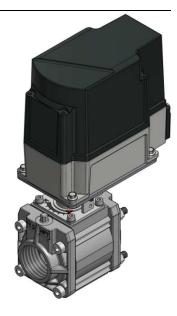
SCC Inc.

Technical Instructions

Document No. VA-2000 July 9, 2019

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. Engineered for precise shaft alignment with less actuator wear Rigid and robust design VKP valve sizes from 1/2" to 2" Includes Siemens SQM33, SQM40, SQM45, or SQM50 actuator Various inlet and outlet flange sizes provide mounting options 				
Features					
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.

			VA	45.2	- 0.5	- 0.5VKP	- 0.5	
Valve	Actuator Assembly							
	•							
Actua	ator							
33	= SQM33.550A9 (stepper		,					
10.11	= SQM40.115R11 (12.5 s	ec, 135 Ohn	n/2-10 VDC, high/lov	v fire feedback)				
10.14	= SQM40.145A21 (12.5 s	-		·				
40.15	= SQM40.155R11 (12.5 s							
10.16	= SQM40.165 (12.5 sec	-	-	-				
0.18								
10.21	= SQM40.215R11 (25 sec			fire feedback)				
10.24	= SQM40.245A21 (25 sec							
10.25	= SQM40.255 (25 sec, 4		-					
10.26	= SQM40.265 (25 sec, 3	-	-	.к)				
10.27	= SQM40.275R10 (25 sec	-		cwitchoc)				
10.28 15.2	= SQM40.285R11 (25 sec	-	-	switches)				
+J.Z	= SQM45.295B9 (stepper	, ior use wit	ur Liviv J)					
Volta	ge							
Blank	= 120 Vac SQM40 or star	ndard SQM3	3 or SQM45					
220)	= 220 Vac (not available							
nlet	Flange Size							
	NPT Threads		Rp Threads					
).5	= 1/2" AGF10.15U	0.5R	= 1/2" AGF10.15					
).75	= 3/4" AGF10.20U	0.75R	= 3/4" AGF10.20					
L.O	= 1" AGF10.25U	1.0R	= 1" AGF10.25					
1.25	= 1-1/4" AGF10.32U	1.25R	= 1-1/4" AGF10.32					
1.5	= 1-1/2" AGF10.40U	1.5R	= 1-1/2" AGF10.40)				
2.0	= 2" AGF10.50U	2.0R	= 2" AGF10.50					
	X = N	one						
	/alve							
	= 1/2" VKP40.15							
	P = 3/4" VKP40.20							
	= 1" VKP40.25							
	P = 1 - 1/4" VKP40.32							
	= 1-1/2" VKP40.40							
	= 2" VKP40.50							
	P = 2" VKP40.50H P = 2" VKP40.50S							
Jutie	t Flange Size		Pp Throads					
	NPT Threads		Rp Threads					
).5	= 1/2" AGF10.15U	0.5R	= 1/2" AGF10.15					
).75	= 3/4" AGF10.20U	0.75R	= 3/4" AGF10.20					
L.O	= 1" AGF10.25U	1.0R	= 1" AGF10.25					
L.25	= 1-1/4" AGF10.32U	1.25R	= 1-1/4" AGF10.32					
L.5	= 1-1/2" AGF10.40U	1.5R 2.0R	= 1-1/2" AGF10.40	J				
10								
2.0	= 2" AGF10.50U X = N		= 2" AGF10.50					

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.

