Thermostatic Radiator Valves and Actuators

V135 Thermostatic Mixing or Diverting Valves

Thermostatic Mixing or Diverting Valves for use in hydronic heating systems as a three-way mixing or diverting valve; controls loop temperature in radiant heating systems.

- Includes plastic handle for manual operation.
- Knurled ring on T100R control head for easy attachment to V135.

Application: Thermostatic mixing/diverting valve for use in hydronic heating systems. Controls loop temperature in radiant heating systems.
Materials (Body): Bronze
Differential Pressure Rating: 17 psi maximum
Pressure Ratings (Steam): 232 psi maximum (1601 kPa)
Temperature Rating: 248 F Maximum (120 C Maximum)
Collar Diameter: 1 3/16 in. (30 mm)
Used With: T100R

Replacement Parts:
0900661 Replacement cartridge for V135A 1 in. and 1 1/4 in. models

Product Number	Pipe Size (inch)	Pipe Size DN	Body Pattern	Capacity (Cv)	Connection Type	Dimensions, Approximate (inch)	Dimensions, Approximate (mm)
V135A1006	3/4 in.	DN20	Three-way	3.7 Cv	Sweat	2 9/16 in. x 5 1/8 in.	64 mm x 128 mm
V135A1014	1 in.	DN25	Three-way	5.8 Cv	Sweat	2 15/16 in. x 5 13/16 in.	74 mm x 148 mm
V135A1022	1 1/4 in.	DN32	Three-way	5.8 Cv	NPT	3 3/4 in. x 7 1/8 in.	95 mm x 180 mm
V135A1048	1 1/2 in.	DN40	Three-way	11.7 Cv	NPT	3 3/4 in. x 7 3/8 in.	95 mm x 188 mm
V135A1063	1 1/4 in.	DN32	Three-way	5.8 Cv	Sweat	3 3/8 in. x 6 3/8 in.	86 mm x 162 mm

T100R Thermostatic Mixing or Diverting Valve Actuator

For use in hydronic heating systems with V135 Valves in a three-way mixing or diverting application. Controls loop temperature in radiant heating systems.

- T100R Thermostatic Actuator includes strap-on-pipe sensor.
- Knurled ring on T100R control head for easy attachment to V135.

Application: Three-way mixing and diverting applications in hydronic heating systems requiring remote sensing
Used With Valve: V135
Collar Diameter: 1 3/16 in. (30 mm)

Replacement Parts:
0900661 Replacement cartridge for V135A 1 in. and 1 1/4 in. models

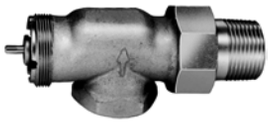
Product Number	Capillary Length (ft)	Capillary Length (m)	Temperature Range (F)	Temperature Range (C)	Setpoint (Integral or Remote)
T100R1004	6 ft. 8 in.	2 m	50 F to 122 F	10 C to 50 C	Remote
T100R1012	6 ft. 8 in.	2 m	86 F to 158 F	30 C to 70 C	Remote

V135 Thermostatic Mixing or Diverting Valves Replacement Cartridges

Product Number	Description	Used With
V135A-12VE	Replacement cartridge for V135A 1/2 in. and 3/4 in. models	V135
V135A-1VE	Replacement cartridge for V135A 1 in. and 1 1/4 in. models	V135
V135A-11/2VE	Replacement cartridge for V135A 1 1/2 in. and 2 in. models	V135

V110 High Capacity Thermostatic Radiator Valves

V110D



V110E

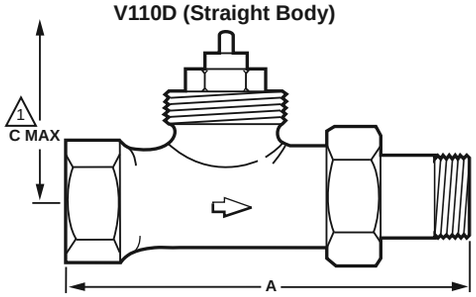
V110F

High Capacity Thermostatic Radiator Valves with T104 Thermostatic Actuators provide precise and automatic control of room temperature in two-pipe systems by modulating the flow of hot water or steam through free-standing radiators, convectors and other heating units with high capacity requirements.

- Designed with the higher capacity normally required by North American heating systems.
- Valve seat disc, which is made of resilient material (EPDM), ensures tight shutoff on steam or hot water systems.
- Nickel-plated bronze casted body with working parts in cartridge insert for ease of service.
- All working parts are replaceable using service tool (MT100C1011) while valve remains in service, in-line, under pressure.
- Valves normally open without control mounted.
- Valves may be used with T104 Thermostatic Actuators.
- Meet ASHRAE Standard 102-1989.

Dimensions in inches (millimeters)

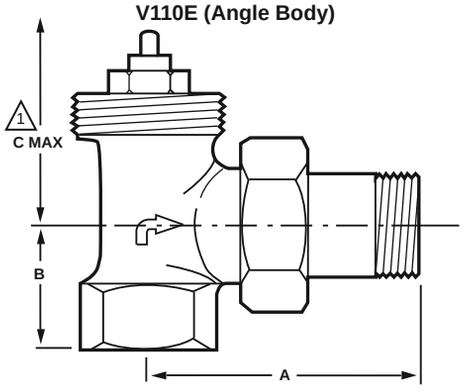
V110D (Straight Body)



PIPE SIZE	A IN. (MM)	1 C MAX IN. (MM)
1/2 INCH	3-3/4 (95)	4-3/4 (121)
3/4 INCH	4-1/8 (105)	4-3/4 (121)
1 INCH	4-15/16 (125)	4-3/4 (121)
1-1/4 INCH	5-7/8 (149)	5 (127)

1 C MAX DIMENSION IS WITH T104 CONTROL INSTALLED. M18959A

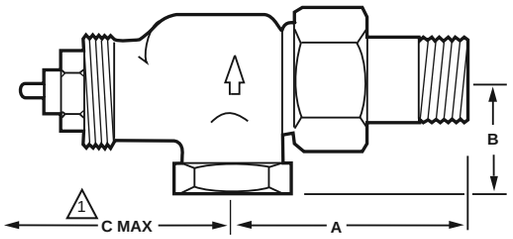
V110E (Angle Body)



