

## Stripe™ CDG160Dhs 1 ... 1000Torr / mbar

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INFICON Stripe high-speed Capacitance Diaphragm Gauges are the fastest, highly accurate vacuum measurement instruments available. With a down to 2 ms response time and high temperature (160°C or 200°C) controlled sensors 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

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- High productivity for fast process control and monitoring - Fast, down to 2 ms response time
- Flexible integration – EtherCAT fieldbus
- Long lifetime – Proven ceramic sensor
- Forget recalibration – 90ppm/year full scale stability
- Extended range of compatible materials and applications – Sensor temperature up to 200°C

ORDER INFORMATION

**3 C E 9** - **9 5 1** - **2 3 G 0**

**Full Scale (F.S.)**

1	<b>6</b>
2	7
5	8
<b>10</b>	<b>9</b>
20	A
50	B
<b>100</b>	<b>C</b>
200	D
500	E
(Torr only) <b>1000</b>	<b>F</b>
(mbar only) 1100	G

**Flange**

1	DN 16 ISO-KF
3	DN 16 CF-R
9	OD 1/2" tube
E	8 VCR female

**Unit**

<b>5</b>	<b>Torr</b>	(× 1.33 mbar; × 133 Pa)
6	mbar	(× 100 Pa)

**bold** = standard products

Other flange types and full scale ranges (F.S.) on request.

## SPECIFICATIONS

Type		1000 Torr/ 1100 mbar	500 ... 1 Torr / mbar
Accuracy (1)	% of reading	0.4	0.4
Temperature effect on zero	percent FS/°C	0.005	0.005
Temperature effect on span	% of reading / °C	0.02	0.02
Gas type dependence		none	none
Pressure, max.	kPa (absolute)	400	260
Resolution	percent FS	0.003	0.003
Lowest reading	percent FS	0.01	0.01
Lowest suggested reading	percent FS	0.05	0.05
Lowest suggested control pressure	percent FS	0.5	0.5
Temperature			
Operation (ambient)	°C	+10 ... +50	+10 ... +50
Sensor temperature	°C	160	160
Bakeout at flange	°C	≤200	≤200
Storage	°C	-20 ... +85	-20 ... +85
Supply voltage		+14 ... +30 V DC or ±15 V (±5%)	+21 ... +30 V DC or ±15 V (±5%)
Power consumption			
During Heat up	W	≤18	≤18
At operating temperature	W	≤16	≤16
Output signal (analog)	V (dc)	0 ... +10	0 ... +10
Measurement rate	kHz	1	1
Response time (2)	ms	2 ... 20	2 ... 20
Degree of protection		IP 40	IP 40
Standards			
CE conformity		EN 61000-6-2/-6-3, EN 61010 & RoHS	EN 61000-6-2/-6-3, EN 61010 & RoHS
ETL certification		UL 61010-1, CSA 22.2 No.61010-1	UL 61010-1, CSA 22.2 No.61010-1
SEMI compliance		SEMI S2	SEMI S2
Electrical connection		D-Sub, 15-pin, male	D-Sub, 15-pin, male
Setpoint			
Number of setpoints		2 (SP1,SP2)	2 (SP1,SP2)

## SPECIFICATIONS

Type		1000 Torr/ 1100 mbar	500 ... 1 Torr / mbar
Setpoint			
Relay contact	V (dc)	≤30	≤30
Setpoint			
Relay contact	A (dc)	≤0.5	≤0.5
Setpoint			
Hysteresis	percent FS	1	1
Diagnostic port			
Protocol		USB	USB
Read		pressure, status, ID	pressure, status, ID
Set		set points, filter, zero adjust, factory reset, DC offset	set points, filter, zero adjust, factory reset, DC offset
Materials exposed to vacuum			
		Aluminum oxide ceramic (Al <sub>2</sub> O <sub>3</sub> ), stainless steel (AISI 316L <sup>(3)</sup> )	Aluminum oxide ceramic (Al <sub>2</sub> O <sub>3</sub> ), stainless steel (AISI 316L <sup>(3)</sup> )
Internal volume			
I. volume 1/2" tube	cm <sup>3</sup> (in. <sup>3</sup> )	4.2 (0.26)	4.2 (0.26)
I. volume DN 16 ISO KF	cm <sup>3</sup> (in. <sup>3</sup> )	4.2 (0.26)	4.2 (0.26)
I. volume DN 16 CF-R	cm <sup>3</sup> (in. <sup>3</sup> )	4.2 (0.26)	4.2 (0.26)
I. volume 8 VCR®	cm <sup>3</sup> (in. <sup>3</sup> )	4.2 (0.26)	4.2 (0.26)
Weight			
Weight 1/2" tube	g	955	955
Weight DN 16 ISO KF	g	955	955
Weight DN 16 CF-R	g	955	955
Weight 8 VCR®	g	955	955
EtherCAT			
Protocol EtherCAT		protocol specialized for EtherCAT	protocol specialized for EtherCAT
Communication standards		ETG.5003.1 S (R) V1.1.0 Common Device Profile ETG.5003.2080 S (R) V1.3.0 Specific Device Profile: Vacuum Gauge	ETG.5003.1 S (R) V1.1.0 Common Device Profile ETG.5003.2080 S (R) V1.3.0 Specific Device Profile: Vacuum Gauge
Node address		Explicit Device Identification	Explicit Device Identification
Physical layer		100BASE-Tx (IEEE 802.3)	100BASE-Tx (IEEE 802.3)
Digital functions read		pressure, status, ID	pressure, status, ID

