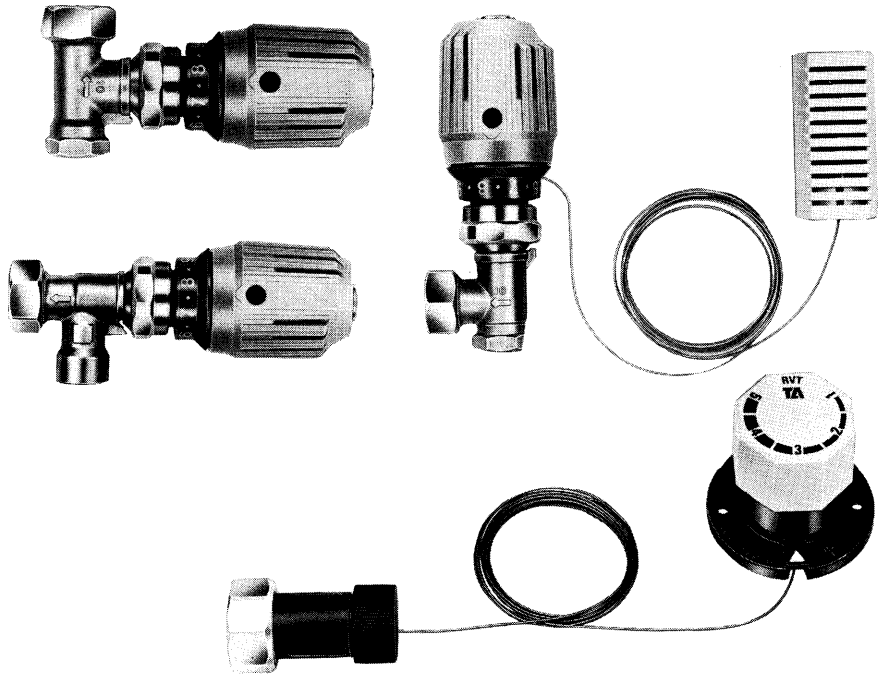


- **RVT** are self-contained thermostatic valves for individual room temperature control. They offer great improvement in fuel economy and comfort and are used in hot water heating systems and steam heating systems up to 15 psig.
- The valves are available in sizes from 3/8" to 1 1/4" NPT. Molded disc and plug give excellent flow characteristics. The valves are normally open (spring open) with angle, straight and reverse angle bodies. Inlets are female NPT and outlets are available in male NPT or solder unions.
- The valve bodies are satin nickel-plated, made of TA's copper alloy "AMETAL" resistant against dezincification, assuring long service life.
- All thermostatic actuators are calibrated to a high accuracy in constant temperature hoods. Attached, remote bulb and remote adjustment models are available.
- The RVT can be converted to a manual radiator valve by using RVT 399 hand-wheel.
- The valve can be set to give high/low limit or fixed temperature.
- The scale has neutral numbers covering a range of 43—79°F (6—26°C).
- The valves are delivered with a protection cap which can be used for manual adjustment.
- Modulating valves require a certain pressure drop to get good controls authority. It is often better to select a smaller valve e.g. 1/2" instead of 3/4" inch.



Description	Product number
Valve body, straight (RVT 321)	VT 321
Valve body, angle (RVT 323)	VT 323
Valve body, reverse angle (RVT 324)	VT 324
Thermostat unit, attached sensor (RVT 341)	VT 341
Thermostat unit, remote sensor (RVT 342)	VT 342
Thermostat unit, remote adjustment (RVT 346)	VT 346
Protection cap (RVT 349)	VTA 349
Handwheel (RVT 399)	VTA 399
Trim cartridge	VTC 343
Union tail piece — NPT	VT 701
Union tail piece — Sweat	VT 703
Pneumatic actuator	MP 473 -0204
Bonnet adapter	LV 223-001
Electrical actuator 24 VAC	VT 99-4322
Bonnet adapter	VT 99-491116
1-pipe steam kit for air-vent installation	VT 100
1-pipe steam thermostatic control valve	VT 101
Pressure regulating valve	VT 194

TECHNICAL DATA

Applications: Hot water and steam heating systems.

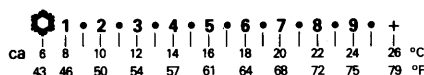
Max body pressure: 1,4 MPa = 14 bar
200 psi (water), 15 psi (steam).

Max static pressure: 250 psi (water).

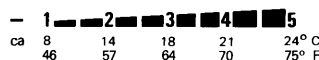
Max pressure drop:
3/8 and 1/2"25 psi
3/4"20 psi
1"15 psi

Max working temperature:
+250°F (+120°C). The thermostatic head may not be exposed to a higher temperature than 122°F (+50°C) or lower than -4°F (-20°C).

