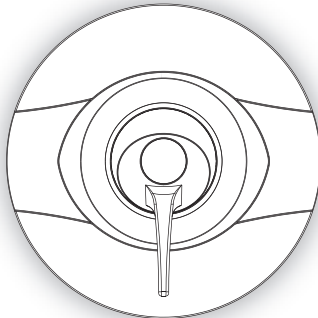
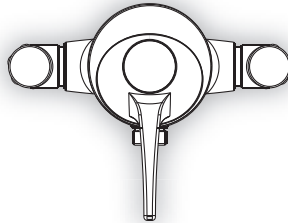


inta

Acura Shower Mixing Valves 90030CP, 90032CP & 90033CP Installation and Maintenance Instructions



inta

Intatec Ltd

Airfield Industrial Estate
Hixon
Staffordshire
ST18 0PF

In this procedure document we have endeavoured to make the information as accurate as possible.

We cannot accept any responsibility should it be found that in any respect the information is inaccurate or incomplete or becomes so as a result of further developments or otherwise.

Tel: **01889 272 180**

Fax: **01889 272 181**

email: **sales@intatec.co.uk**

web: **www.intatec.co.uk**

Contents

Thank you for choosing the Inta Acura concealed and exposed thermostatic dual control shower mixing valves.

The shower has been designed to enhance your showering pleasure with easy to use and responsive controls.

These installation instructions contain all the information you should require to ensure it is fitted correctly and operates as intended.

Should you require any further assistance our Technical Department can be contacted directly on 01889 272199.

Subject	Page
Important Safety Information	2
Introduction	3
Components - Exposed Valve	4
Components - Concealed Valve	5
Technical Data	6
Unvented Mains Pressure System	6
Pumped and Modulating Combi System	7
Gravity system	8
Dimensions - Exposed Valve	8
Dimensions - Concealed Valve	9
Site Preparation - General	9
Site Preparation - Exposed Valve	10
Connection - Exposed Valve	10
Site Preparation - Concealed Valve	11
Connection - Concealed Valve	12
Concealed Valve - Fitting Concealing Plate	13
Calibration	14
Cartridge Replacement	15
Aftercare	15
TMV3 Installation Instructions	16

Important Safety Information

- Please read these instructions thoroughly before commencing installation and retain for future use.
- **We recommend that the installation of any Inta product is carried out by an approved installer.**

The shower is pre-set using ideal conditions to 38°C but can be re-set to suit site conditions or user preference – see calibration page 14.

- The maximum mixed temperature takes account of the allowable tolerances inherent in thermostatic shower mixers and temperature losses.
- **It is not a safe bathing temperature for adults or children.**
- The British Burns Association recommends 37 to 37.5°C as a comfortable washing temperature for children. In premises covered by the Care Standard Act 2000, the maximum mixed water outlet temperature is 43°C.
- Do not use if the shower head or shower has been damaged or become blocked.
- Do not crush or kink the shower hose, this could damage the hose and cause leakage.
- Before commencing remove all components from packaging and check each component with the contents list.
- If any parts are missing, do not attempt to install your Inta shower valve until the missing parts have been obtained.



Warning: Prior to drilling into walls, check that there are no hidden electrical cables or water supply pipes.

This can be checked with the aid of an electronic detector.

- When using power tools eye protection must be worn and unplug equipment after use.
- Isolating valves should be fitted in an accessible position as close as practical to the supply inlets of the shower valve.



Warning: The whole system should be thoroughly flushed, prior to connecting the hot and cold water supplies to the shower valve, to remove any debris that may be in the supply pipework.

Failure to carry out this procedure could damage the internal components or block the flow ways of the shower valve and invalidate the guarantee.

- This shower valve and handset must not be modified in any way as it will invalidate the guarantee.

Introduction

This installation guide has been produced for the Acura concealed and exposed thermostatic dual control shower mixing valves. These instructions cover the installation, operation and maintenance. Please read the enclosed instructions before commencing the installation of this product, please note;

The installation must be carried out strictly in accordance with the Water Supply (Water Fitting) Regulations 1999 and any local authority regulations.

If in doubt we recommend that you contact WRAS - Water Regulations Advisory Scheme on Tel: 0333 207 9030, your local water authority - details available on the WRAS website or the Chartered Institute of Plumbing and Heating Engineers on Tel: 01708 472 791.

All products **MUST** be re-commissioned to suit site conditions to ensure optimum performance levels of the product are obtained.

In hard water areas or if the condition of the mains water supply is unknown it is recommended that an Inta Activflo water conditioner is installed to reduce the risk of calcium deposits forming within the shower valve which may lead to premature failure.

Products

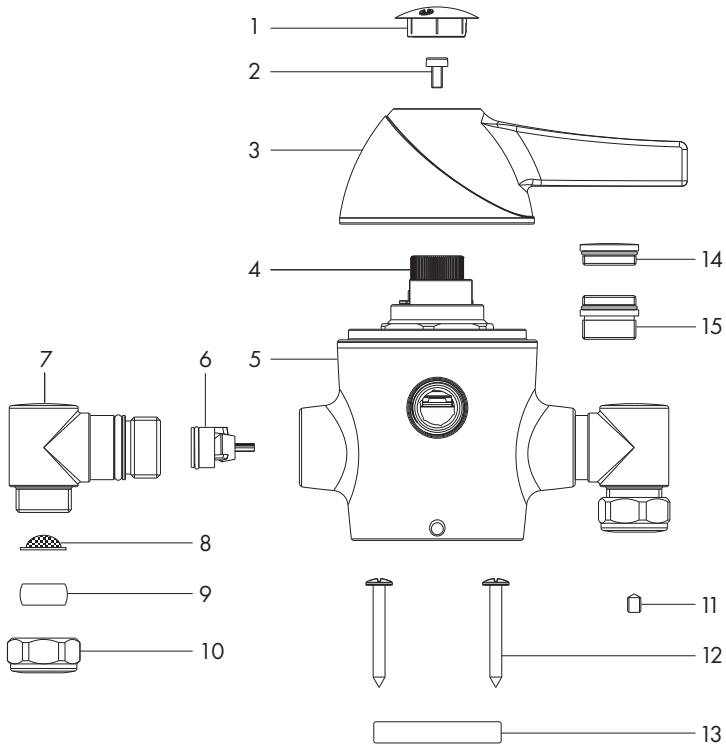
Acura Exposed Thermostatic Sequential Control Single Outlet Shower.	90030CP
Acura Concealed Thermostatic Sequential Control Shower.	90032CP
Acura Exposed Thermostatic Sequential Control Shower with top and bottom outlets.	90033CP

