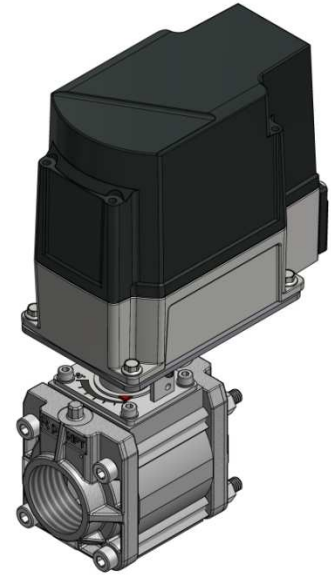


VA Series

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



Description

VA...VKP 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"
- Includes Siemens SQM33, SQM40, SQM45, or SQM50 actuator
- Various inlet and outlet flange sizes provide mounting options

Application

VA...VKP 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					
Actuator					
33	= SQM33.550A9 (stepper, for use with LMV3...)				
40.11	= SQM40.115R11 (12.5 sec, 4-20 mA/135 Ohm/2-10 VDC, high/low fire feedback)				
40.14	= SQM40.145A21 (12.5 sec, 4-20 mA/135 Ohm/2-10 VDC)				
40.15	= SQM40.155R11 (12.5 sec, 4-20 mA, independent aux switch)				
40.16	= SQM40.165... (12.5 sec, 3-position, high/low fire feedback)				
40.18	= SQM40.185R11 (12.5 sec, 3-position, 3 independent aux switches)				
40.21	= SQM40.215R11 (25 sec, 4-20 mA/135 Ohm/2-10 VDC, high/low fire feedback)				
40.24	= SQM40.245A21 (25 sec, 4-20 mA/135 Ohm/2-10 VDC)				
40.25	= SQM40.255... (25 sec, 4-20 mA, independent aux switch)				
40.26	= SQM40.265... (25 sec, 3-position, high/low fire feedback)				
40.27	= SQM40.275R10 (25 sec, high/low basic version)				
40.28	= SQM40.285R11 (25 sec, 3-position, 3 independent aux switches)				
45.2	= SQM45.295B9 (stepper, for use with LMV5...)				
Voltage					
Blank	= 120 Vac SQM40 or standard SQM33 or SQM45				
(220)	= 220 Vac (not available for SQM33 & SQM45 actuators)				
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	= 1-1/4" 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				
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" VKP40.50H				
2.0SVKP	= 2" VKP40.50S				
Outlet 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	= 1-1/4" 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				

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	Z	3	-	1.0	-	1.0VKP	-	1.0
Valve Actuator Assembly													
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)												
A	= AGA56.1A97 (position proportional 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", "H", "K", or "Z" board; none on "A" board												
3	= ASZ12.30 (1000Ω, 90°) on "A" board only												
7	= ASZ22.30 (1000Ω/1000Ω, 90°)												
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	= 1-1/4" 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											
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	= 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	= 1-1/4" 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											

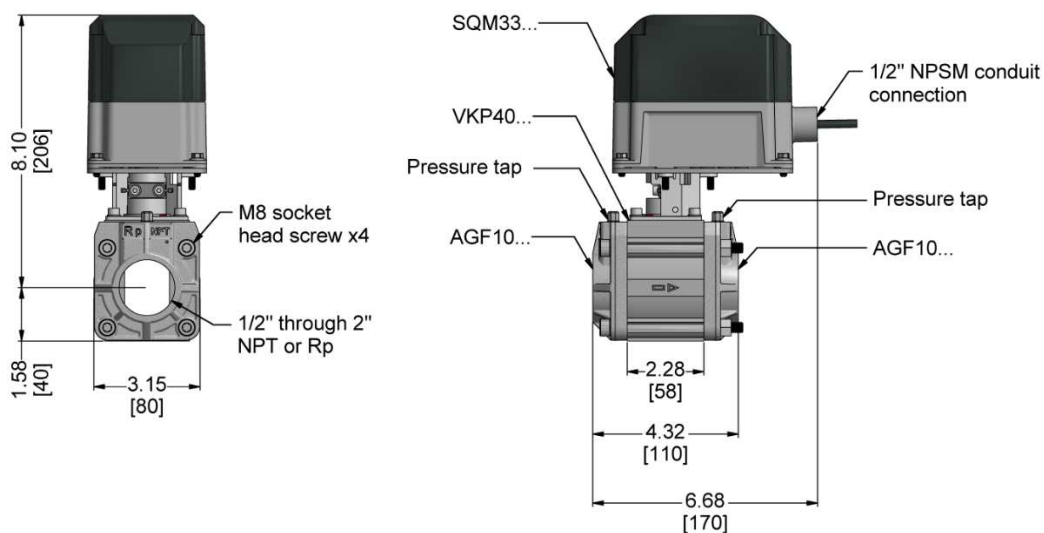
Installation

- Each AGF10...U 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
- The limit switches on all assemblies using an SQM40... or SQM50... actuator are set to achieve a 0-90° stroke

