# **Installation Instructions**

Two-Port / Three-Port Digital Valve

Record your model number:



# Thank you for Choosing KOHLER

Need help? Contact our Customer Service.

• Visit: kohler.co.uk

• Call: +(44) 0800-001-4466

## Guarantee

This product is covered under the **KOHLER**<sub>®</sub> **Digital Taps, Valves, and Controls Five-Year Guarantee**. For a hardcopy of guarantee terms, contact Customer Service.

## **Important Safety Information**

Products manufactured by Kohler Co. are designed to be safe, provided that they are installed, used, and maintained in good working order, in accordance with our instructions and recommendations. Follow all warnings, cautions and instructions contained in this guide, and on, or inside the product.



WARNING: To reduce the risk of fire, electric shock or injury please read the important information listed below.

Installation of this product must be carried out in accordance with these instructions by qualified, competent personnel. Read all instructions before commencing installation.

The electrical installation must comply with BS 7671 (commonly referred to as the IET Wiring Regulations) and all relevant building regulations, or any particular regulation or practice specified by the local electricity supply company.

The plumbing installation must comply with all national or local water regulations and all relevant building regulations, or any particular regulation or practice specified by the local water supply company.

Isolate the electrical and water supplies before commencing installation.

For any copper pipework, verify that supplementary bonding is provided in accordance with the wiring regulations.

A 30 mA Residual Current Device (RCD) must be included in the electrical circuit. This may be part of the consumer unit or a separate unit.

**DO NOT** install the digital mixing valve or user controller in areas with high humidity and temperature (for example, steam rooms and saunas).

**DO NOT** install the digital mixing valve or fittings where they may be exposed to freezing conditions. Verify that any pipework that could become frozen is properly insulated.

**DO NOT** perform any unspecified modifications, drill, or cut holes in the product other than instructed by this guide. When servicing only use genuine KOHLER replacement parts.

If the product is dismantled during installation or servicing, then, upon completion, an inspection must be made to verify that all electrical connections are secure and that there are no leaks.

**DO NOT** operate the product if water is leaking from inside the valve module. Isolate electrical and water supplies to the product and refer to the fault diagnosis section.

**DO NOT** operate the product if it is thought to have been exposed to freezing conditions. Isolate electrical and water supplies to the product and contact Customer Service.

Verify that you fully understand how to operate this shower and verify that it is properly maintained in accordance with the instructions given in this guide.

This product can be used by children aged from 8 years and above and persons with reduced physical, sensory, or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning the use of the appliance in a safe way and understand the hazards involved.

**DO NOT** allow children to play with the product.

DO NOT allow children to clean or perform any user maintenance without supervision.

Children under 8 must be supervised when bathing or showering.

The water temperature needs to be set at a suitable temperature (body temperature is approximately 38°C). Babies and Children are more sensitive to temperature than adults and it is recommended to check that the delivered water temperature is less than 38°C.

The maximum mixed water temperature from the product is 48°C to take into account losses in metal baths. It is not a safe bathing or showering temperature.

Always check that the water temperature is safe before bathing or showering.

**DO NOT** remotely operate or alter any of this product's shower and bathing settings if it is already occupied and / or being used by another person.

**DO NOT** use excessive force when making connections.

Avoid layouts where the shower hose will be sharply kinked. This may reduce the life of the hose.

The position of the shower fittings must provide a minimum air gap of 25 mm between the handshower and the spill over level of any bath, shower tray, or basin. There must be a minimum distance of 30 mm between the handshower and the spill over level of any toilet, bidet, or other appliance with a Fluid Category 5 Backflow risk.

**DO NOT** operate the valve at voltages other than that stated on the rating label.

This appliance is only to be used and supplied at SELV (Safety Extra Low Voltage) using only the supplied detachable power supply unit.

The supply cord of the power supply unit cannot be replaced. If the cord is damaged, the power supply must be replaced.

In the event of a cold water failure, the product is designed to reduce the flow. Depending on the temperature of the hot water, the valve may shut down to prevent scalding.

# **Recommended Usage**

Domestic	Yes
Light Commercial	No

Heavy Commercial	No
Healthcare	No

## **Products Covered**

Product Name	Product No.
KOHLER 2 - Outlet Digital Valve	28209W-NA
KOHLER 3 - Outlet Digital Valve	28210W-NA
KOHLER 4 - Outlet Digital Valve	28211W-NA
KOHLER 6 - Outlet Digital Valve	28212W-NA

## Suitable Plumbing - Combination Boiler

#### **Digital Mixing Valve (High Pressure/Combination Boiler)**

- 1. Combination boiler systems the digital high pressure/combination shower can be installed with an instantaneous combination boiler.
- 2. Unvented mains pressurized system the digital high pressure/combination shower can be installed with an unvented, stored hot water cylinder system.
- 3. Mains pressurized instantaneous hot water heater the digital high pressure/combination shower can be installed with systems of this type with balanced pressures.



**CAUTION:** High pressure mixing valves must never be plumbed to gravity systems. This includes mixed gravity and mains pressure, for example, gravity hot and mains cold. Doing so will invalidate the warranty and potentially cause product and property damage.

