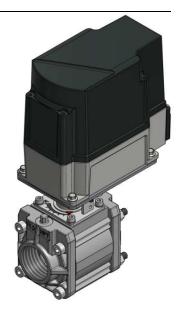
# SCC Inc.

## **Technical Instructions**

## Document No. VA-2000 March 15, 2017

## **VA Series**

VA...VKP Valve Actuator Assemblies with VKP Characterized Valves



Description	VAVKP valve actuator assemblies include a Siemens SQM actuator reliably mounted to a VKP characterized valve.						
Features	Engineered for precise shaft alignment with less actuator wear						
	Rigid and robust design						
	• VKP valve sizes from 1/2" to 2"						
	<ul> <li>Includes Siemens SQM33, SQM40, SQM45, or SQM50 actuator</li> </ul>						
	• Various inlet and outlet flange sizes provide mounting options						
Application	VAVKP valve actuator assemblies mount an SQM33, SQM40, SQM45, or SQM50 actuator to a VKP characterized flow valve. The VKP valve and SQM actuator are rigidly mounted with Siemens engineered brackets and couplings to ensure precise shaft alignment. A variety of inlet and outlet flange options allow for easy installation. VKP technical instructions (N7646) provide sizing and additional valve information.						

## **Product Part Numbers**

The following chart provides VA...VKP assembly part number identification including an SQM33, SQM40, or SQM45 actuator. Technical instructions for SQM33 (N7813), SQM40 (N7817), or SQM45 (N7814) actuators are available at www.scccombustion.com.

Actuat 33 40.11 40.15 40.18 40.21 40.25	= SQM33.550A9 (stepper, = SQM40.115R11 (12.5 se = SQM40.155R11 (12.5 se = SQM40.185R11 (12.5 se	c, 135 Ohn	-		T			
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40.15 40.18 40.21 40.25	= SQM40.155R11 (12.5 se = SQM40.185R11 (12.5 se		1/4-20 MA. 1191/10W	fire feedback)				
40.18 40.21 40.25	= SQM40.185R11 (12.5 se		_	-				
40.21 40.25	•	c, 3-positic						
	= 5Q1V140.215K11(25Sec,	135 Ohm/	4-20 mA, high/low fi	re feedback)				
	= SQM40.255R11 (25 sec,	4-20 mA, i	ndependent aux swi	tch)				
40.26	= SQM40.265R11 (25 sec,	3-position	, high/low fire feedb	ack)				
40.27	= SQM40.275R10 (25 sec,	high/low b	asic version)					
40.28	= SQM40.285R11 (25 sec,	3-position	, 3 independent aux	switches)				
45.2	= SQM45.295B9 (stepper,	for use wit	h LMV5)					
Voltage	e							
Blank	= 120 Vac SQM40 or stand	dard SQM3	3 or SQM45					
(220)	= 220 Vac (not available f	or SQM33 8	& SQM45 actuators)					
Inlet Fl	lange Size							
	NPT Threads		Rp Threads					
0.5	= 1/2" AGF10.15U	0.5R	= 1/2" AGF10.15					
).75	= 3/4" AGF10.20U	0.75R	= 3/4" AGF10.20					
1.0	= 1" AGF10.25U	1.0R	= 1" AGF10.25					
1.25	= 1-1/4" AGF10.32U	1.25R	= 1-1/4" AGF10.32	2				
1.5	= 1-1/2" AGF10.40U	1.5R	= 1-1/2" AGF10.40	D				
2.0	= 2" AGF10.50U	2.0R	= 2" AGF10.50					
	X = No	ne						
VKP Va	alve							
D.5VKP	= 1/2" VKP40.15							
).75VKP	= 3/4" VKP40.20							
1.0VKP	= 1" VKP40.25							
1.25VKP	= 1-1/4" VKP40.32							
	= 1-1/2" VKP40.40							
	= 2" VKP40.50							
2.0HVKP	= 2" high flow VKP40.50H							
Outlet	Flange Size							
	NPT Threads		Rp Threads					
	= 1/2" AGF10.15U	0.5R	= 1/2" AGF10.15					
	= 3/4" AGF10.20U	0.75R	= 3/4" AGF10.20					
	= 1" AGF10.25U	1.0R	= 1" AGF10.25					
	= 1-1/4" AGF10.32U	1.25R	= 1-1/4" AGF10.32					
	= 1-1/2" AGF10.40U	1.5R	= 1-1/2" AGF10.40	J				
2.0	= 2" AGF10.50U	2.0R	= 2" AGF10.50					
	X = No	ne						

