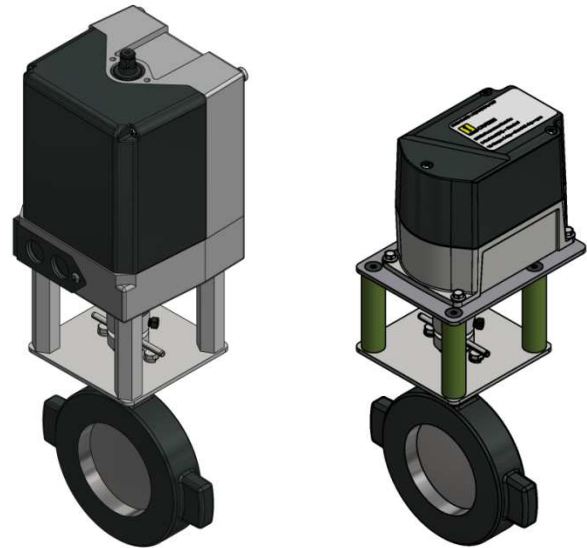


## VA Series

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### VA...VKF Valve Actuator Assemblies with VKF Butterfly Valves



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### Description

VA...VKF valve actuator assemblies include a Siemens SQM... actuator reliably mounted to a VKF... butterfly valve.

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### Features

- Engineered for precise shaft alignment with less actuator wear
- High temperature VA...HT versions for FGR or hot air up to 550°F
- Biogas VA...B versions for corrosive gases such as biogas
- Rigid and robust design
- VKF valve sizes from 1-1/2" to 8"
- Includes Siemens SQM33, SQM40, SQM45, SQM48, or SQM5 actuator

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### Application

VA...VKF valve actuator assemblies mount an SQM33, SQM40, SQM45, SQM48, or SQM5 actuator to a VKF... butterfly valve. The VKF... valve and SQM... actuator are rigidly mounted with Siemens engineered brackets and couplings to ensure precise shaft alignment. VKF technical instructions (CVLV-1000) provide sizing and additional valve information.

## Product Part Numbers

The following chart provides VA...VKF assembly part number identification including an SQM33, SQM40, SQM45, or SQM48 actuator. Technical instructions for SQM33 (N7813), SQM40 (N7817), or SQM45/48 (N7814) actuators are available at [www.scccombustion.com](http://www.scccombustion.com).

		VA	48.4	-	2.0	VKF	-	HT	-	N4
<b>Valve Actuator Assembly</b>										
<b>Actuator</b>										
33	= SQM33.550A9 (stepper, for use with LMV3...)									
40.11	= SQM40.115R11 (12.5 sec, 135 Ohm/4-20 mA, high/low fire feedback)									
40.15	= SQM40.155R11 (12.5 sec, 4-20 mA, independent aux switch)									
40.18	= SQM40.185R11 (12.5 sec, 3-position, 3 independent aux switches)									
40.21	= SQM40.215R11 (25 sec, 135 Ohm/4-20 mA, high/low fire feedback)									
40.25	= SQM40.255R11 (25 sec, 4-20 mA, independent aux switch)									
40.26	= SQM40.265R11 (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...)									
48.4	= SQM48.497B9 (stepper, for use with LMV5...)									
48.6	= SQM48.697B9 (stepper, for use with LMV5...)									
<b>Voltage</b>										
Blank	= 120 Vac SQM40 or standard SQM33, SQM45, or SQM48									
(220)	= 220 Vac (not available for SQM33, SQM45, or SQM48 actuators)									
<b>Valve Size</b>										
1.5	= 1-1/2" VKF41.40...									
2.0	= 2" VKF41.50...									
2.5	= 2-1/2" VKF41.65...									
3.0	= 3" VKF41.80...									
4.0	= 4" VKF41.100...									
6.0	= 6" VKF41.150...									
8.0	= 8" VKF41.200...									
<b>VKF Valve</b>										
<b>Valve Type</b>										
Blank	= Standard VKF...C									
B	= Biogas VKF...B									
HT	= High-temp VKF...H									
<b>Actuator NEMA Rating</b>										
Blank	= NEMA 12 SQM33, SQM45, or SQM48; NEMA 4 SQM40									
N4	= NEMA 4 SQM33, SQM45, or SQM48									

## Product Part Numbers (continued)

The following chart provides VA...VKF assembly part number identification including an SQM50 actuator. Technical instructions for SQM5 (155-517) actuators are available at [www.scccombustion.com](http://www.scccombustion.com).