Check Content

Before commencing remove all components from packaging and check each component with the contents list.

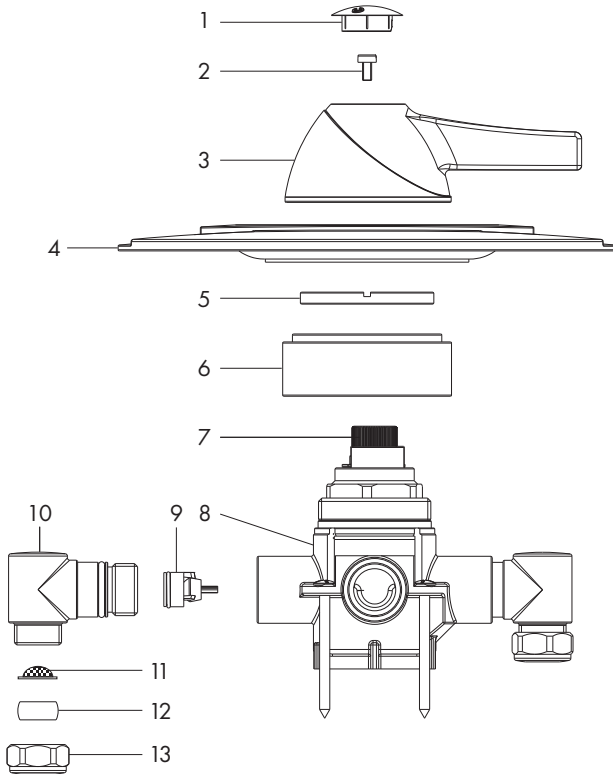
Ensure all parts are present, before discarding any packaging. If any parts are missing, do not attempt to install your Inta shower valve until the missing parts have been obtained.

Components - Exposed



Item	Qty	Component	Item	Qty	Component
1	1	Indice	9	2	Olive
2	1	Screw	10	2	Compression nut
3	1	Flow/Temperature control	11	1	Grub screw
4	1	Thermostatic cartridge	12	2	Fixing screw
5	1	Body	13	1	Back plate
6	2	Check valve	14*	1	Blank plug
7	2	Elbow inc. flow regulator	15*	1	Shower connector
8	2	Filter	* only applies to 90033CP		

Components - Concealed



Item	Qty	Component	Item	Qty	Component
1	1	Indice	8	1	Body and fixing screws
2	1	Screw	9	2	Check valve
3	1	Flow/Temperature control	10	2	Elbow inc. flow regulator
4	1	Wall plate	11	2	Filter
5	1	Fixing ring	12	2	Olive
6	1	Sleeve	13	2	Compression nut
7	1	Thermostatic cartridge			

Technical Data

This Inta Acura thermostatic shower valve is suitable for installations on all types of plumbing systems, including gravity supplies, fully pumped, modulating combination boiler, unvented water heater and unbalanced supplies i.e. Cold Mains & Tank Fed Hot. They are not suitable for non-modulating combination boilers.

Max Inlet Pressure (Static)	10 bar	Max Inlet Temperature	85°C
Max Inlet Pressure (Dynamic)	5 bar	Pre Set Factory Temp Setting	38°C
Min Operating Pressure (Dynamic)		Min Temp Differential to ensure	
90030CP & 90032CP	0.2 bar	fail-safe between hot and	
90033CP	0.4 bar	cold supplies	10°C
Max Unbalanced Pressure Ratio	5:1	Temperature Stability	±2°C
Outlet Connection - Body	G½		

Unvented Mains Pressure System

The drawing shows a typical installation of a shower mixing valve in conjunction with an unvented hot water system. This type of installation must be carried out in accordance with Part G of the Building Regulations.

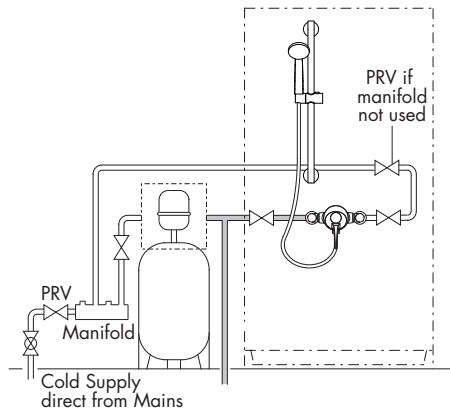
Whilst pressures are theoretically equal (balanced) most unvented hot systems have a pressure reducing valve on the incoming cold water prior to the hot water storage vessel. This means that the hot and cold pressures can be significantly different.

Most unvented systems use an inlet manifold located directly after the pressure reducing valve.

It is recommended that the cold supply be taken from one of the outlets of the manifold directly to the shower as an independent supply.