PIPE SIZE	A IN. (MM)	B IN. (MM)	1 C MAX IN. (MM)
1/2 INCH	2-9/16 (65)	1 (25)	4-3/4 (121)
3/4 INCH	2-5/8 (67)	1-1/8 (29)	4-3/4 (121)
1 INCH	3 (76)	1-5/16 (33)	4-3/4 (121)
1-1/4 INCH	3-5/8 (90)	1-11/16 (43)	5 (127)

1 C MAX DIMENSION IS WITH T104 CONTROL INSTALLED. M18960A

V110F (Horizontal Angle Body)



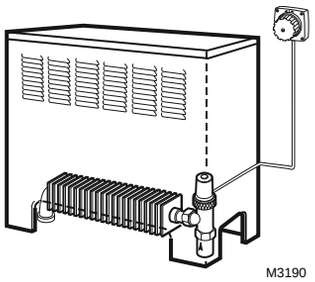
PIPE SIZE	A IN. (MM)	B IN. (MM)	1 C MAX IN. (MM)
1/2 INCH	2-1/4 (57)	1 (25)	5-1/8 (130)
3/4 INCH	2-9/16 (65)	1-1/8 (29)	5-1/4 (133)
1 INCH	2-15/16 (74)	1-3/16 (30)	5-1/4 (133)
1-1/4 INCH	3-1/2 (89)	2-3/16 (56)	5-1/4 (133)

1 C MAX DIMENSION IS WITH T104 CONTROL INSTALLED. M18961A

Capacity: high
Materials (Body): Nickel Plated Bronze
Differential Pressure Rating: 17 psi maximum
Pressure Ratings (Hot Water): 150 psi maximum (1034 kPa maximum)
Pressure Ratings (Steam): 15 psi maximum (103 kPa)
Temperature Rating: 248 F Maximum (120 C Maximum)
Cartridge Change Tool: Yes - Use MT110C1011
Used With: T104

Thermostatic Radiator Valves and Actuators

Typical Installations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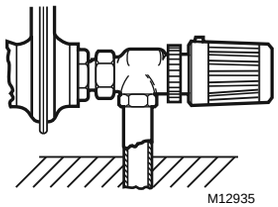
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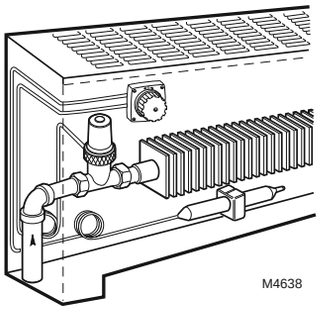
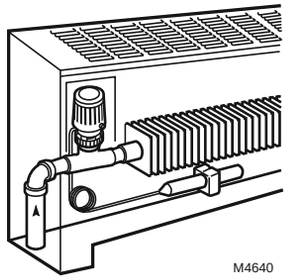

M4638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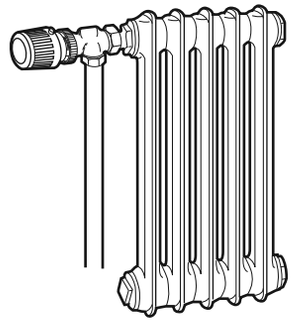

M4632

Product Number	Application	Pipe Size (inch)	Pipe Size DN	Body Pattern	Capacity (Cv)	Capacity (Btu/hr-steam)	Connection Type
V110D1000	Precise and automatic control of room temperature in two-pipe systems by modulating the flow of hot water or steam through high capacity heating units.	1/2 in.	DN15	Straight	4.6 Cv	127,000 Btu/hr	Threaded
V110D1008		3/4 in.	DN20	Straight	5.8 Cv	162,000 Btu/hr	Threaded
V110D1016		1 in.	DN25	Straight	7.0 Cv	193,000 Btu/hr	Threaded
V110D1024		1 1/4 in.	DN32	Straight	8 Cv	193,000 Btu/hr	Threaded
V110D5001		1/2 in.	DN15	Straight	4.6 Cv	127,000 Btu/hr	Sweat
V110D5009		3/4 in.	DN20	Straight	5.8 Cv	162,000 Btu/hr	Sweat
V110D5017		1 in.	DN25	Straight	7.0 Cv	193,000 Btu/hr	Sweat
V110E1004	Precise and automatic control of room temperature in two-pipe systems by modulating the flow of hot water or steam through high capacity heating units when used with T104 Thermostatic Actuators	1/2 in.	DN15	Angle	4.6 Cv	127,000 Btu/hr	Threaded
V110E1012		3/4 in.	DN20	Angle	5.8 Cv	162,000 Btu/hr	Threaded
V110E1020		1 in.	DN25	Angle	7.0 Cv	193,000 Btu/hr	Threaded
V110E1028		1 1/4 in.	DN32	Angle	8 Cv	193,000 Btu/hr	Threaded
V110E5005		1/2 in.	DN15	Angle	4.6 Cv	127,000 Btu/hr	Sweat
V110E5013		3/4 in.	DN20	Angle	5.8 Cv	162,000 Btu/hr	Sweat
V110F1002		1/2 in.	DN15	Horizontal Angle	4.6 Cv	127,000 Btu/hr	Threaded
V110F1010		3/4 in.	DN20	Horizontal Angle	5.8 Cv	162,000 Btu/hr	Threaded
V110F1018		1 in.	DN25	Horizontal Angle	7.0 Cv	193,000 Btu/hr	Threaded
V110F1026		1 1/4 in.	DN32	Horizontal Angle	8 Cv	193,000 Btu/hr	Threaded
V110F5003		1/2 in.	DN15	Horizontal Angle	4.6 Cv	127,000 Btu/hr	Sweat
V110F5011		3/4 in.	DN20	Horizontal Angle	5.8 Cv	162,000 Btu/hr	Sweat

V200; V2000 Series Standard Capacity Thermostatic Radiator Valve Body

V200LD

V2040A, V2040E

V2040D

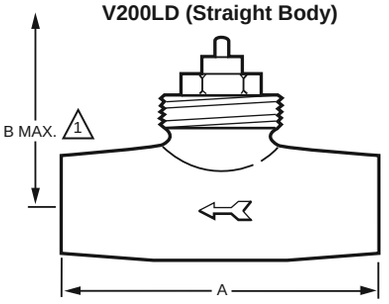
V2040E

One-Pipe Steam Thermostatic Radiator Valves - Allow automatic temperature control in one-pipe steam or hot water systems for free standing radiators, convectors and other heating units with standard capacity requirements. Provide comfort and energy savings.

