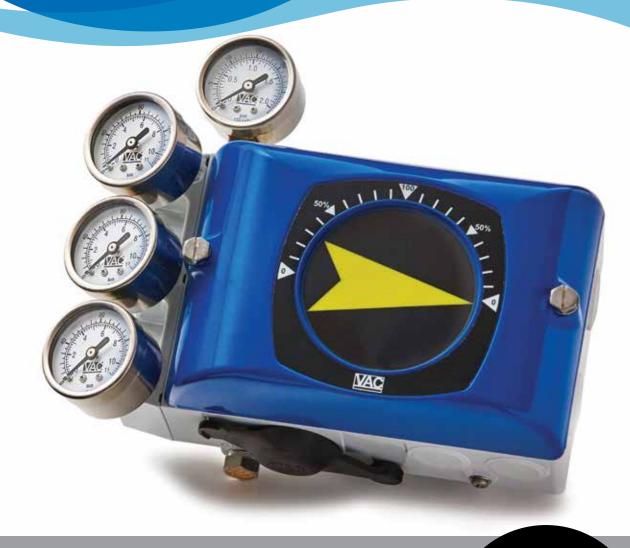
# VALVE ACCESSORIES & CONTROLS

VAC





A POSITIONER THAT OFFERS IT ALL IN ONE COMPACT, SIMPLE, HOUSING

WWW.VACACCESSORIES.COM 205-678-0507

# The V200 Positioner



Internal 4/20 mA Feedback available as an option



Flexible mounting for rotary or linear applications Dome Indicator -Black/Yellow, Red/Green available as an option

> External zero and span adjustmentwithout removing the positioner cover

Internal I/p with simple loop test points.

1 111

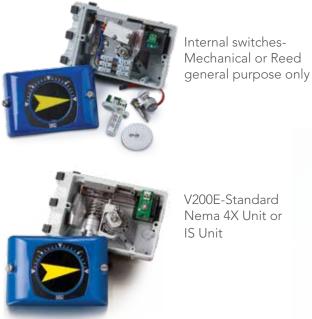
# ALL IN A SINGLE COMPACT AND RUGGED HOUSING

The V200 incorporates the flexibility of converting from a pneumatic unit to several versions of an electropneumatic unit, and the ability to add position feedback, in a matter of minutes, all in one compact and rugged housing. Maximum flexibility and versatility.

With a rugged Nema 4X, IP 66 die cast aluminum housing, versatile polyester coating, optional Tufram® or Nickel

coatings, low -58F or high +325F temp options, and standard features like external zero and span adjustment, this unit expands the VAC offering to cover this "all in one" market for positioners. Add to this the excellent performance yet simple design, and the combination equals a real value.

### V200 OPTIONS



V200E-Standard Nema 4X Unit or IS Unit



V200E-0/10 Volt Unit



Extra High Temp (EHT) +325° F only available in pneumatic



V200-EX Explosion Proof Unit

V200 Nickel Coated



V200E-GA Gas Approved Unit



V200 Tufram<sup>®</sup> Coated

# **V200 BENEFITS**

- Compact Design
- Quality components = rugged and accurate performance
- External zero and span (complete calibration) adjustment without removing cover
- Easily maintain all key components
- Clear, visible indicator with arrow indicator standard-beacon optional
- Field changeable to any I/p option



V200-EX with Third Party EX Switch

# **Technical Specifications:**

Positioners:	Pneumatic	Electropneumatic		
	V200P	V200E & -IS	V200-EX	V200E 0-10
Input Signal	3-15 PSI	4-20mA	4-20 mA	0-10 VDC
Supply Pressure	20-145 PSI	20-145 PSI	20-145 PSI	20-120 PSI
Linearity error	<0.7% f.s.	<1.0% f.s.	<0.8% f.s.	<1% f.s.
Hysteresis	<0.4% f.s.	<0.6% f.s.	<0.5% f.s.	<0.5% f.s.
Repeatability	<0.3% f.s.	<0.5% f.s.	<0.4% f.s.	<0.5% f.s.
Weight	3.2 lbs	3.8 lbs.	5.4 lbs.	3.8 lbs.
Temperature range	-40 to 185 °F	-40 to 185 °F	-40 to 185 °F	-40 to 160 °F
	-40 to 85 °C	-40 to 85 °C	-40 to 85 °C	(-40 to 71 °C)
Low Temp	-58 to 185 °F			
	-50 to 85 °C			
Extra High Temp (EHT)	-40 to 325 °F			
	-40 to 162 °C			

Spool/Pilot Valves	Standard /Low Bleed	High Gain	Super High Gain/High Flow
Air Delivery @87 PSI (600 kPa) Bleed Rate	28.3 scfm	31.5 scfm	50 scfm
@87 PSI (600 kPa) <b>Pressure Gain</b>	<.2 scfm 240:1	.83 scfm 1100:1	1.3 scfm 1100:1