#### Use of Warm-up Feature with Combination Boilers

When using the warm-up feature (see Homeowners Guide) with the digital mixing valve supplied via an instantaneous water heater/combination boiler, the user may experience a brief temperature fluctuation. This is caused by the normal operation of a standard instantaneous water heater/combination boiler whereby the boiler will turn off when the flow is stopped (as happens after the warm-up sequence has been completed). Upon restart of the shower, a cold shot will be flushed through followed by a brief hot shot until the hot water supply has stabilized.

#### **Showering Maximum Flow Rate**

**NOTE:** The digital mixing valve can demand hot water quicker than some instantaneous water heaters/combination boilers can provide, especially in winter when the mains water is colder. It is therefore possible that this mixing valve will need to have its outlet flow rate altered to match the capability of the water system.

High flow rate demanded from low kW combination boilers will result in poor blend temperature stability and could result in your shower going cold. We strongly recommend you to alter the outlet flow rate as the table below.

The flow rate can be adjusted using the Controller or using the App.

Boiler Rating	24 kW (80,000 Btu/h)	30 kW (100,000 Btu/h)	36 kW (120,000 Btu/h)
Outlet Flow Rate	2.2 gal/min (8 l/min)	2.6 gal/min (10 l/min)	3.2 gal/min (12 l/min)

## **Important Installation Considerations**

The digital mixing valve should not be installed where it can become frozen or be subjected to ambient temperatures in excess of 122°F (50°C).

**NOTE:** Do not use any type of jointing paste or compound on any pipework or fittings supplying the digital shower valve. These can build up within the product and reduce the performance or cause early failure.

Position the digital mixing valve and power supply so that there is enough room for maintenance (for example, removal of digital mixing valve lid and removal of the inlet pipework to access the inlet filters) and verify that safe and easy access is available at all times.

**NOTE:** The inlet pipework must be flexible enough to allow 1" (25 mm) movement to enable filters to be removed for cleaning and for maintenance of the internal components. Failure to achieve this may result in service and repair not being able to be carried out.

Supply pipework layout must be arranged to minimize the effect of other outlet usage as shared water supplies may reduce its flow performance upon the dynamic pressures at the digital mixing valve inlets.

Avoid installations where air locking could occur.

To eliminate pipe debris, it is essential that water supply pipes must be flushed before connecting the digital mixing valve to the system so debris cannot enter the digital mixing valve internals.

Fully commission the product after installation taking care to look for any leaks and correct operation.

The use of supply-line or zone strainers will reduce the need to remove debris at the digital mixing valve. The recommended maximum mesh aperture dimension for such strainers is 1/64" (0.5 mm).

Pipework must be rigidly supported and routed such that it does not cause any strain on the connectors.

Long outlet pipework (dead-legs) should be kept to a minimum to avoid temperature fluctuations.

Cables routed through wall cavities, chased into solid walls, directed under baths or in loft spaces must be fitted in such a way that they can later be removed. To facilitate this, appropriate cable conduit/trunking must be used at all times. The conduit/trunking must be at least 13/16" (20 mm) diameter/square to allow for the safe removal of the connectors. Failure to do so may result in an inability to carry out any maintenance or servicing. Safe and easy access to the product should be available at all times.

The product has integral check valves for the purpose of backflow prevention. These can be replaced if required by following the instructions at the end of this guide.

# **Specifications**

## Standards and Approvals

The KOHLER Digital Valve complies with all relevant directives for CE marking. The KOHLER Digital Valve is a type 1 electronic, independently mounted control for surface mounting. The KOHLER Digital Valve is a thermostatic water mixing valve.

## General

Pollution Degree	2
Rated Impulse Voltage	2.5 kV
Connections	15 mm plastic (push-fit)
Suitability for Drinking Water Applications	Not suitable
Solenoid Type	Pilot operated
Water Connection Type	Permanent

#### **Pressures**

Thermostatic Standard	TMV 2 - HP (BS EN 1111 Type 2)
Maximum Static Pressure	1000 kPa (10 bar)
Maximum Maintained Pressure	500 kPa (5 bar)
Minimum Maintained Pressure	100 kPa (1 bar)
Supply Pressure Differential	Nominally equal

## **Temperatures**

Maximum Temperature (setting range)	95°F - 118°F (35°C - 48°C) (Factory Preset 113°F (45°C))	
Minimum Temperature	Thermostatic control down to 59°F (15°C)	
	Full Cold also selectable	
Hot Water Range - Supply	131°F - 149°F (55°C - 65°C)	
Cold Water Range - Supply	34°F - 68°F (1°C - 20°C)	
Temperature Stability at Valve Outlet	± 1.8°F (± 1°C) at recommended supply conditions	
Ambient Temperature	34°F - 122°F (1°C - 50°C)	
Maximum Relative Humidity	95% noncondensing at 86°F (30°C)	

**NOTE:** Valve operating outside of the manufactures recommended conditions of use cannot be guaranteed to operate as TMV2 Type 2 valves.

