# RADA EXACT-3 B THERMOSTATIC MIXING VALVE

- WRAS Approved

- Service friendly - supplied with integral strainers and easy change plug-in cartridge.

- Recessed, for use with concealed pipework.

- Easy to install.

- Connection to 15 mm compression or ½" BSP fitting.

- Reversed inlet connections supported.

Specify as: Rada Exact-3 B chrome (1.0.427.02.1)

½" built-in thermostatic shower control, for concealed pipework, incorporating Radatherm service-free cartridge, ceramic disc flow control cartridge and check valve and strainer cartridges, housed within a chrome plated DZR brass body. This product can also be used with a rigid shower head such as VR105 or BSR-S 300 shower fitting.

Dimensions (mm)
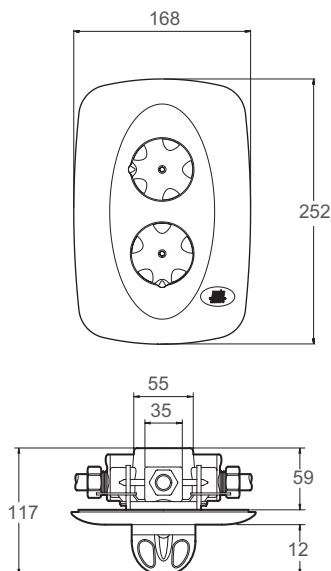
Flow Diagram

Hydraulic restriction: Flow rate/Pressure loss graph
(shower control only, equal dynamics supply pressures, unrestricted outlet and blend temperature setting.
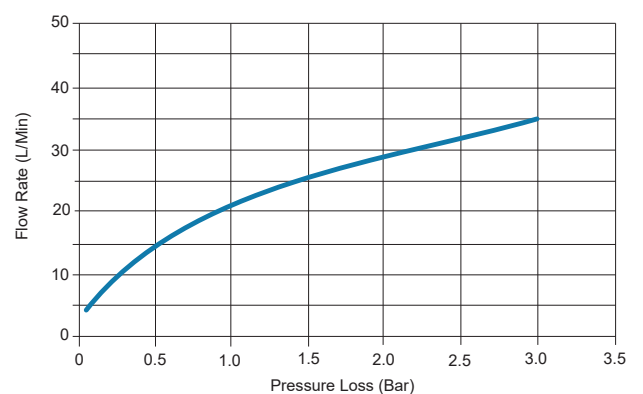
TECHNICAL SPECIFICATION

Installation and Maintenance

Please refer to the appropriate product manual.

The Rada Exact-3 B is designed to be built-in and connect to concealed pipework.

Incorporates the patented "Radatherm" cartridge, a unique sealed-for-life unit, utilising materials of proven durability for extended service-free reliability.

The shower control inlets contain check valves and filters and are both housed within readily accessible cartridges for easy maintenance.

Connections

Inlets: 15 mm compression/½" BSP male fitting connections.
Outlet: 15 mm compression/½" BSP .

Standard connections are hot-left, cold-right, outlet-top when facing the control.
Note! Should the inlet supplies be reversed then the shower control will not be able to control temperature. This can be corrected by reversing the position of the Radatherm cartridge within the control body.

Approvals

Designed to comply with European Standards EN1111 and EN1287.
WRAS approved (Water Regulations Advisory Scheme).
Designed, manufactured and supported in accordance with accredited BS EN ISO 9001:2008 Quality Management Systems and BS EN ISO 14001:2004 Environmental Management Systems.

Operation

The top control knob controls the flow, whilst the bottom control knob controls the temperature.
The temperature controls allow the user to select the required temperature within the range available. An integral temperature stop limits the maximum temperature to a preset level and can only be reset by an authorised person.

Materials

Body: DZR brass.
Concealing Plates: Zinc alloy and chrome plated or white engineering plastic.
Temperature and Flow Control Knobs: Zinc alloy and chrome plated.
Lever Controls and Trims: White engineering plastic.

Temperature Range

The maximum temperature that can be selected is set at approximately 43°C when despatched, but this can be reset on site as required.
Minimum temperature differential, blend to either supply is 12°C.
Optimum thermostatic control range: 35°C - 45°C.
Minimum cold water temperature: 1°C.
Maximum hot water temperature: 85°C.
Note! The mixing valve can accept temporary temperature excursions above 85°C without damage, however operation of the mixing valve at such elevated supply temperatures is not recommended. For reasons of general safety, hot water storage temperatures should be maintained at between 60°C - 65°C where serving ablutionary applications.

Pressures/Flow Rates

Minimum flow rate: 3 l/min at mid-blend and equal supply pressures.
Maximum flow rate: 35 l/min at mid-blend (which equates to a maximum pressure loss of 3.0 bar).
Maximum pressure loss ratio*: should not exceed 10:1 in favour of either supply during flow.
Minimum dynamic supply pressure: 0.15 bar.
Maximum dynamic supply pressure: 5 bar.
Maximum static pressure: 10.0 bar.
Note! Both hot and cold pressure should be nominally equal.
Pressure loss ratio is determined by subtracting the resistance to flow of the outlet pipework and outlet fittings (generally known as the 'back pressure', and measured at the outlet of the mixing valve) from the dynamic pressures of the hot and cold water at the inlets of the mixing valve. This is at its extreme when the mixing valve is being used at its lowest flow rate and when the maximum inequality occurs in the pressure of the hot and cold water supplies.

Weight

Product	Gross Weight (Kgs)	Total Packaged Weight (Kgs)
Rada Exact-3 B Chrome	3.240	3.481

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