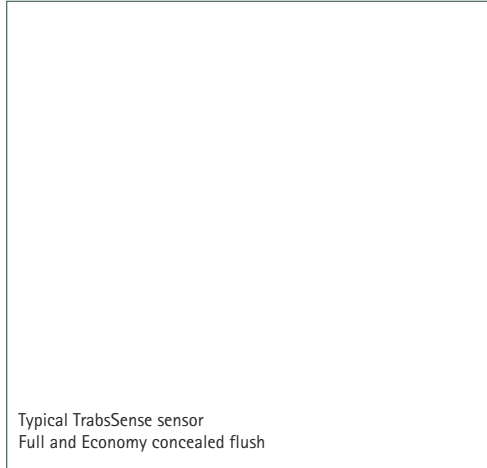


# NON TOUCH FLUSHING CONTROLS FOR WC'S

## ECO EW23CT - TRANS SENSE SENSORS

eco-logic uk

ECO-Logic Trans Sense sensor technology uses digital electronics to control 'Non Touch' (close proximity) or 'One Touch' WC flushing. Uniquely, the WC flush sensor is concealed behind the tile or panel and therefore the sensor 'target area' offers considerable design freedom i.e. colour, graphic or texture. It is a secure flushing system ideal for heavy duty or vandal-prone installation. The system requires very little maintenance and can adapt to virtually any WC pan design. ECO-Logic flush controls work with pressurised, tanked or ECO Pipetank systems. ECO systems do not require individual cisterns for each WC.



Typical Trabsense sensor  
Full and Economy concealed flush



### WC Sensor Range

#### FULL FLUSH

- ECO EW23CT-28mm or 35mm
- ECO EW23CT(BL)28mm or 35mm
- ECO EW23CT(BL)Remote-28mm or 35mm
- ECOEW23CT(BL)Remote BMS

Standard. Valve dependent on water pressure (see chart)  
With Blockage Alert Sensor fitted to Controller  
With Remote Blockage Alert Et Reset Control  
With alert linked via ECO BMS system

#### FULL & ECONOMY FLUSH

- ECO EW23CT(FE)28mm or 35mm
- ECO EW23CT(FE)(BL)28mm or 35mm
- ECO EW23CT(FE)(BL)Remote-28mm or 35mm
- ECO EW23CT(FE)(BL)Remote BMS

Standard. Valve dependent on water pressure (see chart)  
With Blockage Alert Sensor fitted to Controller  
With Remote Blockage Alert Et Reset Control  
With linked alert via Eco BMS system

### Solenoid Valve Chart (WCs)

- ECO 35P (0.05 to 1 bar) c/w isolating/flow adjusters
- ECO 28P (0.5 to 6 bar) c/w isolating/flow adjusters
- ECO D8 35mm (0.05 - 3 bar) Low Pressure
- ECO D4 28mm (0.05 - 3 bar) Low Pressure
- ECO D4 28mm (0.35 - 6 bar) High Pressure

### Features

- Easy to use
- Concealed vandal resistant sensor
- 'Non Touch' or 'One Touch' sensor
- Design of 'target area' is unlimited because sensors detect through finished wall surface
- Multiple flushing options
- Compliant with water regulations
- Rapid repeat flushing (dependant on flushing system) ideal for busy toilets
- Re-flush delay options to allow for low water pressure recovery or misuse prevention.
- Ultra safe 6vDC technology
- Long life battery or mains-reduced power with battery backup system
- Optional Anti-tamper lockouts to prevent misuse
- Optional Blockage Alert Sensor with remote alarm & reset controls to prevent flooding and contamination

### Benefits

- Works with pressurised, tank fed or ECO Pipetank systems
- Installations do not require cisterns behind each WC
- More water efficient installations
- Full and economy flush options
- Cost effective payback periods
- Very hygienic 'Non Touch' operation
- Low maintenance
- Secure fixtures
- Fully adjustable setup to suit installation
- Compliments ECO Sanitaryware & ECO Pipetanks

### Function

Users activate the ECO-Logic flush sensor by putting a hand close to or lightly touching the sensor 'target'. The concealed sensor and sensor box are connected to the ECO Controller and onto the flushing valve. The flush volume/time, mode of operation and anti-tamper controls are setup on the Controller to management requirements. When activated, the flush valve opens and closes to those settings.