## **Flow Rates**

Nominal Flow Rate	Max: 12 gal/min (45.4 liter/min) @ 3.1 Bars (All Outlets)
	Max: 9.6 gal/min (36 liter/min) @ 3.1 Bars (Single Outlet)
	Min: 1 gal/min (4 liter/min) @ 3.1 Bars

# **Electrical Rating**

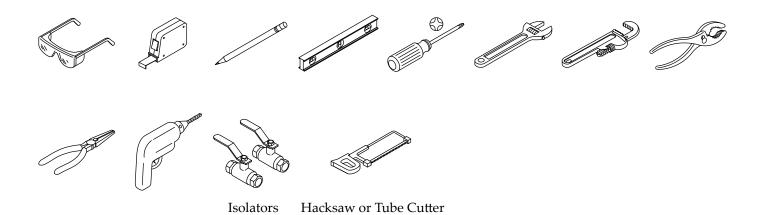
Supply Voltage	100-240 VAC 50/60Hz
Maximum Load	38 W
Output Supply Voltage to Valve	12 VDC

# **Compatible Controllers:**

The Digital Mixing Valve is compatible with only the following controllers:

Digital User Interface (Wired)	28214-XX	
Remote ON/OFF (3 V Battery)	28213-XX	
Electrical Supply (Digital User Interface)	12 VDC SELV 6 W Max Per Controller	
	(Maximum of 2 wired controllers can be connected)	

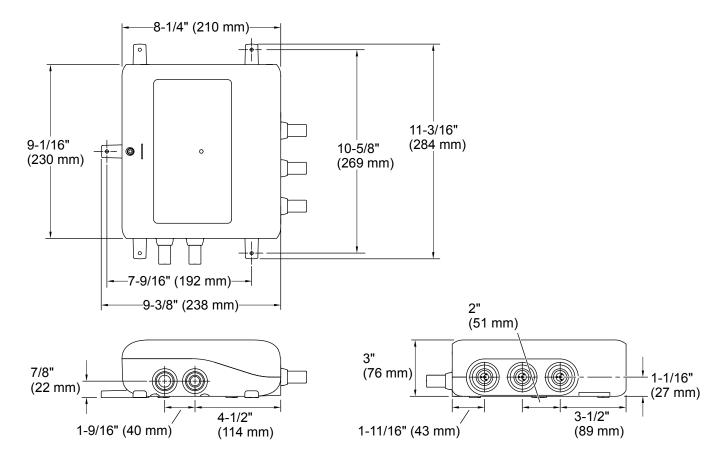
# **Tools and Materials**



## Plus:

- Wood and Framing Materials
- Suitable pipework:
  - 15 mm pipework for inlets and outlets
- 15 mm push-fit connectors for valve inlets and outlets

# **Before You Begin**



**IMPORTANT:** Read these instructions and determine the locations for all required components before beginning installation.

This valve is not intended for single-outlet use unless pairing two outlets for a high flow bath filler.

For optimum performance, dedicated water supply lines are recommended.

If the water supply is a significant distance from the valve, it is recommended that the water supply tube size be increased to offset the piping loss. If necessary, review with your Plumbing Professional.

If possible, install the valve before installing the digital control(s).

A qualified electrician should install a 230 V RCD electrical outlet, within the stud framing, above the valve.

If possible, install the electrical outlet before installing the valve.

All installations shall comply with the Water Supply (Water Fittings) Regulations 1999, Water Supply (Water Fittings) Regulations (Northern Ireland) 2009, and The Water Supply (Water Fittings) (Scotland) Bylaws 2014.

Safe and easy access to the product should be available at all times.

When installing the product in an area not regularly accessed, consideration for potential leaks must be taken into account. While such events are unlikely, it is advisable to periodically check the installation for traces of water on or around the product.

If possible, site the product in a location where any leak would be contained or routed to avoid areas sensitive to water damage.

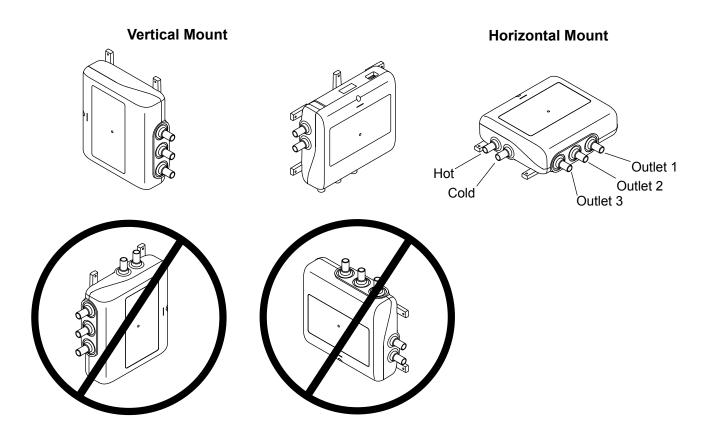
Isolating valves must be installed to both inlets (not supplied) and it is recommended to fit isolators on the outlet, close to the digital mixing valve for ease of maintenance.

