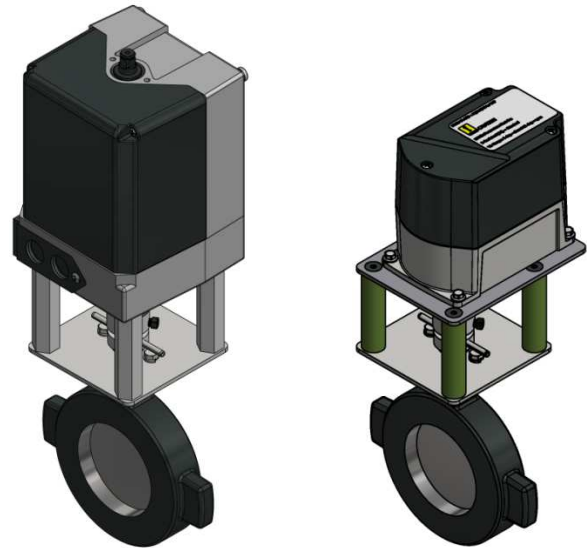


VA Series

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



Description

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

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

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.

		VA	48.4	-	2.0	VKF	-	HT	-	N4
Valve Actuator Assembly										
Actuator										
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...)									
Voltage										
Blank	= 120 Vac SQM40 or standard SQM33, SQM45, or SQM48									
(220)	= 220 Vac (not available for SQM33, SQM45, or SQM48 actuators)									
Valve Size										
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...									
VKF Valve										
Valve Type										
Blank	= Standard VKF...C									
B	= Biogas VKF...B									
HT	= High-temp VKF...H									
Actuator NEMA Rating										
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.

	VA	50	.	4	Z	7	-	4.0	VKF	-	-	N4
Valve Actuator Assembly												
Actuator												
50	= SQM50											
53	= SQM53											
56	= SQM56											
Torque / Timing												
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)											
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											
Valve Size												
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...											
VKF Valve												
Valve Type												
Blank	= Standard VKF...C											
B	= Biogas VKF...B											
HT	= High-temp VKF...H											
Actuator NEMA Rating												
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

