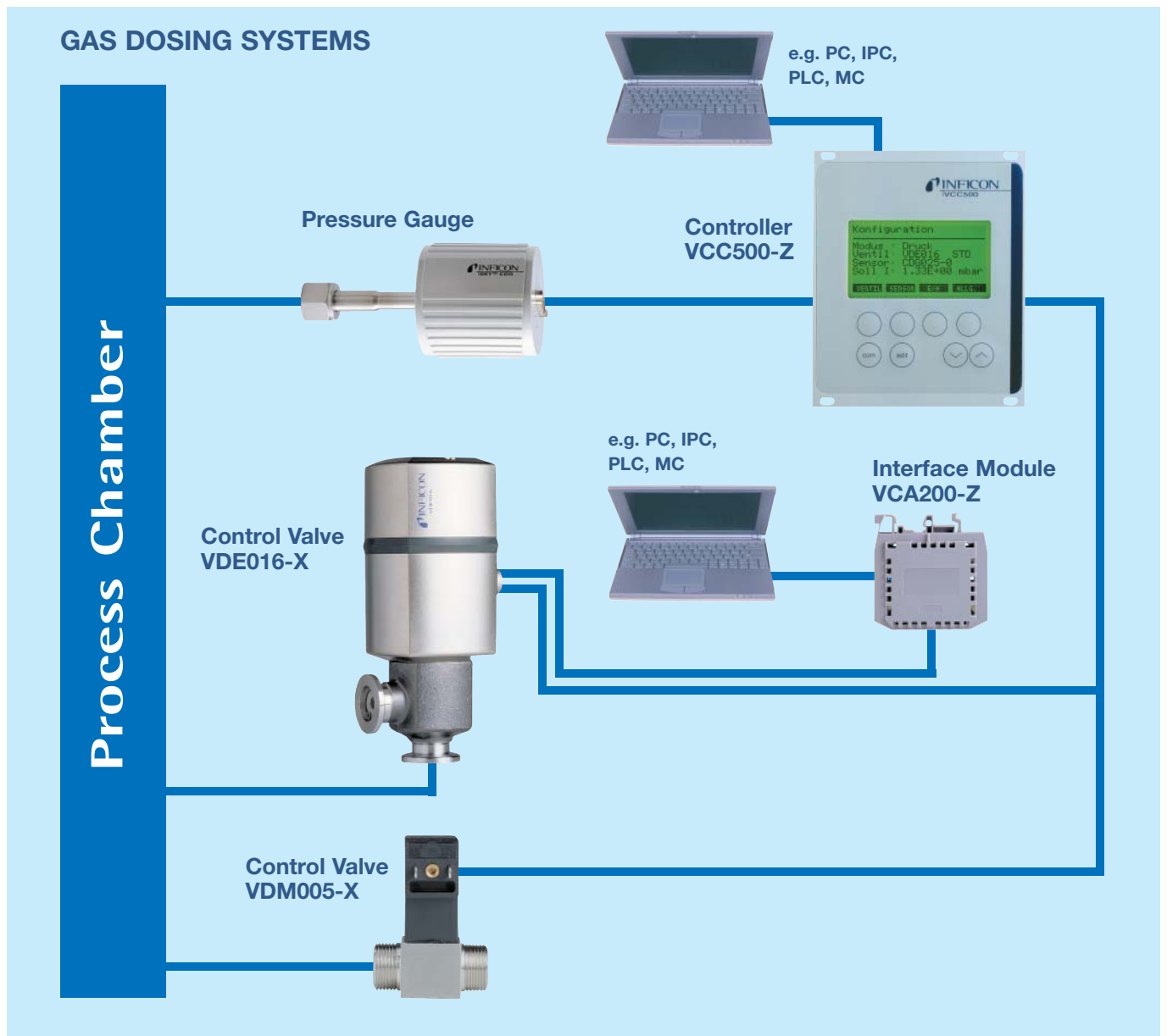


# DATASHEET

## Gas Dosing Systems

### USER ADVANTAGES

- ◆ Higher yield
- ◆ Optimized cycle time
- ◆ Excellent reproducibility
- ◆ Easy system integration