The water supplies to this product must be isolated if the product is not to be used for a long period of time. If the product or pipework is at risk of freezing during this period, they should also be drained of water.

The digital valve is equipped with WiFi and Bluetooth<sup>®</sup> technology allowing for communication through the KOHLER Konnect App or a wireless remote.

The BLUETOOTH<sup>®</sup> word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. and any use of such marks by Kohler Co. is under license. Other trademarks and trade names are those of their respective owners.

# **Mounting Configurations**



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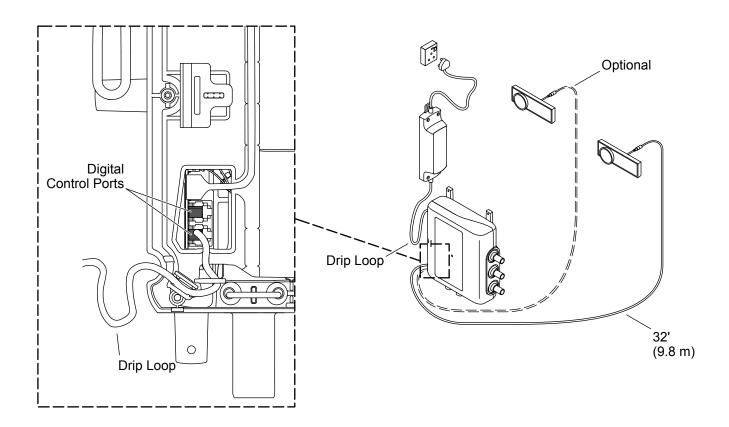
**CAUTION: Risk of product damage.** Do not mount the valve with the inlet or outlet ports positioned above the product. Ports must be installed as shown to optimize water flow.

**NOTE:** Vertical and horizontal mounting options are shown above.

**NOTE:** The digital mixing valve (which contains the thermostatic mixing valve) must be orientated in the positions shown above. Failure to do so will compromise the ability of the unit to fail-safe and deliver constant blend.

The digital mixing valve may be installed in a loft space, under the bath, within a dry-wall or in a convenient cupboard space, provided there is enough room for maintenance (for example, removal of digital mixing valve lid and removal of the inlet pipework to access the inlet filters). Failure to do so may result in an inability to carry out any maintenance.

# 1. Plan the Component Locations

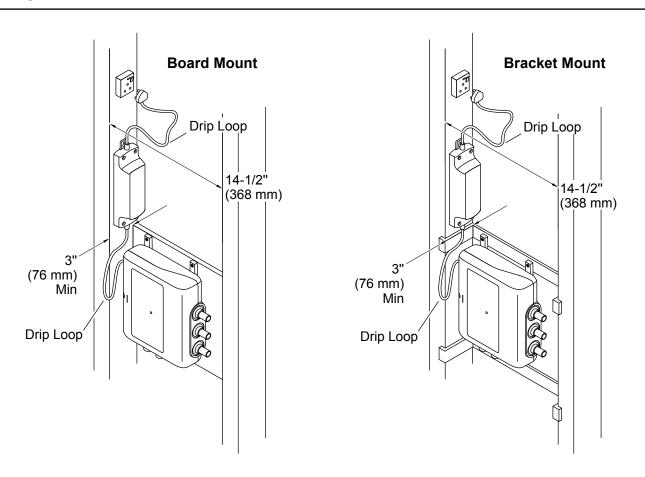


**NOTE:** Only one digital control is required inside of the showering space. A second digital control or ON/OFF remote can be installed outside of the shower area.

**NOTE:** Your digital control may appear different than the one illustrated, however, the installation procedure for the valve remains the same. For the digital control installation, please follow the instructions packed with the digital control.

□ Install a 230 V RCD electrical outlet within the stud framing, near the valve. Locate the electrical outlet above the valve and power supply.

# 2. Prepare the Site



**IMPORTANT!** The power supply must be installed within the stud framing, near the valve. Verify that the power supply is installed above the valve and below the electrical outlet.

NOTICE: Do not install the valve in any location where the temperature may exceed 122°F (50°C).

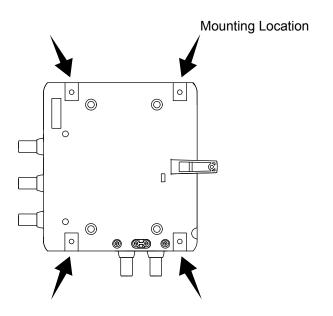
**NOTICE:** This product can be mounted on a rigid backer board or telescopic brackets (not supplied).

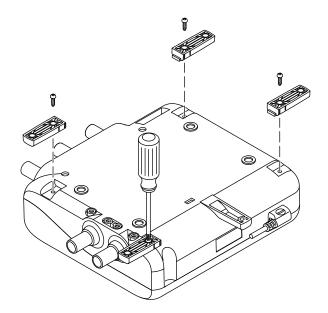
**NOTE:** Horizontal installation within a stud cavity is shown. The valve can also be mounted vertically or mounted to a horizontal surface. Refer to the "Mounting Configurations" section.

**NOTE:** This product is designed to fit within a minimum 14-1/2" (368 mm) stud cavity. Verify that there is a minimum 3" (76 mm) depth clearance.