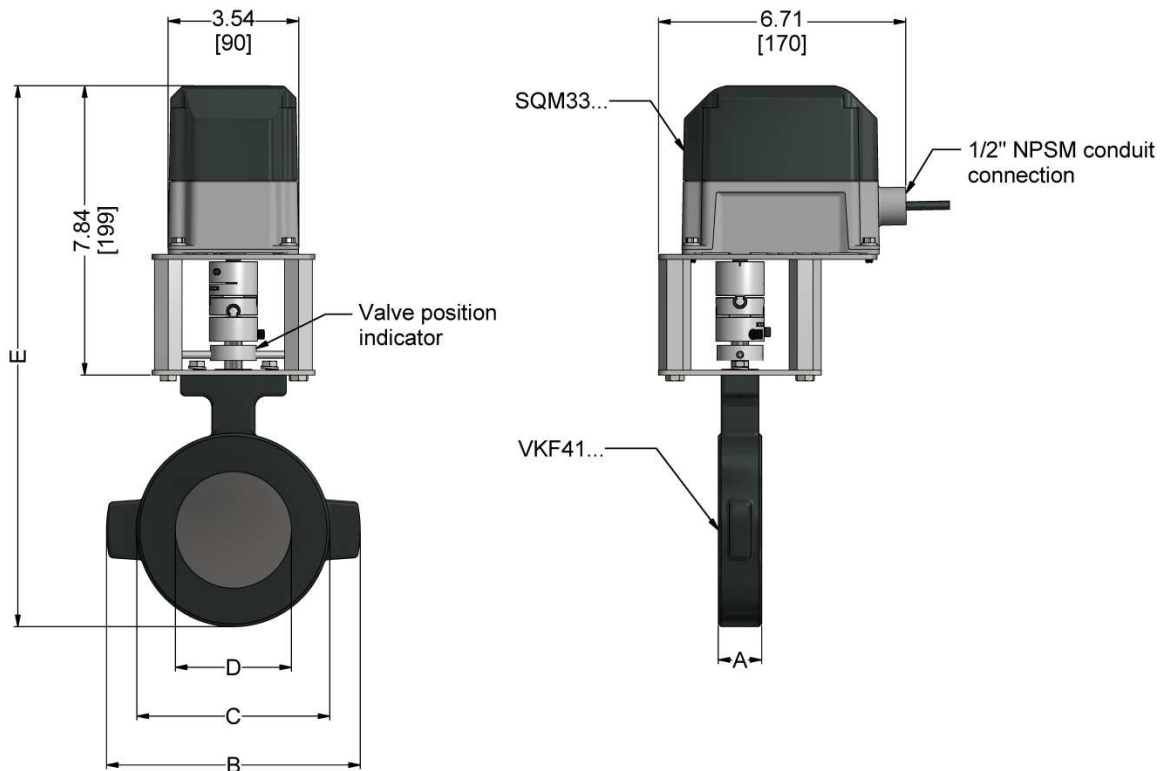


Table 1: VA33...VKF Dimensions

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

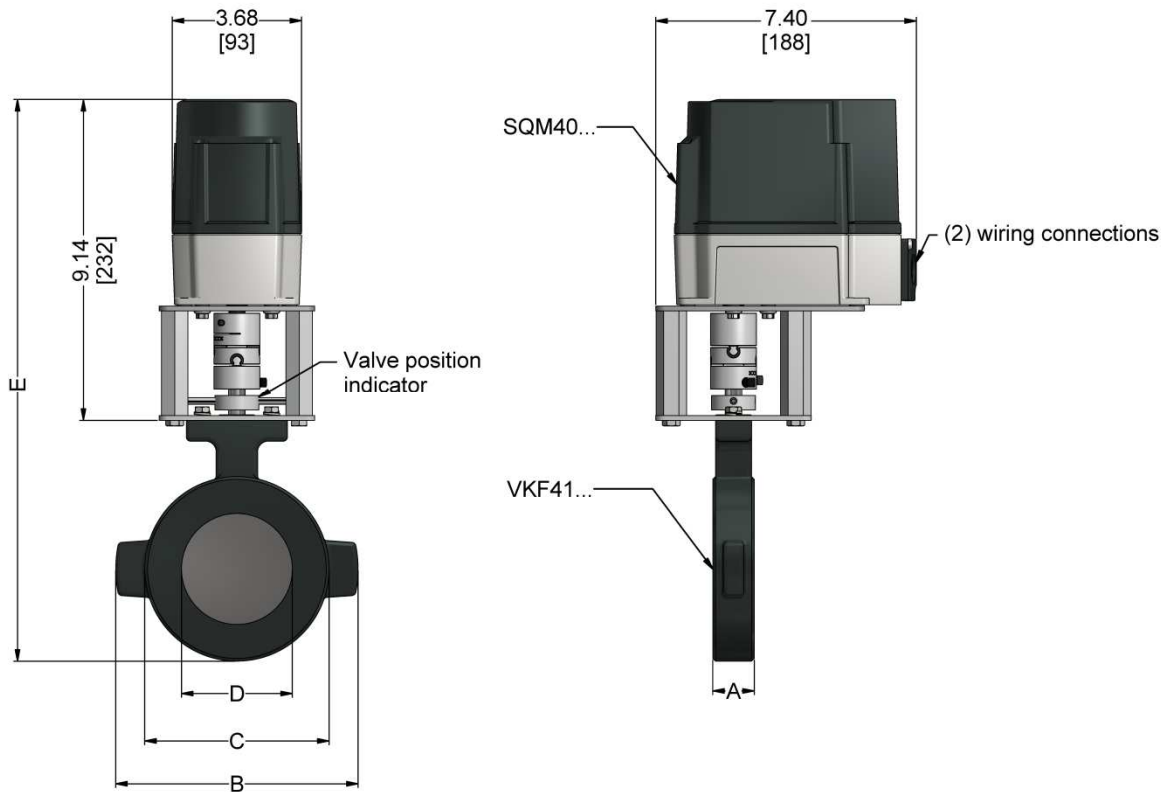


Table 2: VA40...VKF Dimensions

