2-Way Water Valve



Application:



The VMT is a 2-way valve used in controlling the flow of hot water within heating applications. The VMT valve can be installed in applications involving heating or chilled coils, hot water storage tank, plate heat exchanger or floor heating system. In the control of the VMT valve, a thermostatic operator type RAVV or RAVK or

a 24VAC electric actuator type TWA-V or ABV can be mounted to the valve to regulate the temperature and flow through the valve. The VMT valves are available in 1/2", 3/4", and 1" sizes and the connections available are female solder unions for 1/2" and 3/4" and male threaded unions for 1".

Features:

- Seated valve
- Brass body
- Low and high flow capacities
- 1/2" and 3/4" double solder union
- Male NPT unions

Ordering Information:

VMT Valves with Union Connections

| Code No. | Туре | Type Size Cv | | Connection | |
|----------|----------|--------------|-----|-----------------|--|
| 065F0102 | VMT 15/8 | 1/2″ | 1.6 | F. Solder Union | |
| 065F0104 | VMT 20/8 | 3/4" | 2.7 | F. Solder Union | |

High Capacity, VMT Valves with Union Connections

| _ | | Size | | | |
|----------|--------------|------|-----|-----------------|--|
| Code No. | ode No. Type | | Cv | Connection | |
| 065F8960 | VMT 15/2 | 1/2" | 3.3 | F. Solder Union | |
| 065F8961 | VMT 20/2 | 3/4" | 5.9 | F. Solder Union | |
| 065F1242 | VMT 25/2 | 1″ | 9.4 | M. NPT Union | |

Suitable Thermostatic Operators

| Code No. | Туре | Setting Range | Capillary Tube Length | |
|----------|---|-------------------------|-----------------------|--|
| 013U1251 | | 104 – 158°F (40 - 70°C) | | |
| 013U1252 | RAVV | 80 – 132°F (27 - 56°C) | 4′ 11″ (1.5m) | |
| 013U1255 | | 50 – 100°F (10 - 38°C) | | |
| 013U8063 | RAVK | 77 – 149°F (25 - 65°C) | 6′5″(2m) | |
| 017-4370 | 1/2" Brass Sensor Well for RAVV or RAVK | | | |

Electric Actuators

| Code No. | Туре | Valve Function | Supply Voltage | Power Consumption | | |
|----------|---------|-----------------|----------------|----------------------|--|--|
| 088H3120 | TWA-V* | Normally closed | 24.VAC | 2.0 VA | | |
| 088H3121 | I VVA-V | Normally open | | | | |
| 082F0052 | ABV | Normally closed | 24 VAC | 9.0 VA | | |
| 082F0002 | | Normally open | | | | |

^{*}TWA-V should only to be used with VMT 15/8 and VMT 20/8 valves

VMT 2-Way Water Valve



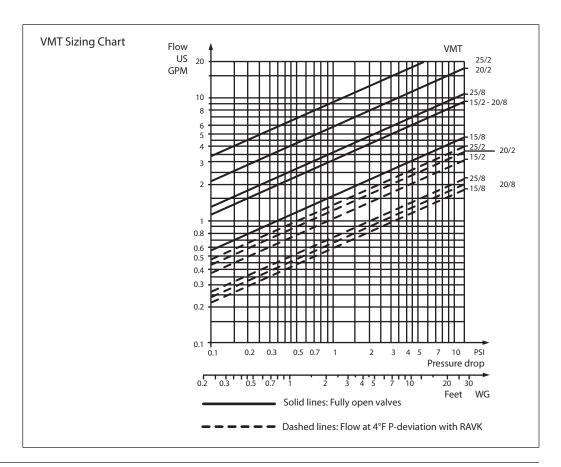
Ordering Information (Cont.):

Spare Parts

| Code No. | Туре | Size |
|----------|--|------|
| 013U0496 | | 1/2" |
| 013U0499 | Union Nut (2 required) | 3/4" |
| 013U0501 | | 1″ |
| 013U0476 | | 1/2" |
| 013U0479 | Male NPT Tailpiece (2 required) | 3/4" |
| 013U0489 | | 1″ |
| 013U8608 | Farada Caldan Taileir ar (2 na maint al) | 1/2" |
| 013U8609 | Female Solder Tailpiece (2 required) | 3/4" |
| 013U0070 | Packing Gland | |

Specifications:

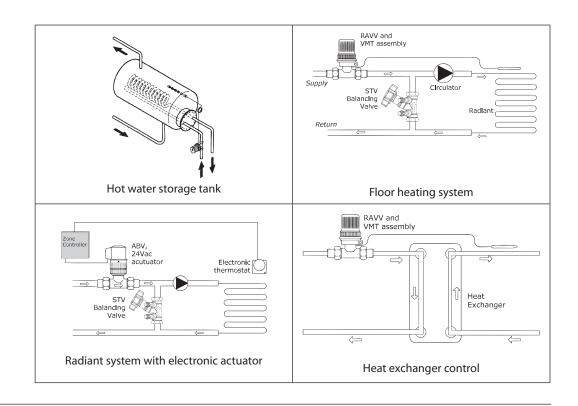
| Maximum test pressure | 232 psi (16 bar) |
|-------------------------------|--|
| Maximum working pressure | 145 psi (10 bar) |
| Maximum flow temperature | 250°F (120°C) |
| Maximum differential pressure | VMT 15/8 & 20/8: 12 psi (0.8 bar) |
| (for quiet operation) | VMT 15/2, 20/2 & 25/2: 7.25 psi (0.5 bar) |
| Allowable fluid | Water (maximum 30% glycol) in a closed loop hydronic system. |



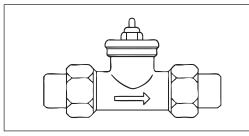
2-Way Water Valve



Typical Installations:

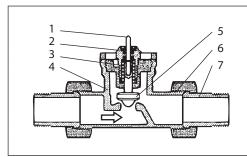


Installation:



The valve body must be installed in the direction of the flow as noted by the cast-in arrow located on the body of the valve. Failure to install the valve in the proper flow direction may result in system noise.

Construction:

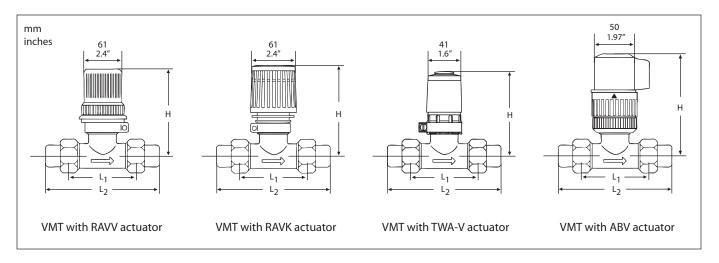


| 1 | Pressure pin Stainless steel | | | |
|---|------------------------------|-------------|--|--|
| 2 | Packing gland | | | |
| 3 | O-ring | EPDM rubber | | |
| 4 | Valve body | Brass | | |
| 5 | Valve cone | NBR rubber | | |
| 6 | Union nut | Brass | | |
| 7 | Tailpiece | Brass | | |

2-Way Water Valve



Dimensions:



| Si | Trens | 11: (| L2, in (mm) | | H, in (mm), VMT + control | | | |
|------|----------|-----------------|-------------|-----------|---------------------------|-----------|----------|-----------|
| Size | е туре | Type L1 in (mm) | F. solder | M. NPT | RAVV | RAVK | TWA-V* | ABV |
| 1/2" | VMT 15/8 | 2.6 (66) | 3.9 (99) | 5.1 (130) | 3.7 (94) | 4.1 (104) | 3.6 (91) | 4.4 (112) |
| 3/4" | VMT 20/8 | 2.9 (74) | 4.6 (117) | 5.7 (145) | 3.7 (94) | 4.1 (104) | 3.6 (91) | 4.4 (112) |
| 1/2" | VMT 15/2 | 2.6 (66) | 3.9 (99) | 5.1 (130) | 3.8 (97) | 4.3 (109) | | 4.5 (114) |
| 3/4" | VMT 20/2 | 2.9 (74) | 4.6 (117) | 5.4 (137) | 3.9 (99) | 4.5 (114) | | 4.6 (117) |
| 1" | VMT 25/2 | 3.6 (91) | | 6.5 (165) | 4.2 (107) | 4.7 (119) | | 4.9 (124) |

^{*}TWA-V should only be used with VMT 15/8 and VMT 20/8 valves

Typical Specification:

The 2-way mixing valve shall be a brass construction with double union connections for hot water heating applications. The valve shall have a stamped indicator to reflect proper piping of valve within system. The valve shall have a serviceable packing gland that is

replaceable. The regulation of the valve shall be by means of thermostatic operator or 24VAC electronic actuator. The actuators mounted onto the valve shall be interchangeable. The 2-way water valve shall be a VMT series.

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Danfoss Inc.

Toronto, ON Tel.: 905-285-2050, Fax: 905-285-2055 www.na.heating.danfoss.com

Danfoss Inc.

Baltimore, MD Tel.: 443-512-0266, Fax: 443-512-0270 www.na.heating.danfoss.com