□ Install a 230 V RCD electrical outlet within the stud framing, near the valve. Locate the electrical outlet above the valve and power supply.

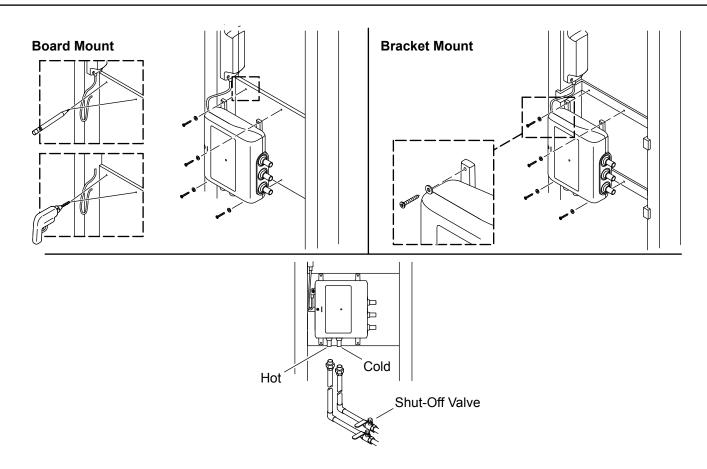
# 3. Install the Mounting Feet





- $\square$  Rotate the valve to access the mounting feet locations.
- $\hfill \square$  Secure the mounting feet with the screws provided.

## 4. Install the Valve



- ☐ Route 15 mm dedicated water supply lines to supply the product.
- ☐ Install shut-off valves in the supply lines before the valve.
- ☐ Hold the valve up to the installation location. Verify fit and mark the hole locations.
- □ Predrill the holes.
- ☐ Secure the valve with the washers and screws. **Do not overtighten!**

**IMPORTANT!** When routing piping, the number marked at each valve outlet must correspond to the appropriate shower fitting for preprogrammed or custom showering experiences to function properly. Refer to the Homeowners Guide for more information.

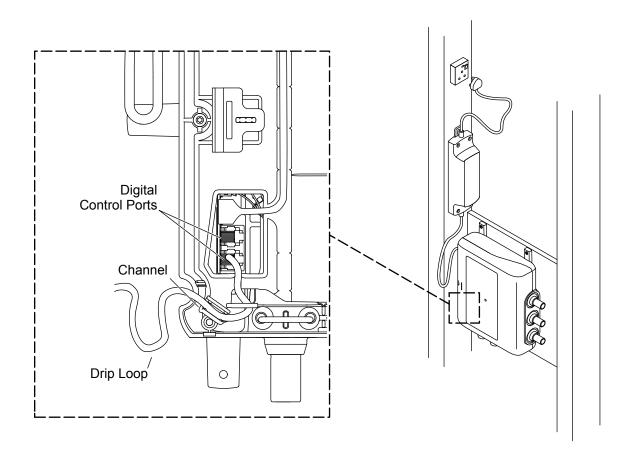
- □ Route 15 mm pipework from the valve outlets to the appropriate shower fitting following the recommended pipe fitting sizes listed.
- □ Connect the hot and cold supply lines to the appropriate valve inlets. Hot is red and marked with "HOT," cold is blue and marked with "COLD."
- ☐ Secure all piping to the framing.

**NOTE:** This product is designed for push fit (15 mm) connectors. Push the push fit connector onto each inlet and outlet with the digital valve in position.

NOTE: If any outlets are not used, they must be capped or isolated using appropriate fittings.

**NOTE:** Do not use any type of jointing paste or compound on any pipework or fittings supplying the digital shower valve. These can build up within the product and reduce the performance or cause early failure.

# 5. Connect the Digital Control

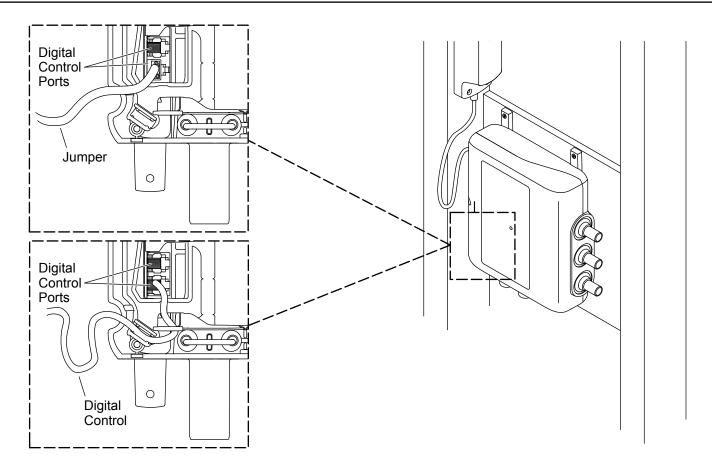


**NOTICE:** Do not plug in the power cord until all digital control cables are connected.

**IMPORTANT!** Make drip loops in all cables and cords.

- □ Route the digital control cable(s) in the wall from the valve location to the digital control installation location(s).
- ☐ If not already installed, install the digital control(s) according to the instructions packed with the product.
- □ Remove the cover to connect the digital control cable(s) to the valve. Verify that the wires are routed through the wire channel to prevent pinching the wires.
- $\square$  Replace the cover.
- $\square$  Plug the power cord into the valve.
- □ Verify that there is power to the 230 V RCD electrical outlet.
- □ Plug the power cord into the electrical outlet.

