

## **Stainless Steel**

'Smart' Valve Controller

Valvescan VA CF8M (316) stainless steel ATEX/IECEx Certified Ex i valve controller is an integrated valve information device for Emergency Shutdown (ESD) valves. Combining valve position monitoring and partial stroke test (PST) or full stroke test (FST) functionality, the Type V unit is an information hub for the ESD valve, enabling plant operators to verify the capabilities of the most critical valves in their installations without having to significantly modify existing operating methodologies.



HART

Exi intrinsically safe

IP.66 / 67 CF8M (316) stainless steel enclosure for superior corrosion protection and mechanical resistive properties (Optional: CF3M (316L) stainless steel and coated anodised aluminium).

ATEX/IECEx Certified II 2 GD / Ex ib IIC T6..T4 & Ex ib IIIC T85°C.. T135°C for zone 1 & 2 hazardous areas.

Valve position via HART, an independent continuous feedback transmitter and/or discrete switches / sensors (mechanical or proximity).

Partial or full stroke test (PST / FST) functionality with local or remote initiation. HART enabled for configuration, test initiation and results analysis.

Up to 6 conduit entries for easy connection options.

Smart calibration allows easy installation and configuration.

Stored valve stroke profile (initial 'as new' signature and up to 50 signatures) allows a predictive maintenance regime to be implemented.

Low power and wiring requirements. Operates by de-energising an independent intrinsically safe solenoid to deliver PST / FST (functions with any suitable solenoid).

IEC 61508 / 61511 functional safety certified.

A screw-on cover ensures secure isolation of electrical components.

Compact design provides considerable space saving over similar equipment without compromising the ease of installation or maintenance.

High visibility red / green position indicator providing clear local indication of the current valve / actuator position (Optional: blue / white, red / yellow or navy / yellow colour combinations).

Quick and secure mounting to most types of pneumatic and hydraulic actuators.

## Ex marking:

II 2 GD Ex ib IIC T6..T4 Gb Ex ib IIIC T85°C / T135°C Db  $T_{amb} = -40^{\circ}C$  to +60°C T6 / -40°C to +80°C T4 Notes

The input parameters markings for the intrinsically safe components shall be determined from their respective certificate numbers depending upon whether they are required for ATEX and/or IECEX. Care should be taken to ensure that the minimum and maximum temperature information on the intrinsically safe components used within the VA valve controller is observed and satisfies the Tamb parameters and the T-class for the VA units, respectively for ATEX/IECEX certificates as per relevance. The minimum ambient markings will depend on approved intrinsically safe components, if fitted, as will the parameters. Units will be marked accordingly at the point of manufacture in line with their individual intrinsically safe equipment approvals. However minimum permitted ambient in all cases is -40°C.

Certificate Number: EMT19ATEX0027X IECEx EMT 19.011X

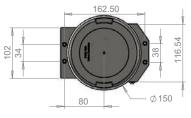












Up to 3 M20 Conduit Entry (local connections)