Air connections1/4" NPTGauges1/8" NPTCable Entry1/2" NPTIngress & corrosion protection – NEMA 4X and IP66Standard coatingPolyester

# Feedback (not rated for EX or IS) Enclosure Nema 4X/IP 66 General Purpose:

(Inductive)

(3) A

(7) A

(0.1) A

(0.2) A

Plug-in components directly into V200 series positioner housing Can combine switches and 4/20 feedback Conduit connections 1/2" NPT Operating temp -40 to +185 °F (-40 to +85 °C) **Mechanical Switches:** 2-Type: SPDT, V3

Max Load:	
Resistive	
15 A	
0.25 A	
0.5 A	
8 A	

Reed Switches: 2-Type: SPDT-CO,

Current:

Contact rating: Voltage:

Contact resistance:

Form C max 3W Switching Breakdown Switching Carry 0.2 ohms 0.3 pF

max 100 VDC min 200 VDC max 0.20 A max 1.3 A

Voltage

220 VDC

110 VDC 24 VDC

125/250 VAC

Contact capacitance: 0.3 pl 4/20 mA Position Feedback:

Voltage supply:7Output:4Loop Impedance:rLinearity error:<</td>Hysteresis:<</td>Temp. Sensitivity:

7-30 VDC 4-20 mA , 2 wire max 850 ohms @ 24 VDC <1.2% <0.2% < 0.1%/10 °F (5.5 °C)

# Approvals—I/p only

Available Approvals: Ratings for Hazardous Locations

Explosion Proof	CL I, II Div 1 Grp B-G
Non Incendive	CL 1 Div 2 Grp A-C
<b>Intrinsically Safe</b> FM	CL I-II-III Div 1 Grp A-G
CSA	CL II Div 1&2 Grp E-G CL III

#### ATEX-explosion protection

1487X, intrinsically safe EEx ia IIC T4/T5/T6 E121X, flameproof EEx d IIC T4/T5/T6

#### **Temperature Class**

	Short circuit	Ambient Temp
	Current-max	max
T6	50 mA	140 °F (60 °C)
T5	60 mA	158 °F (70 °C)
T4	60 mA	185 °F (85 °C)

V200-IS (Intrinsically Safe)

FM

CL1 Div1 Grp A B C D

CSA

EX ia CL1 Grp A B C D EX ia CL 1 Div2 Grp A B C D



#### **Other Options:**

Potentiometer-Namur Sensors - Third party stackable EX mounting kits

# **Ordering Codes:**

Pneumatic	V200 <b>P</b>
Electropneumatic	V200 E
Explosion Proof	V200 <b>EX</b>
Intrinsically Safe	V200 <b>IS</b>
Fail Freeze	V200 <b>FF</b>

#### Spindle

D1 Namur (standard) For additional spindle options, please contact VAC or visit our website at www.vacaccessories.com

#### Front Cover

90 degree rotation	90
60 degree rotation	60
45 degree rotation	45
30 degree rotation	30
Blank scale	00

#### Indicator

Arrow
Standard Beacon/Raised (Black/Yellow)
Optional Beacon/Raised (Red/Green)

Α В BRG

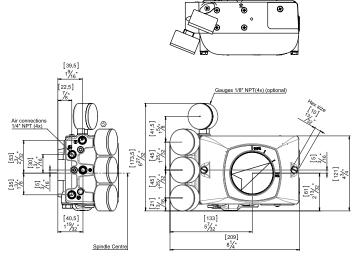
#### Cam

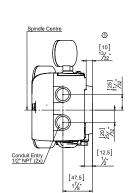
(standard) 90° C1 (standard) For additional cam options, please contact VAC or visit our website at www.vacaccessories.com

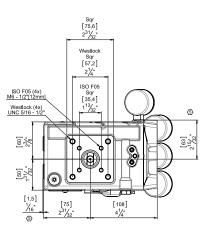
#### Spool Valve Options (shipped with standard spool)

