

### Description

These zone control valves are designed to regulate the flow of hot or chilled water to VAV terminal unit reheat coils, fan coil units, and induction units. The VEP-11/12 models have a straight-through body design, while the VEP-21/22 have a right-angle body design.

The compact design of these units allows easy installation within small enclosures. The fully enclosed electric actuator has heat-resistant lead wires and is readily installed or removed via a screw-on ring nut. Each control valve actuator utilizes a PTC thermal element for dependable long-life and noise-free operation.

Valve bodies are all normally open. The actuator determines the normally open or normally closed function.

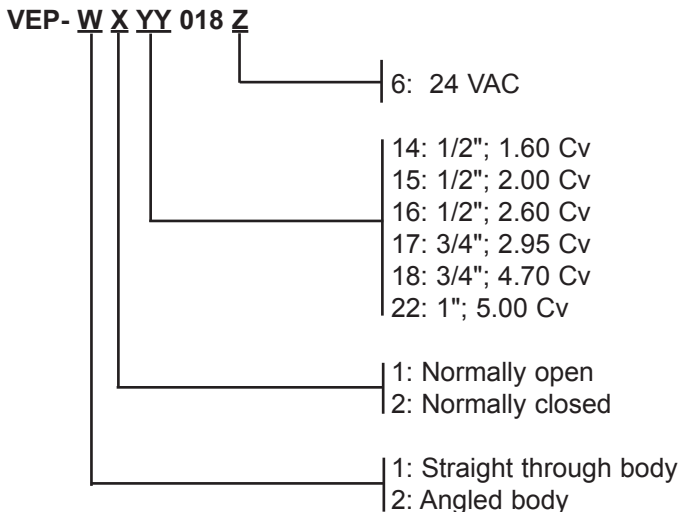


### Features

- ◆ Straight-through or right-angle body designs
- ◆ Compact size
- ◆ Heat-resistant lead wires
- ◆ Fully enclosed electric actuator
- ◆ NO or NC, dependent on actuator

### Models

Use this chart to select the desired model of valve:

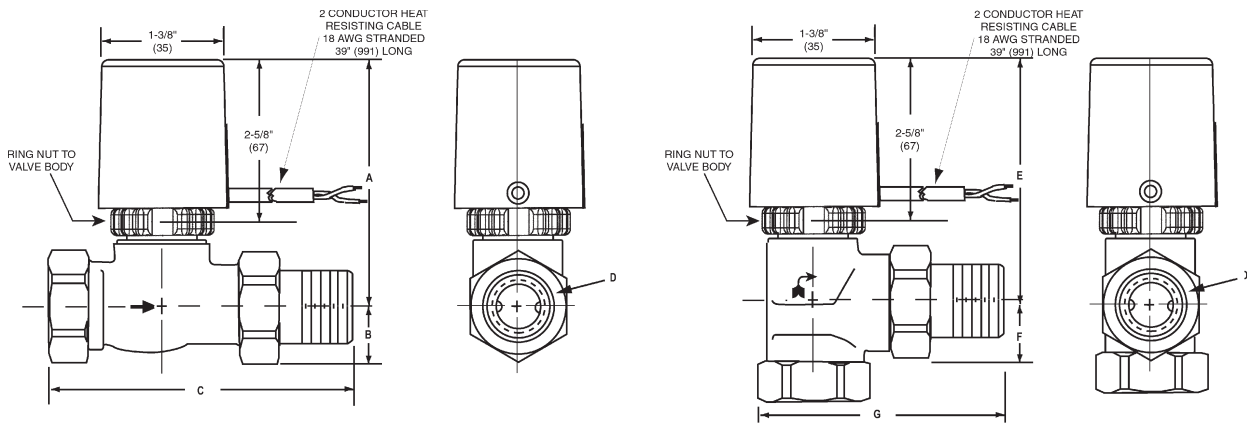


### Accessories/Repair Parts

HMO-4530	Flexible conduit connector
HPO-5021	3/4" union nut
HPO-5022	1" union nut
HPO-5030	1/2" bonnet assembly; 2.00 Cv
HPO-5031	1/2" bonnet assembly; 2.60 Cv
HPO-5032	3/4" bonnet assembly; 2.95 Cv
HPO-5033	3/4" bonnet assembly; 4.70 Cv
HPO-5035	1/2" bonnet assembly; 1.60 Cv
HPO-5055	Amplifier for normally closed valves
HPO-5058	1/2" union nut
HPO-5059	1/2" MPT union
HPO-5065	1/2" replacement disc; 2.00 Cv
HPO-5066	1/2" replacement disc; 2.60 Cv
HPO-5067	3/4" replacement disc; 2.95 Cv
HPO-5068	3/4" replacement disc; 4.70 Cv
MEP-3001	24 VAC normally closed actuator
MEP-3006	24 VAC normally open actuator
REE-5017	Electronic relay for modulating control of a NC valve
REE-5024	Electronic relay for modulating control of a NO valve

# Dimensions

All dimensions in inches (mm).



VEP-11/12 SERIES						VEP-21/22 SERIES				
DIMENSION		A	B	C	D	WEIGHT	E	F	G	WEIGHT
1/2"	Cv: 1.60	3-5/32" (80)	21/32" (17)	3-9/16" (91)	1/2" MPT	1 lb. (.45 kg)	3-5/32" (81)	1" (25) (25)	2-3/4" (70)	1.00 lb. (.45 kg)
	Cv: 2.00					1.05 lb. (.48 kg)				1.05 lb. (.48 kg)
	Cv: 2.60									
3/4"	Cv: 2.95	3-7/32" (82)	13/16" (21)	4-7/16" (113)	3/4" MPT	1.2 lb. (.54 kg)	3-1/8" (79) (79)	1-1/8" (29)	3-13/32" (87)	1.20 lb. (.54 kg) (.54 kg)
	Cv: 4.70	3-7/16" (87) (89)								
1"	Cv: 5.00	3-3/8" (86)	1-1/16" (27)	5-9/16" (141)	1" MPT	1.84 lb. (.83 kg)				

# Specifications

## Action

Normally Open VEP-11/21 Series  
 Normally Closed VEP-12/22 Series

## Sizes and Cv Ratings

1/2" 1.60, 2.00, and 2.60 Cv  
 3/4" 2.95 and 4.70 Cv  
 1" 5.00 Cv

## Maximum Differential

N.O./ N.C.	N.C. w/ HPO-5055
1/2", 1.60 Cv/ 130 psi (896 kPa)	145 psi (1000 kPa)
1/2", 2.00 Cv/ 70 psi (482 kPa)	105 psi (724 kPa)
1/2", 2.60 Cv/ 38 psi (262 kPa)	57 psi (393 kPa)
3/4", 2.95 Cv/ 50 psi (344 kPa)	76 psi (524 kPa)
3/4", 4.70 Cv/ 13 psi (89 kPa)	20 psi (138 kPa)
1", 5.00 Cv/ 16 psi (110 kPa)	24 psi (165 kPa)

**Actuator Voltages** 24 VAC (MEP-3001/3006)

**Power** 3 watts operating; 14 watts average cold start-up surge

**Stroke Timing** 50 to 180 seconds full stroke

**Body Ratings** 168 psi (1163 kPa) @ 212° F  
 232 psi (1599 kPa) @ 35.6° F

## Connections

Inlet FPT  
 Outlet MPT

## Material

Body and Seat Bronze  
 Packing Double O-ring  
 Disc EPDM  
 Stem Stainless Steel

## Temperature Limits

Ambient 32° to 120° F (0° to 49° C)  
 Shipping 0° to 140° F (-18° to 60° C)  
 Medium 35.6° to 212° F (2° to 100° C)

## KMC Controls, Inc.

19476 Industrial Drive, New Paris, IN 46553

574.831.5250

www.kmcccontrols.com

info@kmcccontrols.com