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

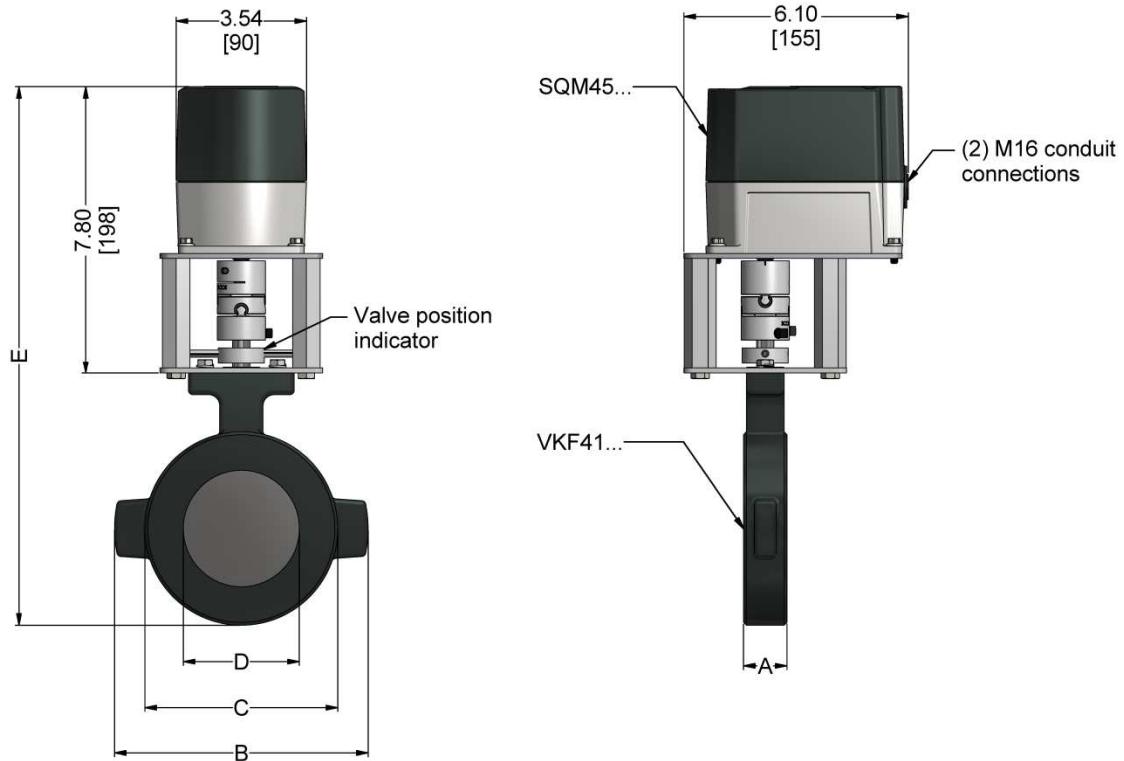


Table 3: VA45...VKF Dimensions

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

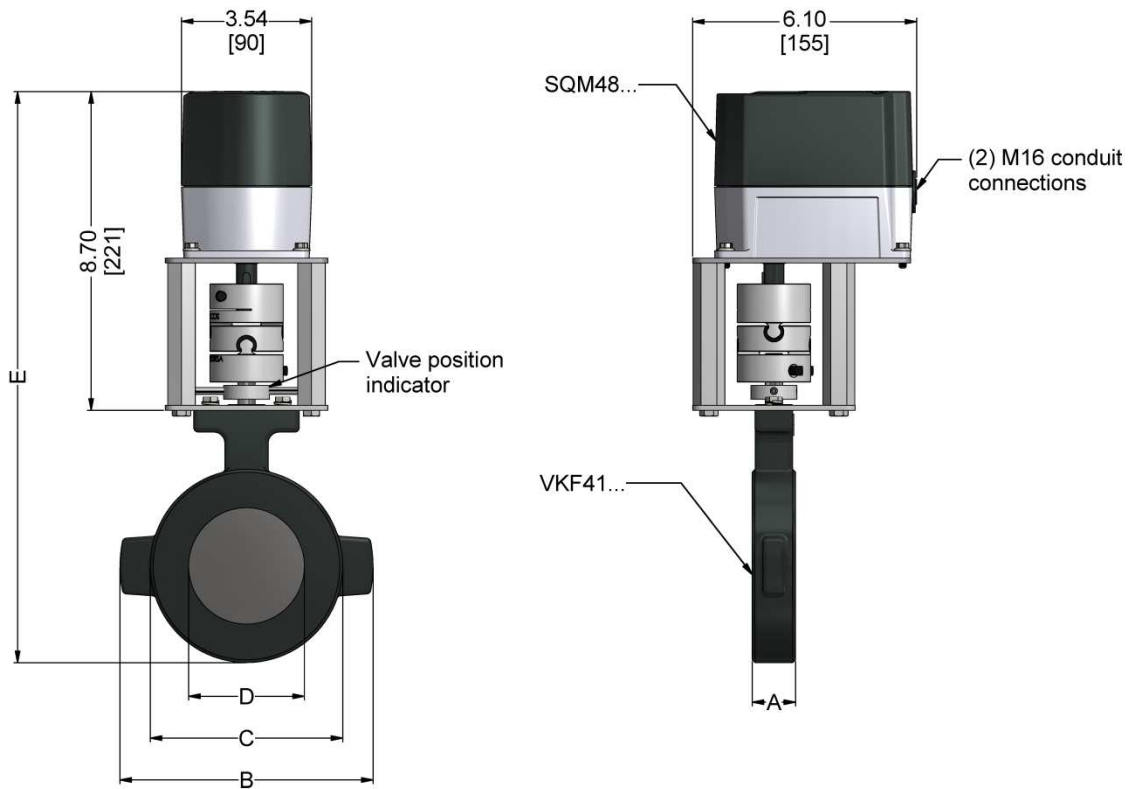