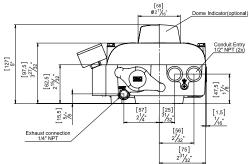
Spool Valve Options (shipped w				
Standard (Low Bleed)		ped as Standard		
High Gain	HG			
Super High Gain/Flow	SHGHF			
Options Extra High Temp (Pneumatic only) (-40 to 325 F) Low Temp (Pneumatic only) (-58 to 185 F) 0/10 Volt I/P (V200E only) Gas Approved ATEX Tufram® Coating (V200 P and E) Nickel Coating (V200 P and E) 6-30 Psi Spring	EHT LT 0/10V GA ATEX TUF NIC 6-30		V200E-GA Ga Approved Uni	
<b>Feedback Options</b> 2 SPDT Mechanical Switches 2 SPDT Reed Switches 4-20 mA Transmitter	FB M R mA			V200-EX Explosion Proof Unit
Mech Switches w/transmitter	MmA		V200E-St	andard
Reed Switches w/transmitter	RmA	<b>~</b>	Nema 4X	(Unit or
1 K potentiometer	1K		IS Unit	
10 K potentiometer	10K	X herk		
Example: V200E-D1-90-B-C1		8 40		
Electropneumatic with namur spin	dle,	490	-	
90 degree cover, raised indicator, 90 degree cam				
Example: FB-MmA Mechanical switches with 4/20 mA transmitter		Mechai	l switches- nical or Reed	
		with 4/2	20 mA transmitte	er

## V200P, E, -IS, TUF, NIC, EHT, LT

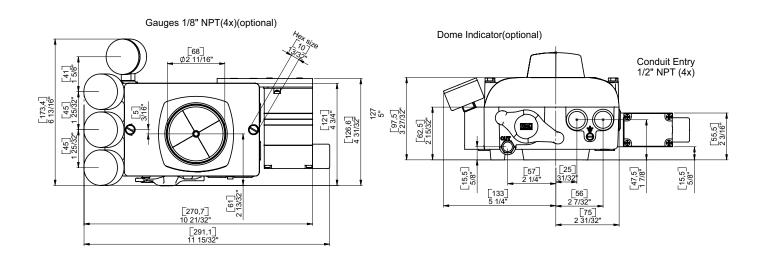




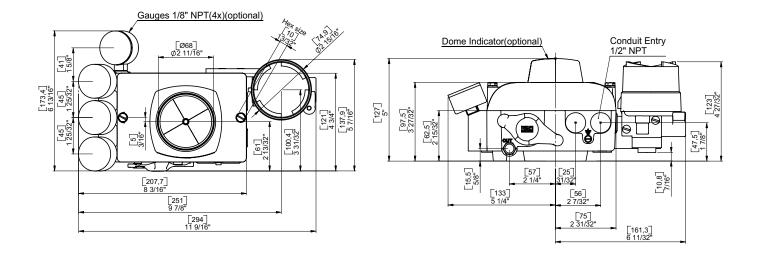




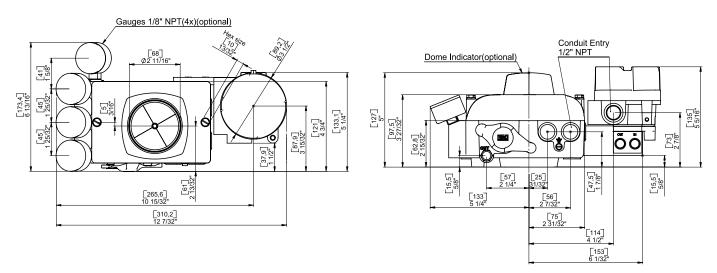
# V200E 0-10V



## V200-EX



V200E-GA



NOTE: mm appear in parentheses



# Our way of doing business is just as simple as our products.

A solid, simply designed positioner, with high quality construction is just the start of the Valve Accessories and Controls story. Because we are a privately held, customer driven company, we can meet your needs much quicker, with a lot more flexibility.

A quality company must be a lot more than a quality product. Responding promptly and honestly, showing genuine interest in what we do and what you do, staying focused on our strengths, and being different in a positive way are important.

Sounds simple-we plan to keep it that way!





# Retrofit your valve with a VAC Positioner—a "choice" of options!

Most industrial control valves are equipped with the valve manufacturer's "standard" positioner when the valve is first delivered. As these companies move into new generation products, they often leave behind a whole marketplace of product needs that don't "fit" the application needs. When these manufacturers' standard positioners need replacing, what choices are you offered? High prices, poor delivery, or discontinued products leave users without many options.

From a very basic and simple, pneumatic unit to standard or EX electropneumatic, to a complete line of digital positioners, the choice of replacing the manufacturer's "standard" positioner is back in your hands. VAC products offer the control accuracy you need in a simple rugged design (all metal housings) that is flexible and adaptable. The installed base of control valves is very important to users and to VAC.

Retrofit with a VAC positioner, putting your positioner options back in your control.



VALVE ACCESSORIES & CONTROLS 200 Jade Park • Chelsea, AL 35043 TEL: 205-678-0507 • FAX: 205-678-0510 info@vacaccessories.com

#### **VALVE ACCESSORIES & CONTROLS**

Bob Goodwin, Eastern Regional Sales Office Cell: 518-222-1170 bobg@vacaccessories.com VALVE ACCESSORIES & CONTROLS Kevin Cowhey, Western Regional Sales Office Cell: 847-910-0056 kevinc@vacaccessories.com