	VA	50 . 4	Z	7	-	4.0	VKF	-	-	N4
<b>Valve Actuator Assembly</b>										
<b>Actuator</b>										
50 = SQM50										
53 = SQM53										
56 = SQM56										
<b>Torque / Timing</b>										
2 = 10Nm & 8sec for 90° stroke (SQM50 only)										
3 = 15Nm & 12sec for 90° stroke (SQM50 only)										
4 = 15Nm (SQM50) or 20Nm (SQM53) & 25sec for 90° stroke										
5 = 30Nm & 37sec for 90° stroke (SQM56 only)										
6 = 40Nm & 50sec for 90° stroke (SQM56 only)										
<b>Control Board</b>										
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)										
<b>Potentiometer</b>										
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°)										
<b>Voltage</b>										
Blank = 120 Vac										
(220) = 220 Vac										
<b>Valve Size</b>										
1.5 = 1-1/2" VKF41.40...										
2.0 = 2" VKF41.50...										
2.5 = 2-1/2" VKF41.65...										
3.0 = 3" VKF41.80...										
4.0 = 4" VKF41.100...										
6.0 = 6" VKF41.150...										
8.0 = 8" VKF41.200...										
<b>VKF Valve</b>										
<b>Valve Type</b>										
Blank = Standard VKF...C										
B = Biogas VKF...B										
HT = High-temp VKF...H										
<b>Actuator NEMA Rating</b>										
Blank = NEMA 12										
N4 = NEMA 4										