For systems without a manifold unit after the pressure reducing valve and where the cold water supply pressure is significantly higher than the hot supply we recommend that a separate pressure reducing valve is fitted to the cold supply, as close as possible to the shower valve and with no draw off points between it and the shower valve.

Flow regulators are required for installations where a PRV is not fitted to ensure simultaneous demand is accounted for.



Pumped Systems

Pumped systems use a booster pump to increase the pressure of the gravity fed water supplies.

These booster pumps are used where the head of water is insufficient to provide a satisfactory shower or where a high performance shower is required.

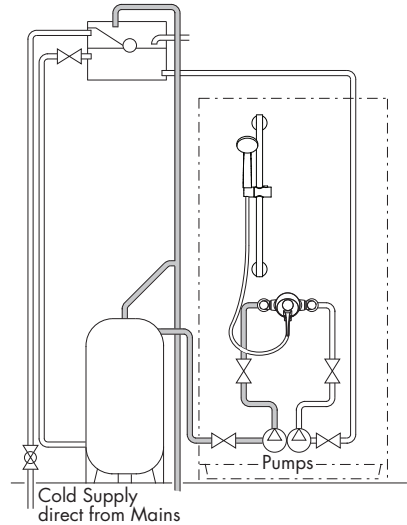
Please ensure that the performance of the pump is matched to suit the shower.

Follow the instructions for gravity fed installations taking into account the installation requirements of the pump.

Ensure that the hot and cold water storage capacity is sufficient to supply the shower and any other draw off points that may be used simultaneously.

Most pumps require a minimum head of water to allow the flow switches to operate automatically. Where this is not available a negative head kit may be required to operate the pump.

Please consult the pump manufacturer's installation requirements



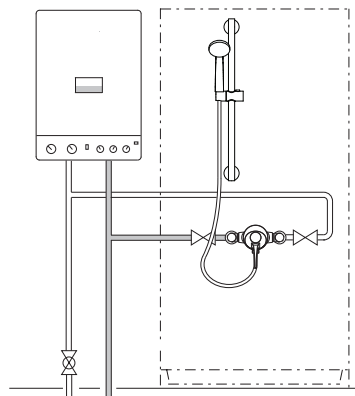
Modulating Combi Boiler / Instantaneous Gas Water Heater

The drawing shows a typical installation of a shower valve in conjunction with a combination boiler.

Combi boilers will produce a constant flow of water at a temperature within its operating range. However we recommend that the system should supply hot water in excess of 60°C.

The hot water flow rates are dependant upon the type of boiler / heater used and the temperature rise required to heat the cold water to the required temperature.

The cold water flow rates may be much greater as they are generally unrestricted from the mains cold water supply. To ensure relatively balanced flow rates, we recommend that a pressure reducing valve or 6 l/min flow regulator is fitted in the cold water supply pipe.



Gravity System

The drawing shows a typical installation of a shower valve on a gravity supplied system.

Please note the minimum head pressure required to ensure correct operation of the valve. In accordance with good plumbing practice, we recommend that a totally independent hot and cold water supply be taken to the valve.

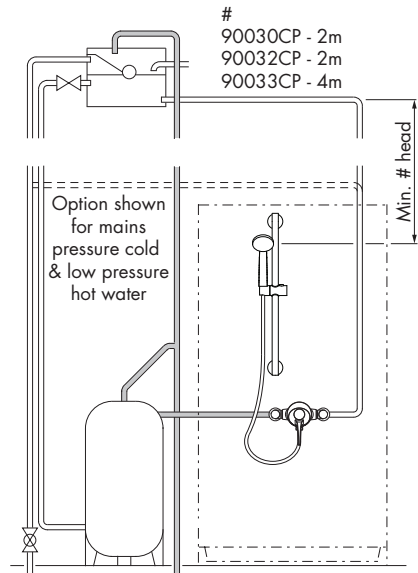
The cold water supply must be connected directly to the water cistern. The hot water supply should be connected to the hot water cylinder via an Essex flange or Sussex flange or to the vent or a draw off pipe as close as possible to the top of the cylinder.

For equal tank fed pressures there is no need to fit the flow regulators. This installation is the recommended minimum for gravity supplies.

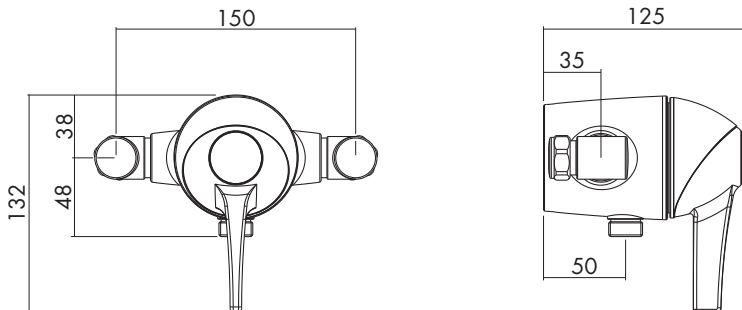
For systems with less than 2 metre head pressure, we recommend that a suitable booster pump is fitted to increase the supply pressure.

