



THORNTHWAITE TECHNOLOGIES

THE SHOWER & WASHROOM SPECIALISTS

Data Sheet

Rada Thermostatic Mixing Valves

rada

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Rada 215 Series Mixing Valves

The Rada 215 thermostatic mixing valves (TMV) feature the Radatherm sealed-for-life service free cartridge.

This significantly reduces the service time and spare parts required for annual maintenance. The Radatherm cartridge only needs to be replaced every 5 years, or earlier as per risk assessment.

These valves are approved to Australian Standard AS 4032.1 and for use in Health Care facilities.

Flow Rates

Recommended Flow Rates	Flow rate
Min. flow rate at mid-blend with equal dynamic inlet supply pressures	2.5 L/min
Max. flow rate at mid-blend (425 kPa pressure loss)	50 L/min

Pressures

Recommended Pressures	Min	Max
Dynamic supply pressure	15 kPa	500kPa
Static inlet supply pressure	-	1000kPa

Temperatures

The blend set temperature is factory set at 43°C but can be reset onsite if required.

	Temperature
Min temperature differential, between blend and either supply	12°C
Optimum thermostatic control range:	35°C - 45°C
Thermostatic control range:	25°C - 60°C
Min. cold water temperature:	5°C
Max. hot water temperature:	85°C

Note: For general safety, hot water inlet temperature should be maintained between 60-65°C. The mixing valve can accept temporary excursions above 85°C (however this is not recommended).

Part No.	Description	Inlets	Outlet
RADA 215dk TMVs			
40861	Rada 215dk TMV	3/4" BSP M	1/2" BSP M
40861EK	Rada 215dk with installation kit	3/4" BSP M	3/4" BSP M
R215BKT	Rada 215dk TMV bracket		
RADA 215dk TMV BOXES			
40861RB300	Rada 215dk TMV in a recessed galvanised box with stainless steel lid	20mm OD copper	20mm OD copper
40861RB300CF	Rada 215dk TMV in a recessed galvanised box with stainless steel lid (with cold water feed)	20mm OD copper	20mm OD copper
40861EBG300	Rada 215dk TMV in an exposed galvanised box and lid	20mm OD copper	20mm OD copper
40861EBG300CF	Rada 215dk TMV in an exposed galvanised box and lid (with cold water feed)	20mm OD copper	20mm OD copper
RADA 215bk TMVs			
40863	Rada 215bk TMV	1/2" BSP M	1/2" BSP M
R20068	Rada 215bk/oemk mounting plate		
RADA 215bk TMV BOXES			
40863EB200	Rada 215bk in an exposed stainless steel box and lid	20mm OD copper	20mm OD copper
40863RB200	Rada 215bk in a recessed stainless steel box and lid	20mm OD copper	20mm OD copper

All TMVs include inlet check valves and strainers.
All TMVs include inlet isolating ball valves except for part numbers 40861 and 40863.

Rada 215dk TMV



Rada 215dk with installation kit



Rada 215dk TMV Boxes



Rada 215bk TMV



Rada 215bk TMV Boxes



See line drawings page 3

Rada 320 Series Mixing Valves

The Rada 320 thermostatic mixing valve (TMV) has a maximum flow rate of 120 L/min which enables a large number of outlets to be served by the one mixing valve.

Featuring the Radatherm sealed-for-life service free cartridge the service time and spare parts required for annual maintenance is reduced. The Radatherm cartridge only needs to be replaced every 5 years, or earlier as per risk assessment.

These valves are approved to Australian Standard AS 4032.1 and for use in Health Care facilities.

The inlets can be orientated to suit the installation and 2 outlet ports are available as required.

Flow Rates

Recommended Flow Rates	Flow rate
Recommended min. flow rate at mid-blend with equal dynamic inlet supply pressures	6 L/min
Recommended max. flow rate at mid-blend (which equates to pressure loss of 560 kPa)	120 L/min

Pressures

Recommended Pressures	Min	Max
Dynamic supply pressure	15kPa	800kPa
Static inlet supply pressure	-	1000kPa

Temperatures

The blend temperature is factory set at 43°C, but can be reset on site as required.

	Temperature
Min temperature differential, from blend to either supply	12°C
Optimum thermostatic control range:	30°C - 50°C
Thermostatic control range:	25°C - 60°C
Min cold water temperature:	1°C
Max. hot water temperature:	85°C

Note: For general safety, hot water inlet temperature should be maintained between 60°C-65°C. The mixing valve can accept temporary temperature excursions above 85°C, however this is not recommended.

