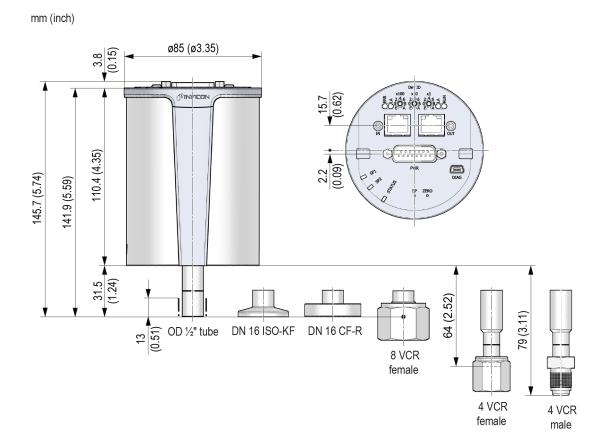
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#### SPECIFICATION ETHERCAT

EtherCAT®		
Protocol	EtherCAT <sup>®</sup> , firmware generation 2.0	
Communication standards	Semiconductor Device Profile ETG.5003 Part 1 Common Device Profile ETG.5003 Part 2080 "Specific Device Profile - Vacuum Pressure Gauge"	
Process Data	Fixed PDO mapping and configurable PDO mapping	
EtherCAT connector	RJ45, 8-pin (socket), IN and OUT	
Cable	Shielded Ethernet CAT5e or higher	
Cable length	≤100 m (330 ft.)	
Data rate	100000 Kbps	

### DIMENSIONS



### FICON Inspired by visions. Proven by success.

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