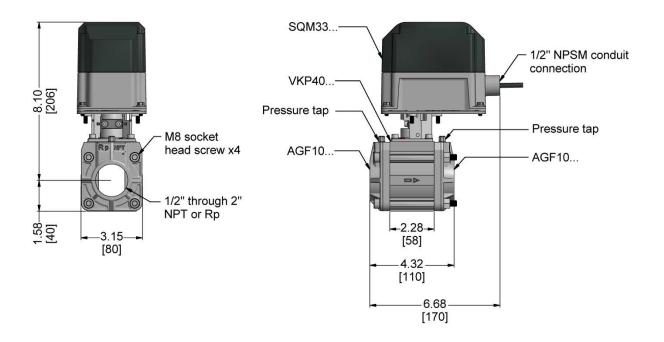
	VA	50.4	Ζ	3	- 1.0	- 1.0VKP	- 1.0
Valve Actuator Assembly				\top			
Actuator							
50 = SQM50							
Torque / Timing							
2 = 10Nm & 8sec (90° stroke)							
3 = 15Nm & 12sec (90° stroke)							
4 = 15Nm & 25sec (90° stroke)							
Control Board							
Blank = AGA56.41A (4-20 mA input)			<u> </u>				
A = AGA56.1A97 (position proport	ional control)						
H = AGA56.42A (0-135 Ω input)							
K = AGA56.43A (0-10 Vdc input) Z = AGA56.9 (all inputs/outputs)							
(
Potentiometer Blank = ASZ12.30 (1000Ω, 90°) on "G",	"U" "K" or "7" beard	h none on "A" l	poard				
$3 = ASZ12.30 (1000\Omega, 90°) \text{ on "A"}$		i; none on A i	Joard				
7 = ASZ22.30 (1000Ω/1000Ω, 90°)	Source only						
Voltage							
Blank = 120 Vac							
(220) = 220 Vac							
(24) = 24 Vac							
Inlet 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						
1.25 = 1-1/4" AGF10.32U 1.25R 1.5 = 1-1/2" AGF10.40U 1.5R	= 1-1/4" AGF10.32 = 1-1/2" AGF10.40						
2.0 = 2" AGF10.50U 2.0R	= 1-1/2 AGF10.40 = 2" AGF10.50						
X = None	2 //01/20100						
VKP Valve							
0.5VKP = 1/2" VKP40.15							
0.75VKP = 3/4" VKP40.20							
1.0VKP = 1" VKP40.25							
1.25VKP = 1-1/4" VKP40.32							
1.5VKP = 1-1/2" VKP40.40							
2.0VKP = 2" VKP40.50							
2.0HVKP = 2" high flow VKP40.50H 2.0SVKP = 2" high flow VKP40.50S							
Outlet Flange Size							
NPT Threads	Rp Threads						
0.5 = 1/2" AGF10.15U 0.5R 0.75 = 3/4" AGF10.20U 0.75R	= 1/2" AGF10.15 = 3/4" AGF10.20						
1.0 = 1" AGF10.200 0.75K	= 3/4 AGF10.20 = 1" AGF10.25						
1.25 = 1.1/4" AGF10.32U 1.25R	= 1-1/4" AGF10.32						
1.5 = 1.1/2" AGF10.40U 1.5R	= 1-1/2" AGF10.40						
2.0 = 2" AGF10.50U 2.0R	= 2" AGF10.50						
X = None							

Installation	•	Each AGF10U flange has one 1/4" NPT pressure tap
	•	Each AGF flange with Rp threads has one 1/8" Rp pressure tap
	•	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.
	•	Install the valve so that the flow follows the direction of the arrow on the valve body.
	•	SQM actuators are not clockable relative to the VKP valve.

Dimensions

Dimensions in inches; millimeters in brackets

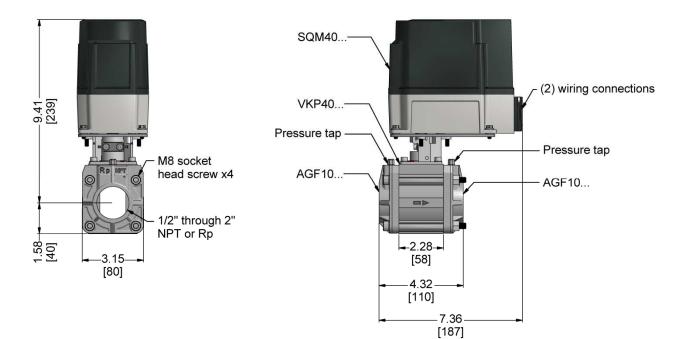
VA33...VKP Valve Actuator Assemblies



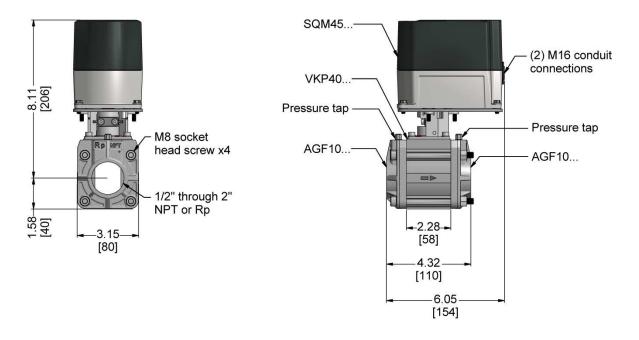
Dimensions (continued)

Dimensions in inches; millimeters in brackets

VA40...VKP Valve Actuator Assemblies



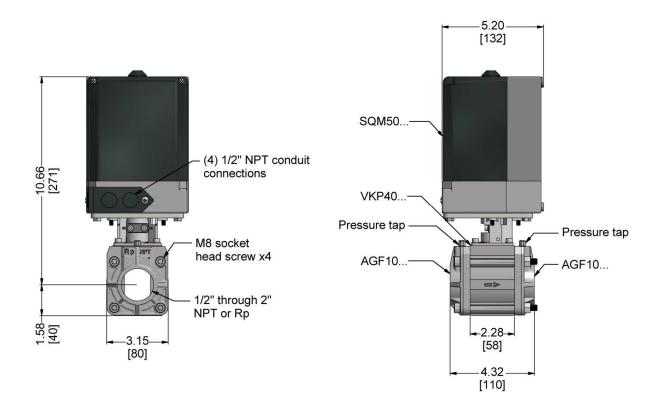
VA45...VKP Valve Actuator Assemblies



Dimensions (continued)

Dimensions in inches; millimeters in brackets

VA50...VKP Valve Actuator Assemblies



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