- Continually monitors and adjusts room temperature for consistent comfort and relief from under-heating and overheating.
- Adjustable balancing cartridge design made from resilient material (EPDM), ensures tight shut-off on steam and hot water systems.
- Nickel plated brass casted body.
- Replaceable cartridge for easy service with service tool.
- Controls include valve body, steam air vent.
- Used with T100 set point and capillary actuators.
- No electrical connection required for non-electric actuators.
- Normally open without control mounted.

Dimensions in inches (millimeters)

V200LD (Straight Body)

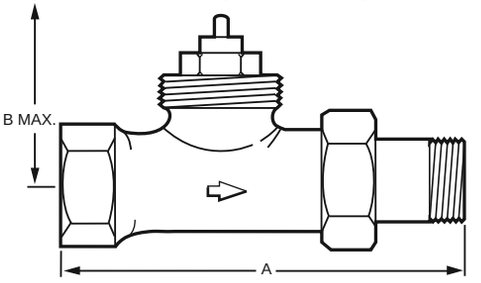


PIPE SIZE	A IN. (MM)	1 B MAX IN. (MM)
1/2 INCH	2-5/8 (66)	4-1/16 (104)
3/4 INCH	2-15/16 (74)	4-1/16 (104)

1 B MAX DIMENSION IS WITH T100A CONTROL INSTALLED.

M12933C

V2040D (Straight Body)

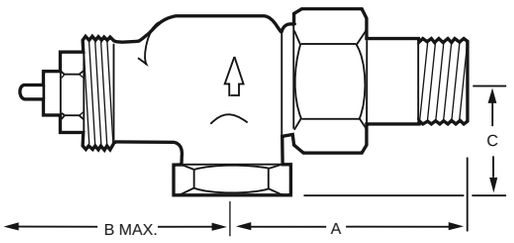


PIPE SIZE	A IN. (MM)	1 B MAX IN. (MM)
1/2 INCH	3-3/4 (95)	4-1/6 (104)
3/4 INCH	4-3/16 (106)	4-1/6 (104)
1 INCH	4-1/2 (114)	4-1/2 (114)

1 B MAX DIMENSION IS WITH T100A CONTROL INSTALLED.

M12930D

V2040A (Horizontal Angle Body)

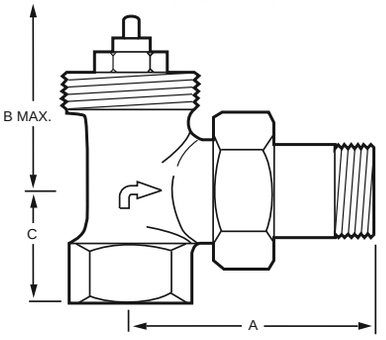


PIPE SIZE	A IN. (MM)	1 B MAX IN. (MM)	C IN. (MM)
1/2 INCH	2-1/8 (54)	4-1/2 (115)	1-1/8 (29)
3/4 INCH	2-1/2 (64)	5-3/16 (132)	1-3/16 (31)
1 INCH	2-15/16 (74)	5-3/16 (132)	1-7/16 (37)

1 B MAX DIMENSION IS WITH T100A CONTROL INSTALLED.

M12932C

V2040E (Angle Body)



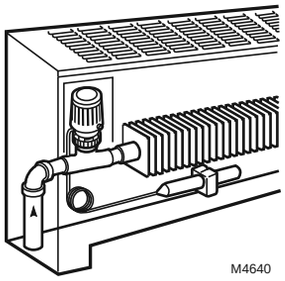
PIPE SIZE	A IN. (MM)	1 B MAX IN. (MM)	C IN. (MM)
1/2 INCH	2-5/16 (58)	3-13/16 (97)	1 (25)
3/4 INCH	2-5/8 (66)	3-13/16 (97)	1-1/8 (29)
1 INCH	2-15/16 (74)	4-5/16 (110)	1-5/16 (34)

1 B MAX DIMENSION IS WITH T100A CONTROL INSTALLED.

M12931D

Thermostatic Radiator Valves and Actuators

Typical Installations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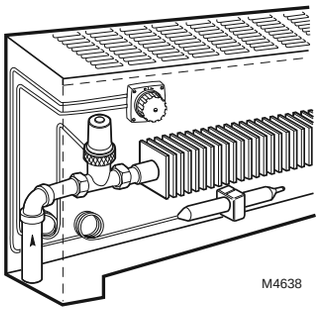
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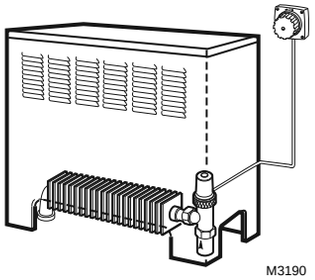
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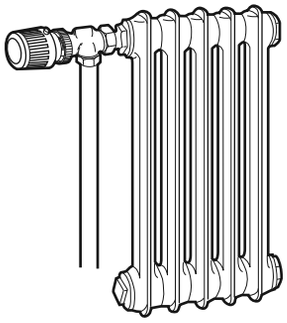

M4632

Capacity: Standard
Materials (Body): Nickel Plated Bronze
Differential Pressure Rating:
With T100 or T200: 15 psi (103 kPa)
With MV100: 36 psi (248 kPa)
For low noise: 3 psi (20 kPa)

Pressure Ratings (Hot Water): 150 psi maximum (1034 kPa maximum)
Pressure Ratings (Steam): 15 psi maximum (103 kPa)
Temperature Rating: 248 F Maximum (120 C Maximum)
Cartridge Change Tool: Yes - Use VA8200A001