The approx temperature for RVT 50 B and RVT 60 B



The approx temperature for RVT 90 B



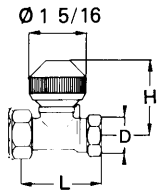
Surface treatment: Body and tail piece: nickel plated.

Length of capillary tube: 6 Ft (2 m) standard, 15 Ft (5 m) or 25 Ft (8 m). Applicable for valves with remote sensing element.

Material: Body: AMETAL®. Bonnet and stem: brass. Disc: EPDM Rubber.

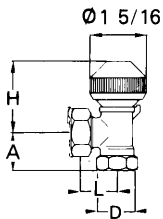
VALVE BODIES

RVT 321 Straight



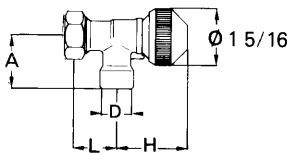
Product number	Size	L	H	D
VT 321-910	3/8"	2	1 15/16	3/8"
-915	1/2"	2 5/16	2	1/2"
-920	3/4"	2 11/16	2	3/4"
-925	1"	3 1/8	2 1/16	1"
With built-in compression fitting for 1/2" copper tube				
VT 321-916	1/2"			

RVT 323 Angle



Product number	Size	L	A	H	D
VT 323-910	3/8"	15/16	13/16	1 15/16	3/8"
-915	1/2"	1	15/16	2	1/2"
-920	3/4"	1 5/16	1 1/8	2	3/4"
-925	1"	1 5/8	1 7/16	2 1/16	1"
-932	1 1/4"	1 3/4	1 7/16	2 1/8	1 1/4"
With built-in compression fitting for 1/2" copper tube					
VT 323-916	1/2"				

RVT 324 Reverse angle

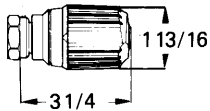


Product number	Size	L	A	H	D
VT 324-910	3/8"	7/8	1 5/16	1 3/4	3/8"
-915	1/2"	1	1 1/8	1 15/16	1/2"
-920	3/4"	1 1/4	1 1/8	2 1/16	3/4"

Product numbers refer to valve body including union nut.

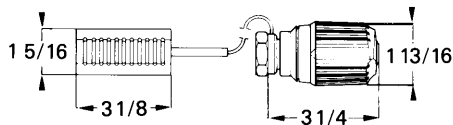
THERMOSTAT

RVT 341 Attached sensor



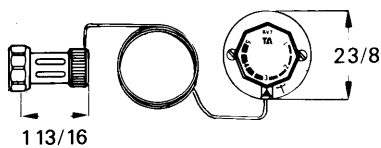
Product number	Temp. range
VT 341-201	43-79°F (6-26°C)

RVT 342 Remote sensor adjustment on the valve



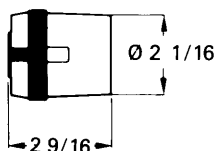
Product number	Temp. range	Length of capillary tube
VT 342-201	43-79°F (6-26°C)	6 Ft (2 m)
-251	43-79°F (6-26°C)	15 Ft (8 m)
-281	43-79°F (6-26°C)	25 Ft (8 m)
Handwheels for RVT 341 and RVT 342 in color:		
Product number/Color	Product number/Color	Product number/Color
VT 340-590 Beige (standard)	VT 340-593 Orange	VT 340-596 Grey
-591 White	-594 Yellow	-597 Brown
-592 Red	-595 Blue	-598 Green

RVT 346 Remote sensing and adjustment



Product number	Temp. range	Length of capillary tube
VT 346-201	46-75°F (8-24°C)	6 Ft (2 m)
-251	46-75°F (8-24°C)	15 Ft (5 m)
-281	46-75°F (8-24°C)	25 Ft (8 m)

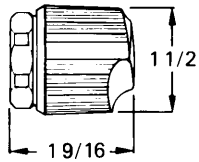
RVT 349 Protection cap for RVT 341 and 342



Product number	Type
VTA 349-202	For 3/8"-3/4" valves
VTA 349-203	For 1" valves

RVT 399

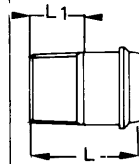
Handwheel used when the RVT is applied as a manual balancing and shut-off valve



Product number
VTA 399-001

RVT 701

Union tail piece, NPT

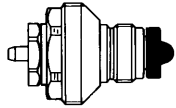


Product number	Size	L	L1
VT 701-910	3/8"	13/16	9/16
-915	1/2"	15/16	13/16
-920	3/4"	13/8	13/16
-925	1"	15/16	11/16
-932	1 1/4"	17/8	7/8

Note: Product number refers to tailpiece only

RVT 343

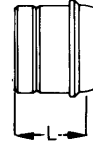
Trim cartridge



Product number	Size
VTC 343-001	3/8"-3/4"
VTC 343-003	1"