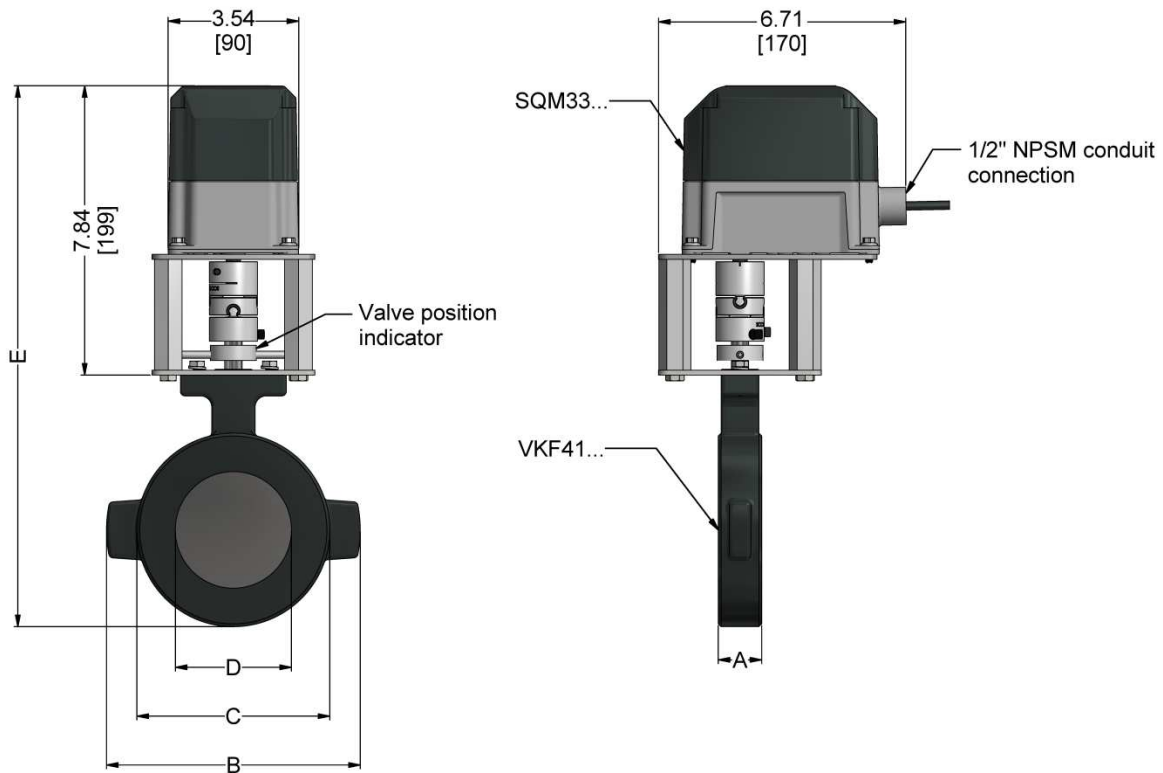
## Installation

- VKF... valves can accommodate flow in either direction. The VA...VKF assembly may be mounted in either direction for actuator wiring convenience.
- Assembly may be mounted in any position except upside down.
- Valve position indicator shows valve position after installation.

## Dimensions

Dimensions in inches; millimeters in brackets

### VA33...VKF Valve Actuator Assemblies



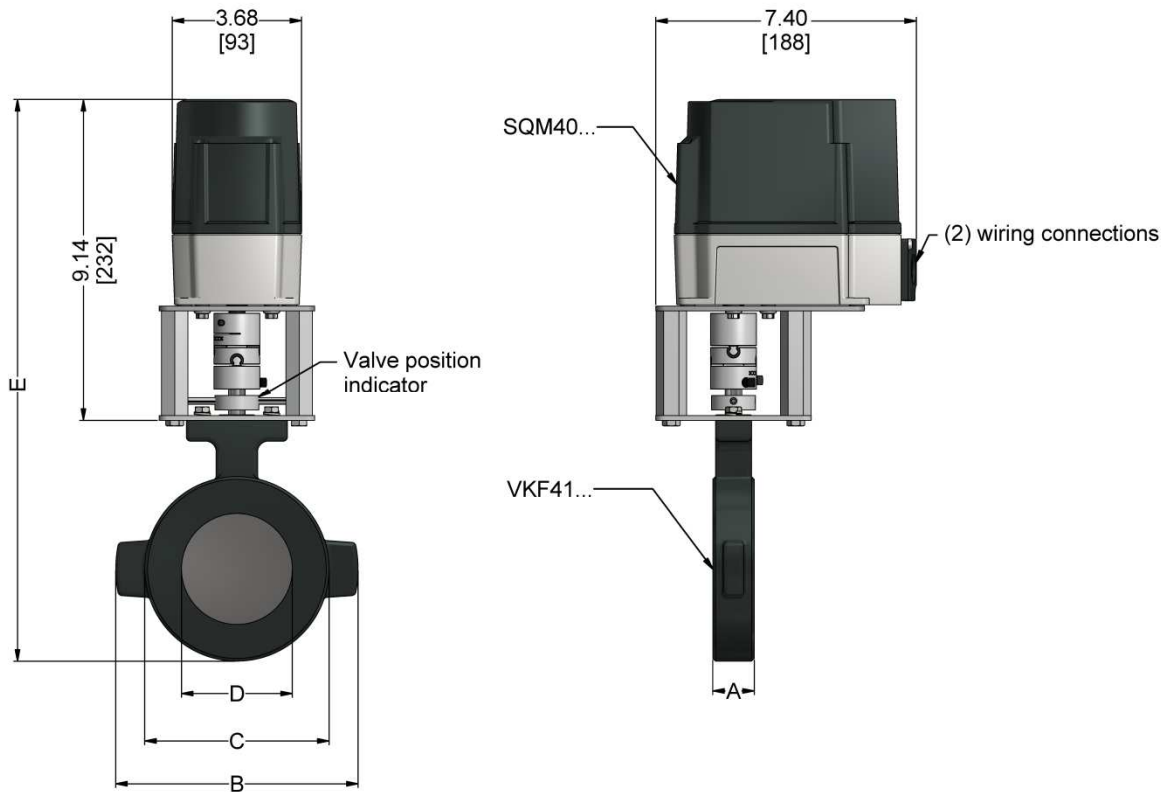
**Table 1: VA33...VKF Dimensions**

Valve Size	A	B	C	D	E
1-1/2"	1.18 [30]	5.12 [130]	3.43 [87]	1.57 [40]	12.97 [329]
2"	1.18 [30]	5.51 [140]	3.82 [97]	1.97 [50]	13.37 [340]
2-1/2"	1.18 [30]	6.30 [160]	4.61 [117]	2.56 [65]	14.06 [357]
3"	1.18 [30]	6.89 [175]	5.24 [133]	3.15 [80]	14.67 [373]
4"	1.18 [30]	7.68 [195]	6.02 [153]	3.94 [100]	15.45 [393]
6"	1.57 [40]	10.04 [255]	8.19 [208]	5.91 [150]	17.83 [453]
8"	1.57 [40]	12.20 [310]	10.35 [263]	7.87 [200]	19.90 [506]