Table 4: VA48...VKF Dimensions

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

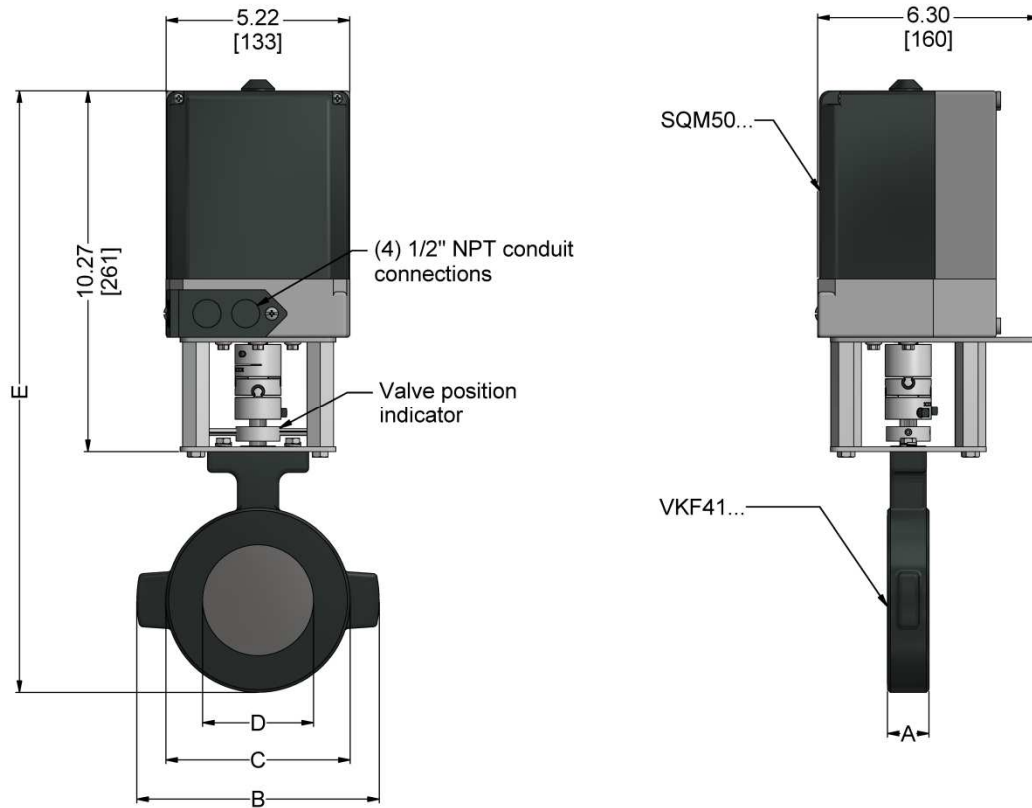


Table 5: VA50...VKF Dimensions

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