Cold Mains & Gravity Hot Supplies

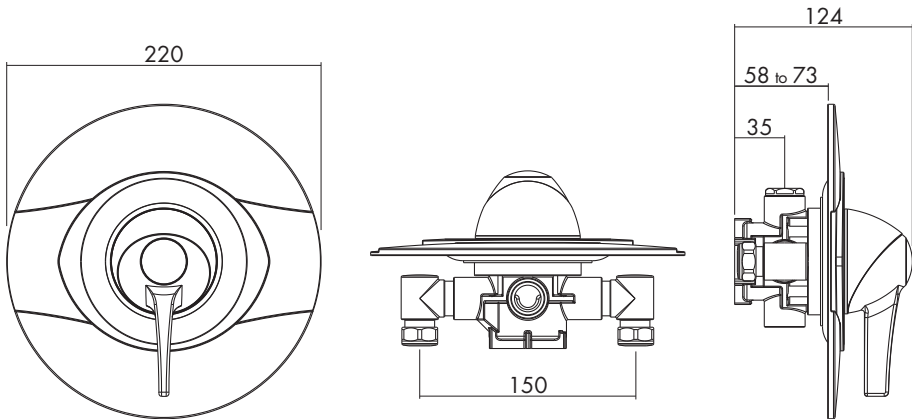
If the cold supply to the shower is direct from the cold water mains and the hot water supply is gravity fed from the cold water cistern via the hot water cistern you **MUST** fit a pressure reducing valve or a 6 l/min flow regulator.



Dimensions - Exposed Valve



Dimensions - Concealed Valve



Site Preparation - General

It is important to plan the installation thoroughly to suit site conditions before commencing.

- Before commencing the installation ensure site conditions are suitable.
- Depending upon the model, the shower valve is designed for exposed or concealed pipework, whether in a solid or studded wall.
- The thickness of wall tiles, plaster or plaster board should all be considered when positioning the shower valve and routing the hot and cold supply pipes.
- The concealed shower valve must protrude sufficiently from the finished tiled surface to allow the concealing plate and control handle to be fitted.
- Ensure the shower valve will be horizontal when installed.
- The supply pipes can come from below, above, the side or through the wall.
- The concealed shower valve must be installed securely into the wall. If not embedded into the wall with plaster the shower valve must be fixed secure to the studding using screws in the 2 mounting holes.
- Each shower valve is supplied with integral non return valves in the cold and hot inlet tail pieces to prevent cross contamination of the water supplies. Additional check valves may be necessary in certain circumstances to comply with the Water Regulations. With flexible hose kits, where the hand set is capable of falling within 25 mm of the top of the shower tray, additional backflow prevention devices may be required.

Site Preparation - General

- Where possible, 22 mm hot and cold supplies should be used as close to the valve as possible and pipe runs should be kept to a minimum to maintain flow rates on low pressure installations.

NOTE: The inlets connections to the elbows to the shower valve are 15mm compression.

- The two inlet elbows contain an integral 6 litre per minute flow regulator.
- The whole system should be thoroughly flushed, prior to connecting of the hot and cold water supplies to the shower valve, to remove any debris that may be in the supply pipework.
- Ensure there are no joint leaks before finishing the wall.
- Isolation valves must be fitted in an accessible position to both the hot and cold supplies should the valve need to be isolated in the future for servicing.

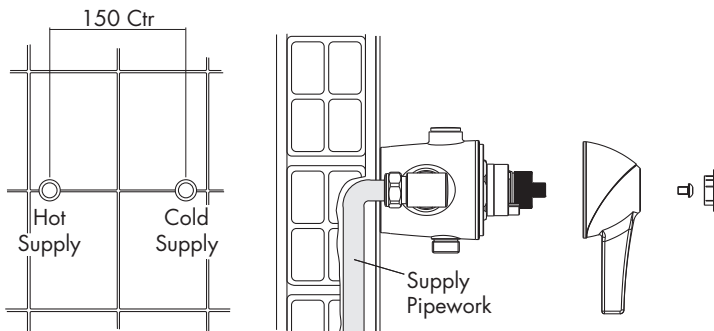
Site Preparation - Exposed Valve

Ensure the hot and cold supplies are positioned correctly to connect to the shower valve and the main compression joints are accessible for future servicing.

When facing the shower valve the hot water supply should be on the left and the cold on the right.

Ensure the valve is positioned to allow the shower kit to be installed at the required height to suit the tallest user.

Apply a bead of mastic to the back of the mounting back plate and fit to the wall in the required position using the appropriate wall plugs to suit the wall type.



90033CP Shown

Connection - Exposed Valve

The 90030CP shower valve has a bottom ½" male shower connector, the position of which cannot be changed, suitable for use with a flexible hose kit.

The 90033CP shower valve is supplied with both the ½" bottom male connector and the ½" blanking plug fitted.

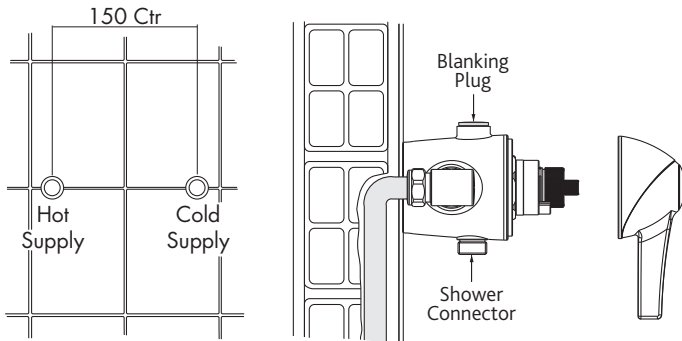
When used with a fixed riser kit, the shower connector can be moved to the upper threaded hole using a 12 mm Allen key. The blanking plug must then be fitted into the bottom threaded hole using a 6 mm Allen key.

Fit the valve body to the back plate and secure having first fitted any required flow regulators.

Connect the hot and cold supplies to the valve using the 15mm compression joints, using a tightening torque of 35 Nm and check the joints for leakage.

Apply a bead of mastic to seal the joints around the hot and cold supply pipes and the joint between the wall and the mounting plate/valve.

