



# CONTROL VALVES

## THREADED GLOBE VALVES

### V5011, V5013 SERIES

#### DESCRIPTION

The **Kele V5011 Series** is a two-way threaded globe valve used for control of water or steam. The **V5013 Series** is a three-way threaded globe valve used for mixing control of water. The valves can be ordered assembled with actuators for spring return or non-spring return operation, or the valve, linkage, and actuator may be ordered separately for field assembly.

#### FEATURES

- *Two- and three-way body patterns from 1/2" to 2"*
- *Two-way equal percentage characteristics*
- *Three-way linear characteristics*
- *Floating, two-position, or proportional control actuators*
- *ANSI 150 body class*
- *Compatible with MP953 pneumatic actuators*



V5013N1097/  
KA-175-P



#### SPECIFICATIONS

<b>Size</b>	1/2" to 2" FNPT
<b>Cv Range</b>	0.73 to 46.8
<b>Stroke</b>	3/4"
<b>Body Pattern</b>	Two-way (stem up to open), three-way mixing (stem up to open B-AB)
<b>Flow Characteristic</b>	Two-way V5011N1xxx: equal percentage; Two-way V5011N2xxx: linear; Three-way: ports A-AB equal percentage, ports B-AB linear
<b>Rangeability</b>	50:1 per VDI/VDE 2173
<b>Leakage Rating</b>	ANSI Class III, 0.05% of Cv
<b>Life Expectancy</b>	250,000 full cycles at maximum rated temperature
<b>Maximum Closeoff Pressure</b>	Actuator dependant, see Selection Chart; maximum differential pressure for quiet service 20 psid
<b>Pressure Drop</b>	Maximum water differential pressure for quiet service 20 psid (138 kPa).
<b>Maximum Pressure Rating</b>	Water: 217 psi (1497 kPa) from 36° to 248°F (2° to 120°C), 185 psi (1277 kPa) from 248° to 337°F (120° to 169°C); Steam: 100 psi (690 kPa) at 337°F (169°C), using stainless trim valve (V5011N2xxx)
<b>Pressure Rating</b>	ANSI 150
<b>Materials Of Construction</b>	Red brass body, stainless steel stem, metal-to-metal brass/stainless plug and seat, spring-loaded carbon-fiber reinforced Teflon® V-ring packing

<b>Media Compatibility</b>	Hot or chilled water, <50% glycol, steam (use V5011N2xxx for steam above 15 psig (103 kPa) to 100 psig (690 kPa))
<b>Media Temperature Range</b>	Brass trim: 36° to 248°F (2° to 120°C), 15 psig (103 kPa) steam; Stainless trim: 36° to 340°F (2° to 177°C), 100 psig (690 kPa) steam
<b>Action</b>	Stem up to open (2-way), stem up to open B-AB, close A-AB (3-way)
<b>Compatible Actuators</b>	Electric rotary Kele KA/KAS Series or Honeywell MN/MS Series with appropriate Q5020 Linkage, or direct-mount ML Series shown on following pages. For pneumatic actuation see MP953 Series in PNEUMATICS & FITTINGS catalog section.
<b>Actuator Mounting</b>	U-bolt or set screws to fit 1-3/8" valve yoke diameter, 3/4" stroke length
<b>Operating Temperature</b>	Actuator dependant, refer to appropriate ACTUATORS & DAMPERS section or ML Series (on following pages) for specifications
<b>Approvals</b>	Actuator dependant, refer to appropriate ACTUATORS & DAMPERS section or ML Series (on following pages) for specifications
<b>Warranty</b>	1 year on valves, 5 years on rotary actuators, 1 year on direct-mount actuators

# CONTROL VALVES

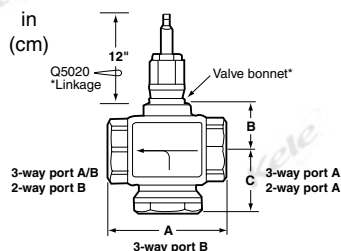
## THREADED GLOBE VALVES V5011, V5013 SERIES



3

CONTROL VALVES

### DIMENSIONS



V501x Two-way and Three-way

VALVE SIZE	ANSI CLASS 150 Dimensions in (cm)		
	A	B	C
1/2"	3.3 (8.38)	1.6 (3.95)	2.6 (6.65)
3/4"	3.3 (8.38)	1.6 (3.95)	2.2 (6.50)
1"	4.1 (10.42)	1.6 (3.95)	2.6 (6.65)
1-1/4"	4.2 (10.67)	1.6 (3.95)	2.9 (7.25)
1-1/2"	4.7 (11.94)	1.8 (4.65)	3.0 (7.70)
2"	5.3 (13.46)	1.8 (4.65)	3.3 (8.35)

\* Allow approximately 12" (30.5 cm) clearance above the valve bonnet for installation and service of the actuator and linkage.