Product Number	Application	Body Pattern	Pipe Size (inch)	Pipe Size DN	Outlet Connection Type	Capacity (Cv)	Capacity (Btu/hr-steam)	Used With
V200LDSL15	For baseboards and other installations with copper tubing.	Straight	1/2 in.	DN15	Sweat both ends, no union	2.5 Cv	59,100 Btu/hr	T100
V200LDSL20		Straight	3/4 in.	DN20	Sweat both ends, no union	2.7 Cv	63,800 Btu/hr	T100
V2040ASL15	Replaces most manual valves with minimum piping changes.	Horizontal Angle	1/2 in.	DN15	Threaded	2.5 Cv	59,100 Btu/hr	T100A, M and V controls to conform to horizontal mounting requirements
V2040ASL20		Horizontal Angle	3/4 in.	DN20	Threaded	2.7 Cv	63,800 Btu/hr	T100A, M and V controls to conform to horizontal mounting requirements
V2040ASL25		Horizontal Angle	1 in.	DN25	Threaded	2.7 Cv	70,500 Btu/hr	T100A, M and V controls to conform to horizontal mounting requirements
V2040DSL15	Especially suited for base boards and straight runs where manual valves were not originally installed.	Straight	1/2 in.	DN15	Threaded	2.5 Cv	59,100 Btu/hr	—
V2040DSL20		Straight	3/4 in.	DN20	Threaded	2.7 Cv	63,800 Btu/hr	—
V2040DSL25		Straight	1 in.	DN25	Threaded	2.7 Cv	70,500 Btu/hr	—
V2040ESL15	Use where installation space is limited	Angle	1/2 in.	DN15	Threaded	2.5 Cv	59,100 Btu/hr	T100B; T100C; T100F
V2040ESL20		Angle	3/4 in.	DN20	Threaded	2.7 Cv	63,800 Btu/hr	T100B; T100C; T100F
V2040ESL25		Angle	1 in.	DN25	Threaded	2.7 Cv	70,500 Btu/hr	T100B; T100C; T100F
V2043ASL15	Replaces most manual valves with minimum piping changes.	Horizontal Angle	1/2 in.	DN15	Sweat	2.5 Cv	59,100 Btu/hr	T100A, M and V controls to conform to horizontal mounting requirements
V2043ASL20		Horizontal Angle	3/4 in.	DN20	Sweat	2.7 Cv	63,800 Btu/hr	T100A, M and V controls to conform to horizontal mounting requirements
V2043DSL15	For baseboards and other installations with copper tubing.	Straight	1/2 in.	DN15	Sweat both ends, no union	2.5 Cv	59,100 Btu/hr	T100
V2043DSL20	Especially suited for base boards and straight runs where manual valves were not originally installed.	Straight	3/4 in.	DN20	Sweat	2.7 Cv	63,800 Btu/hr	—
V2043ESL15	Use where installation space is limited	Angle	1/2 in.	DN15	Sweat	2.5 Cv	59,100 Btu/hr	T100B; T100C; T100F
V2043ESL20		Angle	3/4 in.	DN20	Sweat	2.7 Cv	63,800 Btu/hr	T100B; T100C; T100F

V2000 Series Valve Bodies Cross Reference to V100 Series

Use T100 Actuators With New V2000 Series Valve Bodies

V2000 Series Replacement	V100 Series Product	Product Description
V2040DSL15	**V100D 1056**	1/2 in. TRV Straight Body, Female NPT Inlet, Male NPT Tailpiece Outlet
V2040DSL20	**V100D 1064**	3/4 in. TRV Straight Body, Female NPT Inlet, Male NPT Tailpiece Outlet
V2040DSL25	**V100D 1072**	1in. TRV Straight Body, Female NPT Inlet, Male NPT Tailpiece Outlet
V2043DSL15	**V100D 5057**	1/2 in. TRV Straight Body, Female NPT Inlet, Sweat Tailpiece Outlet
V2043DSL20	**V100D 5065**	3/4 in. TRV Straight Body, Female NPT Inlet, Sweat Tailpiece Outlet
V2040ESL15	**V100E 1055**	1/2 in. TRV Vertical Body, Female NPT Inlet, Male NPT Tailpiece Outlet
V2040ESL20	**V100E 1063**	3/4 in. TRV Vertical Body, Female NPT Inlet, Male NPT Tailpiece Outlet
V2040ESL25	**V100E 1071**	1 in. TRV Vertical Body, Female NPT Inlet, Male NPT Tailpiece Outlet
V2043ESL15	**V100E 5056**	1/2 in. TRV Vertical Body, Female NPT Inlet, Sweat Tailpiece Outlet
V2043ESL20	**V100E 5064**	3/4 in. TRV Vertical Body, Female NPT Inlet, Sweat Tailpiece Outlet
V2040ASL15	**V100F 1054**	1/2 in. TRV Horizontal, Female NPT Inlet, Male NPT Tailpiece Outlet
V2040ASL20	**V100F 1062**	3/4 in. TRV Horizontal, Female NPT Inlet, Male NPT Tailpiece Outlet
V2040ASL25	**V100F 1070**	1” TRV Horizontal, Female NPT Inlet, Male NPT Tailpiece Outlet
V2043ASL15	**V100F 5055**	1/2 in. TRV Horizontal Body, Female NPT Inlet, Sweat Tailpiece Outlet
V2043ASL20	**V100F 5063**	3/4 in. TRV Horizontal Body, Female NPT Inlet, Sweat Tailpiece Outlet
V200LDSL15	**V100G 5054**	1/2 in. TRV Straight Body, Sweat Inlet, Sweat Outlet No Tailpiece
V200LDSL20	**V100G 5062**	3/4 in. TRV Straight Body, Sweat Inlet, Sweat Outlet No Tailpiece
V2042HSL10	**V100P 1046**	1/8 in. TRV (1/2 in. Body With 1/8 in. Adapter) Male NPT Inlet, Female NPT Outlet. One Pipe Steam
V2043HSL10	**Y100P 1001**	1/8 in. TRV (1/2 in. Body With 1/8 in. Adapter) Male NPT Inlet, Female NPT Outlet. One Pipe Steam Includes SA123A1003
VS1200SL01		Replacement Cartridge New V2000 Series
VA8200A001		Cartridge Service Tool V2000 Series Bodies

Thermostatic Radiator Valves and Actuators

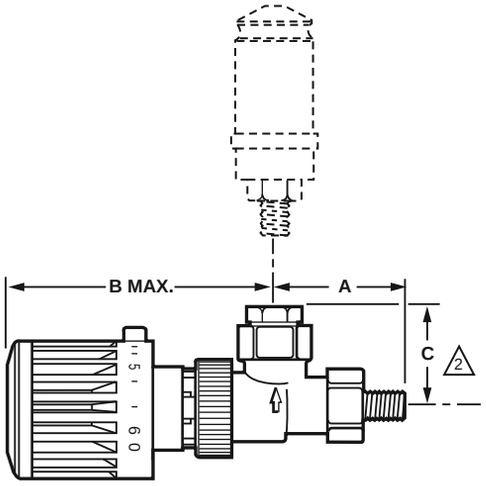
V2042H; V2043H One-pipe Steam Thermostatic Radiator Valve

One-Pipe Steam Thermostatic Radiator Valves - Allow automatic temperature control in one-pipe steam or hot water systems for free standing radiators, convectors and other heating units with standard capacity requirements. Provide comfort and energy savings.