An optional ECO Blockage Alert can be fitted to the WC/Urinal waste pipe which prevents flushing when a blockage is detected, avoiding flooding of contaminated water and maintaining hygiene standards. A warning light, alarm or BMS signal notifies management. After clearing the blockage, the system is restarted using a reset button.

## ECO-Logic Controllers and Sensors

ECO Controllers provide the link between the sensors, valves and outlets. Flow/flush times, operational modes, temperature monitoring, lockouts and anti-tamper controls can all be set on the Controller. **Controller choice depends on several factors and early consultation with ECO-Logic is recommended.**

### Single Controllers

- some integrated with a sensor.

### Multi-Channel Controllers

- to control banks of the same item.
- to control a number of different outlets. Typically in a bathroom with a WC, Basin and Shower.

### Modular Controllers

- offering total management controls for accommodation or washrooms. Can include water, heating, lighting, communication, audio/visual and security systems. All with ECO BMS links.

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## ECO EW23CT - TRANS SENSE SENSORS

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## Installation Notes

### Electronics

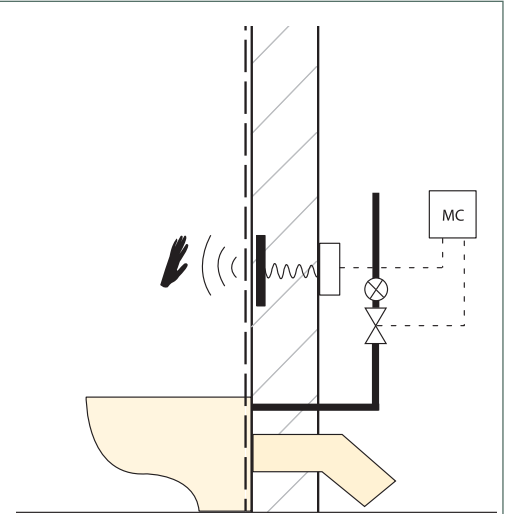
The ECO Trans Sense sensor is a metal plate and sensor box, installed onto (and in contact with) the back of the finished wall surface or recessed into the solid wall. The sensor is self calibrating, enabling installation into most standard wall finishes. For 'Dual Flush' installations, a second plate is supplied with cable for connection to the sensor box. The plate and sensor box must be no more than 300mm apart. The plate and sensor box can also be supplied as a pre-fitted unit.

The sensor box transfers the 'activated' signal to an ECO Multi-Channel Controller which can control up to 8 WCs. Each sensor box is cabled individually to the controller, which then activates the appropriate solenoid valve to open. ECO-Logic offer a pre-fitted

wiring loom, which delivers all the cables with easy snap-lock sockets and the relevant labels attached. This makes for easy, cost saving installation and simplified ongoing maintenance. If required, Blockage Alerts Sensors are secured around the WC waste pipe and connected via the sensor box to the main ECO-Logic Controller and then to a remote alarm if fitted. (see page3)

### Plumbing

Solenoid valves are installed onto the cold water supply. Valve size depends on water pressure. If the cold water supply also serves other outlets, a pipe interrupter (ECO DC256A-025 Backflow Preventer) should be fitted 300mm above the top of the WC overspill level. If from mains supply, with brass solenoid valves, a check valve needs to be fitted before the S.V.