# Control Valve VDM005-X

## USER ADVANTAGES

- ◆ Fast response
- ◆ Wide control range at low cost
- ◆ Withstands corrosive gases - stainless steel / FPM
- ◆ Closed automatically in case of a power failure
- ◆ Smooth electro-magnetic drive



## SELECTION DATA

Vacuum connection	DN 5 mm / M 14 x 1
Gas flow, controllable	
Min.	1 x 10 <sup>-5</sup> mbar l/s
Max.	100 mbar l/s
Pressure, absolute	
Min.	1 x 10 <sup>-8</sup> mbar
Max.	2.0 bar
Response time	10 ... 15 ms (0 ... 90 % of stroke)

## TECHNICAL DATA

Tightness	1 x 10 <sup>-8</sup> mbar l/s
Actuator	solenoid
Controller	VCC500-Z
Ambient temperature	5 ... 50 °C
Duty cycle	100 %
Protection category	IP 51
Control voltage	0 ... 24 V DC
Power	2 W max.
Housing	stainless steel
Seals	FPM
Weight	80 g

## ORDERING INFORMATION

Type	<b>VDM005-X</b>
Part No.	<b>250-515</b>

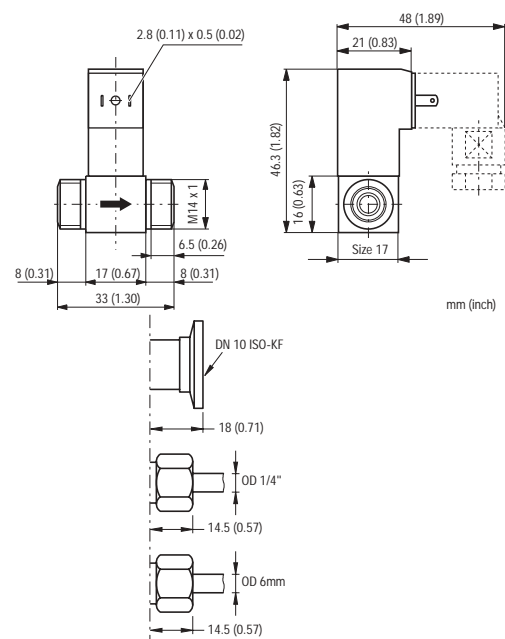
## CABLE VCC - VDM

3m	Part No.	<b>216-160</b>
5m	Part No.	<b>216-161</b>
10m	Part No.	<b>216-162</b>
15m	Part No.	<b>216-163</b>
20m	Part No.	<b>216-164</b>
25m	Part No.	<b>216-165</b>

## CONNECTIONS

DN 10 ISO-KF	Part No.	<b>250-080</b>
For pipe OD 1/4"	Part No.	<b>250-085</b>
For pipe OD 6 mm	Part No.	<b>250-086</b>

## TECHNICAL DRAWING



# Control Valve VDE016-X

## USER ADVANTAGES

- ◆ Broad control range
- ◆ Excellent reproducibility
- ◆ Status information and commands via digital interface
- ◆ Withstands corrosive gases - stainless steel / FPM
- ◆ Combined with the VCC500-Z controller, the valve closes automatically in case of a power failure



## SELECTION DATA

Vacuum connection	DN 16 ISO-KF
Gas flow, controllable	
Min.	$5 \times 10^{-6}$ mbar l/s
Max.	1250 mbar l/s
Pressure absolute	
Min.	$1 \times 10^{-8}$ mbar
Max.	2.5 bar
Closing / opening time	3 / 4 s

