

CONTROL VALVES

ZONE VALVES
KVC SERIES



DESCRIPTION

The **Kele KVC Series** includes two- and three-way, hot and chilled water control valves and fail-in-place or power-fail return electric actuators. The unique cartridge design enables the valve to be piped mixing or diverting for the three-way valve, and either flow direction for the two-way valve. The actuator uses a unique twist-off mount for easy installation or servicing and is available with two-position, floating, or proportional control signals.

FEATURES

- **Three-way mixing and diverting in one body**
- **Two-way bi-directional flow for simple installation**
- **Linear flow characteristics**
- **Easily replaceable seat cartridge**
- **Twist-on low power/long life actuator**
- **Manual override**
- **Fail-in-place or power-fail return actuator models**
- **Selectable power fail return direction models**



**KVC 2100N66 valve with
KVC 6936 actuator**



3 CONTROL VALVES

SPECIFICATIONS

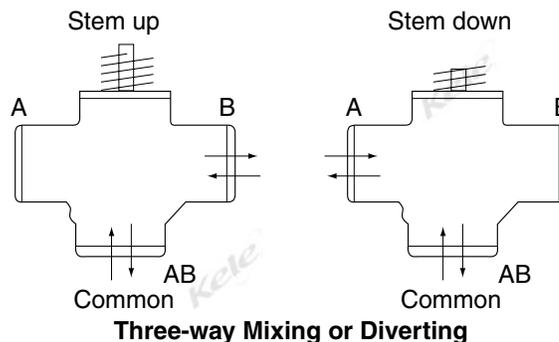
Size	1/2", 3/4", 1", 1-1/4"	Control Signal	Two-position, floating, or proportional
Cv		Wiring	39" (99 cm) cable, 20 AWG conductors
2-way	0.7, 13, 2.9, 3.2, 6.6	Action	
3-way	3.7, 6.6, 8.7, 9.2	2-way	Stem spring up on actuator removal, stem up to close (bi-directional flow)
Connections	FNPT	3-way	Stem spring up on actuator removal, stem up closes port A, stem down closes port B
Body Pattern	2-Way, 3-Way	Actuator Mounting	Twist-lock mount with latch
Flow Characteristic	Linear	Manual Override	Combination override lever and position indicator
Leakage Rating	ANSI Class IV (0.01% of Rated Capacity)	Stroke Time	
Maximum Closeoff Pressure		KVCx114	6 seconds
	60 psid (414 kPa)	KVCx93x	120 seconds
Pressure Rating	300 psig (2069 kPa)	Weight	
Materials Of Construction	Bronze valve body, stainless steel stem, Ryton® and Noryl® trim, Noryl® and Ryton® plastic actuator housing	KVCxxx4	0.9 lb (0.39 Kg)
Media Compatibility	Hot water, chilled water	KVCxxx6	1.1 lb (0.50 Kg)
Media Temperature Range	34° to 203°F (1° to 95°C)	Approvals	
Supply Voltage	24 VAC @ 6 VA, 50/60 Hz	Warranty	1 year

KVC REPLACEMENT CARTRIDGES

CARTRIDGE MODEL NO.	BODY PATTERN	VALVE SIZE AND CV			
		1/2"	3/4"	1"	1-1/4"
VCZZ1100	Two-way	3.2	4.7	6.6	7.1
VCZZ1400		2.9	3.9	4.2	4.3
VCZZ1500		0.7	0.8	0.8	0.8
VCZZ1600		1.3	1.5	1.5	1.5
VCZZ6100	Three-way	3.8	6.6	8.7	8.7

Note: **1000 Series** cartridges fit all two-way bodies.
6000 Series cartridges fit all three-way bodies.
Cartridge tool included with each cartridge.

THREE-WAY VALVE FLOW CHARACTERISTICS





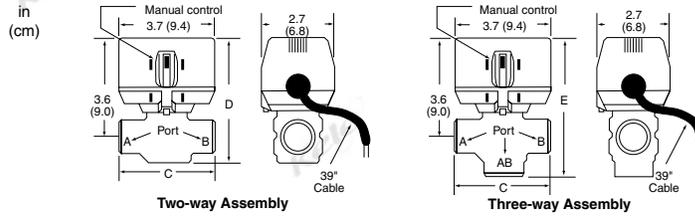
CONTROL VALVES

ZONE VALVES KVC SERIES

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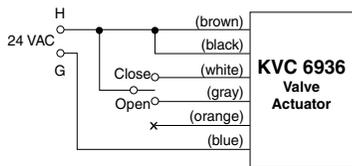
CONTROL VALVES