## **Product Part Numbers (continued)**

The following chart provides VA...VKP assembly part number identification including an SQM50 actuator. Technical instructions for SQM50 (155-517) actuators are available at www.scccombustion.com.

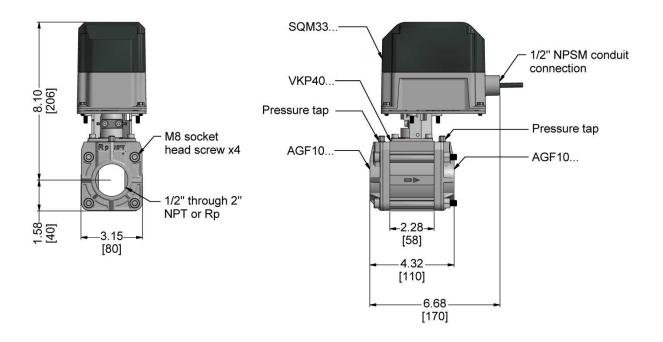
			VA	50	. 4	Ζ	3	-	1.0	- 1.0	VKP	- 1.0	)
Valve	Actuator Assemb	ly			-  _	Τ							-
Actua	ator												
50	= SQM50												
Tora	ue / Timing												
2	= 10Nm & 8sec (90° s	troke)											
3	= 15Nm & 12sec (90°												
4	= 15Nm & 25sec (90°	stroke)											
Conti	rol Board												
Blank	= AGA56.41A (4-20	mA input	)										
А	= AGA56.1A97 (positi	on propor	tional control)										
Н	= AGA56.42A (0-135												
к z	= AGA56.43A (0-10												
	= AGA56.9 (all input	is/output	5)										
	ntiometer												
Blank	= ASZ12.30 (1000Ω, 9			ard; nor	ne on "A	" board	ł						
3 7	= ASZ12.30 (1000Ω, 9 = ASZ22.30 (1000Ω/10		-										
		00012, 90	)										
Volta Blank	= 120 Vac												
(220)	= 220 Vac												
(24)	= 24 Vac												
Inlet	Flange Size												
met	NPT Threads		Rp Threads										
0.5	= 1/2" AGF10.15U	0.5R	= 1/2" AGF10.15										
0.75	= 3/4" AGF10.20U	0.75R	= 3/4" AGF10.20										
1.0	= 1" AGF10.25U	1.0R	= 1" AGF10.25										
1.25	= 1-1/4" AGF10.32U	1.25R											
1.5	= 1-1/2" AGF10.40U	1.5R	= 1-1/2" AGF10.40	0									
2.0	= 2" AGF10.50U X = N	2.0R Ione	= 2" AGF10.50										
											J		
	= 1/2" VKP40.15 P = 3/4" VKP40.20												
	= 1" VKP40.25												
	P = 1 - 1/4'' VKP40.32												
	= 1-1/2" VKP40.40												
2.0VKP	= 2" VKP40.50												
2.0HVK	XP = 2" high flow VKP40.	50H											
Outle	et Flange Size												
	NPT Threads		Rp Threads										
0.5	= 1/2" AGF10.15U	0.5R	= 1/2" AGF10.15										
0.75	= 3/4" AGF10.20U	0.75R	= 3/4" AGF10.20										
1.0	= 1" AGF10.25U	1.0R	= 1" AGF10.25	<b>-</b>									
1.25 1.5	= 1-1/4" AGF10.32U = 1-1/2" AGF10.40U	1.25R 1.5R	= 1-1/4" AGF10.32 = 1-1/2" AGF10.40										
2.0	= 1-1/2 AGF10.400 = 2" AGF10.50U	2.0R	= 1-1/2 AGF10.40										
2.0	X = N		2										