## Dimensions (continued)

Dimensions in inches; millimeters in brackets

### VA40...VKF Valve Actuator Assemblies



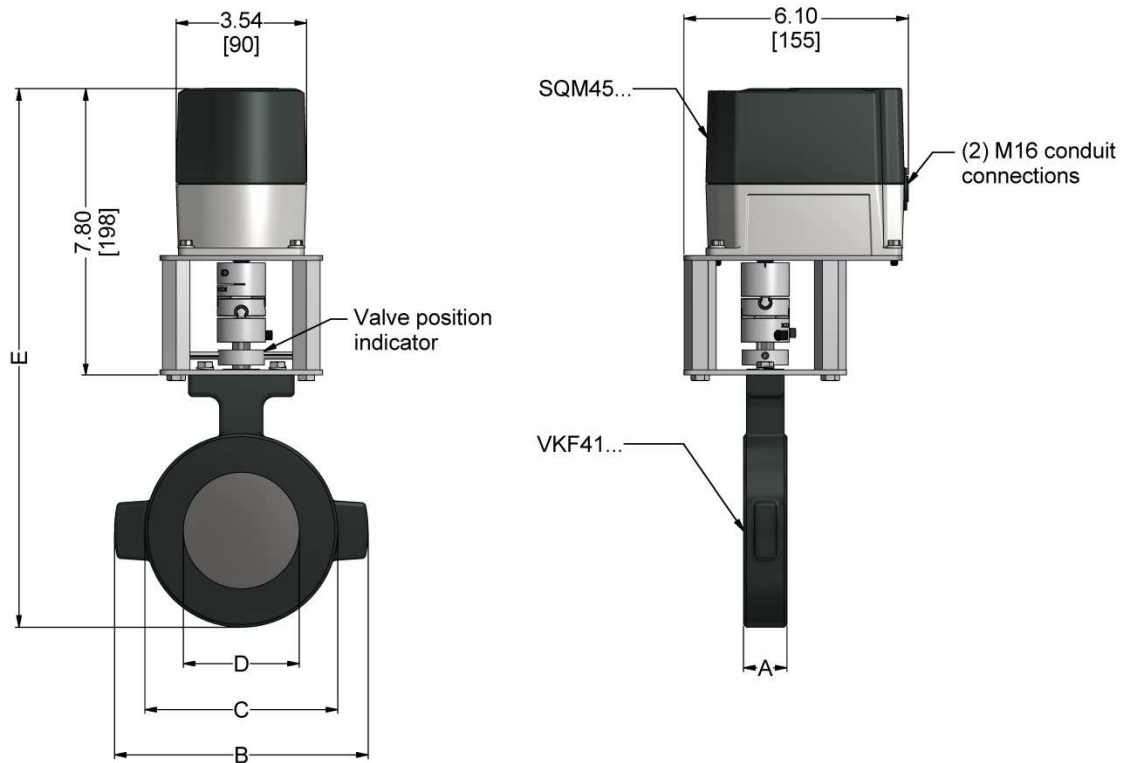
**Table 2: VA40...VKF Dimensions**

Valve Size	A	B	C	D	E
1-1/2"	1.18 [30]	5.12 [130]	3.43 [87]	1.57 [40]	14.27 [362]
2"	1.18 [30]	5.51 [140]	3.82 [97]	1.97 [50]	14.67 [373]
2-1/2"	1.18 [30]	6.30 [160]	4.61 [117]	2.56 [65]	15.36 [390]
3"	1.18 [30]	6.89 [175]	5.24 [133]	3.15 [80]	15.97 [406]
4"	1.18 [30]	7.68 [195]	6.02 [153]	3.94 [100]	16.75 [425]
6"	1.57 [40]	10.04 [255]	8.19 [208]	5.91 [150]	19.13 [486]
8"	1.57 [40]	12.20 [310]	10.35 [263]	7.87 [200]	21.20 [538]