Rada 320 IF TMV



Rada 320 M TMV



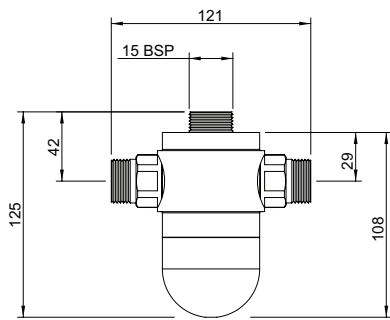
See line drawings page 3

Part No.	Description	Inlets	Outlet
RADA 320			
1847.014	Rada 320 IF TMV	1" BSP F	1" BSP F
1847.016	Rada 320 M TMV	3/4" BSP M	3/4" BSP M

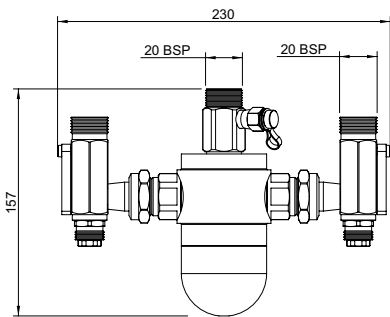
Line Drawings

Rada 215dk Models

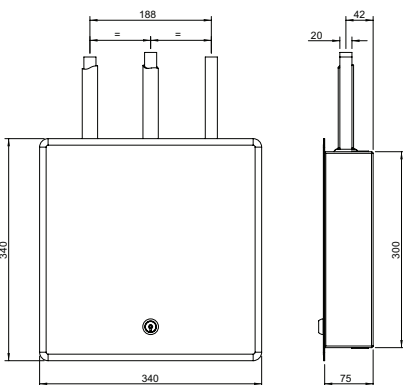
Rada 215dk TMV



Rada 215dk with installation kit

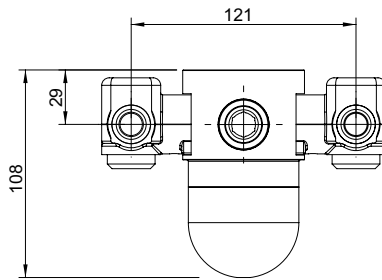


Rada 215dk TMV Boxes

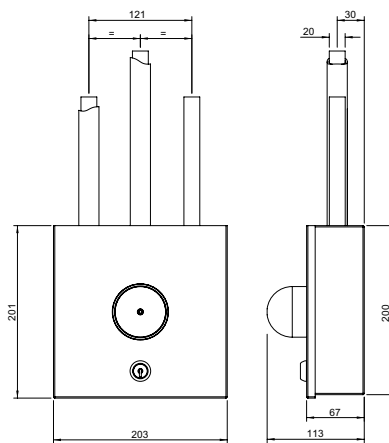


Rada 215bk Models

Rada 215bk TMV

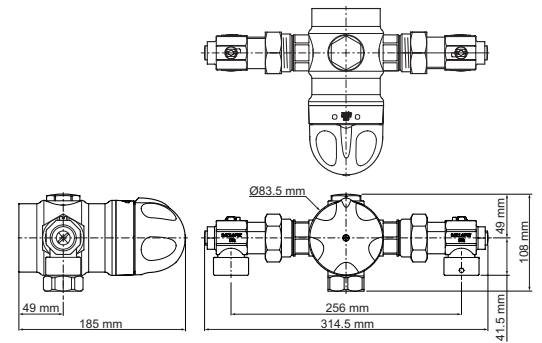


Rada 215bk TMV Boxes

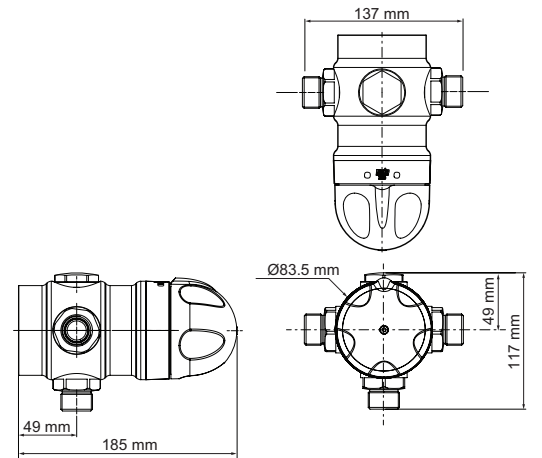


Rada 320 Models

Rada 320 IF TMV



Rada 320 M TMV

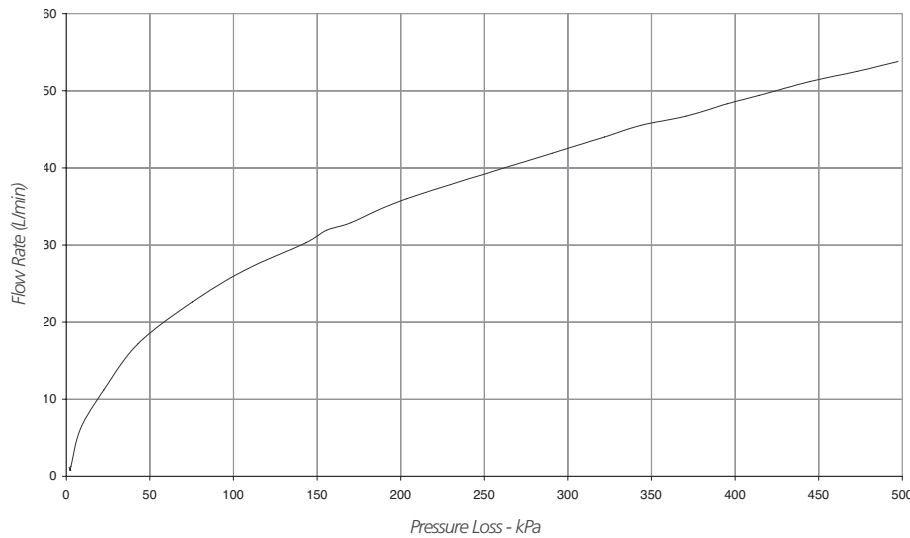


CAD & Revit Drawings

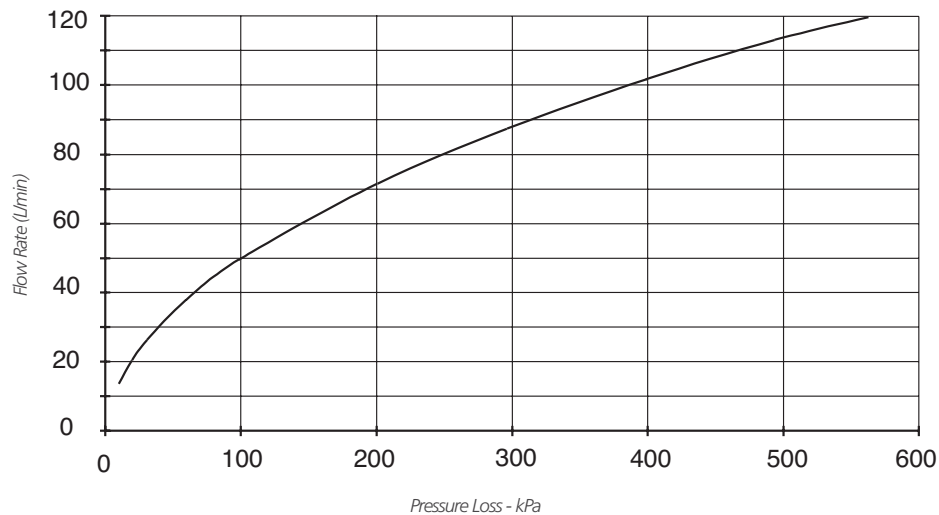
Contact Thornthwaite Technologies for CAD and Revit drawings (DXF and DWG).

Flow Rate vs Pressure Loss Graphs

Rada 215 Mixing Valve



Rada 320 Mixing Valve



Pressures

For optimum performance, dynamic inlet supply pressures should be nominally balanced to within 10% of each other during flow.

Max. pressure loss ratio should not exceed 10:1 in favour of either supply during flow. See product manual for further information on pressure loss ratios.

Head office

79 Victoria Avenue
Chatswood NSW 2067
Australia

Specification Enquiries

Tel: 02 9417 4466
Fax: 02 9417 5231
enquiries@thornthwaite.com.au



Radatherm

Rada 215 & 320 TMVs include Radatherm, a service-free, sealed-for-life cartridge that is a low maintenance solution for accurate mixed water temperature control.