## 6. Installation Checkout



## **Test for Leaks Without a Digital Control**

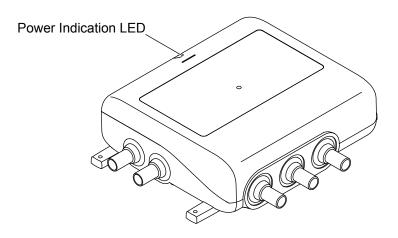
- $\square$  Disconnect the power from the valve.
- ☐ Unthread the screw to remove the cover.
- ☐ Connect the jumper cable to the digital control port, then reconnect the power.
- ☐ Wait 10 seconds for the valve to restart and the outlets to activate.
- ☐ Check all connections for leaks.
- ☐ Disconnect the power. Remove the jumper cable.
- ☐ Replace the cover. Secure with the screw.
- $\square$  Reconnect the power to the valve.

## Test for Proper Operation (Requires an Installed Digital Control)

NOTE: For more information about using the digital control, refer to the digital control Homeowners Guide.

- $\square$  Use the digital control to turn ON the water outlets.
- ☐ Check for leaks and make adjustments as needed.

# 7. Complete the Installation



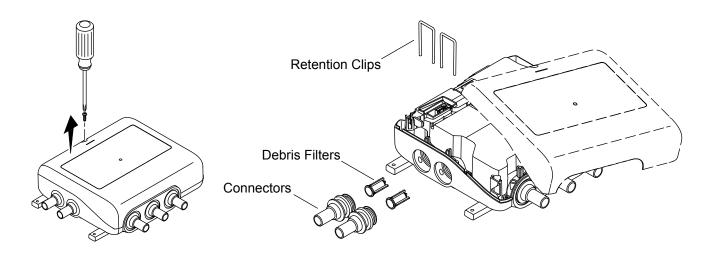
- $\hfill\square$  Turn ON the water supply and open water inlet supply isolators.
- ☐ Turn ON the electrical supply to digital mixing valve.

The digital mixing valve will power and perform a self-check where the LED will indicate a RED light initially and will then change to BLUE light after a few seconds.

**NOTE:** If the LED does not turn to a solid BLUE light after 10 seconds, indicating the product is ready to use, refer to the troubleshooting or fault diagnosis section.

- □ Follow the instructions supplied with your User Interface to check that all outlets are functioning.
- ☐ Your digital valve is now ready for use.

# Replace/Clean the Debris Filters and Check Valves



Read the section "Important Safety Information" first.

Before replacing any parts, verify that the underlying cause of the malfunction has been identified. If the digital mixing valve is dismantled during installation or servicing, then upon completion, the product must be inspected to verify that there are no leaks.



**WARNING:** There are no user serviceable components beneath the cover of the appliance. Only a competent tradesperson should remove the cover.



CAUTION: Risk of personal injury. The valve may contain hot water. Be careful when draining any residual water.

Hot water entering the cold supply, or vice versa, indicates that immediate attention is necessary. This is carried out by removing and cleaning, or renewing as necessary, the check valve cartridges.

NOTE: Running your product without inlet filters can cause valve damage and will invalidate your product guarantee.

	Turn OFF the water supply to both inlets.
	Start the shower for a few seconds to release trapped pressure and verify that you have isolated the water supply.
	Disconnect the power.
	Unthread the screw to remove the cover.
	Lift and remove the retention clips.
	Remove the connectors. The O-ring and screen may be attached to the end of the connector.
_	If the agreen remains in the connector use a nair of needlenges plices to remark the debuic filter from the connector

☐ If the screen remains in the connector, use a pair of needlenose pliers to remove the debris filter from the connector.

☐ Remove the filter and rinse in clean warm water removing any dirt or debris.

☐ Replace if the filter mesh is damaged.

**NOTE:** The check valve is located within the product and does not require routine servicing. If the check valve needs to be replaced, use a blunt object to pull the check valve from the product and replace.

Reassemble	the	inlet	connections.

☐ Replace the cover. Secure with the provided screw.

☐ Refit the supply pipes and restore water supply and electrical supply. Test shower and check for leaks.

# **Troubleshooting**

## **Fault Diagnosis**

Read the section "Important Safety Information" first. As with most electronic equipment resetting the digital mixing valve by powering it down waiting a few seconds then powering it up again can often cure most issues.

Providing the KOHLER Digital Valve has been correctly installed and is operated in accordance with the instructions contained in this guide, difficulties should not arise. If any maintenance is required, then it must be carried out by a competent tradesperson. Before replacing any parts, verify that the underlying cause of the malfunction has been resolved.

**IMPORTANT!** There are no user serviceable components beneath the cover of the appliance. Only a competent tradesperson should remove the cover.