Dimensions

Dimensions in inches [mm]

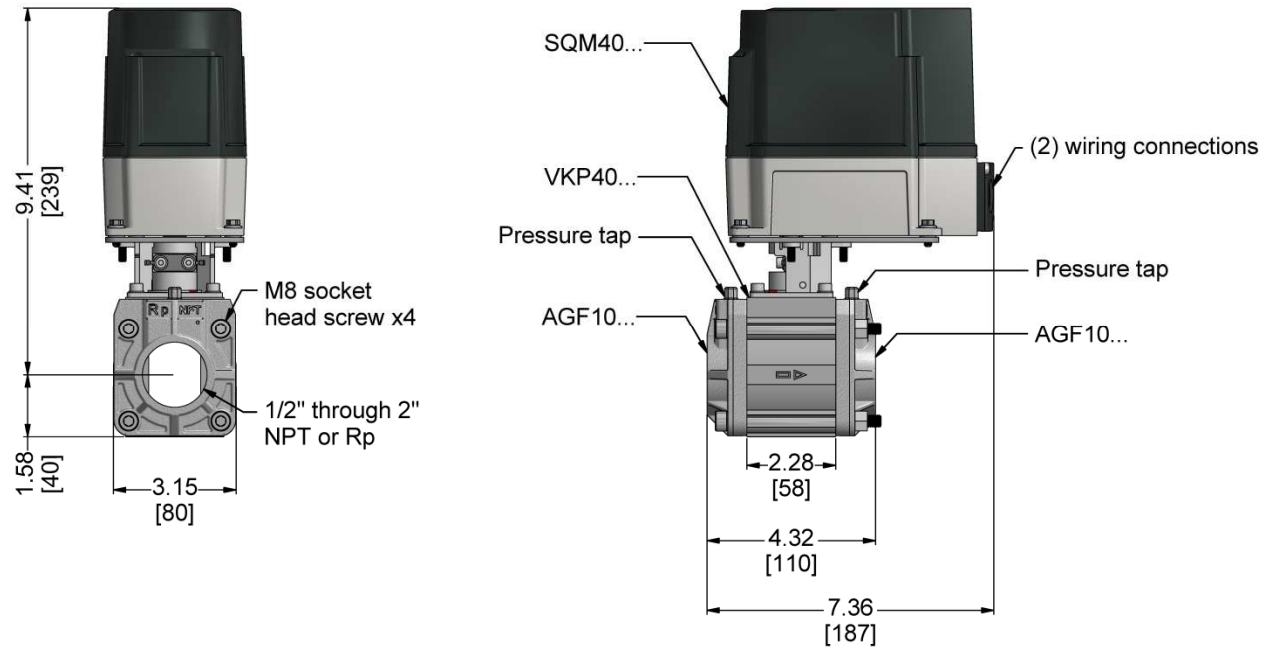
VA33...VKP Valve Actuator Assemblies



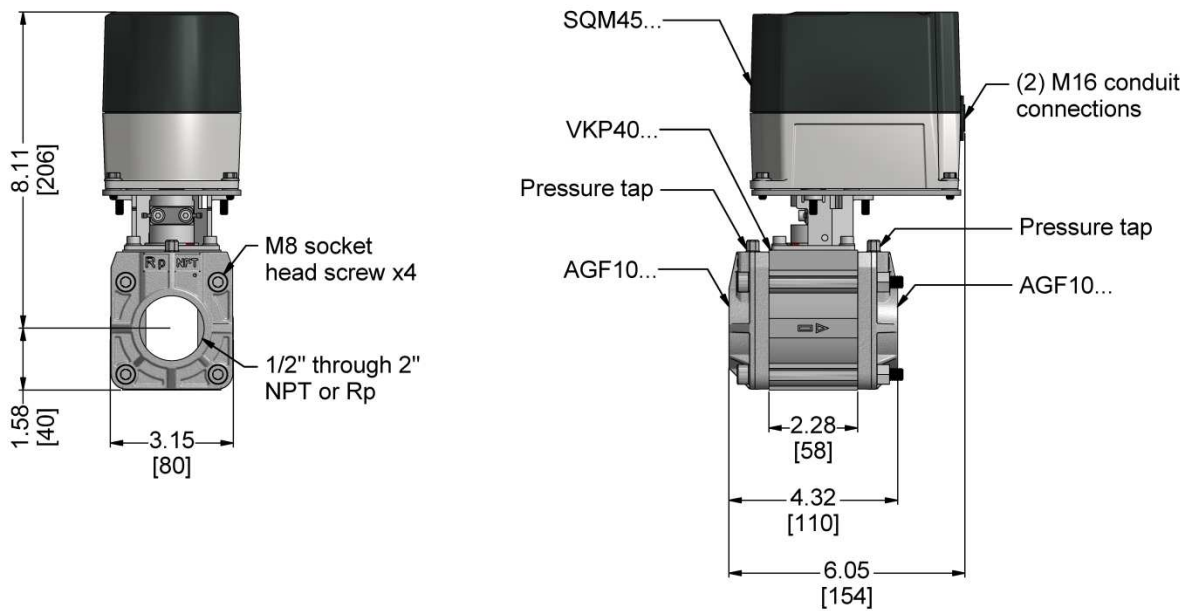
Dimensions (continued)

Dimensions in inches [mm]

VA40...VKP Valve Actuator Assemblies