Check the function of the valve, the maximum temperature should not exceed 43°C. If the maximum mixed water temperature exceeds this the valve must be re-calibrated to suit site conditions.



90033CP Shown

Site Preparation - Concealed Valve

Prepare the cavity to receive the valve, ensure the hot and cold supplies are positioned correctly and isolation valves are fitted in an accessible position.

When facing the shower valve the hot water supply should be on the left and the cold on the right.

Fit the back plate to the wall.

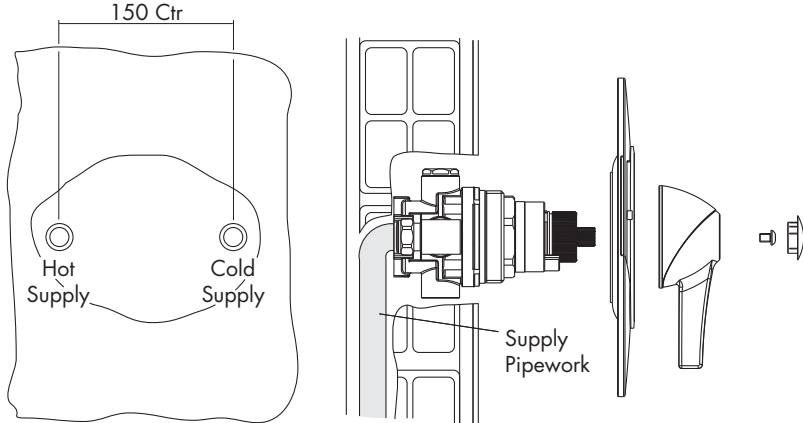
In a stud wall it may be necessary to fit a batten to support the valve.

Ensure the valve is positioned to allow the shower kit to be installed at the required height to suit the tallest user.

Site Preparation - Concealed Valve

Depth of cavity 58 mm minimum to 73 mm maximum to the finished wall surface including wall tiles.

Ensure the second outlet is blanked off if not used.

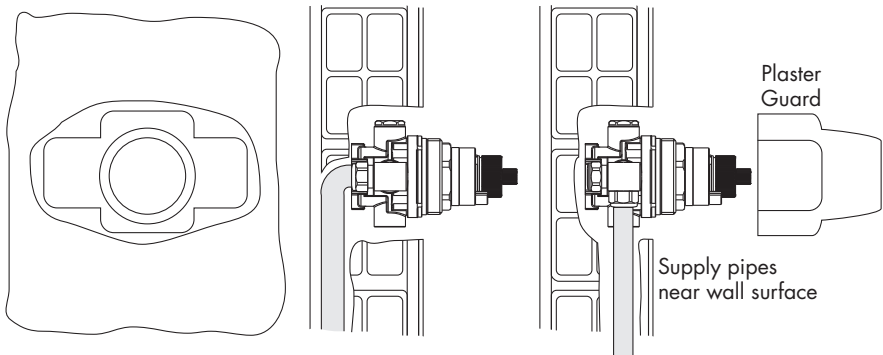


NOTE: Wall elbow available for concealed installation for use with flexible hose shower kit.

Connection - Concealed Valve

The 90032CP shower valve has both a bottom and top $\frac{1}{2}$ " female connection, ensure the blanking plug is fitted into the outlet which is not required and tighten to make a water tight joint.

Fit the valve body to the wall and secure, having first fitted any flow regulators into the elbows as required.



Connection - Concealed Valve

Connect the hot and cold supplies to the valve using the 15mm compression joints, using a tightening torque of 35 Nm and check the joints for leakage.

The elbows are designed to allow access to the filters and check valves without the need to disconnect the valve from the pipework.

A plaster guard is included to protect the valve whilst the wall surface is finished, including the tiling.

Simply fit the guard over the valve and remove when the wall surface is finished.

Turn on the water supplies and check for leaks.

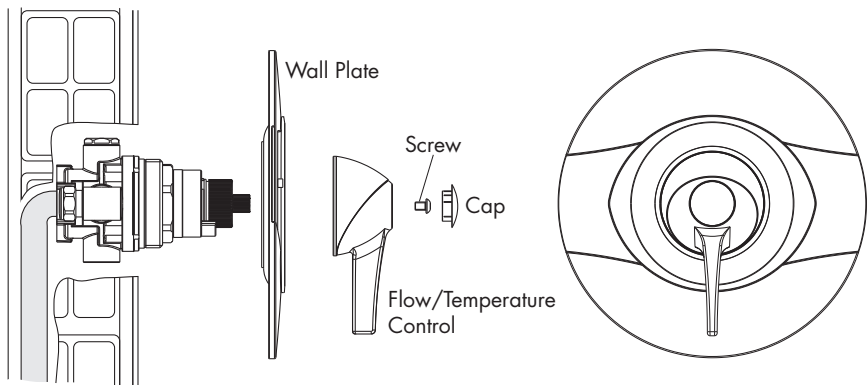
Check the function of the valve, the maximum temperature should not exceed 43°C. If the maximum mixed water temperature exceeds this the valve must be re-calibrated to suit site conditions.

Concealed Valve - Fitting the Concealing Plate

Once the valve has been installed, all the connections have been checked for leakage and the surface of the wall has been finished the concealing plate can be fitted.

It may be necessary to lubricate the seal in the centre of the concealing plate to ease assembly onto the valve body.

Apply a bead of mastic to the outer edge, on the back of the concealing plate and slide the plate over the valve body and press firmly to the wall.