The digital mixing valve has built-in sensors to help diagnose system and product issues. To access these advanced diagnostics features, please download the KOHLER Konnect app (see Homeowners Guide).

Please follow this self-diagnosis section to verify that the product is at fault before contacting Customer Service.

#### Diagnosis stage 1 (Error code check):

In the first instance, check that your product has no error warning displayed on the controller. You can also check for error codes on the KOHLER Konnect app.

Only some errors are displayed on the controller. You will need to download the KOHLER Konnect app for full diagnosis and error functionality.

If you have an error code not listed below, or if the errors continue to occur after it has been reset, please contact Customer Service to resolve the issue.

If you do not have an error code, proceed to Diagnosis stage 2.

Error Code	Description and remedial action	
3, 7, 9	Outlet temperature too hot. Try powering off the product for 30 seconds or resetting in the KOHLER Konnect app. <b>Refer to diagnosis section 4.</b>	
4	Outlet thermistor not detected - contact Customer Service.	
11, 111	<b>DO NOT ATTEMPT TO OPERATE YOUR PRODUCT.</b> A temperature of less than 32°F (0°C) has been detected in your product, which could have caused internal damage leading to potential leaks. It is essential that your product is protected from freezing conditions otherwise serious damage can occur.	
	<b>IMPORTANT!</b> If the valve module has been subjected to freezing conditions, it may require inspection to verify that internal damage has not occurred (contact your installer). If there is no sign of leaks, reset the product by powering off for 30 seconds or resetting in the KOHLER Konnect app. Verify that there are no leaks when shower first used.	
37, 40	A software error has been detected. Try powering off the product for 30 seconds or resetting in the KOHLER Konnect app.	
45	An outlet solenoid error has been detected. Try powering off the product for 30 seconds or resetting in the KOHLER Konnect app.	

Error Code	Description and remedial action	
50	No (or very low) flow has been detected by the product. This can be caused by the inlet water supply being isolated or restricted. Check isolators are open and that the filters or handset and hose are not blocked. Resolve the issue then reset error by powering off the product for 30 seconds or resetting in the KOHLER Konnect app. <b>Refer to diagnosis section 4b.</b>	
53	Flow has been detected when the product should be off. Try powering off the product for 30 seconds or resetting in the KOHLER Konnect app. <b>Refer to diagnosis section 4c.</b>	
54	Unusually high flow has been detected. Try powering off the product for 30 seconds or resetting in the KOHLER Konnect app.	
55	User Interface stuck button detected. Check that your user interface is free to move and then power off the product for 30 seconds or reset the product in the KOHLER Konnect app. If the error reappears, please contact Customer Service.	
66	User Interface has lost communications with the valve. Check that the connection cable is intact and plugged into the valve securely. Power off the product for 30 seconds or reset the product in the KOHLER Konnect app. If the error reappears, please contact Customer Service.	
110	Hot Inlet thermistor not detected - contact Customer Service.	
112	A hot inlet water temperature above the specification has been detected. This can cause dangerous temperature spikes or product damage. Resolve the issue then reset error by powering off the product for 30 seconds or resetting in the KOHLER Konnect app.	

#### Diagnosis stage 2 (Valve status check):

If you do not have an error code, or if the controller is not functional you should then check the status indicator light on the product.

Power Indicator Status	Description
Blue	Product should be functional. If your product is still exhibiting problems, continue to Diagnosis stage 4.
Red	Product has an error. Follow Diagnosis stage 1 or continue to Diagnosis stage 4.
Off	Product is not receiving power. See Diagnosis stage 3.

#### Diagnosis stage 3 (No Power to the product):

- 1. Check that the product is plugged in and switched on.
- 2. Check that the power connector from the power supply is securely connected into the back of the digital mixing valve.
- 3. Check that the circuit breaker or RCD in your consumer unit has not tripped.
- 4. Check that the fuse and replace if necessary (3 Amp).
- 5. Contact Customer Service if none of the above restored power to the digital mixing valve.

## Diagnosis stage 4 (Product powered, but no error code):

If you have a problem with your shower but do not have an error code, find the relevant section and follow the recommendations before contacting Customer Service.

## 4a - Controller not powered:

- 1. Check that the digital mixing valve is functional (Diagnosis stage 2).
- 2. Turn off the valve for 30 seconds and repower. This will restart the controller.

- 3. Check that the controller's extension lead is plugged into the valve and that the cable is not damaged.
- 4. For wall-mount Controllers only, remove the controller and check that the connector to the extension lead is fully inserted and not damaged or wet.
- 5. Contact Customer Service if none of the above resolved the issue.

#### 4b - No Flow / Low Flow:

Low flow through the product normally indicates a restriction in the system, or incorrect system pressures.