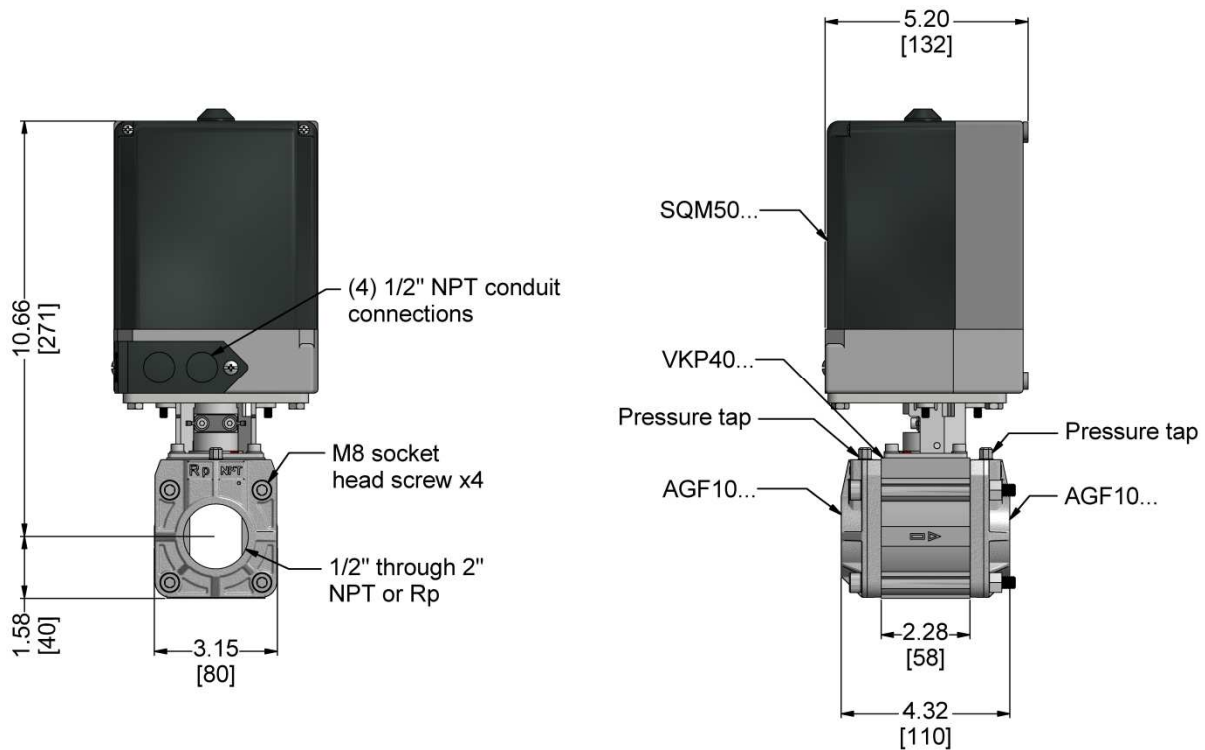
VA45...VKP Valve Actuator Assemblies



Dimensions (continued)

Dimensions in inches [mm]

VA50...VKP Valve Actuator Assemblies



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