## SPECIFICATIONS

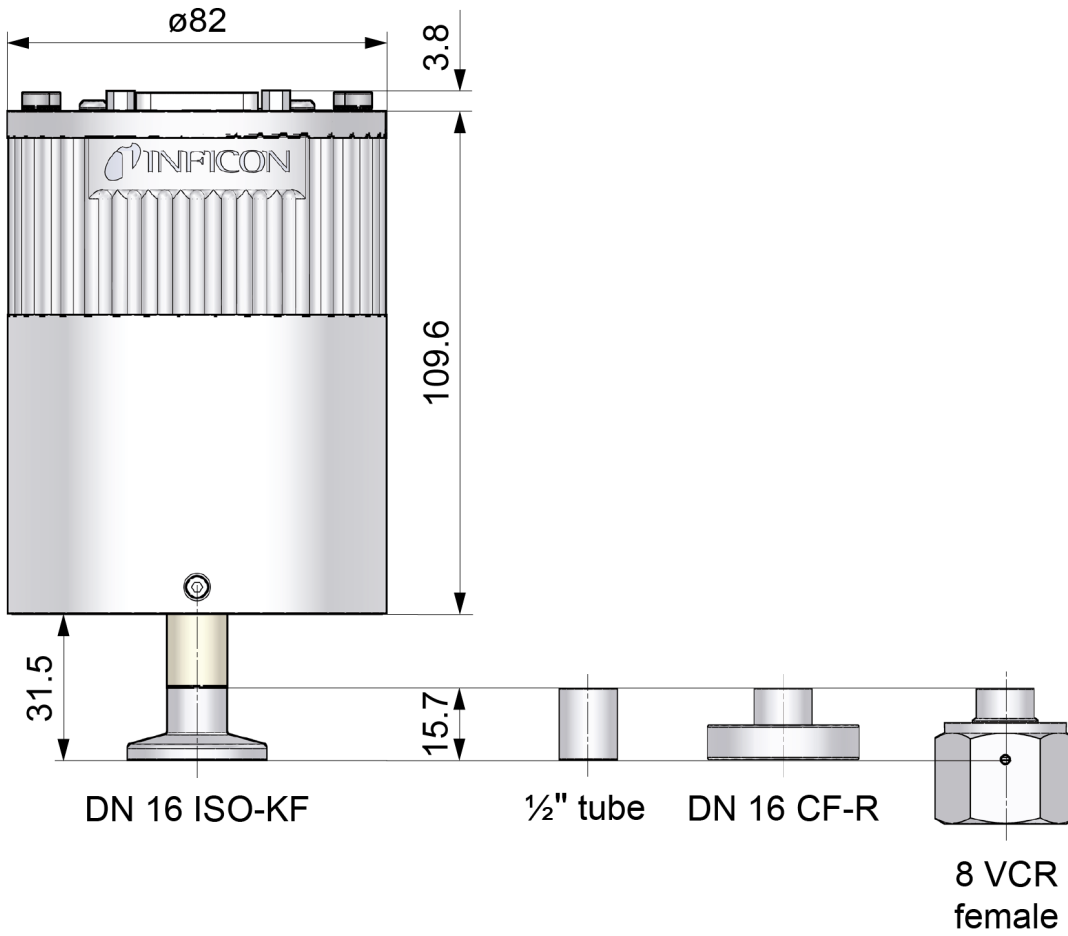
Type		1000 Torr/ 1100 mbar	500 ... 1 Torr / mbar
Digital functions set		set points, filter, zero adjust, reset, DC offset	set points, filter, zero adjust, reset, DC offset
Mailbox (CoE)		SDO requests, responses and information	SDO requests, responses and information
Process data		Fixed PDO mapping and configurable PDO mapping	Fixed PDO mapping and configurable PDO mapping
EtherCAT connector		2 x RJ45, 8-pin (socket), IN and OUT	2 x RJ45, 8-pin (socket), IN and OUT
Cable		shielded Ethernet CAT5e or higher	shielded Ethernet CAT5e or higher
EtherCAT			
Cable length	m (ft.)	≤100 (330)	≤100 (330)
EtherCAT			
Signal processing time	ms	2	2

(1) Non-linearity, hysteresis, repeatability at 25 °C ambient operating temperature without temperature effects after 2 hours operation.

(2) Increase 10 ... 90 percent FS

(3) 18% Cr, 10% Ni, 3% Mo, 69% Fe

## DIMENSIONS



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