DIMENSIONS

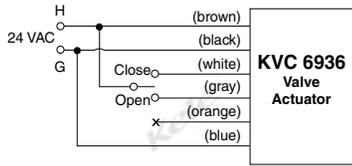


VALVE NUMBER	SIZE	PORT	Cv	C in (cm)	D in (cm)	E in (cm)	Weight
KVC2050N07	1/2"	two-way	0.7	3.87 (9.8)	4.37 (11.1)	—	1.2 lb (.54 Kg)
KVC2050N13	1/2"	two-way	1.3	3.87 (9.8)	4.37 (11.1)	—	1.2 lb (.54 Kg)
KVC2050N29	1/2"	two-way	2.9	3.87 (9.8)	4.37 (11.1)	—	1.2 lb (.54 Kg)
KVC2050N32	1/2"	two-way	3.2	3.87 (9.8)	4.37 (11.1)	—	1.2 lb (.54 Kg)
KVC2075N47	3/4"	two-way	4.7	3.7 (9.4)	4.45 (11.3)	—	1.8 lb (.80 Kg)
KVC2100N66	1"	two-way	6.6	3.7 (9.4)	4.45 (11.3)	—	2.1 lb (.95 Kg)
KVC2125N71	1-1/4"	two-way	7.1	4.3 (11.0)	4.6 (11.8)	—	2.2 lb (1.0 Kg)
KVC3050N37	1/2"	three-way	3.7	3.7 (9.4)	—	5.34 (13.6)	1.4 lb (.61 Kg)
KVC3075N66	3/4"	three-way	6.6	3.7 (9.4)	—	5.12 (13.0)	1.5 lb (.68 Kg)
KVC3100N87	1"	three-way	8.7	3.7 (9.4)	—	5.35 (13.6)	1.6 lb (.70 Kg)
KVC3125N92	1-1/4"	three-way	9.2	4.3 (11.0)	—	5.6 (14.2)	2.35 lb (1.07 Kg)

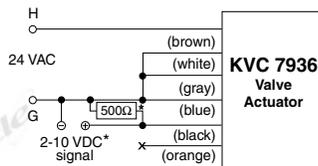
WIRING



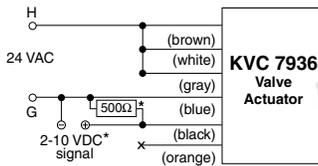
Power-Fail Close Port A



Power-Fail Open Port A

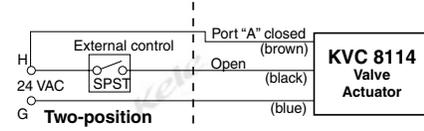


Power-Fail Open Port A

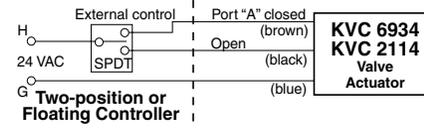


Power-Fail Close Port A
(see Flow Characteristics Table)

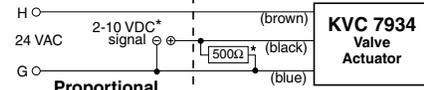
* Use 500Ω resistor when signal is 4-20 mA



Two-position



Two-position or Floating Controller



Proportional

* Use 500Ω resistor when signal is 4-20 mA

ORDERING INFORMATION

VALVE			
MODEL	DESCRIPTION		
KVC2	Two-way zone valve w/ female NPT connections		
KVC3	Three-way zone valve w/female NPT connections		
VALVE SIZE			
050	1/2"		
075	3/4"		
100	1"		
125	1-1/4"		
Cv CAPACITY			
	2-Way	3-Way	Valve Size
N07	0.7	-	1/2"
N13	1.3	-	1/2"
N29	2.9	-	1/2"
N32	3.2	-	1/2"
N47	4.7	-	3/4"
N66	6.6	6.6	1"
N71	7.1	-	1-1/4"
N37	-	3.7	1/2"
N87	-	8.7	3/4"
N92	-	9.2	1-1/4"

KVC2 | 50 | N07 | Example: KVC2050N07

ACTUATOR	
MODEL	DESCRIPTION
KVC	Twist on actuator
CONTROL	
81	Two-position, three-wire, SPST, 6 second timing
21	Two-position, three-wire, SPDT, 6 second timing
69	Floating, three-wire, 120 second timing
79	Proportional, 2-10 VDC control, 120 second timing
ACTION	
14	Two-position (KVC81 and KVC21 Only)
34	Fail in place (KVC69 and KVC79 Only)
36	Power-fail return (KVC69 and KVC79 Only)

KVC | 81 | 14 | Example: KVC8114

NOTE: Order Valve Body and Actuator Separately

SSTAG

RELATED PRODUCTS

Stainless steel tag on bead chain, 1" x 2" dogtag, custom engraved per order