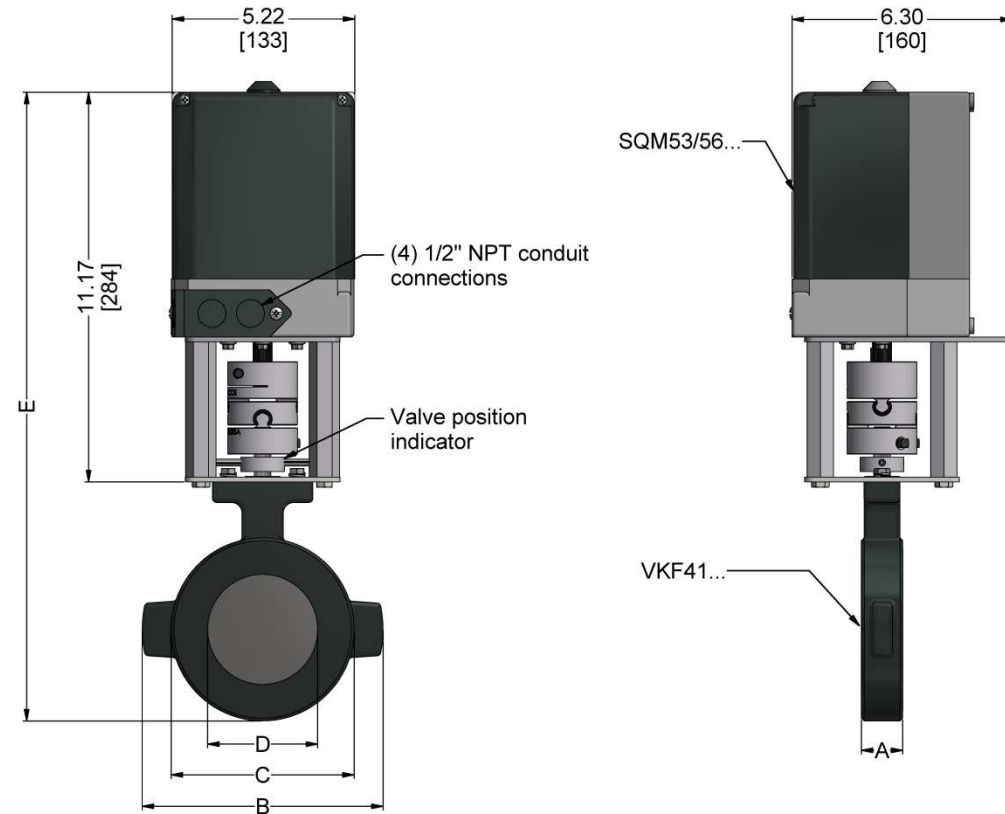


Table 6: VA53...VKF and VA56...VKF Dimensions

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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