- Continually monitors and adjusts room temperature for consistent comfort and relief from under-heating and overheating.
- Adjustable balancing cartridge design made from resilient material (EPDM), ensures tight shut-off on steam and hot water systems.
- Nickel plated brass casted body.
- Replaceable cartridge for easy service with service tool.
- Controls include valve body, steam air vent.
- Used with T100 set point and capillary actuators.
- No electrical connection required for non-electric actuators.
- Normally open without control mounted.

Dimensions in inches (millimeters)

V2042H (Body)/V2043H (Body with Vent)



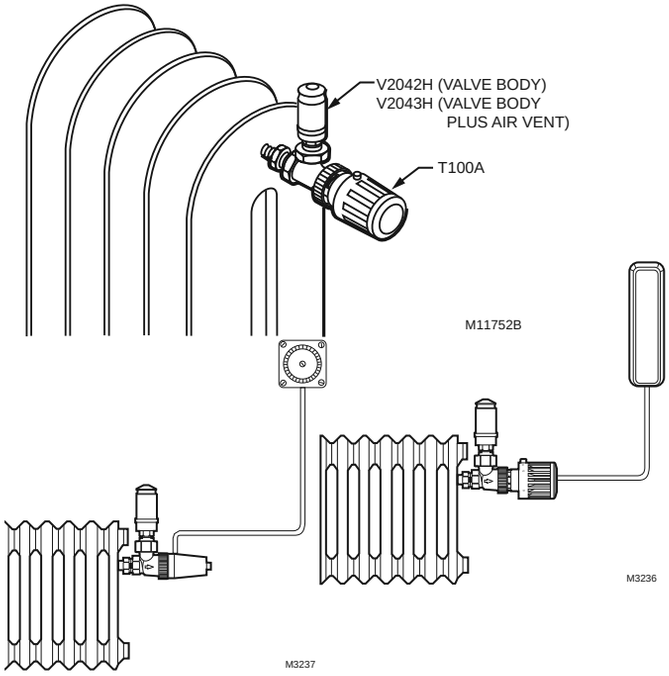
PIPE SIZE	A IN. (MM)	1 B MAX IN. (MM)	2 C IN. (MM)
3/8 INCH	1-11/16 (43)	3-13/16 (97)	1-3/16 (31)

1 B MAX DIMENSION IS WITH T100A CONTROL INSTALLED.

2 C DIMENSION IS WITHOUT THE STEAM/AIR VENT INSTALLED.

M17016B

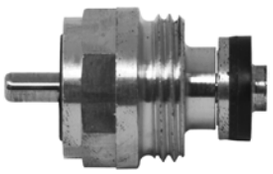
Typical Installations



Capacity: Standard
Materials (Body): Nickel Plated Bronze
Differential Pressure Rating:
With T100 or T200: 15 psi (103 kPa)
With MV100: 36 psi (248 kPa)
For low noise: 3 psi (20 kPa)
Pressure Ratings (Steam): 15 psi maximum (103 kPa)
Temperature Rating: 248 F Maximum (120 C Maximum)
Body Pattern: Angle
Cartridge Change Tool: Yes - Use VA8200A001

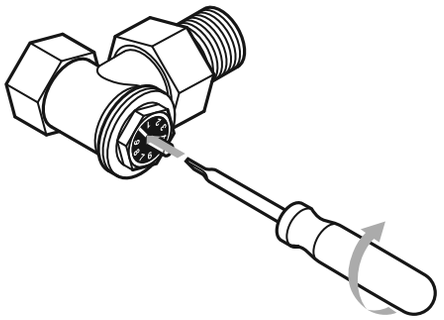
Product Number	Application	Pipe Size (inch)	Connection Type	Description	Includes	Used With
V2042HSL10	Angle pattern valve body for one pipe steam systems	1/8 in.	Threaded	One-pipe Steam 1/8 in. Radiator valve	—	T100
V2043HSL10	Thermostatic Radiator Valve Pack. Includes V2042HSL10 body plus steam/air vent. Use for one pipe steam applications.	1/8 in.	NPT	One Pipe Steam Thermostatic Radiator valve and air vent pack	V2042HSL10 plus steam/air vent	—

V2000 Series Thermostatic Radiator Valve Accessories

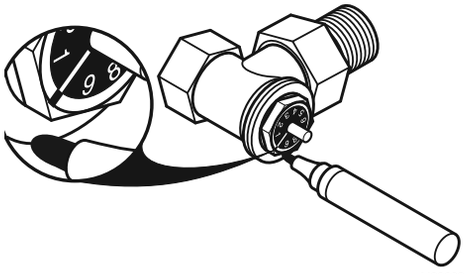


Materials (Body): Bronze
Cartridge Change Tool: VA8200A001

V2000 Series Cartridge Balancing Procedure Step 1

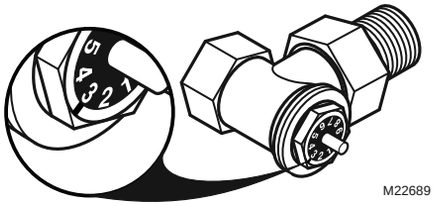


V2000 Series Cartridge Balancing Procedure Step 2



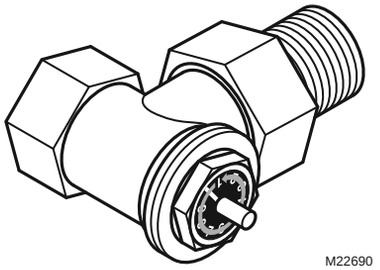
M22688

V2000 Series Cartridge Balancing Procedure Step 3



M22689

V2000 Series Cartridge Balancing Procedure Step 4



M22690

Product Number	Application	Description	Used With
VS1200SL01	Accessory or Replacement Part	Replacement cartridge for NEW V2000 (adjustable cartridge)	T100