- 1. Check that there are no digital mixing valve errors (Diagnosis stage 1).
- 2. Check that the flow on the controller is not set too low. Check Max settings.
- 3. Check that the inlet isolators to the digital mixing valve are fully open.
- 4. For mains-fed (High Pressure / Combination) products, check that the incoming supply to the property is not too restrictive. Fully open the stop cock and check that the 'Pressure Reducing Valve' (if fitted) is not set too low. Refer to the 'Minimum maintained pressure' requirement for your product.
- 5. Check and clean the inlet filters (refer to "Replace/Clean the Debris Filters and Check Valves Section").
- 6. Check for restrictions in the showerhead / hose and clean or replace if necessary.
- 9. Contact Customer Service if none of the above resolved the issue.

#### 4c - Product flowing water when switched off:

The digital mixing valve reduces the water flow slowly before final shut-off to reduce the severity of water hammer. The time duration depends on the flow rate and system pressures. This is normal and not a product fault.

Shower fittings can continue to drain down after the digital mixing valve is shut off, especially where there are large volumes of water present (for example, large deluge heads or long pipe runs). This process can take several hours and may be triggered by changes in temperature or atmospheric pressure. This is normal and not a product fault. We would therefore recommend that all water outlets are kept contained within the water catchment area.

- 1. Check that the issue is not a natural draining of the fittings. Remove the fittings and monitor the outlet if necessary.
- 2. Activate the shower a number of times at maximum flow to dislodge any debris.
- 3. If none of the above resolved the issue, isolate the water and power supply and contact Customer Service.

#### 4d - Showering temperature is hotter/colder than indicated or is fluctuating:

**NOTE:** The temperature displayed on the user interface is measured inside the digital mixing valve, not at the shower outlet.

The perceived temperature of the water from your shower can vary with shower fittings and room temperature. A wider, finer spray will cool more quickly and feel cooler than a direct spray, and long outlet pipe runs can also influence the blend temperature, in which case you may need to adjust the showering temperature.

- 1. **Combination Boiler fed products:** Check that the hot water supply is hot enough when the shower is in use. Combination boilers are sometimes unable to maintain temperatures at higher flows or may cut out at lower flows. Check that no other devices are using hot water at the same time. Reduce or increase the outlet flow to around 2.2 gal/min (8 l/min) and see if that solves the issue.
- 2. **Hot water storage tank fed products:** Check that the hot water supply is not being depleted in use. Reduce the outlet flow or reduce showering time and see if that solves the issue.
- 3. Check that the hot and cold supplies are connected to the correct inlets, and that the temperature and pressures are within the product specification and are stable. Inlet water pressures must be nominally equal.

- 4. Check that no other devices are using water at the same time. Devices switching on/off (for example, washing machines, taps etc.) can rapidly change the water pressure of the system causing rapid pressure and temperature changes.
- 5. Verify that inlet filters, check valves, showerhead, and hose are not blocked (refer to "Replace/Clean the Debris Filters and Check Valves Section").
- 6. If none of the above resolved the issue, and the measured temperature is significantly different to that on the controller display, contact Customer Service.

#### 4e - Shower turning off too soon:

- 1. Check to see if you have 'Warm Up' mode is enabled in the KOHLER Konnect app. This is designed to 'pause' the shower once showering temperature is reached.
- 2. Check to see if you have a maximum showering duration set. This is designed to turn off the shower after a predetermined duration.
- 3. Check to see if you are using predefined showering experiences. These may turn off the shower after a predetermined duration.
- 4. The shower is designed to turn off after 30 minutes.
- 5. Use the KOHLER Konnect app to check the error log. The shower is designed to turn off if the outlet temperature is too high.
- 6. Check that the inlet water temperature and pressures are within specification. The shower may turn off if these are out of specification. Tip: Use the KOHLER Konnect app to check the temperature of the hot water inlet.
- 7. If none of the above resolved the issue, contact Customer Service.

#### 4f - Noise:

- 1. Some plumbing systems can produce "water hammer." To reduce this effect, verify that all pipework is securely fixed.
- 2. The type of wall or flooring the appliance is fixed to will affect the perceived noise level from the product. For a quieter operation, install the product to solid walls or structures.
- 3. If none of the above resolved the issue, contact Customer Service.

## Compliance

#### Disposal and Recycling

When this appliance has reached the end of its serviceable life it should be disposed of in a safe manner, in accordance with current local authority recycling or waste disposal policy. For more information about recycling, please contact your local council office.

## **Decommissioning and Recycling for WEEE**



This product should not be disposed of with your general household waste. When this product has reached the end of its serviceable life, take it to a recognized WEEE (Waste Electrical and Electronic Equipment) collection facility such as your local civic amenity site for recycling. Your local authority or retailer can direct you to the nearest recycling facility.

#### Frequency Bands and Maximum Radio Frequency Power

Hereby, Kohler Ltd. declares that the radio equipment type KOHLER Digital Valve is in compliance with Directive 2014/53/EU. The full text of the EU declaration of conformity is available at the following internet address: kohler.co.uk

Technology	Frequency Band	Maximum Power
Bluetooth® Low Energy	2402-2480 MHz	<+4 dBm
WLAN (802.11 b/g/n)	2400-2483.5 MHz	<+18 dBm
WLAN (802.11 a/n)	5150-5350 MHz (indoor use only) / 5500-5725 MHz	<+ 18.4 dBm



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