### Technical Information

Control & Sensor Box Materials	ABS White Plastic & Metal Sensor
Sensor Type	ECO Trans Sense – capacitance
Operating Voltage	6vDC
Power Source	<ul style="list-style-type: none"> <li>• ECO Battery 1.3 AH Lithium Cell 6vDC</li> <li>or • ECO Reduced-Mains Transformer (230vAC/6vDC) with automatic Battery Backup</li> </ul>
Flush Interval	Flush per use (reflush delays can be applied)
Flush Time	0.1 to 15.9 seconds (adjustable to requirements)
Blockage Alert Sensor	ECO Trans Sense – capacitance
Valve Type	Solenoid with magnetic latching coil (various sizes)
Valve Connection	ECO 28P or D4-28mm or ECO 35P or D8-35mm
Valve Body Material	Brass DZR self finish or Polyamide plastic
Cable Type	3 core 0.5mm <sup>2</sup> to BS 21823Y
Flow Rate	Pressure dependent

All ECO 'P' valves are WRAS approved. Water Regulations Schedule 2, Section 9, Para 25.

### Related Product Sheets

'One Touch' WC Sensors	ECO Touch Sense & ECO React Sense	W19
'Non Touch' WC Sensors	ECO Infra Sense	W20
'Non Touch' Urinal Sensor	ECO Trans Sense	U14
Secure Sanitaryware	Polymer	POL16
	Stainless Steel	ELC17
Transformers	ECO Transformers 230v/ 6vDC	TR15
Water Storage Systems	Pressurised	W10
	Tanked	W11
	ECO Pipetanks	W21
Other Fittings	1"/1¼" Lever Action Isolation Valve	
	Backflow Prevention. ECO 256A-025	

## ECO-Logic provide solutions for:-

Handwashing • Bathfills • Showering • Flushing • Kitchens

Multi-Channel & Modular Controls for Ensuite Bathrooms & Washrooms

Secure sanitaryware • Lockout Systems • Shutdown Controls • BMS Links

Download at [www.ecologicuk.com](http://www.ecologicuk.com)

### Warranties

ECO-Logic Controllers and Sensor Electronics 2 years

ECO-Logic Solenoid Valves (Strainer Protected) 2 years

Brassware and other fittings 1 year

All ECO electronic products are designed, tested and manufactured in the UK to CE standards

### Maintenance

- Replacement parts, batteries and service kits are available direct from ECO-Logic UK.
- Spares advice on individual products are provided in ECO-Logic maintenance manuals.
- Maintenance requirements are very low. All product warranties are dependent on fittings being installed in accordance with ECO-Logic instructions.
- Battery life usually between 3 – 5 years (not infra red). Battery in ECOTrans transformers should last up to 10years, dependent on usage.
- All ECO-Logic Controllers have a non-volatile memory which retain setup programmes if power is lost or switched off for maintenance.
- Solenoid valves should be installed with service valves and strainers to allow isolation, inspection, and cleaning.

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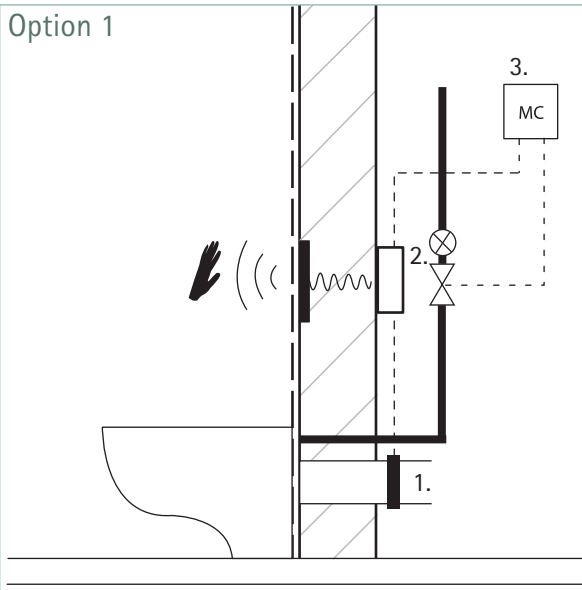
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Option 1