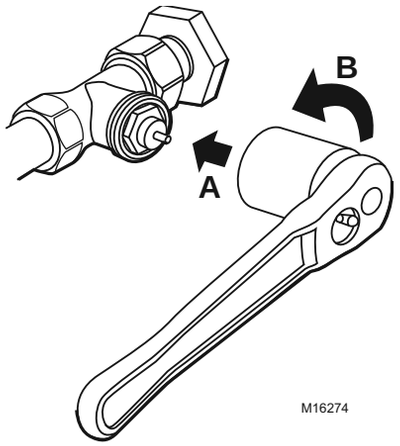
Thermostatic Radiator Valves and Actuators

MT100; MT110 Cartridge Changing Tool

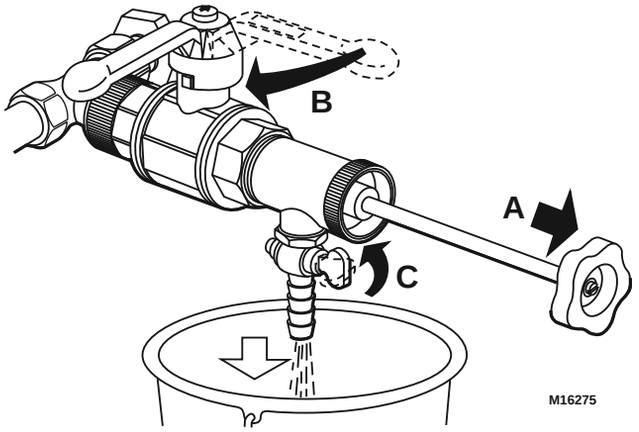
The MT110 Valve Cartridge Changing Tool enables the user to remove, and clean or replace the valve cartridge while the valve remains pressurized. Boiler shutdown is not required.

- MT110 for V110 Series valves.

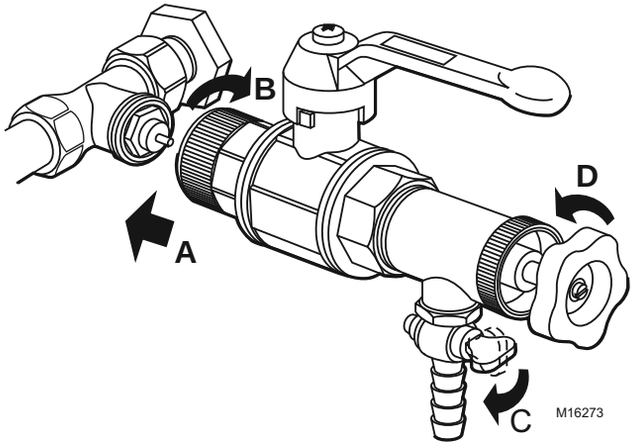
Remove control and loosen valve cartridge slightly.



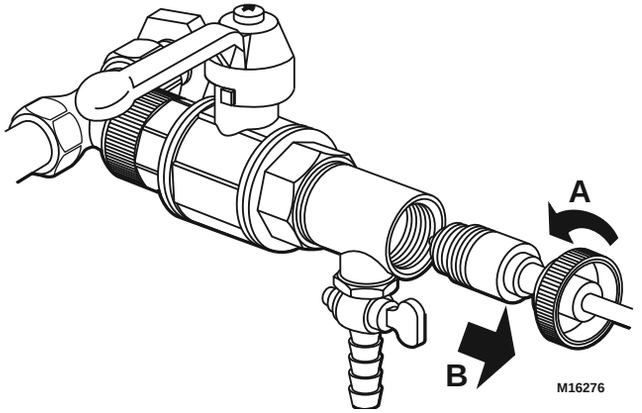
Open shut-off on drain cock, removing excess water and steam from chamber.



Tighten Cartridge Changer to valve body and close off drain cock.



Unscrew end cap and remove cartridge from chamber. Clean or replace cartridge.



Product Number	Application Type	Description	Comments	Used With
MT100L1023	Tool to remove T100M tamper resistant direct mount control from valve body.	Actuator Removal Tool	—	V100
MT110C1011	Cartridge changing tool, in service, in line, under pressure for V110 series valve.	Cartridge Changing Tool for in-line service of V110 valves	—	V100
MT110D1019	Socket to remove or replace cartridges on V110D, E, F series valves; use in combination with MT110C1011 for pre-loosening and final tightening of cartridge. Fits 3/8 in. socket driver.	Cartridge Changing tool	For CA110C Cartridge	—

Thermostatic Valve Accessories

Product Number	Description	Used With
CA100B1008	Replacement cartridge for old style V100 (metal cartridge body)	V100 Series;
CA110C1007	Replacement Cartridge for V110	V110 Series;

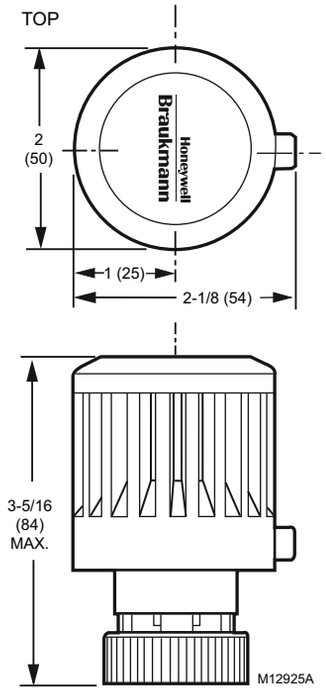
T100 Standard Capacity Thermostatic Radiator Actuators

Allow automatic temperature control in two-pipe steam or hot water systems for free standing radiators, convectors, and other heating units with standard capacity requirements. Provide comfort and energy savings at affordable prices.