## Dimensions (continued)

Dimensions in inches; millimeters in brackets

### VA45...VKF Valve Actuator Assemblies



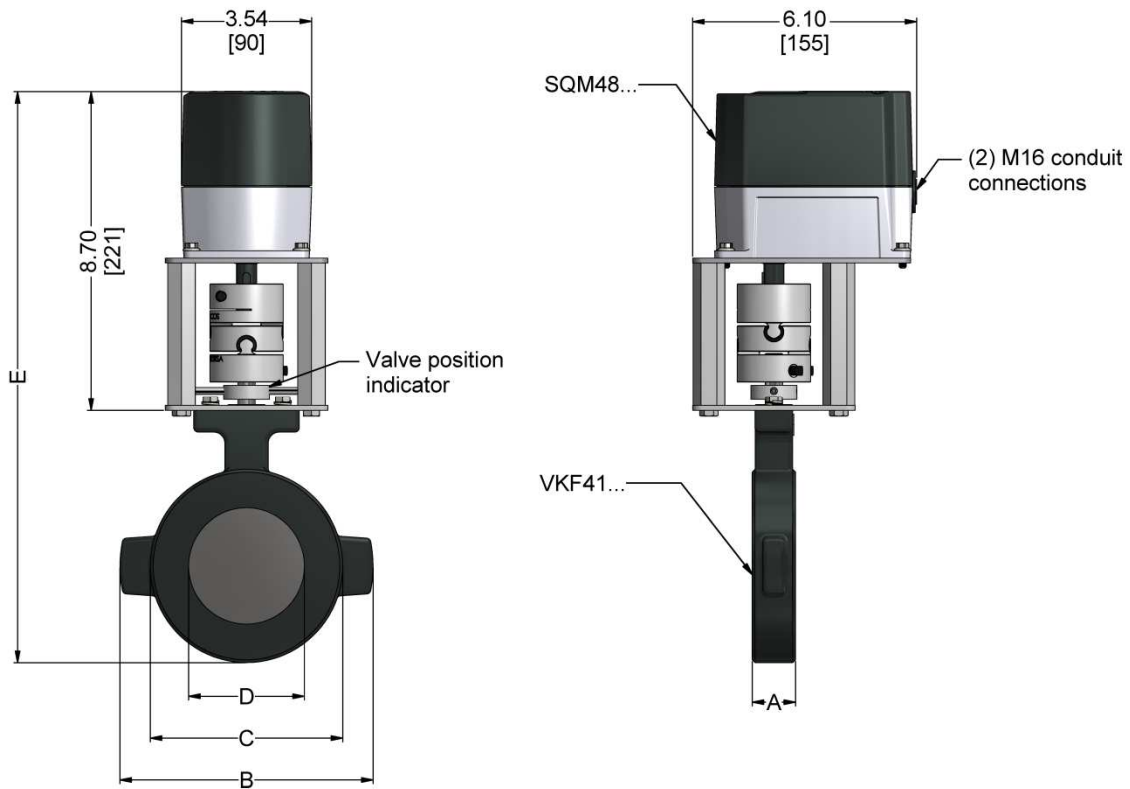
**Table 3: VA45...VKF Dimensions**

Valve Size	A	B	C	D	E
1-1/2"	1.18 [30]	5.12 [130]	3.43 [87]	1.57 [40]	12.93 [328]
2"	1.18 [30]	5.51 [140]	3.82 [97]	1.97 [50]	13.33 [339]
2-1/2"	1.18 [30]	6.30 [160]	4.61 [117]	2.56 [65]	14.02 [356]
3"	1.18 [30]	6.89 [175]	5.24 [133]	3.15 [80]	14.63 [372]
4"	1.18 [30]	7.68 [195]	6.02 [153]	3.94 [100]	15.41 [391]
6"	1.57 [40]	10.04 [255]	8.19 [208]	5.91 [150]	17.79 [452]
8"	1.57 [40]	12.20 [310]	10.35 [263]	7.87 [200]	19.86 [504]