RVT 703

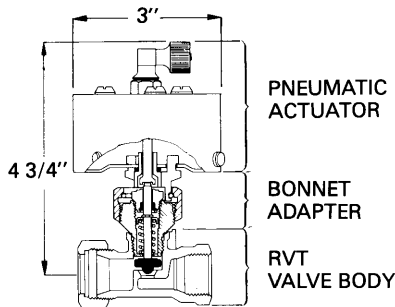
Union tail piece, Sweat



Product number	Size	L
VT 703-815	1/2"	11/16
-820	3/4"	7/8
-825	1"	1

Note: Product number refers to tailpiece only

Pneumatic actuator and linkage for valves RVT 321, 323 and 324.
Additional information on catalogue sheet No 2-55-1



Product number

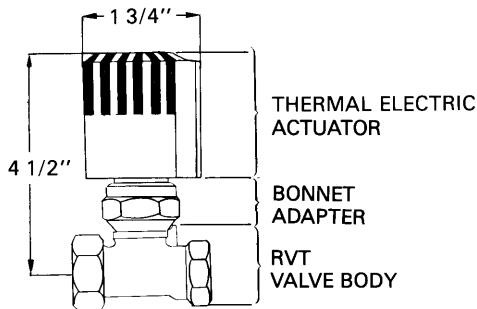
Pneumatic actuator

MP 473-0204

Bonnet adapter

LV 228-001

Thermal electric actuator and linkage for valves RVT 321, 323 and 324.
Additional information on catalogue sheet No. 11-30-1



Product number

Thermal electric actuator

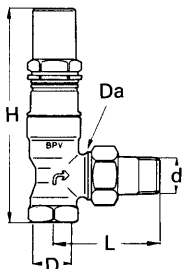
24 VAC VT 99-4322

Bonnet adapter

VT 99-491116

PRESSURE REGULATING VALVE

Type BPV angle pattern differential pressure regulating valve is located on a bypass between the supply and return of a hydronic system or in the bypass of heating or cooling coil. It maintains a constant differential pressure by opening the bypass whenever the pressure differential between the supply and return reaches the set-point of the valve. The 3/4" valve body is made of TA's copper alloy "Ametal" resistant to dezincification. Maximum operating pressure is 250 psi. Maximum operating temperature is 250°F. The adjustable differential pressure is 0.7 to 2.2 psi.

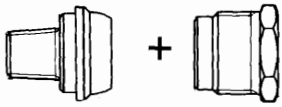


Product number	Size	L	H	Da	d	D
VT 194-920	3/4"	2 9/16	5"	M34 x 1,5	3/4"	3/4"

RVT 100

1-pipe steam kit
for air-vent installation
For valve RVT 324 3/8"

1/8" TAIL PIECE + 3/8" x 1/8" REDUCER

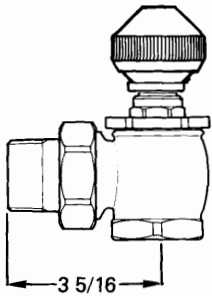


Product number
VT 100-680

RVT 101

1-pipe steam
thermostatic control valve

for installation in the supply line. Controls the flow of steam to the radiator. The valve is provided with a built-in condensate return device (Patented) that prevents water-lock in the radiators.



Product number
Complete valve 1 1/4" with NPT tail piece and RVT 341 thermostat
VT 101-680
Adapter for 1 1/4" valve body
VT 101-690

PRESSURE-DROP GRAPH

Cv values, valve fully open

Size	Straight	Angle	Reverse angle
3/8"	0,8	0,8	0,8
1/2"	1,5	1,9	1,8
3/4"	2,0	2,3	2,1
1"	3,0	3,0	
1 1/4"		3,0	

Steam table capacity in lbs/hr

Valve Size	Pressure drop in psi							
	1	2	4	6	8	10	12	15
3/8"	14	20	28	34	39	44	48	54
1/2"	20	28	40	48	56	62	68	77
3/4"	26	36	51	63	72	81	89	99
1"	34	48	67	83	95	107	117	131

SIZING:

STEAM: 1SF RAD = 240B/HR = 0.24LB/HR STM

WATER: 1SF RAD = 200B/HR = 1/5MBH = 1/50 GPM

STM EXMPL: CI RAD 25Hx6Dx42L RATED 58SF
58x0.24 = 14LB/HR, PICK 3/8 SIZE 1.0 PSI PD

HW EXMPL: HT LOSS 15MBH = 15000B/HR = 75 SF
75x1/50 = 1.5 GPM, SELECT 3/8 SIZE 1.5 PSI PD

SEE ASHRAE '79 EQPT HBK pg 28.2 RAD RTG