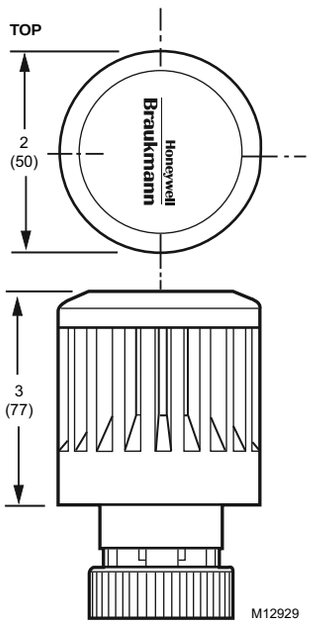
- Continually monitor and adjust room temperature for consistent comfort and relief from under-heating and overheating.
- Valve seat disc, which is made of resilient material (EPDM), ensures tight shutoff on steam or hot water systems.
- Nickel-plated brass casted body with working parts in cartridge insert for ease of service.
- Controls include sensor, setpoint dial and valve actuator; components may be integral or connected by capillary tubes.
- Require no electrical connections.
- All working parts are replaceable using service tool (MT100C1016) while valve remains in service, in-line, under pressure.
- Valves normally open without control mounted.
- Valves may also be used with MV100 Electric Zone Valve Actuator.

Dimensions in inches (millimeters)

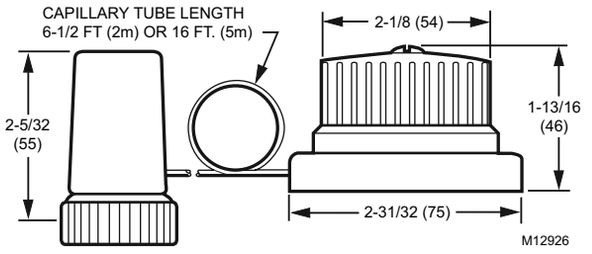
T100A



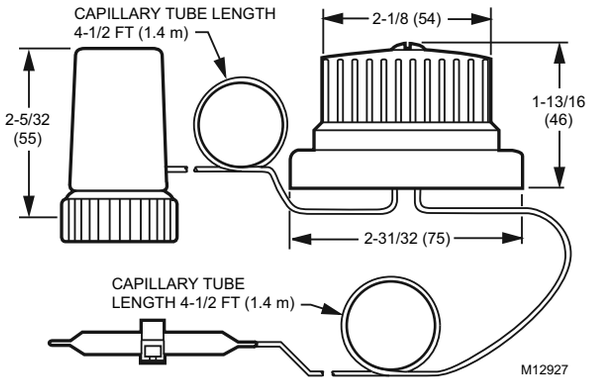
T100M



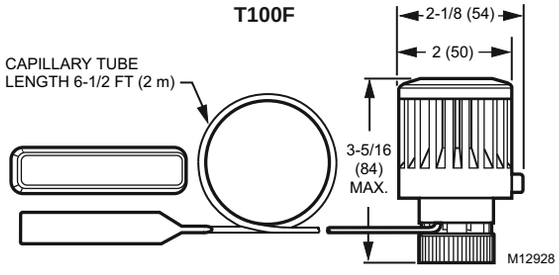
T100B



T100C

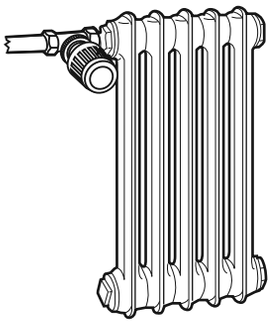


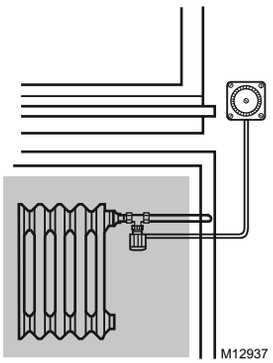
T100F



Thermostatic Radiator Valves and Actuators

Typical Installations


M4631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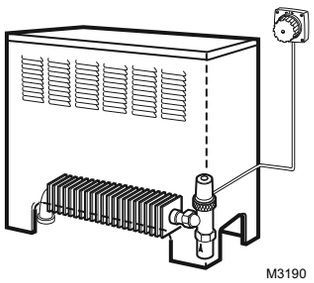
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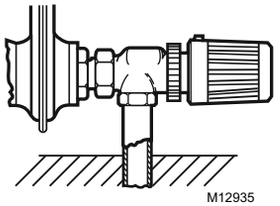
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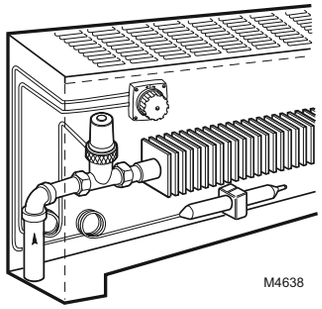

M4638

Application: Standard Capacity Thermostatic Radiator Actuator
Used With Valve: V100, V2000
Collar Diameter: 1 3/16 in. (30 mm)

Product Number	Application Type	Capillary Length (ft)	Capillary Length (m)	Temperature Range (F)	Temperature Range (C)	Sensor (Integral or Remote)	Setpoint (Integral or Remote)	Comments	Used With
T1002W0NA	A self-contained control with sensor, setpoint dial and valve actuator in one unit. Mounts horizontal. Not for use inside enclosures or where airflow around sensor is restricted. Adjustable limits.	—	—	43 F to 79 F	6 C to 26 C	Integral	Integral	Adjustable Limits	V100, V2000
T100B1035	A control with combined remote setpoint and sensor mounted on wall. Connected by a capillary tube to an actuator, which is mounted on the valve body.	6 1/2 ft	2 m	48 F to 79 F	9 C to 26 C	Remote	Remote	—	V100, V2000
T100B1043		16 ft.	5 m	48 F to 79 F	9 C to 26 C	Remote	Remote	—	V100, V2000
T100C1026	A control with remote setpoint and sensor mounted with setpoint dial on outside of heating cabinet; sensor mounted beneath heating coils in cold air return. Dual capillary.	Two 4 1/2 ft.	Two 1.4 m	48 F to 79 F	9 C to 26 C	Remote	Remote	—	V100, V2000
T100F1395	A control with remote temperature sensing and integral set point. Adjustable limits.	6 ft. 8 in.	2 m	43 F to 79 F	6 C to 26 C	Integral	Integral	Adjustable Limits	V100, V2000
T100M2056	A self-contained control with sensor, setpoint dial and actuator in one unit. Use where increased durability, tamper resistance and limited adjustment range are desired. Horizontal mount. Locks onto valve body. Not for enclosures.	—	—	43 F to 79 F	6 C to 26 C	Integral	Integral	Tamper Resistant, Adjustable Limits	V100, V2000