## Dimensions (continued)

Dimensions in inches; millimeters in brackets

### VA48...VKF Valve Actuator Assemblies



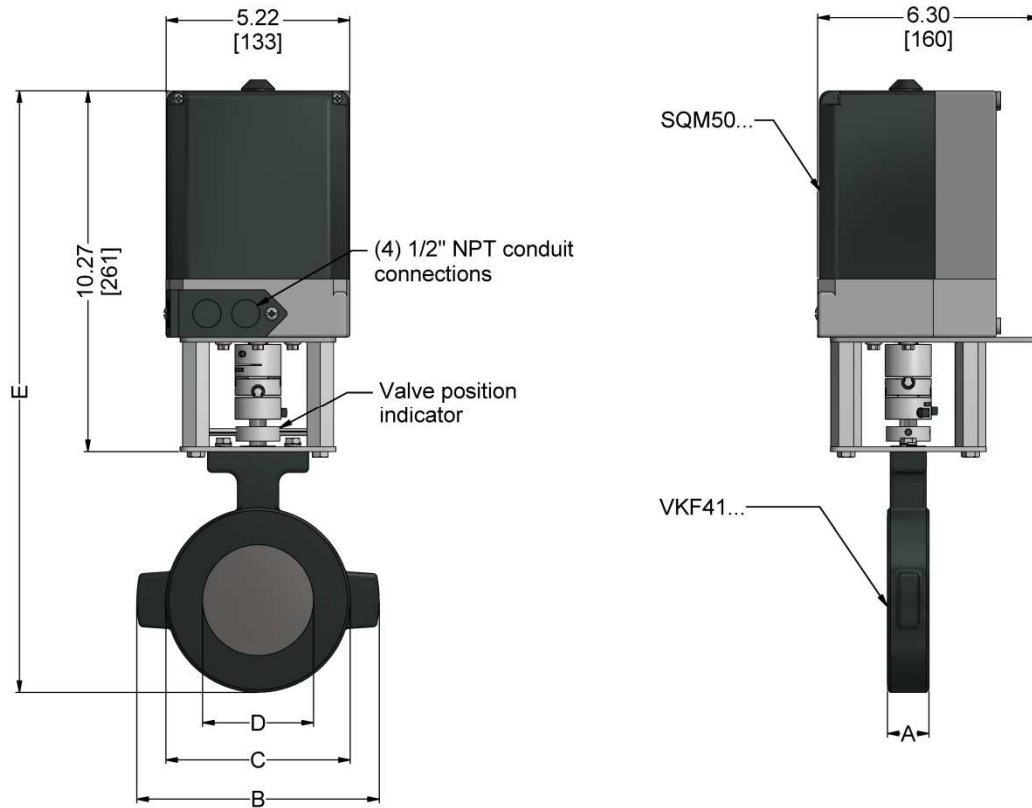
**Table 4: VA48...VKF Dimensions**

Valve Size	A	B	C	D	E
1-1/2"	1.18 [30]	5.12 [130]	3.43 [87]	1.57 [40]	13.83 [351]
2"	1.18 [30]	5.51 [140]	3.82 [97]	1.97 [50]	14.23 [361]
2-1/2"	1.18 [30]	6.30 [160]	4.61 [117]	2.56 [65]	14.92 [379]
3"	1.18 [30]	6.89 [175]	5.24 [133]	3.15 [80]	15.53 [394]
4"	1.18 [30]	7.68 [195]	6.02 [153]	3.94 [100]	16.31 [414]
6"	1.57 [40]	10.04 [255]	8.19 [208]	5.91 [150]	18.69 [475]
8"	1.57 [40]	12.20 [310]	10.35 [263]	7.87 [200]	20.76 [527]