Up to 3 Conduit Entry - max size 3/4"NPT (client connections) —

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				www.imtex-controls.com/va			
Model	Number Compila	ation (Drawing No. A19035	2-VA-IS) / Example:				
Ту	pe Designator	3rd Party Solenoid	Control Board	Number of Electrical		Electrical Function	Enclosure - Materia
(	(see Note 1)	Certification	Certification Setup	Function		(see Note 2)	of Contruction
	VA	<u> </u>	1	2		17	S
					unication		
C	Conduit Entry	Output Drive	Visual Indicator	(see Note 3)		Power	Feature Designatio
	Y	S	R		2	L	100
Code		nected Solenoid Certific	ation	Code	(0) 1405		
1	Exi Intrinsically Safe				(3) M25 x 1.5, (2) M20 x 1.5 & (1) ½" NPT		
	Control Board Certification Setup			P	(2) M25 x 1.5, (3) M20 x 1.5 & (1) ½" NPT		
1	Exi Setup (No Pressure Transmitter)			<u>N</u>	(1) M25 x 1.5, (4) M20 x 1.5 & (1) ½" NPT		
	Number of Additional Electrical Function Devices			<u>M</u>	(5) ½" NPT & (1) M20 x 1.5		
0	No Additional Function				(3) <sup>3</sup> / <sub>4</sub> " NPT, (2) <sup>1</sup> / <sub>2</sub> " NPT & (1) M20 x 1.5		
1	One Additional Function			<u>к</u>	(2) <sup>3</sup> / <sub>4</sub> " NPT, (3) <sup>1</sup> / <sub>2</sub> " NPT & (1) M20 x 1.5		
2	Two Additional Function			J	(1) <sup>3</sup> ⁄ <sub>4</sub> " NPT, (4) <sup>1</sup> ⁄ <sub>2</sub> " NPT & (1) M20 x 1.5		
3	Three Additional Function (not Function 70)				Output Drive		
4	Four Additional Function (not Function 70)			S	2-Pin Drive		
5	Five Additional Function (not Function 70)			N	Namur Drive		
6	Six Additional Function (not Function 70)				Visual Indicator (ABS Material)		
	Additional Electrical Function			R	Red (Closed) / Green (Open)		
01	Base Model Only (No Additional Switches/Sensors)			В	Blue (Closed) / White (Open)		
17	SPDT Gold Contact Mechanical Switch			E	Red (Closed) / Yellow (Open)		
25	SPDT Reed Proximity Switch			Y	Navy (Closed) / Yellow (Open)		
40	SPST / SPDT Reed Proximity Switch			С	Continuous		
42	V3 Style Namur Proximity Sensor			0	No Visual Indicator		
43	Non V3 Style Namur Proximity Sensor				System Communication		
70	Position Trans	smitter		0	-	onal Communication (Local Operation Only)	
	Enclosure - N	laterials of Construction		2		X	
S		) Cover & Housing			Control B	oard Power	
L	CF3M (316L) Cover & Housing		E		ernal 24VDC Power Supply (Exi Restrictions Apply)		
9	High Pressure Die Cast Aluminium (Powder Coated) Cover & Housing			L	Loop Powe	Loop Powered on Board AO	
					Feature De	esignation	
_	Conduit Entry			- 1XX	Feature Designationr		
Z	(6) M20 x 1.5				Additional Items ATEX & IEXEx Dual Certified & Suitable for Gas & Dust (see Note 2)		
Y	(3) M25 x 1.5 & (3) M20 x 1.5			- 3XX	Ex Feature Designation		
X	(2) M25 x 1.5 & (4) M20 x 1.5			- 377	Additional Items ATEX Certified & Suitable for Gas & Dust		
W		& (5) M20 x 1.5			(see Note	2)	
<u>v</u>	(6) ½" NPT						
U	(3) <sup>3</sup> / <sub>4</sub> " NPT &	( )					
T	(2) <sup>3</sup> ⁄ <sub>4</sub> " NPT &	( )					
S	(1) <sup>3</sup> ⁄ <sub>4</sub> " NPT & (						
R	(5) M20 x 1.5	α (1) ½ NP1					

NOTES

The following letters should be applied to define the main control electronics board that is installed within the device: "A V-AID Monitor & Control Board (Exib option). Exi Details for Board - refer to Drg.A190372 1

Ex Dotains to board \* feet to Dig.AT30072
The exact detail of switches / sensors / transmitters fitted within the device is not fully specified by the part number. The 'feature designator' provides a mechaism for cross-referencing to a centralised log establishing the make and models of the additional parts fitted in a given unit. Dual Certified means the unit is covered by both ATEX & IECEx certification. For additional component characteristics, please refer to Drg.A190354.
Communication relates to the way the installed unit operates with the client system and analytics application. For options available on each electronis board and certification variant, please consult Imtex Controls Ltd.



## **IMTEX Valve Communication**

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