GLOBE VALVE					NON-SPRING RETURN *			SPRING RETURN*		
Body Type	Size	Cv	Water and 15# Steam Model	High-Pressure Steam Model	Floating Two-position	Proportional	Close-off (psid)	Two-position	Proportional or Floating	Close-off (psid)
Two-way NPT	1/2"	0.73	V5011N1008	V5011N2006	KA-44-2T	KA-44-M	230	KAS-44-2	KAS-44-M	207
	1/2"	1.16	V5011N1016	V5011N2014	KA-44-2T	KA-44-M	230	KAS-44-2	KAS-44-M	207
	1/2"	1.85	V5011N1024	V5011N2022	KA-44-2T	KA-44-M	230	KAS-44-2	KAS-44-M	207
	1/2"	2.9	V5011N1032	V5011N2030	KA-44-2T	KA-44-M	230	KAS-44-2	KAS-44-M	207
	1/2"	4.7	V5011N1040	V5011N2048	KA-44-2T	KA-44-M	143	KAS-44-2	KAS-44-M	184
	3/4"	7.3	V5011N1057	V5011N2055	KA-44-2T	KA-44-M	69	KAS-44-2	KAS-44-M	79
	1"	11.7	V5011N1065	V5011N2063	KA-44-2T	KA-44-M	47	KAS-44-2	KAS-44-M	66
	1-1/4"	18.7	V5011N1073	V5011N2071	KA-88-2T	KA-88-M	69	KAS-88-2	KAS-88-M	84
	1-1/2"	29.3	V5011N1081	V5011N2089	KA-88-2T	KA-88-M	44	KAS-88-2	KAS-88-M	55
	2"	46.8	V5011N1099	V5011N2097	KA-175-2T	KA-175-P	58	KAS-175-2	KAS-175-M	63
Three-way NPT	1/2"	2.9	V5013N1030		KA-44-2T	KA-44-M	230	KAS-44-2	KAS-44-M	207
	1/2"	4.7	V5013N1048		KA-44-2T	KA-44-M	143	KAS-44-2	KAS-44-M	184
	3/4"	7.3	V5013N1055		KA-44-2T	KA-44-M	69	KAS-44-2	KAS-44-M	79
	1"	11.7	V5013N1063		KA-44-2T	KA-44-M	47	KAS-44-2	KAS-44-M	66
	1-1/4"	18.7	V5013N1071		KA-88-2T	KA-88-M	69	KAS-88-2	KAS-88-M	84
	1-1/2"	29.3	V5013N1089		KA-88-2T	KA-88-M	44	KAS-88-2	KAS-88-M	55
	2"	46.8	V5013N1097		KA-175-2T	KA-175-P	58	KAS-175-2	KAS-175-M	63

\* See KA and KAS Series direct-coupled actuator catalog pages for wiring and specs. Q5020A1003 linkage included with assembly.

MODEL	DESCRIPTION
VALVE SELECTION (INCLUDES Q5020A1003 LINKAGE)	
Vxxxxxxxxx /	Select 1/2" to 2" valve model number (from list above)
ACTUATOR SELECTION*	
KA_ _ _ _	KA actuator (from list above)

**Example:** V5011N1008 / KA-44-2T 1/2" two-way globe valve, Cv=0.73, with floating non-spring return actuator, factory assembled.

\* Specify normally open or normally closed when ordering an assembly with a KAS actuator.

For field assembly, order the **Model Q5020A1003** linkage, the valve, and the actuator as separate line items.

#### Q5020A1003 SSTAG SW2

#### RELATED PRODUCTS

Linkage for 1/2" to 2" valves  
Stainless steel tag on bead chain, 1" x 2" dogtag, custom engraved per order  
Auxiliary switch kit for KA-175/301 and KAS-88/175

#### 0901786A

#### ACCESSORIES

Repack kit for V5011, V5013 valves with 1/4" diameter stem (1/2" to 1-1/4")