Factory assembled, tested and sealed for durability and reliable performance, Radatherm makes annual preventative maintenance simple and efficient, substantially reducing the time required to service individual TMVs.

We recommend that the cartridge is replaced every 5 years unless an operating conditions risk assessment determines more frequent replacement.

Benefits of Radatherm

- Self-contained, service-free cartridge for low maintenance
- Polymer cartridge materials prevent scale build-up and corrosion
- Quick and easy cartridge replacement
- Reduced spare parts stock holding

Contact your sales and specification consultant for more information or to arrange an appointment to view the Rada mixing valve range.

Commissioning & Maintenance

Refer to the Product Manual for detailed instructions. For further information on replacement parts and service contact Thornthwaite on 1300 137 170.

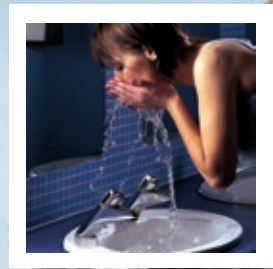
Warranty

2 years subject to manufacturer's conditions.

More Information

Download product manuals, data sheets, specification sheets, line drawings and brochures from our website.

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PRESTO-TIMED FLOW
TAP WARE



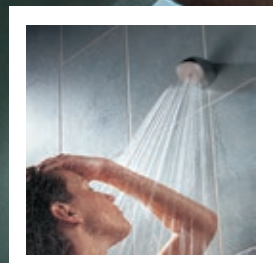
RADA SENSE



RADA PULSE &
MONO CONTROL



RADA TMVs



RADA
SHOWERHEADS

Thornthwaite Technologies Pty Ltd ABN 67 113 609 019
79 Victoria Avenue Chatswood NSW 2067
T: 1300 137 170 | F: 02 9417 5231 | E: enquiries@thornthwaite.com.au

THORNTHWAITE TECHNOLOGIES
THE SHOWER & WASHROOM SPECIALISTS