## ORDERING INFORMATION<sup>1)</sup>

Type	<b>VDE016-X</b>
Part No.	<b>250-505</b>

<sup>1)</sup> Connector included

## CABLE VCC - VDE

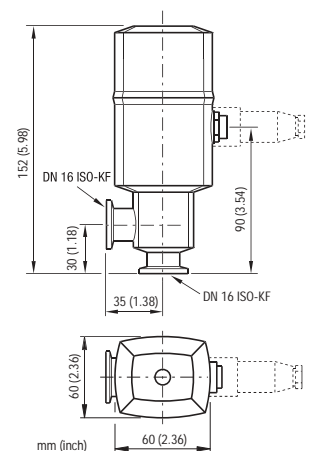
3 m	Part No.	<b>216-150</b>
5 m	Part No.	<b>216-151</b>
10 m	Part No.	<b>216-152</b>
15 m	Part No.	<b>216-153</b>
20 m	Part No.	<b>216-154</b>
25 m	Part No.	<b>216-155</b>

## TECHNICAL DATA

Tightness	1 x 10 <sup>-9</sup> mbar l/s
Actuator	Stepper motor
Control	
Digital	VCC500-Z, VCA200-Z
Analog	0 ... 10 V DC
Ambient temperature	5 ... 40 °C
Supply	24 V DC / 12 VA
Housing	stainless steel
Dosing sleeve	fluorplastomer
Seals	FPM
Weight <sup>1)</sup>	0.5 kg

<sup>1)</sup> Connector included

## TECHNICAL DRAWING



# Controller VCC500-Z

## USER ADVANTAGES

- ◆ Simple operation - user friendly LCD display and function keys
- ◆ Analog/digital inputs, outputs and interfaces
- ◆ 99 PI pre-programmed control adjustments for quick and easy operation
- ◆ Adjustable PID control algorithm
- ◆ Wide variety of pre-programmed pressure gauges



## SELECTION DATA

Analog input	0 ... 10 V DC nominal pressure, gas flow
Analog output	0 ... 10 V DC pressure, valve position

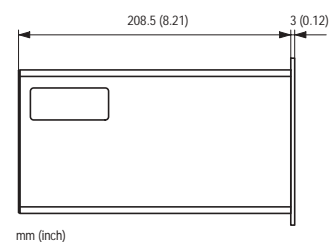
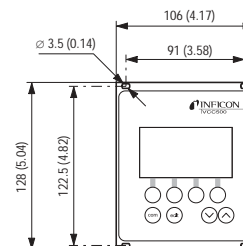
## ORDERING INFORMATION<sup>1)</sup>

Type	<b>VCC500-Z</b>
Part No.	<b>250-900</b>

## TECHNICAL DATA

Operating modes	Pressure control Gas flow adjustment
8 available digital inputs	Flow adjustment, opening/closing the valve, switching between pressure and gas flow control
8 available digital outputs	Valve position indication, setpoint status reached, status messages - sensor, valve, pressure control upstream and downstream
Features	Switching on after power failure Output "nominal value reached", adjustable tolerance
Units	mbar, Pa, Torr, mV
Languages	English, German
Interfaces	RS232C, RS485
Controller types	Auto = PI - selectable control speed steps 1-99 PID = PID - user definable parameters
Control accuracy	5 % FS sensors
Display accuracy	0.2 % FS sensor
Supply	
Voltage	90 ... 250 V AC
Consumption	50 VA
Weight	1.65 kg

## TECHNICAL DRAWING



# Interface Module VCA200-Z

## USER ADVANTAGES

- ◆ Easy and economic system integration
- ◆ Connects an RS232C interface to the digital interface of the Control Valve VDE016-X
- ◆ Inquiry of status and valve position



## SELECTION DATA

Interface	RS232C
Supply	24 VDC / 0.5 A

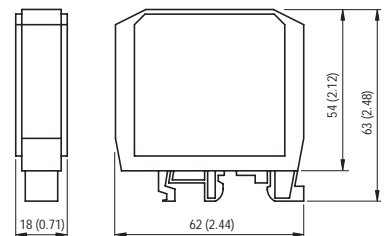
## ORDERING INFORMATION

Type	<b>VCA200-Z</b>
Part No.	<b>250-915</b>

## TECHNICAL DATA

Installation	DIN mounting rail (symmetric or asymmetric)
Connection	terminals
Ambient temperature	5 ... 50 °C
Weight	40 g

## TECHNICAL DRAWING





**GLOBAL HEADQUARTERS:**

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