## Dimensions (continued)

Dimensions in inches; millimeters in brackets

### VA50...VKF Valve Actuator Assemblies



**Table 5: VA50...VKF Dimensions**

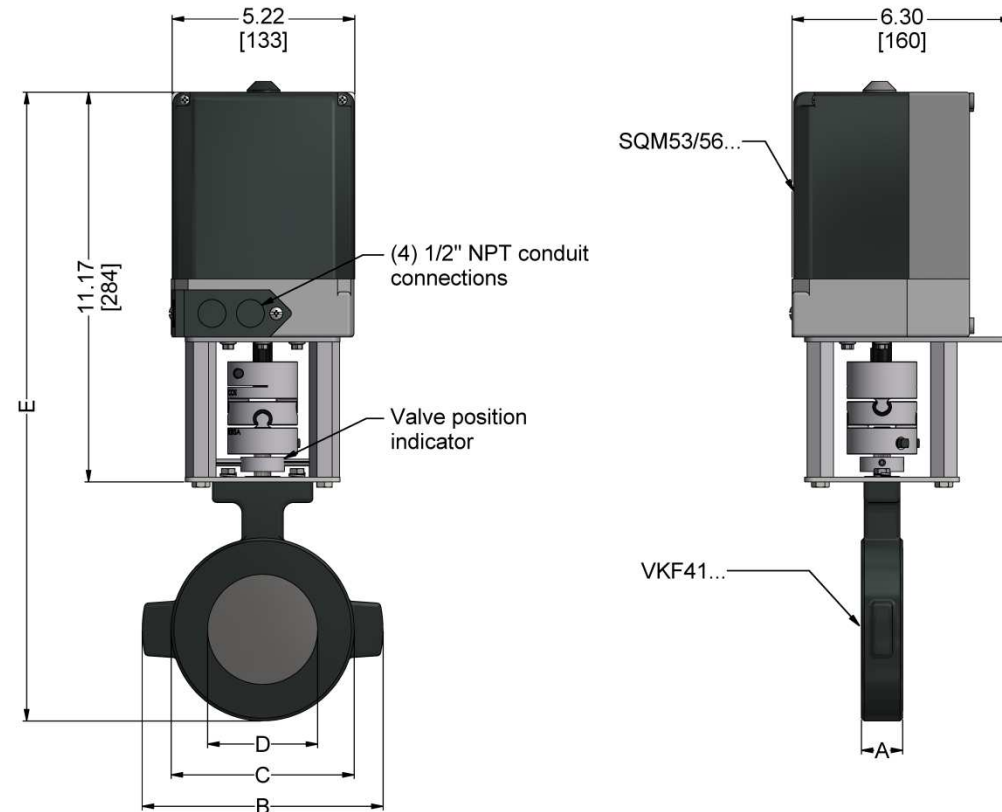
Valve Size	A	B	C	D	E
1-1/2"	1.18 [30]	5.12 [130]	3.43 [87]	1.57 [40]	15.40 [391]
2"	1.18 [30]	5.51 [140]	3.82 [97]	1.97 [50]	15.80 [401]
2-1/2"	1.18 [30]	6.30 [160]	4.61 [117]	2.56 [65]	16.49 [419]
3"	1.18 [30]	6.89 [175]	5.24 [133]	3.15 [80]	17.10 [434]
4"	1.18 [30]	7.68 [195]	6.02 [153]	3.94 [100]	17.88 [454]
6"	1.57 [40]	10.04 [255]	8.19 [208]	5.91 [150]	20.26 [515]
8"	1.57 [40]	12.20 [310]	10.35 [263]	7.87 [200]	22.33 [567]



## Dimensions (continued)

Dimensions in inches; millimeters in brackets

### VA53...VKF and VA56...VKF Valve Actuator Assemblies



**Table 6: VA53...VKF and VA56...VKF Dimensions**

Valve Size	A	B	C	D	E
1-1/2"	1.18 [30]	5.12 [130]	3.43 [87]	1.57 [40]	16.30 [414]
2"	1.18 [30]	5.51 [140]	3.82 [97]	1.97 [50]	16.70 [424]
2-1/2"	1.18 [30]	6.30 [160]	4.61 [117]	2.56 [65]	17.39 [442]
3"	1.18 [30]	6.89 [175]	5.24 [133]	3.15 [80]	18.00 [457]
4"	1.18 [30]	7.68 [195]	6.02 [153]	3.94 [100]	18.78 [477]
6"	1.57 [40]	10.04 [255]	8.19 [208]	5.91 [150]	21.16 [537]
8"	1.57 [40]	12.20 [310]	10.35 [263]	7.87 [200]	23.23 [590]

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