## Blockage Alert Sensor

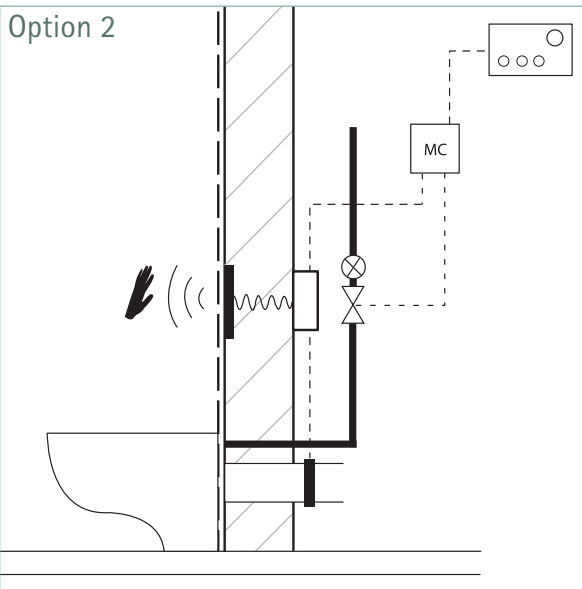
The ECO-Logic Blockage Alert Sensor System is designed to protect washrooms and bathrooms from damage and contamination from foul water flooding caused by blocked waste pipes. If a blockage is detected, the controller isolates the relevant sensor and solenoid valve, preventing further use of the flushing system until the blockage is cleared and reset.

### Option 1 – ECO EW23CT(BL)

The blockage sensor (1) is wrapped around the waste pipe from each WC/urinal and wired to the ECO Trans Sense Sensor box (2), which is then connected to the ECO-Logic Controller (3). Each WC/urinal has its own sensor, sensor box and connections.

A blockage results in the affected WC/urinal system being isolated and a warning light on the control box flashes. After the blockage is cleared the isolation is lifted and reset by pressing the reset sensor mounted on the Controller.

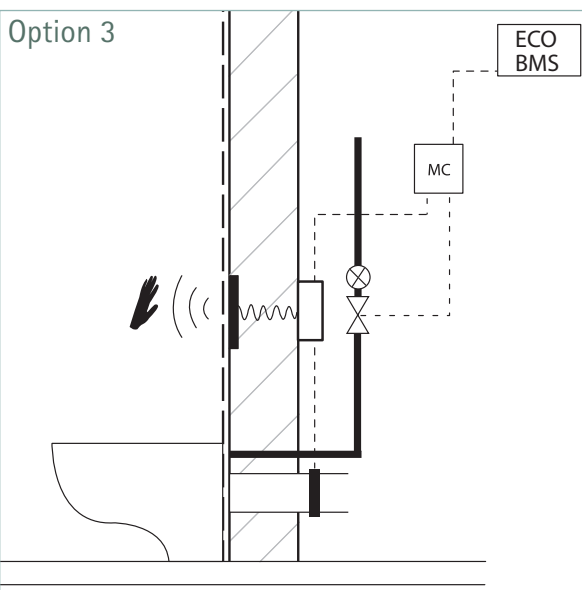
Option 2



### Option 2 – ECO EW23CT(BL) Remote

Largely as above, but the warning lights are on a remote plate situated in the maintenance or management office. The reset button can also be installed on the plate, but the relevant Controller will retain a reset sensor for local operation.

Option 3



### Option 3 – ECO EW23CT(BL) Remote BMS

As Option 1, but the warning system is located within the ECO-Logic Building Management Control System and the computer screen flashes the blockage alert and relevant location.

After the blockage has been cleared, the isolation of the sensor/valve is lifted either by pressing the reset sensor on the controller, or by using the ECO BMS system.

Connection to other BMS systems will require additional software programming. Please consult ECO-Logic UK.