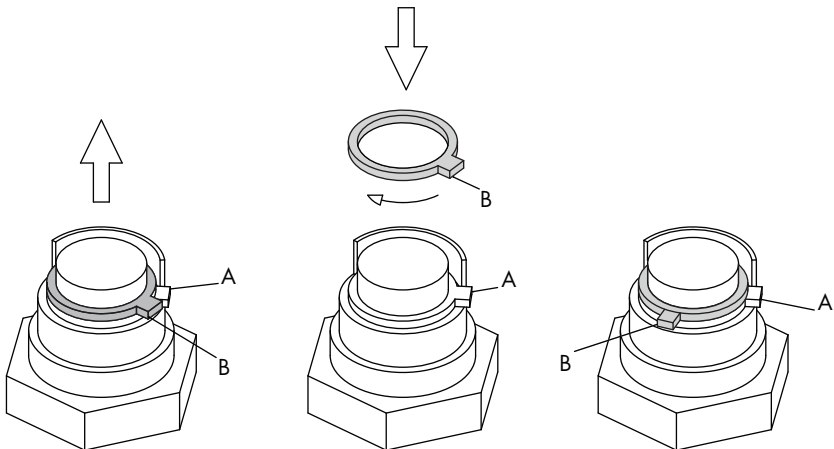


Calibration

The factory outlet temperature setting of 38°C can be altered to suit site conditions.

WARNING: Care should be taken when altering the setting as incorrect calibration can cause injury.

- Remove the indice (1) from the front of the shower valve.
- Remove the retaining screw (2) and handle (3).
- The temperature stop rings (4) are used to control the temperature. Ring A controls the hot and ring B controls the cold water.
- Remove both rings (4) from the cartridge and set the mixed water to the required temperature, maximum 41°C.
- Temporarily refit the handle (3) and using a digital thermometer it is possible to increase or reduce the mixed water outlet temperature until 41°C is re-established, by slowly rotating the handle.
- The temperature can be measured from mixed water outlet on the exposed valve (Fig 1) and from the wall elbow (Fig 2) or shower head outlet with the shower head removed for fully concealed installations.
- When the required temperature is achieved replace the two stop rings (4) on the splined spindle. The rings are used to set the temperature limits of the shower when in use.
- Re-assemble the handle (3), secure with the retaining screw (2) and re-fit the indice (1).



Calibration

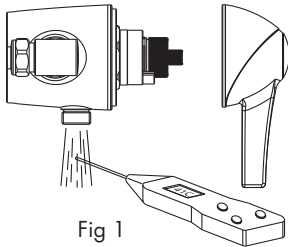


Fig 1

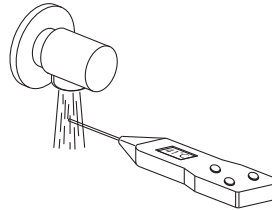
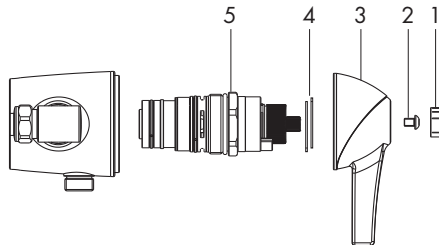


Fig 2

Cartridge Replacement

- Isolate both the hot and cold water supplies
- Remove the indice (1), retaining screw (2), handle (3) and the two stop rings (4).
- Using a suitable spanner unscrew the cartridge (3).
- Replace with a new cartridge.
- The shower valve must be re-calibrated after fitting the new cartridge following the procedure on page 14.
- Re-fit the handle, retaining screw and indice.



Aftercare

Inta shower mixing valves have a high quality finish and should be treated with care.

An occasional wipe with a mild washing-up liquid on a soft damp cloth followed by a thorough rinsing is all that is required.

The nozzles in the hand set should be cleaned periodically to remove any build up of debris or deposits which may affect the performance of the shower.

Do not use an abrasive or chemical household cleaner as this may **cause damage**.

Acura TMV3 Thermostatic Shower Valve

Introduction

The Acura thermostatic shower mixing valve has been specifically designed and manufactured to meet the requirements of BS 7942:2011 and NHS D08. The valve has been independently tested and approved as a TYPE 3 valve under the TMV3 scheme.

Technical Specification / Conditions for use TMV3 Valves

Outlet Temperature Adjustment Range	30°C to 50°C
Temperature Stability	±2°C
Maximum Hot Inlet Temperature	85°C
Inlet Temperature Range	55°C to 65°C : Hot Supply 5°C to 20°C : Cold Supply
DO8 Working Pressure Range	0.2 to 1.0 bar : Low Pressure - LP-SE 1.0 to 5.0 bar : High Pressure - HP-S
Min Temp Differential (Mix to Hot) for Fail-Safe	10°C
Max. Pressure Inlet Differential	5 : 1

Operating Pressure Range	High Pressure	Low Pressure
Maximum Static Pressure	10 bar	10 bar
Flow Pressure, Hot and Cold	1 to 5 bar	0.2 to 1 bar
Hot Supply Temperature	55°C to 65°C	55°C to 65°C
Cold Supply Temperature	5°C to 20°C	5°C to 20°C

NOTE: Valves operating outside these conditions cannot be guaranteed by the Scheme to operate as Type 3 valves.

Approvals

TMV3 Scheme Approval Number:

Details Available on Request

WRAS Scheme Approval Number:

Details Available on Request

Fail Safe Function

Acura shower valves are designed to stop the mixed water flow in the event of either the hot or cold water supply failing when installed in accordance with these instructions.

To ensure full closure of the mixed water flow, the minimum temperature differential between the hot water inlet to the shower and the mixed water outlet **MUST be at least 10°C**.

Dimensions

See page 8 for the exposed shower valve and page 9 for the concealed shower valve.