T104 High Capacity Thermostatic Radiator Valve Actuators

T104A

T104B

T104C

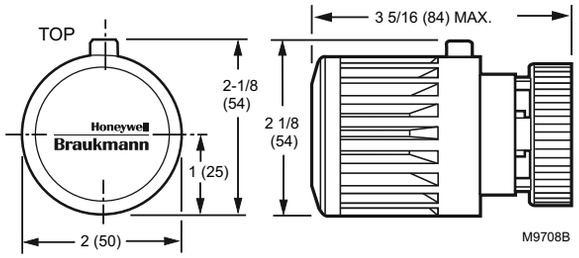
T104F

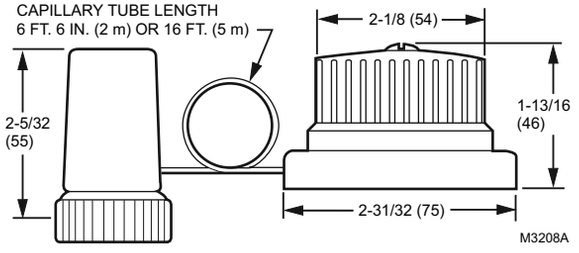
T104V

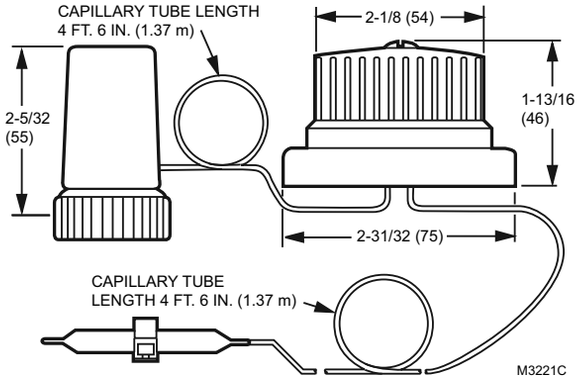
Provide precise and automatic control of room temperature in two-pipe systems by modulating the flow of hot water or steam through free-standing radiators, convectors and other heating units with high capacity requirements.

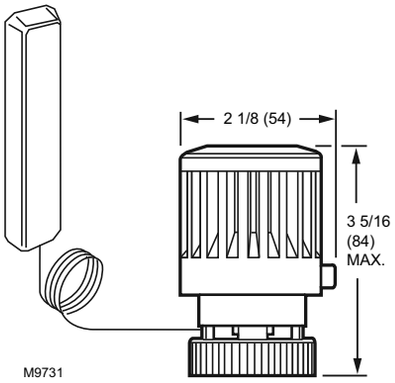
- Continually monitor and adjust room temperature for consistent comfort and relief from under-heating and overheating.
- Designed with the higher capacity normally required by North American heating systems.
- Valve seat disc, which is made of resilient material (EPDM), ensures tight shutoff on steam or hot water systems.
- Nickel-plated bronze casted body with working parts in cartridge insert for ease of service.
- Controls include sensor, setpoint dial and valve actuator; components may be integral or connected by capillary tubes.
- Require no electrical connections.
- Meet ASHRAE Standard 102-1989.
- 40 mm collar diameter.

Dimensions in inches (millimeters)

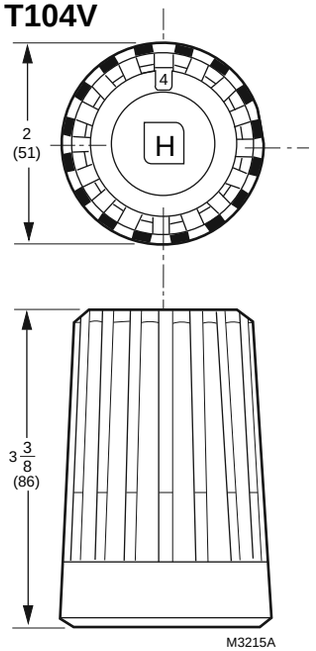








T104V



Thermostatic Radiator Valves and Actuators

Application: High Capacity Thermostatic Radiator Actuator
Used With Valve: V110
Collar Diameter: 1 19/32 in. (40 mm)

Product Number	Application Type	Capillary Length		Temperature Range		Sensor (Integral or Remote)	Setpoint (Integral or Remote)	Comments	Used With
		(ft)	(m)	(F)	(C)				
T104A1040	Self-contained controller with sensor, setpoint dial and valve actuator in one unit. Adjustable limits. Mount horizontal. Not for use inside enclosures or in locations with restricted airflow around sensor. For V110 valves.	—	—	43 F to 79 F	6 C to 26 C	Integral	Integral	Adjustable Limits	V110
T104B1038	Controller with combined remote setpoint and sensor mounted on a wall. Setpoint/sensor connect with a capillary tube to an actuator, which mounts on the valve body. For V110 valves.	6 ft. 8 in.	2 m	48 F to 79 F	9 C to 26 C	Remote	Remote	—	V110
T104B1046		16 ft.	4.9 m	48 F to 79 F	9 C to 26 C	Remote	Remote	—	V110
T104C1036	Controller with remote setpoint and sensor normally mounted with setpoint dial mounted on outside cabinet or enclosure; sensor mounted beneath heating coils in cold air return. Double capillaries. For V110 valves.	Two 4 1/2 ft.	Two 1.4 m	48 F to 79 F	9 C to 26 C	Remote	Remote	—	V110
T104F1512	Thermostatic radiator valve controller for use with V110 series valves. With remote temperature sensing and integral set point. Adjustable limits.	6 ft. 8 in.	2 m	43 F to 79 F	6 C to 26 C	Remote	Integral	Adjustable Limits	V110
T104V1422	Self-contained controller with sensor, setpoint dial and valve actuator in one unit. Locks to valve body. Rugged design. Adjustable setpoint under locking cap. Factory set at 68 F (20 C). Mounts horizontal. Not for use in enclosures. For V110 valves.	—	—	43 F to 79 F	6 C to 26 C	Integral	Integral	Vandal Proof	V110

T104 Thermostatic Radiator Valves Parts and Accessories

Product Number	Description	Used With
G111B1053	Bulb guard to protect remote temperature sensors on T104C and T104F controls only	T104F; T104C
P110V1003	Replacement Locking Ring for T104V1422 only (package of 5)	T104V1422