Installation	• Each AGF10U flange has one 1/4" NPT pressure tap
	<ul> <li>Each AGF flange with Rp threads has one 1/8" Rp pressure tap</li> </ul>
	<ul> <li>AGF10 flanges may be rotated in 90° increments relative to the valve to better position the pressure tap. To rotate the flange, remove the four M8 socket head screws that attach the flange to the valve, rotate the flange in the desired 90° increment, and reassemble with the four M8 socket head screws.</li> </ul>
	<ul> <li>Install the valve so that the flow follows the direction of the arrow on the valve body.</li> </ul>
	• SQM actuators are not clockable relative to the VKP valve.

### Dimensions

Dimensions in inches; millimeters in brackets

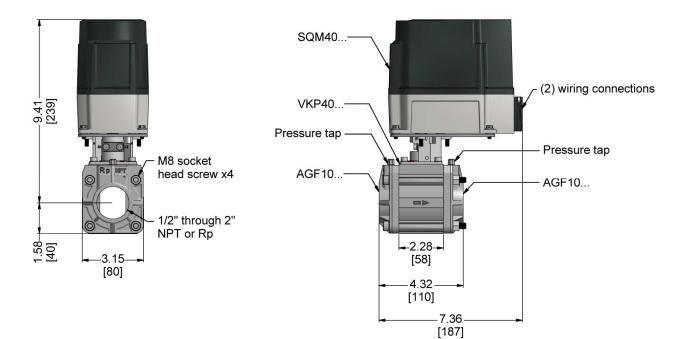
#### VA33...VKP Valve Actuator Assemblies



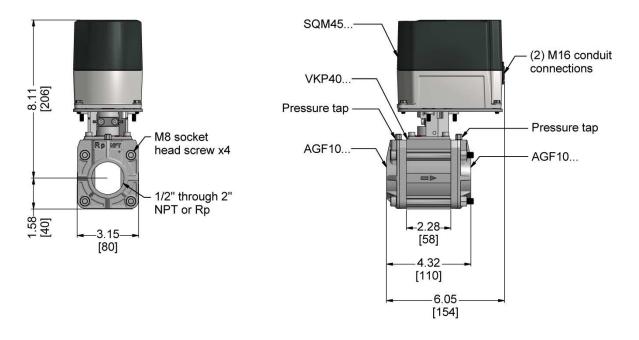
## **Dimensions (continued)**

Dimensions in inches; millimeters in brackets

#### VA40...VKP Valve Actuator Assemblies



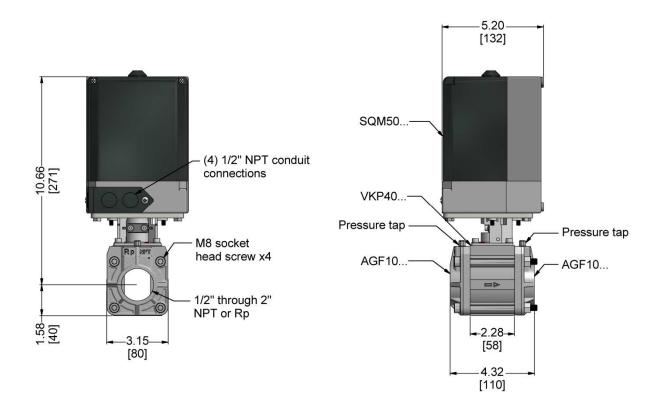
#### VA45...VKP Valve Actuator Assemblies



## **Dimensions (continued)**

Dimensions in inches; millimeters in brackets

#### VA50...VKP Valve Actuator Assemblies



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