Temperature Setting

Ensure that the shower valve is commissioned under normal system conditions. The valve **MUST** be commissioned to suit site conditions and the desired outlet temperature set by the installer;

- i. With normal supply conditions established and the hot and cold water supplies running, open the shower valve to its maximum temperature and leave running.
- ii. Remove the indice, retaining screw and handle.
- iii. The temperature stop rings are used to control the temperature, ring A the hot and B the cold water, see diagram on page 14.
- iv. Remove both rings from the cartridge and set the mixed water to the required temperature, maximum 41°C.
- v. Temporarily refit the handle and using a digital thermometer it is possible to increase or reduce the mixed water outlet temperature until 41°C is re-established, by slowly rotating the handle.
- vi. The stop rings are used to set the temperature limits of the shower when in use. When the required temperature is achieved replace the two stop rings on the splined spindle.

Application

The Acura thermostatic shower mixing valve has been independently tested by NSF and certified as meeting the requirements of the NHS D08 specification under the TMV3 Scheme as being suitable for use on the following designations;

Shower **HP-S and LP-SE**

Installation

IMPORTANT - The following instructions must be read prior to the installation of any Inta shower valve. The installer should also be aware of their responsibility and duty of care to ensure that all aspects of the installation comply with all current regulations and legislation.

Flushing through water systems using certain chemicals may wholly or partially remove the lubricant from the internal workings of the valve, which may adversely affect its performance. We recommend that following a flushing of the system with chemicals, valves are checked for correct operation.

- 1 It is essential that before installing a Acura shower valve to ensure that the supply conditions of the system, to which the valve is intended to be fitted, are checked to confirm compliance with the parameters as quoted within the Technical Specification and conditions on which the approval is granted i.e. verify supply temperatures, supply pressures, risk assessment.

Installation

- 2 Consideration must be made for the possibility of multiple / simultaneous demands being made on the supply system whilst the Acura shower valve is in use, all practical precautions must be made to ensure that the valve is not affected. Failure to make provision within the pipe sizing etc. will affect the performance of the valves.
- 3 The supply system to which the Acura shower valve is to be installed into must be thoroughly flushed and cleaned to remove any debris, which may have accumulated during the installation. Failure to remove any debris will affect the performance and the manufacturer's warranty of the product. Independent filters / check valves and isolation valves must be fitted in conjunction with the shower valve, as close as practically possible to the water supply inlets of the Acura thermostatic valve. In areas that are subject to aggressive water, provision must be made to treat the water supply prior to the supply entering any product.
- 4 The maximum flow rate of the valve will only be achieved when the supply conditions are achieved as quoted within the Technical Specification, with a flow condition under 1 bar differential pressure.
- 5 The Acura shower valve has been designed for horizontal installation either exposed surface mounted or concealed within wall or supply duct. It is essential that the access to the valve is not obstructed for any future maintenance that may be required to the valve or associated fittings.
- 6 The hot and cold water supplies must be connected to the valve strictly in accordance with the indications on the body of the valve i.e. hot water supply to the hot port of the valve.
- 8 In a situation where one or both of the water supplies are excessive, it is possible to fit a pressure reducing valve or the 6 l/m flow regulator to reduce the pressure(s) to within the limits as quoted previously.
- 9 Any thermostatic shower mixing valve must be fitted with a back flow prevention device, such as check valves to prevent the cross contamination of supplies. The Acura shower valve is complete with integral insert check valves and strainers in the inlet elbows. However if required, additional WRAS approved backflow prevention devices should be positioned as close as practically possible to the water supply inlets of the Acura thermostatic shower valve.
- 10 Y Pattern strainers and full-bore isolation valves must be installed in conjunction with the Acura fail-safe thermostatic shower valve as close as is practically possible to the location of the valve.
- 11 It is essential that the Acura fail-safe thermostatic shower valve should not be installed in situations where there is a possibility of the valve being deprived of water or where demands for water are greater than the actual stored supplies.
- 12 To ensure that the performance levels of the Acura thermostatic shower valve is maintained (in the event of cold water failure), the temperature of the hot water supply at the point of entry to the valves must be a minimum of 10°C above the commissioned mixed water discharge temperature.

Installation

- 13 The Acura fail-safe thermostatic shower valve must not be subject to any extreme temperature variations either during the installation or under normal operating conditions.

Commissioning

IMPORTANT - The following instructions must be read and understood prior to the commissioning the Acura fail-safe thermostatic shower valves. If under any circumstances there are aspects to the installation / system which do not comply with the specification laid down, the valve **MUST NOT** be put into operation until the system / installation complies with our specification. However if all these conditions are met, proceed to set the temperature as follows;

- 1 Ensure that the system is thoroughly cleaned and free from any debris prior to the commissioning the Acura fail-safe thermostatic shower valve.
- 2 Commissioning the temperatures must be carried out using a suitably calibrated thermometer preferably a digital thermometer.
- 3 In the absence of other temperatures being specified, we recommend the outlet temperature quoted in Table 1 are used.

Table 1

Application	Recommended Set Mixed Water Temp.
Shower	41°C

- 4 Each shower valve must be commissioned taking into consideration any fluctuations, which may occur within the system due to simultaneous demands. It is advisable that any outlets which are connected to the same supply as the shower valve are opened during the setting of the mixed water temperature. During commissioning it is advisable to ensure that the water temperatures are established before any attempt to commission.
- 5 Once the supply temperatures are stable and the normal operating conditions are established, the valve can be commissioned. The temperature setting can be adjusted by removing the handle from the valve body and re-positioning the temperature stop rings. We suggest that the following sequence is followed when commissioning the valve:
 - 5.1 Set the mixed water temperature to the required temperature.
 - 5.2 Measure and record the temperature of the hot and cold water supplies at the connection to the valve.
 - 5.3 Measure and record the temperature of the water discharging from the shower valve.
 - 5.4 Isolate the cold water supply to the valve and monitor the mixed water temperature.
 - 5.5 Measure and record the maximum mixed water temperature and the final temperature. The final temperature found during the test should not exceed the value quoted in Table 2.
 - 5.6 Record all the equipment used during the commissioning.

Commissioning

Table 2

Application	Maximum Set Mixed Water Temp.
Shower	43°C

- 6 Once the desired temperature is established replace and re-position the temperature stop rings, refit the handle.
- 7 Ensure that the application, in which the shower valve will be used, is appropriate for the approved designation. The above information must be recorded and updated on every occasion when any work is carried out on the valve.

Maintenance

To ensure that the Acura shower valve maintains a high level of protection, we advise the following in service testing is conducted (the same equipment used to commission the valve initially must be used in the following tasks).

- 1 After a period of between 6 and 8 weeks from commissioning carry out the following;
 - 1.1 Record the temperature of the hot and cold water supplies.
 - 1.2 Record the temperature of the mixed water from the shower valve.
- 2 If the mixed water temperature has changed significantly from the previous test results (e.g. >1°K), record the change and before resetting the mixed water temperature check that:
 - 2.1 All the strainers are clean.
 - 2.2 All the check valves are in good working order.
 - 2.3 The isolation valves are fully open.
- 3 If the mixed water temperatures are acceptable, carry out the following:
 - 3.1 Record the temperature of the hot and cold water supplies.
 - 3.2 Record the temperature of the mixed water from the shower valve.
 - 3.3 Isolate the cold water supply to the mixing valve and monitor the mixed water temperature.
 - 3.4 Record the maximum temperature achieved as a result of (3.3) and the final temperature (the final temperature should not exceed the values quoted in table 2)
 - 3.6 Record the equipment used during these tests.
- 4 If the mixed water temperature is greater than the values quoted in table 2 or the maximum temperature exceeds the corresponding values from previous test results by more than 2°K, the valve must be serviced.

Maintenance

- 5 After a period of between 12 to 15 weeks from commissioning, carry out the sequence of tests as described in Maintenance sections 1, 2, 3 and 4.
- 6 Dependant upon the results obtained from the first two series of tests; there are a number of possible outcomes:
 - 6.1 If no significant change in the mixed water temperatures (e.g. $\leq 1^{\circ}\text{K}$) is recorded between commissioning and Maintenance sections 1 or between commissioning and Maintenance sections 5, the next in service testing should be carried out at a period of 24 to 28 weeks after initial commissioning.
 - 6.2 If a small change (e.g. 1 to 2°K) in the mixed water temperature is recorded in only one of these periods, necessitating adjustment of the mixed water temperature, then the next in service can be deferred to 24 to 28 weeks after commissioning.
 - 6.3 If small changes (e.g. 1 to 2°K) in the mixed water temperature are recorded in both of these periods, necessitating adjustment of the mixed water temperature, then the next in service test can be deferred to 18 to 21 weeks after commissioning.
 - 6.4 If significant changes (e.g. $> 2^{\circ}\text{K}$) in the mixed water temperature are recorded in both of these periods necessitating service work, then the next in service test should be carried out at 18 to 21 weeks after commissioning.
- 7 The general principle to be observed after the first 2 or 3 in-service tests is that the intervals for future tests should be set to those which previous tests have shown can be achieved with no more than a small change in mixed water temperature.
- 8 In all areas periodic maintenance of the valve and associated fittings i.e. strainers, check valves will ensure optimum performance levels are maintained.
- 9 The inlet strainers on both the hot and cold water supplies can be removed for cleaning by unscrewing the inlet union nuts and carefully pulling apart the connecting pipework.
- 10 The built in check valves can be accessed to ensure freedom and correct seating.

Spares

A full range of spares are available for this product from Inta.

PLEASE NOTE: Only genuine spares should be used.

Problem Solving

The following details are supplied for on site queries, should you require any further assistance our Technical Department can be contacted directly on 01889 272199.

1 Hot water at other outlets

- i. Operation of the insert check valves is hindered, check the valve is seated correctly.
- ii. Check Valves not fitted.
- iii. Unbalanced hot/cold supply pressure.

2 Fluctuating mixed water temperature

- i. Erratic supply temperatures at the inlets of the valve.
- ii. Starvation of the water supplied at the inlets of the valve.
- iii. Incorrect commissioning of the valve.

3 Erratic flow

- i. Insufficient water supplies.
- ii. Fluctuations in the supply pressures/temperatures.
- iii. Adverse effect created by other draw off points on the system.

4 No flow/reduced flow from shower

- i. In line filters are blocked.
- ii. Insufficient supply pressure.
- iii. Debris obstructing valve operation.
- iv. Valve requires servicing (Servicing kits available from your local stockist).

5 Valve does not fail safe when tested

- i. Installation not in accordance with our recommendations.
- ii. The minimum temperature differential not achieved.
- iii. Internal mechanism hindered by debris.

Full and detailed instructions are supplied with service kits and are available on request.

inta

Please leave this Manual for the User

To activate your product warranty please visit
www.intatec.co.uk
and click on Product Registration

inta

Intatec Ltd

Airfield Industrial Estate
Hixon
Staffordshire
ST18 0PF

Tel: **01889 272 180**

Fax: **01889 272 181**

email: **sales@intatec.co.uk**

web: **www.intatec.co.uk**

E & O.E

© Intatec Ltd 2025

02-06-25